

Pluto gateway SERCOS III

GATE-S3



Application:

- Bi-directional status information from the Pluto safety PLC
- SERCOS III

Features:

- Two-way communication
- Compact enclosure
- Fast response time
- Fast startup
- Common interface with Pluto

Compact and fast

Pluto SERCOS III Gateway is a compact and fast unit providing two-way communication for Pluto Safety PLC over the Industry Ethernet protocol SERCOS III.

The Pluto gateway is a 22 mm wide unit mounted on a DIN rail, and can be connected anywhere on a Pluto safety bus. The unit has a common interface with Pluto, i.e. the same cabling, and the Pluto Manager PC program can be used for servicing and where necessary for configuration. When programming Pluto there are ready-made function blocks which, via the Pluto gateway, send and receive data from the non-safe system.

Protocol

Pluto Gateway GATE-S3 handles the status from and to Pluto safety PLCs via Industry Ethernet protocol SERCOS III.

Data from Pluto

Via the SERCOS III protocol a non-safe PLC system can have access to the I/Os and other variables in a Pluto safety PLC. Global I/Os in a Pluto safety PLC are accessible via the usual I/O transfer in the protocol. Local data in Pluto units can be transmitted by function blocks in Pluto called "Additional data".

Data to Pluto

Via the SERCOS III protocol a non-safe PLC system can transmit non-safety information to a Pluto safety PLC. A total of 16 byte data can be transmitted, 64 boolean variables / 8 registers or a combination of them. Function blocks for receiving the data are available in Pluto Manager.

Technical data - GATE-S3

Article number	2TLA020071R9200
Buses	Pluto-bus CAN (isolated) SERCOS III (isolated)
Pluto safety bus speeds	100, 125, 200, 250, 400, 500, 800 and 1000 kbit/s (automatic speed detection)
Ethernet	SERCOS III 100 Mbit/s
Ethernet protocol	Status from and to Pluto safety PLC - SERCOS III Gateway status and IP address configuration - Web server - Terminal server (TCP/IP)
SERCOS III	According to: Communication Spec. V1.1.2.1.7 (March 30, 2009). SERCOS Communication Profile V1.1.2.1.1 (March 31, 2009). Function Specific Profile IO V1.1.2.1.4 (May 11, 2009). Internet Protocol Services V1.3.1 - 1.2 (February 10, 2011). Minimum cycle time 500 µs.
Web server	Status, IP-address configuration and software update (port 80)
Terminal server (TCP/IP)	Simple server with the same commands as via the serial programming port in the unit.
IP address	Static, DHCP and BOOTP. Set via terminal (PC-port) or web server. Default IP address: 192.168.0.100
Connections	Top, 4-pole terminal for Pluto safety bus (included) Front, PC-port Bottom, 2 Ethernet connections via RJ-45 (screened cable cat. 5e FTP) Bottom, 4-pole terminal for 24 VDC (included)
Status indications	Pluto safety bus status indication via LED (Pluto safety bus) SERCOS III status indication via LED (S3 Status)
Operating voltage	24 VDC, -15 % to +20 %
Current at 24 V	< 200 mA (recommended fuse ≤6 A)
Dimensions (w x h x d)	22.5 x 108 x 114 mm
Installation	35 mm DIN rail
Operating temperature (ambient)	-10°C to + 55°C
Temperature, transport and storage	-25°C to + 55°C
Humidity	EN 60 204-1 50 % at 40°C (ambient 90 % at 20°C)
Enclosure classification	IP20 - IEC 60 529
Accessories	
To PC-port (front connector)	
Cable (serial)	2TLA020070R5600
Cable (USB)	2TLA020070R5800

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