

Accessories for ESX10

Description

Module 17plus is a power distribution system for use with electronic circuit protectors ESX10.

Each module accommodates two protectors with an individual housing width of only 12.5 mm and fits onto all industry standard mounting rails.

The two-way modules can be interconnected to provide as many ways as required with a terminal block fitted at each end for connection of signalling circuits. A distribution busbar can be fitted on the supply side of the modules (positive pole) though each pole of multipole circuit breakers must be individually connected.

Electrical connections are by means of spring-loaded terminals. The reference potential for the ESX10 (GND pin 11) is also looped through and connected to the terminal blocks at the sides.

The integral status output SF of the ESX10-104/-124 can be tapped at terminal 12 of the relevant channel (single signalisation). The reset input RE may be connected via terminal 13 or 14 (ESX10-124) or terminal 12 (ESX10-125). The integral control input IN+ of ESX10-115 is connected via terminal 12.

Depending on the version a potential-free signal contact is available (ESX10-103/-104/-115/-125).

Ordering information

17PLUS-Q02-00	Module 17plus, centre piece, two-way
17PLUS-QA0-LR	one each left- and right-side terminal block for supply feed from the side by means of screw terminal, connection of signalisation etc.

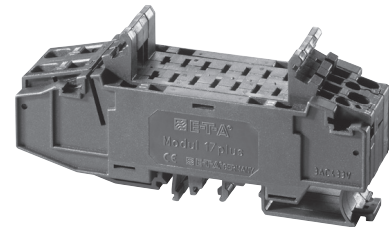
Pin configuration, fitted with ESX10-124 (Example)

ESX10-124 Modul 17 plus			
LINE (+)	(1)		operating voltage PLUS, DC 24 V
GND	(11)		operating voltage MINUS
RE	(13)		reset input RE
RE	(14)		reset input RE
SF	(12)		status output SF
LOAD (+)	(2)		protected load output

Approvals

Authority	Voltage ratings	Current ratings
UL 60950	AC 250 V; DC 80 V	50 A

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.



17plus

Technical data

Connection Spring-loaded terminals for solid conductors and stranded cables with and without wire end ferrules. Please use appropriate screw driver size (SD) for removing the spring loaded terminals.

cable	cross section of connecting cable	screw driver	stripped length
Line feed (1)	1.5-10 mm ²	3 (1.0 x 5.5)	12 mm
Load output (2)	0.25-4 mm ²	1 (0.6 x 3.5)	12 mm
Signalisation terminals (11, 13, 14)	0.25-2.5 mm ²	1 (0.6 x 3.5)	10 mm
Signalisation terminal (12)	0.25-1.5 mm ²	0 (0.4 x 2.5)	9 mm

Voltage rating (without ESX10) AC 250 V; 3 AC 433 V; DC 65 V

Current rating (without ESX10)

LINE feed (1)	50 A
LOAD output (2)	25 A
Reference potential GND (11)	10 A
single signal (12)	1 A (with ESX10: 0.5 A)
Group signal / (13-14)	1 A (with ESX10: 0.5 A)

Internal resistance values (without ESX10)

LINE-LOAD (1-2)	≤ 5 mΩ
Group signal (13-14) per module	≤ 8 mΩ per pole +5 mΩ for each additional module

Vibration 5 g (57-500 Hz) ± 0.38 mm (10-57 Hz), to IEC 60068-2-6, test Fc, 10 frequency cycles/axis

Shock 25 g (11 ms) to IEC 60068-2-27, test Ea 11 ms half sine

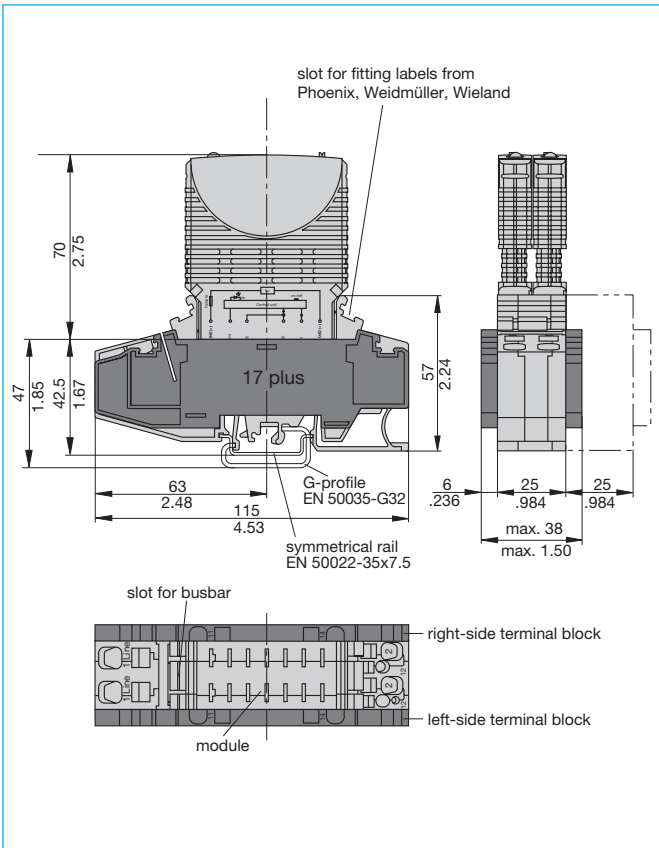
Corrosion 96 hours at 5 % salt mist, to IEC 60068-2-11, test Ka

Humidity 240 hours at 95 % RH to IEC 60068-2-78, test Cab

Dielectric strength of Module 17plus (without ESX10)
between main circuits (without busbar): 1,500 V
main circuit to auxiliary circuit: 1,500 V
between auxiliary circuits: 1,500 V

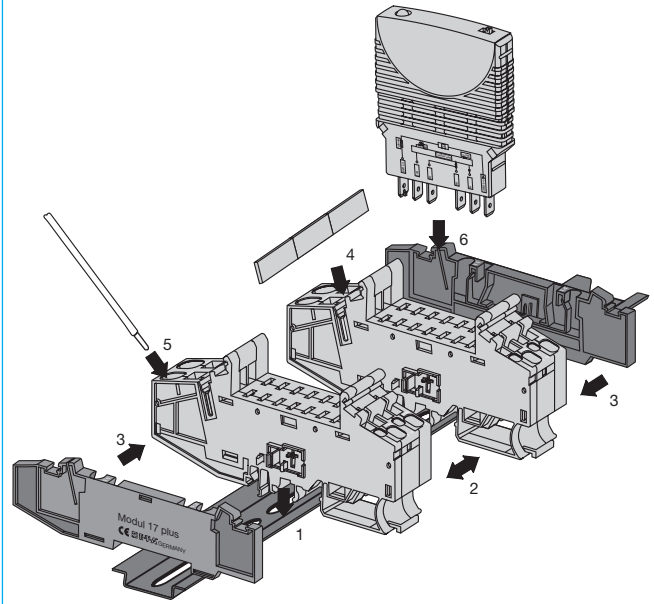
Mass: Module 17plus (centre piece) approx. 85 g
terminal blocks (pair) approx. 30 g

Dimensions



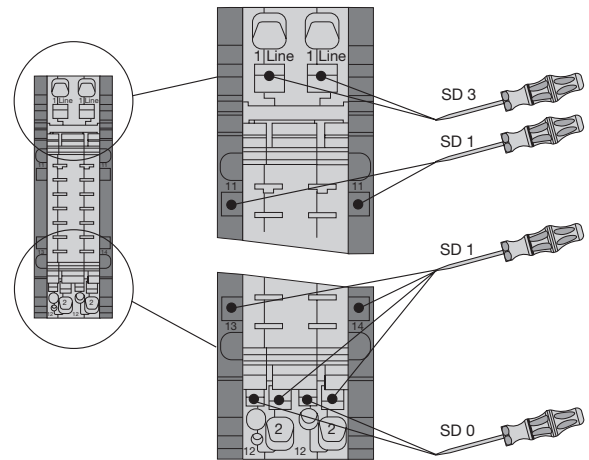
This is a metric design and millimeter dimensions take precedence ($\frac{mm}{inch}$)

Installation example



Installation:

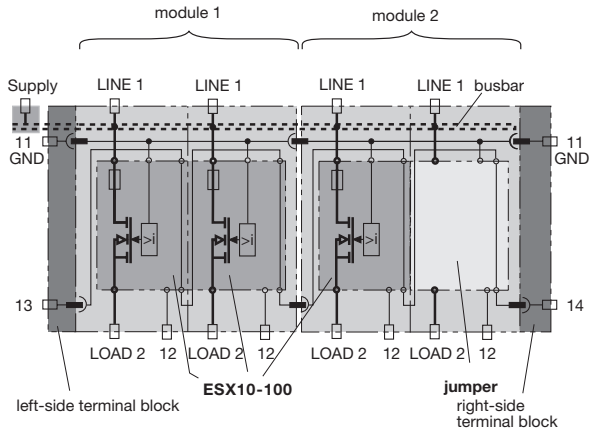
- Clip modules onto DIN rails.
- Push modules together (side-by-side).
- Snap on right-side and left-side terminal blocks.
- Cut busbar to required length and fit on supply side of the modules.
- Connect line feed with spring-loaded terminals.
- Plug in ESX10.



Connection and disconnection of cables with screw driver

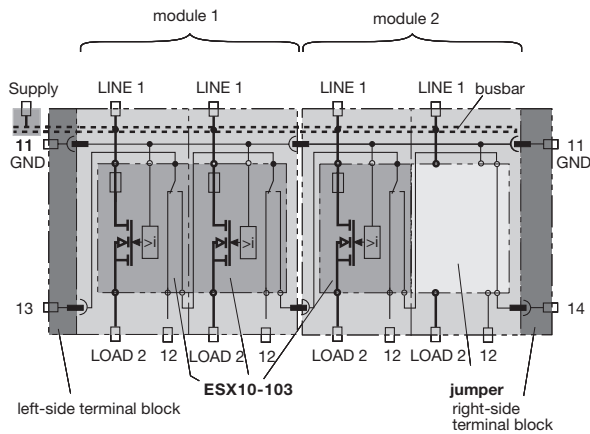
Connection diagram for ESX10-...

Module 17plus with ESX10-100



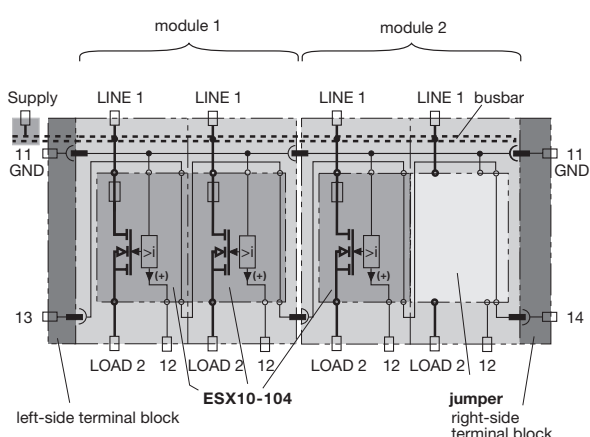
11 GND
13, 14 looped through

Module 17plus with ESX10-103



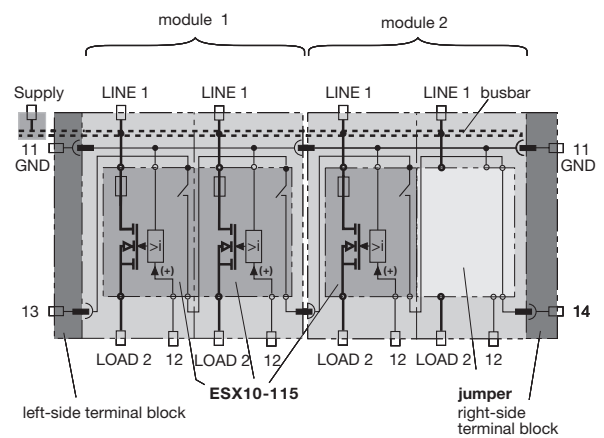
11 GND
12, 13, 14 terminal group signalisation (change-over)
(13-12 N/C, 13-14 N/O)

Module 17plus with ESX10-104



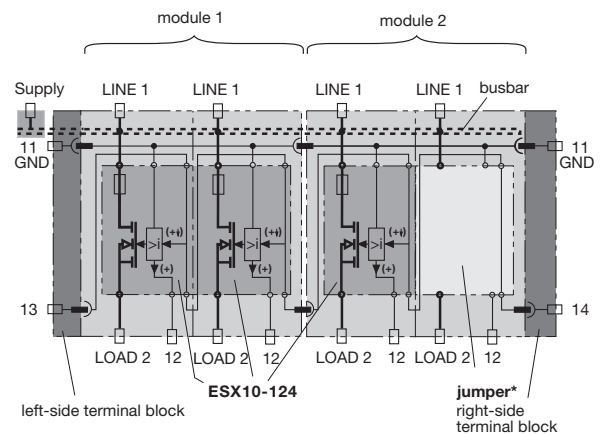
11 GND
12 status indication SF +24V=OK
13, 14 looped through

Module 17plus with ESX10-115



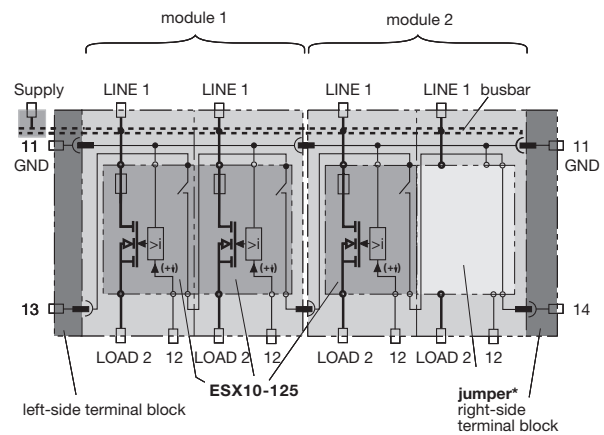
11 GND
12 terminal control signal ON (+24V DC)
13, 14 terminal group signalisation (N/O)

Module 17plus with ESX10-124



11 GND
12 status indication SF +24V=OK
13, 14 reset input RE (group reset), +24V falling edge
*Caution: unused slots have to be fitted with jumpers

Module 17plus with ESX10-125

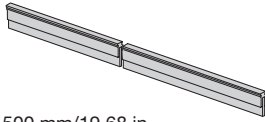


11 GND
12 reset input RE (single reset), +24V falling edge
13, 14 terminal group signalisation (N/O)
*Caution: unused slots have to be fitted with jumpers

Accessories for ESX10

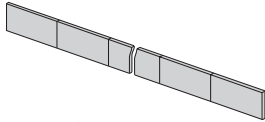
Busbar 32 A

X 222 005 01 blue insulation, 500 mm/19.68 in.
X 222 005 02 red insulation, 500 mm/19.68 in.
X 222 005 03 grey insulation, 500 mm/19.68 in.
 "up to 32 A continuous load"



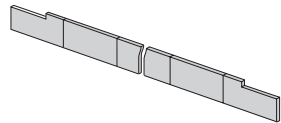
Busbar 50 A

Y 307 016 01 non-insulated, 500 mm/19.68 in.
 "up to 50 A continuous load; plugged in completely, protected against brush contact"



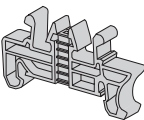
Busbar 50 A

Y 307 016 11 non-insulated, 500 mm/19.68 in.
 "up to 50 A continuous load"



End bracket

X 222 004 01
 Width 10 mm



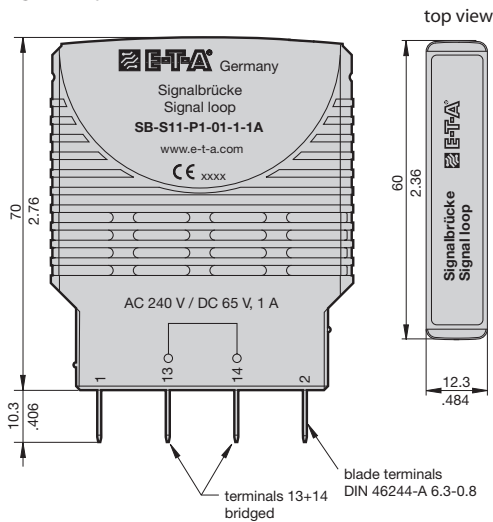
Screw terminal for busbar

X 211 156 01 non insulated



Jumper

SB-S11-P1-01-1-1A

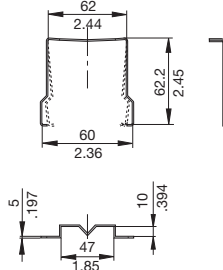


top view

terminals 13+14 bridged
 blade terminals DIN 46244-A 6.3-0.8

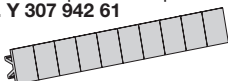
Retaining clip for electronic circuit breaker typ ESX10

Y 308 729 01



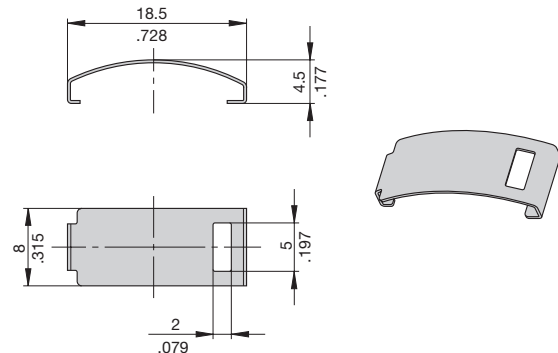
Labels

marking area 6 x 10 mm
 (packing unit 10 pcs = 1 strip
 part. no. **Y 307 942 61**



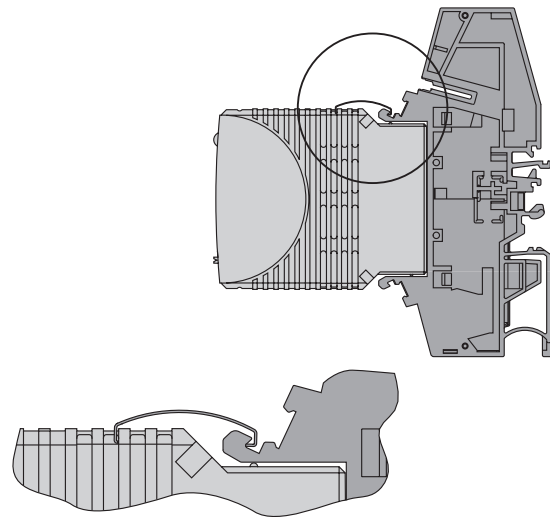
Accessories for ESX10

Retaining clip Y 307 754 01

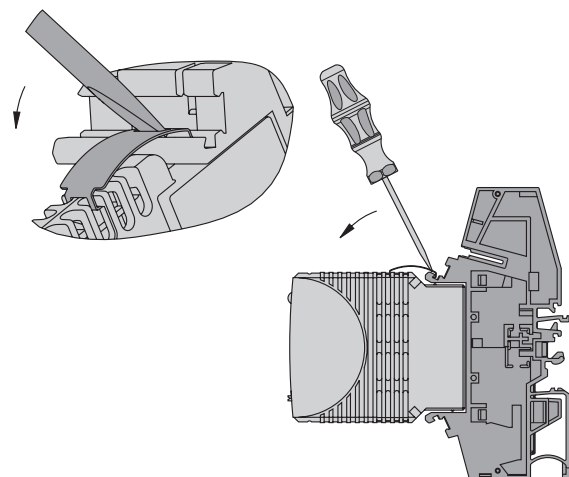


Mounting of retaining clip

ESX10 with retaining clip **Y 307 754 01**
 for power distribution system module 17plus



Removal of retaining clip Y 307 754 01



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

Accessories for ESX10

Single mounting sockets

(up to 16 A max. load)

17-P10-Si

17-P70-Si

(retaining clip Y 308 792 01)

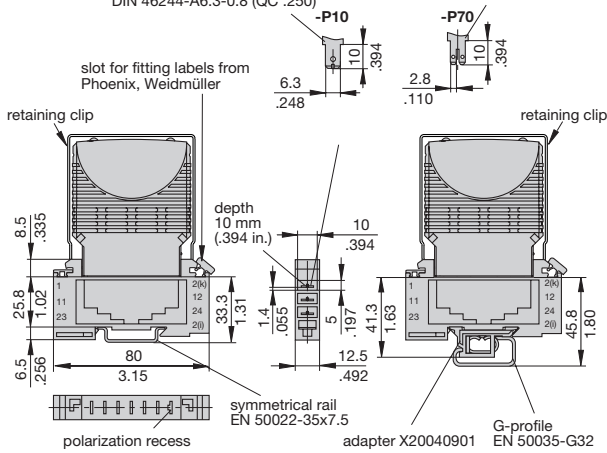
polarized blade terminal
DIN 46244-A6.3-0.8 (QC .250)

(with adapter)

17-P10-Si-20025

17-P70-Si-20025

blade terminal DIN 46244 part 2
C profile (2x A2.8-0.8) (QC 2x.110)

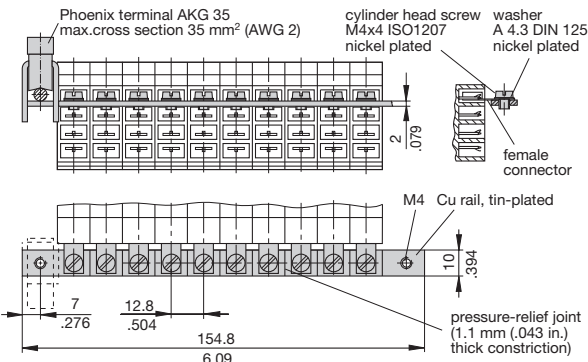


Busbar (10-way) (supplied as a complete package) for type 17 socket

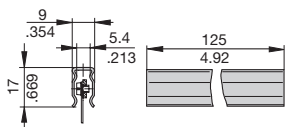
(for max. 100 A continuous load), more positions available on request

X 211 157 01 with terminal

X 211 157 02 without terminal



Insulating sleeving for busbar (10-way) Y 303 824 01



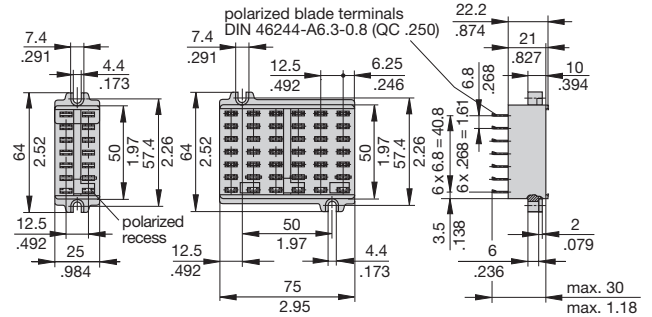
2-way mounting socket

23-P10-Si

(retaining clip Y 300 581 03 available on request)

6-way mounting socket

63-P10-Si



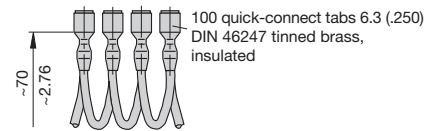
Connector bus links -P10

X 210 588 01/ 1.5 mm², (AWG 16), brown (up to 13 A max. load)

X 210 588 02/ 2.5 mm², (AWG 14), black (up to 20 A max. load)

X 210 588 03/ 2.5 mm², (AWG 14), red (up to 20 A max. load)

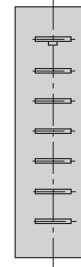
X 210 588 04/ 2.5 mm², (AWG 14), blau (up to 20 A max. load)



Pin selection, fitted with ESX10-124 (Example)

ESX10-124 17-P10-Si

LINE (+)	[2(k)]
GND	[12]
RE	[24]
	[2(i)]
RE	[23]
SF	[11]
LOAD (+)	[1]



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Table 4: ESX10-... - Pin assignment 17-P10-Si

17-P10-Si	ESX10-					
Pins	-100	-103	-104	-115	-124	-125
[2(k)]	LINE (+) DC +24 V	LINE (+) DC +24 V	LINE (+) DC +24 V	LINE (+) DC +24 V	LINE (+) DC +24 V	LINE (+) DC +24 V
[12]	GND	GND	GND	GND	GND	GND
[24]		group SF changeover terminal		group SF N/O	reset IN+ +24 V ↓	group SF N/O
[2(i)]	not assigned	not assigned	not assigned	not assigned	not assigned	not assigned
[23]		group SF changeover N/O		group SF N/O	reset IN+ +24 V ↓	group SF N/O
[11]		group SF changeover N/C	status OUT +24 V = OK	control signal IN+ +24 V = ON	status OUT +24 V = OK	reset IN+ +24 V ↓
[1]	LOAD (+)	LOAD (+)	LOAD (+)	LOAD (+)	LOAD (+)	LOAD (+)