



Miniature circuit breaker (MCB), 4A, 1p, B-Char, AC

Part no. FAZ-B4/1
Catalog No. 278527
Eaton Catalog No. FAZ-B4/1
EL-Nummer 0001691007
(Norway)

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	U_n	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	U_n	V AC	240
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

Technical data for design verification			
Rated operational current for specified heat dissipation	I_n	A	4
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) (ec@ss10.0.1-27-14-19-01 [AAB905014])			
Release characteristic			B
Number of poles (total)			1
Number of protected poles			1
Rated current		A	4
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		mm ²	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: -