

1-Channel circuit breaker current-limiting, communicative **EB-0824-100-4**



EasyB

Advantages

Automatic channel assignment
Communication via communication modules
Optional undervoltage shutdown in combined network
Optional settings for tripping current
Additional load outputs through output expanders mountable side by side
Selective load-dependent activation
Collective reset input
3 years warranty

Applications

Electronic circuit breaker with current-limiting characteristic and comprehensive communication with the connected modules.

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, UL 2367, DNV GL



1-Channel circuit breaker current-limiting, communicative

EB-0824-100-4

Type	EB-0824-100-4
Electrical data	
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 Vdc (Turn-off Threshold 16.7 Vdc), ± 0.7 Vdc
Max. power losses	1.2 - 2.5 W
Over voltage protection	Suppressor diode 33 Vdc
Stand-by current	39 mA @ 24 Vdc
Power losses in stand-by mode	1.17 W @ 24 Vdc
Turn on capacity	50-110 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	0.5 - 10 A, adjustable (0,5A, 1A, 2A, 3A, 4A, 5A, 6A, 8A, 10A)
Efficiency	99.0 %
Output limited current	typ. rated current x 1,25 (@ 1-10 A) typ. rated current x 2,5 (@ 0,5 A)
Signaling	
Bus communication	Read:-state (tripped, On, Off) -set/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. 15 Vdc, max. 30 Vdc Level low = min. 0 Vdc, max. 5 Vdc
Approvals	
Approvals	cURus, cULus, DNV GL, EAC
Environment	
Type of cooling	Natural convection
Ambient temperature	-25 °C to +70 °C
Storage temperature	-25 °C . . . +85 °C
Derating	max. +60 °C > 6A
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-0824-100-4

Type	EB-0824-100-4
Mechanical data	
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	horizontal for standard rail DIN TS35
Measures and weights	
Weight	0.042 kg

Subject to change.