## Description

Single pole, with PT connection technology, to accommodate 1-pole circuit protector type REf16-S.

Part number: 80PLUS-PT01

- Push-in design: push the stripped wire (cross section ≥ 0.25 mm^2, rigid or with wire end ferrule) into the round hole of the terminal without using a tool
- For smaller cable cross sections or flexible wires without wire end ferrule you have to push in the orange push button to open the spring.
- For release push in the orange push button with a screw driver.

Time/current characteristic (T_U = 25 °C)

min. 1.05 / max. 1.45 x I_N

trip time in seconds

0 1 3 3 IK

trip time depending on I_N (see table 1)

Trip time and current limitation typically 1,25 x I_N

times rated current

- The trip is typically in a range of 80 ms to 800 ms depending on the rated current (I_N).
- Electronic disconnection and/or current limitation typically occur at 1.25 x I_N. This means that under all overload conditions the max. overload before disconnection will not exceed 1.25 times rated current.
- Without this current limitation a considerably higher overload current would flow in the event of an overload or short circuit.

Line connection

| 1	LINE +
2.1 / 2.2	LOAD +
11 (a)	Si or IN+ or RE
14 (c)	Si or SF
12 (b)	GND

Dimensions
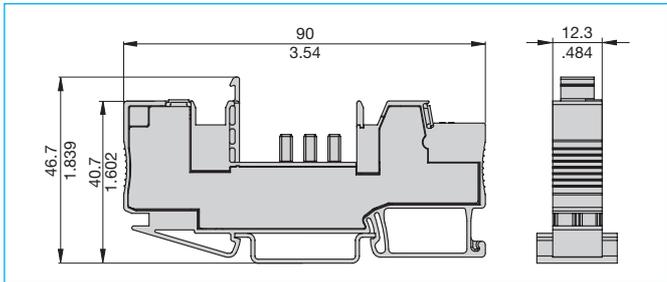
Cable cross section

|	Cross section when opening the push-in terminal		Cable cross section directly pluggable		stripped wire length
terminal 1 (line)	- rigid: - flexible: - flexible with wire end ferrule: (with plastic sleeve) - flexible with wire end ferrule: (without plastic sleeve) - flexible with TWIN-wire end ferrule	0.5…6 mm^2 0.5…6 mm^2 0.5…6 mm^2 (10 mm^2) 0.5…6 mm^2 0.5…1 mm^2	- rigid - flexible with wire end ferrule: (with plastic sleeve) - flexible with wire end ferrule: (without plastic sleeve)	1…6 mm^2 0.5…6 mm^2 (10 mm^2) 0.5…6 mm^2	12 mm
terminals 2.1 and 2.2 (load)	- rigid: - flexible: - flexible with wire end ferrule: (with plastic sleeve) - flexible with wire end ferrule: (without plastic sleeve) - flexible with TWIN-wire end ferrule:	0.2…6 mm^2 0.2…4 mm^2 0.25…4 mm^2 0.25…4 mm^2 0.5…1 mm^2	- rigid: - flexible with wire end ferrule: (with plastic sleeve) - flexible with wire end ferrule: (without plastic sleeve)	0.5…6 mm^2 0.75…4 mm^2 0.5…4 mm^2	12 mm
terminals 11, 12 and 14 (signalling)	- rigid: - flexible: - flexible with wire end ferrule: (with plastic housing) - flexible with wire end ferrule: (without plastic sleeve)	0.14…1.5 mm^2 0.14…1.5 mm^2 0.14…1.5 mm^2 0.14…1 mm^2	- rigid: - flexible with wire end ferrule: (with plastic housing) - flexible with wire end ferrule: (without plastic sleeve)	0.25…1.5 mm^2 0.34…1.5 mm^2 0.34…1 mm^2	8 mm

6

Insertion of busbars/jumpers

12 (b)

1

bridging contacts
14 (c) and 11 (a)
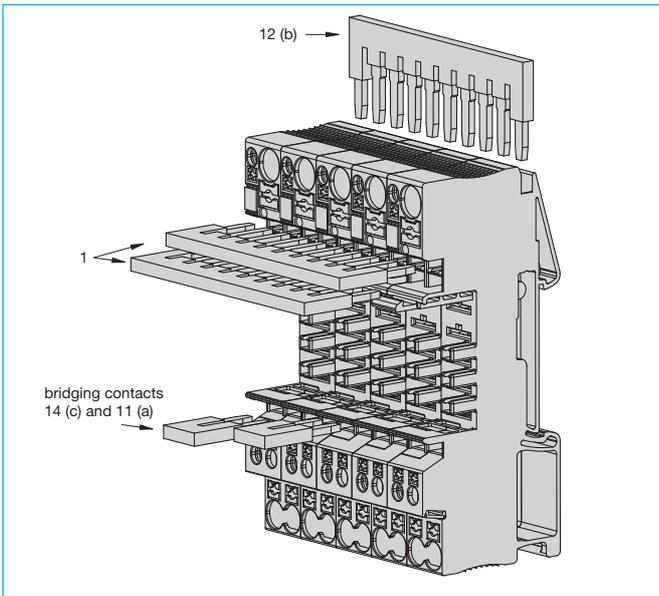
Coding of REF16-S and socket 80plus following the lock-key-principle
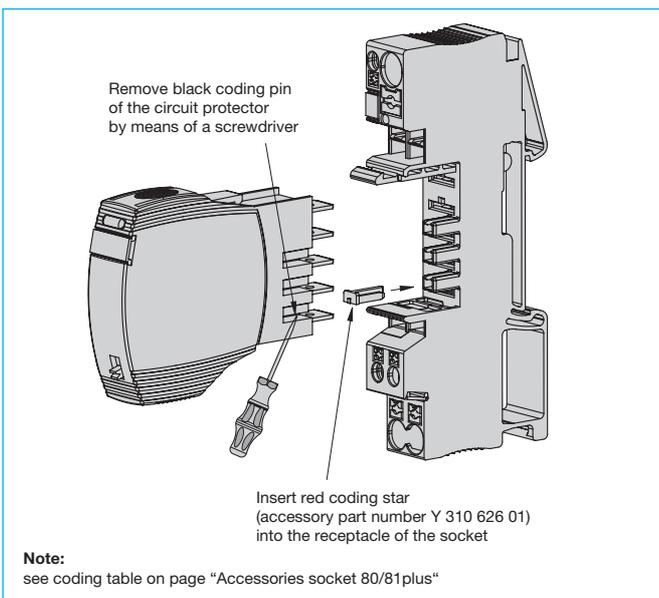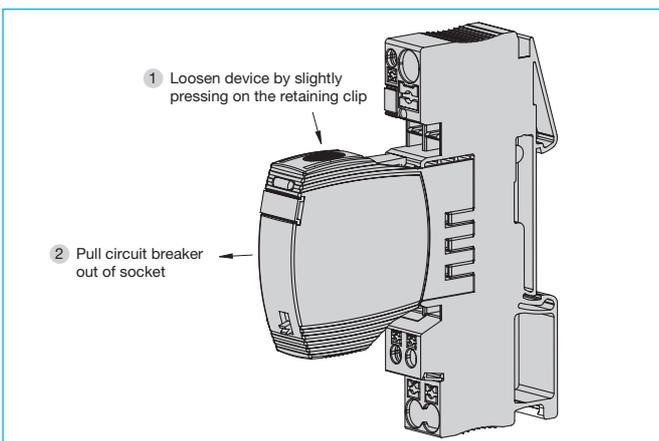
Remove black coding pin
of the circuit protector
by means of a screwdriver

Insert red coding star
(accessory part number Y 310 626 01)
into the receptacle of the socket

Note:
see coding table on page "Accessories socket 80/81plus"

Replacing a REF16-S

1 Loosen device by slightly
pressing on the retaining clip

2 Pull circuit breaker
out of socket

Application examples

Common line entry

cross bridging
terminals 1 (line)

Common line entry GND

cross bridging
terminals 12 (b)

Series connection of aux. contacts (REF16-S101)

individual bridging
of terminals
11 (a) and 14 (c)
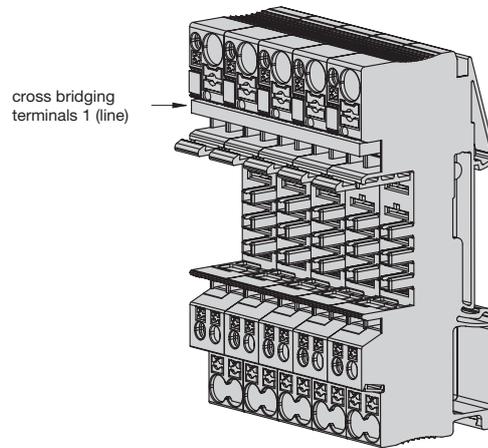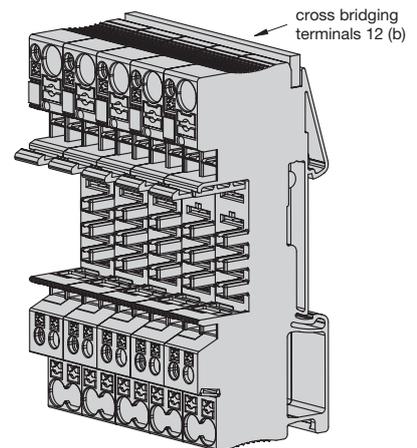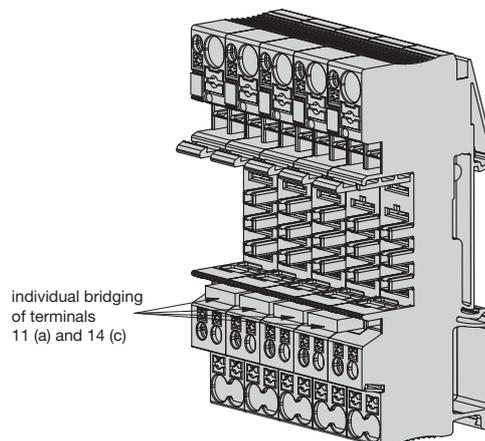
Description

Single pole, with PT connection technology, to accommodate 1-pole circuit protector type REf16-S.

Part number: 81PLUS-UT01

Dimensions
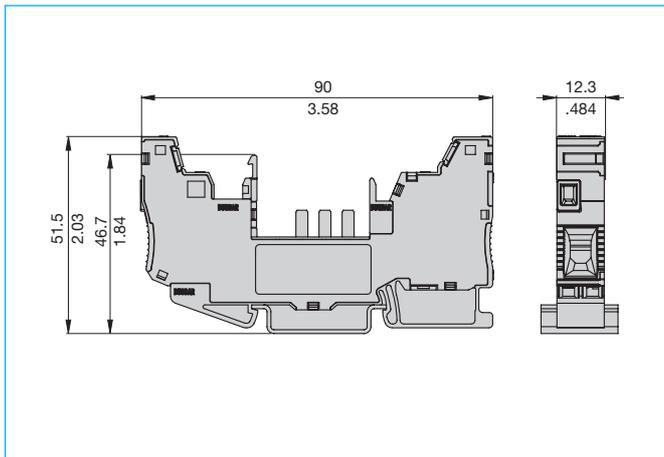
Line connection
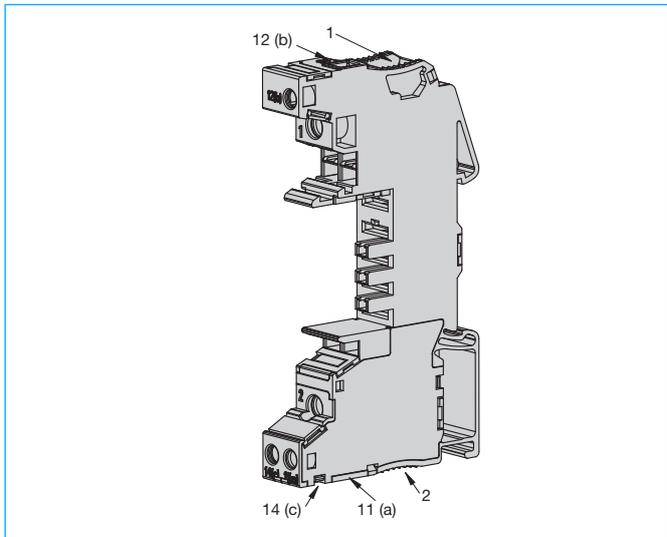
1	LINE +
2	LOAD +
11 (a)	Si or IN+ or RE
14 (c)	Si or SF
12 (b)	GND

Cable cross section

|	thread size	max. cable cross section		stripped wire length	tightening torque

terminals 1 (line) and 2 (load)	M4	Wire
		- rigid (single-wire or multistrand)
		- flexible:
		- flexible with wire end ferrule:
		  (with and without plastic sleeve)
		- flexible with TWIN-wire end ferrule:
		
		Multi-lead connection (two wires with identical cross section)
		- rigid (single-wire or multistrand)
		- flexible:
		- flexible with TWIN-wire end ferrule
		  (without plastic sleeve)
			0.5...16 mm²
			0.5...10 mm²
			0.5...10 mm²
			
			0.5...6 mm²
			
			0.5...4 mm²
			0.5...4 mm²
			0.5...2.5 mm²
				10 mm	1.2 Nm

terminals 11, 12 and 14 (signalling)	M3	Wire
		- rigid:
		- flexible:
		- flexible with wire end ferrule:
		  (with and without plastic sleeve)
		
		Multi-lead connection (two wires with identical cross section)
		- rigid:
		- flexible:
		- flexible with TWIN AEH:
		  (with plastic sleeve)
		- flexible with AEH:
		  (without plastic sleeve)
			0.14...4 mm²
			0.14...4 mm²
			0.14...2.5 mm²
			
			0.14...1.5 mm²
			0.14...1.5 mm²
			0.5...1.5 mm²
			
			0.14...1.5 mm²
				9 mm	0.5 Nm

This is a metric design and millimeter dimensions take precedence ($\frac{mm}{inch}$)

All dimensions without tolerances are for reference only. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.Product markings may not be exactly as the ordering codes. Errors and omissions excepted.

Insertion of busbars/jumpers

12 (b)

1

bridging contacts
14 (c) and 11 (a)
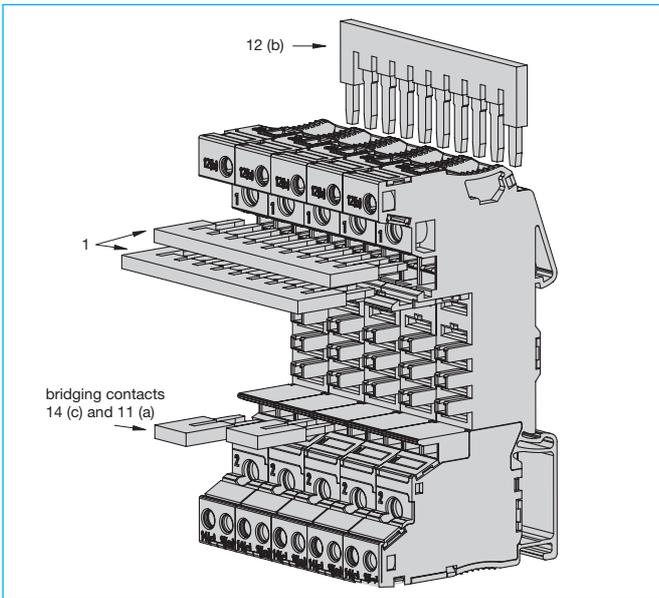
Coding of REF16-S and socket 81plus following the lock-key-principle
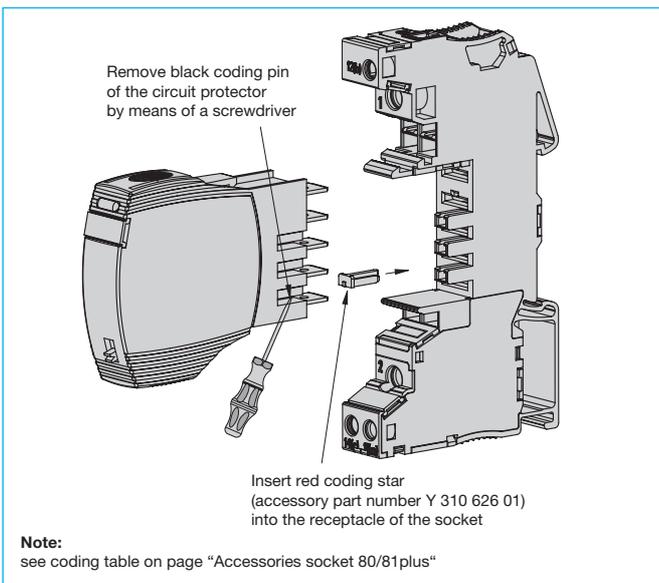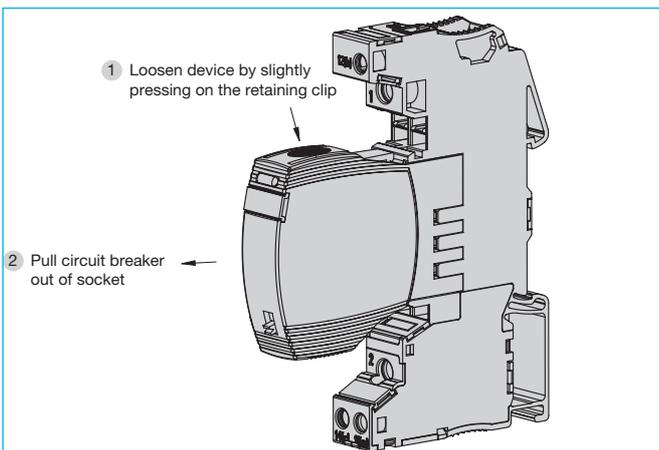
Remove black coding pin
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Insert red coding star
(accessory part number Y 310 626 01)
into the receptacle of the socket

Note:
see coding table on page "Accessories socket 80/81plus"

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Common line entry GND

cross bridging
terminals 12 (b)

Series connection of aux. contacts (REF16-S101)

individual bridging
of terminals
11 (a) and 14 (c)

6
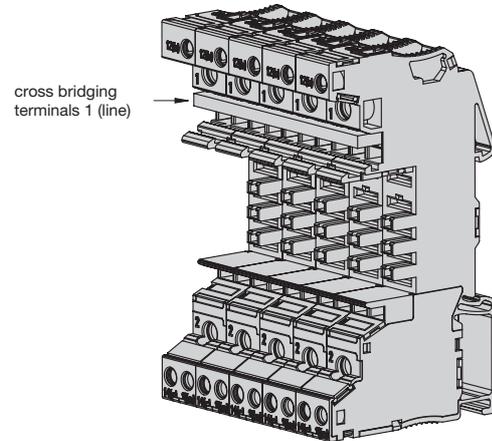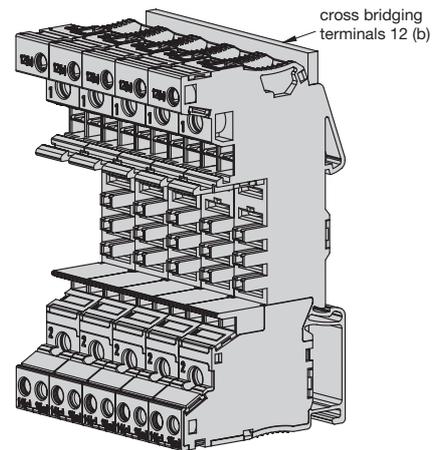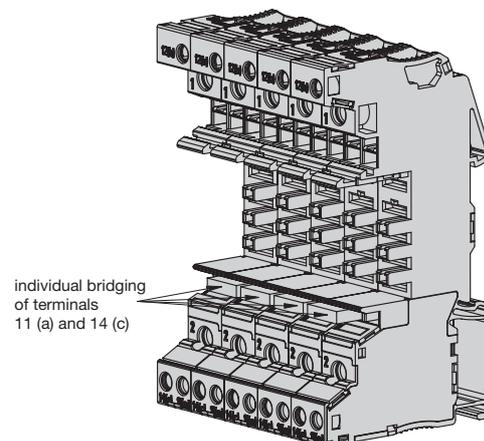
Accessories

Accessories for Socket 80plus and Socket 81plus	part number	packing qty
busbar, for cross-bridging in the bridge shaft, red, 2 poles *	Y 310 624 01	50
busbar, for cross-bridging in the bridge shaft, red, 4 poles *	Y 310 625 01	50
busbar, for cross-bridging in the bridge shaft, red, 10 poles *	Y 308 823 11	10
busbar, for cross-bridging in the bridge shaft, blue, 2 poles *	Y 310 624 02	50
busbar, for cross-bridging in the bridge shaft, blue, 4 poles *	Y 310 625 02	50
busbar, for cross-bridging in the bridge shaft, blue, 10 poles *	Y 308 823 12	10
busbar, for cross-bridging in the bridge shaft, grey, 2 poles *	Y 310 624 03	50
busbar, for cross-bridging in the bridge shaft, grey, 10 poles *	Y 308 823 13	10
coding star, red, with 4 coding pins each	Y 310 626 01	50
label	X 222 977 50	50

busbar/jumper, 10 poles	coding star	label

* Max. bridge current: 32 A
When using two busbars/jumpers (in both bridge shafts of terminal 1), the max. current capacity is 41 A.
Caution:
When using busbars/jumpers for bridging the aux. contacts (11(a), 12(b) and 14(c)), the max. bridge current is 4 A.

Coding table

Coding example:
Avoid hazardous oversize current ratings

Your benefit:
Coded electronic overcurrent protector can no longer be inserted into slots with a lower current rating coding.

Coding of electrionic overcurrent protector and sockets

Sockets: Insert coding pins in accordance with coding table into receptacles of the sockets.

Electronic Overcurrent Protector: Remove coding pins in accordance with coding table by means of screw driver.

Protector-socket-coding for the circuit protector with the **highest** current rating

decreasing current rating

Protector-socket-coding for the circuit protector with the **lowest** current rating
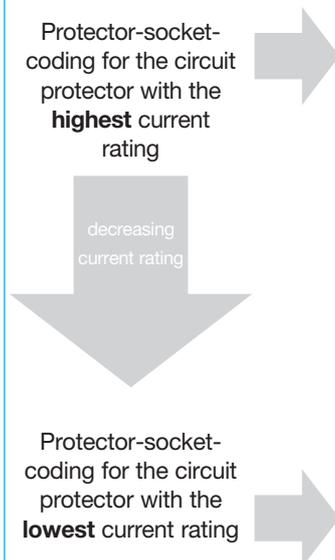
Coding table				Example
Protector	1	1	1	10 A
Socket	0	0	0	
Protector	1	1	0	8 A
Socket	0	0	1	
Protector	1	0	1	6 A
Socket	0	1	0	
Protector	1	0	0	4 A
Socket	0	1	1	
Protector	0	1	1	3 A
Socket	1	0	0	
Protector	0	1	0	2 A
Socket	1	0	1	
Protector	0	0	1	1 A
Socket	1	1	0	
Protector	0	0	0	0.5 A
Socket	1	1	1	

1: With PIN / **0: No** PIN

0 1 1

1 0 0