

3.10 Connecting the Smart Connect SC to the ET 200L-SC/TB 16IM-SC

Introduction

The electronics blocks of the ET 200L-SC and the ET 200L-SC IM-SC can all be supplemented by means of the Smart Connect:

- ET 200L-SC 16 DI DC 24 V – 6ES7 131-1BH11-0XB0
- ET 200L-SC 32 DI DC 24 V – 6ES7 131-1BL11-0XB0
- ET 200L-SC 16 DO DC 24 V/0.5 A 6ES7 132-1BH11-0XB0
- ET 200L-SC 16 DI/16 DO DC 24 V/0.5 A 6ES7 133-1BL10-0XB0
- ET 200L-SC TB 16IM-SC – 6ES7 120-0AH50-0AA0 (screw-type terminal), 6ES7 120-0BH50-0AA0 (spring terminal)

Connecting the Smart Connect

Enclosed with every TB 16SC terminal block is a 5 cm long Smart Connect cable set with which you can connect the Smart Connect.

1. Insert the sheathed end of the cable set into the Smart Connect interface of the ET 200L-SC or ET 200L-SC IM-SC.
2. One of the connecting cable's connectors has a lug. Insert this connector into the terminal block of the Smart Connect.

Note

All open Smart Connect interfaces must be closed using the accompanying SC cover before operating the ET 200L-SC or ET 200L-SC IM-SC. Only then are the requirements for handling electrostatically sensitive components met.

Removing the Smart Connect

When you remove Smart Connect, do it in the following order:

1. Turn off the power supply on the ET 200L-SC or ET 200L-SC IM-SC and Smart Connect.
2. Detach the cable set from the terminal block of the Smart Connect.
3. Place the SC cover on the Smart Connect interface of the ET 200L-SC or ET 200L-SC IM-SC. Only then are the requirements for handling electrostatically sensitive components met.

9.4 Electronics Block L-SC 32 DI DC 24 V – 6ES7 131-1BL11-0XB0

Characteristics

The upgraded L-SC 32 DI DC 24 V electronics block has the following characteristics:

- 32 inputs in two groups, each of 16 outputs
- Rated input voltage of 24 VDC
- Suitable for switches, and proximity switches (BEROs)
- TB 16SC connection

View

The following figure shows a view of the electronics block.

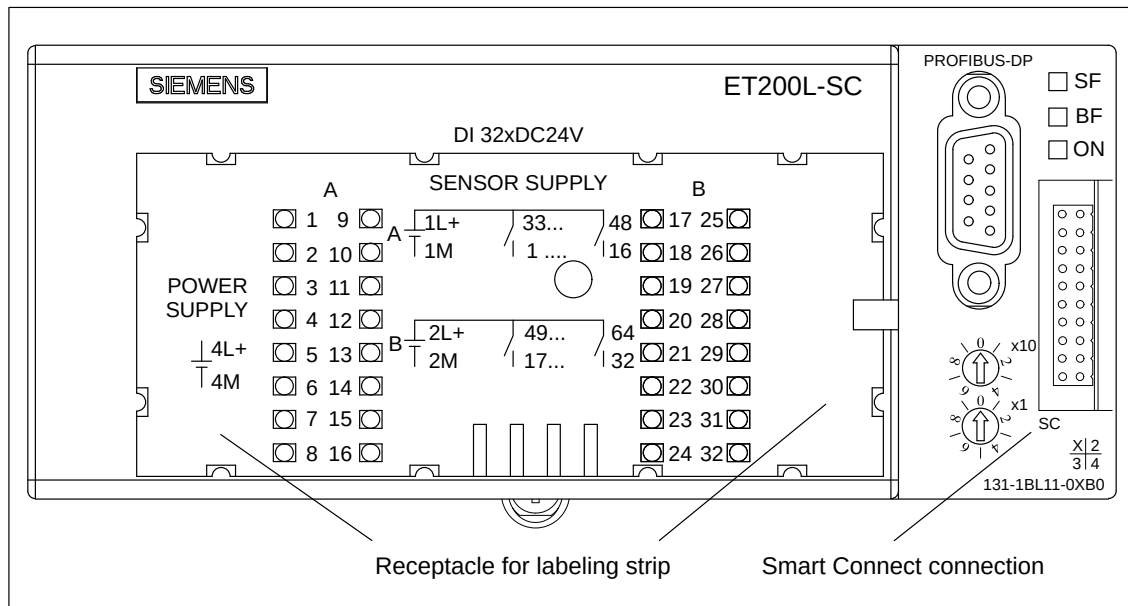


Figure 9-7 View of the L-SC 32 DI DC 24 V Electronics Block

Block Diagram

Figure 9-8 shows the block diagram.

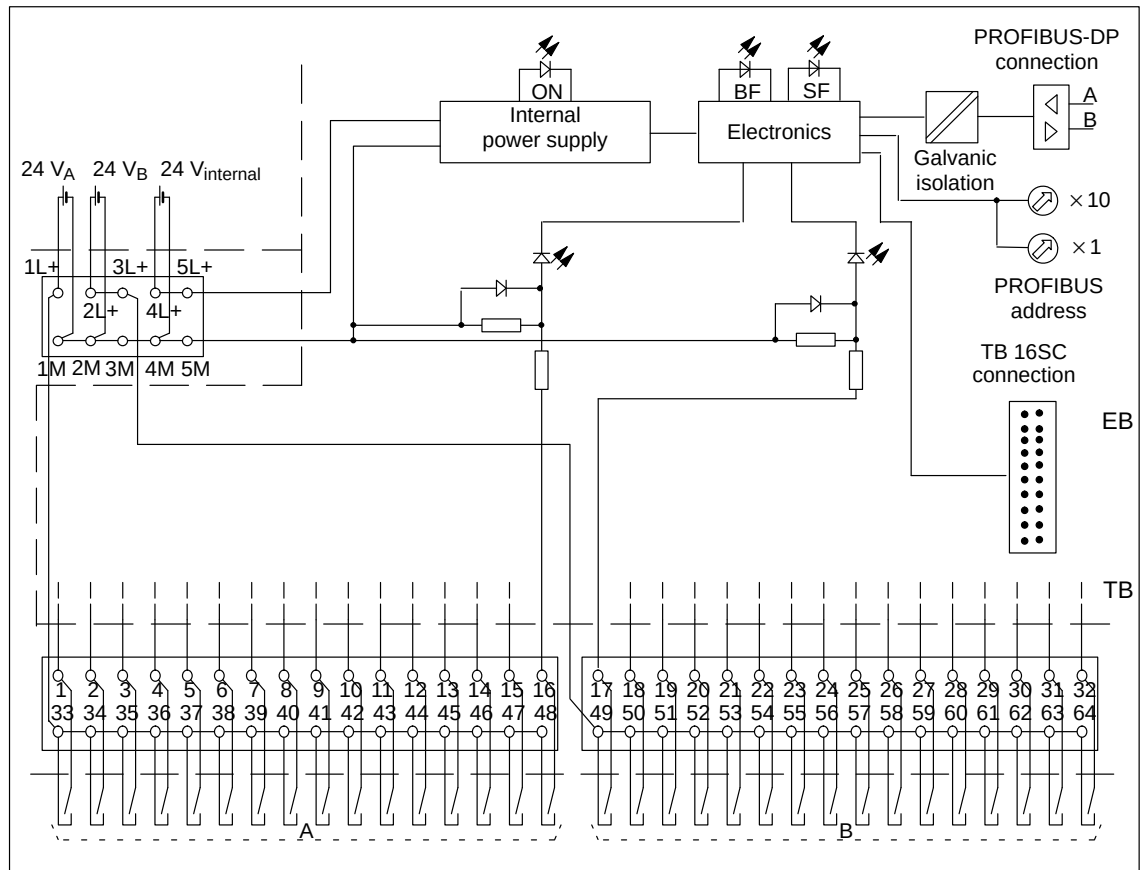


Figure 9-8 Block diagram of the L-SC 32 DI DC 24 V Electronics Block

Technical Data

The following table shows the technical data of the L-SC 32 DI DC 24 V electronics block.

Dimensions and Weight		Status, Interrupts, Diagnostics	
Dimensions W × H × D (mm)	145 × 60 × 60.5	Status display	Green LED per channel
Weight	Approx. 150 g	Interrupts	None
Module-Specific Data		Diagnostic function	Yes
Baud rate	9.6; 19.2; 93.75; 187.5; 500 and 1500 kBaud	• Bus monitoring PROFIBUS-DP	Red "BF" LED
Bus protocol	PROFIBUS-DP	• Monitoring of elec- tronics power supply	Green "ON" LED
FREEZE compatibility	Yes	• Group error	Red "GE" LED
SYNC compatibility for SC outputs	Yes	Sensor Selection Data	
Number of inputs	32	Input voltage	
Cable length		• Rated value	24 VDC
• Unshielded	Max. 600 m	• At signal "1"	13 to 30 V
• Shielded	Max. 1000 m	• At signal "0"	-30 to 5 V
Manufacturer ID	8029H	Input current	
Voltages, Currents, Potentials		• At signal "1"	Typically 5 mA at 24 V
Rated supply voltage for electronics (4L+, 5L+)	24 VDC	Input delay	
• Reverse polarity protection	Yes	• With "0" after "1"	2.0 to 4.5 ms
• Power failure with- stand time	At least 20 ms	• With "1" after "0"	2.0 to 4.5 ms
Rated load voltage (1L+, 2L+ and 3L+)	24 VDC	Input characteristic	To IEC 1131-2 Type 1
Maximum number of in- puts driven simultaneously	32	Connection of 2-wire BEROs	Possible
Galvanic isolation		• Permissible closed-cir- cuit current	Max. 1.5 mA
• Between channels	No		
• Between channels and PROFIBUS-DP	Yes		
Insulation tested with	500 VDC		
Power input			
• from supply voltage L4+/L5+	Max. 180 mA		
• from load voltage L1+ and L2+/L3+ (without load)	Max. 100 mA per load group		
Power loss of module	Typically 4.8 W		