#### **DATASHEET - FAZT-C20/4**



#### Miniature circuit breaker (MCB), 20A, 4p, C-Char, AC

Powering Business Worldwide\*

Part no. FAZT-C20/4
Catalog No. 240966
Eaton Catalog No. FAZT-C20/4
EL-Nummer 0001691415
(Norway)

# Technical data

Electrical			
Standards			IEC/EN 60947-2
Rated voltage according to IEC/EN 60947-2	$U_{n}$	V AC	415
Rated switching capacity acc. to IEC/EN 60947-2	I <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)	I <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	$U_n$	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	$U_{i}$	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

Twin-purpose terminals

1 - 25

max. 2.4

As required

0.8 (exept N 0.5 SU)

mm<sup>2</sup>

N/m

mm

Finger- and back-of-hand proof according to BGV A3 and ÖVE-EN 6

## Design verification as per IEC/EN 61439

Terminals top and bottom

Tightening torque of fixing screws

Thickness of busbar material

Terminal protection

Terminal capacities

Mounting position

Rated operational current for specified heat dissipation In A 20 Heat dissipation per pole, current-dependent P <sub>vid</sub> W 0  Equipment heat dissipation, current-dependent P <sub>vid</sub> W 13.1  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  Ilinear, per +1 °C, results in a 0.5% reduction of current carrying capacity				
Heat dissipation per pole, current-dependent  Equipment heat dissipation, current-dependent  Pvid  W  13.1  Static heat dissipation, non-current-dependent  Pvs  W  0  Heat dissipation capacity  Pdiss  W  0  Operating ambient temperature min.  Operating ambient temperature max.  **C  **C  **T5  Innear, 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	Technical data for design verification			
Equipment heat dissipation, current-dependent $P_{vid}$ $W$ 13.1  Static heat dissipation, non-current-dependent $P_{vs}$ $W$ 0  Heat dissipation capacity $P_{diss}$ $W$ 0  Operating ambient temperature min. $P_{diss}$	Rated operational current for specified heat dissipation	In	Α	20
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  Innear, 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	Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Heat dissipation capacity  Operating ambient temperature min.  Operating ambient temperature max.  Pdiss  *C  -40  75  Ilinear, 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	Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	13.1
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IEC/EN 61439 design verification  10.2 Strength of materials and parts	Operating ambient temperature max.		°C	75
10.2 Strength of materials and parts				linear, per +1 $^{\circ}$ C, results in a 0.5% reduction of current carrying capacity
	IEC/EN 61439 design verification			
10.2.2 Corrosion resistance Meets the product standard's requirements.	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.

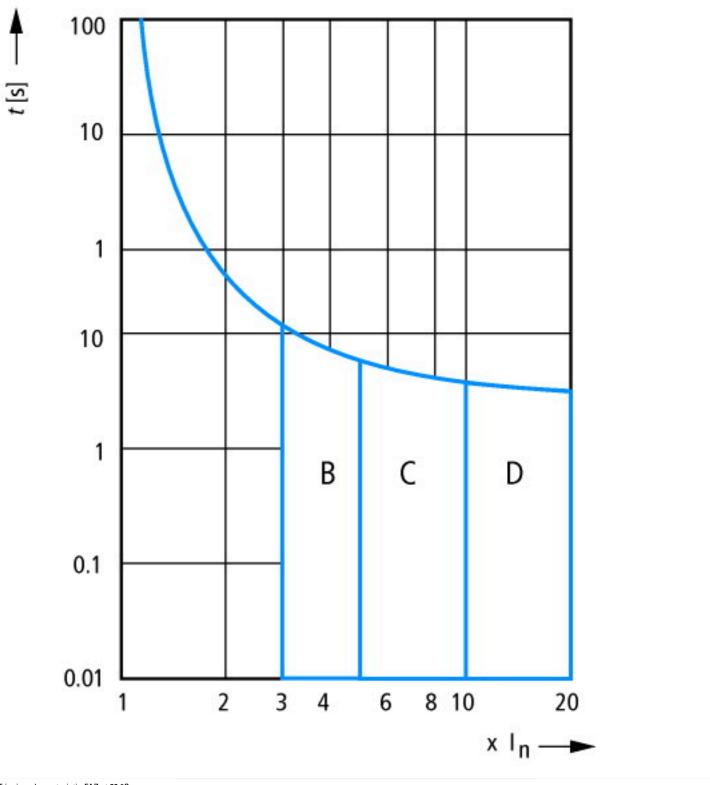
#### **Technical data ETIM 7.0**

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])

(ecl@ss10.0.1-27-14-19-01 [AAB905014])	illiataro on	
Release characteristic		C
Number of poles (total)		4
Number of protected poles		4
Rated current	Α	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		Yes
Over voltage category		3
Pollution degree		2
Additional equipment possible		Yes
Width in number of modular spacings		4
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

## **Characteristics**



Tripping characteristic FAZ at 30 °C: B, C, D to IEC/EN 60898

## **Dimensions**

