DATASHEET - FAZ-Z2/1

Miniature circuit breaker (MCB), 2A, 1p, Z-Char, AC





Part no.

(Norway)

FAZ-Z2/1 Catalog No. 278620 Eaton Catalog No. FAZ-Z2/1 EL-Nummer 0001695248

Similar to illustration

Technical data

Electrical			
Standards			IEC/EN 60947-2 IEC/EN 60898
Rated operational voltage	U _e	V	
	U _e	V AC	240/415
		V DC	60 (per pole)
Rated switching capacity acc. to IEC/EN 60947-2	I _{cu}	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		mm ²	
		mm ²	1 x 25
		mm ²	2 x 10
Thickness of busbar material		mm	0.8 2
Mounting position			As required

Design verification as per IEC/EN 61439

5			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	А	2
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	3.7
Static heat dissipation, non-current-dependent	P _{vs}	W	0
Heat dissipation capacity	P _{diss}	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.

10.12 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		
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. 10.3.0 Begree of protection of ASSEMBLIES Does not apply, since the entire switchgear needs to be evaluated. 10.4 Clearances and creepage distances Does not apply, since the entire switchgear needs to be evaluated. 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. 10.9 Instruction advicting devices and components Does not apply, since the entire switchgear needs to be evaluated. 10.9 Instruction for external conductors Is the panel builder's responsibility. 10.9 Instruction properties Is the panel builder's responsibility. 10.9.1 Store requery electric strength Is the panel builder's responsibility. 10.9.2 Power-frequency electric strength Is the panel builder's responsibility. 10.9.1 Store-circuit rating Is the panel builder's responsibility. <td>10.2.3.1 Verification of thermal stability of enclosures</td> <td>Meets the product standard's requirements.</td>	10.2.3.1 Verification of thermal stability of enclosures	Meets the product standard's requirements.
and fire due to internal electric effects Meta to internal electric effects 102.4 Resistance to ultra-violet (UV) radiation Meta the product standard's requirements. 102.5 Lifting Does not apply, since the entire switchgear needs to be evaluated. 102.6 Mechanical impact Does not apply, since the entire switchgear needs to be evaluated. 103.7 Inscriptions Metas the product standard's requirements. 104.4 Clearances and creepage distances Metas the product standard's requirements. 105.5 Protection against electric shock Metas the product standard's requirements. 105.1 Incorporation of switching devices and components Does not apply, since the entire switchgear needs to be evaluated. 105.1 Incorporation of switching devices and components Does not apply, since the entire switchgear needs to be evaluated. 105.2 Power-frequency electric strength Does not apply, since the entire switchgear needs to be evaluated. 108.2 Power-frequency electric strength Ste panel builder's responsibility. 109.3 Inpulse withstand voltage Is the panel builder's responsibility. 10.0 Temperature rise Is the panel builder's responsibility. 10.1 Mont-circuit rating Is the panel builder's responsibility. 10.1 Short-circuit rating Is the panel builder's responsibility. The specifications for the switchgear must be observed. <td>10.2.3.2 Verification of resistance of insulating materials to normal heat</td> <td>Meets the product standard's requirements.</td>	10.2.3.2 Verification of resistance of insulating materials to normal heat	Meets the product standard's requirements.
10.2.5 LiftingDoes not apply, since the entire switchgear needs to be evaluated.10.2.5 LiftingDoes not apply, since the entire switchgear needs to be evaluated.10.2.5 LiftingDoes not apply, since the entire switchgear needs to be evaluated.10.3.0 Egree of protection of ASSEMBLIESDoes not apply, since the entire switchgear needs to be evaluated.10.4 Clearances and creepage distancesDoes not apply, since the entire switchgear needs to be evaluated.10.5 Protection against electric shockDoes not apply, since the entire switchgear needs to be evaluated.10.6 Incorporation of switching devices and componentsDoes not apply, since the entire switchgear needs to be evaluated.10.7 Internal electrical circuits and connectionsIs the panel builder's responsibility.10.8 Connections for external conductorsIs the panel builder's responsibility.10.9.1 Nover-frequency electric strengthIs the panel builder's responsibility.10.9.2 Power-frequency electric strengthIs the panel builder's responsibility.10.9.3 Inpulse withstand voltageIs the panel builder's responsibility.10.9.1 Temperature riseIs the panel builder's responsibility.10.10 Temperature riseIs the panel builder's responsibility.10.11 Short-circuit ratingIs the panel builder's responsibility. The specifications for the switchgear must be observed.10.12 Electromagnetic compatibilityIs the panel builder's responsibility. The specifications for the switchgear must be observed.10.13 Mechanical functionIs the panel builder's responsibility. The specifications for the switchgear must be observed.10.13 Mechanical		Meets the product standard's requirements.
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. 10.9.1 neurol electric strength Is the panel builder's responsibility. 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. 10.10 Temperature rise Is the panel builder's responsibility. 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 Is the op	10.2.4 Resistance to ultra-violet (UV) radiation	Meets the product standard's requirements.
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 Is the panel builder's responsibility. 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. 10.10 Temperature rise The panel builder's responsibility. 10.10 Temperature rise Is the panel builder's responsibility. 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	10.2.5 Lifting	Does not apply, since the entire switchgear needs to be evaluated.
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 Is the panel builder's responsibility. 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. 10.10 Temperature rise Is the panel builder's responsibility. 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	10.2.6 Mechanical impact	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 Is the panel builder's responsibility. 10.9.1 Rupuse withstand voltage Is the panel builder's responsibility. 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. 10.9.1 Temperature rise Is the panel builder's responsibility. 10.10 Temperature rise Is the panel builder's responsibility. 10.11 Short-circuit rating Is the panel builder's responsibility. 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, provide the information in the instruction	10.2.7 Inscriptions	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 Is the panel builder's responsibility. 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's responsibility. 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	10.3 Degree of protection of ASSEMBLIES	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 Is the panel builder's responsibility. 10.9.1 Supulse 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 Is the panel builder's responsibility. 10.11 Short-circuit rating 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	10.4 Clearances and creepage distances	Meets the product standard's requirements.
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 Is the panel builder's responsibility. 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 Is the panel builder's responsibility. 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, provide the information in the instruction	10.5 Protection against electric shock	Does not apply, since the entire switchgear needs to be evaluated.
10.8 Connections for external conductors Is the panel builder's responsibility. 10.9 Insulation properties Is the panel builder's responsibility. 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's responsibility. 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	10.6 Incorporation of switching devices and components	Does not apply, since the entire switchgear needs to be evaluated.
10.9 Insulation propertiesInsulation properties10.9.2 Power-frequency electric strengthIs the panel builder's responsibility.10.9.3 Impulse withstand voltageIs the panel builder's responsibility.10.9.4 Testing of enclosures made of insulating materialIs the panel builder's responsibility.10.10 Temperature riseIs the panel builder is responsibility.10.11 Short-circuit ratingIs the panel builder's responsibility. The specifications for the switchgear must be observed.10.12 Electromagnetic compatibilityIs the panel builder's responsibility. The specifications for the switchgear must be observed.10.13 Mechanical functionThe device meets the requirements, provided the information in the instruction	10.7 Internal electrical circuits and connections	Is the panel builder's responsibility.
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 Is the panel builder's responsibility. 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, provide the information in the instruction	10.8 Connections for external conductors	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, provide the information in the instruction	10.9 Insulation properties	
10.9.4 Testing of enclosures made of insulating material Is the panel builder's responsibility. 10.10 Temperature rise Is the panel builder's responsibile 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, provide the information in the instruction	10.9.2 Power-frequency electric strength	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, provide the information in the instruction	10.9.3 Impulse withstand voltage	Is the panel builder's responsibility.
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, provide the information in the instruction	10.9.4 Testing of enclosures made of insulating material	Is the panel builder's responsibility.
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	10.10 Temperature rise	
10.13 Mechanical function The device meets the requirements, provided the information in the instruction	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.
leafiet (IL) is 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)

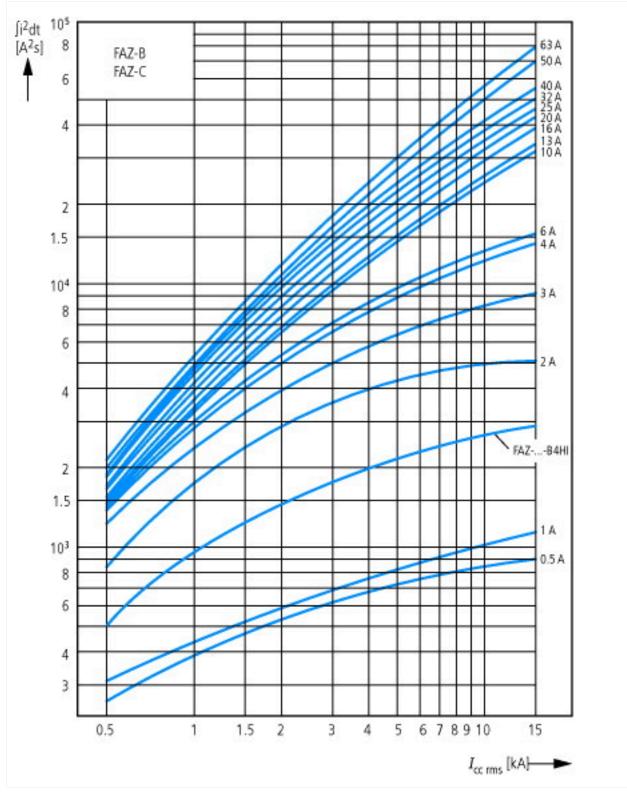
Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss10.0.1-27-14-19-01 [AAB905014])

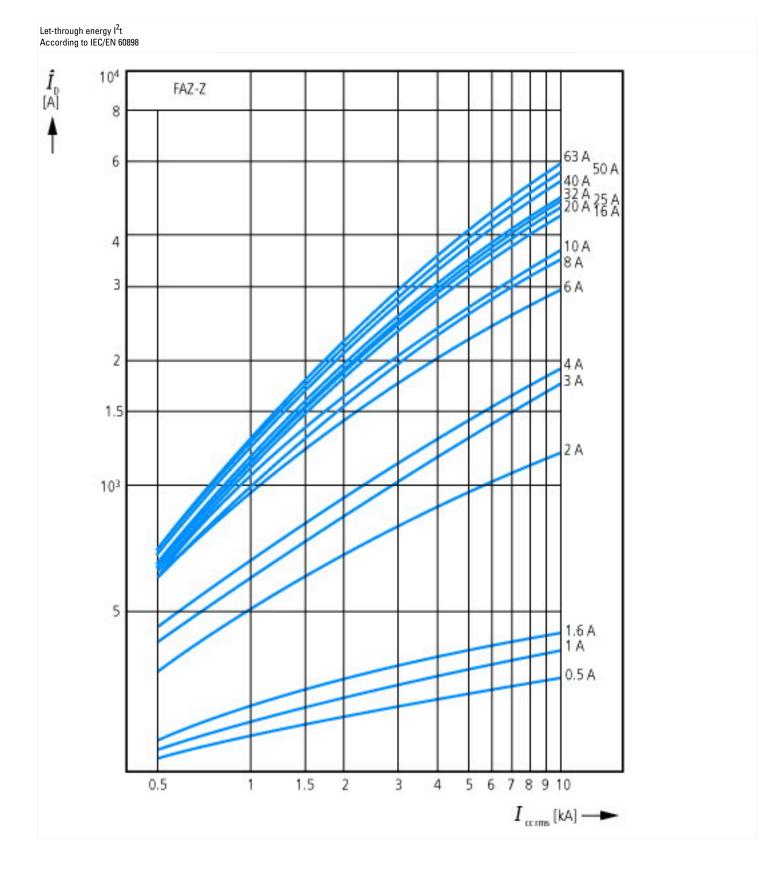
(ecl@ss10.0.1-27-14-19-01 [AAB905014])		
Release characteristic		Z
Number of poles (total)		1
Number of protected poles		1
Rated current	А	2
Rated voltage	V	230
Rated insulation voltage Ui	V	440
Rated impulse withstand voltage Uimp	kV	4
Rated short-circuit breaking capacity Icn EN 60898 at 230 V	kA	0
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 400 V	kA	10
Voltage type		AC
Frequency	Hz	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		1
Built-in depth	mm	70.5
Degree of protection (IP)		IP20
Ambient temperature during operating	°C	-25 - 75
Connectable conductor cross section multi-wired	mm²	1 - 25
Connectable conductor cross section solid-core	mm²	1 - 25

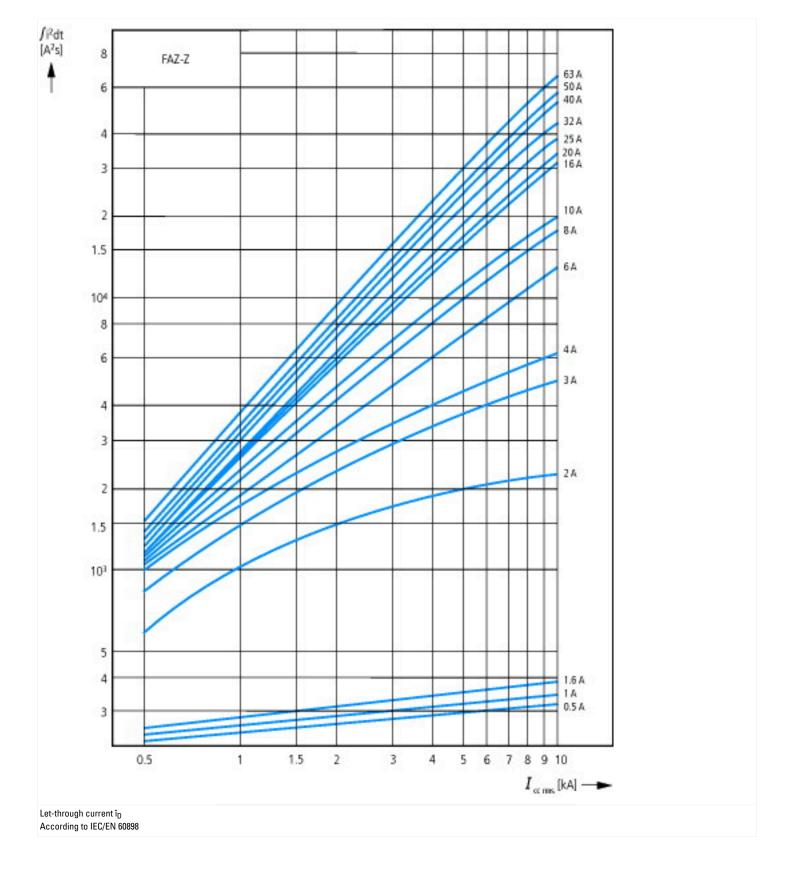
Approvals

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	277 VAC; 48 VDC
Degree of Protection	IEC: IP20; UL/CSA Type: -

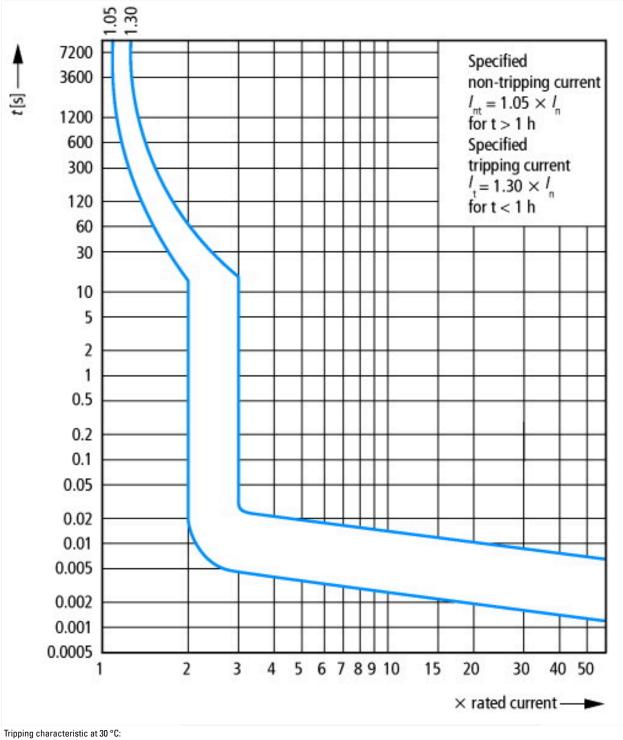
Characteristics











03/07/2019



