#### **DATASHEET - FAZT-D1/4**

Miniature circuit breaker (MCB), 1A, 4p, D-Char, AC



Part no.	FAZT-D1/4
Catalog No.	240968
Alternate Catalog	FAZT-D1/4
No.	
EL-Nummer	0001691475
(Norway)	

Similar to illustration

#### **Delivery program**

Basic function			Miniature circuit-breakers
Number of poles			4 pole
Tripping characteristic			D
Application			Switchgear for industrial and advanced commercial applications
Rated current	In	А	1
Rated switching capacity acc. to IEC/EN 60947-2	l <sub>cu</sub>	kA	25
Product range			FAZ-T

# Technical data

StandardsNoteECK 0604-2Red voltage according to ECK 0609-2VaVa3405Red woltage according to ECK 0609-2VaVa360Red insultation voltageVaVa360Red insultation voltageYaVa360Red insultation voltageYaVa360Red insultation voltageYaSa360Red insultation voltageYaSa360	Electrical			
Aread switching capacity acc. to EG/EN 60947-2     Ico     Area     Second Science Scien	Standards			IEC/EN 60947-2
Rate disclation voltage     Vi     V     4       Rate direquency     f     Hz     50/60       Characteristic     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F     F	Rated voltage according to IEC/EN 60947-2	U <sub>n</sub>	V AC	240/415
Rated frequency     Frequency     Hz     Bode for the constraint of the cons	Rated switching capacity acc. to IEC/EN 60947-2	l <sub>cu</sub>	kA	25
Characteristic   Prediction of incoming supply   B, C, D     Direction of incoming supply   Predictical   required     Itespan   Predictical   Perations   # 4000     Mechanical   Operations   # 1000   # 1000     Mechanical   Image: Standard front dimension   Image: Standard front dimension   # 1000     Rologues height   Image: Standard front dimension   Image: Standard front dimension   Image: Standard front dimension     Mounting width per pole   Image: Standard front dimension   Image: Standard front dimension for top-hat rail IEC/EN 60715     Degree of Protection   Image: Standard front dimension for top-hat rail IEC/EN 60715   Image: Protection for top-hat rail IEC/EN 60715     Terminal stop and bottom   Image: Protection for top-hat rail IEC/EN 60715   Image: Protection for top-hat rail IEC/EN 60715     Terminal capacities   Image: Protection for top-hat rail IEC/EN 60715   Image: Protection for top-hat rail IEC/EN 60715     Terminal capacities   Image: Protection for top-hat rail Standard Free Free Free Free Free Free Free	Rated insulation voltage	Ui	V	440
Direction of incoming supply arequired   itespan Operations ≥ 4000   Mechanical Operations ≥ 1000   Mechanical Operations ≥ 1000   Mechanical Operations ≥ 1000   Mechanical mm 4   Standard front dimension mm 9   Enclosure height mm 1.5   Mounting Mick attachment with 3 latch positions for top-hatr atil IEC/EN 60715   Degree of Protection mm 1.5   Terminals top and bottom mm 1.5   Terminal repretion mm 1.5   Terminal capacities mm <t< td=""><td>Rated frequency</td><td>f</td><td>Hz</td><td>50/60</td></t<>	Rated frequency	f	Hz	50/60
Itespan     Item     Item       Idepand     Operations     ≥ 4000       Mechanical     Operations     ≥ 10000       Mechanical     Operations     ≥ 10000       Mechanical     Operations     ≥ 10000       Mechanical     Image: Standard front dimension     Image: Standard front dimension       Enclosure height     Image: Standard front dimension     Image: Standard front dimension       Mounting width per pole     Image: Standard front dimension for op-hat rail IEC/EN 600715     Image: Standard front dimension for op-hat rail IEC/EN 600715       Mounting     Image: Standard front dimension for op-hat rail IEC/EN 600715     Image: Standard front dimension for op-hat rail IEC/EN 600715       Degree of Protection     Image: Standard front dimension for op-hat rail IEC/EN 600715     Image: Standard front dimension for op-hat rail IEC/EN 600715       Terminal stop and bottom     Image: Standard front dimension for op-hat rail IEC/EN 600715     Image: Standard front dimension for op-hat rail IEC/EN 600715       Terminal capacities     Image: Standard front dimension for op-tandard diverse for-tandard diverse for op-tandard diverse for op-tandard diverse	Characteristic			B, C, D
Electrical     Operations     # 4000       Mechanical     Operations     # 10000       Mechanical     Image: Second Seco	Direction of incoming supply			as required
Mechanical     Operations     ≥ 1000       Mechanical     Mechanical     Standard front dimension     mm     45       Standard front dimension     mm     90     90     90       Enclosure height     mm     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90     90	lifespan			
Mechanical       Standard front dimension     mm     45       Enclosure height     mm     80       Mounting width per pole     mm     1.5       Mounting     Pagee of Protection     Pagee     Pagee of Protection       Terminals top and bottom     Ferminal capacities     Toin-purpose terminals       Terminal capacities     mm <sup>2</sup> 1.25       Tightening torque of fixing screws     mm <sup>2</sup> N/m       Nom     nsc.24     mm	Electrical	Operations		≧ 4000
Standard front dimension   mm   45     Enclosure height   mm   80     Mounting width per pole   mm   1.5     Mounting   Mm   Juck attachment with 3 latch positions for top-hat rail IEC/EN 60715     Degree of Protection   IP20   IP20     Terminals top and bottom   Imm   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   M/m   ax.2.4     Textinal could fixing screws   Mm   8.(exept N 0.5 SU)		Operations		≧ 10000
Enclosure height   mm   8     Mounting width per pole   mm   1.5     Mounting   uick attachment with 3 latch positions for top-hat rail IEC/EN 60715   Pol     Degree of Protection   PO   Pol     Terminal stop and bottom   Finder and back-of-hand proof according to BGV A3 and ÖVE-EN 6   Finder and back-of-hand proof according to BGV A3 and ÖVE-EN 6     Terminal capacities   Mmm   1.25     Tightening torque of fixing screws   N/m   max.24     Thickness of busbar material   Mmm   8 (seept N0.5SU)	Mechanical			
Mounting width per polemm1.5MountingJuck attachment with 3 latch positions for top-hat rail IEC/EN 60715Degree of ProtectionIOOTerminals top and bottomFOOTerminal protectionIOOTerminal capacitiesImm <sup>2</sup> Tightening torque of fixing screwsMmTightening to gues of busbar materialN/mMunting torque of fixing screwsMmTightening to gues of busbar materialMmMunting torque of fixing screwsMmMunting torque of fixi	Standard front dimension		mm	45
MountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountingMountin	Enclosure height		mm	80
Degree of ProtectionP20Terminals top and bottomTwin-purpose terminalsTerminal protectionTwin-purpose terminalsTerminal capacitiesmm²Tightening torque of fixing screwsN/mTightening torque of fixing screwsN/mMarch and SchematerialMm²March and SchematerialMm² <t< td=""><td>Mounting width per pole</td><td></td><td>mm</td><td>17.5</td></t<>	Mounting width per pole		mm	17.5
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 M/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 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)	Degree of Protection			IP20
Terminal capacitiesmm21 - 25Tightening torque of fixing screwsN/mmax. 2.4Thickness of busbar materialmm0.8 (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 <sup>2</sup>	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	I <sub>n</sub>	А	1
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	3.2
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

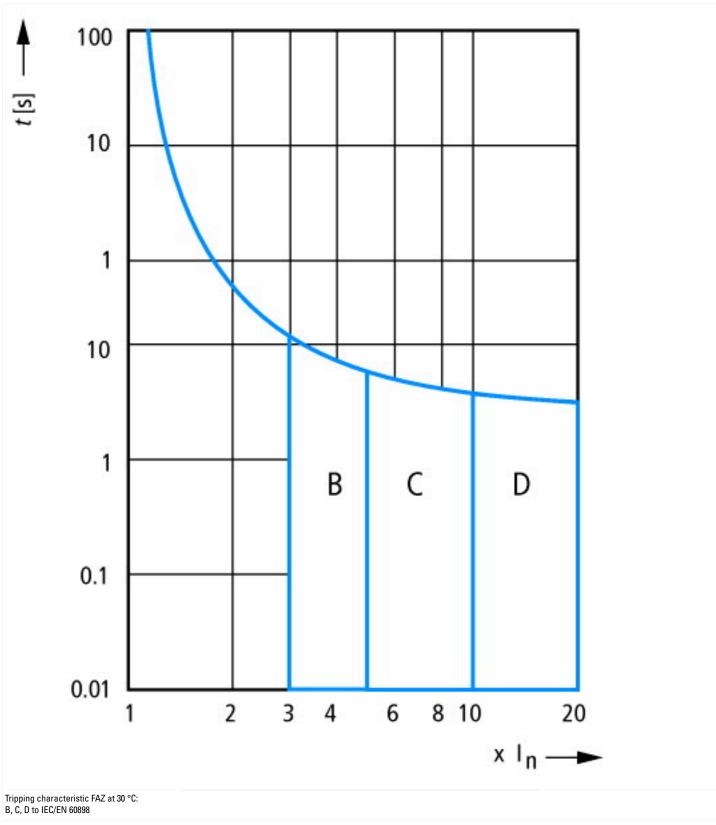
linear, per +1 °C, results in a 0.5% reduction of current carrying capacity

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 observed.
10.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear must observed.
10.13 Mechanical function	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

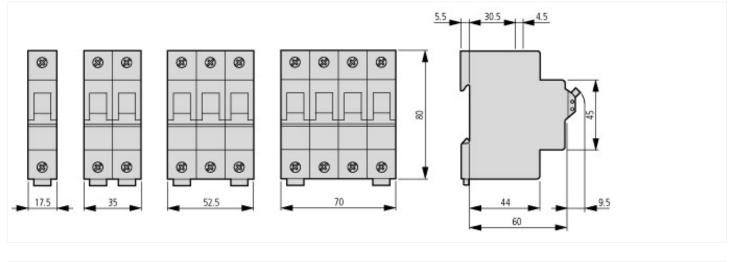
### **Technical data ETIM 7.0**

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)			4
Number of protected poles			4
Rated current	А		1
Rated voltage	V		230
Rated insulation voltage Ui	V		440
Rated impulse withstand voltage Uimp	k۱	V	4
Rated short-circuit breaking capacity Icn EN 60898 at 230 V	kA	A	15
Rated short-circuit breaking capacity Icn EN 60898 at 400 V	kA	A	15
Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	kA	A	25
Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V	kA	A	25
Voltage type			AC
Frequency	Hz	z	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	m	ım	70.5
Degree of protection (IP)			IP20
Ambient temperature during operating	°C	C	-25 - 75
Connectable conductor cross section multi-wired	m	nm²	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