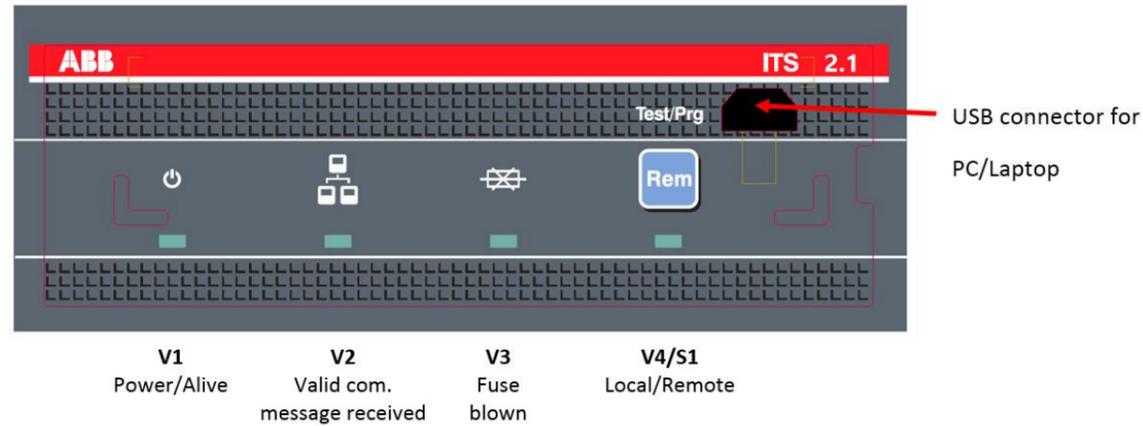


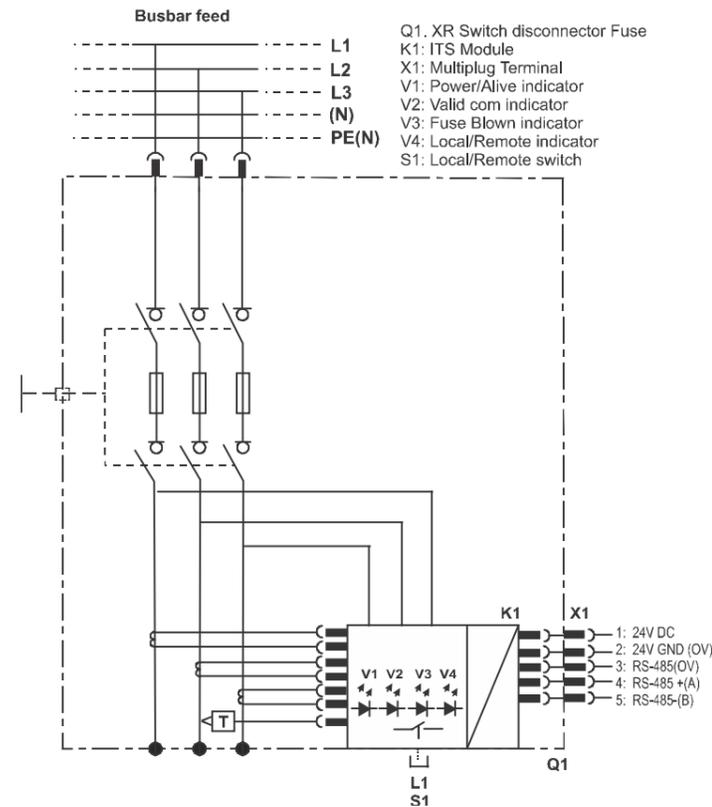
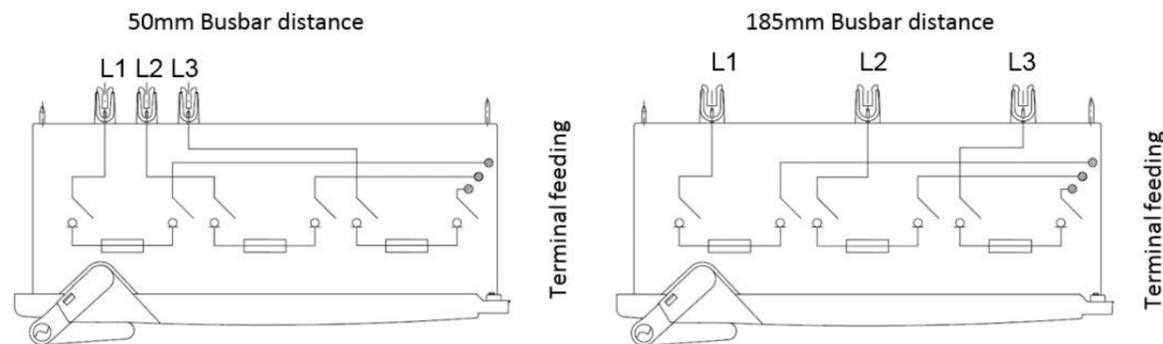
Indicator LED's



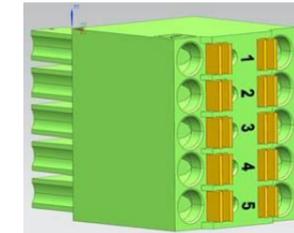
How to remove:  
Grab on top/bottom of ITS2.1 or ITS2.D housing and pull.

How to insert:  
Align left side of ITS2.1 or ITS2.D unit against left side of opening in the switch. When resistance is felt, push unit until it stops.

Phase overview XR version



Terminal	Signal
1	24 VDC
2	24 V GND (0V)
3	RS-485 0V
4	RS-485 + (A)
5	RS-485 - (B)



If a termination resistor is needed, it must be fitted to terminals 4 and 5 in the last ITS2.1 or ITS2.D unit in the multi drop line.

Technical data for XR ITS2.1 and ITS2.D

Input voltage limits	
Power supply	24 VDC ± 20%
Power consumption	2W
Functional characteristics	
Voltage measuring range	10 – 900 VAC
Measured current range	0 – 1,3 x I <sub>n</sub>
Measuring range temperature	0 – 127 °C
Measuring accuracy (Voltage and current)	± 1 %
Electronic Fuse Monitoring detection level	Nominal line to line voltage – 20%
Electronic Fuse Monitoring operating time	≥ 1 s
Signaling output terminals (multiplug)	
Conductor cross section stranded min.	0.25 mm <sup>2</sup>
Conductor cross section stranded max.	1.5 mm <sup>2</sup>
Conductor cross section stranded, with ferrule without plastic sleeve max.	1.5 mm <sup>2</sup>
Conductor cross section stranded, with ferrule with plastic sleeve max.	0.75 mm <sup>2</sup>
Modbus communication and configuration	
Default setting	19200 E,8,1 Default Modbus addr. 247
Baudrates	9600, 19200
Parity, stop- start bits	E,8,1 – O,8,1 – N,8,2 – N,8,1
Modbus address range	1 – 247
Configuration tool	Ekip connect <i>SACE Ekip T&amp;P needed when connecting a laptop to the ITS2.1 or ITS2.D unit for configuration</i>
Termination resistor	No internal resistor. If needed, place on terminal 4,5 on last ITS2.1 or ITS2.D unit in multidrop line.
Insulation test	The ITS2.1 or ITS2.D unit must be removed during dielectric test.

## ITS2.D / with integrated Ekip Display

How to install the Ekip Display ( Order code 1SDA068659R0001 ) to an ITS 2.1 :



1. Push in the 3 areas at the front label of the ITS 2.1 as shown above.



2. Plug in the Ekip Display carefully. Let the guide pin at the left side first slide into position. Then slide the right side into the USB plug in the ITS2.1.



3. Fix the closing button by using a screw driver and rotate to closed position.



For possible connection to your PC/laptop using the software Ekip Connect, use the USB connector at the bottom side of the Ekip Display.

The connection cable has to be the T&P cable kit( Order code : 1SDA066989R0001 )

The Ekip Connect software tool can be downloaded for free at:

<http://www.abb.com/abblibrary/DownloadCenter>