#### DATASHEET - FAZT-B20/3



Miniature circuit breaker (MCB), 20A, 3p, B-Char, AC





Similar to illustration

#### **Technical data**

Fleetical			
Electrical			
Standards			IEC/EN 60947-2
Rated voltage according to IEC/EN 60947-2	Un	V AC	415
Rated switching capacity acc. to IEC/EN 60947-2	l <sub>cu</sub>	kA	25
Rated service short-circuit breaking capacity according to IEC/EN 60947-2	I <sub>cs</sub>		12,5 kA
Max operational voltage according to IEC/EN 60947-2		V AC	440
Rated switching capacity according to IEC/EN 60947-2 (max operational voltage)	l <sub>cu</sub>	kA	15
Rated service short-circuit breaking capacity according to IEC/EN 60947-2 (max operational voltage)	I <sub>cs</sub>		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	Un	V AC	415
Rated switching capacity according to IEC/EN 60898-1	I <sub>cn</sub>	kA	15
Rated service short-circuit breaking capacity according to IEC/EN 60898-1	I <sub>cs</sub>		7,5 kA
Rated insulation voltage	Ui	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 <sup>2</sup>	1 - 25
Tightening torque of fixing screws		N/m	max. 2.4
Thickness of busbar material		mm	0.8 (exept N 0.5 SU)
Mounting position			As required

## Design verification as per IEC/EN 61439

Fechnical data for design verification			
Rated operational current for specified heat dissipation	In	А	20
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	9.8
Static heat dissipation, non-current-dependent	P <sub>vs</sub>	W	0
Heat dissipation capacity	P <sub>diss</sub>	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
C/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.

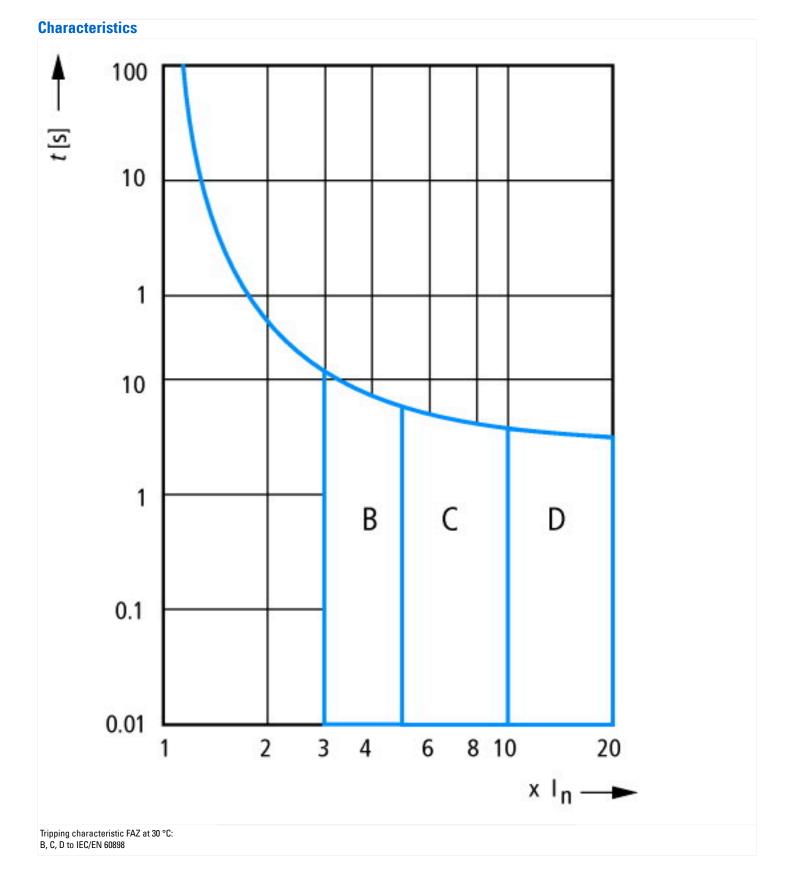
# **Technical data ETIM 7.0**

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)			3		
Number of protected poles			3		
Rated current		А	20		
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	15		
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	20		
Rated short-circuit breaking capacity Icu 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			3		
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

mm²

1 - 25



## Dimensions

