#### EB-1824-040-0



## 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

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

EN 60950-1, EN 50178, EN/IEC 60204-1

EN 61000-6-2 (interference immunity), EN 61000-6-3 (emitted interference)

Acc. to 2014/30/EU

**Approvals** 







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





# 1-Channel circuit breaker

### EB-1824-040-0

	Туре	EB-1824-040-0
Ĵ٢	Special features	
ĭ+	Characteristics	
	Input	
Electrical data	Input rated voltage	24 Vdc
	Input voltage range	18 - 30 Vdc
	Maximal residual ripple of supplied input voltage	3%
	Max. total input current	4 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	1,5 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	110 mF @ 24 Vdc / 2,5 mm <sup>2</sup> / 2,5 m
	Output	
	Output rated voltage	24 Vdc
	Maximum voltage drop between input and output	70 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	4 A
	Efficiency	99.0 %
	Output limited current	typ. 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)
		Output status, short circuit proof
	Signal output	high = Channel on, low = Channel off, fault
	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)	30 mm
	Safety and protection	
	Protection index	IP 20
	Safety class	III, without PE connection
	Degree of pollution	2
	Order numbers	
	Order Number	EB-1824-040-0

EB-1824-040-0 Type Terminal and mounting Terminals input, (spring clamp terminal) max. 16 mm<sup>2</sup> max 2,5 mm² (1 x "+") Terminals output, (spring clamp terminal) Mechanical data Terminals signalling, (spring clamp terminal) max. 2,5 mm<sup>2</sup> Mounting position Measures and weights 0,042 kg Weight

