1-Channel circuit breaker

EB-1824-010-0

Picture shows EB 1824-XX0-0

Advantages

- Automatic feedthrough of all signal levels
- Optional bus connection 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)

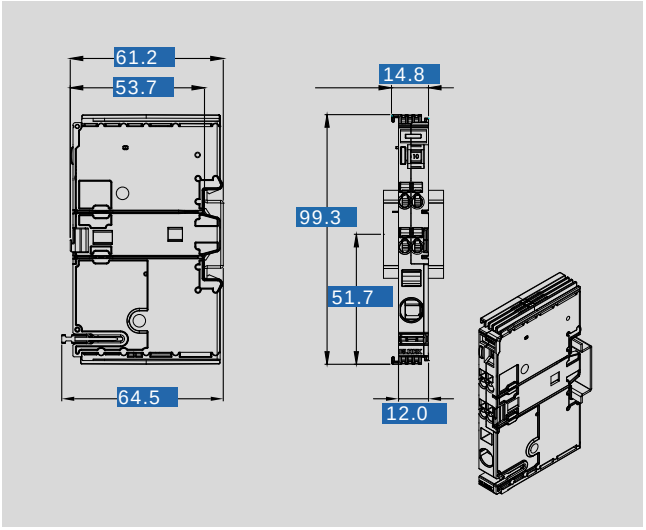
1-Channel circuit breaker
EB-1824-010-0

Electrical data

Type	EB-1824-010-0
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	1 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	1,2 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	110 mF @ 24 Vdc / 2,5 mm² / 2,5 m
Output	
Output rated voltage	24 Vdc
Maximum voltage drop between input and output	58 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	1 A
Efficiency	99 %
Output limited current	typ. 1,25 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 off, fault low = Channel on
Signal output (ON/OFF/Reset)	Reset input Level high = min. 15V, max. 30V Level low = min. 0V, max. 5V
Environment	
Type of cooling	Natural convection
Ambient temperature	-25 °C ..+70 °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)	40 mm
Safety and protection	
Protection index	IP 20
Safety class	III, without PE connection
Degree of pollution	2
Order numbers	
available from	Q2 2016
Order Number	**EB-1824-010-0**

Mechanical data

Type	EB-1824-010-0
Terminal and mounting	
Terminals input, (spring clamp terminal)	max. 16 mm²
Terminals output, (spring clamp terminal)	max 2,5 mm² (1 x "+")
Terminals signalling, (spring clamp terminal)	max. 2,5 mm²
Mounting position	
Measures and weights	
Weight	42.0 g



Subjects to change.