

# Over current switch, 3A, 2 p, type B characteristic, DC

Part no. FAZ-B3/2-DC Article no. 176076



Similar to illustration

	gram

,			
Basic function			Miniature circuit breakers
Number of poles			2 pole
Tripping characteristic			В
Application			Switchgear for DC applications
Rated current	In	Α	3
Rated switching capacity acc. to IEC/EN 60947-2		kA	10
Product range			FAZ

# **Technical data**

#### Electrical

switching capacity acc. to IEC/EN 60947-2
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## **Design verification as per IEC/EN 61439**

Design verification as per IEC/EN 61439			
echnical data for design verification			
Rated operational current for specified heat dissipation	In	Α	3
Heat dissipation per pole, current-dependent	$P_{vid}$	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	5
Static heat dissipation, non-current-dependent	$P_{vs}$	W	0
Heat dissipation capacity	P <sub>diss</sub>	W	0
Operating ambient temperature min.		°C	-40
Operating ambient temperature max.		°C	75
			linear, per +1 °C, results in a 0.5% reduction of current carrying capacity
C/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

Release characteristic Romber of poles (total) Number of protected poles Number of protection (IP) Number of protected poles Number of protection (IP) Number of protection (I	[AAB905011])			
Number of protected poles         2           Nominal rated current         A         3           Nominal rated voltage         V         500           Rated short-circuit breaking capacity Icn EN 60898 at 230 V         kA         0           Rated short-circuit breaking capacity Icu EN 60898 at 400 V         kA         10           Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V         kA         10           Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V         kA         10           Voltage type         DC         Current limiting class         3           Current limiting class         S         50 - 60           Concurrently switching N-neutral         No         No           Suitable for flush-mounted installation         No         No           Over voltage category         2         3           Pollution degree         2         2           Width in number of modular spacings         2         2           Built-in depth         No         2           Additional equipment possible         MR         No	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 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 200 V Voltage type Current limiting class Frequency 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 A A B A B B A B B B A B B B B B B B B	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  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 400 V Voltage type Current limiting class Frequency Concurrently switching N-neutral Suitable for flush-mounted installation Over voltage category Pollution degree Vidith in number of modular spacings Built-in depth Additional equipment possible	Nominal rated current	А	١	3
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  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	Nominal rated voltage	V	,	500
Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V kA 10  Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 10  Voltage type DC  Current limiting class 3 3  Frequency Suitable for flush-mounted installation No  Over voltage category No  Pollution degree SW  Width in number of modular spacings SW  Built-in depth Additional equipment possible SW  Additional equipment possible SW  Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V kA 10  DC  Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V kA 10  DC  Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V kA 10  DC  Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V kA 10  DC  CURRENT SW  RATED SW	Rated short-circuit breaking capacity Icn EN 60898 at 230 V	k.A	Α	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	Rated short-circuit breaking capacity Icn EN 60898 at 400 V	k.A	Α	0
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  DC  DC  DC  DC  3  4  4  50 - 60  No  No  No  2  4  4  50 - 60  No  No  No  10  4  7  50 - 60  No  No  No  10  4  7  50 - 60  No  No  10  10  10  10  10  10  10  10  10  1	Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	k.A	Α	10
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  3  3  3  6  6  7  8  9  9  9  9  9  9  9  9  9  9  9  9	Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V	k.A	Α	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  Pollogian  Possible Pollogian  Possible Pollogian  Possible Pollogian  Possible Pollogian  Possible Pollogian  Possible Pos	Voltage type			DC
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  No  3  2  2  4  7  7  7  7  7  7  7  7  7  7  7  7	Current limiting class			3
Suitable for flush-mounted installation  Over voltage category  Pollution degree  Width in number of modular spacings  Built-in depth  Additional equipment possible  No  2  2  Yes	Frequency	H	lz	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 2 Width in number of modular spacings 2 2 Built-in depth mm 70.5 Additional equipment possible 2 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 ves	Pollution degree			2
Additional equipment possible Yes	Width in number of modular spacings			2
	Built-in depth	m	nm	70.5
Degree of protection (IP) IP20	Additional equipment possible			Yes
	Degree of protection (IP)			IP20