### **DATASHEET - FAZ-Z1/3**



### Miniature circuit breaker (MCB), 1A, 3p, Z-Char, AC

Powering Business Worldwide\*

Part no. FAZ-Z1/3
Catalog No. 278919
Eaton Catalog No. FAZ-Z1/3
EL-Nummer 0001695278
(Norway)

Similar to illustration

# Technical data

Electrical			
Standards			IEC/EN 60947-2 IEC/EN 60898
Rated operational voltage	U <sub>e</sub>	V	
	U <sub>e</sub>	V AC	240/415
		V DC	60 (per pole)
Rated switching capacity acc. to IEC/EN 60947-2	I <sub>cu</sub>	kA	10
Operational switching capacity		kA	7.5
Characteristic			B, C, D, K, S, Z
Max. back-up fuse		A gL/gG	125
Selectivity Class			3
lifespan			
Lifespan	Operations		> 10000
Direction of incoming supply			as required
Mechanical			
Standard front dimension		mm	45
Enclosure height		mm	80
Mounting width per pole		mm	17.5
Mounting			IEC/EN 60715 top-hat rail
Degree of Protection			IP20, IP40 (when fitted)
Terminals top and bottom			Twin-purpose terminals
Terminal protection			Finger and back-of-hand proof to BGV A2
Terminal capacities		$\mathrm{mm}^2$	
		$\mathrm{mm}^2$	1 x 25
		mm <sup>2</sup>	2 x 10
Thickness of busbar material		mm	0.8 2
Mounting position			As required

# Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	1
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	10.7
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
IEC/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 7.0**

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

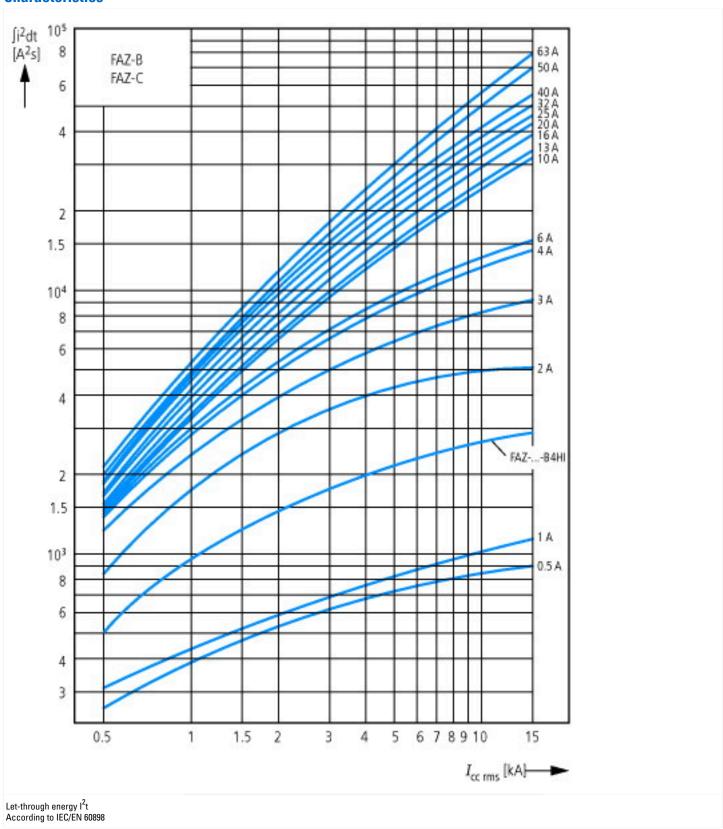
Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss10.0.1-27-14-19-01 [AAB905014]) Release characteristic Z Number of poles (total) 3 Number of protected poles 3 Rated current 1 Α ٧ Rated voltage 400 Rated insulation voltage Ui V 440 Rated impulse withstand voltage Uimp kV 4 Rated short-circuit breaking capacity Icn EN 60898 at 230 V kΑ 0 Rated short-circuit breaking capacity Icn EN 60898 at 400 V kΑ 0 Rated short-circuit breaking capacity Icu IEC 60947-2 at 230  $\rm V$ kΑ 10 Rated short-circuit breaking capacity Icu IEC 60947-2 at 400  $\rm V$ kΑ 10 AC Voltage type Hz Frequency 50 - 60 **Current limiting class** 3 Suitable for flush-mounted installation No Concurrently switching N-neutral No Over voltage category 3 Pollution degree 2 Additional equipment possible Yes Width in number of modular spacings 3 Built-in depth 70.5 mm IP20 Degree of protection (IP) °C -25 - 75 Ambient temperature during operating Connectable conductor cross section multi-wired mm² 1 - 25 Connectable conductor cross section solid-core 1 - 25

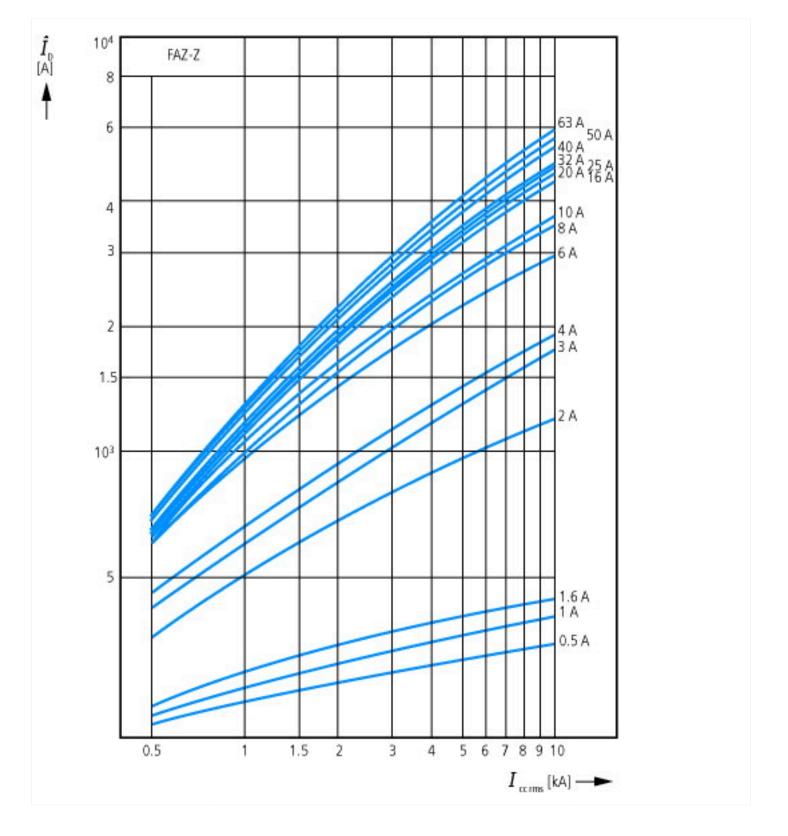
### **Approvals**

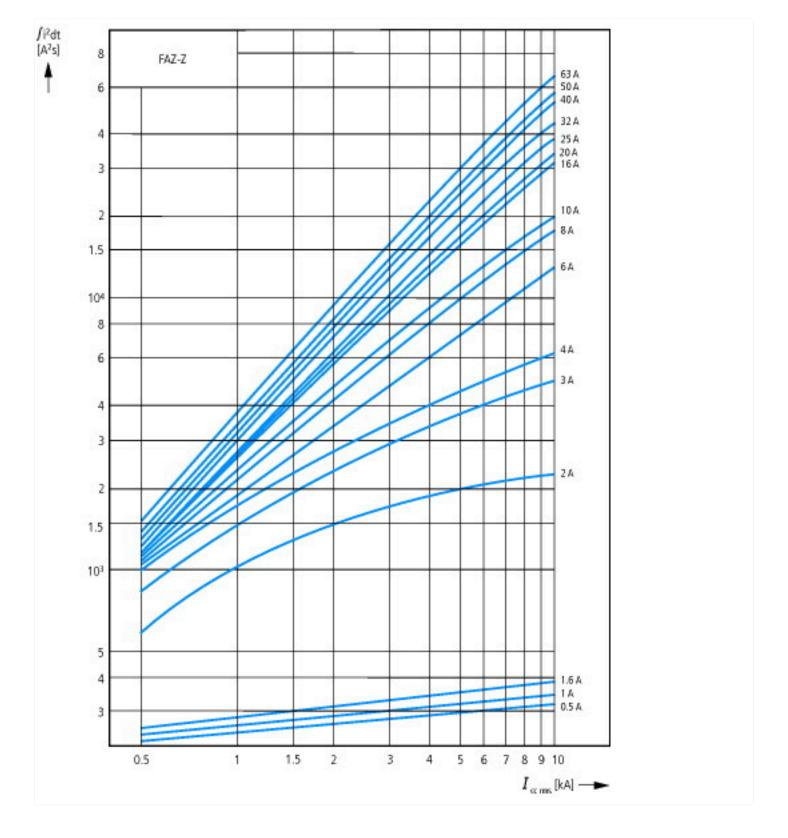
Product Standards	IEC/EN 60947-2; IEC/EN 60898; UL 1077; CSA-C22.2 No. 235; CE marking
UL File No.	E177451

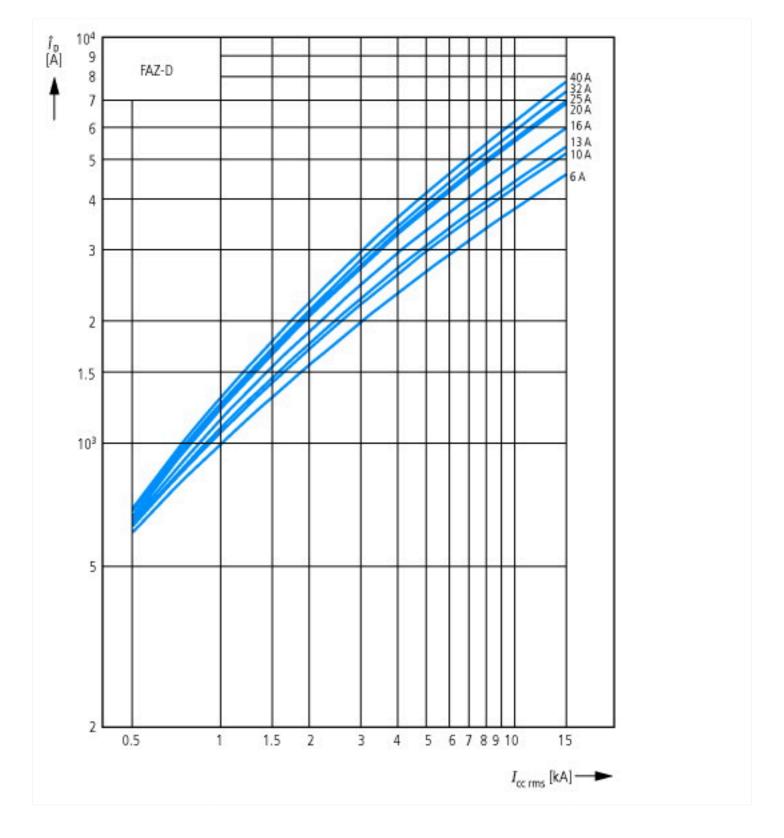
UL Category Control No.	QVNU2, QVNU8
CSA File No.	204453
CSA Class No.	3215-30
North America Certification	UL recognized, CSA certified
Conditions of Acceptability	Supplementary Protector only
Suitable for	Branch Circuits; not as BCPD
Current Limiting Circuit-Breaker	No
Max. Voltage Rating	480Y/277 VAC
Degree of Protection	IEC: IP20; UL/CSA Type: -

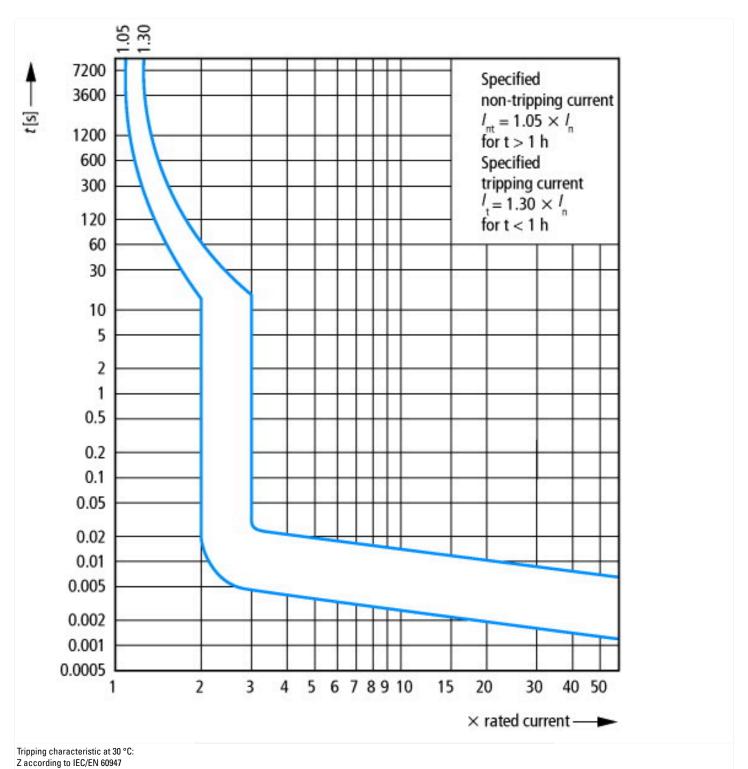
## **Characteristics**











# **Dimensions**

