## **DATASHEET - FAZT-D20/1**

Part no.

FIT-N AZT-B16

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



FAZT-D20/1 Catalog No. 142481 Eaton Catalog No. FAZT-D20/1



Similar to illustration

#### **Technical data** Electrical

Electrical			
Standards			IEC/EN 60947-2
Rated voltage according to IEC/EN 60947-2	Un	V AC	240/415
Rated switching capacity acc. to IEC/EN 60947-2	I <sub>cu</sub>	kA	20
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

Rated operational current for specified heat dissipation   In   A   20     Heat dissipation per pole, current-dependent   Pvid   W   0     Equipment heat dissipation, current-dependent   Pvid   W   2     Static heat dissipation, non-current-dependent   Pvid   W   0     Heat dissipation capacity   Pvids   W   0     Operating ambient temperature min.   Pdiss   W   0     Operating ambient temperature max.   Point   Point   Point				
International problement of the pro	Technical data for design verification			
Equipment heat dissipation, current-dependent Pvid W 2   Static heat dissipation, non-current-dependent Pvs W 0   Heat dissipation capacity Pdiss W 0   Operating ambient temperature min. Pdiss °C -40   Operating ambient temperature max. °C -75   EEC/EN 61439 design verification Inear, per +1 °C, results in a 0.5% reduction of current carrying capacity   10.2.3 Strength of materials and parts Metes the product standard's requirements.   10.2.3.1 Verification of resistance of insulating materials to normal heat and fire due to internal electric effects Metes the product standard's requirements.	Rated operational current for specified heat dissipation	In	Α	20
Static heat dissipation, non-current-dependent Pvs W 0   Heat dissipation capacity Pdiss W 0   Operating ambient temperature min. °C -40   Operating ambient temperature max. °C 5   ICE/EN 61439 design verification F F   10.2 Strength of materials and parts F F   10.2.3.1 Verification of thermal stability of enclosures F Meets the product standard's requirements.   10.2.3.2 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects F Meets the product standard's requirements.	Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Heat dissipation capacity     Pdiss     W     0       Operating ambient temperature min.     °C     -40       Operating ambient temperature max.     °C     75       Incert, per +1 °C, results in a 0.5% reduction of current carrying capacity     Incert, per +1 °C, results in a 0.5% reduction of current carrying capacity       IEC/EN 61439 design verification     Incert, per +1 °C, results in a 0.5% reduction of current carrying capacity       10.2 Strength of materials and parts     Incert, per +1 °C, results in a 0.5% reduction of current carrying capacity       10.2.2 Corrosion resistance     Incert, per +1 °C, results in a 0.5% reduction of current carrying capacity       10.2.3.1 Verification of thermal stability of enclosures     Incert, per voluct standard's requirements.       10.2.3.2 Verification of resistance of insulating materials to normal heat and fire due to internal electric effects     Meets the product standard's requirements.	Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	2
Operating ambient temperature min.   °C   -40     Operating ambient temperature max.   °C   75     EC/EN 61439 design verification   FO   Inear, per +1 °C, results in a 0.5% reduction of current carrying capacity     ID.2.3 Strength of materials and parts   FO   Meets the product standard's requirements.     10.2.3.1 Verification of resistance of insulating materials to normal heat and fire due to internal electric effects   FO   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.	Static heat dissipation, non-current-dependent	P <sub>vs</sub>	W	0
Operating ambient temperature max.   °C   75     Inear, per +1 °C, results in a 0.5% reduction of current carrying capacity     IEC/EN 61439 design verification   Image: Period Contract Contend Contract Contract Contract Contract Con	Heat dissipation capacity	P <sub>diss</sub>	W	0
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IEC/EN 61439 design verification   Image: state stat	Operating ambient temperature max.		°C	75
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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 and fire due to internal electric effects   Meets the product standard's requirements.	IEC/EN 61439 design verification			
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10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects	10.2.3.1 Verification of thermal stability of enclosures			Meets the product standard's requirements.
and fire due to internal electric effects	10.2.3.2 Verification of resistance of insulating materials to normal heat			Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation Meets the product standard's requirements.				Meets the product standard's requirements.
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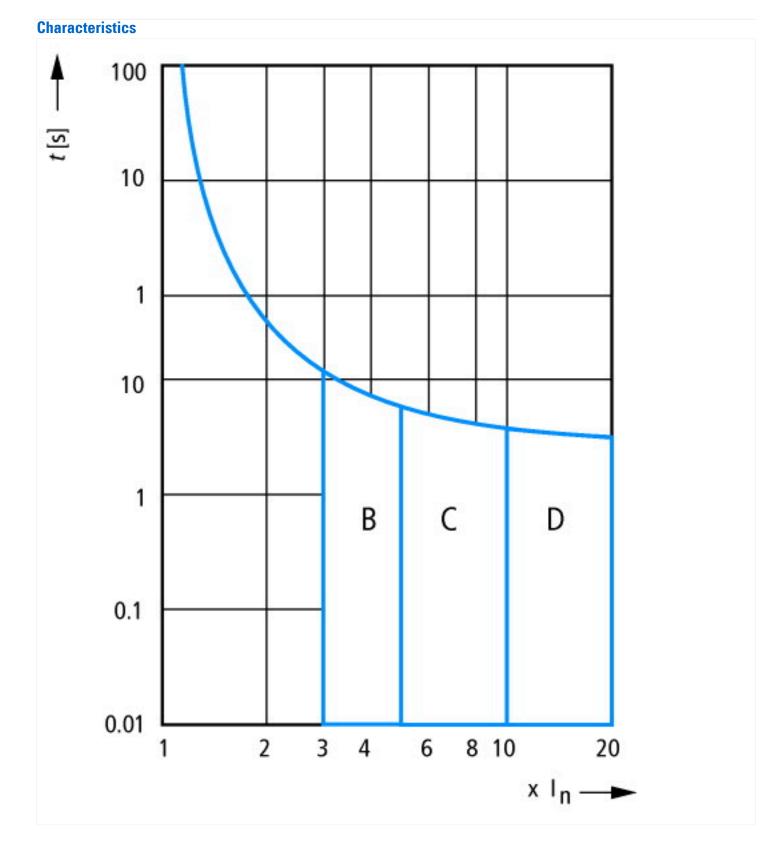
10.2.5 Lifting	Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact	Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions	Meets the product standard's requirements.
10.3 Degree of protection of ASSEMBLIES	Does not apply, since the 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		D
Number of poles (total)		1
Number of protected poles		1
Rated current	А	20
Rated voltage	V	240
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		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	mm²	1 - 25



## Dimensions

