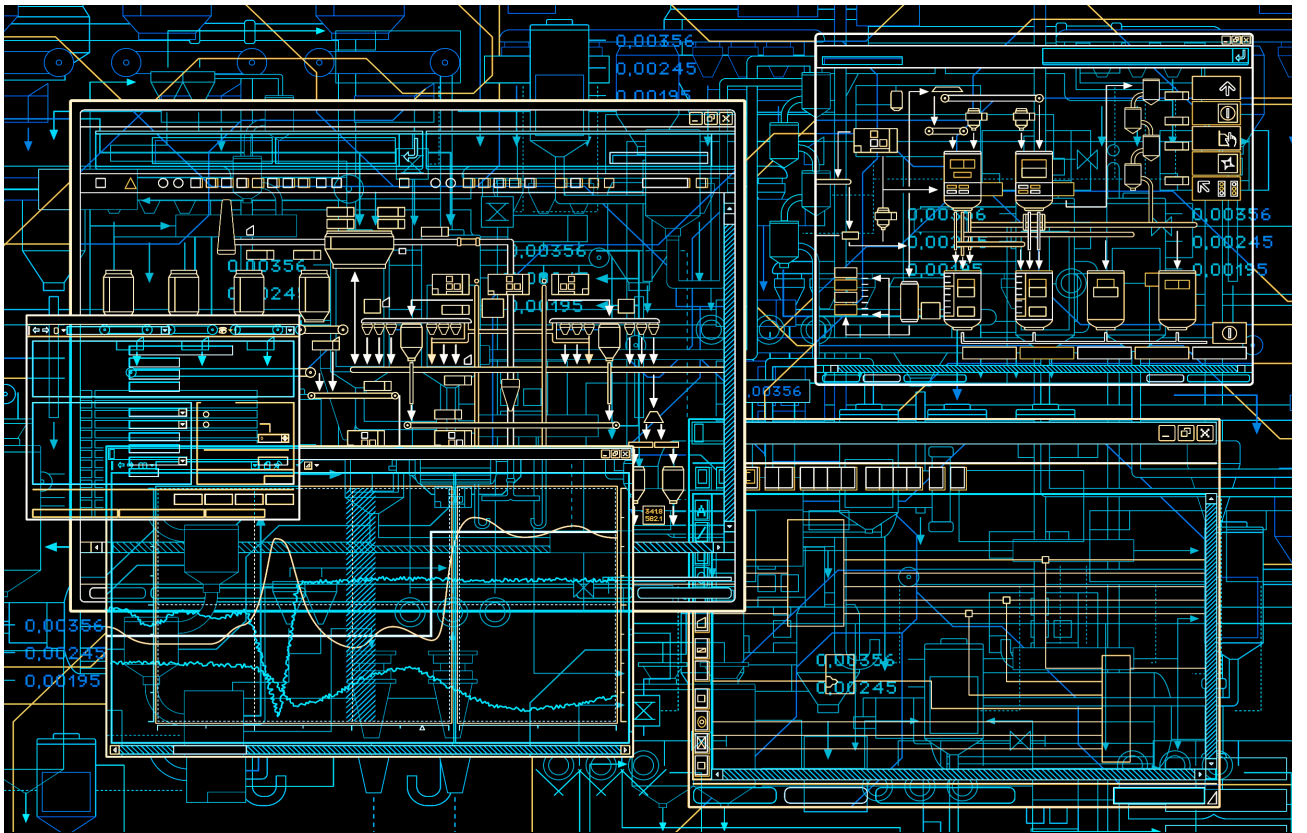

800xA for Safeguard

Graphic Library

System Version 6.0

Power and productivity
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800xA for Safeguard

Graphic Library

System Version 6.0

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About This User Manual

General

Any security measures described in this User Manual, for example, for user access, password security, network security, firewalls, virus protection, etc., represent possible steps that a user of an 800xA System may want to consider based on a risk assessment for a particular application and installation. This risk assessment, as well as the proper implementation, configuration, installation, operation, administration, and maintenance of all relevant security related equipment, software, and procedures, are the responsibility of the user of the 800xA System.

This user manual includes Graphic Libraries for 800xA for Safeguard.

User Manual Conventions

Microsoft Windows conventions are normally used for the standard presentation of material when entering text, key sequences, prompts, messages, menu items, screen elements, etc.

Feature Pack

The Feature Pack content (including text, tables, and figures) included in this User Manual is distinguished from the existing content using the following two separators:

Feature Pack Functionality

<Feature Pack Content>

Feature Pack functionality included in an existing table is indicated using a table footnote (*) :
*Feature Pack Functionality

Feature Pack functionality in an existing figure is indicated using callouts.

Unless noted, all other information in this User Manual applies to 800xA Systems with or without a Feature Pack installed.

Warning, Caution, Information, and Tip Icons

This User Manual includes Warning, Caution, and Information where appropriate to point out safety related or other important information. It also includes Tip to point out useful hints to the reader. The corresponding symbols should be interpreted as follows:

Electrical warning icon indicates the presence of a hazard which could result in *electrical shock.*

Warning icon indicates the presence of a hazard which could result in *personal injury.*

Caution icon indicates important information or warning related to the concept discussed in the text. It might indicate the presence of a hazard which could result in *corruption of software or damage to equipment/property.*

Information icon alerts the reader to pertinent facts and conditions.

Tip icon indicates advice on, for example, how to design your project or how to use a certain function

Although Warning hazards are related to personal injury, and Caution hazards are associated with equipment or property damage, it should be understood that operation of damaged equipment could, under certain operational conditions, result

in degraded process performance leading to personal injury or death. Therefore, fully comply with all Warning and Caution notices.

Terminology

A complete and comprehensive list of terms is included in *System 800xA System Guide Functional Description (3BSE038018*)*. The listing includes terms and definitions that apply to the 800xA System where the usage is different from commonly accepted industry standard definitions and definitions given in standard dictionaries such as Webster's Dictionary of Computer Terms. Terms that uniquely apply to this User Manual are listed in the following table.

Term/Acronym	Description
MB300	MasterBus 300, the control network communication protocol that is used by the AC 400 controllers.
Safeguard	Safeguard 400 Series, safety controller based on the AC400 Series. Also refers to the previous model, Safeguard 3000.
SCS	Safety Control System / Safety Control Station, the dual safety system configuration of SG 3000 / Safeguard 400 Series consisting of two equally configured safety controllers.
SC	Safety Controller, refers to one of the nodes in a SCS.
SCA	The safety controller with the lowest node number in a SCS.
SCB	The safety controller with the highest node number in a SCS.
ESD system	Emergency Shut-Down system.
PSD system	Process Shut-Down system.

Released User Manuals and Release Notes

A complete list of all User Manuals and Release Notes applicable to System 800xA is provided in *System 800xA Released User Manuals and Release Notes (3BUA000263*)*.

System 800xA Released User Manuals and Release Notes (3BUA000263)* is updated each time a document is updated or a new document is released. It is in pdf format and is provided in the following ways:

- Included on the documentation media provided with the system and published to ABB SolutionsBank when released as part of a major or minor release, Service Pack, Feature Pack, or System Revision.
- Published to ABB SolutionsBank when a User Manual or Release Note is updated in between any of the release cycles listed in the first bullet.

A product bulletin is published each time *System 800xA Released User Manuals and Release Notes (3BUA000263*)* is updated and published to ABB SolutionsBank.

Section 1 Safeguard Subelements

This section describes basic subelements developed to be used in the Faceplates, Object Displays and Graphic Elements in 800xA for Safeguard. These are available in the Safeguard Sub Elements library in the Graphic Builder Toolbox.

The Subelements are not object aware and are not intended for use directly in Graphic Displays.

BoolProperty

Presentation:

Due to the high number of boolean property presentations in the Faceplates and Object Displays of the Objects in the Graphic Library product, a separate subelement is developed in order to standardize and increase the efficiency boolean presentation, that is value status and description label.

Properties (Appearance category):

Name	Type	Default	Description
Label	String	BoolProperty 1	Returns the name used in code to identify an object
OffColor	COLOR	Gray	Color when Value is false (and Resolved is true)

Name	Type	Default	Description
OnColor	COLOR	Green	Color when Value is true (and Resolved is true)
Resolved	Boolean	false	Should be connected to <object property> .QualityOk
Value	Boolean	false	Should be connected to <object property> .Value

The conditions are in priority order.

FlameDetector

Presentation:

Subelement used in the Detector01 Graphic Element aspect for the Fire Input (FI) object.

Properties (Appearance category):

Name	Type	Default	Description
BorderColor	Pen	Green	BorderColor (when Resolved is true)
FillColor	OLE_COLOR	Green	Symbol fill Color (when Resolved is true)
Rotation	Rotation	0	Rotation of the element.

The conditions are in priority order.

InfraredDetector

Presentation:

Subelement used in the Detector01 Graphic Element aspect for the Gas Input (GI) object.

Properties (Appearance category):

Name	Type	Default	Description
InfraredDetectorColor	COLOR	Black	Symbol fill color.
ArrowDirection	Rotation	0	Direction of the element.

The conditions are in priority order.

Section 2 Faceplates and Graphic Elements

This section describes faceplates and graphic elements installed and loaded with 800xA for Safeguard.

Analog Input

M_NameStatus01

Presentation:

Analog Input presentation, object name or description, and status. Used in Cause & Effect Matrix display.

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		FrameColor	Frame Color	Normal

No	Description	Default Presentation	Condition	Remarks
2	Name / Description	Red flash	AL_UNACK = 1	Unacknowledged alarm
		Red	AlarmType =HighHigh and ABOVE_HI_LIM2 =1	Alarm High-High
		Red	AlarmType =High and ABOVE_HI_LIM1 =1	Alarm High
		Red	AlarmType =Low and ABOVE_LO_LIM1 =1	Alarm Low
		Red	AlarmType =LowLow and ABOVE_LO_LIM2 =1	Alarm Low-Low
		Green	Value	Normal
3.1	Alarm Text	HH	AlarmType =HighHigh	
		H	AlarmType =High	
		L	AlarmType =Low	
		LL	AlarmType =LowLow	
3.2	Alarm Color	Red	AlarmType =HighHigh and ABOVE_HI_LIM2 =1	Alarm High-High
		Red	AlarmType =High and ABOVE_HI_LIM1 =1	Alarm High
		Red	AlarmType =Low and ABOVE_LO_LIM1 =1	Alarm Low
		Red	AlarmType =LowLow and ABOVE_LO_LIM2 =1	Alarm Low-Low
		Grey	Value .QualityOK	Normal

No	Description	Default Presentation	Condition	Remarks
4	Status Square	Dark Grey *center*	(AlarmType =HighHigh and ABOVE_HI_LIM2 =0) or (AlarmType =High and ABOVE_HI_LIM1 =0) or (AlarmType =Low and ABOVE_LO_LIM1 =0) or (AlarmType =LowLow and ABOVE_LO_LIM2 =0)	Unfilled, no alarm (not High-High alarm and not High alarm and not Low-Low alarm and not Low alarm)
		Yellow	UPD_BLK = 1	Input Update blocked
		Cyan	InhibitUsed = true and TESTED = 1	Inhibit
		Red	AlarmType =HighHigh and ABOVE_HI_LIM2 =1	Alarm High-High
		Red	AlarmType =High and ABOVE_HI_LIM1 =1	Alarm High
		Red	AlarmType =Low and ABOVE_LO_LIM1 =1	Alarm Low
		Red	AlarmType =LowLow and ABOVE_LO_LIM2 =1	Alarm Low-Low
		Red	DISTURBANCE =1	Alarm
		Red	ERROR =1	Error
		Green	Value .QualityOK	-
		Beige	-	Unresolved

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameColor	1. Frame	**Black,** any color	Color of frame in normal condition. (Conform to Cause & Effect grid)
AlarmType	2. Name / Description, 3. Alarm Text, 4. Status	**High_High,** High, Low, Low_Low	Alarm limit used on Analog Input, Refer to “Alarm” in Safety Builder (C&E Matrix)
InhibitUsed	4. Status	**true,** false	Default: Cyan status square when TESTED = 1. Refer to “Additional properties” in Safety Builder.
Status3D	4. Status	**false,** true	Default (false): flat status square, true: 3 Dimensional status square, sunken when square is filled.
Background Color	Background	**Transparent**, any	

M_Status01

Presentation:

Presentation of Status for Analog Input on Cause & Effect Matrix display (dynamic ‘dot’).

1

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Circle **frame**	White	SELECTED = 1	Object selected
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Transparent	Value	Normal
		Beige	-	Unresolved
1.2	Circle Color	Green	InhibitUsed = true and TESTED = 1	Inhibited **Note: Alarm not visible !**
		Red	AlarmType =HighHigh and ABOVE_HI_LIM2 =1	Alarm High-High
		Red	AlarmType =High and ABOVE_HI_LIM1 =1	Alarm High
		Red	AlarmType =Low and ABOVE_LO_LIM1 =1	Alarm Low
		Red	AlarmType =LowLow and ABOVE_LO_LIM2 =1	Alarm Low-Low
		Green	Value .QualityOK	Normal

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
AlarmType	1. Circle	**HighHigh**, High, Low, LowLow	Alarm limit used on Analog Input, Refer to “Alarm” in Safety Builder (C&E Matrix)
InhibitUsed	1. Circle	**true**, false	Default: Green status circle when TESTED = 1, that is, Alarm indication is ‘hidden’. Refer to “Additional properties” in Safety Builder .
Background Color	Background	**Transparent**, any	

SD_Value01

Presentation:

Numeric presentation of analog input value and unit. Presentation of inhibit (TESTED property) included.

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Select frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	AL_BLK = 1	Alarm blocked by operator
		Transparent	Value	Normal
2.1	Value Frame	Gray	FrameStyle = Raised or FrameStyle =Sunken	3 Dimensional value box
		Invisible	FrameStyle =Flat	2 Dimensional value box
2.2	Value string	"? ? ?"	ERR = 1	I/O Error (Standard AI NLSID_Quest3 string)
		White cross on red	Signal_status .QualityCode	No contact with Controller (standard unResolved indication)
		Measured value	VALUE	Object value
2.3	Value color	Red flashing	AL_UNACK = 1	Unacknowledged alarm
		Yellow	BLOCKED =1	Input blocked
		Red	DISTURB = 1	Alarm
		Cyan	TESTED = 1	Inhibited
		Red	ERR = 1	I/O Error
		Green	Value QualityOK	Normal
3.1	**Unit string**	Unit	Value .QualityOK	Object unit
		"Unit"	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
3.2	**Unit color**	Cyan	TESTED = 1	Inhibited
		Yellow	BLOCKED =1	Input blocked
		Red	ERR = 1	I/O Error
		UnitNormalColor	Value .QualityOK	Normal
		Beige	-	Unresolved

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	2. Valuey	**0**, (1..4)	
FrameStyle	2. Value	**Flat**, Raised, Sunken	
ValueBackgroundColor	2. Value	**Black**, any color	Not logically defined
UnitVisible	3. Unit	**True**, False	
UnitNormalColor	3. Unit	**Green**, any color	Not logically defined
BackgroundColor	Background	**Transparent**, any	

Digital Input

NameStatus01

Presentation:

Digital Input presentation, object name and status letters, alarm, block, inhibit (tested), and error. (Value is not indicated).

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Frame**	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Transparent	Value	Normal
2	**Object Name**	Red flash	AL_UNACK = 1	Unacknowledged alarm
		Cyan	TESTED = 1	Inhibit
		Yellow	UPD_BLK = 1	Input Update blocked
		Red	DISTURBANCE =1	Alarm
		Red	ERROR =1	Error
		Green	Value .QualityOK	Normal
		Beige	-	Unresolved (name: name)
3.1	Alarm Text	A	-	Alarm indication

No	Description	Default Presentation	Condition	Remarks
3.2	Alarm Color	Red flash	AL_UNACK = 1	Unacknowledged alarm
		Red	DISTURBANCE =1	Alarm
		Transparent	Value .QualityOK	Normal
		Beige	-	Unresolved
4.1	Override Text	B	UPD_BLK = 1	Input Update blocked
		I	TESTED = 1	Inhibit
		Bx	AL_PERIOD_BLK = 1	Alarm period block (from AMPL logic)
			Value .QualityOK	Normal (no text)
		B	-	Unresolved
4.2	Override Color	Yellow	UPD_BLK = 1	Input Update blocked
		Cyan	TESTED = 1	Inhibit
		Yellow	AL_PERIOD_BLK = 1	Alarm period block (from AMPL logic)
		Transparent	Value .QualityOK	Normal
		Beige	-	Unresolved
5.1	Error Text	E	-	Error indication

No	Description	Default Presentation	Condition	Remarks
5.2	Error Color	Red	ERROR = 1	Error
		Transparent	Value .QualityOK	Normal
		Beige	-	Unresolved
5.3	Background Color	Background	Transparent, Any	

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

NameBox01

Presentation:

Digital Input presentation, object name and value square. Inhibit indication (tested property) included.

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Frame**	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Transparent	Value	Normal
		Beige	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
2	**Object Name**	Red flash	AL_UNACK = 1	Unacknowledged alarm
		Cyan	TESTED = 1	Inhibit
		Yellow	UPD_BLK = 1	Input Update blocked
		Red	DISTURBANCE =1	Alarm
		Red	ERROR =1	Error
		Green	Value .QualityOK	Normal
		Beige	-	Unresolved (name: name)
3	Status Square	BackgroundColor center	VALUE = 0 and StatusInverted = false or (VALUE = 1 and StatusInverted = true)	Unfilled, open Input signal (or inverted)
		Red flash	AL_UNACK = 1	Unacknowledged alarm
		Yellow	UPD_BLK = 1	Input Update blocked
		Red	DISTURBANCE =1	Alarm (Filled if NORM_POS = 0)
		Cyan	TESTED = 1	Inhibit
		Red	ERROR =1	Error
		Green	Value .QualityOK	Normal (Filled if NORM_POS = 1)
		Beige	-	Unresolved

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

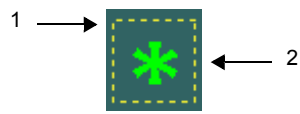
Configuration:

Parameters	Affects	Options (bold is default)	Remarks
Status3D	3. Status	false, true	Default (false): flat status square, true: 3 Dimensional status square, sunken when square is filled.
StatusInverted	3. Status	false, true	Default: filled status square when VALUE = 1
BackgroundColor	Background	Transparent, Any	

Selection01

Presentation:

Selection point for Digital Input.



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object selected
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked
		Invisible	Value	Normal
2.1	Asterisk	Asterisk symbol	-	-
2.2	Asterisk Color	AsteriskColor	Value .QualityOK	-

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameters	**Affects**	**Options (bold is default)**	**Remarks**
AsteriskColor	2 Asterisk	**Green,** any color	
BackgroundColor	Background	Transparent, Any	

M_NameStatus01

Presentation:

Digital Input presentation, object name or description, and status. Used in Cause & Effect Matrix display.

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Frame**	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		FrameColor	Value .QualityOK	Normal
		Beige	-	Unresolved
2	**Name / Description**	Red flash	AL_UNACK = 1	Unacknowledged alarm
		Red	InputType =NormallyOpen and VALUE =1	Alarm (Closed NO input)
		Red	InputType =NormallyClosed and VALUE =0	Alarm (Open NC input)
		Green	Value .QualityOK	Normal
		Beige	-	Unresolved
3	Input type	NC (Grey)	InputType =NormallyClosed	

No	Description	Default Presentation	Condition	Remarks
		NO (Grey)	InputType =NormallyOpen	
		NO (Beige)	-	Unresolved
4	Status Square	Dark Grey *center*	VALUE = 0	Unfilled, open input
		Yellow	UPD_BLK = 1	Input Update blocked
		Cyan	InhibitUsed = true and TESTED = 1	Inhibit
		Red	InputType =NormallyOpen and VALUE =1	Alarm (Closed NO input)
		Red	InputType =NormallyClosed and VALUE =0	Alarm (Open NC input)
		Red	DISTURBANCE =1	Alarm
		Red	ERROR =1	Error
		Green	Value .QualityOK	Normal
		Beige	-	Unresolved

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameColor	1. Frame	**Black,** any color	Color of frame in normal condition. (Conform to Cause & Effect grid)
InputType	2. Name / Description, 3. Input Type, 4. Status	**NormallyOpen,** NormallyClosed	Default: Alarm indication when VALUE = 1. Refer to “Alarm” in Safety Builder (C&E Matrix)
InhibitUsed	4. Status	**true,** false	Default: Cyan status square when TESTED = 1. Refer to “Additional properties” in Safety Builder . Default: FaceplateInhibit is used. (false: Faceplate is used)
Status3D	4. Status	**false,** true	Default (false): flat status square, true: 3 Dimensional status square, sunken when square is filled.
Background Color	Background	Transparent, Any	

M_Status01

Presentation:

Presentation of Status for Digital Input on Cause & Effect Matrix display (dynamic ‘dot’).

1

Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	Circle frame	White	SELECTED = 1	Object selected
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	Value	Normal
1.2	Circle Color	Green	InhibitUsed = true and TESTED = 1	Inhibited **Note: Alarm not visible !**
		Red	InputType =NormallyOpen and VALUE =1	Alarm (Closed NO input)
		Red	InputType =NormallyClosed and VALUE =0	Alarm (Open NC input)
		Green	Value	Normal
		Transparent	-	Unresolved.

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
InputType	1. Circle	**NormallyOpen,** NormallyClosed	Default: Alarm indication when VALUE = 1. Refer to “Alarm” in Safety Builder (C&E Matrix)
InhibitUsed	1. Circle	**true,** false	Default: Green status circle when TESTED = 1, that is, Alarm indication is ‘hidden’. Refer to “Additional properties” in Safety Builder . Default: FaceplateInhibit is used. (false: Faceplate is used)
BackgroundColor	Background	Transparent, Any	

M_NameReset01

Presentation:

Static presentation of Object name and description for RESET Input on Cause & Effect Matrix display.

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		FrameColor	Value	Normal
2	Name / Description	Green	Value .QualityOK	Normal
		Beige	-	Unresolved
3.1	Static Text text	StaticText		
3.2	Static Text color	Green	VALUE = 1	High input (Reset active)
		Grey	Value .QualityOK	Unresolved
		Beige	-	Unresolved
4	Status Square	■ Green	VALUE = 1	Filled, Reset activate
		□ Green	Value .QualityOK	Unfilled, open input
		□ Beige	-	Unresolved

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameColor	1. Frame	**Black,** any color	Color of frame in normal condition. (Conform to Cause & Effect grid)
StaticText	3. Static Text	**R,** any character	Default: “R” to indicate “RESET” input. Refer to “DI Type” in Safety Builder. Option: “F” to indicate Manual Cause input, as opposed to process Cause input.
Status3D	4. Status	**false,** true	Default (false): flat status square, true: 3 Dimensional status square, sunken when square is filled.
BackgroundColor	Background	Transparent, Any	

M_Reset01

Presentation:

Presentation of Status for RESET Input on Cause & Effect Matrix display (dynamic square).

1

Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	Square frame	White	SELECTED = 1	Object selected
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Green	Value	Normal
1.2	Square center	■ Green	VALUE = 1	Filled, Reset activate
		□ Symbol Off	Value	Center color

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
BackgroundColor	Background	Transparent, Any	

StatusBox01

Presentation:

Digital Input presentation, Status. Inhibit (tested property) indication included.

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Select frame	White	SELECTED = 1	Object selected
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible (GeneralBackColor)	Value .QualityOK	Invisible
		Beige	-	Unresolved
2	Status square	BackgroundColor Center	ERR = 1	I/O Error
		BackgroundColor Center	VALUE = 0 and Inverted = false or (VALUE = 1 and Inverted = true)	*Off (or Inverted)*
		Red Flash	AL_UNACK = 1	Unacknowledged alarm
		Yellow	UPD_BLK = 1	Input Update blocked
		Cyan	TESTED = 1	Inhibited
		Red	DISTURB = 1 and DisturbanceUsed = true	Disturbance (NORM_TR=1) and DisturbanceUsed is set.
		Green	Value .QualityOK	Filled if On
		BackgroundColor	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
3	Label	E Red Flash	AL_UNACK = 1 and ERR = 1	Unacknowledged alarm and Error
		E Yellow	UPD_BLK = 1 and ERR = 1	Blocked and Error
		E Red	ERR = 1	Error
		Label Dark Grey	VALUE = 1	*On*
		Label Green	Value .QualityOK	*Off (or Inverted)*
		Label Beige	-	Unresolved

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
Status3D	2. Square	**false,** true	Default (false): flat status square, true: 3 Dimensional status square in normal (green), sunken when square is filled.
Inverted	2. Square	**false,** true	
DisturbanceUsed	2. Square	**true,** false	
Label	3. Label	**" ",** any letter	
BackgroundColor	Background	Transparent, Any	

FG_ValueText01

Presentation:

Text presentation of digital input value and / or Tested (if TestedUsed parameter is set).

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked
		Invisible (GeneralBackColor)	Value .QualityOK	Normal
		BackgroundColor	-	Unresolved
2	Text	TestedAndValueOnText (TestedAndValueOnColor)	TestedUsed = true and TESTED = 1 and VALUE = 1	Tested on and Value on
		TestedAndValueOffText (TestedAndValueOffColor)	TestedUsed = true and TESTED = 1 and Value .QualityOK	Tested on and Value off
		ValueOnText (ValueOnColor)	VALUE = 1	Value on
		ValueOffText (ValueOffColor)	Value .QualityOK	Value off
		ValueOffText (Beige)	-	Unresolved

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

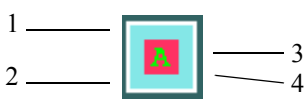
Configuration:

Parameter	Affect	Option (bold is default)	Remarks
TestedUsed	1. Text	**false**, true	If false; Only ValueOnText & ValueOffText are presented If true; All texts are displayed, and FaceplateInhibit is used
TestedAndValueOnText TestedAndValueOffText ValueOnText ValueOffText	1. Text	, any text	Default: empty string
TestedAndValueOnColor TestedAndValueOffColor ValueOnColor ValueOffColor	1. Text	**Cyan**, any color **Cyan**, any color **Green**, any color **Green**, any color	
BackgroundColor	Background	Transparent, Any	

FG_InhibitBox01

Presentation:

Presentation of group inhibit signal, e.g. Area-gas-detector inhibit.
Inhibit is performed by setting the tested flag, and is presented in the Edge area. The center square indicates the inhibitable signal, which is typically “gas coincidence alarm” when the activation signal is “gas coincidence alarm, not inhibit”..



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	Value	Normal
		Background Color	-	Unresolved
2	Inhibit (Edge)	Red	ERROR = 1	Signal error
		Yellow	BLOCKED = 1 and BlockedUsed = true	Input update blocked
		Cyan	TESTED = 1	Inhibit
		Red flash	AL_UNACK = 1	Unacknowledged alarm
		Red	DISTURB = 1	Alarm (NORM_TR =1)
		Green	Value .QualityOK	Normal
		Beige	-	Unresolved
3	Alarm (Center)	Dark Grey	ERROR = 1	Error
		Red flash	AL_UNACK = 1	Unacknowledged alarm
		Red	DISTURB = 1	Alarm (NORM_TR =1)
		Green	VALUE = 1	Value on (Event, no Alarm)
		Dark Grey	-	Value off (Normal)
4.1	Label Text	"E"	ERROR = 1	Error
		Label	-	-

No	Description	Default Presentation	Condition	Remarks
4.2	Label color	Dark Grey	AL_UNACK = 1	Unacknowledged alarm
		Yellow	BLOCKED = 1 and BlockedVisible = true	Input update blocked
		Red	ERROR = 1	Error
		Dark Grey	VALUE = 1	Value on (Event, No alarm)
		Green	Value .QualityOK	Value off (Normal)
		Beige	-	Unresolved

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameter	Affect	Option (bold is default)	Remarks
Label	4. Label	<empty>, any character	Space for one character in default sized element.
BlockedUsed	2. Edge, 4. Label	**true**, false	True: Yellow edge when update blocked.
BackgroundColor	Background	Transparent, Any	

FG_Toggle01

Presentation:

One toggle button for control and presentation of Digital Input *Value*. Control performed directly, no Faceplate is displayed when selected.

Since the action depends on button status, this control must be used with care in a dual system..

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Button			Set VALUE when pressed
1.1	Button	Sunken	VALUE =1	Button pressed, Value = 1
		Raised	Value .qualityOK	Button released, Value = 0
		Raised	-	Unresolved
1.2	Label	OnCaption	VALUE =1	
		OffCaption	-	
1.3	Labelcolor	OnColorPressed	VALUE =1	Button pressed, Value = 1
		OffColorNotpressed	-	Button released, Value = 0

The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
OnCaption	1. Button	**"On", any text**	Caption of button when value = 1
OnColorPressed	1. Button	**Black, any color**	Text color on button when value = 1
OffCaption	1. Button	**"Off", any text**	Caption of button when value = 0

Parameters	Affects	Options (bold is default)	Remarks
OffColorNotpressed	1. Button	**Black, any color**	Text color on button when value = 0
BackgroundColor	Background	Transparent, Any	

FG_Toggle01 utilization

Example logic to use the control to give a 10 second pulse:

The input signal is blocked when value is low (class is set to 79 to disable bypass management), and for 10 seconds after value is set: Connect Value inverted to the input pin of a TOFF element. TP is set to 10. The TOFF element output pin is connected to the input blocked property.

Digital Output

NameBox01

Presentation:

Digital Output presentation, object name and status (square).

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	Value .QualityOK	Normal
		Beige	-	Unresolved
2	Object Name	Yellow	OUTP_BLK = 1	Output blocked
		Cyan	MANMODE=1	Manual mode
		Red	ERROR =1	Error
		Blue	ValuePresentation= On_Off and ((OutputType=ND and VALUE=1) or (OutputType=NE and VALUE=0))	AbNormal position and value presentation set to ‘On_Off’ .
		Green	Value .QualityOK	Normal position (or value presentation set to ‘Normal_Abnormal’)
		Beige	-	Unresolved (name: name)

No	Description	Default Presentation	Condition	Remarks
3	Value Square	BackgroundColor or *center*	ValuePresentation= On_Off and VALUE = 0	Unfilled: low output and value presentation set to ‘On_Off’
		BackgroundColor or *center*	ValuePresentation= *Normal_Abnormal* and ((OutputType=ND and VALUE=0) or (OutputType=NE and VALUE=1))	Unfilled: normal output and value presentation set to ‘Normal_Abnormal’
		Cyan	MANMODE = 1	Manual mode
		Yellow	OUTP_BLK = 1	Output blocked
		TestedColor	TESTED = 1	Test, Position fault, etc.
		Blue	ValuePresentation= On_Off and ((OutputType=ND and VALUE=1) or (OutputType=NE and VALUE=0))	AbNormal position and value presentation set to ‘On_Off’ .
		Green	Value .QualityOK	(High output and value presentation set to ‘Normal_Abnormal’)
		Beige	-	Unresolved

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

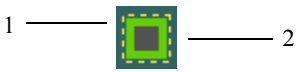
Configuration:

Parameters	Affects	Options (bold is default)	Remarks
OutputType	2. Name, 3. Value	**NormallyDeenergized,** Normallyenergized	Default: Normally De -energized output, that is, “abnormal position” if VALUE=1.
ValuePresenta-tion	3. Value, (2. Name)	**On_Off,** Normal_Abnormal	On_Off: filled square when VALUE = 1. Normal_Abnormal: filled square if abnormal. NOTE: Set parameter to On_Off to indicate abnormal position by blue color on status square and Name Set parameter to Normal_Abnormal to indicate abnormal position by a filled square. (Green color in both normal and abnormal position).
Status3D	3. Value	**false,** true	Default (false): flat status square, true: 3 Dimensional status square, sunken when square is filled.
TestedColor	3. Value	**red,** any color	Color for presentaion of TESTED property, used for testmode, position fault, etc.
Background Color	Background	Transparent, Any	

StatusBox01

Presentation:

Digital Output presentation, status (square).



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	Value .QualityOK	Normal
		Beige	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
2	Value Square	BackgroundColor or *center*	ValuePresentation=On_Off and VALUE=0	Unfilled: low output and value presentation set to ‘On_Off’
		BackgroundColor or *center*	ValuePresentation=*Normal_Abnormal* and ((OutputType=ND and VALUE=0) or (OutputType=NE and VALUE=1))	Unfilled: normal output and value presentation set to ‘Normal_Abnormal’
		Cyan	MANMODE = 1	Manual mode
		Yellow	OUTP_BLK = 1	Output blocked
		Red	ERROR =1	Error
		TestedColor	TESTED = 1	Test, Position fault, etc.
		Blue	ValuePresentation=On_Off and ((OutputType=ND and VALUE=1) or (OutputType=NE and VALUE=0))	AbNormal position and value presentation set to ‘On_Off’ .
		Green	Value .QualityOK	Normal
		Beige filled	ValuePresentation=On_Off and OutputType=NE	Unresolved (NE)
		Beige unfilled	-	Unresolved (ND)

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

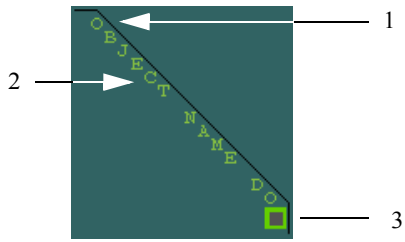
Parameters	Affects	Options (bold is default)	Remarks
OutputType	2. Value	**NormallyDeenergized,** Normallyenergized	Default: Normally De -energized output, that is, “abnormal position” if VALUE=1.
ValuePresenta-tion	2. Value	**On_Off,** Normal_Abnormal	On_Off: filled square when VALUE = 1. Normal_Abnormal: filled square if abnormal. NOTE: Set parameter to On_Off to indicate abnormal position by blue color . Set parameter to Normal_Abnormal to indicate abnormal position by a filled square. (Green color in both normal and abnormal position).
Status3D	2. Value	**false,** true	Default (false): flat status square, true: 3 Dimensional status square, sunken when square is filled.
TestedColor	2. Value	**red,** any color	Color for presentaion of TESTED property, used for testmode, position fault, etc.
Background Color	Background	Transparent, Any	

M_NameBox01

Presentation:

Digital Output presentation, a label (object name, description, or text) and a square. The Cause & Effect output status is indicated on the label, and the output value is indicated on the square.

The presentation is aslant in order to fit on the column top of the Cause & Effect diagram.



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		FrameColor	Value	Normal
2.1	Label Text	Name:Name	Label = Name and Value .QualityOK	Object Name
		Name:Description	Label = Description and Value .QualityOK	Object Description
		LabelText	(Label = Label_Text and Value .QualityOK	Configure -able Label
		name: name	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
2.2	Label Color	Yellow	OUTP_BLK = 1	Output blocked
		Red	ERROR =1	Error
		Blue	OutputType=ND and property 18 = 1 or (OutputType=NE and property 18 = 0)	AbNormal C&E status (Activation order or Shutdown order)
		Green	Value .QualityOK	Normal C&E status
		Beige	-	Unresolved (name: name)
3	Value Square	Dark Grey *center*	VALUE = 0 and Value .QualityOK	Unfilled: low output
		Cyan	MANMODE = 1	Manual mode
		Yellow	OUTP_BLK = 1	Output blocked
		TestedColor	TESTED = 1	Test, Position fault, etc.
		Blue	(OutputType=ND and VALUE=1) or (OutputType=NE and VALUE=0)	AbNormal position
		Green	Value .QualityOK	Normal position
		Beige	-	Unresolved

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

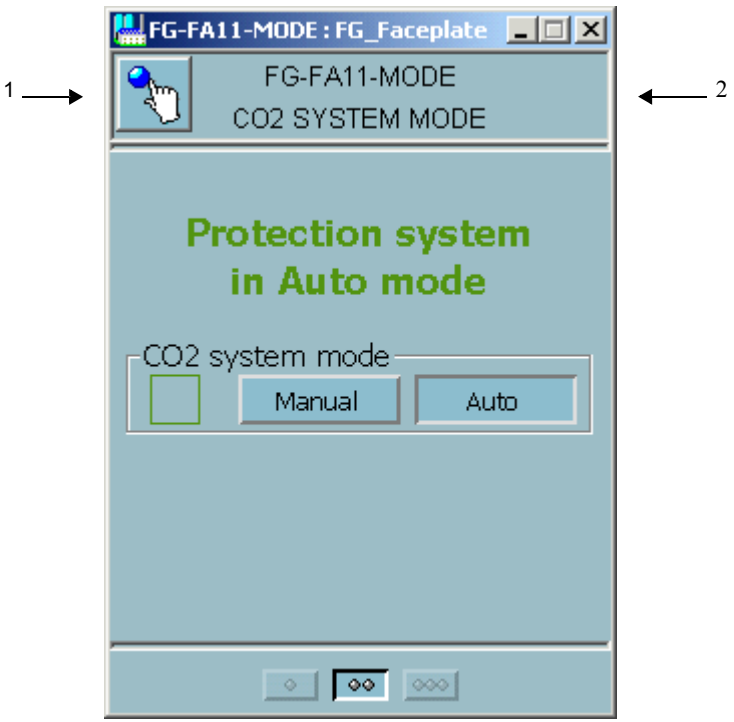
Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameColor	1. Frame	**black,** any color	Color of frame in normal condition. Intended as a part of the Cause & Effect Matrix grid.
OutputType	2. Label, 3. Value	**NormallyDeenergized,** Normallyenergized	Default: Normally De -energized output, that is, “abnormal position” if VALUE=1.
Label	2. Label	Name, Description, Label_Text	Default: C&E output is identified by presenting the Object Name.
LabelText	2. Label	OUTPUT, any text	Label to identify the Cause & Effect Matrix output. NOTE: Only visible if Label = Label_Text.
Status3D	3. Value	**false,** true	Default (false): flat value square, true: 3 Dimensional status square, sunken when square is filled.
TestedColor	3. Value	**red,** any color	Color for presentaion of TESTED property, used for testmode, position fault, etc.
Background Color	Background	Transparent, Any	

FG_Faceplate

Faceplate for DOC signal for control of CO2 system mode, using the Grapic Element Selection01, an asterisk selection point.The signal is connected to the User Element CO2 in the fire area logic.

Presentation:

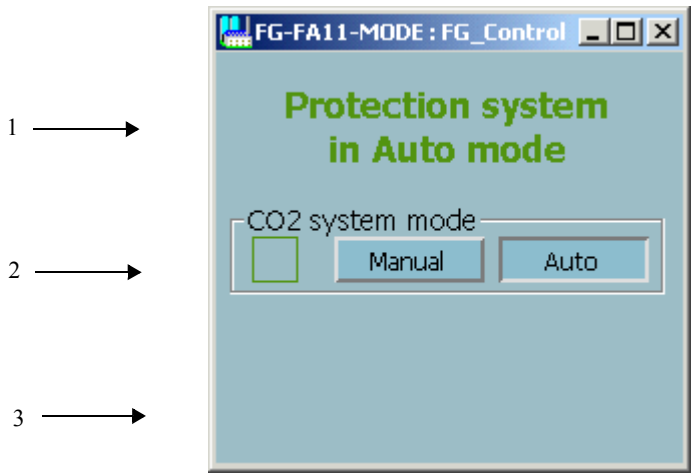


Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Lock Button			
2	Name and Description			

FG_Control

Presentation:



Behavior (Activation):

No	Button Text	Action	Response	Remarks
2.2	Manual	Set CO2 system in manual mode	Set VALUE = 1	Disabled if override not authorized,
2.3	Auto	Set CO2 system in auto mode	Set VALUE = 0	Disabled if override not authorized,

Behavior (Presentation):

No	Description	Default Presentation	Condition	Remarks
1	Mode description	Manual mode (Auto release inhibited) (Cyan)	VALUE = 1	System set in manual mode
		Protection system in Auto mode (Green)	VALUE .QualityOK	System set in auto mode
		System mode text (Beige)	-	Unresolved
2.1	Mode indication	Filled square (Cyan) Unfilled square (Green) Unfilled square (Beig)	VALUE = 1 VALUE .QualityOK -	CO2 system in manual mode CO2 system in auto mode Unresolved
3	Override authorize	(Invisible)	TESTED = 1	Override Authorize on
		Override not authorized (Grey)	TESTED .QualityOK	Override Authorize off
		Override not authorized (Beige)	-	Unresolved

The conditions are in priority order. Logically defined colors are used,see Appendix A, Logical Colors Definitions.

FG_Selection01

Presentation:

Selection point for (calculated) Digital Output. Used for mode selection object. Linked to FG_Faceplate.

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	Value .QualityOK	Normal
		Beige	-	Unresolved
2	Asterisk	White	SELECTED = 1	Selected
		Asterisk symbol (AsteriskColor)	Value .QualityOK	-
		Beige	-	Unresolved

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
AsteriskColor	2 Asterisk	**Green,** any color	
BackgroundColor	Background	Transparent, Any	

FG_Button01

Presentation:

3 Dimensional button presentation for Digital Output. Only *Value* indicated. Standard Faceplate displayed when selected.

Used as operator interface ("command") for DOCs, calculated digital outputs (To give command without Faceplate, see FG_Order01).

Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	Square frame	Sunken (FrameColor / FrameColor2)	VALUE =1 and Not Inverted or VALUE =0 and Inverted	Button pressed, Value = 1 or Inverted
		Raised (FrameColor / FrameColor2)	Value .qualityOK	Button released, Value = 0 or Inverted
		Beige	-	Unresolved
1.2	Square color	OnColor	VALUE =1 and Not Inverted or VALUE =0 and Inverted	Button pressed, Value = 1 or Inverted
		OffColor	Value .qualityOK	Button released, Value = 0 or Inverted
		Beige	-	Unresolved
2.1	Label	Label	-	

No	Description	Default Presentation	Condition	Remarks
2.2	Labelcolor	LabelOnColor	VALUE =1 and Not Inverted or VALUE =0 and Inverted	Button pressed, Value = 1 or Inverted
		LabelOffColor	Value	Button released, Value = 0 or Inverted
		Beige	-	Unresolved

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
Inverted	1. Square	**false,** true	
OnColor	1. Square	**Grey**, any color	Button pressed color
OffColor	1. Square	**Silver**, any color	Button released color
FrameColor	1. Square	**Very Light gray**, any color	
FrameColor2	1. Square	**Very Dark gray**, any color	
Label	2. Label	**""**, any text	
LabelOnColor	2. Label	**Red**, any color	
LabelOffColor	2. Label	**Green**, any color	
BackgroundColor	Background	Transparent, Any	

FG_NameBox01

Presentation:

Presentation of logic status (signal name) and value (square) for Digital Output. This enables presentation of activation signal from PC logic even when the output is set in manual mode. Used on fire area maintenance displays. Refer to User Elements ND-OUT and NE_OUT. The presentation is also suitable for Cause & effect Matrix outputs.

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	Value .QualityOK	Normal
		Beige	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
2	Status (Name) color			(Neither Manual mode nor VALUE is indicated on name.)
		Yellow	OUTP_BLK = 1	Output blocked
		Red	ERROR =1	Error
		Blue	StatusProperty =31and property 31=1	AbNormal AMPL logic status.
		Blue	StatusProperty =18 and property 18=0 and OutputType=NE	AbNormal C&E NE status.
		Blue	StatusProperty =18 and property 18=1 and OutputType=ND	AbNormal C&E ND status.
		Green	Value .QualityOK	Normal position.
		Beige	-	Unresolved (name: name)

No	Description	Default Presentation	Condition	Remarks
3	Value (Square) color	Dark Grey *center*	ValuePresentation=On_Off and VALUE = 0	Unfilled: low output and value presentation set to ‘On_Off’
		Dark Grey *center*	ValuePresentation=*Normal_Abnormal* and ((OutputType=ND and VALUE=0) or (OutputType=NE and VALUE=1))	Unfilled: normal output and value presentation set to ‘Normal_Abnormal’
		Cyan	MANMODE = 1	Manual mode
		Yellow	OUTP_BLK = 1	Output blocked
		Red	TESTED = 1	Test, Position fault, etc.
		Blue	ValuePresentation=On_Off and ((OutputType=ND and VALUE=1) or (OutputType=NE and VALUE=0))	AbNormal position and value presentation set to ‘On_Off’ .
		Green	Value .QualityOK	Normal
		Beige filled	ValuePresentation=On_Off and OutputType=NE	Unresolved (NE)
		Beige unfilled	-	Unresolved (ND)

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameters	**Affects**	**Options (bold is default)**	**Remarks**
OutputType	2. Name, 3. Value	**NormallyDeenergized,** Normallyenergized	Default: Normally De -energized output, that is, “abnormal position” if VALUE=1.
StatusProperty	2. Name	**31 AMPL,** 18 CauseEffect	AMPL: Property 31, set by AMPL logic when output is activated /tripped (that is, property 31 =0 in normal position for both ND and NE outputs). CauseEffect: Property 18, controlled by the Cause&Effect Matrix and set to the same value as the output (that is, property 18 =0 in normal position for ND outputs and property 18 =1 in normal position for NE outputs).
ValuePresenta-tion	3. Value	**On_Off,** Normal_Abnormal	On_Off: filled square when VALUE = 1, blue color indicate abnormal position Normal_Abnormal: filled square if abnormal, green in both normal and abnormal position
Status3D	3. Value	**false,** true	Default (false): flat status square, true: 3 Dimensional status square, sunken when square is filled.

Parameters	Affects	Options (bold is default)	Remarks
TestedColor	3. Value	**red,** any color	Color for presentaion of TESTED property, used for testmode, position fault, etc. Not Logically defined.
BackgroundColor	Background	Transparent, Any	

FG_NameBox01 utilization

Generally, outputs in a Safety system should never be *blocked*. In default Safeguard configuration, activation of a blocked output will lead to forced shutdown. This means that blocking can not be used as a way of testing the logic without interfering with the field.

A solution is to set the output which shall be tested in *manual mode*. The logic will then not control the field, and activation order will not give forced shutdown. In addition, the AMPL logic must be connected to property 31 to enable presentation of the logic status. In the Cause&Effect Matrix logic, property 18 is used (already connected internally).

The Graphic Element FG_NameBox01 provides presentation of signal name and square for normally de-energized (ND) and normally energized (NE) outputs. Logic Status (AMPL or Cause & Effect) is indicated on name, and value is indicated on the square.

For correct presentation of normally energized outputs, the parameter OutputType must be set to NormallyEnergized (default is NormallyDeenergized).

There are two alternatives on indication of value. This is controlled by the parameter ValuePresentation.

Alternative 1 (default): Both value (on/off) and status (normal/abnormal) are indicated.
(This will also indicate the output type, as for example a green filled square will indicate a normally energized output.)

Alternative 2: Only status indicated (normal/abnormal) by square appearance. (Always green).

The parameter settings and the resulting presentation appearance is illustrated in Table 1.

Table 1. Presentation of digital output value with the FG_NameBox01 Graphic Element.

Alternative	Property settings	ND presentation	NE presentation
1	ValuePresentation = On_Off	Normal: Green open square. Abnormal: *Blue filled* square.	Normal: Green filled square. Abnormal: *Blue open* square.
2	ValuePresentation = Normal_Abnormal	Normal: Green open square. Abnormal: Green *filled* square.	

FG_StatusBox01

Presentation:

Presentation of logical status (square) for Digital Outputs. This enables presentation of activation signal from PC logic even when the output is set in manual mode. Refer to User Elements ND-OUT and NE_OUT. The presentation is also suitable for Cause & effect Matrix outputs.

Note: Neither Manual mode nor VALUE is indicated.

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	Value .QualityOK	Normal
		Beige	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
2	Status	Dark Grey *center*	StatusProperty =31and property 31=1 and OutputType=NE	Unfilled: Abnormal AMPL NE status **NOTE: Inverted presentation of AMPL NE status to give same visual effect as the NE ouput**
		Dark Grey *center*	StatusProperty =31and property 31=0 and OutputType=ND	Unfilled: Normal AMPL ND status
		Dark Grey *center*	StatusProperty =18 and property 18=0	Unfilled: AbNormal C&E NE status or Normal C&E ND status
		Yellow	OUTP_BLK = 1	Output blocked
		Red	ERROR =1	Error
		Blue	StatusProperty =31and property 31=1 and OutputType=NE	AbNormal AMPL NE status.
		Blue	StatusProperty =31and property 31=1 and OutputType=ND	Abormal AMPL ND status

No	Description	Default Presentation	Condition	Remarks
		Blue	StatusProperty =18 and property 18=0 and OutputType=NE	AbNormal C&E NE status.
		Blue	StatusProperty =18 and property 18=1 and OutputType=ND	AbNormal C&E ND status.
		Green	Value .QualityOK	Normal (property 31 resolved)
		Beige filled	OutputType=NE	Unresolved (NE)
		Beige unfilled	-	Unresolved (ND)

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
OutputType	2. Status	**NormallyDeenergized,** Normallyenergized	Default: Normally De -energized output, that is, “abnormal position” if VALUE=1.
StatusProper-ty	2. Status	**31 AMPL,** 18 CauseEffect	AMPL: Property 31, set by AMPL logic when output is activated / tripped (that is, property 31 =0 in normal position for both ND and NE outputs). CauseEffect: Property 18, controlled by the Cause&Effect Matrix and set to the same value as the output (that is, property 18 =0 in normal position for ND outputs and property 18 =1 in normal position for NE outputs).
Status3D	2. Status	**false,** true	Default (false): flat status square, true: 3 Dimensional status square , sunken when square is filled.
Background Color	Background	Transparent, Any	

FG_ValueText01

Presentation:

Text presentation of Digital Output value.
Configurable color and strings, both for value on and value off.

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	Value .QualityOK	Normal
		Beige	-	Unresolved
2	Text	ValueOnText (ValueOnColor)	VALUE = 1	Value on
		ValueOffText (ValueOffColor)	Value .QualityOK	Value off
		ValueOffText (Beige)	-	Unresolved

The conditions are in priority order. Underlined parameters are configurable.
Logically defined colors are used, see Appendix A, Logical Colors Definitions.

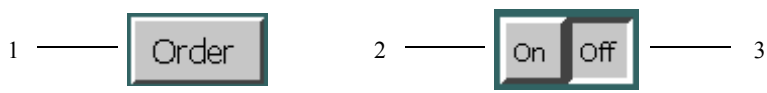
Configuration:

Parameter	Affect	Option (bold is default)	Remarks
ValueOnText	2. Text	, any text	Default: empty string
ValueOffText	2. Text	, any text	Default, empty string
ValueOnColor	2. Text	**Green**, any color	
ValueOffColor	2. Text	**Green**, any color	
BackgroundColor	Background	Transparent, Any	

FG_Order01

Presentation:

Two pushbuttons for control and presentation of Digital Output *Value*, On and Off. Control performed directly, no Faceplate is displayed when selected
A Cover is included (configurable), demanding two clicks to perform change of value (to avoid unawared action)
(To give command from standard Faceplate, see FG_Button01.)



Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	CoverLabel	(Cover not visible)	CoverVisible =False	CoverStyle =True, then Cover dissappears when clicked.
		CoverCaptionOn	VALUE =1	Static cover label
		CoverCaptionOff	Value .qualityOK	Dynamic cover label, Value = 1
		Raised	-	Unresolved
1.3	Labelcolor	CoverCaptionOnColor	VALUE =1	Value = 1
		CoverCaptionOffColor	Value .qualityOK	Value = 0
		Grey	-	Unresolved
2.1	Left Button	Sunken	VALUE =1	Button pressed, Value = 1
		Raised	Value .qualityOK	Button released, Value = 0
		Raised	-	Unresolved
2.2	Label	OnCaption	-	
2.3	Labelcolor	OnColorPressed	VALUE =1	Button pressed, Value = 1
		OnColorNotpressed	-	Button released, Value = 0

No	Description	Default Presentation	Condition	Remarks
3.1	Right Button	Raised	VALUE =1	Button released, Value = 1
		Sunken	Value .qualityOK	Button pressed, Value = 0
		Sunken	-	Unresolved
3.2	Label	OffCaption	-	
3.3	Labelcolor	OffColorNotpressed	VALUE =1	Button released, Value = 1
		OffColorPressed	-	Button pressed, Value = 0

The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
CoverVisible	1. Cover	**True**, False	Cover to avoid unawared action, that is, no action is performed on ‘first click’. Also, the Cover Captions can improve status indication.
CoverCaptionOn	1. Cover	**"Order"**, any text	Only visible if CoverVisible = True
CoverCaptionOff	1. Cover	**"Order"**, any text	Only visible if CoverVisible = True
CoverCaptionOnColor	1. Cover	**Black**, any color	Text color on Cover when value = 1
CoverCaptionOffColor	1. Cover	**Black**, any color	Text color onCover when value = 0

Parameters	Affects	Options (bold is default)	Remarks
OnCaption	2. Left Button	**"On"**, any text	Caption of ON button
OnColorNotpressed	2. Left Button	**Black**, any color	Text color on ON button when value = 0
OnColorPressed	2. Left Button	**Black**, any color	Text color on ON button when value = 1
OffCaption	3. Right Button	**"Off"**, any text	Caption of OFF button
OffColorNotpressed	3. Right Button	**Black**, any color	Text color on OFF button when value = 1
OffColorPressed	3. Right Button	**Black**, any color	Text color on OFF button when value = 0
BackgroundColor	Background	Transparent, Any	

FG_Toggle01

Presentation:

One toggle button for control and presentation of Digital Output *Value*.
Control performed directly, no Faceplate is displayed when selected.
Since the action depends on button status, this control must be used with care in a dual system. (To ensure same action in both dual nodes, consider the Graphic Element FG_Order01).

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Button			Set VALUE when pressed
1.1	Button	Sunken	VALUE =1	Button pressed, Value = 1
		Raised	Value .qualityOK	Button released, Value = 0
		Raised	-	Unresolved
1.2	Label	OnCaption	VALUE =1	
		OffCaption	-	
1.3	Labelcolor	OnColorPressed	VALUE =1	Button pressed, Value = 1
		OffColorNotpressed	-	Button released, Value = 0

The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
OnCaption	1. Button	**"On"**, any text	Caption of button when value = 1
OnColorPressed	1. Button	**Black**, any color	Text color on button when value = 1
OffCaption	1. Button	**"Off"**, any text	Caption of button when value = 0

Parameters	Affects	Options (bold is default)	Remarks
OffColorNotpressed	1. Button	**Black**, any color	Text color on button when value = 0
BackgroundColor	Background	Transparent, Any	

FG_Toggle01 utilization

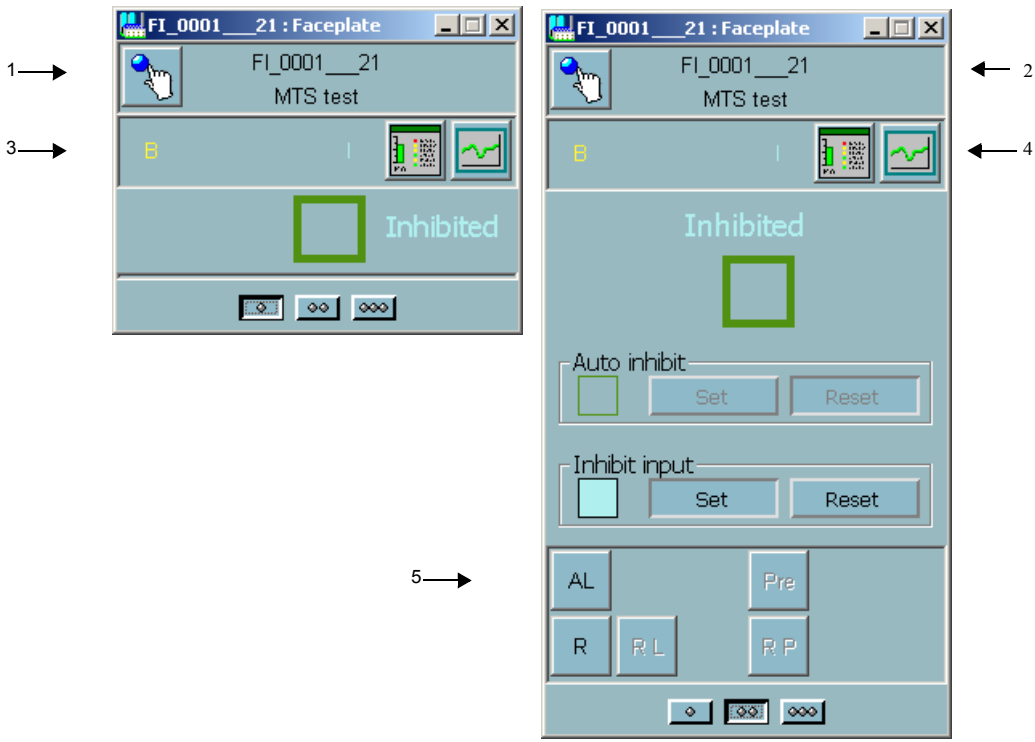
Example logic to use the control to give a 10 second pulse:

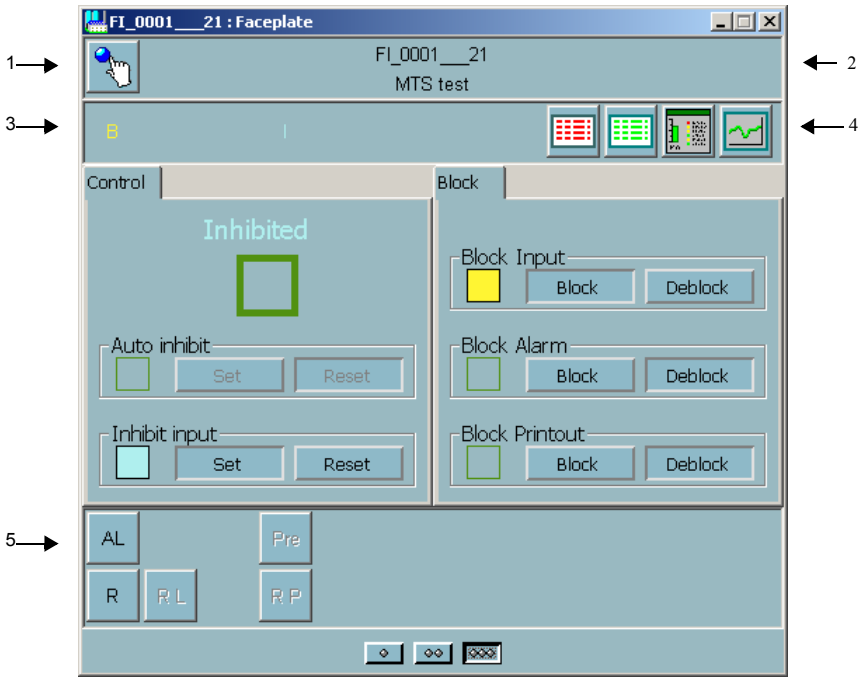
The output signal is set in manual when value is low (class is set to 79 to disable bypass management), using an Invertor (INV element). Value is connected to the input pin of a mono element, through a trigger. TP on the mono element is set to 10. The mono element output pin is connected to the output signal value.

Fire Input

Faceplate

Presentation:





Behavior:

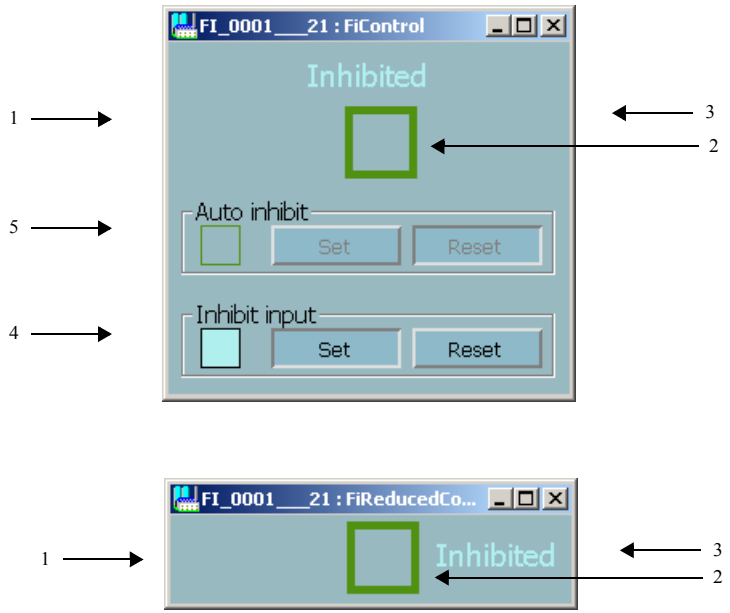
No	Description	Default Presentation	Condition	Remarks
1	Lock Button			
2	Name and Description			
3	Status Field			
3.1	Input Blk	**B** Yellow	UPD_BLK = 1	
3.2	Print Blk	**P** Yellow	PRINT_BLK = 1	

No	Description	Default Presentation	Condition	Remarks
3.3	Error	**E** Red	ERROR = 1	
3.4	Inhibit	**I** Cyan	INH = 1	
4	Aspect links	Alarm List	position 0, 0, 9	
		Event List	position 0, 0, 10	
		Object Display	position 5, 5, 11	
		Trend Display	position 6, 6, 12	
5	Buttons			
5.1	AL	Set Alarm	iif($'.:UPD_BLK', 1, 0)	Enabled if blocked
5.7	R	Reset Alarm	iif($'.:UPD_BLK', 1, 0)	Enabled if blocked
5.3	R L	Reset Latch	iif($'.:ALARM_LATCH' And $'.:AL'=0, 1, 0)	Enabled if unack. alarm
5.2	Pre	Set Prewarning	iif($'.:UPD_BLK' And $'.:DETECTOR_TYPE'=5, 1, 0)	Enabled if Fire Detector
5.8	R P	Reset Prewarning	iif($'.:UPD_BLK' And $'.:DETECTOR_TYPE'=5, 1, 0)	Enabled if Fire Detector

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

FiControlFI and FiReducedControl

Presentation:



Behavior (Activation):

No	Button Text	Action	Response	Remarks
4.2	Set	Set Inhibit	Set INH = 1	
4.3	Reset	Reset Inhibit	Set INH = 0	
5.2	Set	Set Auto Inhibit	Set AUTO_INH = 1	Only visible for FINC (Normally Closed), Only accessible when Alarm and not Blocked.
5.3	Reset	Reset Auto Inhibit	Set AUTO_INH = 0	Only accessible for FINC (Normally Closed)

Behavior: (Presentation)

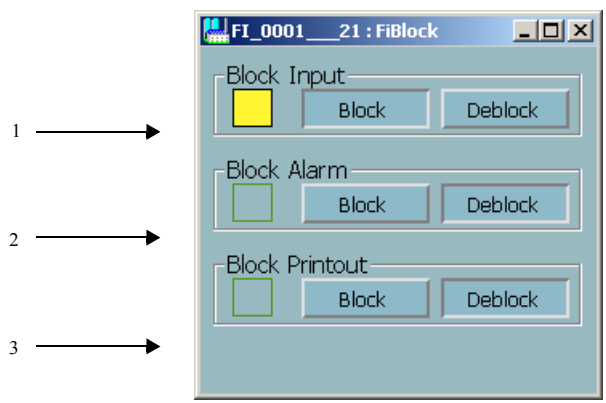
No	Description	Default Presentation	Condition	Remarks
1	Alarm Text (Color)	Alarm (Red)	AL = 1	*Alarm*
		Latched Alarm (Red)	AL_L = 1 Not (DETECTOR_TYPE =5)	Latched alarm & Not FD
		Prewarning (Red)	PREWARN = 1 And DETECTOR_TYPE =5)	Prewarning & fD
		(no indication)	AL .QualityOK	Normal condition
		Latched Alarm (Beige)	-	Unresolved
2	Alarm square	■ Red	AL = 1	*Alarm*
		□ Red	AL_L = 1 Not (DETECTOR_TYPE =5)	Latched alarm & Not FD
		□ Red	PREWARN = 1 And DETECTOR_TYPE =5)	Prewarning & fD
		□ Green	AL .QualityOK	Normal condition
3	Inhibit Text (Color)	Inhibited (Cyan)	INH = 1	*Inhibited*
		Invisible (Light Blue)	AL .QualityOK	
		Inhibited (Beige)	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
4.1	Inhibit Input indication	Filled square (Cyan) Unfilled square (Green) Disabled	INH = 1 - AUTO_INH .QualityBad	*Inhibited* Not *Inhibited* Unresolved
5.1	Auto inhibit indication	Invisible Filled square (Cyan) Unfilled square (Green) Unfilled square (Grey) Disabled	DETECTOR_TYPE <> 1 AUTO_INH = 1 AL = 1 and BLOCKED = 0 - AUTO_INH .QualityBad	*Only visible if FINC (Normally Closed)* *Auto inhibited* Not Auto *Inhibited* Not accessible Unresolved

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

FiBlock

Presentation:



Behavior (Activation):

No	Button Text	Action	Response	Remarks
1.2	Block	Set Input Block	Set UPD_BLK = 1	
1.3	Deblock	Reset Input Block	Set UPD_BLK = 0	
2.2	Block	Set Alarm Block	Set ALARM_BLK = 1	
2.3	Deblock	Reset Alarm Block	Set ALARM_BLK = 0	
3.2	Block	Set Printout Block	Set PR_BLK = 1	
3.3	Deblock	Reset Printout Block	Set PR_BLK = 0	

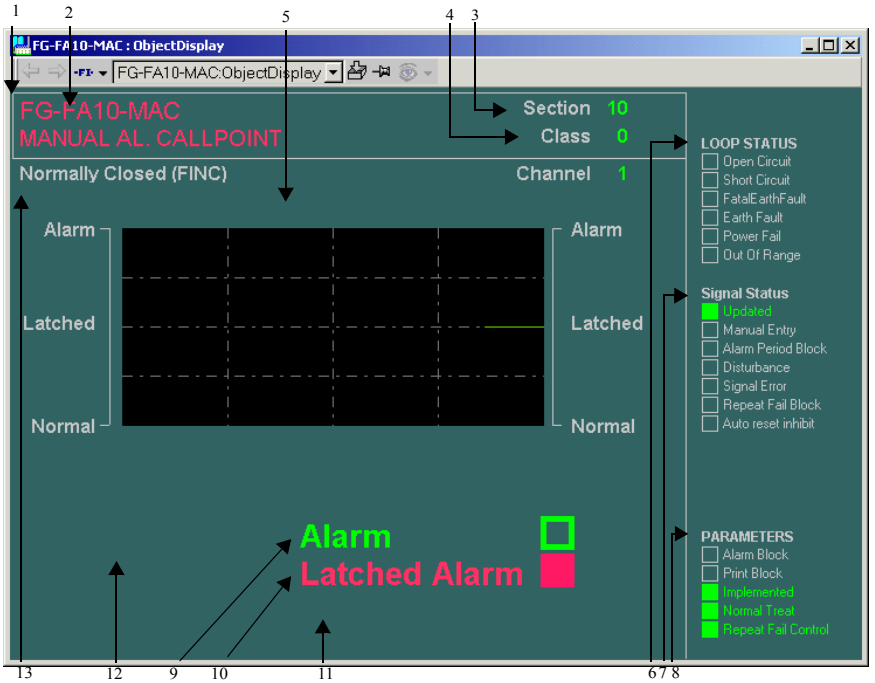
Behavior (Presentation):

No	Description	Default Presentation	Condition	Remarks
1.1	Block Input indication	Filled square (Yellow) Unfilled square (Green) Disabled	UPD_BLK = 1 - UPD_BLK .QualityBad	*Input Blocked* Input not *blocked* Unresolved
2.1	Block Alarm indication	Filled square (Yellow) Unfilled square (Green) Disabled	ALARM_BLK = 1 - ALARM_BLK .QualityBad	**Alarm** *Blocked* **Alarm** not *blocked* Unresolved
3.1	Block Printout indication	Filled square (Yellow) Unfilled square (Green) Disabled	PR_BLK = 1 - PR_BLK .QualityBad	**Printout** *Blocked* **Printout** not *blocked* Unresolved

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Object Display for FINO, FINC and FISM

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Lock Frame	White	SELECTED = 1	Object select frame
		Grey	SELECTED = 0	

No	Description	Default Presentation	Condition	Remarks
2	Header		NAME and DESCR	Object Name and Description
		Red flashing	AL_UNACK = 1	Unacknowledged
		Yellow	UPD_BLK = 1	Input blocked
		Cyan	INH = 1	Inhibited
		Red	ERR = 1	Error
		Red	DISTURB = 1	Alarm
		Red	AL_L = 1	Alarm Latched
		Green	AL .QualityOK	Normal
		Beige	-	Unresolved
3.1	Section Text	Section (Grey)	AL .QualityOK	Static text
		Beige	-	Unresolved
3.2	Section Value	Green	PROC_SEC (SUBSYSTEM)	Process section
4.1	Class Text	Class (Grey)	AL .QualityOK	Static text
		Beige	-	Unresolved
4.2	Class Value	Green	CLASS	Object class
5.1	Alarm Trim Curve	Green	ALARM	

No	Description	Default Presentation	Condition	Remarks
5.2	Range Indicators	Alarm (Grey)	AL . QualityOK	Alarm indicator
		Alarm (Beige)	-	Unresolved
		Latched (Grey)	AL . QualityOK	Latched indicator
		Latched (Beige)	-	Unresolved
		Normal (Grey)	AL . QualityOK	Normal indicator
		Normal (Beige)	-	Unresolved
6	Loop Status	LOOP STATUS (Grey)		Static text
6.1	Open Circuit	■ Open Circuit (Red) □ Open Circuit (Grey) □ Open Circuit (Beige)	CABLE_BREAK = 1 CABLE_BREAK .QualityOK -	Open Circuit Normal status <u>Unresolved</u>
6.2	Short Circuit	■ Short Circuit (Red) □ Short Circuit (Grey) □ Short Circuit (Beige)	SH_CIRC = 1 SH_CIRC .QualityOK -	Short Circuit Normal status <u>Unresolved</u>

No	Description	Default Presentation	Condition	Remarks
6.3	Fatal Earth Fault	■ Fatal Earth Fault (Red) □ Fatal Earth Fault (Grey) □ Fatal Earth Fault (Beige)	F_EARTHF = 1 F_EARTHF .QualityOK -	Fatal Earth Fault Normal status Unresolved
6.4	Earth Fault	■ Earth Fault (Red) □ Earth Fault (Grey) □ Earth Fault (Beige)	EARTHF = 1 EARTHF .QualityOK -	Earth Fault Normal status Unresolved
6.5	Power Fail	■ Power Fail (Red) □ Power Fail (Grey) □ Power Fail (Beige)	POW_FAIL = 1 POW_FAIL .QualityOK -	Power Fail Normal status Unresolved
6.6	Out of Range	■ Out of Range (Red) □ Out of Range (Grey) □ Out of Range (Beige)	OUT_OF_R = 1 OUT_OF_R .QualityOK -	Out of Range Normal status Unresolved
7	Signal Status	SIGNAL STATUS (Grey)		Static text

No	Description	Default Presentation	Condition	Remarks
7.1	Updated	■ Updated (Green) □ Updated (Grey) □ Updated (Beige)	UPDATED = 1 UPDATED .QualityOK -	Updated Not updated Unresolved
7.2	Manual entry	■ Manual entry (Green) □ Manual entry (Grey) □ Manual entry (Beige)	MAN_ENTR = 1 MAN_ENTR .QualityOK -	Manual entry Unresolved
7.3	Alarm period block	■ Alarm period blk (Yellow) □ Alarm period blk (Grey) □ Alarm period blk (Beige)	AL_P_BLK = 1 AL_P_BLK .QualityOK -	Alarm period block Normal status Unresolved
7.4	Disturbance	■ Disturbance (Red) □ Disturbance (Grey) □ Disturbance (Beige)	DISTURBANCE = 1 DISTURBANCE .QualityOK -	Disturbance Normal status Unresolved
7.5	Signal error	■ Signal error (Red) □ Signal error (Grey) □ Signal error (Beige)	ERROR = 1 ERROR .QualityOK -	Signal error Normal status Unresolved

No	Description	Default Presentation	Condition	Remarks
7.6	Repeat Fail Block	■ Repeat Fail Block (Yellow) □ Repeat Fail Block (Grey) □ Repeat Fail Block (Beige)	RP_FAIL_BLK = 1 RP_FAIL_BLK .QualityOK -	Repeat Fail Block Normal status Unresolved
7.7	Auto Repeat Inhibit	(Invisible) ■ Auto Repeat Inhibit (Cyan) □ Auto Repeat Inhibit (Grey) □ Auto Repeat Inhibit (Beige)	DETECTOR_TYPE <> 1 AUTO_INH = 1 AUTO_INH .QualityOK -	(Only visible if FINC) Auto Repeat Inhibit Normal status Unresolved
8	PARAMETERS	PARAMETERS (Grey)		Static text
8.1	Alarm block	■ Alarm block (Yellow) □ Alarm block (Grey) □ Alarm block (Beige)	ALARM_BLK = 1 ALARM_BLK .QualityOK -	Alarm block Normal status Unresolved
8.2	Print block	■ Print block (Yellow) □ Print block (Grey) □ Print block (Beige)	PRINT_BLK = 1 PRINT_BLK .QualityOK -	Print block Normal status Unresolved

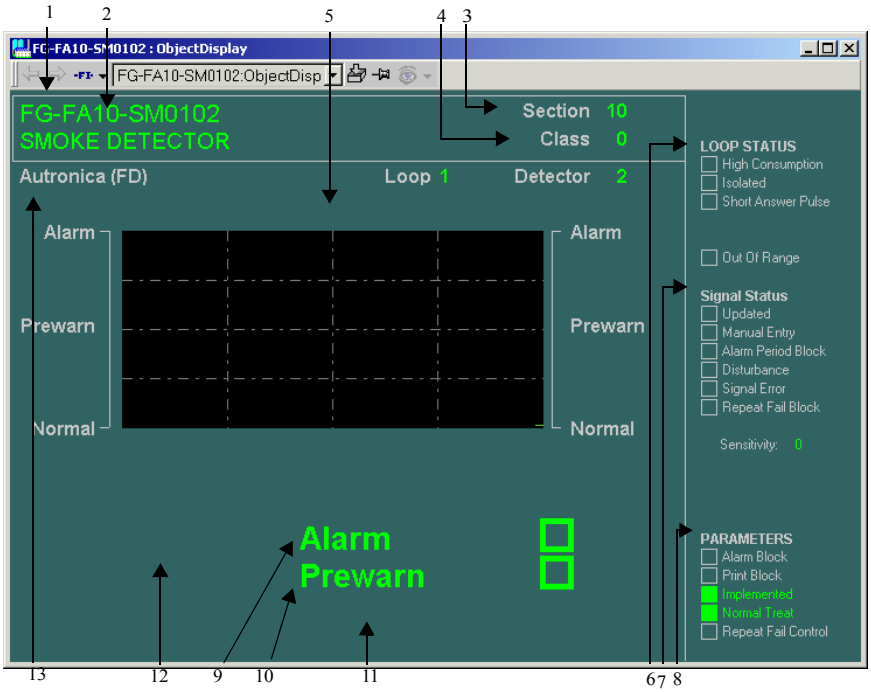
No	Description	Default Presentation	Condition	Remarks
8.3	Implemented	■ Implemented (Green) □ Implemented (Grey) □ Implemented (Beige)	IMPLEMENTED = 1 IMPLEMENTED .QualityOK -	Implemented Normal status Unresolved
8.4	Normal Treat	■ Normal Treat (Green) □ Normal Treat (Grey) □ Normal Treat (Beige)	NORM_TR = 1 NORM_TR .QualityOK -	Normal Treat Normal status Unresolved
8.5	Repeat Fail Control	■ Repeat Fail Cntl (Green) □ Repeat Fail Cntl (Grey) □ Repeat Fail Cntl (Beige)	RP_F_CTL = 1 RP_F_CTL .QualityOK -	Repeat Fail Control Normal status Unresolved
9	Alarm	ALARM ■ (Red) ALARM □ (Grey) ALARM □ (Beige)	AL = 1 AL .QualityOK -	Alarm Normal status Unresolved

No	Description	Default Presentation	Condition	Remarks
10	Latched Alarm	LATCHED ALARM ■ (Red) LATCHED ALARM □ (Grey) LATCHED ALARM □ (Beige)	AL_L = 1 AL_L .QualityOK -	Alarm Normal status Unresolved
11	Inhibit	Inhibit (Cyan) Inhibit (Grey) Inhibit (Beige)	INH = 1 INH .QualityOK -	Inhibit Normal status Unresolved
12	Input Blocked	Input Blocked (Yellow) Input Blocked (Grey) Input Blocked (Beige)	UPD_BLK = 1 AL .QualityOK -	Input Blocked Normal status Unresolved
13	Fire Input Type	Normally Closed (FINC)(Grey) Normally Open (FINO) (Grey) Smoke (FISM) (Grey) Unknown detector type (Grey) Detector Type (Beige)	DETECTOR_TYPE = 1 DETECTOR_TYPE = 3 DETECTOR_TYPE = 4 AL .QualityOK -	Fire Input Normally Closed Fire Input Normally Open Fire Input Smoke Unknown Unresolved

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Object Display for FD (Autronica)

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Lock Frame	White	SELECTED = 1	Object select frame
		Grey	SELECTED = 0	

No	Description	Default Presentation	Condition	Remarks
2	Header		NAME and DESCR	Object Name and Description
		Red flashing	AL_UNACK = 1	Unacknowledged
		Yellow	UPD_BLK = 1	Input blocked
		Cyan	INH = 1	Inhibited
		Red	ERR = 1	Error
		Red	DISTURB = 1	Alarm
		Red	AL_L = 1	Alarm Latched
		Green	AL .QualityOK	Normal
		Beige	-	Unresolved
3.1	Section Text	Section (Grey)	AL .QualityOK	Static text
		Beige	-	Unresolved
3.2	Section Value	Green	PROC_SEC (SUBSYSTEM)	Process section
4.1	Class Text	Class (Grey)	AL .QualityOK	Static text
		Beige	-	Unresolved
4.2	Class Value	Green	CLASS	Object class
5.1	Alarm Trim Curve	Green	ALARM	
5.2	Range Indicators	Alarm (Grey)	AL . QualityOK	Alarm indicator
		Alarm (Beige)	-	Unresolved
		Prewarn (Grey)	Prewarn	Prewarn indicator
		Normal (Grey)	AL . QualityOK	Normal indicator
		Normal (Beige)	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
6	Loop Status	LOOP STATUS (Grey)		Static text
6.1	High Consumption	■ High Consumption (Red) □ High Consumption (Grey) □ High Consumption (Beige)	CABLE_BREAK = 1 CABLE_BREAK .QualityOK -	High Consumption Normal status Unresolved
6.2	Isolated	■ Isolated (Red) □ Isolated (Grey) □ Isolated (Beige)	SH_CIRC = 1 SH_CIRC .QualityOK -	Isolated Normal status Unresolved
6.3	Short Anwer Pulse	■ Short Anwer Pulse (Red) □ Short Anwer Pulse (Grey) □ Short Anwer Pulse (Beige)	F_EARTHF = 1 F_EARTHF .QualityOK -	Short Anwer Pulse Normal status Unresolved
6.4	Out of Range	■ Out of Range (Red) □ Out of Range (Grey) □ Out of Range (Beige)	OUT_OF_R = 1 OUT_OF_R .QualityOK -	Out of Range Normal status Unresolved
7	Signal Status	SIGNAL STATUS (Grey)		Static text

No	Description	Default Presentation	Condition	Remarks
7.1	Updated	■ Updated (Green) □ Updated (Grey) □ Updated (Beige)	UPDATED = 1 UPDATED .QualityOK -	Updated Not updated Unresolved
7.2	Manual entry	■ Manual entry (Green) □ Manual entry (Grey) □ Manual entry (Beige)	MANUAL_ENTR = 1 MANUAL_ENTR .QualityOK -	Manual entry Unresolved
7.3	Alarm period block	■ Alarm period blk (Yellow) □ Alarm period blk (Grey) □ Alarm period blk (Beige)	AL_P_BLK = 1 AL_P_BLK .QualityOK -	Alarm period block Normal status Unresolved
7.4	Disturbance	■ Disturbance (Red) □ Disturbance (Grey) □ Disturbance (Beige)	DISTURBANCE = 1 DISTURBANCE .QualityOK -	Disturbance Normal status Unresolved
7.5	Signal error	■ Signal error (Red) □ Signal error (Grey) □ Signal error (Beige)	ERROR = 1 ERROR .QualityOK -	Signal error Normal status Unresolved

No	Description	Default Presentation	Condition	Remarks
7.6	Repeat Fail Block	■ Repeat Fail Block (Yellow) □ Repeat Fail Block (Grey) □ Repeat Fail Block (Beige)	REPEAT_FAIL_BLK = 1 REPEAT_FAIL_BLK .QualityOK -	Repeat Fail Block Normal status Unresolved
7.7	Not visible		AUTO_INH	Only FINO, FINC, FISM.
7.8	Sensivity	Sensivity (Grey) <value> (Green) <0> (Beige)	VALUE .QualityOK -	Static text Sensivity value Unresolved
8	PARAMETERS	PARAMETERS (Grey)		Static text
8.1	Alarm block	■ Alarm block (Yellow) □ Alarm blockt (Grey) □ Alarm block (Beige)	ALARM_BLK = 1 ALARM_BLK .QualityOK -	Alarm block Normal status Unresolved
8.2	Print block	■ Print block (Yellow) □ Print block (Grey) □ Print block (Beige)	PRINT_BLK = 1 PRINT_BLK .QualityOK -	Print block Normal status Unresolved
8.3	Implemented	■ Implemented (Green) □ Implemented (Grey) □ Implemented (Beige)	IMPLEMENTED = 1 IMPLEMENTED .QualityOK -	Implemented Normal status Unresolved

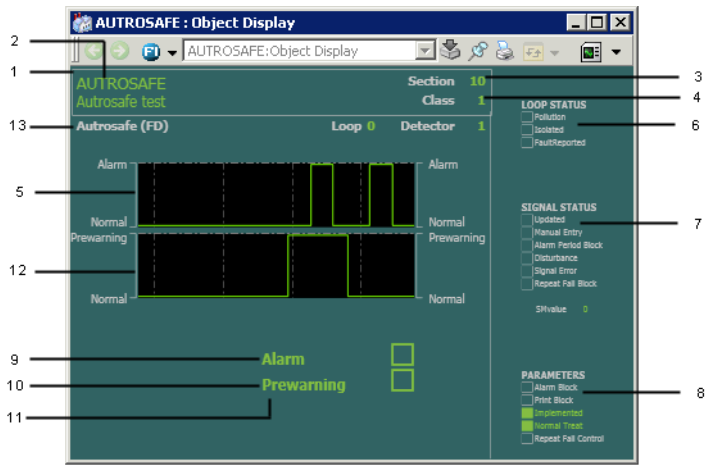
No	Description	Default Presentation	Condition	Remarks
8.4	Normal Treat	■ Normal Treat (Green) □ Normal Treat (Grey) □ Normal Treat (Beige)	NORM_TREAT = 1 NORM_TREAT .QualityOK -	Normal Treat Normal status Unresolved
8.5	Repeat Fail Control	■ Repeat Fail Cntl (Green) □ Repeat Fail Cntl (Grey) □ Repeat Fail Cntl (Beige)	RP_F_CTL = 1 RP_F_CTL .QualityOK -	Repeat Fail Control Normal status Unresolved
9	Alarm	ALARM ■ (Red) ALARM □ (Grey) ALARM □ (Beige)	AL = 1 AL .QualityOK -	Alarm Normal status Unresolved
10	Prewarning	PREWARNING ■ (Red) PREWARNING □ (Grey) PREWARNING □ (Beige)	PREWARN = 1 PREWARN .QualityOK -	Prewarning Normal status Unresolved
11	Inhibit	Inhibit (Cyan) Inhibit (Grey) Inhibit (Beige)	INH = 1 INH .QualityOK -	Inhibit Normal status Unresolved

No	Description	Default Presentation	Condition	Remarks
12	Input Blocked	Input Blocked (Yellow) Input Blocked (Grey) Input Blocked (Beige)	UPD_BLK = 1 AL .QualityOK -	Input Blocked Normal status Unresolved
13	Fire Detector Type	Autronica (Grey) Unknown detector type (Grey) Detector Type (Beige)	DETECTOR_TYPE=5 & TYPE=0 AL .QualityOK -	Autronica detector Unknown Unresolved

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Object Display for FD (AutroSafe)

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Lock Frame	White	SELECTED = 1	Object select frame
		Grey	SELECTED = 0	

No	Description	Default Presentation	Condition	Remarks
2	Header		NAME and DESCR	Object Name and Description
		Red flashing	AL_UNACK = 1	Unacknowledged
		Yellow	UPD_BLK = 1	Input blocked
		Cyan	INH = 1	Inhibited
		Red	ERR = 1	Error
		Red	DISTURB = 1	Alarm
		Red	AL_L = 1	Alarm Latched
		Green	AL .QualityOK	Normal
		Beige	-	Unresolved
3.1	Section Text	Section (Grey)	AL .QualityOK	Static text
		Beige	-	Unresolved
3.2	Section Value	Green	PROC_SEC (SUBSYSTEM)	Process section
4.1	Class Text	Class (Grey)	AL .QualityOK	Static text
		Beige	-	Unresolved
4.2	Class Value	Green	CLASS	Object class
5.1	Alarm Trim Curve	Green	ALARM	
5.2	Range Indicators	Alarm (Grey)	AL . QualityOK	Alarm indicator
		Alarm (Beige)	-	Unresolved
		Prewarn (Grey)	Prewarn	Prewarn indicator
		Normal (Grey)	AL . QualityOK	Normal indicator
		Normal (Beige)	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
6	Loop Status	LOOP STATUS (Grey)		Static text
6.1	Pollution	■ Pollution (Red) □ Pollution(Grey) □ Pollution(Beige)	CABLE_BREAK = 1 CABLE_BREAK .QualityOK -	Pollution Normal status Unresolved
6.2	Isolated	■ Isolated (Red) □ Isolated (Grey) □ Isolated (Beige)	SH_CIRC = 1 SH_CIRC .QualityOK -	Isolated Normal status Unresolved
6.3	Fault Reported	■ Fault Reported(Red) □ Fault Reported(Grey) □ Fault Reported(Beige)	F_EARTHF = 1 F_EARTHF .QualityOK -	Fault Reported Normal status Unresolved
7	Signal Status	SIGNAL STATUS (Grey)		Static text
7.1	Updated	■ Updated (Green) □ Updated (Grey) □ Updated (Beige)	UPDATED = 1 UPDATED .QualityOK -	Updated Not updated Unresolved

No	Description	Default Presentation	Condition	Remarks
7.2	Manual entry	■ Manual entry (Green) □ Manual entry (Grey) □ Manual entry (Beige)	MANUAL_ENTR = 1 MANUAL_ENTR .QualityOK -	Manual entry Unresolved
7.3	Alarm period block	■ Alarm period blk (Yellow) □ Alarm period blk (Grey) □ Alarm period blk (Beige)	AL_P_BLK = 1 AL_P_BLK .QualityOK -	Alarm period block Normal status Unresolved
7.4	Disturbance	■ Disturbance (Red) □ Disturbance (Grey) □ Disturbance (Beige)	DISTURBANCE = 1 DISTURBANCE .QualityOK -	Disturbance Normal status Unresolved
7.5	Signal error	■ Signal error (Red) □ Signal error (Grey) □ Signal error (Beige)	ERROR = 1 ERROR .QualityOK -	Signal error Normal status Unresolved
7.6	Repeat Fail Block	■ Repeat Fail Block (Yellow) □ Repeat Fail Block (Grey) □ Repeat Fail Block (Beige)	REPEAT_FAIL_BLK = 1 REPEAT_FAIL_BLK .QualityOK -	Repeat Fail Block Normal status Unresolved

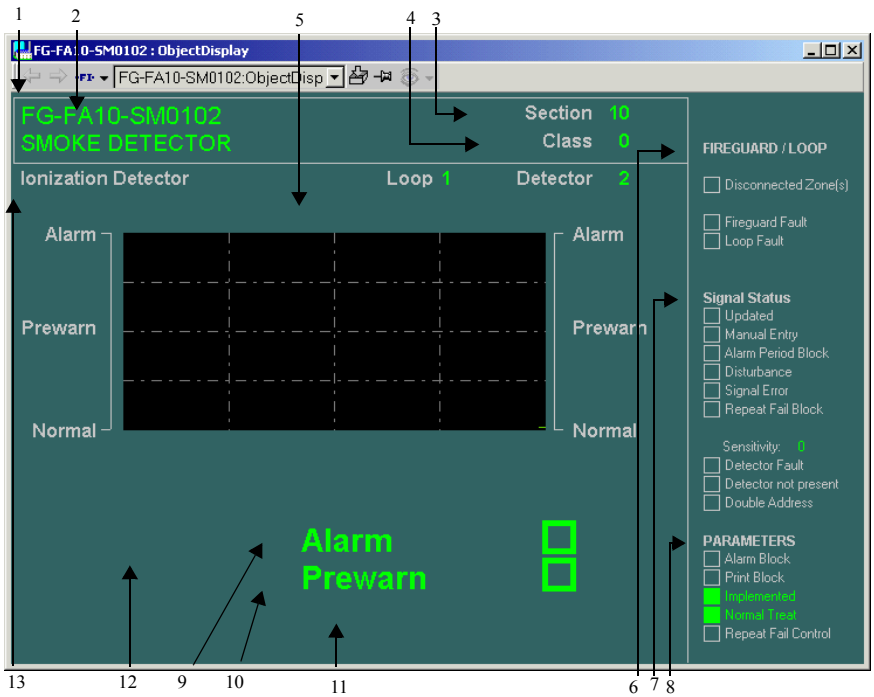
No	Description	Default Presentation	Condition	Remarks
7.7	SMvalue	SMvalue (Grey) <value> (Green) <0> (Beige)	VALUE .QualityOK -	Static text SMvalue value Unresolved
8	PARAMETERS	PARAMETERS (Grey)		Static text
8.1	Alarm block	■ Alarm block (Yellow) □ Alarm blockt (Grey) □ Alarm block (Beige)	ALARM_BLK = 1 ALARM_BLK .QualityOK -	Alarm block Normal status Unresolved
8.2	Print block	■ Print block (Yellow) □ Print block (Grey) □ Print block (Beige)	PRINT_BLK = 1 PRINT_BLK .QualityOK -	Print block Normal status Unresolved
8.3	Implemented	■ Implemente d (Green) □ Implemente d (Grey) □ Implemente d (Beige)	IMPLEMENTED = 1 IMPLEMENTED .QualityOK -	Implemented Normal status Unresolved
8.4	Normal Treat	■ Normal Treat (Green) □ Normal Treat (Grey) □ Normal Treat (Beige)	NORM_TREAT = 1 NORM_TREAT .QualityOK -	Normal Treat Normal status Unresolved

No	Description	Default Presentation	Condition	Remarks
8.5	Repeat Fail Control	■ Repeat Fail Cntl (Green) □ Repeat Fail Cntl (Grey) □ Repeat Fail Cntl (Beige)	RP_F_CTL = 1 RP_F_CTL .QualityOK -	Repeat Fail Control Normal status Unresolved
9	Alarm	ALARM ■ (Red) ALARM □ (Grey) ALARM □ (Beige)	AL = 1 AL .QualityOK -	Alarm Normal status Unresolved
10	Prewarning	PREWARNING ■ (Red) PREWARNING □ (Grey) PREWARNING □ (Beige)	PREWARN = 1 PREWARN .QualityOK -	Prewarning Normal status Unresolved
11	Inhibit	Inhibit (Cyan) Inhibit (Grey) Inhibit (Beige)	INH = 1 INH .QualityOK -	Inhibit Normal status Unresolved
12	Input Blocked	Input Blocked (Yellow) Input Blocked (Grey) Input Blocked (Beige)	UPD_BLK = 1 AL .QualityOK -	Input Blocked Normal status Unresolved
13	Fire Detector Type	AutroSafe (Grey) Unknown detector type (Grey) Detector Type (Beige)	DETECTOR_TYPE=5 & TYPE=1 AL .QualityOK -	AutroSafe detector Unknown Unresolved

The conditions are in priority order.

Object Display for FD (Fireguard)

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Lock Frame	White	SELECTED = 1	Object select frame
		Grey	SELECTED = 0	

No	Description	Default Presentation	Condition	Remarks
2	Header		NAME and DESCR	Object Name and Description
		Red flashing	AL_UNACK = 1	Unacknowledged
		Yellow	UPD_BLK = 1	Input blocked
		Cyan	INH = 1	Inhibited
		Red	ERR = 1	Error
		Red	DISTURB = 1	Alarm
		Red	AL_L = 1	Alarm Latched
		Green	AL .QualityOK	Normal
		Beige	-	Unresolved
3.1	Section Text	Section (Grey)	AL .QualityOK	Static text
		Beige	-	Unresolved
3.2	Section Value	Green	PROC_SEC (SUBSYSTEM)	Process section
4.1	Class Text	Class (Grey)	AL .QualityOK	Static text
		Beige	-	Unresolved
4.2	Class Value	Green	CLASS	Object class
5.1	Alarm Trim Curve	Green	ALARM	
5.2	Range Indicators	Alarm (Grey)	AL . QualityOK	Alarm indicator
		Alarm (Beige)	-	Unresolved
		Prewarn (Grey)	Prewarn	Prewarn indicator
		Normal (Grey)	AL . QualityOK	Normal indicator
		Normal (Beige)	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
6	Fireguard / Loop Status	FIREGUARD / LOOP STATUS (Grey)		Static text
6.1	Not visible		CABLE_BREAK	Ref. 7.9 Detector fault
6.2	Disconnected Zone(s)	■ Disconnected Zone(s) (Red) □ Disconnected Zone(s) (Grey) □ Disconnected Zone(s) (Beige)	SH_CIRC = 1 SH_CIRC .QualityOK -	Disconnected Zone(s) Normal status Unresolved
6.3	Not visible		F_EARTHF	Ref. 7.11 Double address
6.4	Fireguard Fault	■ Fireguard Fault (Red) □ Fireguard Fault (Grey) □ Fireguard Fault (Beige)	EARTHF = 1 EARTHF .QualityOK -	Fireguard Fault Normal status Unresolved
6.5	Loop Fault	■ Loop Fault (Red) □ Loop Fault (Grey) □ Loop Fault (Beige)	POW_FAIL = 1 POW_FAIL .QualityOK -	Loop Fault Normal status Unresolved
6.6	Not visible		OUT_OF_R	Ref. 7.10 Det. not present
7	Signal Status	SIGNAL STATUS (Grey)		Static text
7.1	Updated	■ Updated (Green) □ Updated (Grey) □ Updated (Beige)	UPDATED = 1 UPDATED .QualityOK -	Updated Not updated Unresolved

No	Description	Default Presentation	Condition	Remarks
7.2	Manual entry	■ Manual entry(Green) □ Manual entry(Grey) □ Manual entry (Beige)	MANUAL_ENTR = 1 MANUAL_ENTR .QualityOK -	Manual entry Unresolved
7.3	Alarm period block	■ Alarm period blk (Yellow) □ Alarm period blk (Grey) □ Alarm period blk (Beige)	AL_P_BLK = 1 AL_P_BLK .QualityOK -	Alarm period block Normal status Unresolved
7.4	Disturbance	■ Disturbance (Red) □ Disturbance (Grey) □ Disturbance (Beige)	DISTURBANCE = 1 DISTURBANCE .QualityOK -	Disturbance Normal status Unresolved
7.5	Signal error	■ Signal error (Red) □ Signal error (Grey) □ Signal error (Beige)	ERROR = 1 ERROR .QualityOK -	Signal error Normal status Unresolved
7.6	Repeat Fail Block	■ Repeat Fail Block (Yellow) □ Repeat Fail Block (Grey) □ Repeat Fail Block (Beige)	REPEAT_FAIL_BLK = 1 REPEAT_FAIL_BLK .QualityOK -	Repeat Fail Block Normal status Unresolved
7.7	Not visible		AUTO_INH	Only FINO, FINC, FISM.

No	Description	Default Presentation	Condition	Remarks
7.8	Sensivity	Sensivity (Grey) <value> (Green) Sensivity (Beige)	VALUE .QualityOK -	Static text Value Unresolved
7.9	Detector Fault	■ Detector Fault (Red) □ Detector Fault (Grey) □ Detector Fault (Beige)	CABLE_BREAK = 1 CABLE_BREAK .QualityOK -	Detector Fault Normal status Unresolved
7.10	Detector not present	■ Detector not present (Red) □ Detector not present (Grey) □ Detector not present (Beige)	OUT_OF_R = 1 OUT_OF_R .QualityOK -	Detector not present Normal status Unresolved
7.11	Double Address	■ Double Address (Red) □ Double Address (Grey) □ Double Address (Beige)	F_EARTHF = 1 F_EARTHF .QualityOK -	Double Address Normal status Unresolved
8	PARAMETERS	PARAMETERS (Grey)		Static text
8.1	Alarm block	■ Alarm block (Yellow) □ Alarm blockt (Grey) □ Alarm block (Beige)	ALARM_BLK = 1 ALARM_BLK .QualityOK -	Alarm block Normal status Unresolved

No	Description	Default Presentation	Condition	Remarks
8.2	Print block	■ Print block (Yellow) □ Print block (Grey) □ Print block (Beige)	PRINT_BLK = 1 PRINT_BLK .QualityOK -	Print block Normal status Unresolved
8.3	Implemented	■ Implemented(Green) □ Implemented(Grey) □ Implemented(Beige)	IMPLEMENTED = 1 IMPLEMENTED .QualityOK -	Implemented Normal status Unresolved
8.4	Normal Treat	■ Normal Treat(Green) □ Normal Treat (Grey) □ Normal Treat (Beige)	NORM_TREAT = 1 NORM_TREAT .QualityOK -	Normal Treat Normal status Unresolved
8.5	Repeat Fail Control	■ Repeat Fail Cntl (Green) □ Repeat Fail Cntl (Grey) □ Repeat Fail Cntl (Beige)	RP_F_CTL = 1 RP_F_CTL .QualityOK -	Repeat Fail Control Normal status Unresolved
9	Alarm	ALARM ■ (Red) ALARM □ (Grey) ALARM □ (Beige)	AL = 1 AL .QualityOK -	Alarm Normal status Unresolved
10	Prewarning	PREWARNING ■ (Red) PREWARNING □ (Grey) PREWARNING □ (Beige)	PREWARN = 1 PREWARN .QualityOK -	Prewarning Normal status Unresolved

No	Description	Default Presentation	Condition	Remarks
11	Inhibit	Inhibit (Cyan) Inhibit (Grey) Inhibit (Beige)	INH = 1 INH .QualityOK -	Inhibit Normal status Unresolved
12	Input Blocked	Input Blocked (Yellow) Input Blocked (Grey) Input Blocked (Beige)	UPD_BLK = 1 AL .QualityOK -	Input Blocked Normal status Unresolved
13.1	Detector Type text	Detector Type : (Grey)	AL .QualityOK	Static text
		Detector Type : (Beige)	-	Unresolved
13.2	Detector Type	Apiration Detector (Grey) Input Output Unit (Grey) Ionization Detector (Grey) Zone Monitor Unit (Grey) Optical Detector (Grey) Heat detector (Grey) Manual Call Piont (Grey) Unknown Detector Type(Grey) Detector Type (Beige)	DETECTOR_TYPE = 5 and TYPE = 10 and : NO_OF_DEC = 11 NO_OF_DEC = 12 NO_OF_DEC = 13 NO_OF_DEC = 14 NO_OF_DEC = 15 NO_OF_DEC = 16 NO_OF_DEC = 17 AL .QualityOK -	Fire detector (FD) and Autronicat detector : Apiration Detector Input Output Unit Ionization Detector Zone Monitor Unit Optical Detector Heat detector Manual Call Piont Unknown (Unresolved)

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

IndicatorBox01

Presentation:

Fire Input presentation, Status.

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Select Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	AL .QualityOK	
2	Status Square	Dark Grey *center*	ERR = 1	I/O Error
		Dark Grey *center*	AL = 0 and Inverted = false or (AL = 1 and Inverted = true)	*Off, not alarm (or Inverted)*
		Red Flash	AL_UNACK = 1	Unacknowledged alarm
		Yellow	UPD_BLK = 1	Input Update blocked
		Cyan	INH = 1 and LatchedUsed = false	Inhibited

No	Description	Default Presentation	Condition	Remarks
		Cyan	INH = 1 and AL_NIL = 0 and LatchedUsed = true	Inhibit unlatched (Included for backward compatibility before XMSGSYS 6.1/5)
		Red	DISTURB = 1 and DisturbanceUsed = true	Disturbance (NORM_TR=1) and DisturbanceUsed is set.
		Red	AL_LATCH = 1 and LatchedUsed = true	Alarm latched
		Green	AL	Normal
3.1	Label Text	E	ERR = 1	Error
		Label	-	
3.1	Label Color	Red flash	AL_UNACK = 1 and ERR = 1	Unacknowledged alarm and Error
		Yellow	UPD_BLK = 1 and ERR = 1	Blocked and Error
		Red	ERR = 1	Error
		Dark Grey	AL = 1 and Inverted = false or (AL = 0 and Inverted = true)	*Alarm (or Inverted)*
		Green	AL	*Off, not alarm (or Inverted)*

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration**:**

Parameters	**Affects**	**Options (bold is default)**	**Remarks**
Status3D	2. Square	**false,** true	Default (false): flat status square, true: 3 Dimensional status square , sunken when square is filled.
Inverted	2. Square	**false**, true	
DisturbanceUsed	2. Square	**true**, false	
LatchedUsed	2. Square	**true,** false	
Label	3. Label	**“ “**, any letter	
BackgroundColor	Background	Transparent, Any	

Name01

Presentation:

Fire Input presentation, object name.

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	AL .QualityOK	Normal
		Beige	-	Unresolved
2	Object Name		NAME	Object Name
		Flashing Red	AL_UNACK = 1	Unacknowledged alarm
		Yellow	UPD_BLK = 1	Input Update blocked
		Cyan	INH = 1 and LatchedUsed = false	Inhibited
		Cyan	INH = 1 and AL_NIL = 0 and LatchedUsed = true	Inhibit unlatched (Included for backward compatibility before XMS GSYS 6.1/5)
		Red	DISTURBANCE =1	Alarm
		Red	AL_L = 1 and LatchedUsed = True	Alarm Latched
		Red	ERROR =1	Error
		Green	-	Normal
		Beige	-	Unresolved (name: name)

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

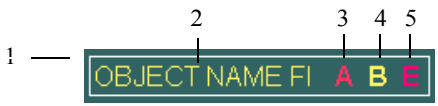
Configuration:

Parameters	Affects	Options (bold is default)	Remarks
LatchedUsed	2. Name	**true,** false	
BackgroundColor	Background	Transparent, Any	

NameStatus01

Presentation:

Fire Input presentation, object name and status.



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	AL .QualityOK	Normal
2	Object Name		NAME	Object Name
		Flashing Red	AL_UNACK = 1	Unacknowledged alarm
		Yellow	UPD_BLK = 1	Input Update blocked

No	Description	Default Presentation	Condition	Remarks
		Cyan	INH = 1 and LatchedUsed = false	Inhibited
		Cyan	INH = 1 and AL_NIL = 0 and LatchedUsed = true	Inhibit unlatched
		Red	DISTURBANCE =1	Alarm
		Red	AL_L = 1 and LatchedUsed = True	Alarm Latched
		Red	ERROR =1	Error
		Green	AL	Normal
3.1	Alarm Text	AlarmText	AL_UNACK = 1 And AL = 1	Unacknowledged and alarm
		PrewarnText	AL_UNACK = 1 And PREWARN = 1	Unacknowledged prewarnining
		AlarmText	AL_UNACK = 1	Unacknowledged (alarm)

No	Description	Default Presentation	Condition	Remarks
		AlarmText	AL = 1	Alarm
		AlarmText	AL_L = 1 and LatchedUsed = True	Alarm Latched
		PrewarnText	PREWARN = 1	Prewarnining
			AL .QualityOK	Normal (no text)
		AlarmText	-	Unresolved
3.2	Alarm Color	Red flash	AL_UNACK = 1	Unacknowledged alarm
		Red	AL =1	Alarm
		Red	AL_L = 1 and LatchedUsed = True	Alarm Latched
		Red	PREWARN = 1	Prewarning
		Invisible	AL .QualityOK	Normal
		Beige	-	Unresolved
4.1	Override Text	BlockedText	UPD_BLK = 1	Input Update blocked
		InhibitText	INH = 1	Inhibit
			AL .QualityOK	Normal (no text)
		BlockedText	-	Unresolved
4.2	Override Color	Yellow	UPD_BLK = 1	Input Update blocked
		Cyan	INH = 1	Inhibit
		Invisible	AL .QualityOK	Normal
5.1	Error Text	ErrorText	-	Error indication

No	Description	Default Presentation	Condition	Remarks
5.2	Error Color	Red	ERROR = 1	Error
		Invisible (GeneralBackColor)	AL .QualityOK	Normal
		Beige	-	Unresolved

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
LatchedUsed	2. Name	**true,** false	
AlarmText	3. Alarm	**A,** any character	
PrewarnText	3. Alarm	**P,** any character	
BlockedText	4. Override	**B,** any character	
InhibitText	4. Override	**I,** any character	
ErrorText	5. Error	**E,** any character	
BackgroundColor	Background	Transparent, Any	

Detector01

Presentation:

Fire Input presentation, detector symbol.

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		(same color as Symbol)	AL	Frame is part of symbol
2	Symbol	Red Flash	AL_UNACK = 1	Unacknowledged alarm
		Yellow	UPD_BLK = 1	Input Update blocked
		Cyan	INH = 1 and LatchedUsed = false	Inhibited
		Cyan	INH = 1 and AL_NIL = 0 and LatchedUsed = true	Inhibit unlatched (included for backward compatibility before XMSGSYS 6.1/5)
		Red	DISTURBANCE =1	Alarm
		Red	AL_L and LatchedUsed = True	Alarm Latched
		Red	ERROR =1	Error
		Green	AL	Normal

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameters	**Affects**	**Options (bold is default)**	**Remarks**
LatchedUsed	2. Symbol	**true,** false	
DetectorType	2. Symbol	1, 2, 3, 4, 5, 6, 7, 8 or 9	Suggested size: width =600 for Flame symbol, width = 300 for other symbols.
		1 - Heat-Fixed	I
		2 - Heat	I
		3 - Flame	Right, Up, Left, Down
		4 - Manual	
		5 - Smoke (optical)	
		6. Smoke (ionization)	
		7 - Water Released	
		8 - Water Release	
		9 - CO2 Release	

Parameters	Affects	Options (bold is default)	Remarks
FlameSymbolDirection	Set direction of flame symbol	**Right**, Up, Left or Down	Only visible if DetectorType = 3 (Flame): Symbol is rotating anti-clockwise.
FlameDegreeAboveFloor	Number presentation	**0**, any integer	Only visible if number is not zero (default), and DetectorType = 3 (Flame).
BackgroundColor	Background	Transparent, Any	

M_NameStatus01

Presentation:

Presentation of Object name, description and status for Fire Input on Cause & Effect Matrix display.

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		FrameColor	AL .QualityOK	Normal
		Beige	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
2	Name / Description	Flashing Red	AL_UNACK = 1	Unacknowledged alarm
		Red	AL = 1	Alarm
		Red	AL_L = 1 and LatchedUsed = True	Alarm Latched
		Green	AL .QualityOK	Normal
		Beige	-	Unresolved
3.1	Alarm Text	A	AL = 1	Alarm
		P	PREWARN = 1 And DETECTOR_TYPE = 5	Prewarning & FD
		A	-	-
3.2	Alarm Color	Red	AL = 1	Alarm
		Red	PREWARN = 1 And DETECTOR_TYPE = 5	Prewarning & FD
		Grey	AL .QualityOK	Normal
		Beige	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
4	Status Square	Dark Grey *center*	AL = 0	Unfilled, no Alarm
		Yellow	UPD_BLK = 1	Input Update blocked
		Cyan	InhibitUsed = true and INH = 1 and LatchedUsed = false	Inhibited
		Cyan	InhibitUsed = true and INH = 1 and AL_NIL = 0 and LatchedUsed = true	Inhibit unlatched (Included for backward compatibility before XMSGSYS 6.1/5)
		Red	ERROR = 1	Error
		Red	AL = 1	Alarm
		Red	AL_L = 1 and LatchedUsed = True	Alarm Latched
		Green	AL .QualityOK	Normal
		Beige	-	Unresolved

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
BackgroundColor	Background	Transparent, Any	

M_Status01

Presentation:

Presentation of Status for Fire Input on Cause & Effect Matrix display (dynamic ‘dot’).

1

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Circle frame	White	SELECTED = 1	Object selected
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	AL	Normal
1.2	Circle Color	Green	InhibitUsed = true and INH = 1 and LatchedUsed = false	Inhibited. **Note: Alarm not visible !**
		Green	InhibitUsed = true and INH = 1 and AL_NIL = 0 and LatchedUsed = true	Inhibit unlatched.**(Alarm not visible)** (Included for backward compatibility before XMSGSYS 6.1/5)
		Red	AL = 1	Alarm
		Red	AL_L = 1 and LatchedUsed = True	Alarm Latched
		Green	AL	Normal

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
LatchedUsed	1. Circle	**true,** false	Default: Latched Alarm indicated. Refer to “Alarm” in Safety Builder (C&E Matrix)
InhibitUsed	1. Circle	**true,** false	Default: Green status circle when Inhibited, that is, Alarm indication is ‘hidden’. Refer to “Additional properties” in Safety Builder .
BackgroundColor	Background	Transparent, Any	

FG_NameBox01

Presentation:

Fire Input presentation, name and status square, similar to Digital Input presentation.

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible (GeneralBackColor)	AL .QualityOK	Normal
		Beige	-	Unresolved
2	Object Name	Flashing Red	AL_UNACK = 1	Unacknowledged alarm
		Cyan	INH = 1 and LatchedUsed = false	Inhibited
		Cyan	INH = 1 and AL_NIL = 0 and LatchedUsed = true	Inhibit unlatched (Included for backward compatibility before XMSGSYS 6.1/5)
		Yellow	UPD_BLK = 1	Input Update blocked
		Red	DISTURBANCE = 1	Disturbance (NORM_TR = 1)
		Red	AL_L = 1 and LatchedUsed = True	Alarm Latched
		Red	ERROR =1	Error
		Green	AL .QualityOK	Normal
		Beige	-	Unresolved (name: name)

No	Description	Default Presentation	Condition	Remarks
3	Status Square	Dark Grey *center*	AL = 0	Unfilled, no Alarm
		Red flash	AL_UNACK = 1	Unacknowledged alarm
		Yellow	UPD_BLK = 1	Input Update blocked
		Cyan	INH = 1 and LatchedUsed = false	Inhibited
		Cyan	INH = 1 and AL_NIL = 0 and LatchedUsed = true	Inhibit unlatched (Included for backward compatibility before XMSGSYS 6.1/5)
		Red	DISTURBANCE = 1	Disturbance (NORM_TR = 1)
		Red	AL_L = 1 and LatchedUsed = True	Alarm Latched
		Red	ERROR = 1	Error
		Green	AL .QualityOK	Normal
		Beige	-	Unresolved

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

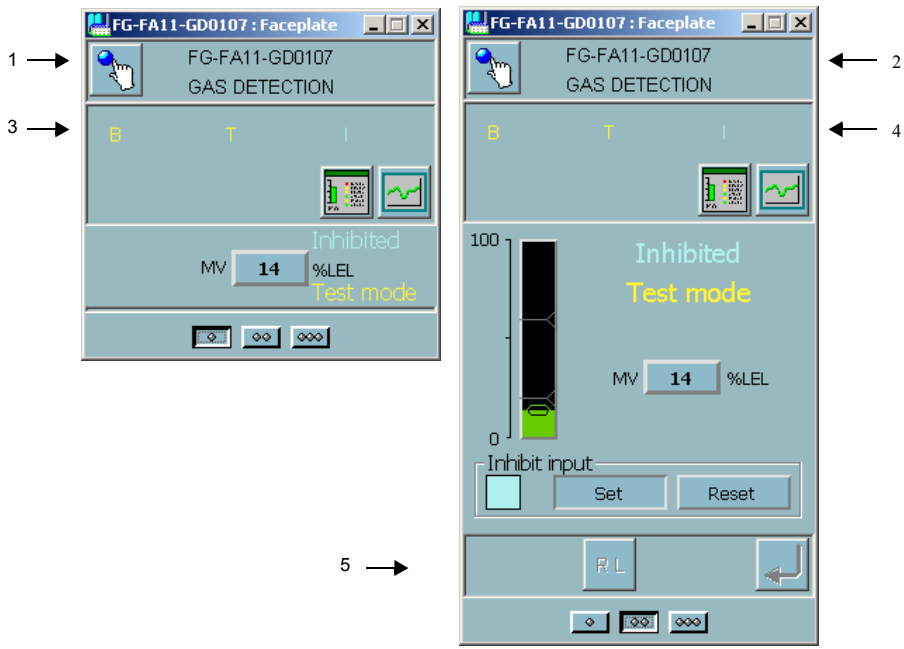
Parameters	Affects	Options (bold is default)	Remarks
LatchedUsed	2. Name, 3. status	**true,** false	
Status3D	3. Status	**false,** true	Default (false): flat status square, true: 3 Dimensional status square, sunken when square is filled (alarm)
BackgroundColor	Background	Transparent, Any	

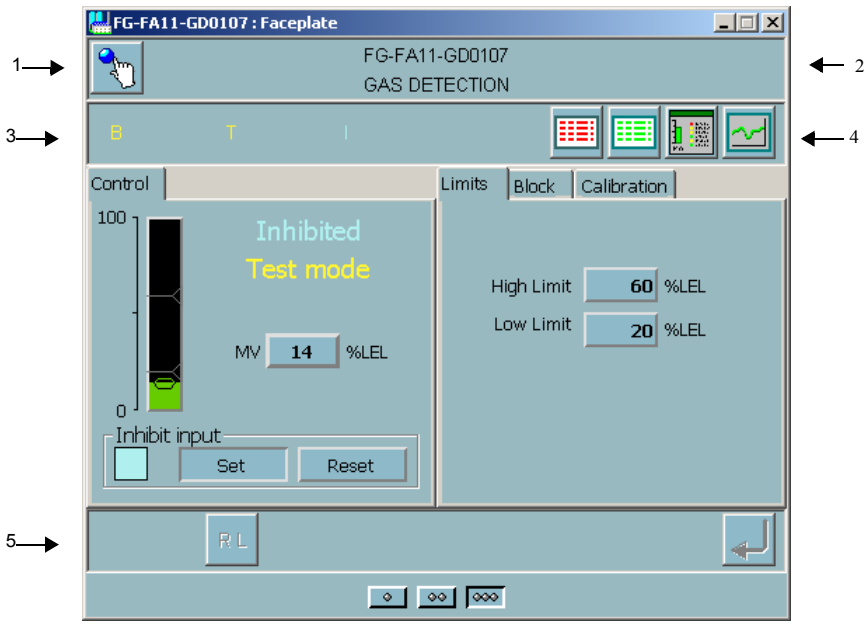
When the Graphic Element is used for address -able fire detector (FD) objects, the parameter **LatchedUsed** must be set to false.

Gas Input

Faceplate

Presentation:





Behavior:

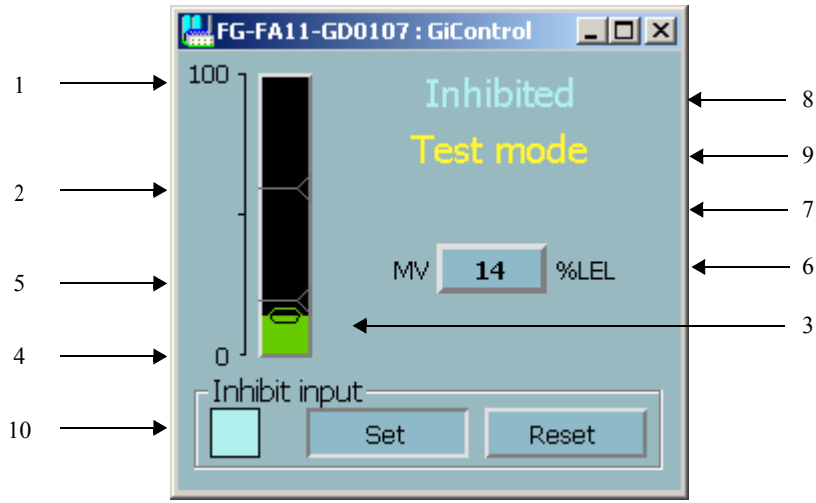
No	Description	Default Presentation	Condition	Remarks
1	Lock Button			
2	Name and Description			
3	Status Field			
3.1	Input Blk	**B** Yellow	UPD_BLK = 1	
3.2	Print Blk	**P** Yellow	PRINT_BLK = 1	
3.3	Test Mode	**T** Yellow	TEST = 1	

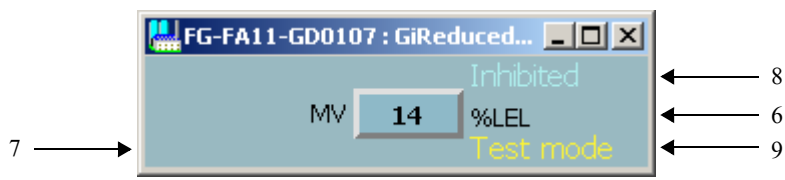
No	Description	Default Presentation	Condition	Remarks
3.4	Error	**E** Red	ERROR = 1	
3.5	Inhibit	**I** Cyan	INH = 1	
4	Aspect links	Alarm List	position 0, 0, 9	
		Event List	position 0, 0, 10	
		Object Display	position 5, 5, 11	
		Trend Display	position 6, 6, 12	
5	Buttons			
5.3	R	Reset Latch	UPD_BLK = 1	Set RSET_CH_LATCH =1

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

GiControl and GiReducedControl

Presentation:





Behavior (Activation):

No	Button Text	Action	Response	Remarks
10.2	Set	Set Inhibit	Set INH = 1	
10.3	Reset	Reset Inhibit	Set INH = 0	

Behavior (Presentation):

No	Description	Default Presentation	Condition	Remarks
1	Range Max	Black	RANGEMAX	*Range Max of the MV value*
2	High Limit		LIM_HI_AL	High limit indication
		-	LIM_HI_AL >= RANGE_MAX	Invisible
		Filled Yellow	VALUE>H1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	VALUE>H1 = 1	
		Unfilled Grey	-	Normal
3.2	Bargraph indication	Measured value	VALUE_LEL	Normal
3.3	Bargraph color	Red flash	AL_UNACK = 1	Unacknowledged alarm
		Red	DISTURB = 1	Alarm
		Red	ERROR = 1	I/O Error
		Green	VALUE_LEL .QualityOK	Normal
		Beige	-	Unresolved
4	Range Min	Black	RANGE_MIN	*Range Min of the MV value*

No	Description	Default Presentation	Condition	Remarks
5	Low Limit 1		LIM_LO_AL	Low limit indication
		-	LIM_LO_AL <= RANGE_MIN	Invisible
		Filled Yellow	VALUE<L1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	VALUE<L1 = 1	
		Unfilled Grey	-	
6.1	Value Frame	Raised	UPD_BLK = 1 (BLOCKED = 1)	Input blocked
		Flat	UPD_BLK = 0 (BLOCKED = 0)	
6.2	Value indication	? ? ?	ERROR = 1	Error
		White cross on red square	VALUE_LEL .QualityCode	Unresolved
		Measured value	VALUE_LEL	Normal
6.3	Value color	Red flash	AL_UNACK = 1	Unacknowledged alarm
		Red	DISTURB = 1	Alarm
		Red	ERROR = 1	I/O Error
		Black	VALUE_LEL .QualityOK	Normal
		Beige	-	Unresolved
6.4	MV Unit	Black	UNIT	*Measured unit*

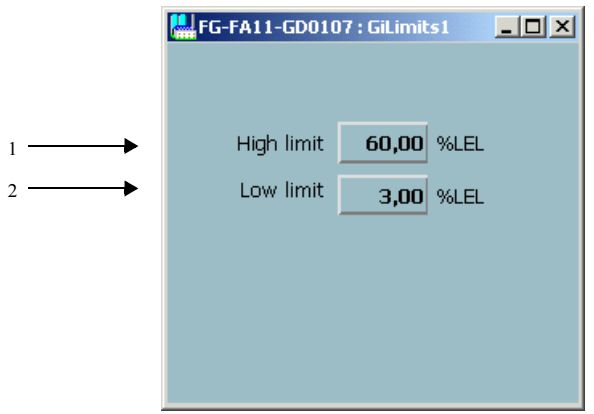
No	Description	Default Presentation	Condition	Remarks
7	Alarm Text (Color)	High Alarm (Red)	HI_AL = 1	*High Alarm*
		Latched High Alarm (Red)	HI_AL_L = 1	Latched high alarm
		Low Alarm (Red)	LO_AL = 1	*Low Alarm*
		Latched Low Alarm (Red)	LO_AL_L = 1	Latched low alarm
		(no indication)	HI_AL .QualityOK	Normal condition
		Latched Low Alarm (Beige)	-	Unresolved
8	Inhibit Text	Inhibited (Cyan)	INH = 1	*Inhibited*
		(Invisible)	INH .QualityOK	
		Inhibited (Beige)	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
9	Test mode Text	Test mode (Yellow)	TEST = 1	*Test mode activated*
		(Invisible)	TEST .QualityOK	
		Inhibited (Beige)	-	Unresolved
10.1	Inhibit Input indication	**Filled square** (Cyan) **Unfilled square** (Green) **White cross on red square**	INH = 1 - AUTO_INH .QualityBad	*Inhibited* Not *Inhibited* Unresolved

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

GiLimits1

Presentation:



Behavior:

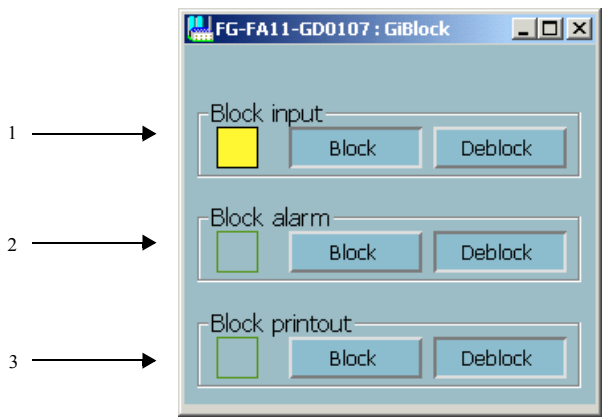
No	Description	Default Presentation	Condition	Remarks
1	ALARM LIMITS for MV			Alarm limits for MV
1.1	High alarm limit Text	High limit (Black)		Text *in front of the value*
1.2	High alarm limit Value	<value> (Black)	LIM_H_AL .QualityOK	High limit value
		White cross on red square	VALUE_LEL .QualityCode	Unresolved
2.1	Low alarm limit Text	Low limit (Black)		Text *in front of the value*

No	Description	Default Presentation	Condition	Remarks
2.2	Low alarm limit Value	<value> (Black)	LIM_L_AL .QualityOK	Low limit value
		White cross on red square	VALUE_LEL .QualityCode	Unresolved

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

GiBlock

Presentation:



Behavior (Activation):

No	Button Text	Action	Response	Remarks
1.2	Block	Set Input Block	Set UPD_BLK = 1	
1.3	Deblock	Reset Input Block	Set UPD_BLK = 0	

No	Button Text	Action	Response	Remarks
2.2	Block	Set Alarm Block	Set ALARM_BLK = 1	
2.3	Deblock	Reset Alarm Block	Set ALARM_BLK = 0	
3.2	Block	Set Printout Block	Set PR_BLK = 1	
3.3	Deblock	Reset Printout Block	Set PR_BLK = 0	

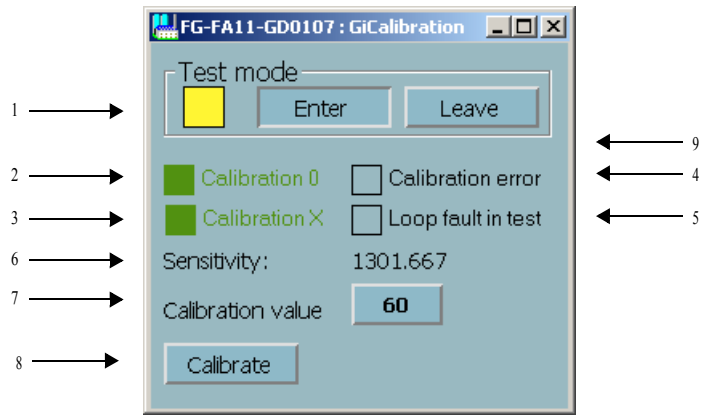
Behavior (Presentation):

No	Description	Default Presentation	Condition	Remarks
1.1	Block Input indication	Filled square (Yellow) Unfilled square (Green) White cross on red square	UPD_BLK = 1 - UPD_BLK .QualityBad	*Input Blocked* Input not *blocked* Unresolved
2.1	Block Alarm indication	Filled square (Yellow) Unfilled square (Green) White cross on red square	ALARM_BLK = 1 - ALARM_BLK .QualityBad	**Alarm** *Blocked* **Alarm** not *blocked* Unresolved
3.1	Block Printout indication	Filled square (Yellow) Unfilled square (Green) White cross on red square	PR_BLK = 1 - PR_BLK .QualityBad	**Printout** *Blocked* **Printout** not *blocked* Unresolved

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

GiCalibration

Presentation:



Behavior (Activation):

No	Button Text	Action	Response	Remarks
1.2	Enter	Enter Test mode	Set TEST = 1	Not visible for Analog Gas objects
1.3	Leave	Leave Test mode	Set TEST = 0	Not visible for Analog Gas objects
8	Calibrate	Calibrate (pulse)	Set CALIBRATE = 1	Enabled when Test mode is active and object is not Analog Gas.

Behavior (Presentation):

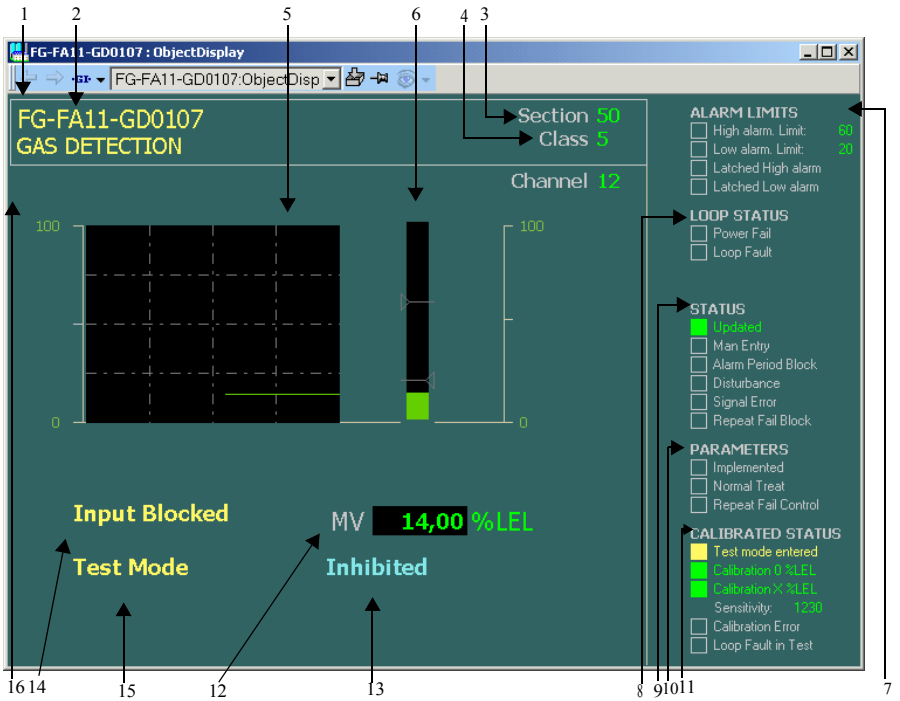
No	Description	Default Presentation	Condition	Remarks
1.1	Test mode indication	Filled square (Yellow) Unfilled square (Green) White cross on red square	TESTED = 1 - TESTED .QualityBad	*Test mode active* Test mode not active Unresolved
2	Calibration 0	■ Calibration 0 (Green)	CALD_0 (ZERO_SETPOINT) = 1	Calibration 0 % LEL
		□ Calibration 0 (Black)	CALD_0 .QualityOK	Not calibrated
		□ Calibration 0 (Beige)	-	Unresolved
3	Calibration X	■ Calibration X (Green)	CALD_X (X_SETPOINT) = 1	Calibration X % LEL
		□ Calibration X (Black)	CALD_X .QualityOK	Not calibrated
		□ Calibration X (Beige)	-	Unresolved
4	Calibration error	■ Calibration error (Red)	CAL_ERR = 1	Calibration error
		□ Calibration error (Black)	CAL_ERR .QualityOK	Normal status
		□ Calibration error (Beige)	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
5	Loopfault in Test	■ Loopfault in Test (Red)	LF_IN_T = 1	Loop fault in test
		□ Loopfault in Test (Black)	LF_IN_T .QualityOK	Normal status
		□ Loopfault in Test (Beige)	-	Unresolved
6	Sensivity	Sensivity (Grey) <value> (Green) <0> (Beige)	SENSITIV (SENS_DRIFT) TESTED .QualityOK -	Static text Sensivity value Unresolved
7.1	Calibration Text	Calibration value (Grey)	TESTED .QualityOK	*Test Mode entered*
		Calibration value (Beige)	-	Unresolved
7.2	Calibration Value	Sunken (write protected)	TESTED = 0	*Test Mode not entered*
		<value> (Black)	CALIBRATION_VAL .QualityOK	Low limit value
		<value> (Beige)	-	Unresolved
8	Calibrate	Disabled	TESTED = 0 or CALIBRATE .QualityBad	*Test Mode not entered (or unresolved)*
		Calibrate (Black)	-	Calibrate command button
9	Not applicable indication	Calibration is not applicable for Analog detectors (Grey)	GI_SPARE_37 = 1	Analog GI
		(not visible)	-	Catalytic GI or Calculated GI

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Object Display GI

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Lock Frame	White	SELECTED = 1	Object select frame
		Grey	SELECTED = 0	

No	Description	Default Presentation	Condition	Remarks
2	Header		NAME and DESCR	Object Name and Description
		Red flashing	AL_UNACK = 1	Unacknowledged
		Yellow	UPD_BLK = 1 (BLOCKED = 1)	Input blocked
		Cyan	INH = 1	Inhibited
		Yellow	TEST = 1	Test mode
		Red	DISTURB = 1 or ERR = 1	Alarm or Error
		Red	HI_AL_L = 1	Latched High Alarm
		Red	LO_AL_L = 1	Latched Low Alarm
		Green	VALUE_LEL .QualityOK	Normal
		Beige	-	Unresolved
3.1	Section Text	Section (Grey)	VALUE_LEL .QualityOK	Static text
		Beige	-	Unresolved
3.2	Section Value	Green	PROC_SEC (SUBSYSTEM)	Process section
4.1	Class Text	Class (Grey)	VALUE_LEL .QualityOK	Static text
		Beige	-	Unresolved
4.2	Class Value	Green	CLASS	Object class
5.1	Alarm Trim Curve	Green	VALUE_LEL	

No	Description	Default Presentation	Condition	Remarks
5.2	Range Indicators	Range Max (Grey)	VALUE_LEL . QualityOK	Range Max indicator
		Range Max (Beige)	-	Unresolved
		Range Min (Grey)	VALUE_LEL . QualityOK	Range Min indicator
		Range Min (Beige)	-	Unresolved
6	Value Bargraph	Green	VALUE_LEL	Measured value
	High limit	Yellow	AL_BLK = 1	Alarm blocked
		Red	HI_AL = 1	High alarm
		Grey	VALUE_LEL .QualityOK	Normal
		Beige	-	Unresolved
	Low limit	Yellow	AL_BLK = 1	Alarm blocked
		Red	LO_AL = 1	Low alarm
		Grey	VALUE_LEL .QualityOK	Normal
		Beige	-	Unresolved
7	Alarm Limits	ALARM LIMITS		Static text
7.1	Print block	P block (Yellow) P block (Invisible) P block (Beige)	PRINT_BLK = 1 PRINT_BLK .QualityOK -	Print block Normal status Unresolved
7.2	Alarm block	B (Yellow) Bx (Yellow) B (Invisible) B (Beige)	AL_BLK = 1 AL_P_BLK = 1 AL_BLK .QualityOK -	Alarm block Alarm periodic blocked Normal status Unresolved

No	Description	Default Presentation	Condition	Remarks
7.3	High alarm limit, Value High alarm limit, Indication	<LIM_HI_AL> ■ High alarm, limit: (Red flash) ■ High alarm, limit: (Red) □ High alarm, limit: (Grey) □ High alarm, limit: (Beige)	LIM_HI_AL HI_AL_UNACK = 1 HI_AL = 1 HI_AL .QualityOK -	limit value Unacknowledged High alarm High alarm High alarm Normal status Unresolved
7.4	Low alarm limit, Value Low alarm limit, Indication	<LIM_LO_AL> ■ Low alarm, limit: (Red flash) ■ Low alarm, limit (Red) □ Low alarm, limit (Grey) □ Low alarm, limit: (Beige)	LIM_LO_AL LO_AL_UNACK = 1 LO_AL = 1 LO_AL .QualityOK -	limit value Unacknowledged Low alarm Low alarm Normal status Unresolved
7.5	Latched High alarm	■ Latched High alarm (Red) □ Latched High alarm (Grey) □ Latched High alarm (Beige)	HI_AL_L = 1 HI_AL_L .QualityOK -	Latched High alarm Normal status Unresolved

No	Description	Default Presentation	Condition	Remarks
7.6	Latched Low alarm	■ Latched Low alarm (Red) □ Latched Low alarm (Grey) □ Latched Low alarm (Beige)	LO_AL_L = 1 LO_AL_L .QualityOK -	Latched Low alarm Normal status Unresolved
8	STATUS			Status
8.1	Power Fail	■ Power Fail (Red) □ Power Fail (Grey) □ Power Fail (Beige)	POW_FAIL = 1 POW_FAIL .QualityOK -	Power Failt Normal status Unresolved
8.2	Loop Fail	■ Loop Fail (Red) □ Loop Fail (Grey) □ Loop Fail (Beige)	LOOP_FAIL = 1 LOOP_FAIL .QualityOK -	Loop Failt Normal status Unresolved
8.3	Invisible		LO_AL_IN_T	Input Error only indicated in Analog GI Object Display
8.4	Invisible		SENSITIV (SENS_DRIFT)	Ref. 11.4 Sensitivity. (AI current in Analog GI)
9	Status	STATUS (Grey)		Static text

No	Description	Default Presentation	Condition	Remarks
9.1	Updated	■ Updated (Green) □ Updated (Grey) □ Updated (Beige)	UPDATED = 1 UPDATED .QualityOK -	Updated Not updated Unresolved
9.2	Manual entry	■ Manual entry (Green) □ Manual entry (Grey) □ Manual entry (Beige)	MAN_ENTR = 1 MAN_ENTR .QualityOK -	Manual entry Unresolved
9.3	Alarm period block	■ Alarm period blk (Yellow) □ Alarm period blk (Grey) □ Alarm period blk (Beige)	AL_P_BLK = 1 AL_P_BLK .QualityOK -	Alarm period block Normal status Unresolved
9.4	Disturbance	■ Disturbance (Red) □ Disturbance (Grey) □ Disturbance (Beige)	DISTURBANCE = 1 DISTURBANCE .QualityOK -	Disturbance Normal status Unresolved
9.5	Signal error	■ Signal error (Red) □ Signal error (Grey) □ Signal error (Beige)	ERROR = 1 ERROR .QualityOK -	Signal error Normal status Unresolved

No	Description	Default Presentation	Condition	Remarks
9.6	Repeat Fail Block	■ Repeat Fail Block (Yellow) □ Repeat Fail Block (Grey) □ Repeat Fail Block (Beige)	RP_FAIL_BLK = 1 RP_FAIL_BLK .QualityOK -	Repeat Fail Block Normal status Unresolved
10	Parameters	PARAMETERS (Grey)		Static text
10.1	Implemented	■ Implemented (Green) □ Implemented (Grey) □ Implemented (Beige)	IMPLEMENTED = 1 IMPLEMENTED .QualityOK -	Implemented Normal status Unresolved
10.2	Normal Treat	■ Normal Treat (Green) □ Normal Treat (Grey) □ Normal Treat (Beige)	NORM_TR = 1 NORM_TR .QualityOK -	Normal Treat Normal status Unresolved
10.3	Repeat Fail Control	■ Repeat Fail Cntl (Green) □ Repeat Fail Cntl (Grey) □ Repeat Fail Cntl (Beige)	RP_F_CTL = 1 RP_F_CTL .QualityOK -	Repeat Fail Control Normal status Unresolved
11	Calibrated Status	CALIBRATED STATUS (Grey)		Static text

No	Description	Default Presentation	Condition	Remarks
11.1	Test mode entered	■ Test mode entered (Yellow) □ Test mode entered (Grey) □ Test mode entered (Beige)	TESTED = 1 TESTED .QualityOK -	Test mode entered Normal status Unresolved
11.2	Calibration 0 %	■ Calibration 0 <UNIT> (Green) □ Calibration 0 <UNIT> (Grey) □ Calibration 0 <UNIT> (Beige)	CALD_0(ZERO_SETPOINT) = 1 CALD_0 .QualityOK -	Calibration 0 % Not calibrated Unresolved
11.3	Calibration X %	■ Calibration X <UNIT> (Green) □ Calibration X <UNIT> (Grey) □ Calibration X <UNIT> (Beige)	CALD_X(X_SETPOINT) = 1 CALD_X .QualityOK -	Calibration X % Not calibrated Unresolved
11.4	Sensivity	Sensivity (Grey) <value> (Green) <0> (Beige)	SENSITIV (SENS_DRIFT) SENSITIV .QualityOK -	Static text Sensivity value Unresolved
11.2	Calibration Error	■ Calibration Error (Red) □ Calibration Error (Grey) □ Calibration Error (Beige)	CAL_ERR = 1 CAL_ERR .QualityOK -	Calibration Error Normal status Unresolved

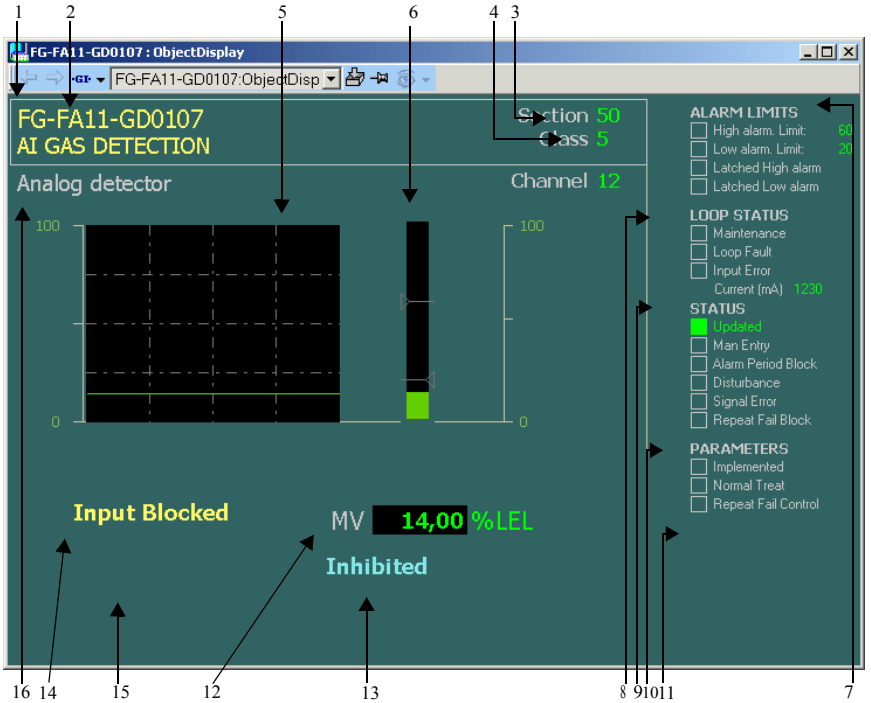
No	Description	Default Presentation	Condition	Remarks
11.3	Loop Fail in Test	■ Loop Fail in Test (Red) □ Loop Fail in Test (Grey) □ Loop Fail in Test (Beige)	LF_IN_T = 1 LF_IN_T.QualityOK -	Loop Fail in Test Normal status Unresolved
12.1	Measured Value text	MV (Grey)		Static text
12.2	Measured Value	? ? ? (Red)	ERROR = 1	Error
		<value> Green	VALUE_LEL	Value
		White cross on red square	VALUE_LEL .QualityBad	Unresolved
12.3	Measured Value Unit	<UNIT>	VALUE_LEL .QualityOK	Unit
		UNIT (Beige)	-	Unresolved
13	Inhibit	Inhibited (Cyan) Inhibited (Grey) Inhibited (Beige)	INH = 1 VALUE_LEL .QualityOK -	Inhibit Normal status Unresolved
14	Input Blocked	Input Blocked (Yellow) Input Blocked (Grey) Input Blocked (Beige)	UPD_BLK = 1 (BLOCKED =1) VALUE_LEL .QualityOK -	Input Blocked Normal status Unresolved

No	Description	Default Presentation	Condition	Remarks
15	Test Mode	Test Mode (Yellow) Test Mode (Grey) Test Mode (Beige)	TEST = 1 VALUE_LEL.QualityOK -	Test Mode Normal status Unresolved
16	Detector Type	Analog detector (Grey) (no text) Detector type (Beige)	GI_SPARE_37 = 1 VALUE_LEL .QualityOK -	Analog GI Catalytic GI or Calculated GI Unresolved

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Object Display AI

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Lock Frame	White	SELECTED = 1	Object select frame
		Grey	SELECTED = 0	

No	Description	Default Presentation	Condition	Remarks
2	Header		NAME and DESCR	Object Name and Description
		Red flashing	AL_UNACK = 1	Unacknowledged
		Yellow	UPD_BLK =1 (BLOCKED = 1)	Input blocked
		Cyan	INH = 1	Inhibited
		Yellow	TEST = 1	Test mode
		Red	DISTURB = 1 or ERR = 1	Alarm or Error
		Green	VALUE_LEL .QualityOK	Normal
		Beige	-	Unresolved
3.1	Section Text	Section (Grey)	VALUE_LEL .QualityOK	Static text
		Beige	-	Unresolved
3.2	Section Value	Green	PROC_SEC (SUBSYSTEM)	Process section
4.1	Class Text	Class (Grey)	VALUE_LEL .QualityOK	Static text
		Beige	-	Unresolved
4.2	Class Value	Green	CLASS	Object class
5.1	Alarm Trim Curve	Green	VALUE_LEL	

No	Description	Default Presentation	Condition	Remarks
5.2	Range Indicators	Range Max (Grey)	VALUE_LEL . QualityOK	Range Max indicator
		Range Max (Beige)	-	Unresolved
		Range Min (Grey)	VALUE_LEL . QualityOK	Range Min indicator
		Range Min (Beige)	-	Unresolved
6	Value Bargraph	Green	VALUE_LEL	Measured value
	High limit	Yellow	AL_BLK = 1	Alarm blocked
		Red	HI_AL = 1	High alarm
		Grey	VALUE_LEL .QualityOK	Normal
		Beige	-	Unresolved
	Low limit	Yellow	AL_BLK = 1	Alarm blocked
		Red	LO_AL = 1	Low alarm
		Grey	VALUE_LEL .QualityOK	Normal
		Beige	-	Unresolved
7	Alarm Limits	ALARM LIMITS		Static text
7.1	Print block	P block (Yellow) P block (Invisible) P block (Beige)	PRINT_BLK = 1 PRINT_BLK .QualityOK -	Print block Normal status Unresolved

No	Description	Default Presentation	Condition	Remarks
7.2	Alarm block	B (Yellow) Bx (Yellow) B (Invisible) B (Beige)	AL_BLK = 1 AL_P_BLK = 1 AL_BLK .QualityOK -	Alarm block Alarm periodic blocked Normal status Unresolved
7.3	High alarm limit, Value High alarm limit, Indication	<LIM_HI_AL> ■ High alarm, limit: (Red flash) ■ High alarm, limit: (Red) □ High alarm, limit: (Grey) □ High alarm, limit: (Beige)	LIM_HI_AL HI_AL_UNACK = 1 HI_AL = 1 HI_AL .QualityOK -	limit value Unacknowledged High alarm High alarm High alarm Normal status Unresolved
7.4	Low alarm limit, Value Low alarm limit, Indication	<LIM_LO_AL> ■ Low alarm, limit: (Red flash) ■ Low alarm, limit (Red) □ Low alarm, limit (Grey) □ Low alarm, limit: (Beige)	LIM_LO_AL LO_AL_UNACK = 1 LO_AL = 1 LO_AL .QualityOK -	limit value Unacknowledged Low alarm Low alarm Normal status Unresolved
7.5	Latched High alarm	■ Latched High alarm (Red) □ Latched High alarm (Grey) □ Latched High alarm (Beige)	HI_AL_L = 1 HI_AL_L .QualityOK -	Latched High alarm Normal status Unresolved

No	Description	Default Presentation	Condition	Remarks
7.6	Latched Low alarm	■ Latched Low alarm (Red) □ Latched Low alarm (Grey) □ Latched Low alarm (Beige)	LO_AL_L = 1 LO_AL_L .QualityOK -	Latched Low alarm Normal status Unresolved
8	STATUS			Status
8.1	Maintenance	■ Maintenance (Red) □ Maintenance (Grey) □ Maintenance (Beige)	POW_FAIL = 1 POW_FAIL .QualityOK -	Maintenance Normal status Unresolved
8.2	Loop Fail	■ Loop Fail (Red) □ Loop Fail (Grey) □ Loop Fail (Beige)	LOOP_FAIL = 1 LOOP_FAIL .QualityOK -	Loop Failt Normal status Unresolved
8.3	Input Error	■ Input Error (Red) □ Input Error (Grey) □ Input Error (Beige)	LO_AL_IN_T = 1 LO_AL_IN_T .QualityOK -	Input Error Normal status Unresolved
8.4	Current label Current value	Current : mA (Grey) <value> (Green) <0> (Beige)	SENS_DRIFT .QualityOK -	Static text Current value (SENSITIVITY) Unresolved

No	Description	Default Presentation	Condition	Remarks
9	Status	STATUS (Grey)		Static text
9.1	Updated	■ Updated (Green) □ Updated (Grey) □ Updated (Beige)	UPDATED = 1 UPDATED .QualityOK -	Updated Not updated Unresolved
9.2	Manual entry	■ Manual entry (Green) □ Manual entry (Grey) □ Manual entry (Beige)	MAN_ENTR = 1 MAN_ENTR .QualityOK -	Manual entry Unresolved
9.3	Alarm period block	■ Alarm period blk (Yellow) □ Alarm period blk (Grey) □ Alarm period blk (Beige)	AL_P_BLK = 1 AL_P_BLK .QualityOK -	Alarm period block Normal status Unresolved
9.4	Disturbance	■ Disturbance (Red) □ Disturbance (Grey) □ Disturbance (Beige)	DISTURBANCE = 1 DISTURBANCE .QualityOK -	Disturbance Normal status Unresolved
9.5	Signal error	■ Signal error (Red) □ Signal error (Grey) □ Signal error (Beige)	ERROR = 1 ERROR .QualityOK -	Signal error Normal status Unresolved

No	Description	Default Presentation	Condition	Remarks
9.6	Repeat Fail Block	■ Repeat Fail Block (Yellow) □ Repeat Fail Block (Grey) □ Repeat Fail Block (Beige)	RP_FAIL_BLK = 1 RP_FAIL_BLK .QualityOK -	Repeat Fail Block Normal status Unresolved
10	Parameters	PARAMETERS (Grey)		Static text
10.1	Implemented	■ Implemented (Green) □ Implemented (Grey) □ Implemented (Beige)	IMPLEMENTED = 1 IMPLEMENTED .QualityOK -	Implemented Normal status Unresolved
10.2	Normal Treat	■ Normal Treat (Green) □ Normal Treat (Grey) □ Normal Treat (Beige)	NORM_TR = 1 NORM_TR .QualityOK -	Normal Treat Normal status Unresolved
10.3	Repeat Fail Control	■ Repeat Fail Cntl (Green) □ Repeat Fail Cntl (Grey) □ Repeat Fail Cntl (Beige)	RP_F_CTL = 1 RP_F_CTL .QualityOK -	Repeat Fail Control Normal status Unresolved
11	Invisible			No Calibration of Analog GI
12.1	Measured Value text	MV (Grey)		Static text
12.2	Measured Value	? ? ? (Red)	ERROR = 1	Error

No	Description	Default Presentation	Condition	Remarks
		<value> Green	VALUE_LEL	Value
		White cross on red square	VALUE_LEL .QualityBad	Unresolved
12.3	Measured Value Unit	<UNIT>	VALUE_LEL .QualityOK	Unit
		UNIT (Beige)	-	Unresolved
13	Inhibit	Inhibit (Cyan) Inhibit (Grey) Inhibit (Beige)	INH = 1 VALUE_LEL .QualityOK -	Inhibit Normal status Unresolved
14	Input Blocked	Input Blocked (Yellow) Input Blocked (Grey) Input Blocked (Beige)	UPD_BLK = 1 (BLOCKED = 1) VALUE_LEL .QualityOK -	Input Blocked Normal status Unresolved
15	Invisible			No Test mode on Analog GI
16	Detector Type	Analog detector (Grey) (no text) Detector type (Beige)	GI_SPARE_37 = 1 VALUE_LEL .QualityOK -	Analog GI Catalytic GI or Calculated GI Unresolved

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

NumericMV01

Presentation:

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Lock indication	White	SELECTED = 1	Object select frame
		Dotted Yellow	AL_BLK = 1	Alarm blocked by operator
		Invisible	Value_LEL .QualityOK	Normal
2.1	Value Frame	Invisible	FrameStyle = Flat or FrameWidth = 0	2 Dimension value presentation
		Raised or Sunken	FrameStyle <> Flat and FrameWidth > 0	3 Dimension value presentation
2.2	Value indication	? ? ?	ERROR = 1	Error
		Measured value	Value_LEL .QualityOK	Normal

No	Description	Default Presentation	Condition	Remarks
2.3	Value color	Red flash	AL_UNACK = 1	Unacknowledged alarm
		Yellow	UPD_BLK = 1 (BLOCKED =1)	Input blocked
		Cyan	INH =1	Inhibit
		Red	DISTURB = 1	Alarm
		Red	ERROR = 1	I/O Error
		Green	Value_LEL .QualityOK	Normal
		Invisible	-	Unresolved

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	2. Value	**3**, (0..4)	
FrameStyle	2. Value	**Flat**, Raised, Sunken	
BackgroundColor	Background	Transparent, Any	

UnitMV01

Presentation:

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Unit			Object unit
		Cyan <UNIT>	INH = 1	Inhibited
		Green <UNIT>	Value_LEL .QualityOK	Normal
		Beige “UnitMV”	-	Unresolved

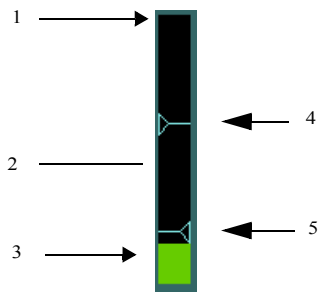
The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
BackgroundColor	Background	Transparent, Any	

BargraphMV01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Lock indication	White	SELECTED = 1	Object select frame
		Dotted Yellow	AL_BLK = 1	Alarm blocked by operator
		Invisible	Value_LEL .QualityOK	Normal
2	Error indication	?	ERROR = 1	Error
		Measured value	Value_LEL .QualityOK	Normal
		X	-	Unresolved
3.1	Value Bar Frame	Invisible	FrameStyle = Flat or FrameWidth = 0	2 Dimension value presentation
		Raised or Sunken	FrameStyle <> Flat and FrameWidth > 0	3 Dimension value presentation
3.2	Value Color	Red flash	AL_UNACK = 1	Unacknowledged alarm
		Yellow	UPD_BLK = 1 (BLOCKED = 1)	Input blocked
		Red	DISTURB = 1	Alarm
		Red (?)	ERR = 1	Error
		Green	Value_LEL .QualityOK	Normal condition
		Invisible	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
4	High Limit		LIM_H_AL	Alarm High limit
		Invisible	LIM_HI_AL >= RANGE_MAX or LIM_HI_AL = 0	
		Cyan	INH = 1 and LatchedUsed = false	Inhibited
		Cyan	INH = 1 and H_AL_NIL = 0 and LatchedUsed = true	Inhibit unlatched (Included for backward compatibility before XMSGSYS 6.1/5)
		Yellow	AL_BLK = 1	Blocked
		Red	H_AL = 1	High alarm
		Red	H_AL_L = 1and LatchedUsed	High alarm latched

No	Description	Default Presentation	Condition	Remarks
5	Low Limit 2		LIM_L_AL	Alarm Low limit
		Invisible	LIM_LO_AL <= RANGE_MIN or LIM_LO_AL = 0	
		Cyan	INH = 1 and LatchedUsed = false	Inhibited
		Cyan	INH = 1 and L_AL_NIL = 0 and LatchedUsed = true	Inhibit unlatched (Included for backward compatibility before XMSGSYS 6.1/5)
		Yellow	AL_BLK = 1	Blocked
		Red	L_AL = 1	Low alarm
		Red	L_AL_L = 1and LatchedUsed	Low alarm latched

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
LatchedUsed	4. High limit, 5. Low limit	**true,** false	
FrameWidth	2. Bar Frame	**3**, (0...4)	
FrameStyle	2. Bar Frame	Flat, Raised, Sunken	
Orientation	Bargraph	Horizontal, Vertical	
BackgroundColor	Background	Transparent, Any	

Name01

Presentation:

Gas Input presentation, object name.

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	Value_LEL	Normal

No	Description	Default Presentation	Condition	Remarks
2	Object Name		NAME	Object Name
		Flashing Red	AL_UNACK = 1	Unacknowledged alarm
		Yellow	UPD_BLK = 1	Input Update blocked
		Cyan	INH = 1 and LatchedUsed = false	Inhibited
		Cyan	INH = 1 and L_AL_NIL = 0 and H_AL_NI = 0 and LatchedUsed = true	Inhibit unlatched (Included for backward compatibility before XMSGSYS 6.1/5)
		Red	DISTURBANCE =1	Alarm
		Red	(L_AL_L = 1 or H_AL_L) and LatchedUsed = True	Alarm Latched
		Red	ERROR =1	Error
		Green	Value_LEL	Normal
		Green	-	Unresolved (name: name)

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration**:**

Parameters	Affects	Options (bold is default)	Remarks
LatchedUsed	2. Name	**true,** false	
BackgroundColor	Background	Transparent, Any	

FG_NameStatus01

Presentation:

Gas Input presentation for analog input fire detectors, name and status (similar to FI).

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	Value_LEL .QualityOK	Normal
		Beige	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
2	Object Name	Red Flash	AL_UNACK = 1	Unacknowledged alarm
		Yellow	UPD_BLK = 1	Input Update blocked
		Cyan	INH = 1 and LatchedUsed = false	Inhibited
		Cyan	INH = 1 and L_AL_NIL = 0 and H_AL_NI = 0 and LatchedUsed = true	Inhibit unlatched (Included for backward compatibility before XMSGSYS 6.1/5)
		Red	DISTURBANCE =1	Alarm
		Red	(L_AL_L = 1 or H_AL_L) and LatchedUsed = True	Alarm Latched
		Red	ERROR =1	Error
		Green	Value_LEL .QualityOK	Normal
		Green	-	Unresolved (name: name)
3.1	Alarm Text	"H"	HI_AL = 1	High alarm
		"H"	H_AL_L and LatchedUsed = True	High alarm Latched
		"L"		-
3.2	Alarm Color	Red Flash	HI_AL_UNACK = 1	Unacknowledged high alarm
		Red Flash	LO_AL_UNACK = 1	Unacknowledged low alarm
		Red	HI_AL = 1	High alarm

No	Description	Default Presentation	Condition	Remarks
		Red	HI_AL_L = 1 and LatchedUsed = true	High alarm latched
		Red	LO_AL = 1	Low alarm
		Red	LO_AL_L = 1 and LatchedUsed = true	Low alarm latched
		Invisible	Value_LEL .QualityOK	Normal
4.1	Inhibit / Block Text	BlockedText	UPD_BLK = 1	Update blocked
		TestText	TESTED = 1	Input in test mode (for calibration)
		InhibitText		-
4.2	Inhibit / Block Color	Yellow	UPD_BLK = 1	Update blocked
		Yellow	TESTED = 1	Input in test mode (for calibration)
		Cyan	INH = 1 and LatchedUsed = false	Inhibited
		Cyan	INH = 1 and L_AL_NIL = 0 and H_AL_NI = 0 and LatchedUsed = true	Inhibit unlatched (Included for backward compatibility before XMSGSYS 6.1/5)
		Invisible	Value_LEL .QualityOK	Normal
5.1	Error Text	ErrorText		
5.2	Error Color	Red	ERROR = 1	Error
		Invisible	Value_LEL	Normal

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
LatchedUsed	2. Name	**true,** false	
BlockedText	4. Block / Inhibit	**B,** any character	
TestText	4. Block / Inhibit	**T,** any character	
InhibitText	4. Block / Inhibit	**I,** any character	
ErrorText	5. Error	**E,** any character	
BackgroundColor	Background	Transparent, Any	

FG_Detector01

Presentation:

Gas Input presentation, flame or heat detector symbol, similar to Fire Input presentation. Used for analog input fire detectors.

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	Value_LEL .QualityOK	Normal

No	Description	Default Presentation	Condition	Remarks
2	Symbol	Red Flash	AL_UNACK = 1	Unacknowledged alarm
		Yellow	UPD_BLK = 1	Input Update blocked
		Cyan	INH = 1 and LatchedUsed = false	Inhibited
		Cyan	INH = 1 and L_AL_NIL = 0 and H_AL_NI = 0 and LatchedUsed = true	Inhibit unlatched (Included for backward compatibility before XMSGSYS 6.1/5)
		Red	DISTURBANCE =1	Alarm
		Red	(L_AL_L = 1 or H_AL_L) and LatchedUsed = True	Alarm Latched
		Red	ERROR =1	Error
		Green	Value_LEL .QualityOK	Normal
		Green	-	Unresolved

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
LatchedUsed	2. Symbol	**true,** false	
DetectorType	2. Symbol		Suggested size: width =600 for Flame symbol, width = 300 for other symbols.

Parameters	**Affects**	**Options (bold is default)**	**Remarks**
		Heat-Fixed Heat Flame	 Right, Up, Left, Down
FlameSymbolDirection	Set direction of flame symbol	**Right**, Up, Left or Down	Only visible if DetectorType = 3 (Flame): Symbol is rotating anti-clockwise.
FlameDegreeAboveFloor	Number presentation	**0**, any integer	Only visible if number is not zero (default), and DetectorType = 3 (Flame).
BackgroundColor	Background	Transparent, Any	

NameStatus01

Presentation:

Gas Input presentation, object name and status.

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	Value_LEL .QualityOK	Normal
		Invisible	-	Unresolved
2	Object Name		NAME	Object Name
		Red flash	AL_UNACK = 1	Unacknowledged alarm
		Yellow	UPD_BLK = 1	Input Update blocked
		Cyan	INH = 1 and LatchedUsed = false	Inhibited
		Cyan	INH = 1 and L_AL_NIL = 0 and H_AL_NI = 0 and LatchedUsed = true	Inhibit unlatched (Included for backward compatibility before XMSGSYS 6.1/5)
		Red	DISTURBANCE =1	Alarm
		Red	HI_AL_L = 1 and LatchedUsed = True	High Alarm Latched
		Red	L_AL_L = 1 and LatchedUsed = True	Low Alarm Latched
		Red	ERROR =1	Error
		Green	Value_LEL .QualityOK	Normal
		Green	-	Unresolved (name: name)

No	Description	Default Presentation	Condition	Remarks
3.1	Alarm Text	H	HI_AL_UNACK = 1	Unacknowledged high alarm
		H	HI_AL = 1	High Alarm
		H	HI_AL_L = 1 and LatchedUsed = True	Latched High Alarm
		L	LO_AL_UNACK = 1	Unacknowledged low alarm
		L	LO_AL = 1	Low Alarm
		L	LO_AL_L = 1 and LatchedUsed = True	Latched Low Alarm
			Value_LEL .QualityOK	Normal (no text)
		H	-	Unresolved
3.2	Alarm Color	Red flash	HI_AL_UNACK = 1	Unacknowledged high alarm
		Red	HI_AL =1	High Alarm
		Red	HI_AL_L = 1 and LatchedUsed = True	High Alarm Latched
		Red flash	LO_AL_UNACK = 1	Unacknowledged low alarm
		Red	LO_AL = 1	Low Alarm
		Red	L_AL_L = 1 and LatchedUsed = True	Low Alarm Latched
		Invisible	-	Normal

No	Description	Default Presentation	Condition	Remarks
4.1	Override Text	BlockedText	UPD_BLK = 1	Input Update blocked
		TestModeText	TESTED = 1	Testmode entered
		InhibitText	INH = 1	Inhibit
			Value_LEL .QualityOK	Normal (no text)
		BlockedText	-	Unresolved
4.2	Override Color	Yellow	UPD_BLK = 1	Input Update blocked
		Yellow	TESTED = 1	Testmode entered
		Cyan	INH = 1	Inhibit
		Invisible	-	Normal
5.1	Error Text	ErrorText	-	Error indication
5.2	Error Color	Red	ERROR = 1	Error
		Invisible	-	Normal
6.1	Value Text	? ? ?	ERROR = 1	Error
		Measured value	-	Value presentation
		X X X	Value_LEL .QualityOK	Unresolved
6.2	Value color	Red	ERROR = 1	I/O Error
		Red	HI_AL = 1	High Alarm
		Red	HI_AL_L = 1 and LatchedUsed = True	Latched High Alarm
		Red	LO_AL = 1	Low Alarm
		Red	LO_AL_L = 1 and LatchedUsed = True	Latched Low Alarm
		Green	Value_LEL	Normal

No	Description	Default Presentation	Condition	Remarks
7.1	Bargraph value	Measured value	VAL_LEL	Value presentation
7.2	Bargraph color	Red	HI_AL = 1	High Alarm
		Red	HI_AL_L = 1 and LatchedUsed = True	Latched High Alarm
		Red	LO_AL = 1	Low Alarm
		Red	LO_AL_L = 1 and LatchedUsed = True	Latched Low Alarm
		Green	Value_LEL	Normal
7.3	Bargraph frame	Red	HI_AL = 1	High Alarm
		Red	LO_AL = 1	Low Alarm
		Green	Value_LEL	Normal

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
LatchedUsed	2. Name	**true,** false	
BlockedText	4. Override	**B,** any character	
InhibitText	4. Override	**I,** any character	
TestModeText	4. Override	**T,** any character	
ErrorText	5. Error	**E,** any character	
BackgroundColor	Background	Transparent, Any	

Detector01

Presentation:

Gas Input presentation, detector symbol.

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	Value_LEL .QualityOK And DetectorType = Infrared	No frame
		(same color as Symbol)	Value_LEL .QualityOK	Frame is part of symbol
2	Symbol	Red Flash	AL_UNACK = 1	Unacknowledged alarm
		Yellow	UPD_BLK = 1	Input Update blocked
		Cyan	INH = 1 and LatchedUsed = false	Inhibited
		Cyan	INH = 1 and L_AL_NIL = 0 and H_AL_NI = 0 and LatchedUsed = true	Inhibit unlatched (Included for backward compatibility before XMSGSYS 6.1/5)
		Red	DISTURBANCE =1	Alarm

No	Description	Default Presentation	Condition	Remarks
		Red	(L_AL_L = 1 or H_AL_L) and LatchedUsed = True	Alarm Latched
		Red	ERROR =1	Error
		Green	-	Normal

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration**:**

Parameters	Affects	Options (bold is default)	Remarks
LatchedUsed	2. Symbol	**true,** false	
DetectorType	2. Symbol	Gas Gas_Low Gas_High Infrared H_2S	 Right, Up, Left, Down

Parameters	Affects	Options (bold is default)	Remarks
		CO_2	
		H_2 Gas	
		Smoke (Early warning)	
		Gas small square	
ArrowDirection	Set direction of Infrared symbol	**Right**, Up, Left or Down	Only visible if DetectorType = Infrared beam gas detector
BackgroundColor	Background	Transparent, Any	

M_NameStatus01

Presentation:

Presentation of Object name, description and status for Gas Input on Cause & Effect Matrix display.

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		NormalFrameColor	-	Normal
2	Name / Description	Red flash	AlarmType = High and HI_AL_UNACK = 1	Unacknowledged high alarm
		Red flash	AlarmType = Low and LO_AL_UNACK = 1	Unacknowledged low alarm
		Red	AlarmType =High and HI_AL =1	High Alarm
		Red	AlarmType =High and HI_AL_L =1 and LatchedUsed = true	High Alarm Latched
		Red	AlarmType =Low and LO_AL =1	Low Alarm
		Red	AlarmType =Low and LO_AL_L =1 and LatchedUsed = true	Low Alarm Latched
		Green	-	Normal
3.1	Alarm Text	H	AlarmType =High	
		L	AlarmType =Low	

No	Description	Default Presentation	Condition	Remarks
3.2	Alarm Text Color	Red	AlarmType =High and HI_AL =1	High Alarm
		Red	AlarmType =High and HI_AL_L =1 and LatchedUsed = true	High Alarm Latched
		Red	AlarmType =Low and LO_AL =1	Low Alarm
		Red	AlarmType =Low and LO_AL_L =1 and LatchedUsed = true	Low Alarm Latched
		Grey	Value_LEL .QualityOK	Normal
4	Status Square	Dark Grey *center*	(AlarmType =High and HI_AL =0) and (AlarmType =Low and LO_AL =0)	Unfilled, no alarm (not High alarm and not Low alarm)
		Yellow	UPD_BLK = 1	Input Update blocked
		Cyan	InhibitUsed = true and INH = 1 and LatchedUsed = false	Inhibited
		Cyan	InhibitUsed = true and INH = 1 and L_AL_NIL = 0 and H_AL_NI = 0 and LatchedUsed = true	Inhibit unlatched (Included for backward compatibility before XMSGSYS 6.1/5)

No	Description	Default Presentation	Condition	Remarks
		Red	AlarmType =High and HI_AL =1	High Alarm
		Red	AlarmType =High and HI_AL_L =1 and LatchedUsed = true	High Alarm Latched
		Red	AlarmType =Low and LO_AL =1	Low Alarm
		Red	AlarmType =Low and LO_AL_L =1 and LatchedUsed = true	Low Alarm Latched
		Red	ERROR =1	Error
		Green	Value_LEL	Normal

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
NormalFrameColor	1. Frame	**Black,** any color	Color of frame in normal condition. (Conform to Cause & Effect grid)
AlarmType	2. **Name / Description,** 3. Alarm Text 4. Status	**High,** Low	Alarm limit used on Gas Input, Refer to “Alarm” in Safety Builder (C&E Matrix)

Parameters	Affects	Options (bold is default)	Remarks
LatchedUsed	2. **Name / Description,** 3. Alarm Text 4. Status	**true,** false	Default: Latched Alarm indicated. Refer to “Alarm” in Safety Builder (C&E Matrix)
InhibitUsed	4. Status	**true,** false	Default: Cyan status square when Inhibited. Refer to “Additional properties” in Safety Builder .
Status3D	4. Status	**false,** true	Default (false): flat status square, true: 3 Dimensional status square, sunken when square is filled.
BackgroundColor	Background	Transparent, Any	

M_Status01

Presentation:

Presentation of Status for Gas Input on Cause & Effect Matrix display (dynamic ‘dot’).

1

Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	Circle frame	White	SELECTED = 1	Object selected
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	-	Normal
1.2	Circle Color	Green	InhibitUsed = true and INH = 1 and LatchedUsed = false	Inhibited. Note: Alarm not visible !
		Green	InhibitUsed = true and INH = 1 and L_AL_NIL = 0 and H_AL_NI = 0 and LatchedUsed = true	Inhibit unlatched (Alarm not visible !) (Included for backward compatibility before XMSGSYS 6.1/5)
		Red	AlarmType =High and HI_AL =1	High Alarm
		Red	AlarmType =High and HI_AL_L =1 and LatchedUsed = true	High Alarm Latched
		Red	AlarmType =Low and LO_AL =1	Low Alarm
		Red	AlarmType =Low and LO_AL_L =1 and LatchedUsed = true	Low Alarm Latched
		Green	-	Normal

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
AlarmType	1. Circle	**High,** Low	Alarm limit used on Analog Input, Refer to “Alarm” in Safety Builder (C&E Matrix)
LatchedUsed	All	**true,** false	Default: Latched Alarm indicated. Refer to “Alarm” in Safety Builder (C&E Matrix)
InhibitUsed	1. Circle	**true,** false	Default: Green status circle when Inhibited, that is, Alarm indication is ‘hidden’. Refer to “Additional properties” in Safety Builder .
BackgroundColor	Background	Transparent, Any	

Fire Area Status Object (GENUSD1)

FG_Faceplate

This Faceplate is is used with Genusd objects used for safety area status presentation. The purpose of the dialog is to enable acknowledge of detector errors and protection feedback faults.
The deviation from standard Genusd dialog is that only the Acknowledge button is present. The Faceplate (control element) presents the Fire area status signals.

The Genusd objects should be connected to the User Element VDU-A in the fire area PC logic.

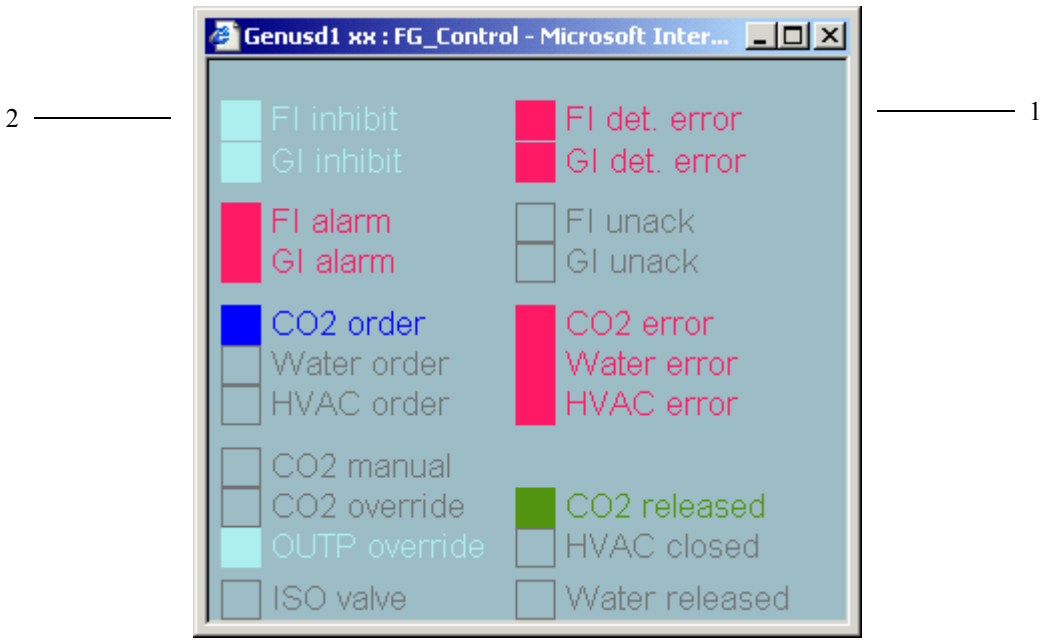
Presentation:

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Lock Button			
2	Name and Description			

FG_Control

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Fire area error			Alarms: ALQ1, ALQ2, ALF1, ALF2, ALF3
1.1	FI det. error Text	FI det. error		

No	Description	Default Presentation	Condition	Remarks
1.1	FI det. error Color	Red Flash Red Green Beige	UA_ST_00=1 PC_ST_00=1 PC_ST_00 .QualityOK -	FI detector error, unacknowledged FI detector error, acknowledged (ALQ1=1) No FI detector error Unresolved
1.2	GI det. error Text	GI det. error		
	GI det. error Color	Red Flash Red Green Beige	UA_ST_01=1 PC_ST_01=1 PC_ST_01 .QualityOK -	GI detector error, unacknowledged GI detector error, acknowledged (ALQ2=1) No GI detector error Unresolved
1.3	CO2 error Text	CO2 error		
	CO2 error Color	Red Flash Red Green Beige	UA_ST_02=1 PC_ST_02=1 PC_ST_02 .QualityOK -	CO2 system feedback fault, unack. CO2 system feedback fault, ack. (ALF1=1) No CO2 system feedback fault Unresolved
1.4	Water error Text	Water error		
	Water error	Red Flash Red Green Beige	UA_ST_03=1 PC_ST_03=1 PC_ST_03 .QualityOK -	Water system feedback fault, unack. Water system feedback fault, ack. (ALF2=1) No Water system feedback fault Unresolved

No	Description	Default Presentation	Condition	Remarks
1.5	HVAC error Text	HVAC error		
	HVAC error Color	Red Flash Red Green Beige	UA_ST_04=1 PC_ST_04=1 PC_ST_04 .QualityOK -	HVAC feedback fault, unack. HVAC feedback fault, unack. (ALF3=1) HVAC feedback fault, unack. Unresolved
2	Fire area status			Indications
2.1	FI inhibit Text	FI inhibit		
	FI inhibit Color	Cyan Gray Beige	PC-ST_16=1 PC-ST_16 .QualityOK -	Any inhibited FI detector (M1=1) No inhibited FI detector Unresolved
2.2	GI inhibit Text	GI inhibit		
	GI inhibit Color	Cyan Gray Beige	PC-ST_17=1 PC-ST_17 .QualityOK -	Any inhibited GI detector (M2=1) No inhibited GI detector Unresolved
2.3	FI alarm Text	FI alarm		
	FI alarm Color	Red Gray Beige	PC-ST_24=1 PC-ST_24 .QualityOK -	Acknowledged FI detector alarm (IND1=1) No Acknowledged FI detector alarm Unresolved

No	Description	Default Presentation	Condition	Remarks
2.4	GI alarm Text	GI alarm		
	GI alarm Color	Red Gray Beige	PC-ST_26=1 PC-ST_26 .QualityOK -	Acknowledged GI detector alarm (IND3=1) No Acknowledged GI detector alarm Unresolved
2.5	FI unack Text	FI unack		
	FI unack Color	Red Gray Beige	PC-ST_25=1 PC-ST_25 .QualityOK -	Unacknowledged FI detector alarm (IND2=1) No Unacknowledged FI detector alarm Unresolved
2.6	GI unack Text	GI unack		
	GI unack Color	Red Gray Beige	PC-ST_27=1 PC-ST_27 .QualityOK -	Unacknowledged GI detector alarm (IND4=1) No Unacknowledged GI detector alarm Unresolved
2.7	CO2 order Text	CO2 order		
	CO2 order Color	Blue Gray Beige	PC-ST_21 .QualityOK -PC-ST_21 .QualityOK -	CO2 system release ordered (BLK=1) CO2 system release not ordered Unresolved

No	Description	Default Presentation	Condition	Remarks
2.8	Water order Text	Water order		
	Water order Color	Blue Gray Beige	PC-ST_19=1 PC-ST_19 .QualityOK -	Water system release ordered (AUTO=1) Water system release not ordered Unresolved
2.9	HVAC order Text	HVAC order		
	HVAC order Color	Blue Gray Beige	PC-ST_10=1 PC-ST_10 .QualityOK -	HVAC action ordered (INTLU3=1) HVAC action not ordered Unresolved
2.10	CO2 manual Text	CO2 manual		
	CO2 manual Color	Cyan Gray Beige	PC-ST_20=1 PC-ST_20 .QualityOK -	CO2 system in manual mode (MAN=1) CO2 system in auto mode Unresolved
2.11	CO2 override Text	CO2 override		
	CO2 override Color	Cyan Gray Beige	PC-ST_22=1 PC-ST_22 .QualityOK -	CO2 output overridden (STBY=1) CO2 output not overridden Unresolved

No	Description	Default Presentation	Condition	Remarks
2.12	OUTP override Text	OUTP override		
	OUTP override Color	Cyan Gray Beige	PC-ST_12=1 PC-ST_12 .QualityOK -	Any output overridden (INTLU5=1) No output overridden Unresolved
2.13	ISO valve Text	ISO valve		
	ISO valve Color	Cyan Green Beige	PC-ST_13=1 PC-ST_13 .QualityOK -	Water isolation valve closed (INTLU6=1) Water isolation valve open Unresolved
2.14	CO2 released Text	CO2 released		
	CO2 released Color	Green Green Beige	PC-ST_08=1 PC-ST_08 .QualityOK -	CO2 system released (INTLU1=1) CO2 system not released Unresolved
2.15	HVAC closed Text	HVAC closed		
	HVAC closed Color	Green Gray Beige	PC-ST_18=1 PC-ST_18 .QualityOK -	All HVAC feedback activated (M3=1) Not all HVAC feedback activated Unresolved
2.16	Water released Text	Water released		
	Water released Color	Green Gray Beige	PC-ST_09=1 PC-ST_09 .QualityOK -	Water system released (INTLU2=1) Water system not released Unresolved

No	Description	Default Presentation	Condition	Remarks
2.17	INTLU4 Text	NA (Int4)		Not applicable (Property not used)
	INTLU4 Color	Pink Invisible (light blue) Beige	PC-ST_11=1 PC-ST_11 .QualityOK -	Not used, but activated.
2.18	F4 Text	NA (F4)		Not applicable (Property not used)
	F4 Color	Red flash Pink Invisible (light blue) Beige	AU-ST_05=1 PC-ST_05=1 PC-ST_06 .QualityOK -	Not used, but activated.
2.19	F5 Text	NA (F5)		Not applicable (Property not used)
	F5 Color	Red flash Pink Invisible (light blue) Beige	AU-ST_06=1 PC-ST_06=1 PC-ST_06 .QualityOK -	Not used, but activated.
2.20	F6 Text	NA (F6)		Not applicable (Property not used)
	F6 Color	Red flash Pink Invisible (light blue) Beige	AU-ST_07=1 PC-ST_07=1 PC-ST_07 .QualityOK -	Not used, but activated.

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

FG_OverviewFire01

Presentation:

Presentation on an overview display, indicating status for FIRE detectors on underlying displays (alarm, error, inhibit and block). Used for Genusd objects connected to User Elements VDU-A and VDU-D.

The Graphic Element can be placed on top of a Aspect Link standard element. The element can not get focus, that is, activation (click) will not activate the operator dialog (Faceplate).

Behavior:

No	Description	Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	-	Normal
2.1	Alarm Text	FireText		
2.2	Alarm Color	Red flash	PC_ST_25 = 1	Unacknowledged Alarm (IND2=1)
		Red	PC_ST_24 = 1	Acknowledged Alarm (IND1=1)
		Cyan	PC_ST_16 = 1	Area or detector inhibit, or detector blocked if specified in FI-VOTE PC element. (M1=1)
		Grey	AU_ST_00 = 1	Unacknowledged detector error
		Grey	PC_ST_00 = 1	Detector error (ALQ1=1)

No	Description	Presentation	Condition	Remarks
		Green	NormalLabelVisible = True and PC_ST_00 .QualityOK	Normal status, visible indication
		White	SELECTED = 1	Selected (To identify the 'invisible' presentation)
		Invisible	-	Normal status, invisible presentation
3.1	StatusText	ErrorText:	PC_ST_00 = 1	Detector error (ALQ1=1)
		InhibitText	PC_ST_16 = 1	Area or detector inhibit, or detector blocked if specified in FI-VOTE PC element.
			PC_ST_00 .QualityOK	Normal status (no string)
		X X X	-	Unresolved
3.2	Status Color	Red flash	AU_ST_00 = 1	Unacknowledged detector error
		Red	PC_ST_00 = 1	Acknowledged detector error
		Cyan	PC_ST_16 = 1	Area or detector inhibit, or detector blocked if specified in FI-VOTE PC element.
		Invisible	PC_ST_00 .QualityOK	Normal status (no string)

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameter	Affect	Option (bold is default)	Remarks
FireText	2. Alarm	**FIRE**, any text	
ErrorText	3. Status	**ERROR**, any text	
InhibitText	3. Status	**INHIBIT**, any text	
NormalLabelVisible	2. Alarm	**False**, True	Default: No indication in normal condition
BackgroundColor	Background	Transparent, Any	

FG_OverviewGas01

Presentation:

Presentation on an overview display, indicating status for GAS detectors on underlying displays (alarm, error, inhibit and block). Used for Genusd objects connected to User Elements VDU-A and VDU-D.

The Graphic Element can be placed on top of a Aspect Link standard element. The element can not get focus, that is, activation (click) will not activate the operator dialog (Faceplate).

Behavior:

No	Description	Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	-	Normal

No	Description	Presentation	Condition	Remarks
2.1	Alarm Text	GasText		
2.2	Alarm Color	Red flash	PC_ST_27 = 1	Unacknowledged Alarm (IND4=1)
		Red	PC_ST_26 = 1	Acknowledged Alarm (IND3=1)
		Cyan	PC_ST_17 = 1	Area or detector inhibit, or detector blocked if specified in FI-VOTE PC element. (M2=1)
		Grey	AU_ST_01 = 1	Unacknowledged detector error
		Grey	PC_ST_01 = 1	Detector error (ALQ2=1)
		Green	NormalLabelVisible = True and PC_ST_00 .QualityOK	Normal status, visible indication
		White	SELECTED = 1	Selected (To identify the 'invisible' presentation)
		Invisible	-	Normal status, invisible presentation
3.1	Status Text	ErrorText:	PC_ST_01 = 1	Detector error (ALQ2=1)
		InhibitText	PC_ST_17 = 1	Area or detector inhibit, or detector blocked if specified in FI-VOTE PC element.
		Invisible	-	Normal status (no string)

No	Description	Presentation	Condition	Remarks
3.2	Status Color	Red flash	AU_ST_01 = 1	Unacknowledged detector error
		Red	PC_ST_01 = 1	Acknowledged detector error
		Cyan	PC_ST_17 = 1	Area or detector inhibit, or detector blocked if specified in FI-VOTE PC element.
		Invisible	-	Normal status (no string)

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameter	Affect	Option (bold is default)	Remarks
GasText	2. Alarm	**GAS**, any text	
ErrorText	3. Status	**ERROR**, any text	
InhibitText	3. Status	**INHIBIT**, any text	
NormalLabelVisible	2. Alarm	**False**, True	Default: No indication in normal condition
BackgroundColor	Background	Transparent, Any	

FG_OverviewWater01

Presentation:

Presentation on an overview display, indicating status for WATER protection systems on underlying displays (order, feedback error and released). Used for Genusd objects connected to User Elements VDU-A and VDU-D.

The Graphic Element can be placed on top of a Aspect Link standard element. The element can not get focus, that is, activation (click) will not activate the operator dialog (Faceplate).

Behavior:

No	Description	Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	-	Normal
2.1	Order Text	WaterText		
2.2	Order Color	Blue	PC_ST_19 = 1	Water release order (AUTO=1)
		Cyan	PC_ST_13 = 1	Isolation valve closed (INTLU6=1)
		Grey	AU_ST_03 = 1	Unacknowledged feedback error
		Grey	PC_ST_03 = 1	Feedback error (ALF2=1)
		Grey	PC_ST_09 = 1	Water released (INTLU2=1)
		Green	NormalLabelVisible = True and PC_ST_00 .QualityOK	Normal status, visible indication
		White	SELECTED = 1	Selected (To identify the 'invisible' presentation)
		Invisible	-	Normal status, invisible presentation

No	Description	Presentation	Condition	Remarks
3.1	Feedback Text	ErrorText:	PC_ST_03 = 1	Feedback error (ALF2=1)
		ReleasedText	PC_ST_09 = 1	Water released (INTLU2=1)
		Invisible	-	Normal status (no string)
3.2	Feedback Color	Red flash	AU_ST_03 = 1	Unacknowledged feedback error
		Red	PC_ST_03 = 1	Acknowledged feedback error
		Blue	PC_ST_19 = 1	Water release order (AUTO=1)
		Green	PC_ST_09 = 1	Water released (INTLU2=1)
		Invisible	-	Normal status (no string)

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameter	Affect	Option (bold is default)	Remarks
WaterText	2. Order	**WATER**, any text	
ErrorText	3. Feedback	**ERROR**, any text	
ReleasedText	3. Feedback	**RLSD**, any text	
NormalLabelVisible	2. Order	**False**, True	Default: No indication in normal condition
BackgroundColor	Background	Transparent, Any	

FG_OverviewHVAC01

Presentation:

Presentation on an overview display, indicating status for Actions, that is, orders with feedback supervision (e.g. HVAC systems) on underlying displays (order, feedback error and released).
Used for Genusd objects connected to User Elements VDU-A and VDU-D.

The Graphic Element can be placed on top of a Aspect Link standard element. The element can not get focus, that is, activation (click) will not activate the operator dialog (Faceplate).

Behavior:

No	Description	Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	-	Normal
2.1	Order Text	ActionText		

No	Description	Presentation	Condition	Remarks
2.2	Order Color	Blue	PC_ST_10 = 1	Action ordered (INTLU3=1)
		Grey	AU_ST_04 = 1	Unacknowledged feedback error
		Grey	PC_ST_04 = 1	Feedback error (ALF3=1)
		Grey	PC_ST_18 = 1	Action executed (not ordered) (M3=1)
		Green	NormalLabelVisible = True and PC_ST_00 .QualityOK	Normal status, visible indication
		White	SELECTED = 1	Selected (To identify the 'invisible' presentation)
		Invisible	-	Normal status, invisible presentation
3.1	Feedback Text	ErrorText:	PC_ST_04 = 1	Feedback error (ALF3=1)
		FeedbackText	PC_ST_18 = 1	Action executed (M3=1)
		Invisible	-	Normal status (no string)

No	Description	Presentation	Condition	Remarks
3.2	Feedback Color	Red flash	AU_ST_04 = 1	Unacknowledged feedback error
		Red	PC_ST_04 = 1	Acknowledged feedback error
		Blue	PC_ST_10 = 1	Action ordered (INTLU3=1)
		Green	PC_ST_18 = 1	Action executed (M3=1)
		Invisible	-	Normal status (no string)

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameter	Affect	Option (bold is default)	Remarks
ActionText	2. Order	**HVAC**, any text	
ErrorText	3. Feedback	**ERROR**, any text	
FeedbackText	3. Feedback	**CLOSED**, any text	
NormalLabelVisible	2. Order	**False**, True	Default: No indication in normal condition
BackgroundColor	Background	Transparent, Any	

FG_OverviewCO201

Presentation:

Presentation on an overview display, indicating status for CO2 protection systems on underlying displays (order, system mode, feedback error and released). Used for Genusd objects connected to User Elements VDU-A and VDU-D.

The Graphic Element can be placed on top of a Aspect Link standard element. The element can not get focus, that is, activation (click) will not activate the operator dialog (Faceplate).

Behavior:

No	Description	Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	-	Normal
2.1	Order Text	OverrideText	PC_ST_22 = 1	CO2 output overridden (STBY=1)
		ManualText	PC_ST_20 = 1	CO2 system in manual mode (MAN=1)
		CO2Text	-	-
2.2	Order Color	Blue	PC_ST_21 = 1	CO2 release order (BLK=1)
		Cyan	PC_ST_22 = 1	CO2 output overridden (STBY=1)
		Cyan	PC_ST_20 = 1	CO2 system in manual mode (MAN=1)
		Grey	AU_ST_02 = 1	Unacknowledged feedback error

No	Description	Presentation	Condition	Remarks
		Grey	PC_ST_02 = 1	Feedback error (ALF1=1)
		Grey	PC_ST_08 = 1	CO2 released (INTLU1=1)
		Green	NormalLabel Visible = True and PC_ST_00 .QualityOK	Normal status, visible indication
		White	SELECTED = 1	Selected (To identify the 'invisible' presentation)
		Invisible	-	Normal status, invisible presentation
3.1	Feedback Text	ErrorText:	PC_ST_02 = 1	Feedback error (ALF1=1)
		ReleasedText	PC_ST_08 = 1	CO2 released (INTLU1=1)
		Invisible	-	Normal status (no string)
3.2	Feedback Color	Red flash	AU_ST_02 = 1	Unacknowledged feedback error
		Red	PC_ST_02 = 1	Acknowledged feedback error
		Blue	PC_ST_21 = 1	CO2 release order (BLK=1)
		Green	PC_ST_08 = 1	CO2 released (INTLU1=1)
		Invisible	-	Normal status (no string)

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameter	Affect	Option (bold is default)	Remarks
CO2Text	2. Order	**CO2**, any text	
OverrideText	2. Order	**CO2 OVR**, any text	
ManualText	2. Order	**CO2 MAN**, any text	
ErrorText	3. Feedback	**ERROR**, any text	
ReleasedText	3. Feedback	**RLSD**, any text	
NormalLabelVisible	2. Order	**False**, True	Default: No indication in normal condition
BackgroundColor	Background	Transparent, Any	

FG_OverviewOut01

Presentation:

Presentation on an overview display, indicating status for OUTPUT OVERRIDE on underlying displays. Used for Genusd objects connected to User Elements VDU-A and VDU-D.

The Graphic Element can be placed on top of a Aspect Link standard element. The element can not get focus, that is, activation (click) will not activate the operator dialog (Faceplate).

Behavior:

No	Description	Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	-	Normal
2.1	Output Text	OutputText		
2.2	Output Color	Cyan	PC_ST_12 = 1	Any output overridden (INTLU5=1)
		Green	NormalLabelVisible = True and PC_ST_00 .QualityOK	Normal status, visible indication
		White	SELECTED = 1	Selected (To identify the 'invisible' presentation)
		Invisible	-	Normal status, invisible presentation

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameter	Affect	Option (bold is default)	Remarks
OutText	2. Output	**OUT**, any text	
NormalLabelVisible	2. Output	**False**, True	Default: No indication in normal condition
BackgroundColor	Background	Transparent, Any	

FG_AreaDetErr01

Presentation:

Presentation on a fire area detail display, indicating fire or gas detectors DETECTION ERROR. Used in order to achieve alarm

handling of detector fault. Used for Genusd objects connected to User Elements VDU-A and VDU-D.

Activation (click) of the GraphicElement will activate the FG_Faceplate, to enable acknowledge of detector error alarms.

Behavior:

No	Description	Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	-	Normal
2.1	Fire detector Text	FireText		

No	Description	Presentation	Condition	Remarks
2.2	Fire detector Color	Grey	AU_ST_00 = 1	Unacknowledged Fire detector error
		Grey	PC_ST_00 = 1	Fire detector error (ALQ1=1)
		Grey	NormalVisible = true & PC_ST_00 .QualityOK	Normal status (visible)
		Invisible	PC_ST_00 .QualityOK	Normal status (not visible)
		Beige	-	Unresolved
3.1	Fire error Text	ErrorText	AU_ST_00 = 1	Unacknowledged Gas detector error
		ErrorText	PC_ST_00 = 1	Fire detector error (ALQ1=1)
		OkText	PC_ST_00 .QualityOK	Normal status
		XX	-	Unresolved
3.2	Fire error Color	Red flash	AU_ST_00 = 1	Unacknowledged Fire detector error
		Red	PC_ST_00 = 1	Acknowledged Fire detector error
		Green	NormalVisible = true & PC_ST_00 .QualityOK	Normal status (visible)
		Invisible	-	Normal status (no string)
4.1	Gas detector Text	GasText		

No	Description	Presentation	Condition	Remarks
4.2	Gas detector Color	Grey	AU_ST_01 = 1	Unacknowledged Gas detector error
		Grey	PC_ST_01 = 1	Gas detector error (ALQ2=1)
		Grey	NormalVisible = true & PC_ST_00 .QualityOK	Normal status (visible)
		Invisible	PC_ST_00 .QualityOK	Normal status
		Beige	-	Unresolved
5.1	Gas error Text	ErrorText	AU_ST_01 = 1	Unacknowledged Gas detector error
		ErrorText	PC_ST_01 = 1	Gas detector error (ALQ2=1)
		OkText	PC_ST_00 .QualityOK	Normal status
		XX	-	Unresolved
5.2	Gas error Color	Red flash	AU_ST_01 = 1	Unacknowledged Gas detector error
		Red	PC_ST_01= 1	Acknowledged Gas detector error
		Green	NormalVisible = true & PC_ST_00 .QualityOK	Normal status (visible)
		Invisible	PC_ST_00 .QualityOK	Normal status (not visible)
		Beige	-	Unresolved

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameter	Affect	Option (bold is default)	Remarks
FireText	2. Fire detector	**FIRE DET.**, any text	
GasText	4. Gas detector	**FIRE DET.**, any text	
ErrorText	3. Fire error, 5. Gas error	**ERROR**, any text	
OkText	3. Fire error, 5. Gas error	**OK**, any text	Visible in normal condition if NormalVisible is true
NormalVisible	2. Fire detector, 3. Fire error, 4. Gas detector, 5. Gas error	**False**, True	
BackgroundColor	Background	Transparent, Any	

FG_AreaCO201

Presentation:

Presentation a fire area detail display, indicating status for CO2 protection system. Used for Genusd objects connected to User Elements VDU-A.

Activation (click) of the GraphicElement will activate the FG_Faceplate, to enable acknowledge of detector error alarms.

Behavior:

No	Description	Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	-	Normal
2.1	Mode Text	OverrideText	PC_ST_22 = 1	CO2 output overridden (STBY=1)
		ManualText	PC_ST_20 = 1	CO2 system in manual mode (MAN=1)
		AutoText	-	-
2.2	Mode Color	Cyan	PC_ST_22 = 1	CO2 output overridden (STBY=1)
		Cyan	PC_ST_20 = 1	CO2 system in manual mode (MAN=1)
		Green	PC_ST_00 .QualityOK	Normal status
		Beige	-	Unresolved
3	Order square	■ Blue	PC_ST_21 = 1	CO2 release order (BLK=1)
		□ Green	PC_ST_00 .QualityOK	Normal status
		■ Beige	-	Unresolved
4.1	Feedback square	■	PC_ST_08 = 1	Filled: CO2 released (INTLU1=1)
		□	-	Unfilled: CO2 not released

No	Description	Presentation	Condition	Remarks
4.2	Feedback Color	Red flash	AU_ST_02 = 1	Unacknowledged feedback error (ALF1=1)
		Red	PC_ST_02 = 1	Acknowledged feedback error
		Blue	PC_ST_21 = 1	CO2 release order (BLK=1)
		Green	PC_ST_00 .QualityOK	-
		Beige	-	Unresolved

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameter	Affect	Option (bold is default)	Remarks
OverrideText	2. Mode	**OVR**, any text	
ManualText	2. Mode	**MAN**, any text	
AutoText	2. Mode	**AUTO**, any text	
BackgroundColor	Background	Transparent, Any	

FG_AreaWater01

Presentation:

A fire area detail display indicates status for Water protection system.
Used for Genusd objects connected to User Elements VDU-A. Activation (click) of

the GraphicElement will activate the FG_Faceplate, to enable acknowledge of detector error alarms.

Behavior:

No	Description	Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	-	Normal
2.1	Mode Text	IsolateValveText		
2.2	Mode Color	Cyan	PC_ST_13 = 1	Water release valve closed (INTLU6=1)
		Invisible	PC_ST_00 .QualityOK	Normal status
		Beige	-	Unresolved
3	Order square	■ Blue	PC_ST_19 = 1	Water release order (AUTO=1)
		□ Green	PC_ST_00 .QualityOK	Normal status
		■ Beige	-	Unresolved
4.1	Feedback square	■	PC_ST_09 = 1	Filled: Water released (INTLU2=1)
		□	-	Unfilled: Water not released

No	Description	Presentation	Condition	Remarks
4.2	Feedback Color	Red flash	AU_ST_03 = 1	Unacknowledged feedback error
		Red	PC_ST_03 = 1	Acknowledged feedback error (ALF2=1)
		Blue	PC_ST_19 = 1	Water release order (AUTO=1)
		Green	PC_ST_00 .QualityOK	-
		Beige	-	Unresolved

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

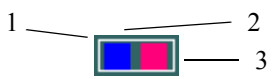
Parameter	Affect	Option (bold is default)	Remarks
IsolateValveText	2. Mode	**ISO**, any text	
BackgroundColor	Background	Transparent, Any	

FG_AreaHVAC01

Presentation:

Presentation a fire area detail display, indicating status for order with feedback supervision (e.g. HVAC). Used for Genusd objects connected to User Elements VDU-A.

Activation (click) of the GraphicElement will activate the FG_Faceplate, to enable acknowledge of detector error alarms.



Behavior:

No	Description	Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	-	Normal
2	Order square	■ Blue	PC_ST_10 = 1	Activation order (INTLU3=1)
		□ Green	PC_ST_00 .QualityOK	Normal status
		■ Beige	-	Unresolved
3.1	Feedback square	■	PC_ST_18 = 1	Filled: HVAC feedback (closed) (M3=1)
		□	-	Unfilled: HVAC not closed
3.2	Feedback Color	Red flash	AU_ST_04 = 1	Unacknowledged feedback error
		Red	PC_ST_04 = 1	Acknowledged feedback error (ALF3=1)
		Blue	PC_ST_10 = 1	Activation order (INTLU3=1)
		Green	PC_ST_00 .QualityOK	-
		Beige	-	Unresolved

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameter	Affect	Option (bold is default)	Remarks
BackgroundColor	Background	Transparent, Any	

SD_Input01

Presentation:

Presentation on an overview display, indicating status for INPUTs in underlaying detail displays. Used for Genusd objects connected to User Element VDU-SD The Graphic Element can be placed on top of a Aspect Link standard element. The element can not get focus, that is, activation (click) will not activate the operator dialog (Faceplate).

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Frame	White	SELECTED =1	Selected
		Dotted Yellow	AL_BLK =1	Alarm blocked
		NormalColor	-	Normal
2.1	Label text	Label		

No	Description	Default Presentation	Condition	Remarks
2.2	Label color	Red flash	PC_ST_25 =1	Input alarm, unacknowledged (IND2 =1)
		Red	PC_ST_24 =1	Input alarm, acknowledged (IND1 =1)
		Cyan	PC_ST_16 =1	Input inhibit (or blocked) (1) (M1 =1)
		Dark Grey	PC_ST_17 =1	Input error (M2 =1) (To Indicate 'type of error')
		White	SELECTED = 1	Selected (To identify the 'invisible' presentation)
		Green	NormalLabelVisible = true and PC_ST_00 .QualityOK	Normal status (visible indication)
		Invisible	-	Normal status (invisible)
3.1	Status text	ErrorText	PC_ST_17 =1	Input error (M2 =1)
		InhibitText	PC_ST_16 =1	Input inhibit (or blocked) (1 (M1 =1)
		AlarmText	PC_ST_24 =1	Input alarm, acknowledged (IND1 =1)
			-	Normal status (no text)
3.2	Status color	Cyan	PC_ST_16 =1 and PC_ST_17 =1 and PC_ST_24 =1	Inhibit and Error and Alarm (red Label and Cyan ErrorText)
		Steady	PC_ST_17 =1	Input error (M2 =1)

No	Description	Default Presentation	Condition	Remarks
		Cyan	PC_ST_16 =1	Input inhibit (or blocked) (1 (M1 =1)
		Red flashing	PC_ST_25 =1	Input alarm, unacknowledged (IND2 =1)
		Red steady	PC_ST_24 =1	Input alarm, acknowledged
		Invisible	-	Normal status

(1) Inputs should generally not be blocked. However, blocked flags are often included in the inhibit presentation logic to make any blocking visible.

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameter	Affect	Option (bold is default)	Remarks
Label	1. Label	**INPUT**, any text	Right aligned (Element can be resized to fit text)
NormalLabelVisible	1. Label	**false**, true	Default: Invisible Label in normal condition.
AlarmText	3. Status	**ALARM**, any text	Left aligned
InhibitText	3. Status	**INHIBIT**, any text	Left aligned
ErrorText	3. Status	**ERROR**, any text	Left aligned
NormalColor	1.Frame,2. Label, 3. Status	**Grey**, any color	
BackgroundColor	Background	Transparent, Any	

SD_Output01

Presentation:

Presentation on an overview display, indicating status for OUTPUTs in underlaying detail displays. Used for Genusd objects connected to User Element VDU-SD. The Graphic Element can be placed on top of a Aspect Link standard element. The element can not get focus, that is, activation (click) will not activate the operator dialog (Faceplate).

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Selected
		Dotted Yellow	AL_BLK = 1	Alarm blocked
		NormalColor	-	Normal
2.1	Label text	Label		

No	Description	Default Presentation	Condition	Remarks
2.2	Label color	Blue	PC_ST_09 = 1	Output activated / tripped (INTLU2 =1)
		Cyan	PC_ST_13 = 1	Valve overridden / Output in manual (INTLU6 =1)
		Dark Grey	PC_ST_12 = 1	Valve fault / Output error (INTLU5 =1) (To Indicate 'type of error')
		Green	NormalLabelVisible = true and PC_ST_00 .QualityOK	Normal status (visible indication)
		White	SELECTED = 1	Selected (To identify the 'invisible' presentation)
		Invisible	-	Normal status
3.1	Status text	ErrorText	PC_ST_12 = 1	Valve fault / Output error (INTLU5 =1)
		OverrideText	PC_ST_13 = 1	Valve overridden / Output in manual (INTLU6 =1)
		ActivatedText	PC_ST_09 = 1	Output activated / tripped (INTLU2 =1)
		Invisible	-	Normal status (no text)

No	Description	Default Presentation	Condition	Remarks
3.2	Status color	Cyan	PC_ST_13 = 1 and PC_ST_12 = 1 and PC_ST_09 = 1	Overridden and Error and Activated. (Blue Label and Cyan ErrorText)
		Red	PC_ST_12 = 1	Valve fault / Output error (INTLU5 =1)
		Cyan	PC_ST_13 = 1	Valve overridden / Output in manual (INTLU6 =1)
		Blue	PC_ST_09 = 1	Output activated / tripped (INTLU2 =1)
		Invisible	-	Normal status

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameter	Affect	Option (bold is default)	Remarks
Label	1. Label	**OUTPUT**, any text	Right aligned (Element can be resized to fit text)
NormalLabelVisible	1. Label	**false**, true	Default: Invisible Label in normal condition.
ActivatedText	2. Status	**TRIP**, any text	Left aligned
OverrideText	2. Status	**OVR**, any text	Left aligned
ErrorText	2. Status	**ERROR**, any text	Left aligned

Parameter	Affect	Option (bold is default)	Remarks
NormalColor	1. Frame, 2 .Label, 3. Status	**Grey**, any color	Backgound color. Default Color : 'Button Face' windows definition, that is, same as default color on Aspect Link element.
BackgroundColor	Background	Transparent, Any	

SD_Level01

Presentation:

Presentation on an overview display, indicating status for shutdown LEVELs in underlaying detail displays. Used for Genusd objects connected to User Element VDU-SD. The Graphic Element can be placed on top of a Aspect Link standard element. The element can not get focus, that is, activation (click) will not activate the operator dialog (Faceplate).

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Frame	White	SELECTED =1	Selected
		Dotted Yellow	AL_BLK =1	Alarm blocked
		Invisible	-	Normal
2.1	Label Text	Label		
2.2	Label Color	Red	PC_ST_08 =1	Cause activate / Level activated (INTLU1 =1)
		Cyan	PC_ST_10 =1	Shutdown cause override (INTLU3 =1)
		White	SELECTED = 1	Selected (To identify the 'invisible' presentation)
		Green	NormalLabelVisible = true and PC_ST_00 .QualityOK	Normal status (visible indication)
		Invisible	-	Normal status
3.1	Status text	ResetPermittedText	PC_ST_18 =1	Reset permitted (M3 =1)
		OverrideText	PC_ST_10 =1	Shutdown cause override (INTLU3 =1)
		ActivatedText	PC_ST_08 =1	Cause activate / Level activated (INTLU1 =1)
		Invisible	-	Normal status (no text)

No	Description	Default Presentation	Condition	Remarks
3.2	Status color	Cyan	PC_ST_10 =1	Shutdown cause override (INTLU3 =1)
		Green	PC_ST_18 =1	Reset permitted (M3 =1)
		Red	PC_ST_08 =1	Cause activate / Level activated (INTLU1 =1)
		Invisible	-	Normal status

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameter	Affect	Option (bold is default)	Remarks
Label	1. Label	**ESD**, any text	Right aligned (Element can be resized to fit text)
NormalLabelVisible	1. Label	**false**, true	Default: Invisible Label in normal condition.
ActivatedText	2. Status	**ACT**, any text	Left aligned
OverrideText	2. Status	**OVR**, any text	Left aligned
ResetPermittedText	2. Status	**RePe**, any text	Left aligned
NormalColor	1. Frame, 2 .Label, 3. Status	**Grey**, any color	
BackgroundColor	Background	Transparent, Any	

SD_Display01

Presentation:

Presentation in detail displays, indicating status for INPUTs, shutdown LEVELs, and OUTPUT's in other detail displays. Activation (click) of the Graphic Element will present the Aspect specified on the 'DisplayName' property.
Used for Genusd objects connected to User Element VDU-SD.

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Input / Level			Left part of button
1.1	Area color	Red flash	PC_ST_25 =1	Input alarm, unacknowledged (IND2 =1)
		Red	PC_ST_24 =1	Input alarm, acknowledged (IND1 =1)
		Red	PC_ST_08 =1	Cause activate or Level activated (INTLU1 =1)
		Cyan	PC_ST_16 =1	Input inhibit (or blocked) (1) (M1 =1)
		Cyan	PC_ST_10 =1	Cause override (INTLU3 =1)
		NormalColor	PC_ST_00 .QualityOK	Normal status
		Beige	-	Not resolved

No	Description	Default Presentation	Condition	Remarks
1.2	Label	ErrorText	PC_ST_17 =1	Input error (M2 =1)
		ResetPermitted Text	PC_ST_18 =1	Reset permitted (M3 =1)
		InhibitText	PC_ST_16 =1 and PC_ST_24 =1	Input inhibit and alarm (red background)
		InhibitText	PC_ST_16 =1 and PC_ST_08 =1	Input inhibit and Level Activated (red background)
		OverrideText	PC_ST_10 =1 and PC_ST_24 =1	Cause override and Input alarm (red background)
		OverrideText	PC_ST_10 =1 and PC_ST_08 =1	Cause override & Level Activated (red background)
			PC_ST_00 .QualityOK	Normal status (no text)
		"X"	-	Not resolved
2	Output			Right part of button
2.1	Area color	Blue	PC_ST_09 =1	Output activated / tripped (INTLU2 =1)
		Cyan	PC_ST_13 =1	Valve overridden / Output in manual (INTLU6 =1)
		NormalColor	PC_ST_00 .QualityOK	Normal status
		Beige	-	Not resolved

No	Description	Default Presentation	Condition	Remarks
2.2	Label	ErrorText	PC_ST_12 =1	Valve fault / Output error (INTLU5 =1)
		OverrideText	PC_ST_13 =1 And PC_ST_09 =1	Output Overridden And Activated (blue background)
			PC_ST_00 .QualityOK	Normal status (no text)
		"X"	-	Not resolved

(1) Inputs should generally not be blocked. However, blocked flags are often included in the inhibit presentation logic to make any blocking visible.

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameter	Affect	Option (bold is default)	Remarks
DisplayName	1. Input, 2. Output	**:**, <Aspect reference>	Syntax = <Object>:<Aspect>. refer to Aspect Link standard element, aspect property.
PresentationMode	1. Input, 2. Output	**Overlap**, Base, Replace	
InhibitText	1. Input	**I**, any character	
ResetPermittedText	1. Input (Level)	**R**, any character	
ErrorText	1 .Input, 2. Output	**E**, any character	
OverrideText	1. Input (Level), 2. Output	**O**, any character	

Parameter	Affect	Option (bold is default)	Remarks
NormalColor	1 .Input, 2. Output	**Grey**, any color	
BackgroundColor	Background	Transparent, Any	

SD_Display02

Presentation:

Presentation in detail displays, indicating status for INPUTs, shutdown LEVELs, and OUTPUT's in other detail displays. Activation (click) of the Graphic Element will present the Aspect specified on the 'DisplayName' property.
Used for Genusd objects connected to User Element VDU-SD.

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Input / Level			Left part of button

No	Description	Default Presentation	Condition	Remarks
1.1	Area color	Red flash	PC_ST_25 =1	Input alarm, unacknowledged (IND2 =1)
		Red	PC_ST_24 =1	Input alarm, acknowledged (IND1 =1)
		Red	PC_ST_08 =1	Cause activate or Level activated (INTLU1 =1)
		Cyan	PC_ST_16 =1	Input inhibit (or blocked) (1) (M1 =1)
		Cyan	PC_ST_10 =1	Cause override (INTLU3 =1)
		NormalColor	PC_ST_00 .QualityOK	Normal status
		Beige	-	Not resolved
1.2	Label Color	Cyan	PC_ST_16 =1 and PC_ST_24 =1	Input inhibit and alarm (red background)
		Cyan	PC_ST_16 =1 and PC_ST_08 =1	Input inhibit and Level Activated
		Cyan	PC_ST_10 =1 and PC_ST_24 =1	Cause override and Input alarm
		Cyan	PC_ST_10 =1 and PC_ST_08 =1	Cause override and Level Activated
		Black	PC_ST_17 =1 and PC_ST_24 =1	Input Error and Input alarm

No	Description	Default Presentation	Condition	Remarks
		Black	PC_ST_17 =1 and PC_ST_08 =1	Input Error and Level Activated
		Red	PC_ST_17 =1	Input Error (M2) (cyan or normal background)
		Green	PC_ST_18 =1	Reset permitted (M3 =1)
		Black	-	Normal status
1.3	Label	ErrorText	PC_ST_17 =1	Input error (M2 =1)
		ResetPermittedText	PC_ST_18 =1	Reset permitted (M3 =1)
		InhibitText	PC_ST_16 =1	Input inhibit (or blocked) (M1 =1)
		OverrideText	PC_ST_10 =1	Cause override (INTLU3 =1)
			PC_ST_00 .QualityOK	Normal status (no text)
		"X"	-	Not resolved
2	Output			Right part of button
2.1	Area color	Blue	PC_ST_09 =1	Output activated / tripped (INTLU2 =1)
		Cyan	PC_ST_13 =1	Valve overridden / Output in manual (INTLU6 =1)
		NormalColor	PC_ST_00 .QualityOK	Normal status
		Beige	-	Not resolved

No	Description	Default Presentation	Condition	Remarks
2.2	Label color	Cyan	PC_ST_13 =1 And PC_ST_09 =1	Output Overridden And Activated (blue background)
		Red	PC_ST_12 =1	Valve fault / Output error (INTLU5 =1)
		Black	-	Normal status
2.3	Label	ErrorText	PC_ST_12 =1	Valve fault / Output error (INTLU5 =1)
		OverrideText	PC_ST_13 =1	Output Overridden
			PC_ST_00 .QualityOK	Normal status (no text)
		"X"	-	Not resolved

(1) Inputs should generally not be blocked. However, blocked flags are often included in the inhibit presentation logic to make any blocking visible.

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameter	Affect	Option (bold is default)	Remarks
DisplayName	1. Input, 2. Output	**:**, <Aspect reference>	Syntax = <Object>:<Aspect>
InhibitText	1. Input	**I**, any character	
ResetPermittedText	1. Input (Level)	**R**, any character	
ErrorText	1 .Input, 2. Output	**E**, any character	
OverrideText	1. Input (Level), 2. Output	**O**, any character	

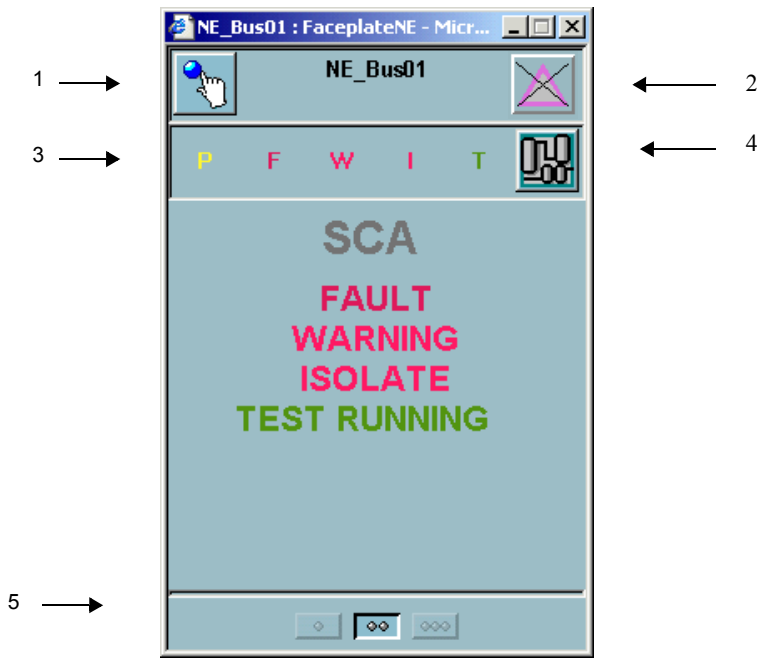
Parameter	Affect	Option (bold is default)	Remarks
NormalColor	1 .Input, 2. Output	**Grey**, any color	
BackgroundColor	Background	Transparent, Any	

Normally Energized Output Bus Object (GENUSD5)

FaceplateNE

Presentation:

Operator dialog for Normally Energized output bus object used for Safeguard 9000.



Behavior:

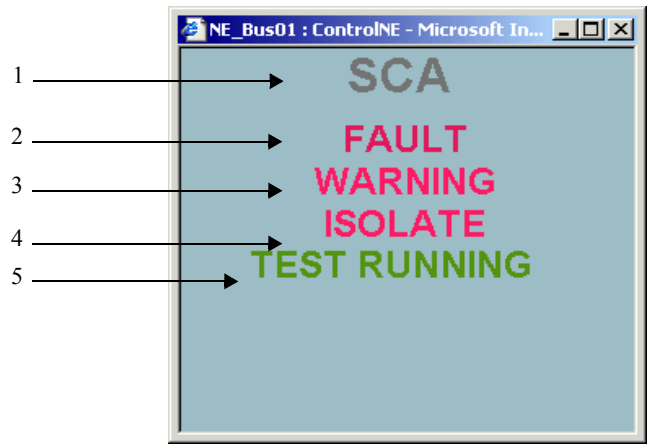
No	Description	Default Presentation	Condition	Remarks
1	Lock Button			
2	Name and Description			

No	Description	Default Presentation	Condition	Remarks
3	Status Field			
3.1	Print Blk	P Yellow	PRINT_BLK = 1	position 0,1,0
3.2	Fault	F Red	PC_ST_02 = 1	position 0,2,0
3.3	Warning	W Red	PC_ST_00 = 1	position 0,3,0
3.4	Isolate	I Red	PC_ST_08 = 1	position 0,4,0
3.5	Test running	T Yellow	PC_ST_16 = 1	position 0,5,0
4	Aspect links	Object Display	position 5, 5, 11	position 0,6,0
5	Buttons	(None)		

The conditions are in priority order.. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

ControlNE

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Safety Controller A/B	SCA (Dark grey)	PC_ST_24 =1 (IND1 =1)	Receiving SideA status
		SCB (Dark grey)	PC_ST_25 =1 (IND2 =1)	Receiving SideB status
		"SC?" (Dark grey)	PC_ST_24 .QualityOK	(Side not defined)
		"SC?" (Beige)	-	Unresolved

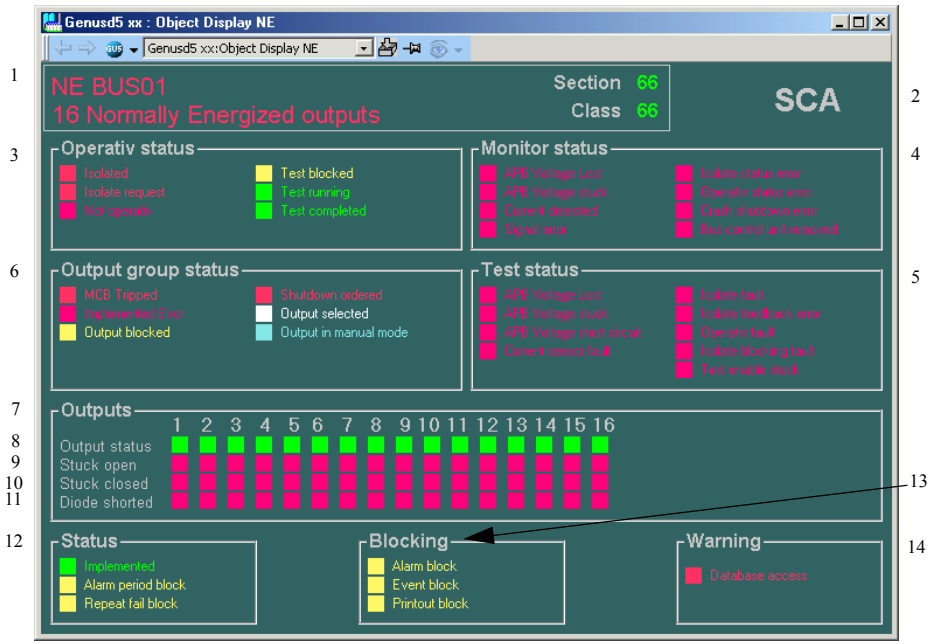
No	Description	Default Presentation	Condition	Remarks
2	Fault	FAULT (Red flash)	AU_ST_02 = 1	Unacknowledged Fault
		FAULT (Red)	PC_ST_02 = 1 (ALF1 =1)	Fault
		FAULT (Grey)	PC_ST_02 .QualityOK	Normal status
		FAULT (Beige)	-	Unresolved
3	Warning	WARNING (Red flash)	AU_ST_00 = 1	Unacknowledged Warning
		WARNING (Red)	PC_ST_00 = 1 (ALQ1 =1)	Warning
		WARNING (Grey)	PC_ST_00 .QualityOK	Normal status
		WARNING (Beige)	-	Unresolved
4	Isolate	ISOLATE (Red)	PC_ST_08 = 1 (INTLU1 =1)	Controller side Isolated
		ISOLATE (Grey)	PC_ST_08 .QualityOK	Normal status
		ISOLATE (Beige)	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
5	Test	TEST RUNNING (Green)	PC_ST_16 = 1 (M1 =1)	Output Test running
		TEST RUNNING (Grey)	PC_ST_16 .QualityOK	Normal status
		TEST RUNNING (Beige)	-	Unresolved

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

ObjectDisplayNE

Presentation: Detail Presentation of Normally Energized output bus object Used for Safeguard 9000.



Behavior:

No	Description	Default Presentation	Condition	Remark
1.1	Select Frame	White	SELECTED =1	Selected
		Dotted Yellow	AL_BLK =1	Alarm blocked
		Grey	-	
1.2	Name and Description	Name:Name and Control Connection: DESCR		Object Name and Object Description

No	Description	Default Presentation	Condition	Remark
		Red flash	AU_ST_00 =1 or AU_ST_01 =1 or AU_ST_02 =1 or AU_ST_03 =1 or AU_ST_04 =1 or AU_ST_05 =1 or AU_ST_06 =1 or AU_ST_07 =1	Unacknowledge d Alarm
		Red	PC_ST_00 =1 or PC_ST_01 =1 or PC_ST_02 =1 or PC_ST_03 =1 or PC_ST_04 =1 or PC_ST_05 =1 or PC_ST_06 =1 or PC_ST_07 =1	Alarm
		Yellow	EVENT_BLK =1	Event blocked
		Green	-	Normal status
1.3	Section	Section (Grey)	SUBSYSTEM .QualityOK	Static text
		Beige	-	Unresolved
		Green	PROC_SEC (SUBSYSTEM)	Process section
1.4	Class	Class (Grey)	CLASS .QualityOK	Static text
		Beige	-	Unresolved
		Green	CLASS	Object class

No	Description	Default Presentation	Condition	Remark
2	Safety Controller A/B	"SCA" (Grey)	PC_ST_24 = 1 (IND1 =1)	Dual side A
		"SCB" (Grey)	PC_ST_25 = 1 (IND2 =1)	Dual side B
		"SC?" (Grey)	PC_ST_24 .QualityOK	(Side not defined)
		"SC?" (Beige)	-	Unresolved
3	Operativ Status	**OPERATIV STATUS** (Grey)		Static text
3.1	Isolated	■ Isolated (Green) □ Isolated (Grey)	MV_INTEL, bit 0 = 1	Isolated Normal status
3.2	Isolated Request	■ Isolated Request (Green) □ Isolated Request (Grey)	MV_INTEL, bit 16 = 1	Isolated Request Normal status
3.3	Not Operativ	■ Not Operativ (Red) □ Not Operativ (Grey)	MV_INTEL, bit 8 = 1	Not Operativ Normal status
3.4	Test Blocked	■ Test Blocked (Yellow) □ Test Blocked (Grey)	MV_INTEL, bit 14 = 1	Isolated Request Normal status
3.5	Test Running	■ Test Running (Green) □ Test Running (Grey)	PC_ST_16 = 1 (M1 =1)	Test Running Normal status
3.6	Test Completed	■ Test Completed (Green) □ Test Completed (Grey)	PC_ST_17 = 1 (M2 =1)	Test Completed Normal status
4	Monitor Status	**MONITOR STATUS** (Grey)		Static text
4.1	APB Voltage lost	■ APB Voltage lost (Red) □ APB Voltage lost (Grey)	MV_INTEL, bit 3 = 1	APB Voltage lost Normal status

No	Description	Default Presentation	Condition	Remark
4.2	APB Voltage Stuckt	■ APB Voltage Stuckt (Red) □ APB Voltage Stuckt (Grey)	MV_INTEL, bit 4 = 1	APB Voltage Stuckt Normal status
4.3	Current Detected	■ Current Detected (Red) □ Current Detected (Grey)	MV_INTEL, bit 5 = 1	Current Detected Normal status
4.4	Signal Error	■ Signal Error (Red) □ Signal Error (Grey)	MV_INTEL, bit 11 = 1	Signal Error Normal status
4.5	Isolate Status Error	■ Isolate Status Error (Red) □ Isolate Status Error (Grey)	MV_INTEL, bit 6 = 1	Isolate Status Error Normal status
4.6	Operativ Status Error	■ Operativ Status Error (Red) □ Operativ Status Error (Grey)	MV_INTEL, bit 7 = 1	Operativ Status Error Normal status
4.7	Crash Shutdown Error	■ Crash Shutdown Error (Red) □ Crash Shutdown Error (Grey)	MV_INTEL, bit 10 = 1	Crash Shutdown Error Normal status
4.8	Bus Control Unit Removed	■ Bus Control Unit Removed (Red) □ Bus Control Unit Removed (Grey)	MV_INTEL, bit 15 = 1	Bus Control Unit Removed Normal status
5	Test Status	**TEST STATUS** (Grey)		Static text
5.1	APB Voltage lost	■ APB Voltage lost (Red) □ APB Voltage lost (Grey)	MV_INTEL, bit 18 = 1	APB Voltage lost Normal status

No	Description	Default Presentation	Condition	Remark
5.2	APB Voltage Stuckt	■ APB Voltage Stuckt (Red) □ APB Voltage Stuckt (Grey)	MV_INTEL, bit 19 = 1	APB Voltage Stuckt Normal status
5.3	APB Voltage Short Circuit	■ APB Voltage Short Circuit (Red) □ APB Voltage Short Circuit (Grey)	MV_INTEL, bit 24 = 1	APB Voltage Short Circuit Normal status
5.4	Current Sensor Fault	■ Current Sensor Fault (Red) □ Current Sensor Fault (Grey)	MV_INTEL, bit 17 = 1	Current Sensor Fault Normal status
5.5	Isolate Fault	■ Isolate Fault (Red) □ Isolate Fault (Grey)	MV_INTEL, bit 21 = 1	Isolate Fault Normal status
5.6	Isolate Feedback Error	■ Isolate Feedback Error (Red) □ Isolate Feedback Error (Grey)	MV_INTEL, bit 22 = 1	Isolate Feedback Error Normal status
5.7	Operativ Fault	■ Operativ Fault (Red) □ Operativ Fault (Grey)	MV_INTEL, bit 20 = 1	Operativ Fault Normal status
5.8	Isolate Blocking Fault	■ Isolate Blocking Fault (Red) □ Isolate Blocking Fault (Grey)	MV_INTEL, bit 25 = 1	Isolate Blocking Fault Normal status
5.9	Test Enable Stuck	■ Test Enable Stuck (Red) □ Test Enable Stuck (Grey)	MV_INTEL, bit 26 = 1	Test Enable Stuck Normal status
6	Output Group Status	**OUTPUT GROUP STATUS** (Grey)		Static text
6.1	MCB Tripped	■ MCB Tripped (Red) □ MCB Tripped (Grey)	MV_INTEL, bit 1 = 1	MCB Tripped Normal status

No	Description	Default Presentation	Condition	Remark
6.2	Implemented Error	■ Implemented Error (Red) □ Implemented Error (Grey)	MV_INTEL, bit 2 = 1	Implemented Error Normal status
6.3	Output Blocked	■ Output Blocked (Yellow) □ Output Blocked (Grey)	MV_INTEL, bit 9 = 1	Output Blocked Normal status
6.4	Shutdown Ordered	■ Shutdown Ordered (Green) □ Shutdown Ordered (Grey)	MV_INTEL, bit 13 = 1	Shutdown Ordered Normal status
6.5	Output Selected	■ Output Selected (White) □ Output Selected (Grey)	MV_INTEL, bit 28 = 1	Output Selected Normal status
6.6	Output in Manual Mode	■ Output in Manual Mode (Cyan) □ Output in Manual Mode (Grey)	MV_INTEL, bit 29 = 1	Output in Manual Mode Normal status
7	Output Number	OUTPUT NUMBER 1 2 3 4 5 6 7 8 9 10 11	12 13 14 15 16	Static text
8	Output Status	**OUTPUT STATUS** (Grey)		Static text
8.1	Output status 1	■ (Green) □ (Green)	SP_INTEL_MMC, bit 0 = 1	Normal Tripped
8.2	Output status 2	■ (Green) □ (Green)	SP_INTEL_MMC, bit 1 = 1	Normal Tripped
8.3	Output status 3	■ (Green) □ (Green)	SP_INTEL_MMC, bit 2 = 1	Normal Tripped
8.4	Output status 4	■ (Green) □ (Green)	SP_INTEL_MMC, bit 3 = 1	Normal Tripped
8.5	Output status 5	■ (Green) □ (Green)	SP_INTEL_MMC, bit 4 = 1	Normal Tripped

No	Description	Default Presentation	Condition	Remark
8.6	Output status 6	■ (Green) □ (Green)	SP_INTEL_MMC, bit 5 = 1	Normal Tripped
8.7	Output status 7	■ (Green) □ (Green)	SP_INTEL_MMC, bit 6 = 1	Normal Tripped
8.8	Output status 8	■ (Green) □ (Green)	SP_INTEL_MMC, bit 7 = 1	Normal Tripped
8.9	Output status 9	■ (Green) □ (Green)	SP_INTEL_MMC, bit 8 = 1	Normal Tripped
8.10	Output status 10	■ (Green) □ (Green)	SP_INTEL_MMC, bit 9 = 1	Normal Tripped
8.11	Output status 11	■ (Green) □ (Green)	SP_INTEL_MMC, bit 10 = 1	Normal Tripped
8.12	Output status 12	■ (Green) □ (Green)	SP_INTEL_MMC, bit 11 = 1	Normal Tripped
8.13	Output status 13	■ (Green) □ (Green)	SP_INTEL_MMC, bit 12 = 1	Normal Tripped
8.14	Output status 14	■ (Green) □ (Green)	SP_INTEL_MMC, bit 13 = 1	Normal Tripped
8.15	Output status 15	■ (Green) □ (Green)	SP_INTEL_MMC, bit 14 = 1	Normal Tripped
8.16	Output status 16	■ (Green) □ (Green)	SP_INTEL_MMC, bit 15 = 1	Normal Tripped
9	Stuck Open	**STUCK OPEN** (Grey)		Static text
9.1	Stuck Open 1	■ (Red) (Invisible)	MIN_INTEL, bit 2 = 1 -	Stuck Open 1 Normal
9.2	Stuck Open 2	■ (Red) (Invisible)	MIN_INTEL, bit 6 = 1 -	Stuck Open 2 Normal status

No	Description	Default Presentation	Condition	Remark
9.3	Stuck Open 3	■ (Red) (Invisible)	MIN_INTEL, bit 10 = 1 -	Stuck Open 3 Normal status
9.4	Stuck Open 4	■ (Red) (Invisible)	MIN_INTEL, bit 14 = 1 -	Stuck Open 4 Normal status
9.5	Stuck Open 5	■ (Red) (Invisible)	MIN_INTEL, bit 18 = 1 -	Stuck Open 5 Normal status
9.6	Stuck Open 6	■ (Red) (Invisible)	MIN_INTEL, bit 22 = 1 -	Stuck Open 6 Normal status
9.7	Stuck Open 7	■ (Red) (Invisible)	MIN_INTEL, bit 26 = 1 -	Stuck Open 7 Normal status
9.8	Stuck Open 8	■ (Red) (Invisible)	MIN_INTEL, bit 30 = 1 -	Stuck Open 8 Normal status
9.9	Stuck Open 9	■ (Red) (Invisible)	MAX_INTEL, bit 2 = 1 -	Stuck Open 9 Normal status
9.10	Stuck Open 10	■ (Red) (Invisible)	MAX_INTEL, bit 6 = 1 -	Stuck Open 10 Normal status
9.11	Stuck Open 11	■ (Red) (Invisible)	MAX_INTEL, bit 10 = 1 -	Stuck Open 11 Normal status
9.12	Stuck Open 12	■ (Red) (Invisible)	MAX_INTEL, bit 14 = 1 -	Stuck Open 12 Normal status

No	Description	Default Presentation	Condition	Remark
9.13	Stuck Open 13	■ (Red) (Invisible)	MAX_INTEL, bit 18 = 1 -	Stuck Open 13 Normal status
9.14	Stuck Open 14	■ (Red) (Invisible)	MAX_INTEL, bit 22 = 1 -	Stuck Open 14 Normal status
9.15	Stuck Open 15	■ (Red) (Invisible)	MAX_INTEL, bit 26 = 1 -	Stuck Open 15 Normal status
9.16	Stuck Open 16	■ (Red) (Invisible)	MAX_INTEL, bit 30 = 1 -	Stuck Open 16 Normal status
10	Stuck Closed	**STUCK CLOSED** (Grey)		Static text
10.1	Stuck Closed 1	■ (Red) (Invisible)	MIN_INTEL, bit 1 = 1 -	Stuck Closed 1 Normal status
10.2	Stuck Closed 2	■ (Red) (Invisible)	MIN_INTEL, bit 5 = 1 -	Stuck Closed 2 Normal status
10.3	Stuck Closed 3	■ (Red) (Invisible)	MIN_INTEL, bit 9 = 1 -	Stuck Closed 3 Normal status
10.4	Stuck Closed 4	■ (Red) (Invisible)	MIN_INTEL, bit 13 = 1 -	Stuck Closed 4 Normal status
10.5	Stuck Closed 5	■ (Red) (Invisible)	MIN_INTEL, bit 17 = 1 -	Stuck Closed 5 Normal status
10.6	Stuck Closed 6	■ (Red) (Invisible)	MIN_INTEL, bit 21 = 1 -	Stuck Closed 6 Normal status

No	Description	Default Presentation	Condition	Remark
10.7	Stuck Closed 7	■ (Red) (Invisible)	MIN_INTEL, bit 25 = 1 -	Stuck Closed 7 Normal status
10.8	Stuck Closed 8	■ (Red) (Invisible)	MIN_INTEL, bit 29 = 1 -	Stuck Closed 8 Normal status
10.9	Stuck Closed 9	■ (Red) (Invisible)	MAX_INTEL, bit 1 = 1 -	Stuck Closed 9 Normal status
10.10	Stuck Closed 10	■ (Red) (Invisible)	MAX_INTEL, bit 5 = 1 -	Stuck Closed 10 Normal status
10.11	Stuck Closed 11	■ (Red) (Invisible)	MAX_INTEL, bit 9 = 1 -	Stuck Closed 11 Normal status
10.12	Stuck Closed 12	■ (Red) (Invisible)	MAX_INTEL, bit 13 = 1 -	Stuck Closed 12 Normal status
10.13	Stuck Closed 13	■ (Red) (Invisible)	MAX_INTEL, bit 17 = 1 -	Stuck Closed 13 Normal status
10.14	Stuck Closed 14	■ (Red) (Invisible)	MAX_INTEL, bit 21 = 1 -	Stuck Closed 14 Normal status
10.15	Stuck Closed 15	■ (Red) (Invisible)	MAX_INTEL, bit 25 = 1 -	Stuck Closed 15 Normal status
10.16	Stuck Closed 16	■ (Red) (Invisible)	MAX_INTEL, bit 29 = 1 -	Stuck Closed 16 Normal status
11	Diode Shorted	**DIODE SHORTED** (Grey)		Static text

No	Description	Default Presentation	Condition	Remark
11.1	Diode Shorted 1	■ (Red) (Invisible)	MIN_INTEL, bit 0 = 1 -	Diode Shorted 1 Normal status
11.2	Diode Shorted 2	■ (Red) (Invisible)	MIN_INTEL, bit 4 = 1 -	Diode Shorted 2 Normal status
11.3	Diode Shorted 3	■ (Red) (Invisible)	MIN_INTEL, bit 8 = 1 -	Diode Shorted 3 Normal status
11.4	Diode Shorted 4	■ (Red) (Invisible)	MIN_INTEL, bit 12 = 1 -	Diode Shorted 4 Normal status
11.5	Diode Shorted 5	■ (Red) (Invisible)	MIN_INTEL, bit 16 = 1 -	Diode Shorted 5 Normal status
11.6	Diode Shorted 6	■ (Red) (Invisible)	MIN_INTEL, bit 20 = 1 -	Diode Shorted 6 Normal status
11.7	Diode Shorted 7	■ (Red) (Invisible)	MIN_INTEL, bit 24 = 1 -	Diode Shorted 7 Normal status
11.8	Diode Shorted 8	■ (Red) (Invisible)	MIN_INTEL, bit 28 = 1 -	Diode Shorted 8 Normal status
11.9	Diode Shorted 9	■ (Red) (Invisible)	MAX_INTEL, bit 0 = 1 -	Diode Shorted 9 Normal status
11.10	Diode Shorted 10	■ (Red) (Invisible)	MAX_INTEL, bit 4 = 1 -	Diode Shorted 10 Normal status

No	Description	Default Presentation	Condition	Remark
11.11	Diode Shorted 11	■ (Red) (Invisible)	MAX_INTEL, bit 8 = 1 -	Diode Shorted 11 Normal status
11.12	Diode Shorted 12	■ (Red) (Invisible)	MAX_INTEL, bit 12 = 1 -	Diode Shorted 12 Normal status
11.13	Diode Shorted 13	■ (Red) (Invisible)	MAX_INTEL, bit 16 = 1 -	Diode Shorted 13 Normal status
11.14	Diode Shorted 14	■ (Red) (Invisible)	MAX_INTEL, bit 20 = 1 -	Diode Shorted 14 Normal status
11.15	Diode Shorted 15	■ (Red) (Invisible)	MAX_INTEL, bit 24 = 1 -	Diode Shorted 15 Normal status
11.16	Diode Shorted 16	■ (Red) (Invisible)	MAX_INTEL, bit 28 = 1 -	Diode Shorted 16 Normal status
12	Status	**STATUS** (Grey)		Static text
12.1	Implemented	■ Implemented (Green) □ Implemented (Grey)	IMPLEMENTED = 1	Implemented Normal status
12.2	Alarm Period Block	■ Alarm Period Block (Yellow) □ Alarm Period Block (Grey)	AL_PERIOD_BLK = 1	Alarm Period Block Normal status
12.3	Repeat Fail Block	■ Repeat Fail Block (Yellow) □ Repeat Fail Block (Grey)	REPEAT_FAIL_BLK = 1	Repeat Fail Block Normal status
13	Blocking	BLOCKING (Grey)		Static text

No	Description	Default Presentation	Condition	Remark
13.1	Alarm Block	■ Alarm Block (Yellow) □ Alarm Block (Grey)	ALARM_BLK = 1 ALARM_BLK	Alarm Block Normal status
13.2	Event Block	■ Event Block (Yellow) □ Event Block (Grey)	EVENT_BLK = 1 EVENT_BLK	Event Block Normal status
13.3	Printout Block	■ Printout Block (Yellow) □ Printout Block (Grey)	PRINT_BLK = 1 PRINT _BLK	Printout Block Normal status
14	Warning	WARNING (Grey)		Static text
14.1	Database Access	■ Database Access (Red) □ Database Access (Grey)	PC_ST_00 = 1 PC_ST_00	Database Access Normal status

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

NameStatusNE01

Presentation:

Presentation of Normally Energized output bus object, with indication of output status. Used for Safeguard 9000.

Behavior:

No	Description	Default Presentation	Condition	Remark
1	Frame	White	SELECTED =1	Selected
		Dotted Yellow	AL_BLK =1	Alarm blocked
		Invisible	-	Normal
2.1	Name Text	Name:Name		Object Name
2.2	Name	Red flash	AU_ST_00 =1 or AU_ST_01 =1 or AU_ST_02 =1 or AU_ST_03 =1 or AU_ST_04 =1 or AU_ST_05 =1 or AU_ST_06 =1 or AU_ST_07 =1	Unacknowledge d Alarm
		Red	PC_ST_00 =1 or PC_ST_01 =1 or PC_ST_02 =1 or PC_ST_03 =1 or PC_ST_04 =1 or PC_ST_05 =1 or PC_ST_06 =1 or PC_ST_07 =1	Alarm
		Yellow	EVENT_BLK =1	Event blocked
		Green	PC_ST_24 .QualityOK	Normal status
		Beige	-	Unresolved (name: name)

No	Description	Default Presentation	Condition	Remark
3	Safety Controller A/B	SCA (Dark grey)	PC_ST_24 =1 (IND1 =1) :	Receiving SideA status
		SCB (Dark grey)	PC_ST_25 =1 (IND2 =1)	Receiving SideB status
		SC? (Dark grey)	PC_ST_24 .QualityOK	Side not defined)
		SC? (Beige)	-	Unresolved
4	Status indication			
4.1	Fault	F (Red flash)	AU_ST_02 = 1	Unacknowledged Fault
		F (Red)	PC_ST_02 = 1 (ALF1 =1)	Fault
		Invisible (GeneralBackColor)	PC_ST_24 .QualityOK	Normal status
		F (Beige)	-	Unresolved
4.2	Warning	W (Red flash)	AU_ST_00 = 1	Unacknowledged Warning
		W (Red)	PC_ST_00 = 1 (ALQ1 =1)	Warning
		Invisible (GeneralBackColor)	PC_ST_24 .QualityOK	Normal status
		W (Beige)	-	Unresolved

No	Description	Default Presentation	Condition	Remark
3.3	Isolate	I (Red)	PC_ST_08 = 1 (INTLU1 =1)	Controller side Isolated
		Invisible (GeneralBackColor)	PC_ST_24 .QualityOK	Normal status
		I (Beige)	-	Unresolved
3.4	Test	T (Green)	PC_ST_16 = 1 (M1 =1)	Output Test running
		Invisible (GeneralBackColor)	PC_ST_24 .QualityOK	Normal status
		T (Beige)	-	Unresolved

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

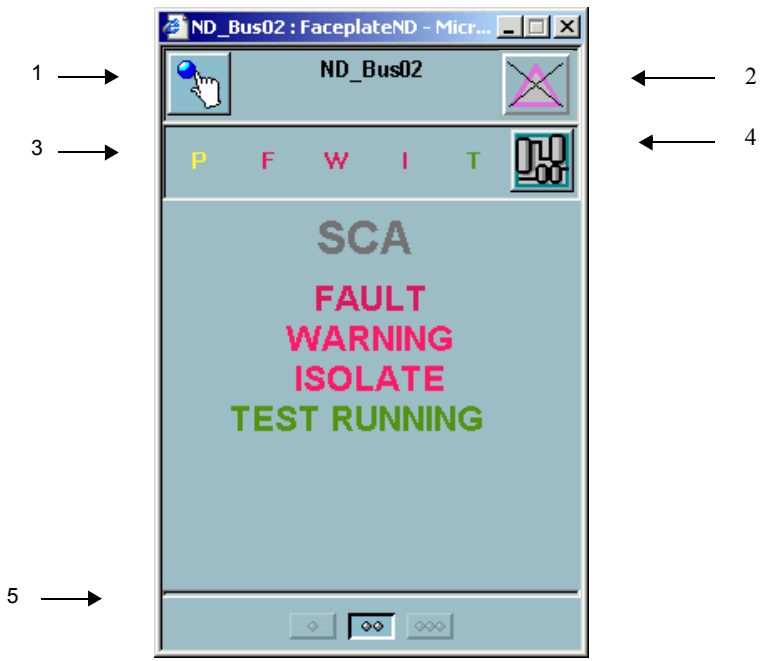
Parameter	Affect	Option (bold is default)	Remarks
BackgroundColor	Background	Transparent, Any	

Normally De-energized Output Bus Object (GENUSD6)

FaceplateND

Presentation:

Operator dialog for Normally De-energized output bus object used for Safeguard 9000.



Behavior:

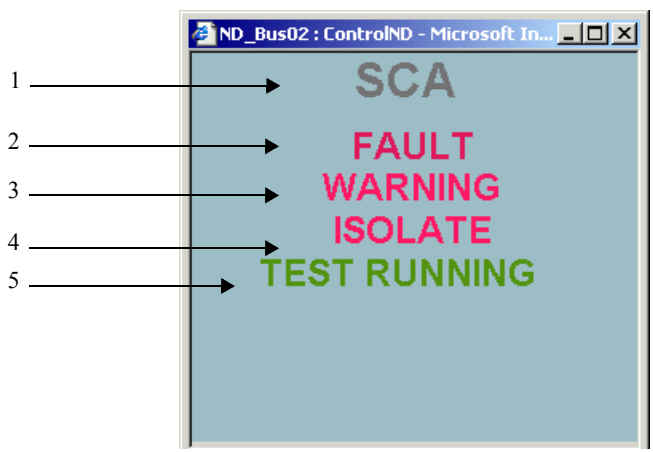
No	Description	Default Presentation	Condition	Remarks
1	Lock Button			
2	Name and Description			

No	Description	Default Presentation	Condition	Remarks
3	Status Field			
3.1	Print Blk	P Yellow	PRINT_BLK = 1	position 0,1,0
3.2	Fault	F Red	PC_ST_02 = 1	position 0,2,0
3.3	Warning	W Red	PC_ST_00 = 1	position 0,3,0
3.4	Isolate	I Red	PC_ST_08 = 1	position 0,4,0
3.5	Test running	T Yellow	PC_ST_16 = 1	position 0,5,0
4	Aspect links	Object Display	position 5, 5, 11	position 0,6,0
5	Buttons	(None)		

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

ControlND

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Safety Controller A/B	SCA (Dark grey)	PC_ST_24 =1 (IND1 =1)	Receiving SideA status
		SCB (Dark grey)	PC_ST_25 =1 (IND2 =1)	Receiving SideB status
		SC? (Dark grey)	PC_ST_24 .QualityOK	(Side not defined)
		SC? (Beige)	-	Unresolved
2	Fault	FAULT (Red flash)	AU_ST_02 = 1	Unacknowledged Fault
		FAULT (Red)	PC_ST_02 = 1 (ALF1 =1)	Fault
		FAULT (Grey)	PC_ST_02 .QualityOK	Normal status
		FAULT (Beige)	-	Unresolved
3	Warning	WARNING (Red flash)	AU_ST_00 = 1	Unacknowledged Warning
		WARNING (Red)	PC_ST_00 = 1 (ALQ1 =1)	Warning
		WARNING (Grey)	PC_ST_00 .QualityOK	Normal status
		WARNING (Beige)	-	Unresolved

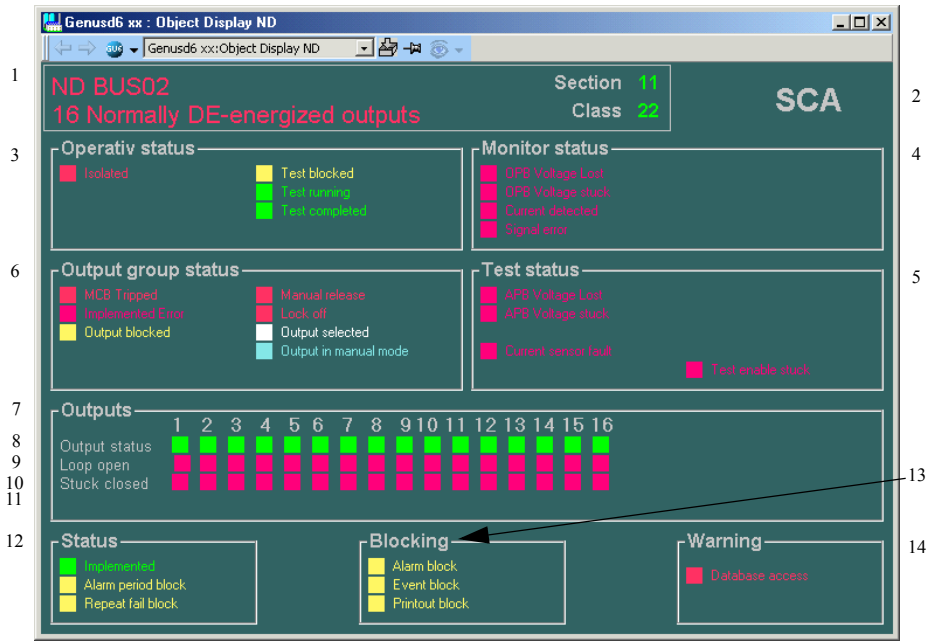
No	Description	Default Presentation	Condition	Remarks
4	Isolate	ISOLATE (Red)	PC_ST_08 = 1 (INTLU1 =1)	Controller side Isolated
		ISOLATE (Grey)	PC_ST_08 .QualityOK	Normal status
		ISOLATE (Beige)	-	Unresolved
5	Test	TEST RUNNING (Green)	PC_ST_16 = 1 (M1 =1)	Output Test running
		TEST RUNNING (Grey)	PC_ST_16 .QualityOK	Normal status
		TEST RUNNING (Beige)	-	Unresolved

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

ObjectDisplayND

Presentation:

Detail Presentation of Normally De-energized output bus object used for Safeguard 9000.



Behavior:

No	Description	Default Presentation	Condition	Remark
1.1	Select Frame	White	SELECTED =1	Selected
		Dotted Yellow	AL_BLK =1	Alarm blocked
		Grey	-	Normal
1.2	Name and Description	Name:Name and Control Connection: DESCR		Object Name and Object Description

No	Description	Default Presentation	Condition	Remark
		Red flash	AU_ST_00 =1 or AU_ST_01 =1 or AU_ST_02 =1 or AU_ST_03 =1 or AU_ST_04 =1 or AU_ST_05 =1 or AU_ST_06 =1 or AU_ST_07 =1	Unacknowledged Alarm
		Red	PC_ST_00 =1 or PC_ST_01 =1 or PC_ST_02 =1 or PC_ST_03 =1 or PC_ST_04 =1 or PC_ST_05 =1 or PC_ST_06 =1 or PC_ST_07 =1	Alarm
		Yellow	EVENT_BLK =1	Event blocked
		Green	-	Normal status
1.3	Section	Section (Grey)	SUBSYSTEM .QualityOK	Static text
		Beige	-	Unresolved
		Green	PROC_SEC (SUBSYSTEM)	Process section

No	Description	Default Presentation	Condition	Remark
1.4	Class	Class (Grey)	CLASS .QualityOK	Static text
		Beige	-	Unresolved
		Green	CLASS	Object class
2	Safety Controller A/B	"SCA" (Grey)	PC_ST_24 = 1 (IND1 =1)	Dual side A
		"SCB" (Grey)	PC_ST_25 = 1 (IND2 =1)	Dual side B
		"SC?" (Grey)	PC_ST_24 .QualityOK)	(Side not defined)
		"SC?" (Beige)	-	Unresolved
3	Operativ Status	OPERATIV STATUS (Grey)		Static text
3.1	Isolated	■ Isolated (Green) □ Isolated (Grey)	MV_INTEL, bit 0 = 1	Isolated Normal status
3.2	Test Blocked	■ Test Blocked (Yellow) □ Test Blocked (Grey)	MV_INTEL, bit 6 = 1	Isolated Request Normal status
3.3	Test Running	■ Test Running (Green) □ Test Running (Grey)	PC_ST_16 = 1 (M1 =1)	Test Running Normal status
3.4	Test Completed	■ Test Completed (Green) □ Test Completed (Grey)	PC_ST_17 = 1 (M2 =1)	Test Completed Normal status
4	Monitor Status	MONITOR STATUS (Grey)		Static text
4.1	OPB Voltage lost	■ APB Voltage lost (Red) □ APB Voltage lost (Grey)	MV_INTEL, bit 3 = 1	OPB Voltage lost Normal status

No	Description	Default Presentation	Condition	Remark
4.2	OPB Voltage Stuckt	■ APB Voltage Stuckt (Red) □ APB Voltage Stuckt (Grey)	MV_INTEL, bit 4 = 1	OPB Voltage Stuckt Normal status
4.3	Current Detected	■ Current Detected (Red) □ Current Detected (Grey)	MV_INTEL, bit 5 = 1	Current Detected Normal status
4.4	Signal Error	■ Signal Error (Red) □ Signal Error (Grey)	MV_INTEL, bit 2 = 1	Signal Error Normal status
5	Test Status	TEST STATUS (Grey)		Static text
5.1	APB Voltage lost	■ APB Voltage lost (Red) □ APB Voltage lost (Grey)	MV_INTEL, bit 18 = 1	APB Voltage lost Normal status
5.2	APB Voltage Stuckt	■ APB Voltage Stuckt (Red) □ APB Voltage Stuckt (Grey)	MV_INTEL, bit 19 = 1	APB Voltage Stuckt Normal status
5.3	Current Sensor Fault	■ Current Sensor Fault (Red) □ Current Sensor Fault (Grey)	MV_INTEL, bit 17 = 1	Current Sensor Fault Normal status
5.4	Test Enable Stuck	■ Test Enable Stuck (Red) □ Test Enable Stuck (Grey)	MV_INTEL, bit 16 = 1	Test Enable Stuck Normal status
6	Output Group Status	OUTPUT GROUP STATUS (Grey)		Static text
6.1	MCB Tripped	■ MCB Tripped (Red) □ MCB Tripped (Grey)	MV_INTEL, bit 1 = 1	MCB Tripped Normal status

No	Description	Default Presentation	Condition	Remark
6.2	Implemented Error	■ Implemented Error (Red) □ Implemented Error (Grey)	MV_INTEL, bit 11 = 1	Implemented Error Normal status
6.3	Output Blocked	■ Output Blocked (Yellow) □ Output Blocked (Grey)	MV_INTEL, bit 10 = 1	Output Blocked Normal status
6.3	Manual Release	■ Manual Release (Red) □ Manual Release (Grey)	MV_INTEL, bit 8 = 1	Output Blocked Normal status
6.4	Lock Off	■ Lock Off (Red) □ Lock Off (Grey)	MV_INTEL, bit 9 = 1	Shutdown Ordered Normal status
6.5	Output Selected	■ Output Selected (White) □ Output Selected (Grey)	MV_INTEL, bit 28 = 1	Output Selected Normal status
6.6	Output in Manual Mode	■ Output in Manual Mode (Cyan) □ Output in Manual Mode (Grey)	MV_INTEL, bit 29 = 1	Output in Manual Mode Normal status
7	Output Number	OUTPUT NUMBER 1 2 3 4 5 6 7 8 9 10 11	12 13 14 15 16	Static text
8	Output Status	OUTPUT STATUS (Grey)		Static text
8.1	Output status 1	■ (Green) □ (Green)	SP_INTEL_MMC, bit 0 = 1	Activated Normal
8.2	Output status 2	■ (Green) □ (Green)	SP_INTEL_MMC, bit 1 = 1	Activated Normal
8.3	Output status 3	■ (Green) □ (Green)	SP_INTEL_MMC, bit 2 = 1	Activated Normal

No	Description	Default Presentation	Condition	Remark
8.4	Output status 4	■ (Green) □ (Green)	SP_INTEL_M MC, bit 3 = 1	Activated Normal
8.5	Output status 5	■ (Green) □ (Green)	SP_INTEL_M MC, bit 4 = 1	Activated Normal
8.6	Output status 6	■ (Green) □ (Green)	SP_INTEL_M MC, bit 5 = 1	Activated Normal
8.7	Output status 7	■ (Green) □ (Green)	SP_INTEL_M MC, bit 6 = 1	Activated Normal
8.8	Output status 8	■ (Green) □ (Green)	SP_INTEL_M MC, bit 7 = 1	Activated Normal
8.9	Output status 9	■ (Green) □ (Green)	SP_INTEL_M MC, bit 8 = 1	Normal Tripped
8.10	Output status 10	■ (Green) □ (Green)	SP_INTEL_M MC, bit 9 = 1	Activated Normal
8.11	Output status 11	■ (Green) □ (Green)	SP_INTEL_M MC, bit 10 = 1	Activated Normal
8.12	Output status 12	■ (Green) □ (Green)	SP_INTEL_M MC, bit 11 = 1	Activated Normal
8.13	Output status 13	■ (Green) □ (Green)	SP_INTEL_M MC, bit 12 = 1	Activated Normal
8.14	Output status 14	■ (Green) □ (Green)	SP_INTEL_M MC, bit 13 = 1	Activated Normal
8.15	Output status 15	■ (Green) □ (Green)	SP_INTEL_M MC, bit 14 = 1	Activated Normal
8.16	Output status 16	■ (Green) □ (Green)	SP_INTEL_M MC, bit 15 = 1	Activated Normal
9	Loop Open	LOOP OPEN (Grey)		Static text
9.1	Loop Open 1	■ (Red) (Invisible)	MIN_INTEL, bit 1 = 1 -	Loop Open 1 Normal status

No	Description	Default Presentation	Condition	Remark
9.2	Loop Open 2	■ (Red) (Invisible)	MIN_INTEL, bit 5 = 1 -	Loop Open 2 Normal status
9.3	Loop Open 3	■ (Red) (Invisible)	MIN_INTEL, bit 9 = 1 -	Loop Open 3 Normal status
9.4	Loop Open 4	■ (Red) (Invisible)	MIN_INTEL, bit 13 = 1 -	Loop Open 4 Normal status Unresolved
9.5	Loop Open 5	■ (Red) (Invisible)	MIN_INTEL, bit 17 = 1 -	Loop Open 5 Normal status
9.6	Loop Open 6	■ (Red) (Invisible)	MIN_INTEL, bit 21 = 1 -	Loop Open 6 Normal status
9.7	Loop Open 7	■ (Red) (Invisible)	MIN_INTEL, bit 25 = 1 -	Loop Open 7 Normal status
9.8	Loop Open 8	■ (Red) (Invisible)	MIN_INTEL, bit 29 = 1 -	Loop Open 8 Normal status
9.9	Loop Open 9	■ (Red) (Invisible)	MAX_INTEL, bit 1 = 1 -	Loop Open 9 Normal status
9.10	Loop Open 10	■ (Red) (Invisible)	MAX_INTEL, bit 5 = 1 -	Loop Open 10 Normal status
9.11	Loop Open 11	■ (Red) (Invisible)	MAX_INTEL, bit 9 = 1 -	Loop Open 11 Normal status

No	Description	Default Presentation	Condition	Remark
9.12	Loop Open 12	■ (Red) (Invisible)	MAX_INTEL, bit 13 = 1 -	Loop Open 12 Normal status
9.13	Loop Open 13	■ (Red) (Invisible)	MAX_INTEL, bit 17 = 1 -	Loop Open 13 Normal status
9.14	Loop Open 14	■ (Red) (Invisible)	MAX_INTEL, bit 21 = 1 -	Loop Open 14 Normal status
9.15	Loop Open 15	■ (Red) (Invisible)	MAX_INTEL, bit 25 = 1 -	Loop Open 15 Normal status
9.16	Loop Open 16	■ (Red) (Invisible)	MAX_INTEL, bit 29 = 1 -	Loop Open 16 Normal status
10	Stuck Closed	STUCK CLOSED (Grey)		Static text
10.1	Stuck Closed 1	■ (Red) (Invisible)	MIN_INTEL, bit 0 = 1 -	Stuck Closed 1 Normal status
10.2	Stuck Closed 2	■ (Red) (Invisible)	MIN_INTEL, bit 4 = 1 -	Stuck Closed 2 Normal status
10.3	Stuck Closed 3	■ (Red) (Invisible)	MIN_INTEL, bit 8 = 1 -	Stuck Closed 3 Normal status
10.4	Stuck Closed 4	■ (Red) (Invisible)	MIN_INTEL, bit 12 = 1 -	Stuck Closed 4 Normal status
10.5	Stuck Closed 5	■ (Red) (Invisible)	MIN_INTEL, bit 16 = 1 -	Stuck Closed 5 Normal status

No	Description	Default Presentation	Condition	Remark
10.6	Stuck Closed 6	■ (Red) (Invisible)	MIN_INTEL, bit 20 = 1 -	Stuck Closed 6 Normal status
10.7	Stuck Closed 7	■ (Red) (Invisible)	MIN_INTEL, bit 24 = 1 -	Stuck Closed 7 Normal status
10.8	Stuck Closed 8	■ (Red) (Invisible)	MIN_INTEL, bit 28 = 1 -	Stuck Closed 8 Normal status
10.9	Stuck Closed 9	■ (Red) (Invisible)	MAX_INTEL, bit 0 = 1 -	Stuck Closed 9 Normal status
10.10	Stuck Closed 10	■ (Red) (Invisible)	MAX_INTEL, bit 4 = 1 -	Stuck Closed 10 Normal status
10.11	Stuck Closed 11	■ (Red) (Invisible)	MAX_INTEL, bit 8 = 1 -	Stuck Closed 11 Normal status
10.12	Stuck Closed 12	■ (Red) (Invisible)	MAX_INTEL, bit 12 = 1 -	Stuck Closed 12 Normal status
10.13	Stuck Closed 13	■ (Red) (Invisible)	MAX_INTEL, bit 16 = 1 -	Stuck Closed 13 Normal status
10.14	Stuck Closed 14	■ (Red) (Invisible)	MAX_INTEL, bit 20 = 1 -	Stuck Closed 14 Normal status
10.15	Stuck Closed 15	■ (Red) (Invisible)	MAX_INTEL, bit 24 = 1 -	Stuck Closed 15 Normal status

No	Description	Default Presentation	Condition	Remark
10.16	Stuck Closed 16	■ (Red) (Invisible)	MAX_INTEL, bit 28 = 1 -	Stuck Closed 16 Normal status
12	Status	STATUS (Grey)		Static text
12.1	Implemented	■ Implemented (Green) □ Implemented (Grey)	IMPLEMENTED = 1	Implemented Normal status
12.2	Alarm Period Block	■ Alarm Period Block (Yellow) □ Alarm Period Block (Grey)	AL_PERIOD_BLK = 1	Alarm Period Block Normal status
12.3	Repeat Fail Block	■ Repeat Fail Block (Yellow) □ Repeat Fail Block (Grey)	REPEAT_FAIL_BLK = 1	Repeat Fail Block Normal status
13	Blocking	BLOCKING (Grey)		Static text
13.1	Alarm Block	■ Alarm Block (Yellow) □ Alarm Block (Grey)	ALARM_BLK = 1 ALARM_BLK	Alarm Block Normal status
13.2	Event Block	■ Event Block (Yellow) □ Event Block (Grey)	EVENT_BLK = 1 EVENT_BLK	Event Block Normal status
13.3	Printout Block	■ Printout Block (Yellow) □ Printout Block (Grey)	PRINT_BLK = 1 PRINT_BLK	Printout Block Normal status
14	Warning	WARNING (Grey)		Static text
14.1	Database Access	■ Database Access (Red) □ Database Access (Grey)	PC_ST_00 = 1 PC_ST_00	Database Access Normal status

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

NameStatusND01

Presentation:

Presentation of Normally De-energized output bus object, with indication of output status. Used for Safeguard 9000.

Behavior:

No	Description	Default Presentation	Condition	Remark
1	Frame	White	SELECTED =1	Selected
		Dotted Yellow	AL_BLK =1	Alarm blocked
		Invisible	-	Normal
2.1	Name Text	Name:Name		Object Name
2.2	Name	Red flash	AU_ST_00 =1 or AU_ST_01 =1 or AU_ST_02 =1 or AU_ST_03 =1 or AU_ST_04 =1 or AU_ST_05 =1 or AU_ST_06 =1 or AU_ST_07 =1	Unacknowledged Alarm
		Red	PC_ST_00 =1 or PC_ST_01 =1 or PC_ST_02 =1 or PC_ST_03 =1 or PC_ST_04 =1 or PC_ST_05 =1 or PC_ST_06 =1 or PC_ST_07 =1	Alarm

No	Description	Default Presentation	Condition	Remark
		Yellow	EVENT_BLK =1	Event blocked
		Green	PC_ST_24 .QualityOK	Normal status
		Beige	-	Unresolved (name: name)
3	Safety Controller A/B	SCA (Dark grey)	PC_ST_24 =1 (IND1 =1)	Receiving SideA status
		SCB (Dark grey)	PC_ST_25 =1 (IND2 =1	Receiving SideB status
		SC? (Dark grey)	PC_ST_24 .QualityOK	(Side not defined)
		SC? (Beige)	-	Unresolved
4	Status indication			
4.1	Fault	F (Red flash)	AU_ST_02 = 1	Unacknowledged Fault
		F (Red)	PC_ST_02 = 1 (ALF1 =1)	Fault
		Invisible (GeneralBackColor)	PC_ST_24 .QualityOK	Normal status
		F (Beige)	-	Unresolved
4.2	Warning	W (Red flash)	AU_ST_00 = 1	Unacknowledged Warning
		W (Red)	PC_ST_00 = 1 (ALQ1 =1)	Warning
		Invisible (GeneralBackColor)	PC_ST_24 .QualityOK	Normal status
		W (Beige)	-	Unresolved

No	Description	Default Presentation	Condition	Remark
3.3	Isolate	I (Red)	PC_ST_08 = 1 (INTLU1 =1)	Controller side Isolated
		Invisible (GeneralBackColor)	PC_ST_24 .QualityOK	Normal status
		I (Beige)	-	Unresolved
3.4	Test	T (Green)	PC_ST_16 = 1 (M1 =1)	Output Test running
		Invisible (GeneralBackColor)	PC_ST_24 .QualityOK	Normal status
		T (Beige)	-	Unresolved

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

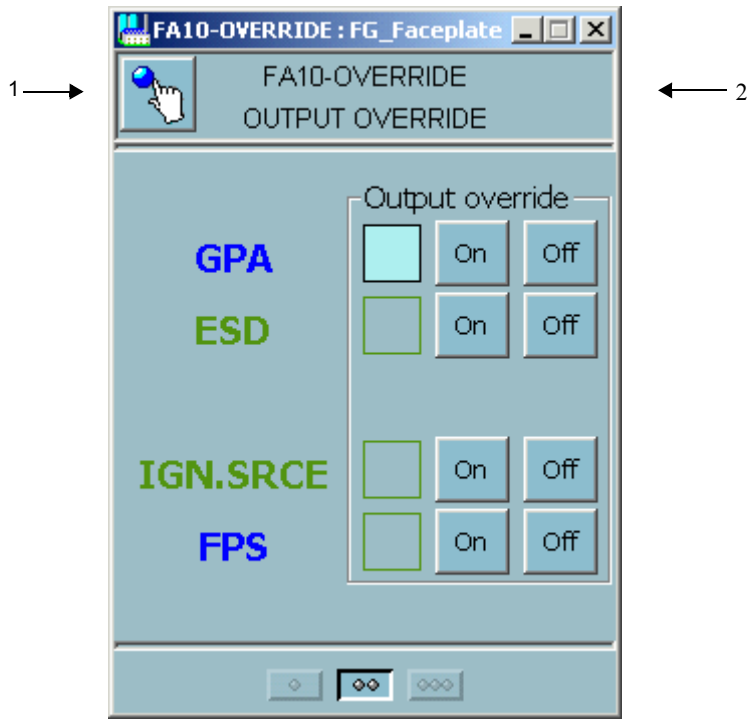
Parameter	Affect	Option (bold is default)	Remarks
BackgroundColor	Background	Transparent, Any	

Output Override Object (MMCX1)

FG_Faceplate

Faceplate for MMCX objects, with reftype =36, connected to User Element OUT-OVR. The dialog enables override of (up to five) activation orders from one fire area without affecting orders from other areas to the same output.
The text properties in the MMCX database are used for descriptions of the various outputs, and appear on Faceplate element FG_Control.

Presentation:

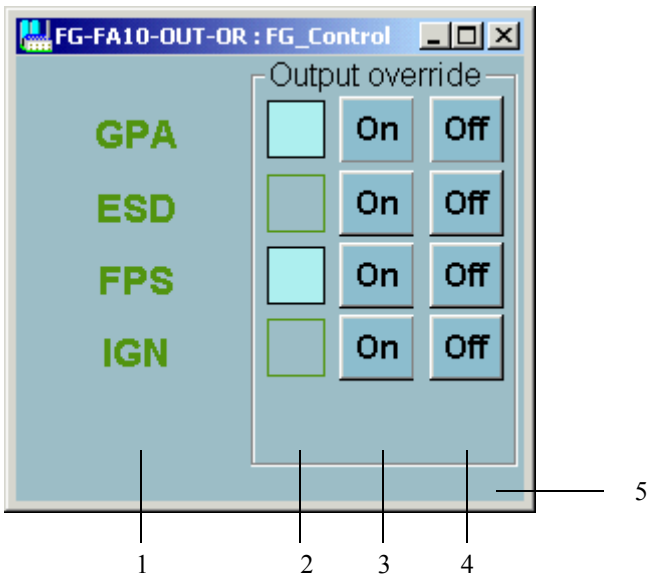


Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Lock Button			
2	Name and Description			

FG_Control

Presentation:



Behavior (Activation):

No	Button Text	Action	Response	Remarks
3	**a: On** **b: On** **c: On** **d: On** **e: On**	Override output group 1 Override output group 2 Override output group 3 Override output group 4 Override output group 5	Set MORD_00 = 1 Set MORD_01 = 1 Set MORD_02 = 1 Set MORD_03 = 1 Set MORD_04 = 1	Disabled if override not authorized, invisible if the corresponding TEXT properties are empty.
4	**a: Off** **b: Off** **c: Off** **d: Off** **e: Off**	Remove override on output group 1 Remove override on output group 2 Remove override on output group 3 Remove override on output group 4 Remove override on output group 5	Set MORD_05 = 1 Set MORD_06 = 1 Set MORD_07 = 1 Set MORD_08 = 1 Set MORD_09 = 1	Disabled if override not authorized, invisible if the corresponding TEXT properties are empty.

Behavior (Presentation):

No	Description	Default Presentation	Condition	Remarks
1	Output groups			

No	Description	Default Presentation	Condition	Remarks
1 a	Output 1 Text	<I2_08TXT> Output 1	IND2_08_PRES_TEXT.QualityOk -	Text from MMCX object Unresolved
	Output 1 Text Color	Blue Green Beige	IND2_00 = 1 IND2_00 .QualityOK -	Output 1 activated Output 1 not activated Unresolved
1 b	Output 2 Text	<I2_09TXT> Output 2	IND2_09_PRES_TEXT.QualityOk -	Text from MMCX object Unresolved
	Output 2 Text Color	Blue Green Beige	IND2_01 = 1 IND2_01 .QualityOK -	Output 2 activated Output 2 not activated Unresolved
1 c	Output 3 Text	<I2_10TXT> Output 3	IND2_10_PRES_TEXT.QualityOk -	Text from MMCX object Unresolved
	Output 3 Text Color	Blue Green Beige	IND2_02 = 1 IND2_02 .QualityOK -	Output 3 activated Output 3 not activated Unresolved
1 d	Output 4 Text	<I2_11TXT> Output 4	IND2_11_PRES_TEXT.QualityOk -	Text from MMCX object Unresolved
	Output 4 Text Color	Blue Green Beige	IND2_03 = 1 IND2_03 .QualityOK -	Output 4 activated Output 4 not activated Unresolved

No	Description	Default Presentation	Condition	Remarks
1 e	Output 5 Text	<I2_12TXT> Output 5	IND2_12_PRES_TEXT.QualityOk -	Text from MMCX objec Unresolvedt
	Output 5 Text Color	Blue Green Beige	IND2_04 = 1 IND2_04 .QualityOK -	Output 5 activated Output 5 not activated Unresolved
2	Override indications			
2 a	Override1 indication	(Invisible) Filled square (Cyan) Unfilled square (Green) White X on red square	IND2_08_PRES_TEXT = Empty & IND1_00 = 0 IND1_00 = 1 IND2_00 .QualityOK -	No TEXT and not ovr. Output 1 overridden Output 1 not overridden Unresolved
2 b	Override2 indication	(Invisible) Filled square (Cyan) Unfilled square (Green) White X on red square	IND2_09_PRES_TEXT = Empty & IND1_01 = 0 IND1_01 = 1 IND2_00 .QualityOK -	No TEXT and not ovr. Output 2 overridden Output 2 not overridden Unresolved

No	Description	Default Presentation	Condition	Remarks
2 c	Override3 indication	(Invisible) Filled square (Cyan) Unfilled square (Green) White X on red square	IND2_10_PRES_TEXT = Empty & IND1_02 = 0 IND1_02 = 1 IND2_00 .QualityOK -	No TEXT and not ovr. Output 3 overridden Output 3 not overridden Unresolved
2 d	Override4 indication	(Invisible) Filled square (Cyan) Unfilled square (Green) White X on red square	IND2_11_PRES_TEXT = Empty & IND1_03 = 0 IND1_03 = 1 IND2_00 .QualityOK -	No TEXT and not ovr. Output 4 overridden Output 4 not overridden Unresolved
2 e	Override5 indication	(Invisible) Filled square (Cyan) Unfilled square (Green) White X on red square	IND2_12_PRES_TEXT = Empty & IND1_04 = 0 IND1_04 = 1 IND2_00 .QualityOK -	No TEXT and not ovr. Output 5 overridden Output 5 not overridden Unresolved
5.1	Authorize Text	Override not authorized		

No	Description	Default Presentation	Condition	Remarks
5.2	Authorize Color	Invisible (light blue)	IND2_08 = 1	Override Authorize On
		Grey	IND2_08 .QualityOK	Override Authorize Off
		Beige	-	Unresolved

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

FG_Override01

Presentation:

Presentation on fire area detail display, indicating OVERRIDE of common outputs. Used for MMCX objects connected to User Element OUT-OVR.

The Graphic Element is select sensitive and connected to the FG_Faceplate, which enables the operator to override 5 common outputs in PC logic by means of one MMCX object. (Without overriding the actual outputs).

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	IND1_00 .QualityOK	Normal
		Beige	-	Unresolved
2.1	Output status Text	I2_08TXT I2_09TXT I2_10TXT I2_11TXT I2_12TXT Output ?	OutputNumber =1 & IND1_00 .QualityOK OutputNumber =2 & IND1_00 .QualityOK OutputNumber =3 & IND1_00 .QualityOK OutputNumber =4 & IND1_00 .QualityOK OutputNumber =5 & IND1_00 .QualityOK IND1_00 .QualityOK	Static text from object database text property, according to OutputNumber parameter Undefined output number
		Output	OutputNumber =1 OutputNumber =2 OutputNumber =3 OutputNumber =4 OutputNumber =5 -	Unresolved

No	Description	Default Presentation	Condition	Remarks
2.2	Output status Color	Blue	OutputNumber =1 & IND20 =1 or OutputNumber =2 & IND21 =1 or OutputNumber =3 & IND22 =1 or OutputNumber =4 & IND23 =1 or OutputNumber =5 & IND24 =1	Output 1 activation ordered Output 2 activation ordered Output 3 activation ordered Output 4 activation ordered Output 5 activation ordered
		NormalColor	-	Normal
3	Override square	□ Cyan	OutputNumber =1 & IND10 =1 or OutputNumber =2 & IND11 =1 or OutputNumber =3 & IND12 =1 or OutputNumber =4 & IND13 =1 or OutputNumber =5 & IND14 =1	Output 1 overridden Output 2 overridden Output 3 overridden Output 4 overridden Output 5 overridden
		■ Blue	OutputNumber =1 & IND20 =1 or OutputNumber =2 & IND21 =1 or OutputNumber =3 & IND22 =1 or OutputNumber =4 & IND23 =1 or OutputNumber =5 & IND24 =1	Output 1 activation ordered Output 2 activation ordered Output 3 activation ordered Output 4 activation ordered Output 5 activation ordered
		□ Green	-	Normal

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameter	Affect	Option (bold is default)	Remarks
OutputNumber	2. Output, 3. Override	1, 2, 3, 4, 5 (**0**)	Select which output to be presented (of the 5 output from the User Element OUT-OVR, described in *Application Unit Fire & Gas User's Guide*).
BackgroundColor	Background	Transparent, any	

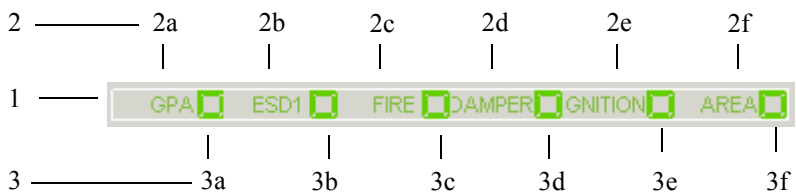
FG_Override05

Presentation:

Presentation on fire area detail display, indicating OVERRIDE of common outputs. Used for MMCX objects connected to User Element OUT-OVR. This Graphic Element displays an overview of all five output groups, which are overrideable by means of one MMCX object. In addition, area output override and output status is displayed.

Presentation of an output group is hidden if the respectiv text property is empty (that is, not used).

The Graphic Element is not select sensitive, hence it can be placed on top of a display-selection element.



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible (GeneralBackColor)	IND1_00 .QualityOK	Normal
		Beige	-	Unresolved
2.1	Output label Text	a: I2_08TXT b: I2_09TXT c: I2_10TXT d: I2_11TXT e: I2_12TXT f: I2_13TXT	IND1_00 .QualityOk	Static text from object database text properties.
		a: Outp 1 b: Outp 2 c: Outp 3 d: Outp 4 e: Outp 5 f: AREA	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
2.2	Output label Color	a: Blue b: Blue c: Blue d: Blue e: Blue f: Blue	a: IND20 = 1 b: IND21 = 1 c: IND22 = 1 d: IND23 = 1 e: IND24 = 1 f: IND26 = 1	Output 1 activated Output 2 activated Output 3 activated Output 4 activated Output 5 activated Any area output activated
		a: Green b: Green c: Green d: Green e: Green f: Green	IND1_00 .QualityOK	Normal (Output 1 not activated) Normal (Output 2 not activated) Normal (Output 3 not activated) Normal (Output 4 not activated) Normal (Output 5 not activated) Normal (No area utputs activated)
		Beige	-	Unresolved
3	Override square	a: □ Cyan b: □ Cyan c: □ Cyan d: □ Cyan e: □ Cyan f: □ Cyan	a: IND10 =1 or b: IND11 =1 or c: IND12 =1 or d: IND13 =1 or e: IND14 =1 or f: IND25 = 1 and IND27 =1	Output 1 overridden Output 2 overridden Output 3 overridden Output 4 overridden Output 5 overridden Some Area output overridden and All activated outputs are overridden
		f: ■ Blue center, Cyan edge (Area outputs only)	f: IND25 =1 and IND26 =1 and IND27 =0	Some Area output overridden and some Area outputs activated, but all activated are not overridden.

No	Description	Default Presentation	Condition	Remarks
		a: ■ Blue b: ■ Blue c: ■ Blue d: ■ Blue e: ■ Blue f: ■ Blue	a: IND20 =1 or b: IND21 =1 or c: IND22 =1 or d: IND23 =1 or e: IND24 =1 or f: IND26 = 1	Output 1 activation ordered Output 2 activation ordered Output 3 activation ordered Output 4 activation ordered Output 5 activation ordered Any Area Output activation ordered
		a: □ Green b: □ Green c: □ Green d: □ Green e: □ Green f: □ Green	IND2_08_PRES_TEXT. not empty IND2_09_PRES_TEXT. not empty IND2_10_PRES_TEXT. not empty IND2_11_PRES_TEXT. not empty IND2_12_PRES_TEXT. not empty IND2_13_PRES_TEXT. not empty	Normal and TEXT property not empty
		a, b, c, d, e, f: Invisible	IND1_00 .QualityOK	Normal and hidden (Empty TEXT)
		□ Beige	-	Unresolved

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

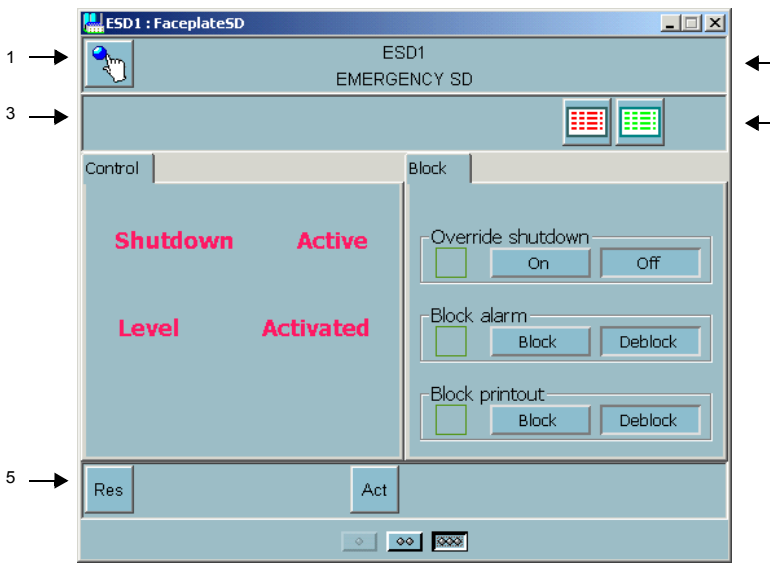
Parameter	Affect	Option (bold is default)	Remarks
BackgroundColor	Background	Transparent, any	

Shutdown Level Object (MMCX2)

Faceplate

Presentation:

Faceplate for Cause & Effect Matrix Shutdown level object, MMCX with reftype 37.



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Lock Button			
2	Name and Description			
3	Status Field			
3.1	Print Blk	P Yellow	PRINT_BLK = 1	position 0,1,1
4	Aspect links	Alarm List		position 0,4,10
		Event List		position 0,5,11
5	Buttons			
5.1	Reset Shutdown Level	Res		Set MORD_10= 1
5.6	Activate Shutdown Level	Act		Set MORD_09= 1

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

ControlSD

Presentation:

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Shutdown	SHUTDOWN (Grey)		*Static text*
1.1	Shutdown status color	Red	IND2_02 = 1	Shutdown cause alarm
		Cyan	IND2_00 = 1	Overridden
		Green	IND2_02 .QualityOK	Normal condition
		Beige	-	Unresolved
2.1	Shutdown active status text	ACTIVE		

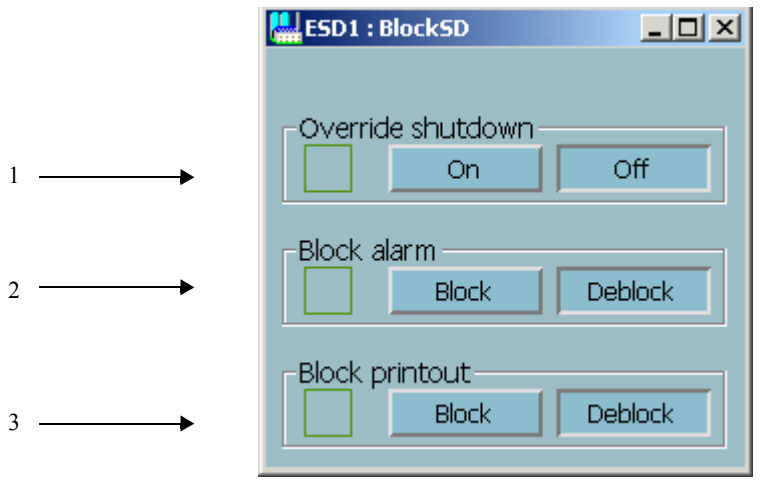
No	Description	Default Presentation	Condition	Remarks
2.2	Shutdown active status color	Red	IND2_02 = 1	Shutdown cause alarm
		Invisible (light blue)	IND2_02 .QualityOK	Normal condition
		Beige	-	Unresolved
3.1	Override status text	OVERRIDDEN		
3.2	Override status color	Cyan	IND2_00 = 1	Overridden
		Invisible (light blue)	IND2_00 .QualityOK	Normal condition
		Beige	-	Unresolved
4	Level	LEVEL (Grey)		*Static text*
5.2	Level status color	Red	IND2_01 = 1	Level activated
		Green	IND2_01 .QualityOK	Normal condition
		Beige	-	Unresolved
5.1	Activated status text	ACTIVATED		
5.2	Activated status color	Red	IND2_01 = 1	Level activated
		Invisible (light blue)	IND2_01 .QualityOK	Normal condition
		Beige	-	Unresolved
6.1	By command status text	BY COMMAND		
6.2	By command status color	Red	IND1_00 = 1	Commanded (from operator dialog)
		Invisible (light blue)	IND1_00 .QualityOK	Normal condition
		Beige	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
7.1	Reset permitted status text	RESET PERMITTED		
7.2	Reset permitted status color	Green	IND2_12 = 1	Reset of activated level permitted
		Invisible (light blue)	IND2_12 .QualityOK	Normal condition
		Beige	-	Unresolved

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

BlockSD

Presentation:



Behavior (Activation):

No	Button Text	Action	Response	Remarks
1.2	On	Set **Override**	MORD_06 = 1	
1.3	Off	Reset **Override**k	MORD_07 = 1	
2.2	Block	Set Alarm Block	Set ALARM_BLK = 1	
2.3	Deblock	Reset Alarm Block	Set ALARM_BLK = 0	
3.2	Block	Set Printout Block	Set PR_BLK = 1	
3.3	Deblock	Reset Printout Block	Set PR_BLK = 0	

Behavior (Presentation):

No	Description	Default Presentation	Condition	Remarks
1.1	Override indication	Filled square (Cyan) Unfilled square (Green) White cross on red square	IND2_00 = 1 - IND2_00 .QualityBad	*Input Blocked* Input not *blocked* Unresolved
2.1	Block Alarm indication	Filled square (Yellow) Unfilled square (Green) White cross on red square	ALARM_BLK = 1 - ALARM_BLK .QualityBad	**Alarm** *Blocked* **Alarm** not *blocked* Unresolved
3.1	Block Printout indication	Filled square (Yellow) Unfilled square (Green) White cross on red square	PR_BLK = 1 - PR_BLK .QualityBad	**Printout** *Blocked* **Printout** not *blocked* Unresolved

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

IndicatorBoxSD01

Presentation:

Presentation of shutdown level object, with indication of cause and level status. Used for objects defined as levels in the Safety Builder, Cause & Effect matrix (ref. type = 37).

Behavior:

No	Description	Default Presentation	Condition	Remark
1	Frame	White	SELECTED =1	Selected
		Dotted Yellow	AL_BLK =1	Alarm blocked
		Invisible	IND2_00 .QualityOK	Normal
		Beige	-	Unresolved
2	Cause / Level	Square		Cause (alarm) and Level (latched) status
2.1	Square edge color = Cause	Cyan	IND2_00 =1	Shutdown cause override (IND20 =1)
		Red	IND2_02 =1	Cause active (IND22 =1)
		Green	-	Normal status

No	Description	Default Presentation	Condition	Remark
2.1	Square center color = Level	Red	IND2_01 =1	Level activated (IND21 =1)
		BackgroundColor	-	Normal status

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameter	Affect	Option (bold is default)	Remarks
Status3D	2. Square	**false,** true	Default (false): flat status square, true: 3 Dimensional status square , sunken when square is filled.
BackgroundColor	Background	Transparent, any	

NameBoxSD01

Presentation:

Presentation of Shutdown Level object, MMCX with reftype 37, with indication of cause and level status. Used for objects defined as levels in the Safety Builder, Cause & Effect Matrix..

Behavior:

No	Description	Default Presentation	Condition	Remark
1	Frame	White	SELECTED =1	Selected
		Dotted Yellow	AL_BLK =1	Alarm blocked
		Red	NormalFrameVisible = true and IND2_02 =1	Cause active (visible normal frame)
		Green	NormalFrameVisible = true and IND2 .QualityOK	Normal (visible normal frame)
		Invisible	IND2 .QualityOK	Normal (invisible normal frame)
		Beige	-	Unresolved
2.1	Name Text	Name:Name		Object Name
2.2	Name Color	Cyan	IND2_00 =1	Shutdown cause override (IND20 =1)
		Red	IND2_02 =1	Cause active (IND22 =1)
		Red	IND2_01 =1	Level activated (IND21 =1)
		Green	IND2 .QualityOK	Normal status
		Beige	-	Unresolved (name: name)

No	Description	Default Presentation	Condition	Remark
3	Level / Cause	Red *center*	IND2_01 =1	Level activated (IND21 =1)
		Dark Grey *center*	-	Level not activated
		Red *edge*	IND2_02 =1	Cause active (IND22 =1)
		Green *edge*	-	Normal status

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameter	Affect	Option (bold is default)	Remarks
NormalFrameVisible	1. Frame	**false,** true	Frame visible in normal condition, if set to true.
BackgroundColor	Background	Transparent, any	

M_NameStatus01

Presentation:

Presentation of Object name, description and status for Cause & Effect Matrix Shutdown Level.

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		FrameColor	IND2 .QualityOK	Normal
		Beige	-	Unresolved
2	Name / Description	Cyan	IND2_00 =1	Shutdown cause override (IND20 =1)
		Red	IND2_02 =1	Cause active (IND22 =1)
		Red	IND2_01 =1	Level activated (IND21 =1)
		Green	IND2 .QualityOK	Normal
		Beige	-	Unresolved
3	Signal Type	Level (Grey)	IND2 .QualityOK	Shutdown level
		Level (Beige)	-	Unresolved
4	Level / Cause	Red *center*	IND2_01 =1	Level activated (IND21 =1)
		Dark Grey *center*	IND2 .QualityOK	Level not activated
		Red *edge*	IND2_02 =1	Cause active (IND22 =1)
		Green *edge*	-	Normal status

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameColor	1. Frame	**Black,** any color	Color of frame in normal condition. (Conform to Cause & Effect grid)
Status3D	4. Status	**false,** true	Default (false): flat status square, true: 3 Dimensional status square, sunken when square is filled.
BackgroundColor	Background	Transparent, any	

M_Status01

Presentation:

Presentation of Status for Shutdown Level on Cause & Effect Matrix display (dynamic ‘dot’).

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Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	Circle frame	White	SELECTED = 1	Object selected
		Dotted Yellow	ALARM_BLK = 1	Alarm blocked by operator
		Invisible	IND2 .QualityOK	Normal
		Beige	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
1.2	Circle Color	Red	IND2_01 =1	Level activated (IND21 =1)
		Green	-	Normal

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

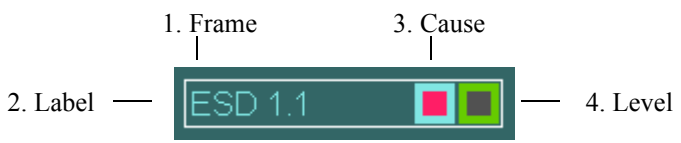
Configuration:

Parameters	Affects	Options (bold is default)	Remarks
BackgroundColor	Background	Transparent, any	

SD_NameCauseLevel01

Presentation:

Presentation of shutdown level object, MMCX with reference type 37, with indication of both cause and level status. Used for objects defined as levels in the Safety Builder, cause and effect matrix. Linked to the FaceplateSD, which enable Shutdown activation, reset and override commands.



Behavior:

No	Description	Default Presentation	Condition	Remark
1	Frame	White	SELECTED =1	Selected
		Dotted Yellow	AL_BLK =1	Alarm blocked
		Red	NormalFrameVisible = true and IND2_02 =1	Cause active (visible normal frame)
		Green	NormalFrameVisible = true and IND2_00 .QualityOK	Normal (visible normal frame)
		Invisible	IND2_00 .QualityOK	Normal (invisible normal frame)
		Beige	-	Unresolved
2.1	Label Text	Name:Name	Label = Name and IND2_00 .QualityOK	Object Name
		Name:Description	Label = Description and IND2_00 .QualityOK	Object Description
		LabelText	(Label = Label_Text and IND2_00 .QualityOK	Configure -able Label
		name: name	-	Unresolved

No	Description	Default Presentation	Condition	Remark
2.2	Label Color	Red	IND2_01 =1	Level activated (IND21 =1)
		Cyan	IND2_00 =1	Shutdown cause override (IND20 =1)
		Red	IND2_02 =1	Cause active (IND22 =1)
		Green	IND2_00 .QualityOK	Normal status
		Beige	-	Unresolved (name: name)
3	Cause	Cyan edge	IND2_00 =1	Shutdown cause override (IND20 =1)
		■ Red	IND2_02 =1	Cause active (IND22 =1)
		□ Green	IND2_00 .QualityOK	Normal status
		■ Beige	-	Unresolved
4	Level	■ Red	IND2_01 =1	Level activated (IND21 =1)
		□ Green	IND2_00 .QualityOK	Normal status
		■ Beige	-	Unresolved

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameter	Affect	Option (bold is default)	Remarks
NormalFrameVisible	1. Frame	**false,** true	Frame visible in normal condition, if set to true.
Label	2. Label	Name, Description, Label_Text	Default: Shutdown level is identified by presenting the Object Name.
LabelText	2. Label	ESD, any text	Label to identify the Shutdown level. NOTE: Only visible if Label = Label_Text.
BackgroundColor	Background	Transparent, any	

SD_LevelLine01

Presentation:

Line -presentation of shutdown level object, MMCX with reference type 37, with indication of level status. Used for objects defined as levels in the Safety Builder, cause and effect matrix. The element can not get focus, that is, no Faceplate will be activated.

1 —

Behavior:

No	Description	Default Presentation	Condition	Remark
1	Line	White	SELECTED =1	Selected
		Red	IND2_01 =1	Level activated (IND21 =1)
		Green	IND2_00 .QualityOK	Normal status
		Beige	-	Unresolved

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

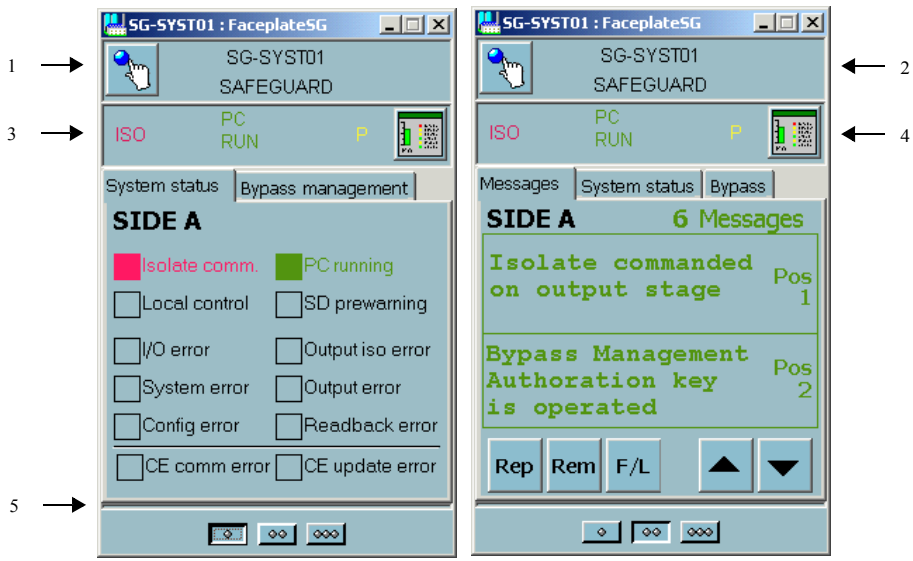
Parameter	Affect	Option (bold is default)	Remarks
Orientation	1. Line	**Horizontal**, Vertical	Line orientation
LineWidth	1. Line	**8,** any	Width of line
BackgroundColor	Background	Transparent, any	

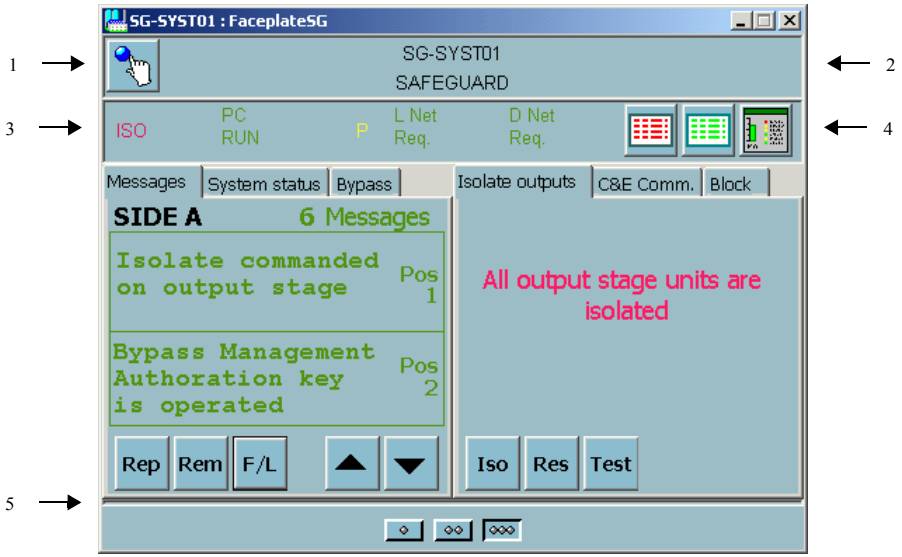
Safeguard Status Object (MMCX3)

FaceplateSG

Presentation:

Faceplate for Safeguard Status object, MMCX with reftype 38, defined in the Safeguard Configuration file.





Behavior:

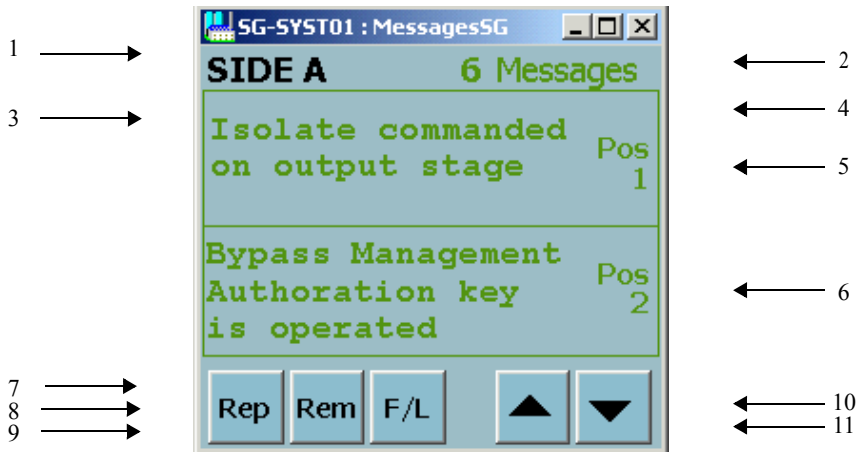
No	Description	Default Presentation	Condition	Remarks
1	Lock Button			
2	Name and Description			
3	Status Field			
3.1	Isolate commanded	ISO (red)	IND2_00 =1	position 1,1,1
3.2	Local control	Local Ctrl (green)	IND2_03 =1	position 2,2,2

No	Description	Default Presentation	Condition	Remarks
3.3	Programs running	PC RUN (green)	INTWB_03 =1And INTWB_05 =0	position 3,3,3
3.4	I/O Error	I/O Error (red)	IND1_02 =1	position 4,4,4
3.5	Print Blk	P (Yellow)	PRINT_BLK = 1	position 5,5,5
3.6	Local net request	L Net Req. (green)	IND2_12 =1	position 0,0,6 (Extended faceplate only)
3.7	Local net block out	L Net Block (yellow)	IND2_10 =1	position 0,0,7 (Extended faceplate only)
3.8	Dual net request	D Net Req. (green)	IND2_13 =1	position 0,0,8 (Extended faceplate only)
3.9	Dual net block out	D Net Block (yellow)	IND2_11 =1	position 0,0,9 (Extended faceplate only)
4	Aspect links	Alarm List		position 0, 0,10 (Extended faceplate only)
		Event List		position 0, 0,11 (Extended faceplate only)
		Object Display	position 0, 0, 9	position 6,6,12
5	Buttons			(None, ref. Faceplate elements)

The conditions are in priority order. Logically defined colors are used, refer to Appendix A, Logical Colors Definitions.

MessagesSG

Presentation:



Behavior (Activation):

No	Button Text	Action	Response	Remarks
7	Rep	Report messages	Set MORD_06= 1	Report messages into buffer
8	Rem	Remove messages	Set MORD_03= 1	Remove reportable messages from buffer
9	F/L	Go to end of buffer	Set MORD_02= 1	Step to First or Last message in buffer
10	Up arrow head	Previous Message	Set MORD_01= 1	Step to previous message in buffer
11	Down arrow head	Next Message	Set MORD_00= 1	Step to next message in buffer

Behavior: (Presentation):

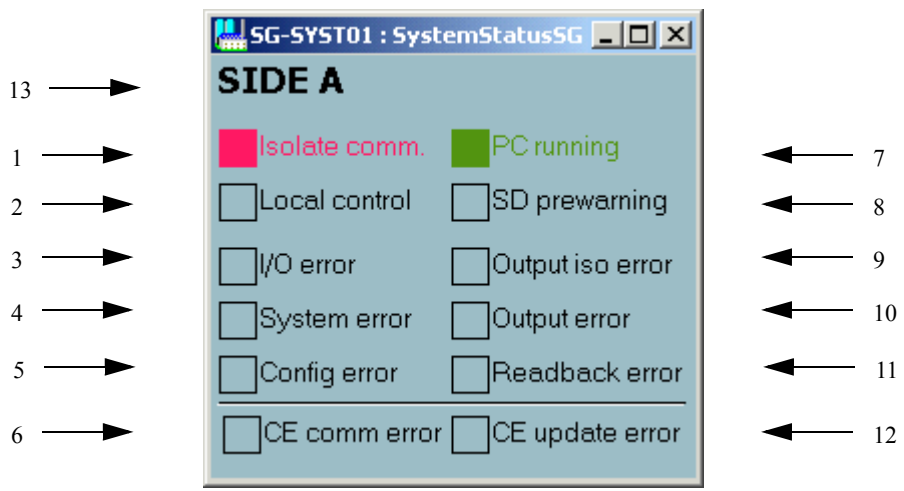
No	Description	Default Presentation	Condition	Remarks
1	Side A / B	Side A (Black) Side B (Black) Side X (Beige)	INTWB, bit 0 = 1 INTWB .QualityOK -	*Dual controller A* *Dual controller B* *Unresolved*
2.1	Messages text	Message: (Green) Messages: (Green) Messages: (Beige)	INTL_RES = 1 INTL_RES .QualityOk -	One message - Unresolved
2.2	Messages number	(number) (Green)	INTL_RES	Number of messages
3.1	Message text line 1	(I2_09TXT) (Green)	I2_09TXT	Text from MMCX database
3.2	Message text line 2	(I2_10TXT) (Green)	I2_10TXT	Text from MMCX database
3.3	Message text line 3	(I2_11TXT) (Green)	I2_11TXT	Text from MMCX database
3.4	Message text line 4	(I2_12TXT) (Green)	I2_12TXT	Text from MMCX database
3.5	Message text line 5	(I2_13TXT) (Green)	I2_13TXT	Text from MMCX database
3.6	Message text line 6	(I2_14TXT) (Green)	I2_14TXT	Text from MMCX database
4	Removable mark	(Removable) (Green (Invisible) (Removable) (Beige)	INTWB, bit 1 = 1 INTWB .QualityOk -	Removable message in uper position (Not removable message) Unresolved

No	Description	Default Presentation	Condition	Remarks
5.1	Position text	Pos (Green)		Static texts
5.2	Position number	(number) (Green)	INTL_RES_MAX	Upper message position no.
6.1	Next Position text	Pos (Green)		Static texts
6.2	Next position number	(number) (Green)	IRESMAX +1 (if < I_RES)	Lower message position no.

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

SystemStatusSG

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Isolate commanded	■ Isolated (Red) □ Isolated (Grey) ■ Isolated (Beige)	IND2_00 = 1 IND2_00 .QualityOK -	Isolate commanded Not isloated Unresolved
2	Local control	■ Local control (Red) □ Local control (Grey) ■ Local control (Beige)	IND2_03 = 1 IND2_03 .QualityOK -	Local control (Isolated locally) Not isolated locally Unresolved
3	I/O interface error	■ I/O error (Red) □ I/O error (Grey) ■ I/O error (Beige)	IND1_02 = 1 IND1_02 .QualityOK -	I/O interface error Normal Unresolved
4	System error	■ System error (Red) □ System error (Grey) ■ System error (Beige)	IND1_00 = 1 IND1_00 .QualityOK -	System error Normal Unresolved
5	Configuration error	■ Config error (Red) □ Config error (Grey) ■ Config error (Beige)	IND1_01 = 1 IND1_01 .QualityOK -	Configuration error Normal Unresolved
6	C&E comm. error	■ CE comm error (Red) □ CE comm error (Grey) ■ CE comm error (Beige)	IND1_06 = 1 IND1_06 .QualityOK -	C&E comm. error Normal Unresolved

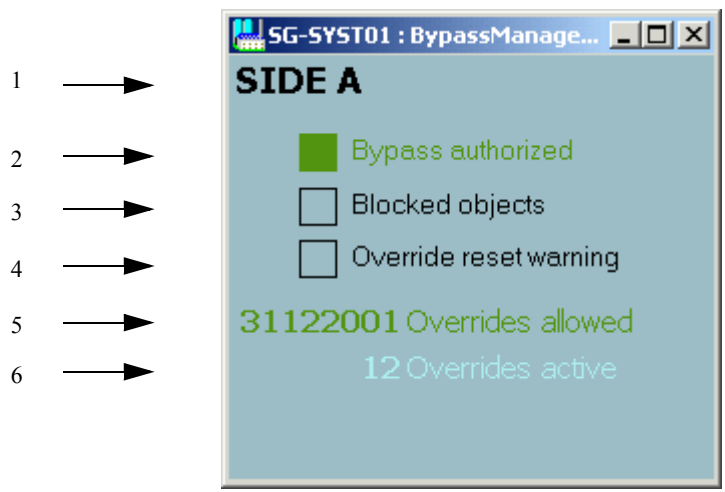
No	Description	Default Presentation	Condition	Remarks
7	Programs **Running**	■ PC running (Green) □ PC running (Grey) ■ PC running (Beige)	INTWB, bit 3 = 1 & bit5 =0 INTWB .QualityOK -	Start-up finished & Prog. Running All AMPL Programs not running Unresolved
8	Shutdown prewarning	■ SD prewarn (Red) □ SD prewarn (Grey) ■ SD prewarn (Beige)	IND1_10 = 1 IND1_10 .QualityOK -	Shutdown prewarning Normal Unresolved
9	Output isolation error	■ Output Iso error (Red) □ Output Iso error (Grey) ■ Output Iso error (Beige)	IND1_04 = 1 IND1_04 .QualityOK -	Output isolation error Normal Unresolved
10	Output instance error	■ Output error (Red) □ Output error (Grey) ■ Output error (Beige)	IND1_03 = 1 IND1_03 .QualityOK -	Output instance error Normal Unresolved
11	Readback error	■ Readback error (Red) □ Readback error (Grey) ■ Readbackx error (Beige)	IND1_05 = 1 IND1_05 .QualityOK -	Readback error Normal Unresolved

No	Description	Default Presentation	Condition	Remarks
12	C&E update error	■ CE update error (Red) □ CE update errpr (Grey) ■ CE update error (Beige)	IND1_07 = 1 IND1_07 .QualityOK -	C&E update error Normal Unresolved
13	**Side A / B**	**Side A** (Black) **Side B** (Black) **Side X** (Beige)	INTWB, bit 0 = 1 INTWB .QualityOK -	*Dual controller A* *Dual controller B* *Unresolved*

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

BypassManagementSG

Presentation:



Behavior:

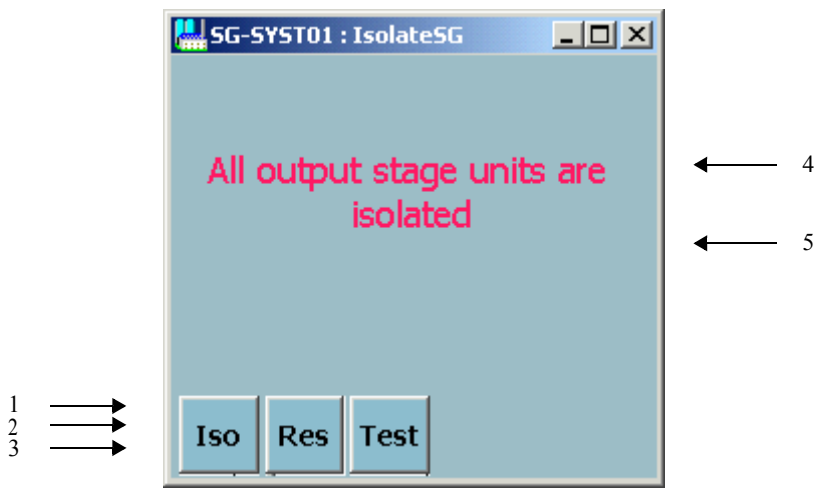
No	Description	Default Presentation	Condition	Remarks
1	Overrides allowed	<nn> Overrides allowed (Green) <nn> Overrides allowed (Grey) <nn> Overrides allowed (Beige)	INTL_PARAM >0 INTL_PARAM .QualityOK -	Number of allowed overrides Unresolved
2	Overrides active	<nn> Overrides active (Cyan) <nn> Overrides active (Grey) <nn> Overrides active (Beige)	INTL_RES_MIN >0 INTL_RES_MIN .QualityOK -	Number of active overrides Unresolved
3	Bypass authorized	■ Bypass authorized (Green) □ Bypass authorized (Grey) ■ Bypass authorized (Beige)	IND2_02 =1 IND2_02 .QualityOK -	Bypass authorized Bypass not authorized Unresolved
4	Blocked object	■ Blocked object (Yellow) □ Blocked object (Grey) ■ Blocked object (Beige)	INTWA, bit 2 = 1 INTWA, bit 2 .QualityOK -	Blocked object No objects blocked Unresolved

No	Description	Default Presentation	Condition	Remarks
5	Override reset warning	■ Override reset warning (Red) □ Override reset warning (Grey) ■ Override reset warning (Beige)	IND1_09 = 1 IND1_09 .QualityOK -	Override reset warning Normal Unresolved
6	Side A / B	Side A (Black) Side B (Black) Side X (Beige)	INTWB, bit 0 = 1 INTWB .QualityOK -	*Dual controller A* *Dual controller B* *Unresolved*

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

IsolateSG

Presentation:



Behavior (Activation):

No	Button Text	Action	Response	Remarks
1	Iso	Isolate outputs	Set MORD_04 Set MORD_10	If Dual controller A If Dual controller B
2	Re	Reset output isolation	Set MORD_05 Set MORD_11	If Dual controller A If Dual controller B
3	Test	Start Isolate Test	Set MORD_08 Set MORD_09	If Dual controller A If Dual controller B

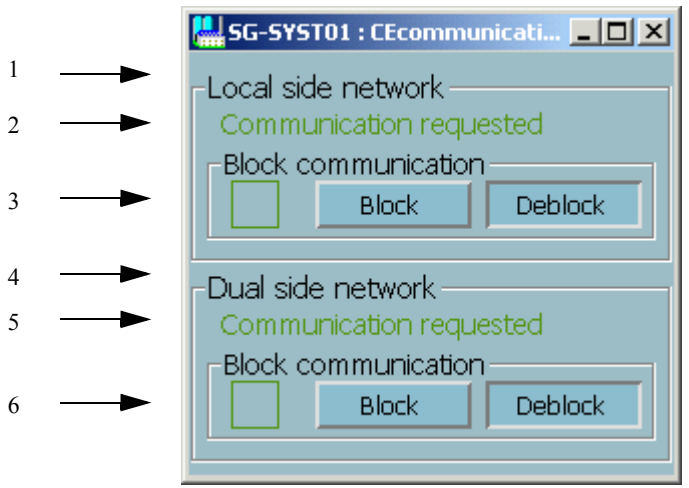
Behavior (Presentation):

No	Description	Default Presentation	Condition	Remarks
4	Isolate commanded	All output stage units are isolated (Red) **(Invisible)**) All output stage units are isolated (Beige)	IND2_00 = 1 IND2_00 .QualityOK -	Isolate commanded Not isloated Unresolved
5	Local control	by local command (red)) Local command activated (red)) Local control (Grey) Local command activated (Beige)	IND2_03 = 1 & IND2_00 = 1 IND2_03 = 1 IND2_03 .QualityOK -	Isolated by local command Local command, not all isolated Not isolated locally Unresolved

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

CEcommunicationSG

Presentation:



Behavior (Activation):

No	Button Text	Action	Response	Remarks
3.2	Block	Block Local communication	Set MORD_12 = 1, Set MORD_14 = 1	If Dual controller A If Dual controller B
3.3	Deblock	Deblock Local communication	Set MORD_12 = 0, Set MORD_14 = 0	If Dual controller A If Dual controller B

No	Button Text	Action	Response	Remarks
6.2	Block	Block Dual communication	Set MORD_13 = 1, Set MORD_15 = 1	If Dual controller A If Dual controller B
6.3	Deblock	Deblock Dual communication	Set MORD_13 = 0, Set MORD_15 = 0	If Dual controller A If Dual controller B

Behavior (Presentation):

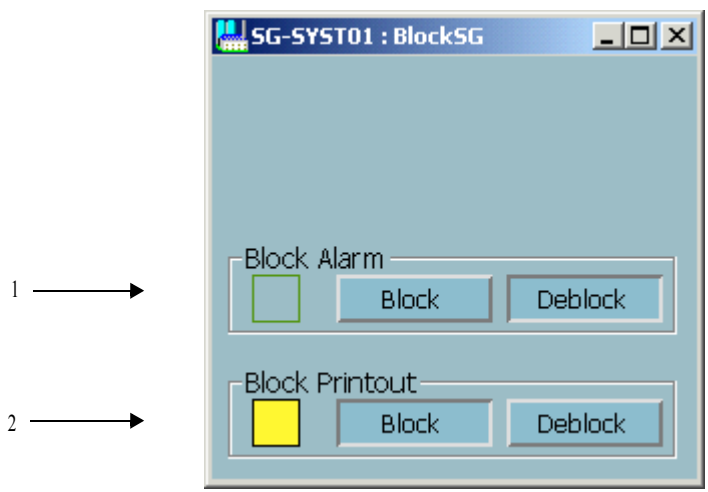
No	Description	Default Presentation	Condition	Remarks
1	Local side	Local side network (Black)	-	Static frame heading
2	Local requested	Communication requested (Green)	IND2_12 = 1	
		Communication NOT requested (Grey)	IND2_12 .QualityOK	
3.1	Block Local indication	Filled square (Yellow) Unfilled square (Green) White cross on red square	IND2_10 = 1 - IND2_10 .QualityBad	Local network *Blocked* Local network not *blocked* Unresolved
4	Dual side	Local side network (Black)	-	Static frame heading

No	Description	Default Presentation	Condition	Remarks
5	Dual requested	Communication requested (Green)	IND2_13 = 1	
		Communication NOT requested (Grey)	IND2_13 .QualityOK	
6.1	Block Dual indication	Filled square (Yellow) Unfilled square (Green) White cross on red square	IND2_11 = 1 - IND2_11 .QualityBad	Dual network *Blocked* Dual network not *blocked* Unresolved

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

BlockSG

Presentation:



Behavior (Activation):

No	Button Text	Action	Response	Remarks
1.1	Block	Set Alarm Block	Set ALARM_BLK = 1	
1.2	Deblock	Reset Alarm Block	Set ALARM_BLK = 0	
2.1	Block	Set Printout Block	Set PR_BLK = 1	
2.2	Deblock	Reset Printout Block	Set PR_BLK = 0	

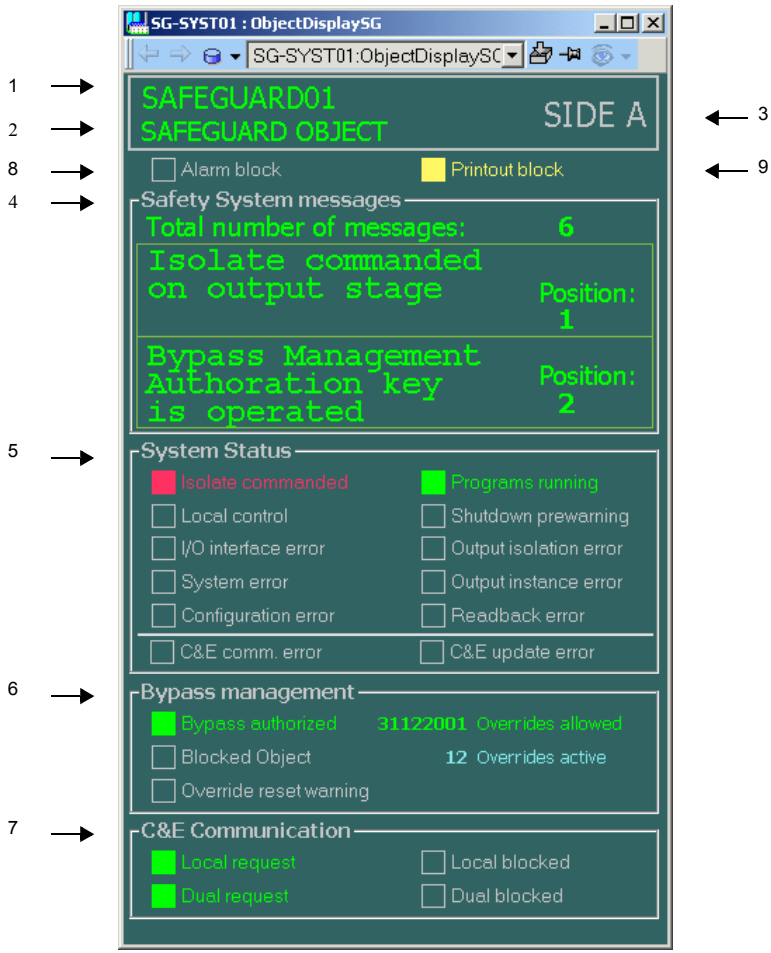
Behavior (Presentation):

No	Description	Default Presentation	Condition	Remarks
1.1	Block Alarm indication	Filled square (Yellow) Unfilled square (Green) White cross on red square	ALARM_BLK = 1 - ALARM_BLK .QualityBad	**Alarm** *Blocked* **Alarm** not *blocked* Unresolved
2.1	Block Printout indication	Filled square (Yellow) Unfilled square (Green) White cross on red square	PR_BLK = 1 - PR_BLK .QualityBad	**Printout** *Blocked* **Printout** not *blocked* Unresolved

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

ObjectDisplaySG

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Lock Frame	White	SELECTED = 1	Object select frame
		Dotted Yellow	AL_BLK =1	Alarm blocked
		Grey	-	
2	Header		NAME and DESCR	Object Name and Description
		Red flashing	AU_IND = 1	Unacknowledged
		Red	IND1_08 = 1 or IND1_09 = 1 or IND1_10 = 1	Any Error (Config, I /O, Output, C&E) or Override reset warning or Shutdown warning.
		Green	INTWB_00 .QualityOK	Normal (name.name)
		Beige	-	Unresolved
3	Side A / B	SIDE A (Grey) SIDE B (Grey) SIDE X (Beige)	INTWB_00 = 1 INTWB_00 .QualityOK -	*Dual controller A* *Dual controller B* *Unresolved*
4	Safety System Messages	SAFETY SYSTEM MESSAGES (Grey)		Static text
4.1	Total	Total number of messages: (Green)	-	Static texts
4.2	Total No. of Messages	(number) (Grey)	INTL_RES	Number of messages

No	Description	Default Presentation	Condition	Remarks
4.3	Message text line 1	(I2_09TXT) (Green)	I2_09TXT	Text from MMCX database
4.4	Message text line 2	(I2_10TXT) (Green)	I2_10TXT	Text from MMCX database
4.5	Message text line 3	(I2_11TXT) (Green)	I2_11TXT	Text from MMCX database
4.6	Message text line 4	(I2_12TXT) (Green)	I2_12TXT	Text from MMCX database
4.7	Message text line 5	(I2_13TXT) (Green)	I2_13TXT	Text from MMCX database
4.8	Message text line 6	(I2_14TXT) (Green)	I2_14TXT	Text from MMCX database
4.9	Position	Position: (Green))		Static texts
4.10	Message position	(number) (Grey)	INTL_RES_MAX	Upper message position no.
4.11	Acknowledge mark	(Remove-able) (Green)	INTWB_01 = 1	Remove -able message
4.12	Next Position	Position: (Green))		Static texts
4.13	Next Message position	(number) (Grey)	IRESMAX +1 (if < I_RES)	Lower message position no.
5	System Status	System Status		Static text
5.1	Programs Running	■ Programs running (Green) □ Programs running (Grey)	INTWB, bit3 = 1 & bit5 =0 INTWB_00 .QualityOK -	Start-up finished & Prog. Running All AMPL Programs not running

No	Description	Default Presentation	Condition	Remarks
5.2	Isolate commanded	■ Isolate commanded (Red) □ Isolate commanded (Grey)	IND2_00 = 1 IND2_00 .QualityOK -	Isolate commanded Not isloated
5.3	Local control	■ Local control (Red) □ Local control (Grey)	IND2_03 = 1 IND2_03 .QualityOK -	Local control (Isolated locally) Not isolated locally
5.4	Shutdown prewarning	■ Shutdown prewarning (Red) □ Shutdown prewarning (Grey)	IND1_10 = 1 IND1_10 .QualityOK -	Shutdown prewarning Normal
5.5	System error	■ System error (Red) □ System error (Grey)	IND1_00 = 1 IND1_00 .QualityOK -	System error Normal
5.6	Configuration error	■ Configuration error (Red) □ Configuration error (Grey)	IND1_01 = 1 IND1_01 .QualityOK -	Configuration error Normal
5.7	I/O interface error	■ I/O interface error (Red) □ I/O interface error (Grey)	IND1_02 = 1 IND1_02 .QualityOK -	I/O interface error Normal

No	Description	Default Presentation	Condition	Remarks
5.8	Output instance error	■ Output instance error (Red) □ Output instance error (Grey)	IND1_03 = 1 IND1_03 .QualityOK -	Output instance error Normal
5.9	Output isolation error	■ Output isolation error (Red) □ Output isolation error (Grey)	IND1_04 = 1 IND1_04 .QualityOK -	Output isolation error Normal
5.10	Readback error	■ Readback error (Red) □ Readback error (Grey)	IND1_05 = 1 IND1_05 .QualityOK -	Readback error Normal
5.11	C&E comm. error	■ C&E comm. error (Red) □ C&E comm. error (Grey)	IND1_06 = 1 IND1_06 .QualityOK -	C&E comm. error Normal
5.12	C&E update error	■ C&E update error (Red) □ C&E updatex error (Grey)	IND1_07 = 1 IND1_07 .QualityOK -	C&E update error Normal
6	Bypass management	Bypass management:		Static text

No	Description	Default Presentation	Condition	Remarks
6.1	Overrides allowed	<nn> Overrides allowed (Green) <nn> Overrides allowed (Grey)	INTL_PARAM >0 INTL_PARAM .QualityOK -	Number of allowed overrides
6.2	Overrides active	<nn> Overrides active (Cyan) <nn> Overrides active (Grey)	INTL_RES_MIN >0 INTL_RES_MIN .QualityOK -	Number of active overrides
6.3	Bypass authorized	■ Bypass authorized (Green) □ Bypass authorized (Grey)	IND2_02 =1 IND2_02 .QualityOK -	Bypass authorized Bypass not authorized
6.4	Blocked object	■ Blocked object (Yellow) □ Blocked object (Grey)	INTWB_02 = 1 INTWB_02 .QualityOK -	Blocked object No objects blocked
6.5	Override reset warning	■ Override reset warning (Red) □ Override reset warning (Grey)	IND1_09 = 1 IND1_09 .QualityOK -	Override reset warning Normal
7	C&E Communication	C&E Communication		Static text
7.1	Local request	■ Local request (Green) □ Local request (Grey)	IND2_12 =1 IND2_12 .QualityOK -	C&E Local request configured C&E Local request not configured

No	Description	Default Presentation	Condition	Remarks
7.2	Local blocked	■ Local blocked (Yellow) □ Local blocked (Grey)	IND2_10 = 1 IND2_10 .QualityOK -	C&E Local communication blocked Normal
7.3	Dual request	■ Dual request (Green) □ Dual request (Grey)	IND2_13 = 1 IND2_13 .QualityOK -	C&E Dual request configured C&E Dual request not configured
7.4	Dual blocked	■ Dual blocked (Yellow) □ Dual blocked (Grey)	IND2_11 = 1 IND2_11 .QualityOK -	C&E Dual communication blocked Normal
8	Alarm block	■ Alarm block (Yellow) □ Alarm block (Grey)	ALARM_BLK = 1 ALARM_BLK .QualityOK -	Alarm block Normal status
9	Printout block	■ Printout block (Yellow) □ Printout block (Grey)	PR_BLK = 1 PR_BLK .QualityOK -	Printout block Normal

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

NameSG01

Presentation:

Name presentation of Safeguard Status object, MMCX with reftype 38, defined in the Safeguard Configuration file.

Behavior:

No	Description	Default Presentation	Condition	Remark
1	Frame	White	SELECTED =1	Selected
		Dotted Yellow	AL_BLK =1	Alarm blocked
		Invisible	INTWB_00 .QualityOK	Normal
		Beige	-	Unresolved
2.1	Name Text	Name:Name		Object Name
2.2	Name Color	Red flash	AU_IND =1	Any unacknowledged alarm
		Red	IND1_08 = 1 or IND1_09 = 1 or IND1_10 = 1	I /O Error or Override reset warning or Shutdown warning.
		Green	-	Normal status

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameter	Affect	Option (bold is default)	Remarks
BackgroundColor	Background	Transparent, any	

NameSG02

Presentation:

Name and controller ‘side’ presentation of Safeguard object, MMCX with reftype 38, defined in the Safeguard Configuration file.

Behavior**:**

No	Description	Default Presentation	Condition	Remark
1	Frame	White	SELECTED =1	Selected
		Dotted Yellow	AL_BLK =1	Alarm blocked
		Invisible	INTWB_00 .QualityOK	Normal
		Beige	-	Unresolved
2	Side A / B	SIDE A: (Black) SIDE B: (Black) SIDE X (Beige)	INTWB, bit 0 = 1 INTWB_00 .QualityOK -	*Dual controller A* *Dual controller B* *Unresolved*
3.1	Name Text	Name:Name		Object Name

No	Description	Default Presentation	Condition	Remark
3.2	Name Color	Red flash	AU_IND =1	Any unacknowledged alarm
		Red	IND1_08 = 1 or IND1_09 = 1 or IND1_10 = 1	I /O Error or Override reset warning or Shutdown warning.
		Green	-	Normal status

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

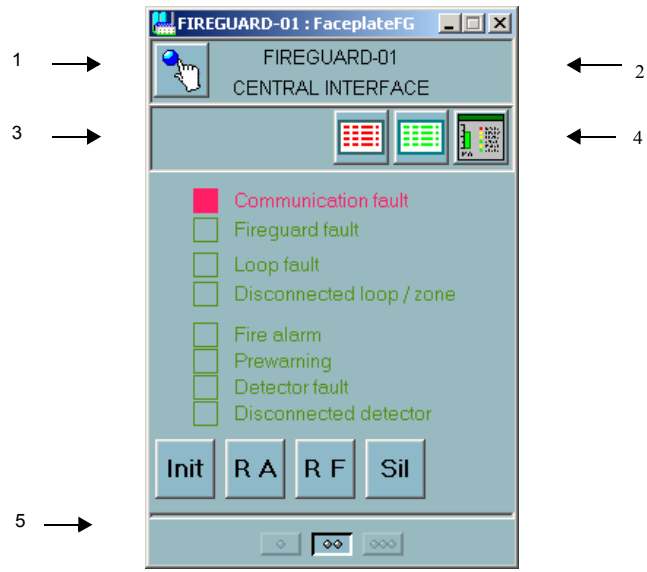
Parameter	Affect	Option (bold is default)	Remarks
BackgroundColor	Background	Transparent, any	

Fireguard Object (GROUP)

FaceplateFG

Presentation:

Operator dialog for Fireguard central communication object, MMCX with reftype 39.



Behavior:

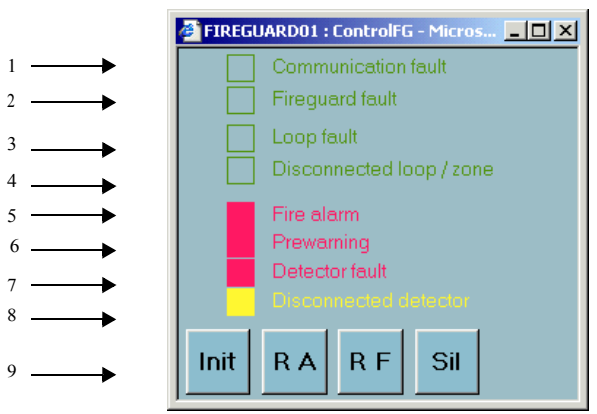
No	Description	Default Presentation	Condition	Remarks
1	Lock Button			
2	Name and Description			
3	Status Field			

No	Description	Default Presentation	Condition	Remarks
3.1	Print Blk	P Yellow	PRINT_BLK = 1	position 0, 1, 0
4	Aspect links	Alarm List		position 0, 4, 0
		Event List		position 0, 5, 0
		Object Display		position 0, 6, 0
5	Buttons			(None, ref. Faceplate elements)

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

ControlFG

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Communication Fault	■ Communication fault (Red)	IND2_00 = 1	Communication fault
		□ Communication fault (Green)	IND2_00 .QualityOK	Normal status
		□ Communication fault (Beige)	-	Unresolved
2	Fireguard Fault	■ Fireguard fault (Red)	IND1_00 = 1 Or IND1_01 = 1 Or IND1_02 = 1 Or IND1_04 = 1 Or IND1_05 = 1	Fireguard Fault
		□ Fireguard fault (Green)	IND1_00 .QualityOK	Normal status
		□ Fireguard fault (Beige)	-	Unresolved
3	Loop Fault	■ Loop fault (Red)	IND1_10 = 1 Or IND1_11 = 1 Or IND1_12 = 1 Or IND1_13 = 1	Loop Fault
		□ Loop fault (Green)	IND1_10 .QualityOK	Normal status
		□ Loop fault (Beige)	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
4	Disconnected loop / zone	■ Disconnected loop/zone (Yellow)	IND1_06 = 1 Or IND1_07 = 1 Or IND1_08 = 1 Or IND1_09 = 1 Or IND2_01 = 1	Disconnected loop or Disconnected zone
		□ Disconnected loop/zone (Green)	IND1_06 .QualityOK	Normal status
		□ Disconnected loop/zone (Beige)	-	Unresolved
5	Fire Alarm	■ Fire Alarm (Red)	IND1_14 = 1 Or IND1_15 = 1 Or IND2_02 = 1 Or IND2_03 = 1	Fire Alarm
		□ Fire Alarm (Green)	IND1_14 .QualityOK	Normal status
		□ Fire Alarm (Beige)	-	Unresolved
6	Prewarning	■ Prewarning (Red)	IND2_04 = 1 Or IND2_05 = 1 Or IND2_06 = 1 Or IND2_07 = 1	Prewarning
		□ Prewarning (Green)	IND2_04 .QualityOK	Normal status
		□ Prewarning (Beige)	-	Unresolved

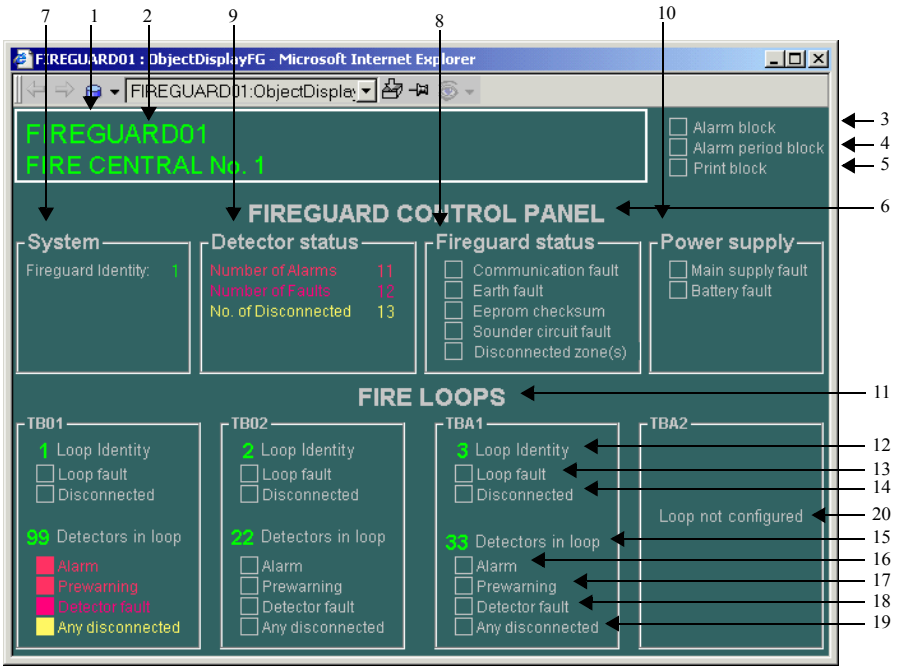
No	Description	Default Presentation	Condition	Remarks
7	Detector fault	■ Detector fault (Red)	IND2_08 = 1 Or IND2_09 = 1 Or IND2_10 = 1 Or IND2_11 = 1	Detector fault
		□ Detector fault (Green)	IND2_08 .QualityOK	Normal status
		□ Detector fault (Beige)	-	Unresolved
8	Disconnected detector	■ Disconnected detector (Yellow)	IND2_12 = 1 Or IND2_13 = 1 Or IND2_14 = 1 Or IND2_15 = 1	Disconnected detector
		□ Disconnected detector (Green)	IND2_08 .QualityOK	Normal status
		□ Disconnected detector (Beige)	-	Unresolved
9	Command buttons			
9.1	Initialize	Initialize Fireguard	Set MORD_00 = 1	Initialize Fireguard
9.2	Reset Alarm	Reset Alarm	Set MORD_01 = 1	Reset Fire Alarm
9.3	Reset Fault	Reset Fault	Set MORD_02 = 1	Reset Fault & Prewarning
9.4	Silence	Silence Sounder	Set MORD_03 = 1	Silence Sounder

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Do not activate the “Initialize Fireguard” command during normal operation. This command will lead to normalization of all FD (Fire Detector) objects while the communication is initialized. Use only if the communication does not start or in re-configuration situations.

Object Display for Fireguard

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Lock Frame	White	SELECTED = 1	Object select frame
		Grey	SELECTED = 0	
2	Header		NAME and DESCR	Name and Description
		Red flashing	AU_IND = 1	Unacknowledge d
		Yellow	AL_BLK=1 or AL_PERIOD_BLK=1	Comm. object blocked
		Yellow	IND1_06 = 1 or IND1_07= 1 or IND1_08 = 1 or IND1_09= 1 or IND2_01	Disconnected loop / zone
		Red	IND1_00 = 1 or IND1_01 = 1 or IND1_02 = 1 or IND1_04 = 1 or IND1_05 = 1 or IND1_10 = 1 or IND1_11 = 1 or IND1_12 = 1 or IND1_13 = 1 or IND2_00 = 1	Disturbance or Error
		Green	Name .QualityOK	Normal (name.name)
		Beige	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
3	Alarm block	■ Alarm block (Yellow)	AL_BLK = 1	Alarm block
		□ Alarm block (Grey)	-	Normal status
4	Alarm period block	■ Alarm period block (Yellow)	AL_PE_BLK = 1	Alarm period block
		□ Alarm period block (Grey)	-	Normal status
5	Print block	■ Print block (Yellow)	PRINT_BLK = 1	Print block
		□ Print block (Grey)	-	Normal status
6	Fireguard Control panel	FIREGUARD CONTROL PANEL (Grey)		*Static text*
7	System	System (Grey)		*Static text*
7.1	Fireguard identity	Fireguard identity <INTW_A> (Green)	INTW_A .QualityOK	Identity number
		Fireguard identity (Beige)	-	Unresolved
8	Fireguard status	Fireguard status (Grey)		*Static text*
8.1	Communication fault	■ Communication fault (Red)	IND2_00 = 1	Communication fault
		□ Communication fault (Grey)	IND2_00 .QualityOK	Normal status

No	Description	Default Presentation	Condition	Remarks
8.2	Earth fault	■ Earth fault (Red)	IND1_00 = 1	Earth fault
		□ Earth fault (Grey)	-	Normal status
8.3	Eeprom checksum fault	■ Eeprom checksum fault (Red)	IND1_01 = 1	Eeprom checksum fault
		□ Eeprom checksum fault (Grey)	-	Normal status
8.4	Sounder circuit fault	■ Sounder circuit fault (Red)	IND1_02 = 1	Eeprom checksum fault
		□ Sounder circuit fault (Grey)	-	Normal status
8.5	Disconnected zone(s)	■ Disconnected zones(s) (Yellow)	IND2_01 = 1	Eeprom checksum fault
		□ Disconnected zones(s) (Grey)	-	Normal status
9	Detector status	Detector status (Grey)		*Static text*
9.1	Number of Alarms	Number of Alarms <REAL_RES> (Red)	REAL_RES > 0	Alarms
		Number of Alarms <REAL_RES> (Grey)	REAL_RES .QualityOK	Normal
		Number of Alarms <REAL_RES> (Beige)	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
9.2	Number of Faults	Number of Faults <INTL_RES> (Red)	INTL_RES > 0	Faults
		Number of Faults <INTL_RES> (Grey)	INTL_RES .QualityOK	Normal
		Number of Faults <INTL_RES> (Beige)	-	Unresolved
9.3	Number of Disconnected	No. of Disconnected <REAL_A> (Yellow)	REAL_A > 0	Disconnected
		No. of Disconnected <REAL_A> (Grey)	REAL_A .QualityOK	Normal
		No. of Disconnected <REAL_A> (Beige)	-	Unresolved
10	Power supply	Power supply (Grey)		*Static text*
10.1	Main supply fault	■ Main supply fault (Red)	IND1_04 = 1	Main supply fault
		□ Main supply fault (Grey)	-	Normal status
10.2	Battery fault	■ Battery fault (Red)	IND1_05 = 1	Battery fault
		□ Battery fault (Grey)	-	Normal status

No	Description	Default Presentation	Condition	Remarks
11	Fire loops	FIRE LOOPS (Grey)		*Static text*
12.1	Loop TB01 identity	<nn> Loop identity (Green)	INTL_RES_MAX .QualityOK	<I_RES_MAX, byte 4>
12.2	Loop TB02 identity	<nn> Loop identity (Green)	INTL_RES_MAX .QualityOK	<I_RES_MAX, byte 3>
12.3	Loop TBA1 identity	<nn> Loop identity (Green)	INTL_RES_MAX .QualityOK	<I_RES_MAX, byte 2>
12.4	Loop TBA2 identity	<nn> Loop identity (Green)	INTL_RES_MAX .QualityOK	<I_RES_MAX, byte 1>
13.1	Loop1 fault	■ Loop fault (Red)	IND1_10 = 1	Loop 1 fault
		□ Loop fault (Grey)	-	Normal status
13.2	Loop 2 fault	■ Loop fault (Red)	IND1_11 = 1	Loop 2 fault
		□ Loop fault (Grey)	-	Normal status
13.3	Loop 3 fault	■ Loop fault (Red)	IND1_12 = 1	Loop 3 fault
		□ Loop fault (Grey)	-	Normal status
13.4	Loop 4 fault	■ Loop fault (Red)	IND1_13 = 1	Loop 4 fault
		□ Loop fault (Grey)	-	Normal status

No	Description	Default Presentation	Condition	Remarks
14.1	Loop1 disconnected	■ Disconnected (Red)	IND1_06 = 1	Loop 1 disconnected
		□ Disconnected (Grey)	-	Normal status
14.2	Loop 2 disconnected	■ Disconnected (Red)	IND1_07 = 1	Loop 2 disconnected
		□ Disconnected (Grey)	-	Normal status
14.3	Loop 3 disconnected	■ Disconnected (Red)	IND1_08 = 1	Loop 3 disconnected
		□ Disconnected (Grey)	-	Normal status
14.4	Loop 4 disconnected	■ Disconnected (Red)	IND1_09 = 1	Loop 4 disconnected
		□ Disconnected (Grey)	-	Normal status
15.1	Detectors in Loop 1	<REAL_B> Detectors in loop (Green)	REAL_B .QualityOK	Detectors
15.2	Detectors in Loop 2	<REAL_C> Detectors in loop (Green)	REAL_C .QualityOK	Detectors
15.3	Detectors in Loop 3	<REAL_D> Detectors in loop (Green)	REAL_D .QualityOK	Detectors
15.4	Detectors in Loop 4	<REAL_E> Detectors in loop (Green)	REAL_E .QualityOK	Detectors

No	Description	Default Presentation	Condition	Remarks
16.1	Loop1 Alarm	■ Alarm (Red)	IND1_14 = 1	Alarm
		□ Alarm (Grey)	-	Normal status
16.2	Loop 2 Alarm	■ Alarm (Red)	IND1_15 = 1	Alarm
		□ Alarm (Grey)	-	Normal status
16.3	Loop 3 Alarm	■ Alarm (Red)	IND2_02 = 1	Alarm
		□ Alarm (Grey)	-	Normal status
16.4	Loop 4 Alarm	■ Alarm (Red)	IND2_03 = 1	Alarm
		□ Alarm (Grey)	-	Normal status
17.1	Loop1 Prewarn	■ Prewarn (Red)	IND2_04 = 1	Prewarn
		□ Prewarn (Grey)	-	Normal status
17.2	Loop 2 Prewarn	■ Prewarn (Red)	IND2_05 = 1	Prewarn
		□ Prewarn (Grey)	-	Normal status
17.3	Loop 3 Prewarn	■ Prewarn (Red)	IND2_06 = 1	Prewarn
		□ Prewarn (Grey)	-	Normal status
17.4	Loop 4 Prewarn	■ Prewarn (Red)	IND2_07 = 1	Prewarn
		□ Prewarn (Grey)	-	Normal status
18.1	Loop1 Detector fault	■ Detector fault (Red)	IND2_08 = 1	Detector fault
		□ Detector fault (Grey)	-	Normal status

No	Description	Default Presentation	Condition	Remarks
18.2	Loop 2 Detector fault	■ Detector fault (Red)	IND2_09 = 1	Detector fault
		□ Detector fault (Grey)	-	Normal status
18.3	Loop 3 Detector fault	■ Detector fault (Red)	IND2_10 = 1	Detector fault
		□ Detector fault (Grey)	-	Normal status
18.4	Loop 4 Detector fault	■ Detector fault (Red)	IND2_11 = 1	Detector fault
		□ Detector fault (Grey)	-	Normal status
19.1	Loop1 Det. disconnected	■ Any disconnected (Yellow)	IND2_12 = 1	Detector disconnected
		□ Any disconnected (Grey)	-	Normal status
19.2	Loop 2 Det. disconnected	■ Any disconnected (Yellow)	IND2_13 = 1	Detector disconnected
		□ Any disconnected (Grey)	-	Normal status
19.3	Loop 3 Det. disconnected	■ Any disconnected (Yellow)	IND2_14 = 1	Detector disconnected
		□ Any disconnected (Grey)	-	Normal status

No	Description	Default Presentation	Condition	Remarks
19.4	Loop 4 Det. disconnected	■ Any disconnected (Yellow)	IND2_15 = 1	Detector disconnected
		□ Any disconnected (Grey)	-	Normal status
20.1	Loop 1 not configured	(not visible)	(I_RES_MAX, byte 4) > 0	*Loop id > 0*
20.2	Loop 2 not configured	(not visible)	(I_RES_MAX, byte 3) > 0	*Loop id > 0*
20.3	Loop 3 not configured	(not visible)	(I_RES_MAX, byte 2) > 0	*Loop id > 0*
		Loop not configured (Grey)	-	*Other Loop ind. hidden*
20.4	Loop 4 not configured	(not visible)	(I_RES_MAX, byte 1) > 0	*Loop id > 0*
		Loop not configured (Grey)	-	*Other Loop ind. hidden*

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

NameFG01

Presentation:

Presentation of Fireguard central communication object.

Behavior:

No	Description	Default Presentation	Condition	Remark
1	Frame	White	SELECTED =1	Selected
		Dotted Yellow	AL_BLK =1	Alarm blocked
		Invisible	IND1_00 .QualityOK	Normal
		Beige	-	Unresolved
2	Name Color	Red flash	AU_IND =1	Unacknowledged Alarm
		Yellow	IND1_06 = 1 Or IND1_07 = 1 Or IND1_08 = 1 Or IND1_09 = 1 Or IND2_01 = 1	Disconnected loop
		Red	IND1_00 = 1 Or IND1_01 = 1 Or IND1_02 = 1 Or IND1_04 = 1 Or IND1_05 = 1	Fireguard fault
		Red	IND1_10 = 1 Or IND1_11 = 1 Or IND1_12 = 1 Or IND1_13 = 1	Loop fault
		Red	IND2_00	Communication fault
		Green	IND1_00 .QualityOK	Normal status
		Beige	-	Unresolved (name: name)

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

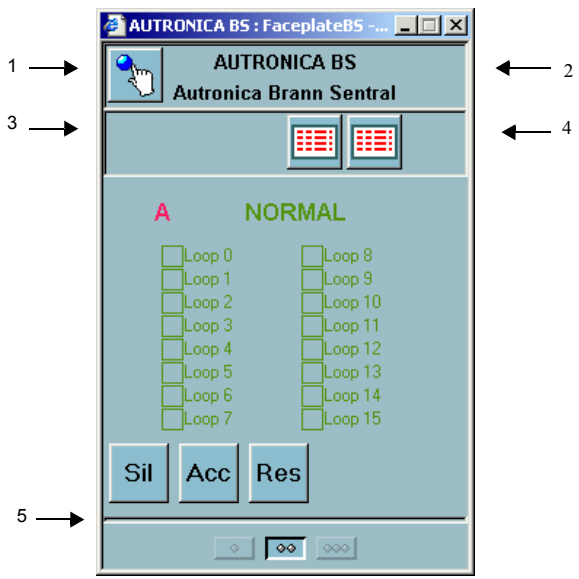
Parameter	Affect	Option (bold is default)	Remarks
BackgroundColor	Background	Transparent, any	

Autronica Object (GROUP)

FaceplateBS

Presentation:

Operator dialog for Autronica BS central communication object, MMCX with reftype 39.



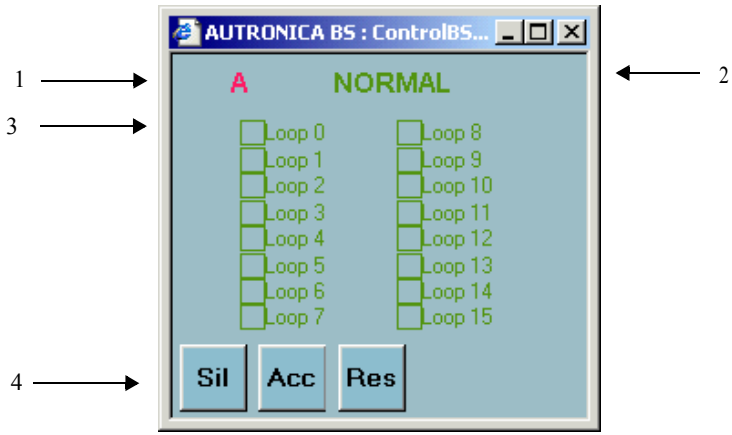
Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Lock Button			
2	Name and Description			
3	Status Field			
3.4	Print Blk	P Yellow	PRINT_BLK = 1	
4	Aspect links	Alarm List	position 0, 0, 9	
		Event List	position 0, 0, 10	
		Object Display	position 5, 5, 11	
		Trend Display	position 6, 6, 12	
5	Buttons			(None, ref. Faceplate elements)

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

ControlBS

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Detector status	E (red)	BOOL_H = 1	Detector Error
		A (red)	BOOL_G = 1	Detector Alarm
		P (red)	BOOL_F = 1	Detector Prewarning
		Invisible	NAME .QualityOK	Normal status
		A (Beige)	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
2	BS-30 Status	Error (red)	BOOL_E = 1	BS-30 Error
		Warning (red)	BOOL_D = 1	BS-30 Warning
		Normal (Green)	NAME .QualityOK	Normal status
		Normal (Beige)	-	Unresolved
3	Loop Status	■ Loop 0 (Red)	IND1_01 = 1	Loop Error
3.0	Loop 0 Status	■ Loop 0 (Red)	IND1_01 = 1	Loop Error
		□ Loop 0 (Green)	IND1_01 .QualityOK	Normal status
		□ Loop 0 (Beige)	-	Unresolved
3.1		■ Loop 1 (Red)	IND1_02 = 1	Loop Error
		□ Loop 1 (Green)	IND1_02 .QualityOK	Normal status
		□ Loop 1 (Beige)	-	Unresolved
3.2		■ Loop 2 (Red)	IND1_03 = 1	Loop Error
		□ Loop 2 (Green)	IND1_03 .QualityOK	Normal status
		□ Loop 2 (Beige)	-	Unresolved
3.3		■ Loop 3 (Red)	IND1_04 = 1	Loop Error
		□ Loop 3 (Green)	IND1_04 .QualityOK	Normal status
		□ Loop 3 (Beige)	-	Unresolved
3.4		■ Loop 4 (Red)	IND1_05 = 1	Loop Error
		□ Loop 4 (Green)	IND1_05 .QualityOK	Normal status
		□ Loop 4 (Beige)	-	Unresolved
3.5		■ Loop 5 (Red)	IND1_06 = 1	Loop Error
		□ Loop 5 (Green)	IND1_06 .QualityOK	Normal status
		□ Loop 5 (Beige)	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
3.6		■ Loop 6 (Red)	IND1_07 = 1	Loop Error
		□ Loop 6 (Green)	IND1_07 .QualityOK	Normal status
		□ Loop 6 (Beige)	-	Unresolved
3.7		■ Loop 7 (Red)	IND1_08 = 1	Loop Error
		□ Loop 7 (Green)	IND1_08 .QualityOK	Normal status
		□ Loop 7 (Beige)	-	Unresolved
3.8		■ Loop 8 (Red)	IND1_09 = 1	Loop Error
		□ Loop 8 (Green)	IND1_09 .QualityOK	Normal status
		□ Loop 8 (Beige)	-	Unresolved
3.9		■ Loop 9 (Red)	IND1_10 = 1	Loop Error
		□ Loop 9 (Green)	IND1_10 .QualityOK	Normal status
		□ Loop9 (Beige)	-	Unresolved
3.10		■ Loop 10 (Red)	IND1_12 = 1	Loop Error
		□ Loop 10 (Green)	IND1_12 .QualityOK	Normal status
		□ Loop 10 (Beige)	-	Unresolved
3.11		■ Loop 11 (Red)	IND1_13 = 1	Loop Error
		□ Loop 11 (Green)	IND1_13 .QualityOK	Normal status
		□ Loop 11 (Beige)	-	Unresolved
3.12		■ Loop 12 (Red)	IND1_14 = 1	Loop Error
		□ Loop 12 (Green)	IND1_14 .QualityOK	Normal status
		□ Loop12 (Beige)	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
3.13		■ Loop 13 (Red)	IND1_15 = 1	Loop Error
		□ Loop 13 (Green)	IND1_15 .QualityOK	Normal status
		□ Loop13 (Beige)	-	Unresolved
4.14		■ Loop 14 (Red)	IND2_00 = 1	Loop Error
		□ Loop 14(Green)	IND2_00 .QualityOK	Normal status
		□ Loop14 (Beige)	-	Unresolved
3.15		■ Loop 15 (Red)	IND2_01 = 1	Loop Error
		□ Loop 15 (Green)	IND2_01 .QualityOK	Normal status
		□ Loop15 (Beige)	-	Unresolved
5	Command buttons			
5.1	Silence	Silence	Set MORD_00 = 1	Silence Sounder
5.1	Accept	Accept	Set MORD_01 = 1	Accept alarms
5.2	Reset Alarm	Reset	Set MORD_02 = 1	Reset Autronica BS central

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

NameBS01

Presentation:

Presentation of Autonica BS central communication object.

Behavior:

No	Description	Default Presentation	Condition	Remark
1	Frame	White	SELECTED =1	Selected
		Dotted Yellow	AL_BLK =1	Alarm blocked
		Invisible	IND1_00 .QualityOK	Normal
		Beige	-	Unresolved
2	Name Color	Red flash	AU_IND =1	Unacknowledged Alarm
		Red	BOOL_E = 1 or BOOL_D = 1	BS-30 Error or Warning
		Red	BOOL_H = 1 or BOOL_G = 1 or BOOL_F = 1	Detector Error or Alarm or Prewarning
		Red	IND1_01 = 1 or IND1_02 or IND1_03 or IND1_04 = 1 or IND1_05 or IND1_06 or IND1_07 = 1 or IND1_08 or IND1_09 or IND1_10 = 1 or IND1_12 or IND1_13 or IND1_14 = 1 or IND1_15 or IND2_00 or IND2_01 = 1	Loop Error (Loop 0 to Loop 15)
		Green	IND1_00 .QualityOK	Normal status
		Beige	-	Unresolved (name: name)

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

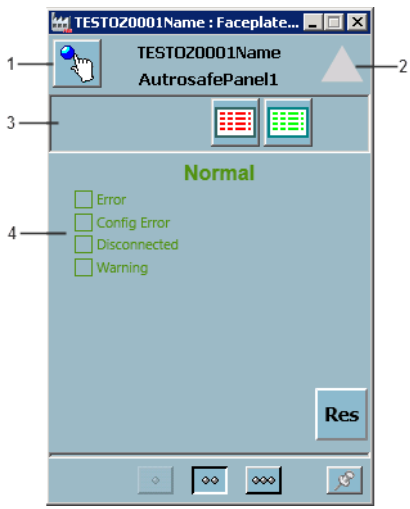
Parameter	Affect	Option (bold is default)	Remarks
BackgroundColor	Background	Transparent, any	

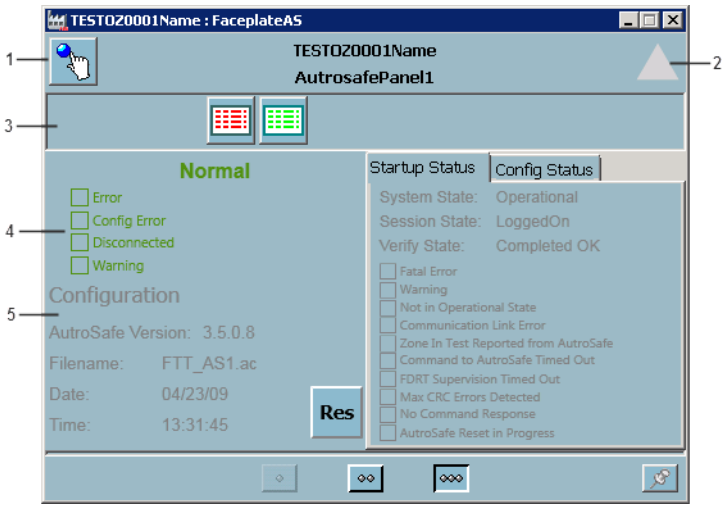
AutroSafe Object (GROUP)

FaceplateAS

Presentation:

Operator dialog for AutroSafe central communication object, MMCX with reftype 39.





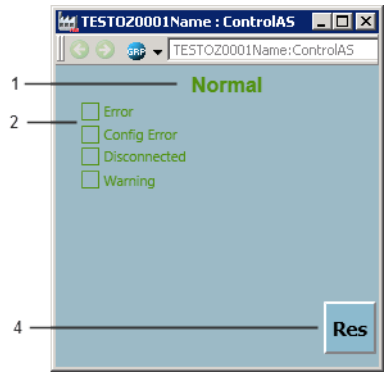
Behavior:

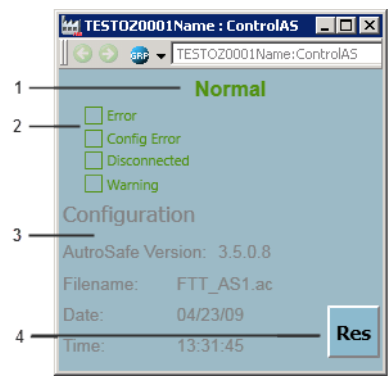
No	Description	Default Presentation	Condition	Remarks
1	Lock Button			
2	Name and Description			
3	Aspect links	Alarm List	position 0, 0, 4	
		Event List	position 0, 0, 5	
4 and 5	Status and Configuration			(Ref. Faceplate element ControlAS)

The conditions are in priority order.

ControlAS

Presentation:





Behavior:

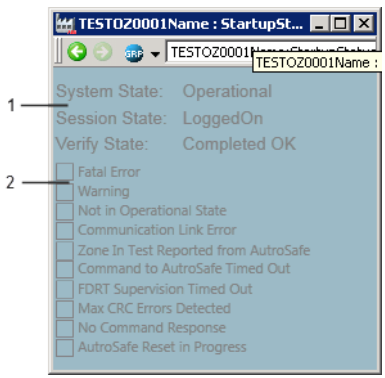
No	Description	Default Presentation	Condition	Remarks
1	AutroSafe Status	Error (red)	BOOL_E = 1 or IND2_02=1 or IND2_05=1 or IND2_06=1 or IND2_07=1 or IND2_10=1 or AU_IND=1	AutroSafe Error
		Warning (red)	BOOL_D = 1 or IND2_00=1	AutroSafe Warning
		Normal (Green)	NAME .QualityOK	Normal status
2.1	Error Indication	Red	BOOL_E = 1	Error flag
	ErrorText	ERROR		Text behind the indication
		red	BOOL_E = 1	
		Normal (Green)		
2.2	Config Error			Config Error flags
	Config ErrorText	Config Error		Text behind the indication
		Red	IND2_02=1 or IND2_05=1 or IND2_06=1 or IND2_07=1 or IND2_10=1	
		Normal (Green)		

No	Description	Default Presentation	Condition	Remarks
2.3	Disconnected			Disconnected flags
	Disconnected Text	Disconnected		Text behind the indication
		Red	IND2_00=1	
		Normal (Green)		
2.4	Warning Indication			Warnings flags
	Warning Text	Warning		Text behind the indication
		Red	BOOL_D=1	
		Normal (Green)		
3	Configuration			
3.1	AutroSafe Version			Static text
	AutroSafe Version Text		IND2_10_PRES_TEXT	
3.2	Filename			Static text
	Config Filename Text		IND2_11_PRES_TEXT	
3.3	Date			Static text
	Config DateText		IND2_12_PRES_TEXT	
3.4	Time			Static text
	Config Time Text		IND2_13_PRES_TEXT	

No	Description	Default Presentation	Condition	Remarks
4	Command buttons			
4.1	Reset Alarm	Reset	Set MORD_02 = 1	Reset AutroSafe Fire Panel

StartupStatusAS

Presentation:



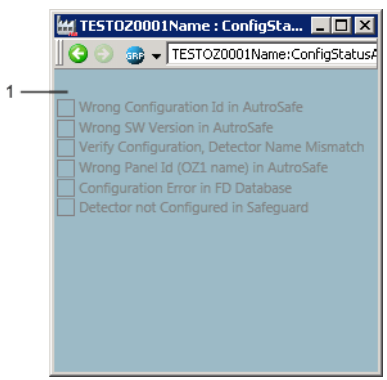
Behavior:

No	Description	Default Presentation	Condition	Remarks
1	System State	Starting Up	Starting Up Offline Verifying Configuration Operational	Text showing current system state.
	Session State	None	None Disconnected Synchronizing Sequence Number Logging Off from AutroSafe Logging On to AutroSafe Logged On	Text showing current system state.
	Verify State	None	None Checking Configuration Info Verifying Detectors Completed OK Failed	Text showing current system state.
2	Indications	Gray		Error Indications
2.1	Fatal Error	Gray	Red if IND1_00=1	
2.2	Warning	Gray	Red if IND1_11=1	
2.3	Not in Operational State	Gray	Red if IND2_00=1	
2.4	Communication Link Error	Gray	Red if IND2_01=1	

No	Description	Default Presentation	Condition	Remarks
2.5	Zone In Test Reported from AutroSafe	Gray	Red if IND2_03=1	
2.6	Command to AutroSafe Timed Out	Gray	Red if IND2_04=1	
2.7	FDRT Supervision Timed Out	Gray	Red if IND2_08=1	
2.8	Max CRC Errors Detected	Gray	Red if IND2_09=1	
2.9	No Command Response	Gray	Red if IND2_12=1	
2.10	AutroSafe Reset in Progress	Gray	Red if IND2_15=1	

ConfigStatusAS

Presentation:



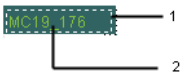
Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Indications	Gray		Config Indications
1.1	Wrong Configuration Id in AutroSafe	Gray	Red if IND2_02=1	
1.2	Wrong SW Version in AutroSafe	Gray	Red if IND2_05=1	
1.3	Verify Configuration, Detector Name Mismatch	Gray	Red if IND2_06=1	
1.4	Wrong Panel Id (OZ1 name) in AutroSafe	Gray	Red if IND2_07=1	
1.5	Configuration Error in FD Database	Gray	Red if IND2_10=1	
1.6	Detector not Configured in Safeguard	Gray	Red if IND2_11=1	

NameAS01

Presentation:

Presentation of AutroSafe central communication object



Behavior:

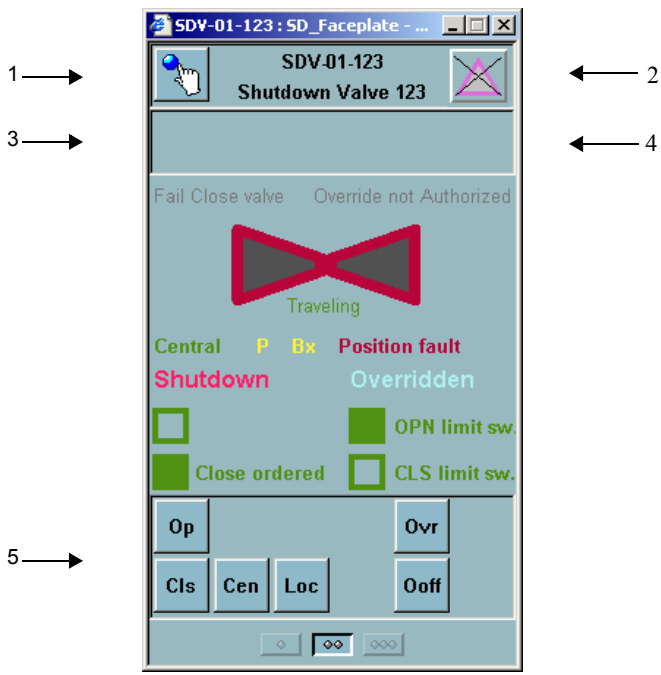
No	Description	Default Presentation	Condition	Remark
1	Frame	White	SELECTED =1	Selected
		Dotted Yellow	AL_BLK =1	Alarm blocked
		Invisible (GeneralBackColor)	IND1_00 .QualityOK	Normal
		Beige	-	Unresolved
2	Name Color	Red flash	ALARM_UNACK=1 or AU_IND =1	Unacknowledged Alarm
		Red	BOOL_E=1 or BOOL_D=1 or IND2_00=1 or IND2_02=1 or IND2_05=1 or IND2_06=1 or IND2_07=1 or IND2_10=1	Error
		Green	IND1_00 .QualityOK	Normal status
		Beige	-	Unresolved

Shutdown Valve Object (Genbin)

SD_Faceplate

This Faceplate provides operator control of a digital output using a valve interface. A Genbin object is connected to the User Elements VAL1-CE and VAL2-CE. This Faceplate and the User Elements enable operator control of the concerned outputs in the cause and effect matrix.
The Faceplate can be used with the User Element VAL1 for operator control of an output not connected to the Cause & Effect Matrix. The SD_Faceplate is used with the Graphic Element SD_Valve01.

Presentation:



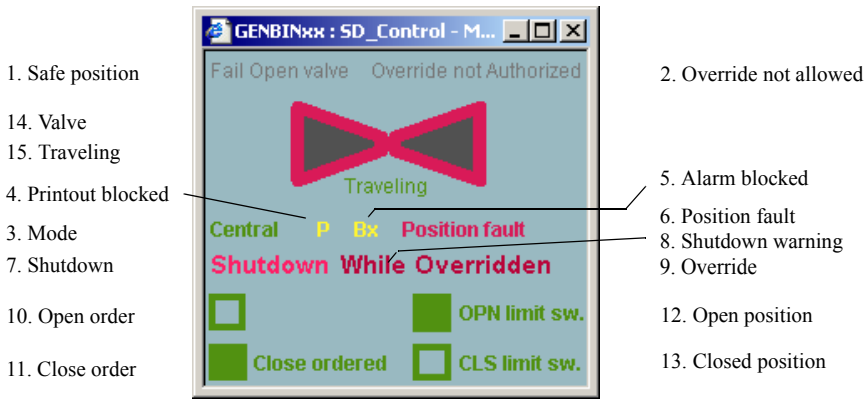
Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Lock Button			
2	Name and Description			
3	Status Field			
3.1	Alarm Blk	B Yellow	ALARM_BLK = 1	Alarm blocked
3.2	Print Blk	P Yellow	PRINT_BLK = 1	Printout blocked
3.4	Error	E Red	PC_ST_01 = 1	Position error
3.5	Override	O Cyan	PC_ST_21 = 1	Overridden
4	Aspect links	(None)		
5	Buttons			
5.1	Op	Open Valve order	set MORD_08 = 1 (ORDONOP =1)	
5.7	Cls	Close Valve order	set MORD_09 = 1 (ORDOFCL =1)	
5.8	Cen	set in Central control	set MORD_01 = 1 (ORDCEN =1)	
5.9	Loc	set in Local control	set MORD_02 = 1 (ORDLOC =1)	
5.5	Ovr	Override ON	set MORD_06 = 1 (ORDBLK =1)	
5.11	Ooff	Override OFF	set MORD_07 = 1 (ORDSTBY =1)	

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

SD_Control

Presentation:.



Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	Safe position text	Fail Open valve	PC_ST_18 =1	Safe position = Open valve (REM =1)
		Fail Close valve	PC_ST_18 .QualityOK	Safe position = Close valve (REM =0)
		Safe position	-	Unresolved
1.2	Safe position color	Gray	PC_ST_18 .QualityOK	Resolved
		Beige	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
2.1	Override not allwed text	Override not Authorized		
2.2	Override not allowed color	Light blue (invisible)	PC_ST_08 =1	Override Authorize on (INTMODE =1)
		Gray	PC_ST_08 .QualityOK	Override Authorize off (INTMODE =0)
		Beige	-	Unresolved
3.1	Mode indication text	Local	PC_ST_17 =1	Local mode (LOC =1, CEN =0)
		Central	-	Central mode (LOC =0, CEN =1)
3.2	Mode indication color	Green	PC_ST_17 .QualityOK	Resolved
		Beige	-	Unresolved
4.1	Printout blocked text	P		
4.2	Printout blocked color	Yellow:	PR_BLK =1	Printout blocked
		Light blue (invisible)	PR_BLK .QualityOK	Printout not blocked
		Beige	-	Unresolved
5.1	Alarm blocked text	B	AL_BLK =1	Alarm blocked by operator
		Bx	AUTO_BLK =1	Alarm blocked form PC program
		Be	EV_BLK =1	Event blocked
		(no text)	AL_BLK .QualityOK	Normal status
		B	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
5.2	Alarm blocked color	Yellow	AL_BLK .QualityOK	Resolved
		Beige	-	Unresolved
6.1	Position fault text	Position fault		
6.2	Position fault color	Red flash	AU_ST_01 =1	Feedback error unack. (ALFBE =1 unack.)
		Red	PC_ST_01 =1	Feedback error (ALFBE =1)
		Light blue (invisible)	PC_ST_01 .QualityOK	Normal status
		Beige	-	Unresolved
7.1	Shutdown text	ShutDown		
7.2	Shutdown color	Red	PC_ST_09 =1	Shutdown activated (INTPROC =1)
		Light blue (invisible)	PC_ST_09 .QualityOK	Shutdown reset (INTPROC =0)
		Beige	-	Unresolved
8.1	Shutdown Warning text	while		(connecting "Shutdown" and "Overridden")
8.2	Shutdown Warning color	Red flash	AU_ST_00 =1	Shutdown while overridden, unack. (LSIGNE =1 unack.)
		Light blue (invisible)	AU_ST_00 .QualityOK	(Not unacknowledged)
		Beige	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
9.1	Override text	Overridden		
9.2	Override color	Red flash	AU_ST_00 =1	Shutdown while overridden, unack. (LSIGNE =1 unack.)
		Cyan	PC_ST_21 =1	Overridden (BLK =1)
		Light blue (invisible)	PC_ST_21 .QualityOK	Not overridden (BLK =0)
		Beige	-	Unresolved
10.1	Open order blocked	× red	PC_ST_09 =1 & PC_ST_21 =0 & PC_ST_18 =0	Order not available. (Shutdown (INTPROC =1) & not overridden (BLK =0) & fail close valve (REM =0))
10.2	Open order Square	□ Green	PC_ST_24 =0	Close order (INDONOP =0)
		■ Green	PC_ST_20 =1	Valve open limit (MAN = 1)
		■ Green flashing	-	Valve opening (Open order & Not Open limit)
		□ Beige	Not PC_ST_24 .QualityOK	Unresolved
10.3	Open order String	Open ordered		

No	Description	Default Presentation	Condition	Remarks
10.4	Open order String color	Green	PC_ST_24 =1	Open order (valve opening) (INDONOP =1)
		Light blue (invisible)	PC_ST_24 .QualityOK	Close order (INDONOP =0)
		Beige	-	Unresolved
11.1	Close order blocked	× red	PC_ST_09 =1 & PC_ST_21 =0 & PC_ST_18 =1	Order not available (Shutdown (INTPROC =1) & not overridden (BLK =0) & fail open valve (REM =1))
11.2	Close order Square	□ Green	PC_ST_24 =1	Open order (INDONOP =1)
		■ Green	PC_ST_19 =1	Valve close limit (AUTO = 1)
		■ Green flashing	PC_ST_24.QualityOK	Valve closing (Close order & Not Close limit)
		□ Beige	-	Unresolved
11.3	Close order String	Close ordered		
11.4	Close order String color	Green	PC_ST_24 =0 & PC_ST_24 .QualityOK	Close order (valve closing) (INDONOP =0)
		Light blue (invisible)	PC_ST_24 .QualityOK	Open order (INDONOP =1)
		Beige	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
12.1	Open position Square	■ Green	PC_ST_20 =1	Valve open limit (MAN =1)
		□ Green	PC_ST_20 .QualityOK	Not Valve open limit (MAN =0)
		■ Beige	-	Unresolved
12.2	Open position String	OPN Limit sw.		
12.3	Open position String color	Green	PC_ST_20 .QualityOK	Resolved
		Beige	-	Unresolved
13.1	Close position Square	■ Green	PC_ST_19 =1	Valve close limit (AUTO =1)
		□ Green	PC_ST_19 .QualityOK	Not Valve close limit (AUTO =0)
		■ Beige	-	Unresolved
13.2	Close position String	CLS Limit sw.		
13.3	Close position String color	Green	PC_ST_19 .QualityOK	Resolved
		Beige	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
14.1	Valve Frame Color	Red flash	AU_ST_01 = 1	Traveling fault, unack (ALFBE =1 unack)
		Red	PC_ST_01 = 1	Traveling fault (ALFBE =1)
		Green flash	PC_ST_25 = 1	Traveling (opening or closing) (INDCH =1)
		Cyan	PC_ST_21 = 1	Shutdown Override (BLK =1)
		Green	PC_ST_24 .QualityOK	Resolved
		Beige	-	Unresolved
14.2	Valve Center Color	Dark Grey	PC_ST_24 = 0 & PC_ST_24 .QualityOK	Close ordered (INDONOP =0)
		Red flash	AU_ST_01 = 1	Traveling fault .unack (ALFBE =1 unack)
		Red	PC_ST_01 = 1	Traveling fault (ALFBE =1)
		Green flash	PC_ST_25 = 1	Traveling (opening or closing) (INDCH =1)
		Green	PC_ST_24 .QualityOk	Open ordered
		Light blue (invisible)	-	Unresolved
15.1	Traveling text	Traveling		

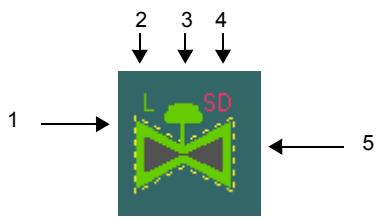
No	Description	Default Presentation	Condition	Remarks
15.2	Traveling color	Green flash	PC_ST_25 =1	Traveling (opening or closing) (INDCH =1)
		Light blue (invisible)	PC_ST_25 .QualityOK	Not Traveling (INDCH =0)
		Beige	-	Unresolved

The conditions are in priority order. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

SD_Valve01

Presentation:

Presentation of shutdown valve outputs controlled from Cause & Effect matrix (Safety Builder). Used together with User Elements VAL1-CE, VAL2-CE or VAL1. Indication of Local mode and Shutdown order. Alarm on Traveling fault and Shutdown while overridden. The Graphic Element is used together with the SD_Faceplate.



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Select Line			Object status frame
		White	SELECTED = 1	Object selected
		Dotted Yellow	AL_BLK = 1	Alarm blocked by operator
		Dotted Yellow	PR_BLK = 1	Printout blocked
		Dotted Yellow	EV_BLK = 1	Event blocked
		Cyan	PC_ST_21 = 1	Shutdown Override (BLK =1)
		Red flash	AU_ST_01 = 1	Traveling fault .unack (ALFBE =1 unack)
		Red	PC_ST_01 = 1	Traveling fault (ALFBE =1)
		Green flash	PC_ST_25 = 1	Traveling (opening or closing) (INDCH =1)
		Invisible		
2	Mode	LocalText		Local mode indication
		Invisible	ModeVisible = false	No mode indication
		Green	PC_ST_17 = 1	Local mode (LOC = 1, CEN = 0)
		Invisible	PC_ST_00 .QualityOK	Central mode (LOC = 0, CEN = 1)
		Beige	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
3	Actuator	Invisible	ActuatorType = None	No actuator
		Red flash	AU_ST_01 = 1	Traveling fault .unack (ALFBE =1 unack)
		Red	PC_ST_01 = 1	Traveling fault (ALFBE =1)
		ActuatorNormalColor	PC_ST_00 .QualityOK	Normal
		Beige	-	Unresolved
4	Shutdown	ShutdownText		Shutdown order indication
		Invisible	ShutdownVisible = False	No shutdown indication
		Red flash	AU_ST_00 =1	Shutdown while overridden, unack (ALSIGNE =1 unack)
		Red	PC_ST_00 =1	Shutdown while overridden(ALSIGNE =1)
		Red	PC_ST_09 =1	Shutdown activated (INTPROC =1)
		Invisible	PC_ST_00 .QualityOK	Shutdown reset
		Beige	-	Unresolved

No	Description	Default Presentation	Condition	Remarks
5.1	Valve Frame Style	2D Style	FrameStyle =Flat	
		3D Style	FrameStyle = Raised or FrameStyle =Sunken	
5.2	Valve Frame Color	Red flash	AU_ST_01 = 1	Traveling fault .unack (ALFBE =1 unack)
		Red	PC_ST_01 = 1	Traveling fault (ALFBE =1)
		Green flash	PC_ST_25 = 1	Traveling (opening or closing) (INDCH =1)
		Cyan	PC_ST_21 = 1	Shutdown Override (BLK =1)
		ValveNormalColor	FrameStyle =Flat & PC_ST_00 .QualityOk	Open Valve, 2D
		FrameNormalColor / FrameNormalColor2	PC_ST_00 .QualityOk	Open Valve, 3D
		Beige	-	Unresolved
5.3	Valve Center Color	Dark Grey	PC_ST_24 = 0	Close ordered (INDONOP =0)
		Red flash	AU_ST_01 = 1	Traveling fault .unack (ALFBE =1 unack)
		Red	PC_ST_01 = 1	Traveling fault (ALFBE =1)
		Green flash	PC_ST_25 = 1	Traveling (opening or closing) (INDCH =1)

No	Description	Default Presentation	Condition	Remarks
		ValveNormalColor	PC_ST_00 .QualityOk	Open ordered
		Beige	-	Unresolved

The conditions are in priority order. Underlined parameters are configurable. Logically defined colors are used, see Appendix A, Logical Colors Definitions.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
ModeVisible	2. Mode	**True**, False	
LocalText	2. Mode	**L**, any Text	
ActuatorNormalC olor	3. Actuator	**Green**, any color	Not logically defined
ActuatorType	3. Actuator		None, Manual, Regulation.
ShutdownVisible	4. Shutdown	**True**, False	
ShutdownText	4. Shutdown	**Sd**, any Text	
FrameWidth	5. Valve	**3**, (3..)	Width of valve edge, that is, should not be zero.
FrameStyle	5. Valve	**Flat**, Raised, Sunken	2 -dimension valve if FrameStyle = Flat.
FrameNormalCo-lor	5. Valve	**Light Green**, any color	Not logically defined (Not used if FrameStyle = Flat
FrameNormalCo-lor2	5. Valve	**Dark Green**, any color	Not logically defined (Not used if FrameStyle = Flat

Parameters	Affects	Options (bold is default)	Remarks
ValveNormalCo-lor	5. Valve	**Green**, any color	Not logically defined (To enable adjustment to process medium color)
Orientation	All	**Horizontal**, Vertical	Valve orientation
BackgroundColor	Background	Transparent, Any	

Appendix A Logical Colors Definitions

In System 800xA, logical definitions are used for colors. The Logical Colors definition aspects are located in the Workplace Structure.
A Safety Colors group is defined to present the Inhibit function.

Some of the Graphic Elements have color properties. The default value of these properties are not Logically defined. If a property is changed, a Logically defined color should be selected in the Expression Builder.

In order to utilize the Logical color definitions as ‘global standard colors’, most of the Graphic Elements described here does not have (configurable) color properties. The following tables show the colors that are used and their definition.

Logical Colors used in Faceplates

Default presentation	Logical Color Name	RGB Value	Color group name
Red (alarm)	FaceplateHighAlarm	RGB(255, 30, 102)	Process Graphics Colors
Red (error)	FaceplateIndError	RGB(217, 26, 88)	Process Graphics Colors
Red flash (unack. alarm)	FaceplateUnackHigh Alarm	RGB(255, 30, 102) / RGB(185, 4, 58) / RGB(185, 4, 58)	Process Graphics Colors
Green flash (travel)	FaceplateIndNotice	RGB(81, 145, 17) / RGB(38, 69, 7)	Process Graphics Colors
Yellow (blocked)	FaceplateIndBlocked	RGB(255, 245, 51)	Process Graphics Colors
Black (normal)	FaceplateFg	RGB(0, 0, 0)	Process Graphics Colors
Light blue (Background)	FaceplateBg	RGB(153, 185, 193)	Process Graphics Colors
Green (normal)	FaceplateIndNormal	RGB(81, 145, 10)	Process Graphics Colors
Grey (static text)	limit	RGB(119, 119, 119)	General Colors
Beige (unresolved)	static	RGB(207, 194, 163)	General Colors
Cyan (Inhibit)	FaceplateInhibit	RGB(175, 239, 238)	Safety Colors

Logical Colors used in Graphic Elements

Default presentation	Logical Color Name	RGB Value	Color group name
White (selected)	selected	RGB(255, 255, 255)	Event Colors
Red (alarm)	HighAlarmSymbol	RGB(255, 30, 102)	Event Colors

Default presentation	Logical Color Name	RGB Value	Color group name
Red (alarm)	HighAlarmText	RGB(255, 51, 102)	Event Colors
Red flash(unack. alarm)	unackHighAlarm	RGB(255, 51, 102) / RGB(185, 4, 58) / RGB(185, 4, 58)	Event Colors
Yellow (blocked)	blockedSymbol	RGB(255, 245, 51)	Event Colors
Yellow (blocked)	blockedText	RGB(255, 245, 102)	Event Colors
Green (normal)	symbol2Normal	RGB(102, 204, 0)	Object Colors
Green (normal)	text2Normal	RGB(128, 191, 64)	Object Colors
Light Green (normal, 3D)	symbol2Emphasize	RGB(128, 255, 0)	Object Colors
Dark Green (normal, 3D)	symbol2Reduce	RGB(69, 138, 0)	Object Colors
Green flash (travel)	symbol2Notice	RGB(102, 204, 0) / RGB(60, 120, 0)	Object Colors
Blue (activated)	actuator	RGB(0, 0, 255)	Object Colors
Dark Grey (closed / off)	symbolOff	RGB(81, 81, 81)	Object Colors
Background	GeneralBackColor	RGB(51, 102, 102)	Process Graphics Colors
Grey (normal limit ind.)	limit	RGB(119, 119, 119)	General Colors
Beige (unresolved)	static	RGB(207, 194, 163)	General Colors
Cyan (manual mode)	manMode	RGB(128, 230, 227)	Object Colors
Cyan (Inhibit)	Inhibit	RGB(128, 230, 227)	Safety Colors
Red (Error)	Error	RGB(255, 0, 120)	Safety Colors

Revision History

This section provides information on the revision history of this User Manual.

The following table lists the revision history of this User Manual.

Revision Index	Description	Date
-	First version published for 800xA 6.0	August 2014
A	Removed Fire and Gas detector subelements from the section Safeguard Subelements, as VBPG is not supported in System 800xA 6.0.	October 2015

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