



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



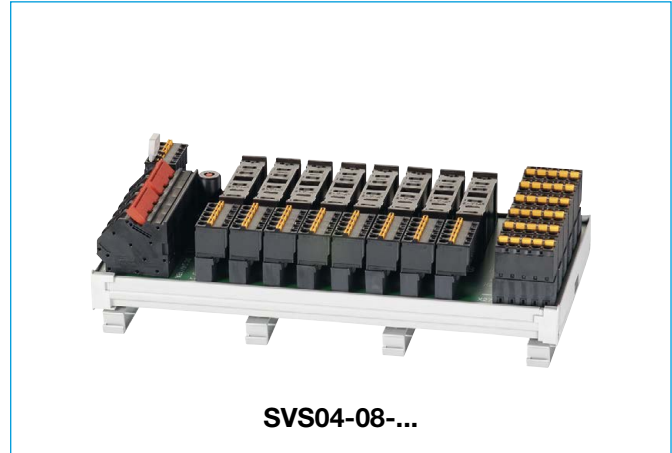
Description

The SVS04 power distribution system for symmetrical DIN rail mounting is designed to distribute power from a switch-mode power supply to 4 or 8 channels. Selective protection of the load output circuits is provided by the plug-in type circuit breakers installed. With a max. load current of 8A per channel and a max. total current of 40A the SVS04 provides ease of wiring in short circuit current limited DC24V applications. Five protected “L+” load outputs per way and 15 or 30 minus terminals significantly reduce wiring time enormously.

Electronic circuit breaker ESS20-003, electronic circuit protector ESX10-103 and thermal-magnetic circuit breakers 2210-S21 are all suitable for use with the SVS04, plugging directly into the sockets provided for each of the 4 or 8 outputs.

Ordering information

Type	power distribution system for types ESS20-003, ESX10-103, 2210-S21
SVS04	<ul style="list-style-type: none"> for short circuit current limited DC 24 V applications max. 40 A continuous load one integral circuit breaker (CB1): overcurrent protection of group signalisation, red LED flashes upon trip of CB1 including 1 insulated wire bridge Y 303 881 08 accessories: jumper SB-S11-P1-01-1-1A for unused ways, please order separately
Version, max. number of circuit breakers on the power distribution system	
04	4 circuit breakers F1...F4
08	8 circuit breakers (F1...F8)
Fitted versions	
B10	standard: fitted with screwless spring-loaded terminals (max. 2.5 mm ² , without wire end ferrule)
B20	fitted with plug-in type screw terminals (max. 2.5 mm ² , without wire end ferrule)
C10	fitted with pcb terminals, spring-loaded terminals (max. 2.5 mm ² , without wire end ferrule)
Minus terminals	
-	15 minus terminals
K01	30 minus terminals (only for SVS04-08)
Special marking	
SB01	with marked terminals entry line +++/-- remaining terminals 1/2/3/4/5
SVS04 - 04 - B10 - K01 - SB01	



Technical data

DC 24 V supply

DC 24 V terminals, 2x3 terminals (screwless terminals max. 10 mm²), for current supply
 - DC 24 V (+) = (X21) +/+/
 - DC 24 V (-) = (X21) -/-/
 Integral loop-through, for wiring and additional connection of an external buffer module.

F positions

Number of ways for circuit breakers, suitable for types ESS20-003, ESX10-103, 2210-S21
 SVS04-04... F1...F4 = terminals X1...X4
 SVS04-08... F1...F8 = terminals X1...X8
 Plug jumper SB-S11-P1-01-1-1A into unused ways (please order separately, see accessories)

Load outputs

5 x L+ protected per position F1...F4 (F1...F8), led through terminals X1...X4 (X1...X8), max. 2.5 mm² load current max. 8 A per position

Signalisation

signalisation terminal X31, 5-pole, max. 2.5 mm²
 +: DC 24 V feed from terminal X21, protected by integral circuit breaker CB1
 total current max. 0.5 A
group signalisation:
 S: line feed DC 24 V, insert insulated wire bridge Y 303 881 08 (bulk shipped) between + and GR
 AS: output of group signalisation
two-group signalisation
 GR: line feed, insert insulated wire bridge Y 303 881 08 (bulk shipped) between + and GR
 AS: output group A (X5...X8)
 B: output group B (X1...X4)

Minus terminals

3 x 5 terminals (X22, X23, X24) or
 6 x 5 terminals (X22, X23, X24, X25, X26, X27): version K01

Termination

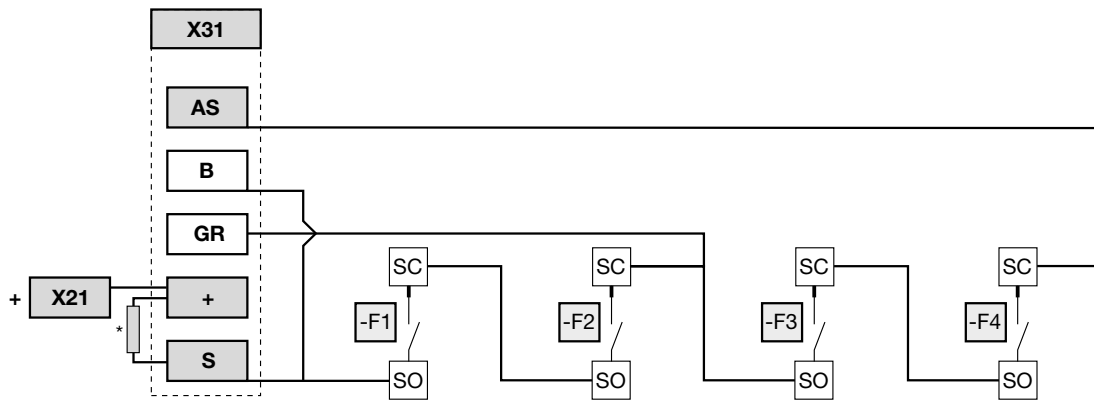
For signalisation, load outputs and minus terminals:
 B10: screwless spring-loaded terminals max. 2.5 mm², with integral test socket
 B20: plug-in type screw terminals max 2.5 mm², with integral test socket
 C10: pcb terminal/spring-loaded terminal max. 2.5 mm², with integral test socket

General data

- protection class to DIN 40050: IP20
- insulation co-ordination to IEC 60934: 0.5 kV
- pollution degree 2
- dielectric strength AC 500 V
- temperature range: 0...50 °C (without condensation)
- for symmetrical DIN rail mounting EN50022 – 35 x 7.5
- dimensions: see dimensional drawings

Wiring example: SVS04-04... with ESS20-003 and group signalisation

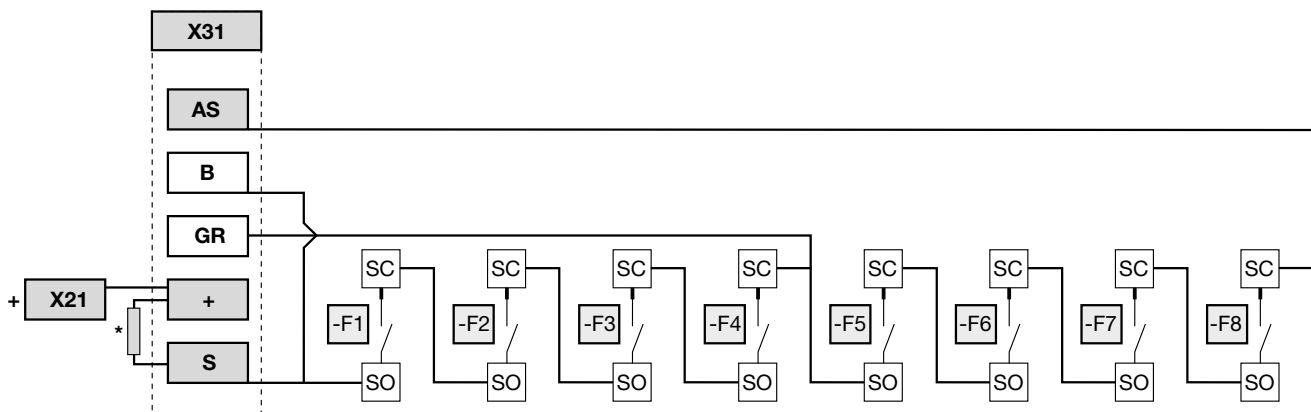
Signal path of group signalisation from F1 to F4



- X 31** **signalisation terminal**
- AS signal output group signal
- + +DC 24 V from terminal 21, internally prewired and protected by CB1
- S line feed group signalisation with insulation bridge*
- SC / SO auxiliary contact ESS20-003, make contact

Wiring example: SVS04-08... with ESS20-003 and group signalisation

Signal path of group signalisation from F1 to F8

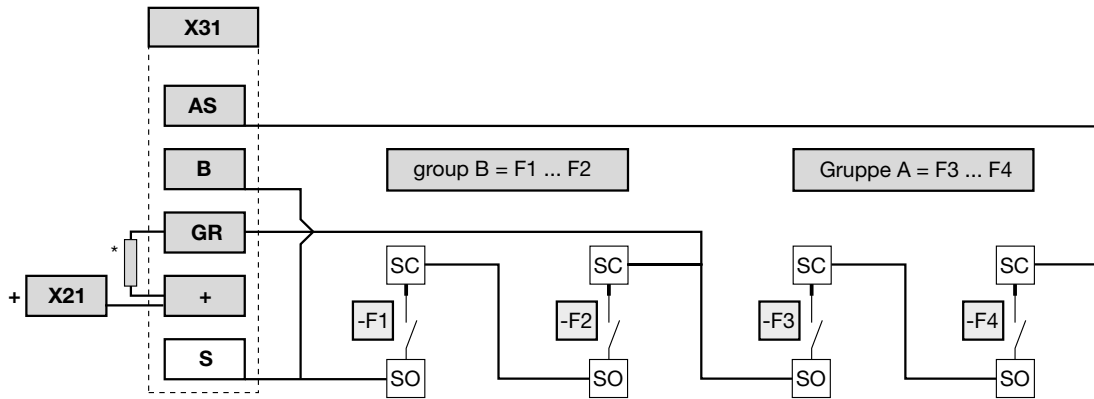


- X 31** **signalisation terminal**
- AS signal output group signal
- + +DC 24 V from terminal 21, internally prewired and protected by CB1
- S line feed group signalisation with insulation bridge*
- SC / SO auxiliary contact ESS20-003, make contact

6

Wiring example: SVS04-04... with ESS20-003 and two-group signalisation

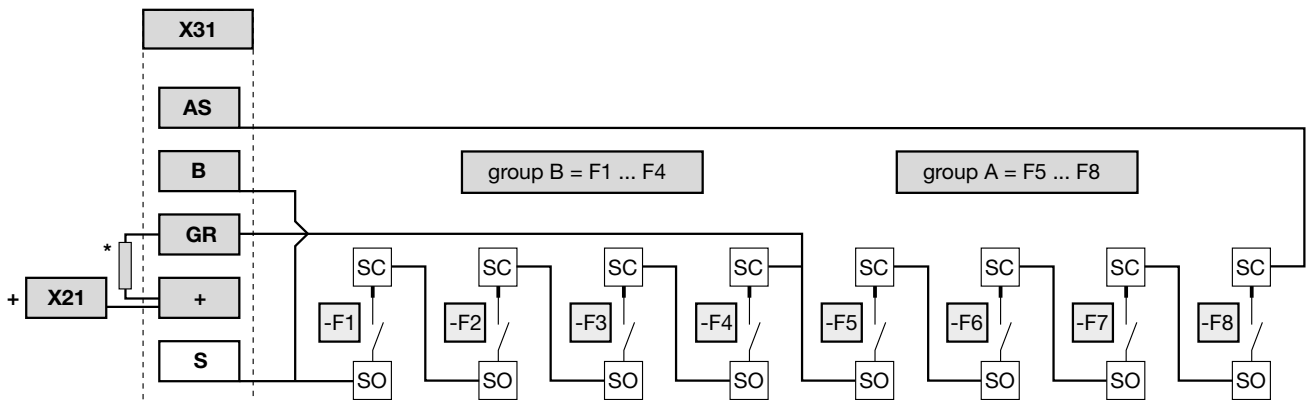
Signal path of two-group signalisation
from F1 to F2 = group B, from F3 to F4 = group A



- X31** signalisation terminal
- AS signal output group A (F3 ... F4)
- B signal output group B (F1 ... F2)
- + +DC 24 V from terminal 21, internally prewired and protected by CB1
- GR line feed two-group signalisation with insulation bridge*
- SC/SO auxiliary contact ESS20-003, make contact

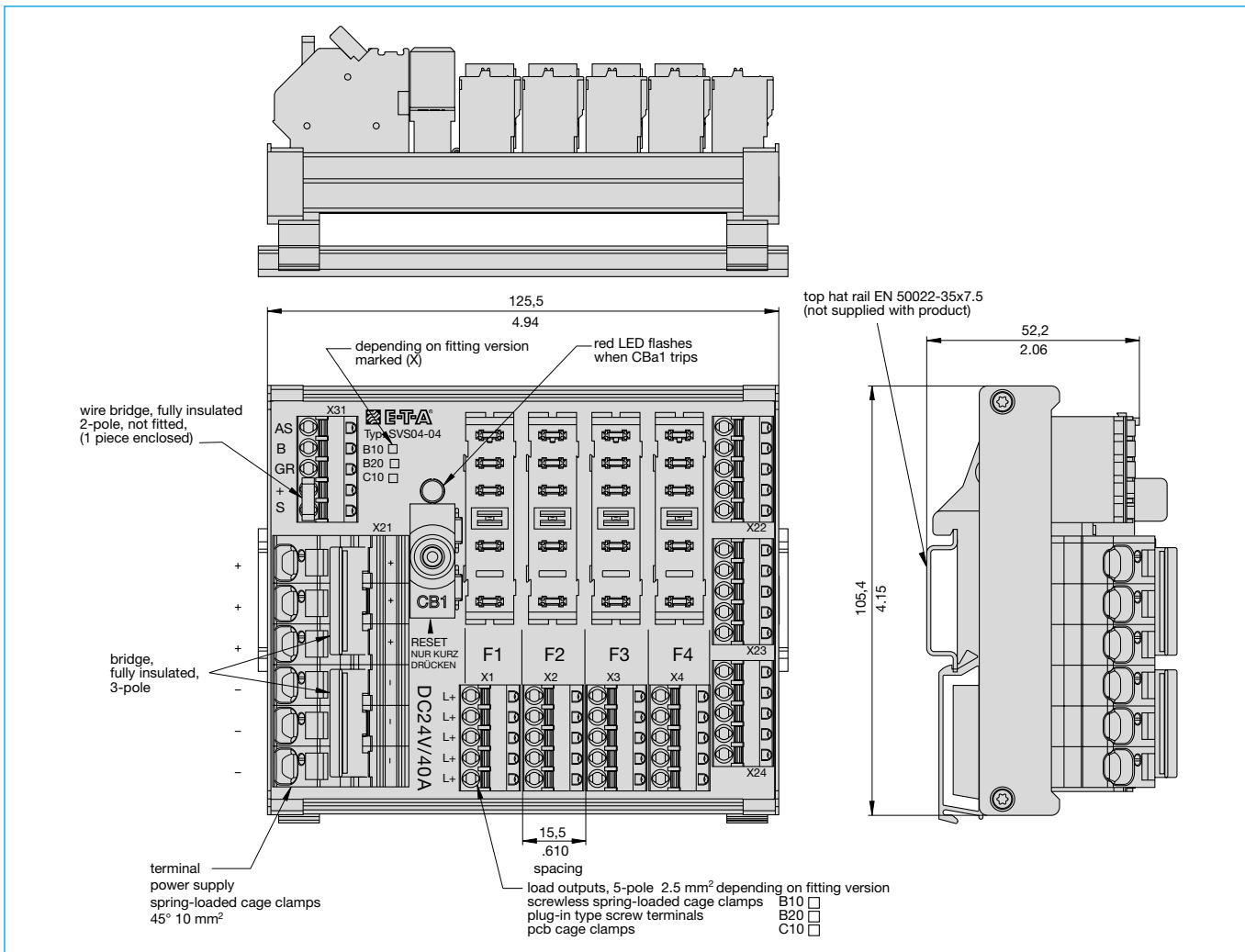
Wiring example: SVS04-08... with ESS20-003 and two-group signalisation

Signal path of two-group signalisation
from F1 to F4 = group B, from F5 to F8 = group A

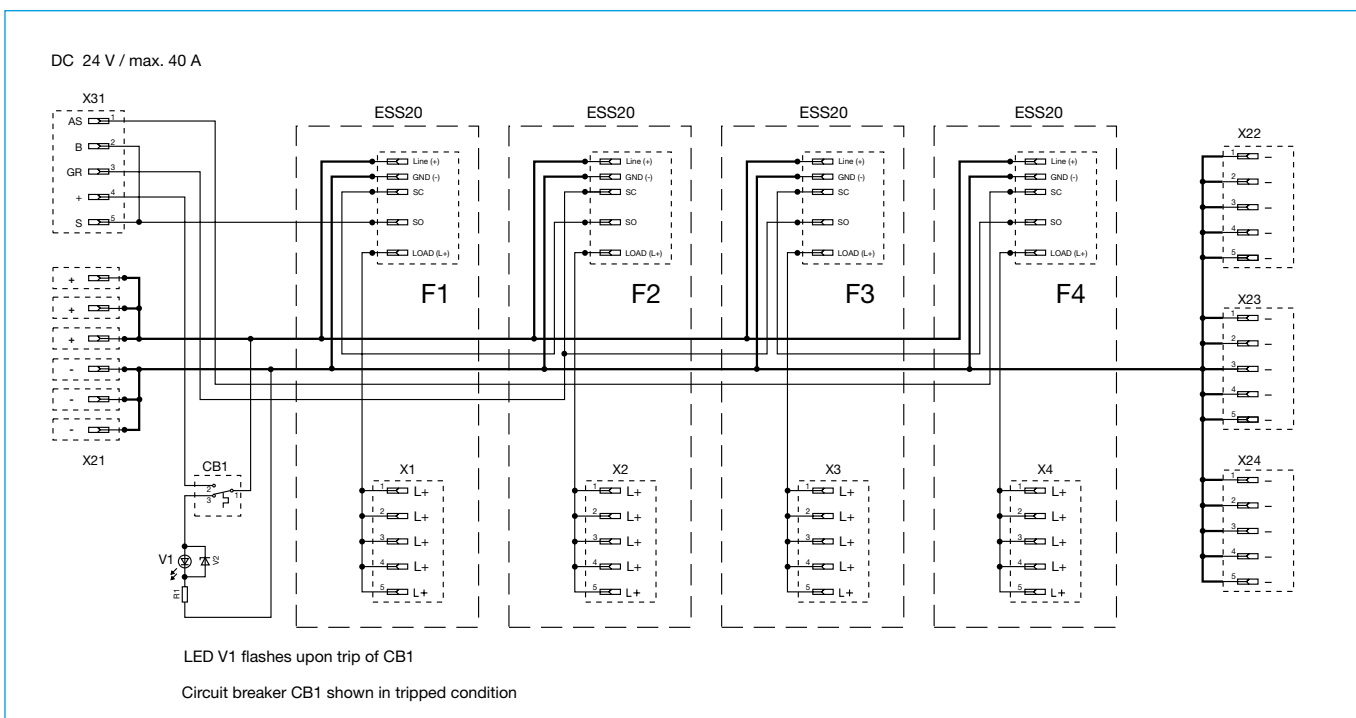


- X31** signalisation terminal
- AS signal output group A (F5 ... F8)
- B signal output group B (F1 ... F4)
- + +DC 24 V from terminal 21, internally prewired and protected by CB1
- GR line feed two-group signalisation with insulation bridge*
- SC/SO auxiliary contact ESS20-003, make contact

Dimensions SVS04-04-... (with 15 minus terminals)

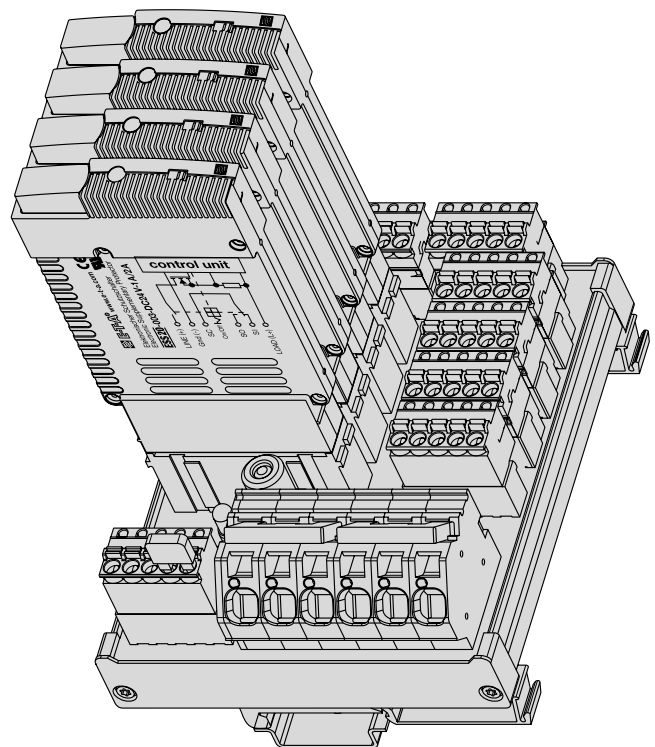
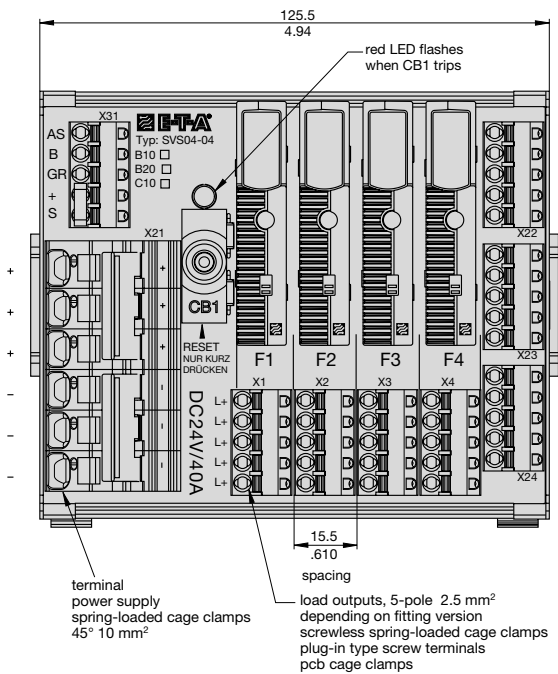
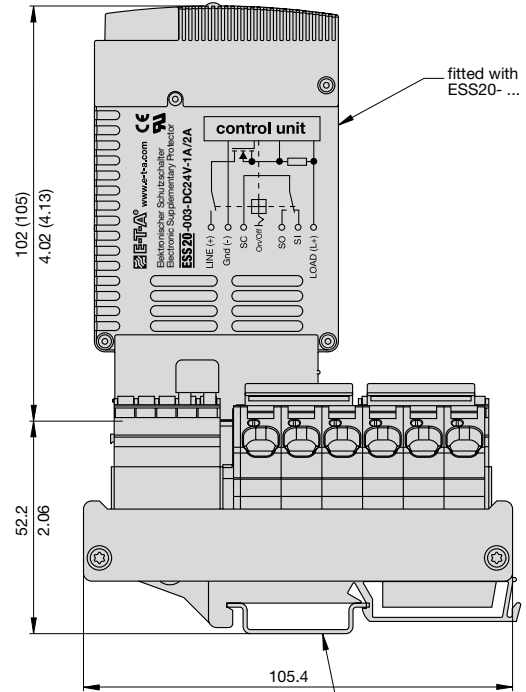
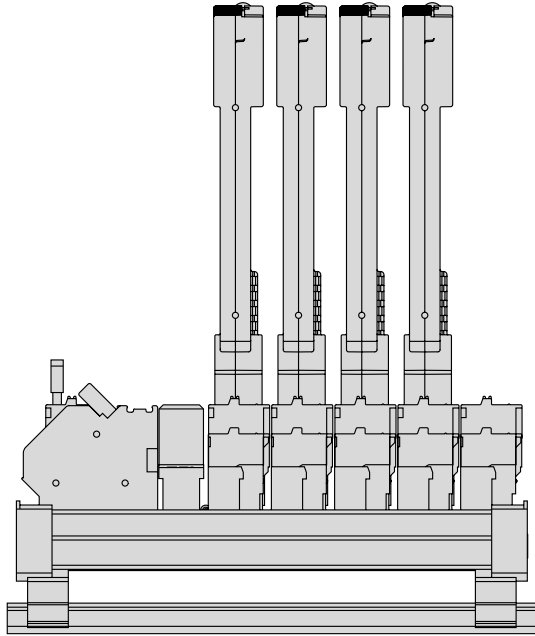


Schematic diagram SVS04-04-... (fitted with ESS20-003)



6

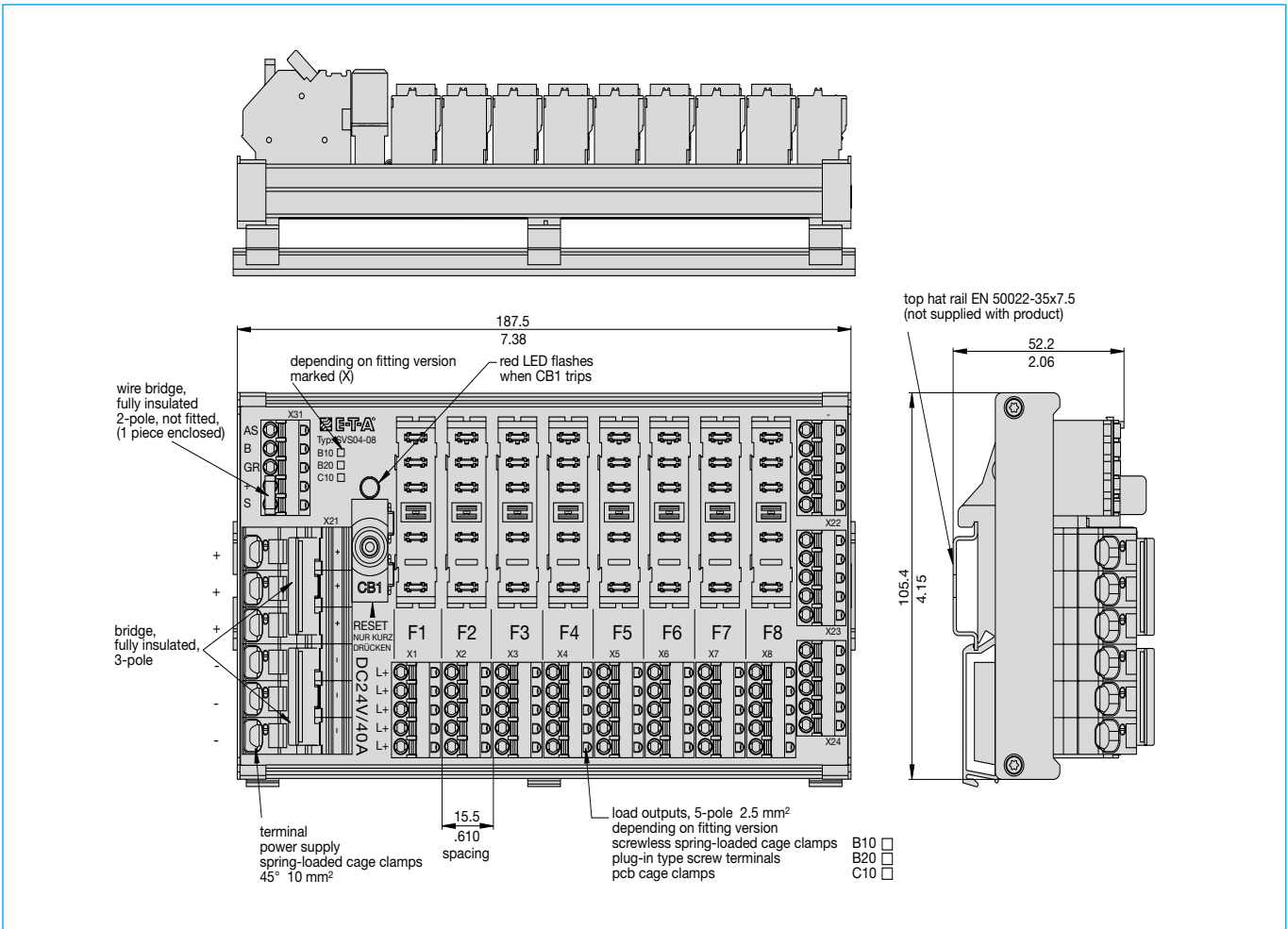
Dimensions SVS04-04-..., fitted with ESS20-003



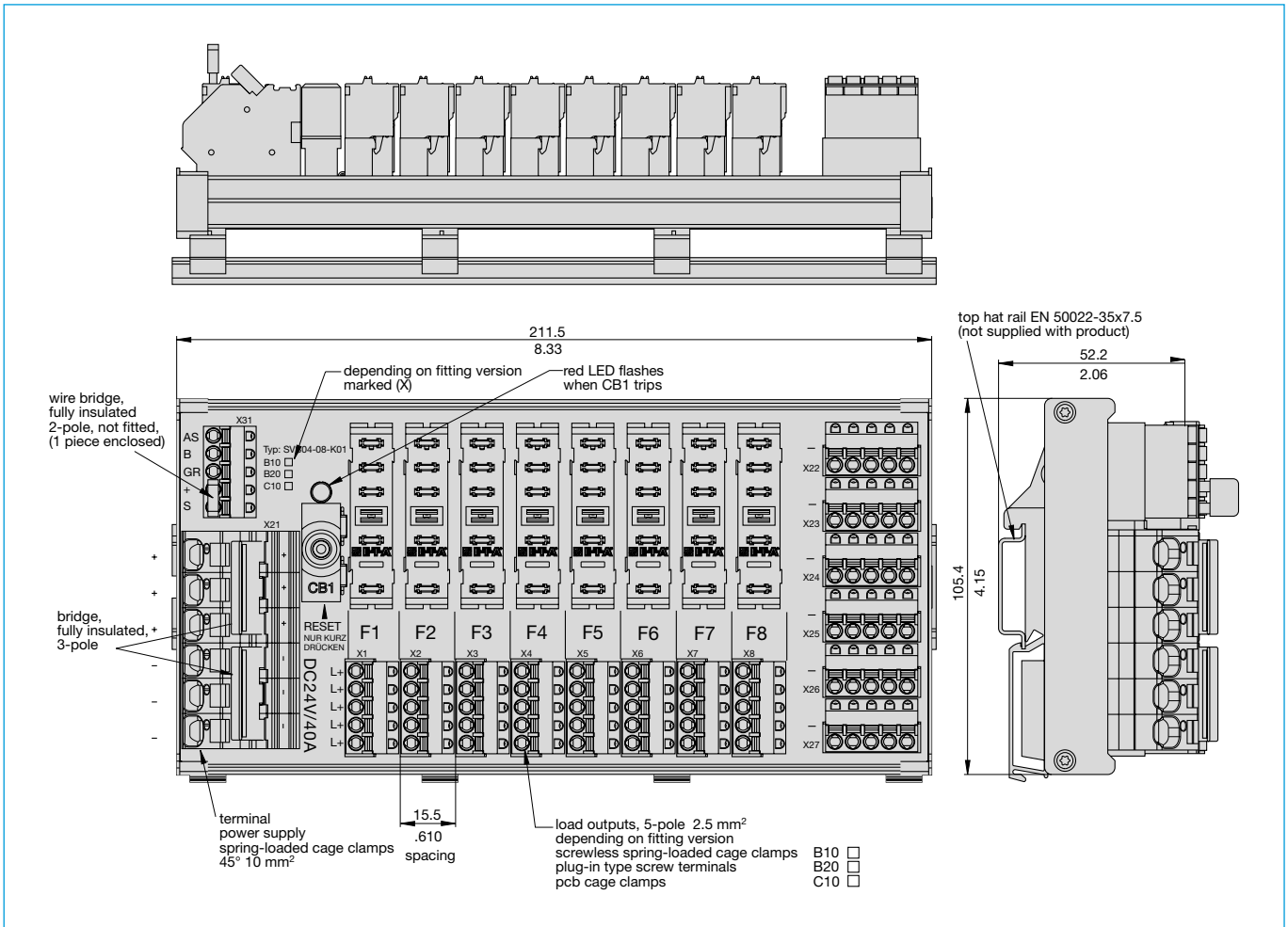
top hat rail EN 50022-35x7.5 (not supplied with product)

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

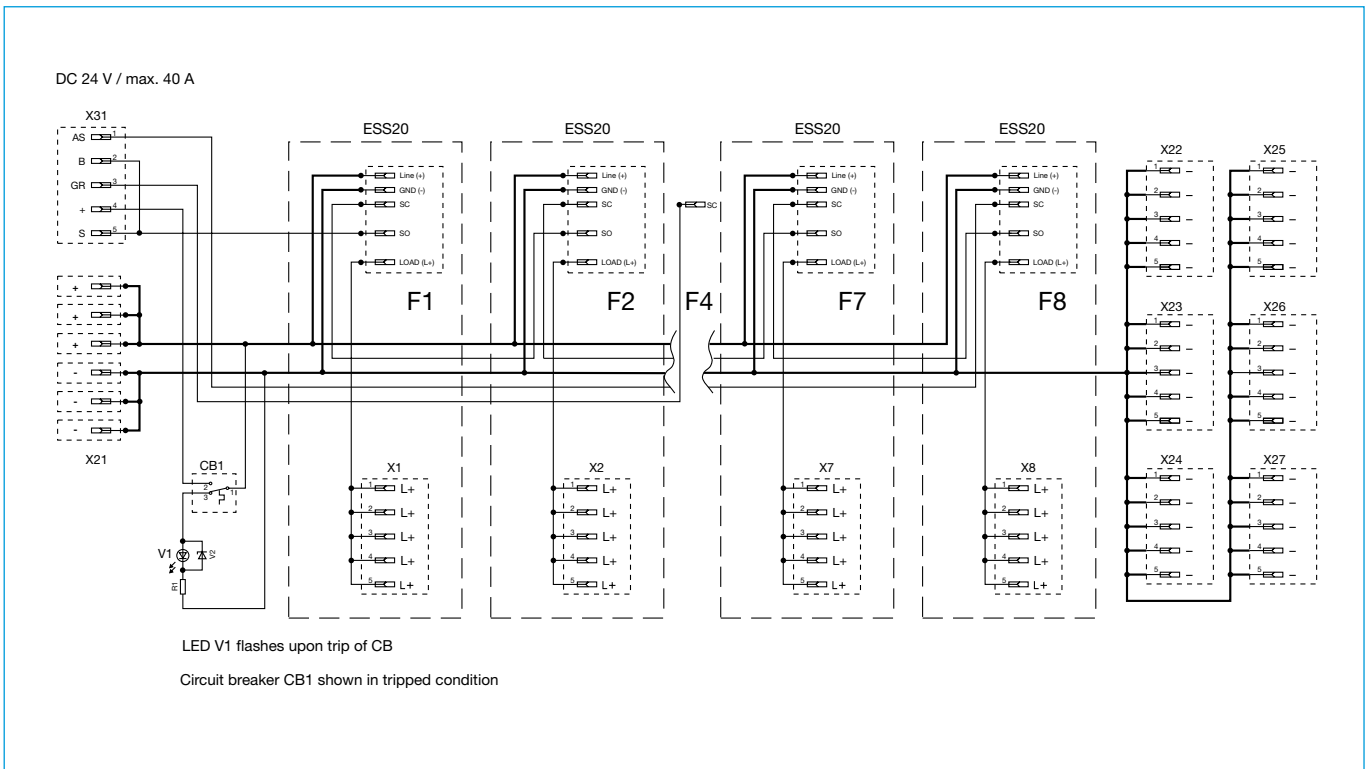
Dimensions SVS04-08-... (with 15 minus terminals)



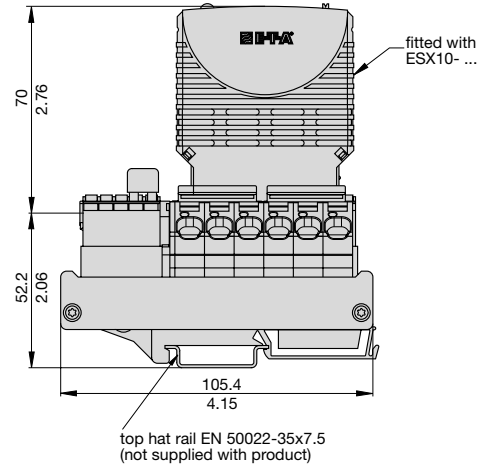
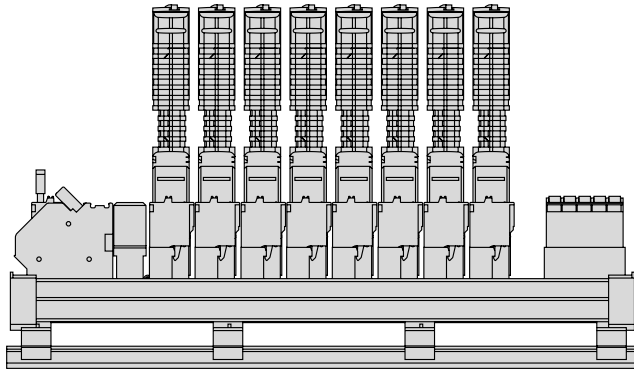
Dimensions SVS04-08... K01 (with 30 minus terminals)



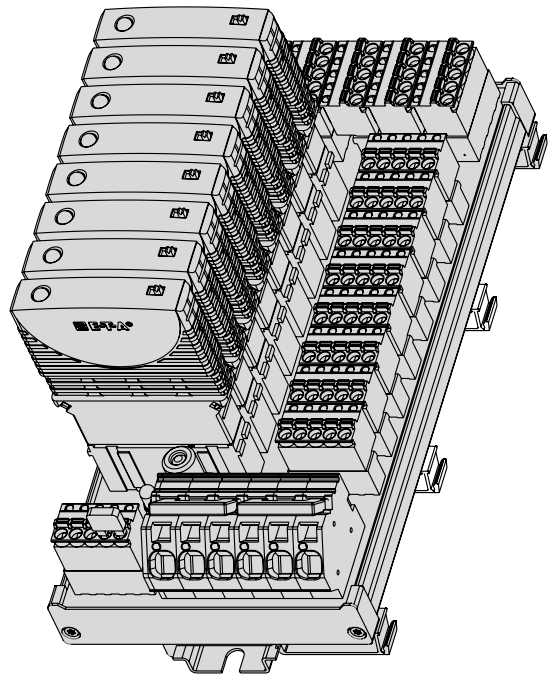
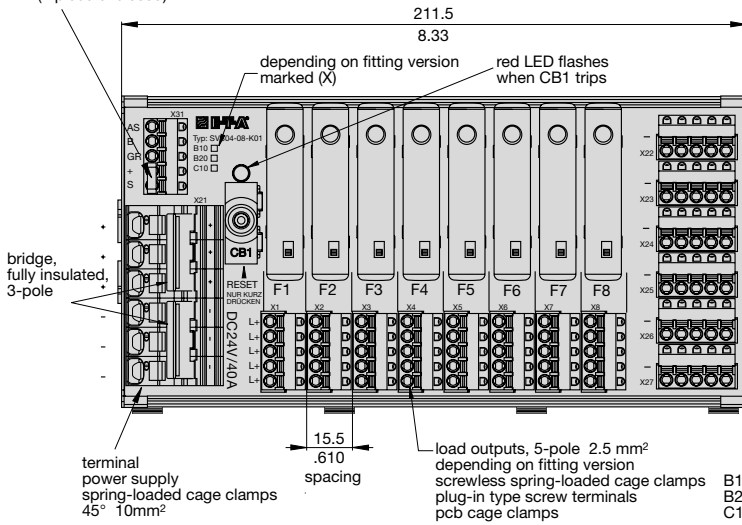
Schematic diagram SVS04-08... K01 (fitted with ESS20-003)



Dimensions SVS04-08... K01, fitted with ESX10-103



wire bridge, fully insulated 2-pole, not fitted, (1 piece enclosed)



This is a metric design and millimeter dimensions take precedence (mm / inch)

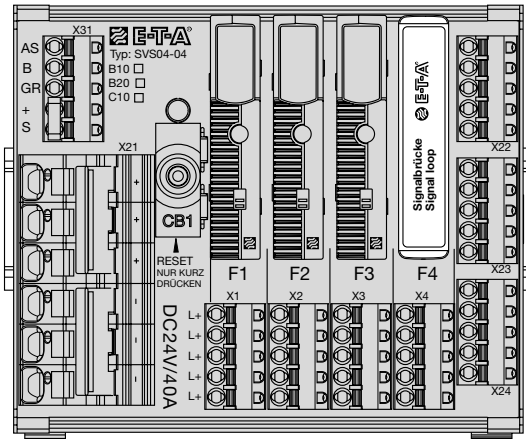
Application example for jumper to replace

The signalling pathway of the group signalisation is as follows:

- feed-in of +DC 24 V potential in X31 (»+« terminal) via in-built overcurrent protection CB1
- via all signal contacts of the fitted circuit breakers type ESS20-003
- back to signal output of group signalisation X31 (»AS«)

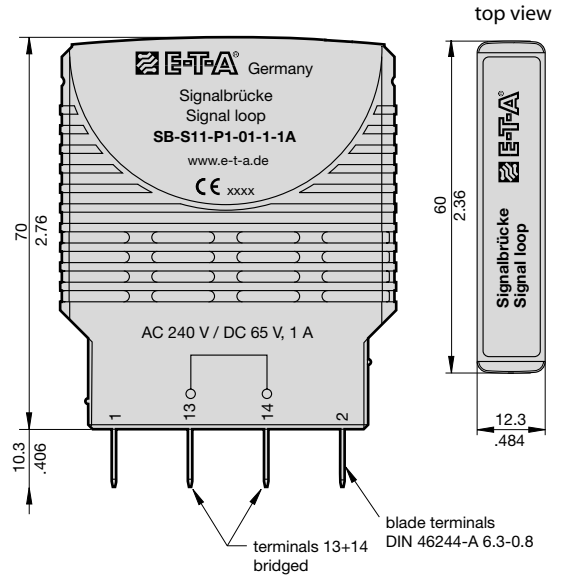
In operating condition (i.e. all circuit breakers plugged in and functional) the signalling pathway X31 from »+« to »AS« is closed.

If the distribution rail is not completely fitted with ESS20-003, the open pathway »+« to »AS« may be closed by means of a jumper type SB-S11-P1-01-1-1A



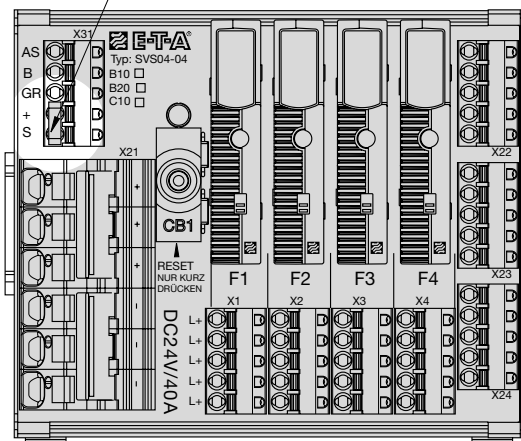
Accessories

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



Application example for insulated wire bridge

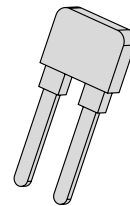
Terminal X31 (group signalisation)
wire bridge from (+) to (SC)
internal +DC24V feed for signalisation
Thus plus potential of terminal X21+ is connected to (S)



Insulated wire bridge Y 303 881 08

1 piece of the insulated wire bridge are supplied with the power distribution system. The insulated wire bridges may be used for:

- terminal X31: internal DC 24 V feed for group signalisation wire bridge from (+) to (S) signal path protected by CB1
- terminal X31: internal DC 24 V feed for two-group signalisation wire bridge from (+) to (GR) signal path protected by CB1



This is a metric design and millimeter dimensions take precedence (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.

