

Miniature circuit breaker (MCB), 13A, 2 p, type B characteristic, DC

Powering Business Worldwide*

Part no. FAZ-B13/2-DC Catalog No. 176080

Similar to illustration

livery		

Basic function			Miniature circuit-breakers
Number of poles			2 pole
Tripping characteristic			В
Application			Switchgear for DC applications
Rated current	In	Α	13
Rated switching capacity acc. to IEC/EN 60947-2		kA	10
Product range			FAZ-DC

Technical data

Electrical

Design verification as per IEC/EN 61439

Design vernication as per 126/214 01433			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	13
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	5.3
Static heat dissipation, non-current-dependent	P _{vs}	W	0
Heat dissipation capacity	P _{diss}	W	0
Operating ambient temperature max.		°C	-40
Operating ambient temperature max.		°C	75
			linear, per +1 °C, results in a 0.5% reduction of current carrying capacity
EC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures			Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat			Meets the product standard's requirements.
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects			Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation			Meets the product standard's requirements.
10.2.5 Lifting			Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact			Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions			Meets the product standard's requirements.
10.3 Degree of protection of ASSEMBLIES			Does not apply, since the entire switchgear needs to be evaluated.
10.4 Clearances and creepage distances			Meets the product standard's requirements.
10.5 Protection against electric shock			Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components			Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections			Is the panel builder's responsibility.
10.8 Connections for external conductors			Is the panel builder's responsibility.
10.9 Insulation properties			
10.9.2 Power-frequency electric strength			Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage			Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material			Is the panel builder's responsibility.
10.10 Temperature rise			The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.

10.11 Short-circuit rating	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 Mechanical function	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

Technical data ETIM 6.0

Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042)

Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss8.1-27-14-19-01 [AAB905011])

Release characteristic Ruber of poles (total) Number of poles (total) Number of protected poles	[AAB905011])		
Number of protected poles 2 Nominal rated current A 13 Nominal rated voltage V 500 Rated short-circuit breaking capacity Icn EN 60898 at 230 V kA 0 Rated short-circuit breaking capacity Icn EN 60898 at 400 V kA 0 Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V kA 10 Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V kA 10 Voltage type DC DC Current limiting class 3 3 Frequency HZ 50 - 60 Concurrently switching N-neutral No No Suitable for flush-mounted installation No 3 Over voltage category 2 3 Pollution degree 2 2 Width in number of modular spacings 2 2 Built-in depth mm 70.5 Additional equipment possible Yes	Release characteristic		В
Nominal rated current Nominal rated voltage Nominal rated voltage Rated short-circuit breaking capacity Icn EN 60898 at 230 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 2400 V Voltage type Current limiting class Frequency Concurrently switching N-neutral Suitable for flush-mounted installation Over voltage category Pollution degree Width in number of modular spacings Bult-in depth Additional equipment possible	Number of poles (total)		2
Nominal rated voltage Rated short-circuit breaking capacity Icn EN 60898 at 230 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Voltage type Current limiting class Frequency Ly 50 - 60 Concurrently switching N-neutral Suitable for flush-mounted installation Over voltage category Pollution degree Width in number of modular spacings Built-in depth Additional equipment possible	Number of protected poles		2
Rated short-circuit breaking capacity Icn EN 60898 at 230 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 200 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Voltage type Current limiting class Current limiting class Frequency Concurrently switching N-neutral Suitable for flush-mounted installation Over voltage category Pollution degree Width in number of modular spacings Built-in depth Additional equipment possible KA 0 0 CO CO CO CO CO CO CO CO	Nominal rated current	А	13
Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Voltage type Current limiting class Frequency Concurrently switching N-neutral Suitable for flush-mounted installation Over voltage category Pollution degree Width in number of modular spacings Built-in depth Additional equipment possible KA 0 10 10 10 10 10 10 10 10 10	Nominal rated voltage	V	500
Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	Rated short-circuit breaking capacity Icn EN 60898 at 230 V	kA	0
Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Voltage type Current limiting class Frequency Concurrently switching N-neutral Suitable for flush-mounted installation Over voltage category Pollution degree Width in number of modular spacings Built-in depth Additional equipment possible KA 10 CC DC CC DC CC DC ABA BA BA BA BA BA BA BA BA	Rated short-circuit breaking capacity Icn EN 60898 at 400 V	kA	0
Voltage typeDCCurrent limiting class3FrequencyHz50 - 60Concurrently switching N-neutralNoSuitable for flush-mounted installationNoOver voltage category3Pollution degree2Width in number of modular spacings2Built-in depthmm70.5Additional equipment possibleYes	Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	kA	10
Current limiting class Frequency Concurrently switching N-neutral Concurrently switching N-neutral Suitable for flush-mounted installation Over voltage category Pollution degree Width in number of modular spacings Built-in depth Additional equipment possible 3 Pollution degree 2 Wes	Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V	kA	10
Frequency Concurrently switching N-neutral Suitable for flush-mounted installation Over voltage category Pollution degree Width in number of modular spacings Built-in depth Additional equipment possible Hz 50 - 60 No No 2 2 4 No	Voltage type		DC
Concurrently switching N-neutral No Suitable for flush-mounted installation Over voltage category Pollution degree Width in number of modular spacings Built-in depth Mo 2 Widthin number of modular spacings Additional equipment possible No 3 2 Wightham of modular spacings Pollution degree Yes	Current limiting class		3
Suitable for flush-mounted installation Over voltage category Pollution degree Width in number of modular spacings Built-in depth Mo 2 Width in number of modular spacings Pollution degree Width in number of modular spacings Yes	Frequency	Hz	50 - 60
Over voltage category 3 Pollution degree 2 Width in number of modular spacings 2 Built-in depth mm 70.5 Additional equipment possible Yes	Concurrently switching N-neutral		No
Pollution degree 2 Width in number of modular spacings 2 Built-in depth mm 70.5 Additional equipment possible Yes	Suitable for flush-mounted installation		No
Width in number of modular spacings 2 Built-in depth mm 70.5 Additional equipment possible Yes	Over voltage category		3
Built-in depth mm 70.5 Additional equipment possible Yes	Pollution degree		2
Additional equipment possible Yes	Width in number of modular spacings		2
	Built-in depth	mm	70.5
Degree of protection (IP)	Additional equipment possible		Yes
	Degree of protection (IP)		IP20