DATASHEET - FAZ-B2/1

Miniature circuit breaker (MCB), 2 A, 1p, characteristic: B





Part no.FAZ-B2/1Catalog No.278523Alternate CatalogFAZ-B2/1No.EL-Nummer(Norway)1691003

Similar to illustration

Delivery program

		Miniature circuit-breakers
		1 pole
		В
		Switchgear for industrial and advanced commercial applications
In	А	2
I _{cu}	kA	15
		FAZ
		···

Technical data

		IEC/EN 60947-2 IEC/EN 60898
U _e	V	
U _e	V AC	240/415
Un	V AC	277
l _{cu}	kA	15
	kA	10 (UL1077)
	V AC	254
e) I _{cu}	kA	10
k I _{cs}		7,5 kA
Un	V AC	240
I _{cn}	kA	10
I _{cs}		7,5 kA
	Ue Un Icu Icu Icu Icu Vn Un Icn	Ue VAC Un VAC Icu KA A C Icu KA VAC VAC VAC Un VAC Un VAC

Design verification as per IEC/EN 61439

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	1.4
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.
10.2.3.1 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])

Retaduring A P Retaduring 20 Retaduring 30 Retaduring 40			
Number of protected polesImage: set of the set of th	Release characteristic		В
Rated current A A Rated vortage V 30 Rated insulation voltage Uin V 40 Rated short-circuit breaking capacity Icn EN 60888 at 200 V V 40 Rated short-circuit breaking capacity Icn EN 60888 at 400 V KA 10 Rated short-circuit breaking capacity Icn EN 60888 at 400 V KA 10 Rated short-circuit breaking capacity Icn EN 60888 at 400 V KA 15 Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V KA 15 Voltage type KA 10 10 Voltage type KA 10 10 Frequency KA 10 10 10 Concrent limiting class KA 10 <td>Number of poles (total)</td> <td></td> <td>1</td>	Number of poles (total)		1
Rate virtuing V 30 Rate dinsilation voltage Uin V 40 Rate dinsilation voltage Uinp Ku 4 Rate dinsilation voltage Uinp Ku 4 Rate dinsilation voltage Uinp Ku 10 Rate dinsilation voltage Uinp (LC 60947-2 at 200 V) Ku 10 Rate short-circuit breaking capacity (LC 60947-2 at 200 V) Ku 5 Voltage type Ku 5 6 Voltage type Ku 5 6 Voltage type Ku 5 6 Subtle for flush-mounted installation Ku 5 6 Our contractify switching N-neutral Ku 5 6 Voltage category Ku 5 6 Vol	Number of protected poles		1
Rate insular outlage Uin V 40 Rated insulae withstand voltage Uinp KV 4 Rated short-circuit breaking capacity Icn KN 60898 at 200 V KA 10 Rated short-circuit breaking capacity Icn KN 60898 at 400 V KA 10 Rated short-circuit breaking capacity Icn KN 60898 at 400 V KA 10 Rated short-circuit breaking capacity Icn KN 60898 at 400 V KA 10 Notage type KA 10 10 Voltage type KA 10 10 Current limiting class KA 10 10 Suitable for flush-mounted installation KA 10 10 Our wortage category KA 50 10 Notal categories KA 10 10 Notal category No 10 10 Notal category No 10 10 Notal categories KA KA 10 Notal categories KA KA 10 Notal categories KA KA 10 Nota	Rated current	А	2
Retad impulse withs and voltage Uimp KV 4 Retad short-circuit breaking capacity Let K00898 at 20 V KA 0 Rated short-circuit breaking capacity Let K00898 at 20 V KA 0 Rated short-circuit breaking capacity Let K00897-2 at 20 V KA 0 Rated short-circuit breaking capacity Let K00947-2 at 20 V KA 0 Voltage type KA 0 Voltage type KA 0 Frequency KA 0 Current limiting class KA 0 Suitable for flush-mouted installation KA 0 Coursent switching Ansentral KA 0 Pollution degree KA 0 Additional equipment possible KA 0 With in number of modular spacings KA 0 Built in degrh KA 0 0 Built indegrh KA 0	Rated voltage	V	230
Rated short-circuit breaking capacity lon EN 60898 at 200 V KA 0 Rated short-circuit breaking capacity lon EN 60898 at 400 V KA 0 Rated short-circuit breaking capacity lon EN 60898 at 400 V KA 0 Rated short-circuit breaking capacity lon EN 60898 at 400 V KA 0 Rated short-circuit breaking capacity lon EN 60898 at 400 V KA 0 Voltage type KA 0 0 Voltage type KA 0 0 Frequency KA 0 0 0 Current limiting class KA 0	Rated insulation voltage Ui	V	440
Rated short-circuit breaking capacity Icu IEC 60987 at 430 V KA 0 Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V KA 5 Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V KA 5 Voltage type C C Frequency C C Current limiting class S S Suitable for flush-mounted installation S No Concurrently switching N-neutral S No Over voltage category S S Pollution degree S S Additional equipment possible S S Buit-in depth S S Degree of protection (IP) S S Athent temperature during operating S S Athent temperature during section multi-wired S S	Rated impulse withstand voltage Uimp	kV	4
Rated short-circuit breaking capacity lcu IEC 60947-2 at 230 V KA 5 Rated short-circuit breaking capacity lcu IEC 60947-2 at 400 V KA 5 Voltage type C C Frequency CH 2 5 Current limiting class S 5 Suitable for flush-mounted installation Frequency No Corcurrently switching N-neutral No S Pollution degree S S S Additional equipment possible Frequency S S Nith in number of modular spacings Frequency S S Additional equipment possible Frequency S S Nith in number of modular spacings Frequency S S Degree of protection (IP) Frequency Frequency S Anbient temperature during operating S S S S Rometable conductor cross section multi-wired Rev S S S S S S S S S S S S S <td>Rated short-circuit breaking capacity Icn EN 60898 at 230 V</td> <td>kA</td> <td>10</td>	Rated short-circuit breaking capacity Icn EN 60898 at 230 V	kA	10
Rated short-circuit breaking capacity lcu IEC 60947-2 at 400 V KA 5 Voltage type C C Frequency Frequency 50-60 Current limiting class S S Suitable for flush-mounted installation S S Concurrently switching N-neutral S No Pollution degree S S S Additional equipment possible S S S With in number of modular spacings S S S Built-in depth S S S S Anbient temperature during operating C S S S S Concurted built - for the	Rated short-circuit breaking capacity Icn EN 60898 at 400 V	kA	10
Voltage type AC Frequency 0-60 Current limiting class 3-60 Suitable for flush-mounted installation No Concurrently switching N-neutral Mo Oncurrently switching N-neutral Mo Pollution degree No Additional equipment possible Yes With in number of modular spacings Mo Built-in depth Mo Polgree of protection (IP) Mo Ambient temperature during operating C Abient temperature during operating C Concectable conductor cross section multi-voired mm	Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	kA	15
Frequency Frequency Frequency Frequency Frequency Frequency Frequency Frequency Frequency Solad Current limiting class I I I I Suitable for flush-mounted installation I I I Concurrently switching N-neutral I I I Over voltage category I I I Pollution degree I I I Additional equipment possible I I I With in number of modular spacings Imm II IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V	kA	15
Current limiting class 3 Suitable for flush-mounted installation So So Concurrently switching N-neutral So So Over voltage category So So Pollution degree So So Additional equipment possible So So Buit-in depth Mo So Degree of protection (IP) Mo So Ambient temperature during operating So So So So So So So So So So Anbient temperature during operating So So So So So So	Voltage type		AC
Suitable for flush-mounted installation Mo Suitable for flush-mounted installation Mo Concurrently switching N-neutral Mo Over voltage category Jaca Pollution degree Jaca Additional equipment possible Ver Witch in number of modular spacings Mo Buit-in depth Mo Degree of protection (IP) Mo Ambient temperature during operating C Mo So Mo So <	Frequency	Hz	50 - 60
Concurrently switching N-neutral No Over voltage category 3 Pollution degree 2 Additional equipment possible Yes Witch in number of modular spacings Manage of the posterior (IP) Anbient temperature during operating Manage of the posterior (IP) Anbient temperature during operating Category Manage of temperature during operating Category Manage of temperature during operating Manage of temperature during operating Manage of temperature during operating Category Manage of temperature during operating Manage of temperature during operating Manage of temperature during operating Category Manage of temperature during operating Manage of temperature during operating Manage of temperature during operating Manage of temperature during operating Manage of temperature during operating Manage of temperature during operating	Current limiting class		3
Over voltage categoryImage: Solution degreeSolution degreeS	Suitable for flush-mounted installation		No
Pollution degreePollution degreePollu	Concurrently switching N-neutral		No
Additional equipment possible Methods Width in number of modular spacings Methods Built-in depth Methods Degree of protection (IP) Methods Ambient temperature during operating C PC Rome PC PC Immediate PC PC Immediate PC PC Immediate PC PC Immediate PC PC	Over voltage category		3
Width in number of modular spacings Mode Mode I Built-in depth mm 70.5 Degree of protection (IP) Mode IP20 Ambient temperature during operating C 25.75 Connectable conductor cross section multi-wired mm ² 1.25	Pollution degree		2
Built-in depth mm 70.5 Degree of protection (IP) Poil P20 Ambient temperature during operating C 25 - 75 Connectable conductor cross section multi-wired mm ² 1 - 25	Additional equipment possible		Yes
Degree of protection (IP) Poil Ambient temperature during operating C Connectable conductor cross section multi-wired mm ²	Width in number of modular spacings		1
Ambient temperature during operating °C °25 - 75 Connectable conductor cross section multi-wired mm² 1 - 25	Built-in depth	mm	70.5
Connectable conductor cross section multi-wired mm ² 1 - 25	Degree of protection (IP)		IP20
	Ambient temperature during operating	°C	-25 - 75
Connectable conductor cross section solid-core mm ² 1 - 25	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; EN 45545-2; IEC 61373; 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: -

Additional product information (links)

Temperature dependency, derating

 $\label{eq:https://www.eaton.com/content/dam/eaton/technicaldocumentation/technical-data-tables/Derating table FAZ.pdf$