DATASHEET - FAZ-B1,5/1



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

Powering Business Worldwide*

Part no. FAZ-B1,5/1 Catalog No. 278521 Eaton Catalog No. FAZ-B1.5/1 EL-Nummer 0001691001 (Norway)

Similar to illustration

Technical data Electrical

Rated operational voltage Ue V AC 240/415 Rated voltage according to UL Rated switching capacity according to UL Max operational voltage according to IEC/EN 60947-2 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 voltage according to IEC/EN 6098-1 Un V AC 240 Rated switching capacity according to IEC/EN 60898-1 Icn KA 10	Liectrical			
Ue VAC 240/415 Rated voltage according to UL Un VAC 277 Rated switching capacity acc. to IEC/EN 60947-2 Icu KA 15 Breaking capacity according to UL KA 10 (UL1077) Max operational voltage according to IEC/EN 60947-2 (max operational voltage) Icu KA 10 Rated switching capacity according to IEC/EN 60947-2 (max operational voltage) Icu KA 10 Rated service short-circuit breaking capacity according to IEC/EN 60947-2 (max operational voltage) Ics 7,5 kA Rated voltage according to IEC/EN 60898-1 Un VAC 240 Rated switching capacity according to IEC/EN 60898-1 Icn KA 10	Standards			· ·
Rated voltage according to UL Rated switching capacity acc. to IEC/EN 60947-2 Breaking capacity according to UL KA 10 (UL1077) 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 254 7,5 kA Paraded 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 Icc KA 10	Rated operational voltage	U _e	V	
Rated switching capacity acc. to IEC/EN 60947-2 Cu		U _e	V AC	240/415
Breaking capacity according to UL KA 10 (UL1077) V AC 254 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 (UL1077) V AC 254 7,5 kA 7,5 kA 10	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 254 7,5 kA 7,5 kA Particular of 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 Un V AC 240 Rated switching capacity according to IEC/EN 60898-1 Icn kA 10	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 Un V AC 240 Rated switching capacity according to IEC/EN 60898-1 Icn 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 Icn 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	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	1.6
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		В
Number of poles (total)		1
Number of protected poles		1
Rated current	Α	1.5
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	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
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	mm ²	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: -