DATASHEET - FAZ-B1/1

Part no. Catalog No.

EL-Nummer

(Norway)

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

FAZ-B1/1

0001691000

278520

Eaton Catalog No. FAZ-B1/1



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
Rated voltage according to UL	Un	V AC	277
Rated switching capacity acc. to IEC/EN 60947-2	I _{cu}	kA	15
Breaking capacity according to UL		kA	10 (UL1077)
Max operational voltage according to IEC/EN 60947-2		V AC	254
Rated switching capacity according to IEC/EN 60947-2 (max operational voltage)	I _{cu}	kA	10
Rated service short-circuit breaking capacity according to IEC/EN 60947-2 (max operational voltage)	I _{cs}		7,5 kA
Rated voltage according to IEC/EN 60898-1	Un	V AC	240
Rated switching capacity according to IEC/EN 60898-1	l _{cn}	kA	10
Rated service short-circuit breaking capacity according to IEC/EN 60898-1	I _{cs}		7,5 kA

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	А	1
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	1.6
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])

Release characteristic Image of the second			
Number of protected polesImage: state of the	Release characteristic		В
Rate duriner A A Rate during A V 30 Rate during A V 40 Rate during Capacity Lon EX 60898 at 200 V KA 10 Rate during Capacity Lon EX 60898 at 400 V KA 10 Rate during Capacity Lon EX 60997.2 at 400 V KA 10 Rate during Capacity Lon EX 6097.2 at 400 V KA 10 Vatage type KA 10 10 Vatage type KA 10 10 Current limiting class KA 10 10 Sutable for flush-mounted instalation KA 10 10 Concurrently witching N-neutral KA 10 10 Outrand Garge KA 10 10 Additional eurige methods KA 10 10 Route during methods KA <td>Number of poles (total)</td> <td></td> <td>1</td>	Number of poles (total)		1
Rate disigned V 3 Rate disulation voltage Uin V 40 Rate disulation voltage Uinp V 40 Rate disulation voltage Uinp V 40 Rate disulation voltage Uinp V 40 Rate discription Exc Modes 8120V K 50 Notage State S	Number of protected poles		1
Rated insulation voltage Ui V 40 Rated insulation voltage Uinp K 40 Rated short-circuit breaking capacity Ice K08987 at 200 V K 10 Rated short-circuit breaking capacity Ice K0897-2 at 200 V K 10 Voltage type K 10 10 Voltage type K 10 10 Voltage type K 10 10 Current limiting class K 10 10 Subtable for flush-mounted installation K K 10 Outround uspecie K K 10 Voltage category K K 10 Voltage category K K K Voltage category K K 10 Voltation unduer pacings K K 10 Voltation unduer pacing K K 10 <td>Rated current</td> <td>А</td> <td>1</td>	Rated current	А	1
Rated inpulse withstand voltage Uimp KV 4 Rated short-circuit breaking capacity Let K0898 at 20 V KA 0 Rated short-circuit breaking capacity Let K0898 at 40 V KA 0 Rated short-circuit breaking capacity Let K0898 at 40 V KA 0 Rated short-circuit breaking capacity Let K08947-2 at 200 V KA 0 Voltage type KA 0 Frequency KA 0 Current limiting class KA 0 Suitable for flush-mouted installation KA 0 Over voltage category KA 0 Pollution degree KA 0 Additional equipment possible KA 0 Bit in depth Ma 0 Polgree of protection (IP) Ma 0 Additional equipment possible Ma 0 Bit in depth Ma 0 Bit in depth Ma 0 Additional equipment for selection (IP) Ma 0 Athient temperature during operating Ma 0 Bit in	Rated voltage	v	230
Rated short-circuit breaking capacity Lon K00898 at 200 V Ka I Rated short-circuit breaking capacity Lon K00898 at 400 V Ka I Rated short-circuit breaking capacity Lon EC 60947-2 at 230 V Ka I Rated short-circuit breaking capacity Lon EC 60947-2 at 400 V Ka I Voltage type Ka I I Frequency Ka I I Current limiting class Y I I Suitab for flush-mounted installation Y I I Polution degree Y I I I Additional equipment possible Y I I I Bilt-in degref Y I I I I <	Rated insulation voltage Ui	v	440
Rated short-circuit breaking capacity lcu IEC 60947-2 at 230 V KA 0 Rated short-circuit breaking capacity lcu IEC 60947-2 at 230 V KA 5 Notage type KA 0 Votage type KA 0 Frequency KA 0 Current limiting class Ferguency 0 Suitable for flush-mounted installation Ferguency 0 Concurrently switching N-neutral Ferguency No Pollution degree Ferguency S Additional equipment possible Ferguency S Nicht in number of modular spacings Ferguency Ferguency Additional equipment possible Ferguency Ferguency Nicht in number of modular spacings Ferguency Ferguency Buit-in depth Ferguency Ferguency Ferguency Additional equipment possible Ferguency Ferguency Ferguency Buit-in depth Ferguency Ferguency Ferguency Ferguency Additional equipment possible Ferguency Ferguency Ferguency Ferguency Ferguency Ferguency Ferguency Fe	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 KA 5 Voltage type KA 6 Frequency KA 5 Current limiting class So 50 Suitable for flush-mounted installation KA 5 Concurrently switching N-neutral Mo No Over voltage category So 3 Pollution degree KA 5 Additional equipment possible Mo So Buit-in auber of modular spacings Man 5 Buit-in depth Mo So Additional equipment possible Man So Buit-in depth Mo So Buit-in depth So So Anbient temperature during operating <	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 KA 50-60 Current limiting class S S Suitable for flush-mounted installation M S Concurrently switching N-neutral M No Pollution degree S S Pollution degree M S With in number of modular spacings M M Built-in depth M M Polgree of protection (IP) M M Anbient temperature during operating ° S Concurted be conductor cross section multi-wired ° S	Rated short-circuit breaking capacity Icn EN 60898 at 400 V	kA	10
Voltage type AC Frequency Hz 50-60 Current limiting class S 60 Suitable for flush-mounted installation S S Concurrently switching N-neutral No S Over voltage category S S Pollution degree S S Additional equipment possible S S With in number of modular spacings S S Built-in depth S S Polge of protection (IP) S S Ambient temperature during operating C S Concectable conductor cross section multi-wired S S	Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	kA	15
Frequency Hz 50-60 Current limiting class F 50-60 Suitable for flush-mounted installation F 50-60 Concurrently switching N-neutral F 50-60 Over voltage category No Sole Pollution degree S Sole Additional equipment possible F Sole With in number of modular spacings Mm Sole Built-in depth Mm Sole Degree of protection (IP) Mm Sole Anbient temperature during operating ° Sole Sole ° Sole Sole Mm Sole Sole Sole Sole Sole Mm Sole Sole Sole Sole Additional equipment possible Mm Sole Sole Mm Sole Sole Sole Sole Sole Sole Sole Sole Sole Sole Sole Sole S	Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V	kA	15
Current limiting class 3 Suitable for flush-mounted installation IM No Concurrently switching N-neutral IM No Over voltage category IM Si Pollution degree IM Si Additional equipment possible IM Si With in number of modular spacings IM IM Buil-in depth IM IM Degree of protection (IP) IM IPO Ambient temperature during operating IM Si Imma IPO IPO Imma IPO IPO	Voltage type		AC
Suitable for flush-mounted installation Mo Soncurrently switching N-neutral Mo Over voltage category Mo Pollution degree Jacanet degree Additional equipment possible Yes Width in number of modular spacings Mo Built-in depth Mo Degree of protection (IP) Mo Ambient temperature during operating Co Mo Sold Mo Sold </td <td>Frequency</td> <td>Hz</td> <td>50 - 60</td>	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 Mmm Built-in depth Mmm Degree of protection (IP) Mm Anbient temperature during operating C Soncetable conductor cross section multi-wired mm² Intervent To Intervent Soncetable	Current limiting class		3
Number of modular spacingsImage: Content of the spacing spaci	Suitable for flush-mounted installation		No
Pollution degree2Additional equipment possibleYesWidth in number of modular spacingsMmmBuilt-in depthMmmDegree of protection (IP)IAmbient temperature during operatingIConnectable conductor cross section multi-wiredImm²Imm²125	Concurrently switching N-neutral		No
Additional equipment possibleYesWidth in number of modular spacings1Built-in depthmmDegree of protection (IP)MmAmbient temperature during operatingCSonnectable conductor cross section multi-wiredmm²1 25	Over voltage category		3
Width in number of modular spacingsImage: Space of protection (IP)Image: Space of protection quarter during operatingImage: Space of quarter quarter during operatingImage: Space of quarter quart	Pollution degree		2
Built-in depth mm 70.5 Degree of protection (IP) C -25 - 75 Ambient temperature during operating C anm ² Connectable conductor cross section multi-wired mm ² 1 - 25	Additional equipment possible		Yes
Degree of protection (IP) IP20 Ambient temperature during operating °C -25 - 75 Connectable conductor cross section multi-wired mm ² 1 - 25	Width in number of modular spacings		1
Ambient temperature during operating °C -25 - 75 Connectable conductor cross section multi-wired mm ² 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

Approvais	
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: -