### **DATASHEET - FAZT-D6/1N**



Miniature circuit breaker (MCB), 6 A, 1p+N, characteristic: D

Powering Business Worldwide\*

Part no. FAZT-D6/1N Catalog No. 241054 Alternate Catalog FAZT-D6/1N

NO.

EL-Nummer 0001666725 (Norway)

(Norwa Similar to illustration

Delivery program			
Basic function			Miniature circuit-breakers
Number of poles			1 pole+N
Tripping characteristic			D
Application			Switchgear for industrial and advanced commercial applications
Rated current	In	Α	6
Rated switching capacity acc. to IEC/EN 60947-2	I <sub>cu</sub>	kA	25
Product range			FAZ-T

## **Technical data**

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ы	ectrical	

Standards     IE/EN 80947-2       Rated voltage according to IEC/EN 60947-2     Un     V AC     24/415       Rated switching capacity acc. to IEC/EN 60947-2     Igual     KA     25       Rated insulation voltage     Up     V AC     40       Rated frequency     Face Projection of incoming supply     HZ     50/60       Idespan     BC, D     BC, D       Electrical     Operations     Projection of incoming supply     Projection of incoming supply       Mechanical     Operations     Projection of incoming supply       Mechanical     Operations     Projection of incoming supply       Standard front dimension     Superations     Projection of incoming supply       Mechanical     Superations     Projection of incoming supply       Standard front dimension     Superations     Projection of incoming supply       Standard front dimension     Superations     Projection of incoming supply       Standard front dimension     Superations     Projection of incoming supply       Benchanical     Immonity     Projection of incoming supply       Benchanical     Immonity <th>Liberious</th> <th></th> <th></th> <th></th>	Liberious			
Rated switching capacity acc. to IEC/EN 60947-2  Rated insulation voltage  Rated frequency  Characteristic  Direction of incoming supply  Iffespan  Electrical  Mechanical  Operations  Operations  Operations  ■ 10000  Mechanical  Standard front dimension  Enclosure height  Mounting width per pole  Mounting  Mounting  Degree of Protection  Terminals top and bottom  Terminal protection  Terminal protection  Terminal capacities  Tightening torque of fixing screws  Tightening torque of fixing scre	Standards			IEC/EN 60947-2
Rated insulation voltage	Rated voltage according to IEC/EN 60947-2	U <sub>n</sub>	V AC	240/415
Rated frequency Characteristic Chiracteristic Chira	Rated switching capacity acc. to IEC/EN 60947-2	I <sub>cu</sub>	kA	25
Characteristic  Direction of incoming supply  lifespan  Electrical Mechanical  Mechanical  Standard front dimension Enclosure height Mounting width per pole  Mounting  Degree of Protection  Terminal protection  Terminal capacities  Tightening torque of fixing screws  Thickness of busbar material  B, C, D as required  B, C, D  Auton  Towno  Towno  Towno  Towno  Tightening torque of fixing screws  Thickness of busbar material	Rated insulation voltage	Ui	V	440
Direction of incoming supply  lifespan  Electrical	Rated frequency	f	Hz	50/60
lifespan Operations ≥ 4000   Mechanical Operations ≥ 10000   Mechanical Departions ≥ 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 mm² 1 - 25   Tightening torque of fixing screws N/m max. 2.4   Thickness of busbar material 0.8 (exept N 0.5 SU)	Characteristic			B, C, D
Electrical Operations Operations ≥ 4000  Mechanical Operations ⇒ 10000  Mechanical Standard front dimension	Direction of incoming supply			as required
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 mm² 1 - 25   Tightening torque of fixing screws N/m max. 2.4   Thickness of busbar material mm 0.8 (exept N 0.5 SU)	lifespan			
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       mm²       1 - 25         Tightening torque of fixing screws       N/m       max. 2.4         Thickness of busbar material       mm       0.8 (exept N 0.5 SU)	Electrical	Operations		≧ 4000
Standard front dimension mm 45 Enclosure height mm 80  Mounting width per pole mm 17.5  Mounting  Mounting  Degree of Protection Irrinals top and bottom Terminal protection  Terminal protection Irrinal capacities mm² 1-25  Tightening torque of fixing screws N/m max. 2.4  Thickness of busbar material mm 45  mm 45  mm 80  Quick attachment with 3 latch positions for top-hat rail IEC/EN 60715  IP20  Twin-purpose terminals  Finger- and back-of-hand proof according to BGV A3 and ÖVE-EN 6  Tomax 2.4  Thickness of busbar material mm 0.8 (exept N 0.5 SU)	Mechanical	Operations		≧ 10000
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 mm² 1 - 25  Tightening torque of fixing screws N/m max. 2.4  Thickness of busbar material mm 0.8 (exept N 0.5 SU)	Mechanical			
Mounting width per pole  Mounting  Mounting  Degree of Protection  Terminals top and bottom  Terminal protection  Terminal capacities  Terminal capacities  Tightening torque of fixing screws  Thickness of busbar material  Tightening torque of fixing screws  Tightening torque of fix	Standard front dimension		mm	45
Mounting  Quick attachment with 3 latch positions for top-hat rail IEC/EN 60715  IP20  Terminals top and bottom  Terminal protection  Terminal protection  Terminal capacities  Terminal capacities  Tightening torque of fixing screws  Thickness of busbar material  Quick attachment with 3 latch positions for top-hat rail IEC/EN 60715  IP20  Twin-purpose terminals  Finger- and back-of-hand proof according to BGV A3 and ÖVE-EN 6  Terminal capacities  Mm²  1 - 25  Tightening torque of fixing screws  N/m  max. 2.4  Thickness of busbar material  mm  0.8 (exept N 0.5 SU)	Enclosure height		mm	80
Degree of Protection  Terminals top and bottom  Terminal protection  Terminal protection  Terminal capacities  Terminal capacities  Tightening torque of fixing screws  Thickness of busbar material  Terminal capacities  IP20  Tiwnin-purpose terminals  Finger- and back-of-hand proof according to BGV A3 and ÖVE-EN 6  To mm²  1 - 25  Tightening torque of fixing screws  N/m  mm. 0.8 (exept N 0.5 SU)	Mounting width per pole		mm	17.5
Terminals top and bottom Terminal protection Finger- and back-of-hand proof according to BGV A3 and ÖVE-EN 6  Terminal capacities mm² 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			Quick attachment with 3 latch positions for top-hat rail IEC/EN 60715
Terminal protection Finger- and back-of-hand proof according to BGV A3 and ÖVE-EN 6  Terminal capacities mm² 1 - 25  Tightening torque of fixing screws N/m max. 2.4  Thickness of busbar material mm 0.8 (exept N 0.5 SU)	Degree of Protection			IP20
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)	Terminals top and bottom			Twin-purpose terminals
Tightening torque of fixing screws N/m max. 2.4 Thickness of busbar material mm 0.8 (exept N 0.5 SU)	Terminal protection			Finger- and back-of-hand proof according to BGV A3 and ÖVE-EN 6
Thickness of busbar material mm 0.8 (exept N 0.5 SU)	Terminal capacities		$mm^2$	1 - 25
	Tightening torque of fixing screws		N/m	max. 2.4
Mounting position As required	Thickness of busbar material		mm	0.8 (exept 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	In	Α	6
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	1.6
Static heat dissipation, non-current-dependent	$P_{vs}$	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

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**

Connectable conductor cross section multi-wired

Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042)

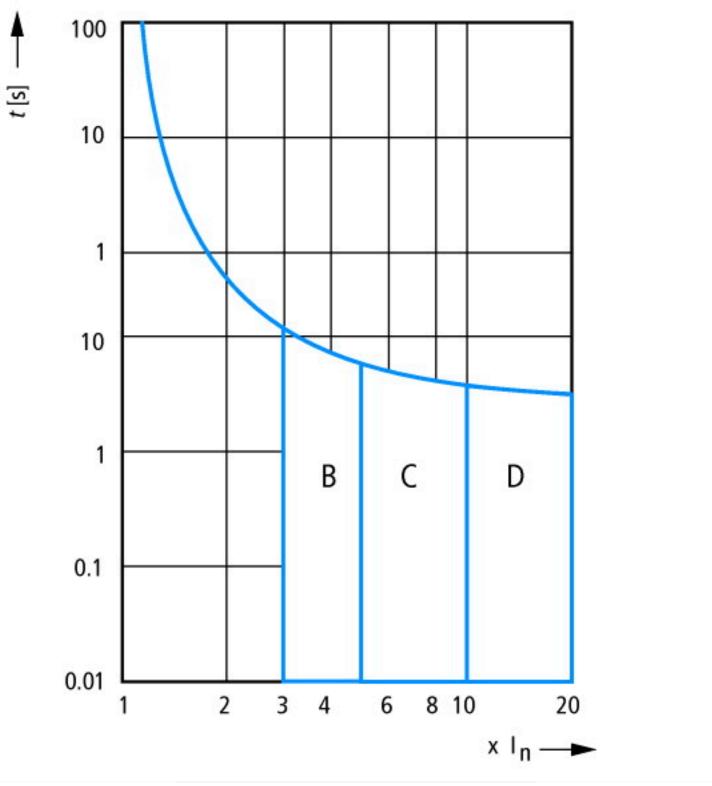
Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss10.0.1-27-14-19-01 [AAB905014]) D Release characteristic 2 Number of poles (total) Number of protected poles Rated current Α 6 ٧ 230 Rated voltage ٧ 440 Rated insulation voltage Ui kV Rated impulse withstand voltage Uimp 4 Rated short-circuit breaking capacity Icn EN 60898 at 230  $\rm V$ kΑ 15 Rated short-circuit breaking capacity Icn EN 60898 at 400  $\rm V$ kΑ 15 Rated short-circuit breaking capacity Icu IEC 60947-2 at 230  ${
m V}$ kA 25 Rated short-circuit breaking capacity Icu IEC 60947-2 at 400  $\rm V$ kΑ 25 Voltage type AC Frequency Hz 50 - 60 3 **Current limiting class** 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 2 Built-in depth mm 70.5 Degree of protection (IP) IP20 °C -25 - 75 Ambient temperature during operating

mm<sup>2</sup>

1 - 25

 $\,\mathrm{mm^2}$ 

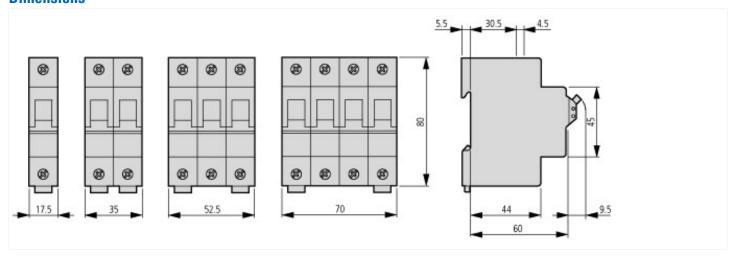
#### **Characteristics**



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

3/4

### **Dimensions**



# **Additional product information (links)**

Temperature dependency, derating

 $https://www.eaton.com/content/dam/eaton/technical documentation/technical-data-tables/Derating\ table\ FAZ\_T.pdf$