



Miniature circuit breaker (MCB), 20A, 1p, B-Char, AC

Part no. FAZT-B20/1
Catalog No. 240796
Alternate Catalog No. FAZT-B20/1
EL-Nummer (Norway) 1605561

Similar to illustration

Delivery program

Basic function			Miniature circuit-breakers
Number of poles			1 pole
Tripping characteristic			B
Application			Switchgear for industrial and advanced commercial applications
Rated current	I_n	A	20
Rated switching capacity acc. to IEC/EN 60947-2	I_{cu}	kA	25
Product range			FAZ-T

Technical data

Electrical

Standards			IEC/EN 60947-2
Rated voltage according to IEC/EN 60947-2	U_n	V AC	240
Rated switching capacity acc. to IEC/EN 60947-2	I_{cu}	kA	25
Rated service short-circuit breaking capacity according to IEC/EN 60947-2	I_{cs}		12,5 kA
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	15
Rated service short-circuit breaking capacity according to IEC/EN 60947-2 (max operational voltage)	I_{cs}		7,5 kA
Max operational voltage DC according to IEC/EN 60947-2		V DC	60/pole
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	15
Rated service short-circuit breaking capacity according to IEC/EN 60898-1	I_{cs}		7,5 kA
Rated insulation voltage	U_i	V	440
Rated frequency	f	Hz	50/60
Characteristic			B, C, D
Direction of incoming supply			as required
lifespan			
Electrical	Operations		≥ 4000
Mechanical	Operations		≥ 10000

Mechanical

Standard front dimension		mm	45
Enclosure height		mm	80
Mounting width per pole		mm	17.5
Mounting			Quick attachment with 3 latch positions for top-hat rail IEC/EN 60715
Degree of Protection			IP20
Terminals top and bottom			Twin-purpose terminals
Terminal protection			Finger- and back-of-hand proof according to BGV A3 and ÖVE-EN 6
Terminal capacities		mm ²	1 - 25
Tightening torque of fixing screws		N/m	max. 2.4
Thickness of busbar material		mm	0.8 (except N 0.5 SU)
Mounting position			As required

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I_n	A	20
Heat dissipation per pole, current-dependent	P_{vid}	W	0
Equipment heat dissipation, current-dependent	P_{vid}	W	3.2
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			
10.2.2.1 Verification of thermal stability of enclosures			
10.2.2.2 Verification of resistance of insulating materials to normal heat			
10.2.2.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects			
10.2.4 Resistance to ultra-violet (UV) radiation			
10.2.5 Lifting			
10.2.6 Mechanical impact			
10.2.7 Inscriptions			
10.3 Degree of protection of ASSEMBLIES			
10.4 Clearances and creepage distances			
10.5 Protection against electric shock			
10.6 Incorporation of switching devices and components			
10.7 Internal electrical circuits and connections			
10.8 Connections for external conductors			
10.9 Insulation properties			
10.9.2 Power-frequency electric strength			
10.9.3 Impulse withstand voltage			
10.9.4 Testing of enclosures made of insulating material			
10.10 Temperature rise			
10.11 Short-circuit rating			
10.12 Electromagnetic compatibility			
10.13 Mechanical function			

Technical data ETIM 7.0

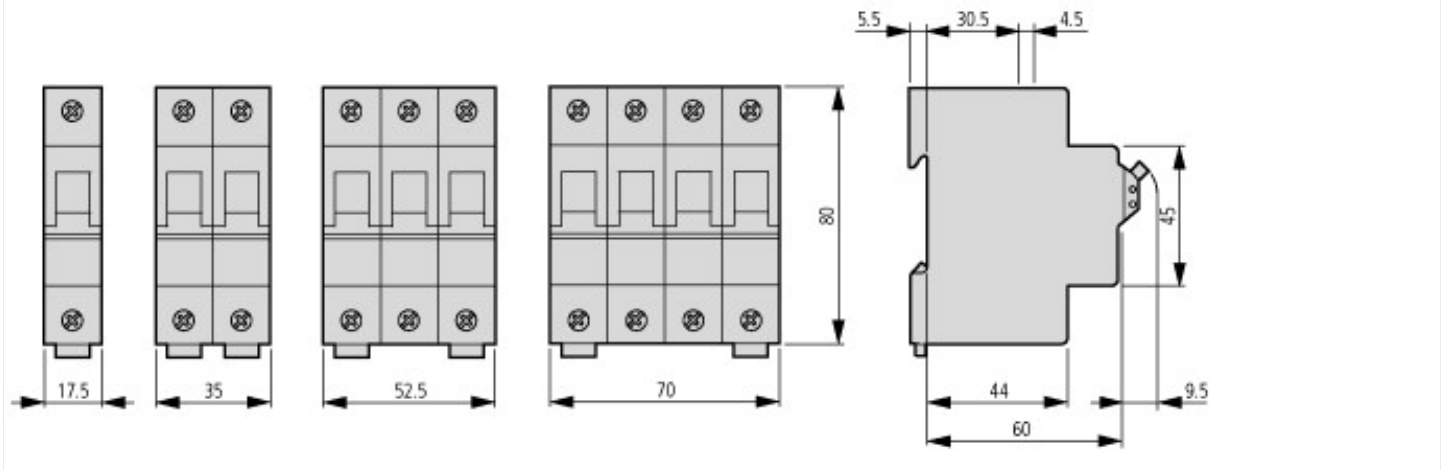
Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042)			
Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss10.0.1-27-14-19-01 [AAB905014])			
Release characteristic			B
Number of poles (total)			1
Number of protected poles			1
Rated current		A	20
Rated voltage		V	240
Rated insulation voltage U_i		V	440
Rated impulse withstand voltage U_{imp}		kV	4
Rated short-circuit breaking capacity I_{cn} EN 60898 at 230 V		kA	15
Rated short-circuit breaking capacity I_{cn} EN 60898 at 400 V		kA	15
Rated short-circuit breaking capacity I_{cu} IEC 60947-2 at 230 V		kA	20
Rated short-circuit breaking capacity I_{cu} IEC 60947-2 at 400 V		kA	20
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

Characteristics



Dimensions



Additional product information (links)

Temperature dependency, derating

[https://www.eaton.com/content/dam/eaton/technicaldocumentation/technical-data-tables/Derating table FAZ_T.pdf](https://www.eaton.com/content/dam/eaton/technicaldocumentation/technical-data-tables/Derating%20table%20FAZ_T.pdf)