DATASHEET - FAZ-C1,5/1



Miniature circuit breaker (MCB), 1.5A, 1p, type C characteristic

Powering Business Worldwide*

Part no. FAZ-C1,5/1 Catalog No. 278547 Eaton Catalog No. FAZ-C1.5/1 EL-Nummer 0001691078 (Norway)

Similar to illustration

Technical data Electrical

Rated operational voltage Ve V AC 240/415	Liectrical			
Rated voltage according to UL Rated switching capacity acc. to IEC/EN 60947-2 Rated switching capacity according to UL Rated switching capacity according to UL Rated switching capacity according to IEC/EN 60947-2 Rated switching capacity according to IEC/EN 60947-2 Rated switching capacity according to IEC/EN 60947-2 (max operational voltage) Rated service short-circuit breaking capacity according to IEC/EN 60947-2 (max operational voltage) Rated service short-circuit breaking capacity according to IEC/EN 60947-2 (max operational voltage) Rated switching capacity according to IEC/EN 6098-1 Un V AC 240/415 AC 15 AC 10 AC	Standards			· ·
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Breaking capacity according to UL Max operational voltage according to IEC/EN 60947-2 Rated switching capacity according to IEC/EN 60947-2 (max operational voltage) Rated service short-circuit breaking capacity according to IEC/EN 60947-2 (max operational voltage) Rated voltage according to IEC/EN 60898-1 Rated switching capacity according to IEC/EN 60898-1 Icn Icn Icn Icn Icn Icn Icn Ic	Rated voltage according to UL	U_n	V AC	277
Max operational voltage according to IEC/EN 60947-2 Rated switching capacity according to IEC/EN 60947-2 (max operational voltage) Rated service short-circuit breaking capacity according to IEC/EN 60947-2 (max operational voltage) Rated voltage according to IEC/EN 60898-1 Un V AC 240 Rated switching capacity according to IEC/EN 60898-1 Icn kA 10	Rated switching capacity acc. to IEC/EN 60947-2	I _{cu}	kA	15
Rated switching capacity according to IEC/EN 60947-2 (max operational voltage) Rated service short-circuit breaking capacity according to IEC/EN 60947-2 (max operational voltage) Rated voltage according to IEC/EN 60898-1 Rated switching capacity according to IEC/EN 60898-1 Ico Ico Ico Ico Ico Ico Ico Ic	Breaking capacity according to UL		kA	10 (UL1077)
Rated service short-circuit breaking capacity according to IEC/EN 60947-2 (max operational voltage) Rated voltage according to IEC/EN 60898-1 Rated switching capacity according to IEC/EN 60898-1 Icn kA 10	Max operational voltage according to IEC/EN 60947-2		V AC	254
operational voltage) Rated voltage according to IEC/EN 60898-1 Rated switching capacity according to IEC/EN 60898-1 I _{cn} kA 10	Rated switching capacity according to IEC/EN 60947-2 (max operational voltage)	I _{cu}	kA	10
Rated switching capacity according to IEC/EN 60898-1 I _{cn} kA 10	Rated service short-circuit breaking capacity according to IEC/EN 60947-2 (max operational voltage)	I _{cs}		7,5 kA
D. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	Rated voltage according to IEC/EN 60898-1	U_n	V AC	240
Rated service short-circuit breaking capacity according to IEC/EN 60898-1 I _{cs} 7,5 kA	Rated switching capacity according to IEC/EN 60898-1	I _{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

Design verincation as per icc/civ 01439			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	1.5
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	1.5
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])

Number of poles (total) 4 1 Number of protected poles 1 Rated current A 1.5 Rated voltage V 230 Rated insulation voltage Ui V 440 Rated simpulse withstand voltage Uimp kV 4 Rated short-circuit breaking capacity Icn EN 60898 at 230 V kA 10 Rated short-circuit breaking capacity Icn EN 60898 at 400 V kA 10 Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V kA 15 Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 15 Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 15 Voltage type kA 15 Current limiting class 3 3 Suitable for flush-mounted installation No 0 Concurrently switching N-neutral No 3 Over voltage category 2 No Pollution degree 2 No Additional equipment possible Yes Width in number of modular spacings 1 1	(eci@ss10.0.1-2/-14-19-01 [AAB905014])			
Number of protected poles 1 Rated current A 1.5 Rated voltage V 200 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 10 Rated short-circuit breaking capacity Icn EN 60898 at 400 V kA 15 Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V kA 15 Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 15 Voltage type AC AC Frequency AC AC Current limiting class S 3 Suitable for flush-mounted installation No No Concurrently switching N-neutral No AC Over voltage category S 3 S Pollution degree Yes Yes Additional equipment possible Yes Yes Width in number of modular spacings Immail and the protection (IP) IP20 Ambient temperature during operating <td>Release characteristic</td> <td></td> <td></td> <td>C</td>	Release characteristic			C
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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 10 Rated short-circuit breaking capacity Icn EN 60898 at 400 V kA 15 Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V kA 15 Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 15 Voltage type AC AC Frequency Hz 50 - 60 Current limiting class 3 3 Suitable for flush-mounted installation No No Concurrently switching N-neutral No No Over voltage category 3 3 Pollution degree 2 2 Additional equipment possible Yes Width in number of modular spacings In No Built-in depth mm 70.5 Degree of protection (IP) P20 Ambient temperature during operating T25 Connectab	Number of protected poles			1
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 10 Rated short-circuit breaking capacity Icn EN 60898 at 400 V kA 15 Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V kA 15 Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 15 Voltage type kA 15 Frequency kB 50 - 60 Current limiting class 3 3 Suitable for flush-mounted installation No No Concurrently switching N-neutral No 3 Over voltage category kB 2 Pollution degree kB 2 Additional equipment possible kB 1 Width in number of modular spacings mm 70.5 Built-in depth protection (IP) protection (IP) Ambient temperature during operating cC 25 - 75 Connectable conductor cross section multi-wired mm² 1 - 25 <td>Rated current</td> <td>A</td> <td>A</td> <td>1.5</td>	Rated current	A	A	1.5
Rated impulse withstand voltage Uimp 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 608947-2 at 230 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 200 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 400 V Voltage type Frequency Current limiting class Suitable for flush-mounted installation Concurrently switching N-neutral Over voltage category Pollution degree Additional equipment possible Width in number of modular spacings Built-in depth Degree of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired Rated short-circuit breaking capacity Icn IEC 60987-2 at 230 V RA 10 10 10 10 10 10 10 10 10 10 10 10 10	Rated voltage	\	V	230
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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 KA KA KA KA KA KA KA KA KA K	Rated short-circuit breaking capacity Icn EN 60898 at 230 V	k	kA	10
Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Voltage type AC Frequency By 50 - 60 Current limiting class Suitable for flush-mounted installation Concurrently switching N-neutral Over voltage category Pollution degree Additional equipment possible Width in number of modular spacings Built-in depth Degree of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired AC AC AC AC AC AC AC AC AC A	Rated short-circuit breaking capacity Icn EN 60898 at 400 V	k	kA	10
Voltage type Frequency Current limiting class Suitable for flush-mounted installation Concurrently switching N-neutral Over voltage category Pollution degree Additional equipment possible Width in number of modular spacings Built-in depth Degree of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired AC AC AC AC AC AC PO 4 50 - 60 No No No AD AD AD AD AD AD AD AD AD A	Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	k	kA	15
Frequency Current limiting class Suitable for flush-mounted installation Concurrently switching N-neutral Over voltage category Pollution degree Additional equipment possible Width in number of modular spacings Built-in depth Degree of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired Hz 50 - 60 No No Ves No Yes 1 1 P20 Arbient temperature during operating CC -25 - 75 Connectable conductor cross section multi-wired No 1 - 25	Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V	k	kA	15
Current limiting class Suitable for flush-mounted installation Concurrently switching N-neutral Over voltage category Over voltage category 3 Pollution degree Additional equipment possible Width in number of modular spacings Width in number of modular spacings Width in number of modular spacings Built-in depth mm 70.5 Degree of protection (IP) Ambient temperature during operating connectable conductor cross section multi-wired mm² 1-25	Voltage type			AC
Suitable for flush-mounted installation Concurrently switching N-neutral Over voltage category Pollution degree Additional equipment possible Width in number of modular spacings Built-in depth Degree of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired No No No 1 PO 2 4 7 8 7 9 1 1 1 1 1 1 1 1 1 1 1 1	Frequency	H	Hz	50 - 60
Concurrently switching N-neutral Over voltage category Pollution degree Additional equipment possible Width in number of modular spacings Width in number of modular spacings Figure of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired No No 1 2 About 1 1 Pobleman Poblem	Current limiting class			3
Over voltage category Over voltage category 3 Pollution degree 2 Additional equipment possible Width in number of modular spacings Built-in depth Degree of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired 3 Pollution degree Yes Yes 1 1 P20 IP20 IP20 IP20 IP20 IP20 IP20 IP20	Suitable for flush-mounted installation			No
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	Concurrently switching N-neutral			No
Additional equipment possible Width in number of modular spacings Built-in depth Degree of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired Yes 1 1 1 1 1 1 1 1 1 1 1 1 1	Over voltage category			3
Width in number of modular spacings Built-in depth mm 70.5 Degree of protection (IP) Ambient temperature during operating °C -25 - 75 Connectable conductor cross section multi-wired 1 1 1 1 1 1 1 1 1 1 1 1 1	Pollution degree			2
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	Additional equipment possible			Yes
Degree of protection (IP) Ambient temperature during operating °C -25 - 75 Connectable conductor cross section multi-wired mm² 1 - 25	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	r	mm	70.5
Connectable conductor cross section multi-wired mm ² 1 - 25	Degree of protection (IP)			IP20
	Ambient temperature during operating	c	°C	-25 - 75
Connectable conductor cross section solid-core mm ² 1 - 25	Connectable conductor cross section multi-wired	r	mm²	1 - 25
	Connectable conductor cross section solid-core	r	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: -