

1-Channel circuit breaker

EB-1824-100-0



Picture shows EB-XX24-XX0-0

Advantages

Automatic feedthrough of all signal levels
Optional communication via communication module
Optional undervoltage shutdown in combined network
Optional settings for tripping current
Additional load outputs through output distribution modules mountable side by side
Selective load-dependent activation
Versions with collective reset input

Applications

EB-27 Electronic circuit breaker with thermomagnetic characteristic with alarm signal forwarded for tripped and switched off channels to the connected channels. Starter version with fuse for 24 V loads.

EB-28 Electronic circuit breaker with current-limiting characteristic with alarm signal forwarded for tripped and switched off channels to the connected channels. Starter version with fuse for 24 V loads if active current limitation is required.

EB-08, EB-18, EB-38 Electronic circuit breaker with current-limiting characteristic and comprehensive communication with the connected modules. Suitable as advanced fuse for 24 V loads with option of reading more detailed current supply parameters and actively controlling the channels.

Standards

Safety:
EN 60950-1, EN 50178, EN/IEC 60204-1
EMC:
EN 61000-6-2 (interference immunity), EN 61000-6-3 (emitted interference)
CE:
Acc. to 2014/30/EU

Approvals



UL 508 (prepared), UL 2367 (prepared), GL (prepared),
VW eCl@ss No.27-37-18-02 (prepared)



1-Channel circuit breaker

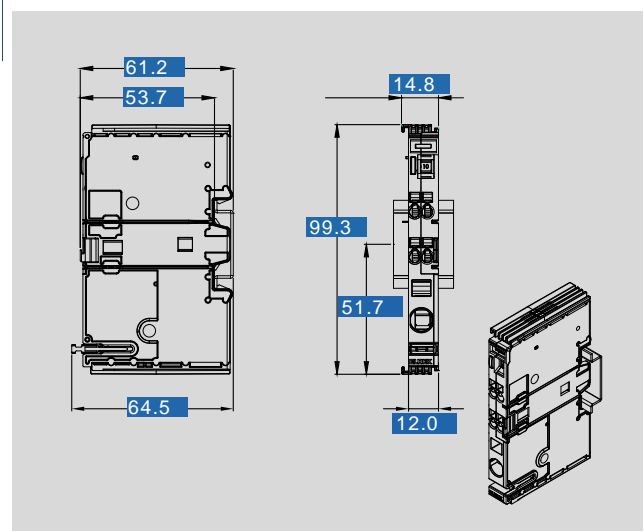
EB-1824-100-0

Electrical data

Type	EB-1824-100-0
Special features	
Characteristics	-
Input	
Input rated voltage	24 Vdc
Input voltage range	18 - 30 Vdc
Maximal residual ripple of supplied input voltage	3 %
Max. total input current	10 A
Max. input current for each pole of terminal	10 A (-), 40 A (+)
Required input voltage for turning-on of outputs	17.5 V (Turn-off Threshold 16.7 V), ± 0.7 V
Max. power losses	2.5 W
Over voltage protection	Suppressor diode 33 V
Stand-by current	39 mA @ 24 V
Power losses in stand-by mode	1.17 W @ 24 V
Turn on capacity	70 mF @ 24 Vdc / 2,5 mm ² / 2,5 m
Output	
Output rated voltage	24 Vdc
Maximum voltage drop between input and output	130 mV
Initialization time of module	52 ms
Turn-on delay of outputs	min. 50 ms / max. 5 s
Waiting periode after switch-off of an output	500 ms (Short circuit) .. 5 s (Overload)
Parallel use of outputs	Not allowed
Serial use of outputs	not allowed
Resistance to reverse feed max.	35 Vdc
Output rated current	10 A
Efficiency	99.0 %
Output limited current	typ. 12.5 A
Signaling	
Bus communication	Read:-state (tripped, On, Off) -set/active current -input voltage -firmware version/serial number Write:-state (on, off, reset)
Status indicator	LED (red, green, orange)
Signal output	Output status, short circuit proof high = Channel on, low = Channel off, fault Reset input
Signal output (ON/OFF/Reset)	Level high = min. 15V, max. 30V Level low = min. 0V, max. 5V
Environment	
Type of cooling	Natural convection
Ambient temperature	-25 °C ... +60 °C
Storage temperature	-25 °C ... +85 °C
Derating	-
Relative humidity	5 .. 96 %, without condensation
Required minimum spacing (left/right)	0 mm
Required minimum spacing (over/under)	30 mm
Safety and protection	
Protection index	IP 20
Safety class	III, without PE connection
Degree of pollution	2
Order numbers	
Order Number	EB-1824-100-0

Mechanical data

Type	EB-1824-100-0
Terminal and mounting	
Terminals input, (spring clamp terminal)	max. 16 mm ²
Terminals output, (spring clamp terminal)	max 2,5 mm ² (1 x "+")
Terminals signalling, (spring clamp terminal)	max. 2,5 mm ²
Mounting position	
Measures and weights	
Weight	0,042 kg



Subject to change.