DATASHEET - FAZT-D10/1

Miniature circuit breaker (MCB), 10A, 1p, D-Char, AC



Part no.FAZT-D10/1Catalog No.240815Alternate CatalogFAZT-D10/1No.EL-Nummer1605580(Norway)



Similar to illustration

Delivery program

Basic function			Miniature circuit-breakers
Number of poles			1 pole
Tripping characteristic			D
Application			Switchgear for industrial and advanced commercial applications
Rated current	I _n	А	10
Rated switching capacity acc. to IEC/EN 60947-2	l _{cu}	kA	25
Product range			FAZ-T

Technical data Electrical

StandardNoteFileICE (K0847-2)Red voltage according to EC/EN 0894-2Va4/45Red voltage according to EC/EN 0894-2Va5Red insuitation voltageVaVa3Red insuitation voltageVaVa3Red insuitation voltageYaNa3Red insuitation voltageYaNa <th>Electrical</th> <th></th> <th></th> <th></th>	Electrical			
Red switching capacity acc. to EC/EN 60947-2IcuIcuIcuIcuRed analysian outageVV40Red analysian outageVV500Red analysian outageVV800DiracteristicVVserquiredDiracteristicVVserquiredDiracteristicVVserquiredInsertionVVserquiredBetricalOperators2000serquiredMachanicalVVserquiredInsertionVVSerduiredInsertionVNSerduiredInsertionVNSerduiredInsertionVNSerduiredInsertionVNSerduiredInsertionVNSerduiredInsertionVNSerduiredInsertionVNSerduiredInsertionVNSerduiredInsertionNNSerduiredInsertionNNSerduiredInsertionNNSerduiredInsertionNNSerduiredInsertionNNSerduiredInsertionNNSerduiredInsertionNNSerduiredInsertionNNSerduiredInsertionNNSerduiredInsertionNNSerduiredInsertionNNSerduired <t< td=""><td>Standards</td><td></td><td></td><td>IEC/EN 60947-2</td></t<>	Standards			IEC/EN 60947-2
Rade insulation voltage Vi V 4 Rade frequency f Hz 50/60 Characteristic I Fz 50/60 Direction fincoming supply I Fz 60/70 If sepan Operations F 60/70 Recharical Operations F 60/70 Mechanical Operations F 60/70 Standard fort dimension Operations F 60/70 Standard fort dimension Main 60/70 50/70 Mounting width per pole Main 9 10/70 Nouting I S 10/70 10/70 Terminal top and bottom Main 10/70 10/70 10/70 Terminal protection Main Interminal scienceristing to BGN Asia and ÖVE- EN 6 10/70 10/70 Terminal protection Main Interminal scienceristing to BGN Asia and ÖVE- EN 6 10/70 10/70 Terminal protection Main Interminal scienceristing to BGN Asia and ÖVE- EN 6 10/70 10/70 </td <td>Rated voltage according to IEC/EN 60947-2</td> <td>Un</td> <td>V AC</td> <td>240/415</td>	Rated voltage according to IEC/EN 60947-2	Un	V AC	240/415
Rad frquery F <td< td=""><td>Rated switching capacity acc. to IEC/EN 60947-2</td><td>l_{cu}</td><td>kA</td><td>25</td></td<>	Rated switching capacity acc. to IEC/EN 60947-2	l _{cu}	kA	25
Characteristic B B B C Direction of incoming supply B C B C B C B C B C B C B C B C B C B C B C	Rated insulation voltage	Ui	V	440
Direction of incoming supply infegran Image: Proceeding and Procession of Control	Rated frequency	f	Hz	50/60
Idegan Operations Add Add Electrical Operations Add Add <td>Characteristic</td> <td></td> <td></td> <td>B, C, D</td>	Characteristic			B, C, D
Indextancial Operations 4000 Mechanical 0erations 10000 Mechanical 10000 10000 Mechanical Nome 10000 Enclosure height Mechanical 10000 Mounting width per pole Mechanical 10000 Mounting Mechanical 10000 Degree of Protection Mechanical 10000 Terminal sop and bottom Mechanical 10000 Terminal capacities Mechanical 10000 Infinite capacities Mechanical merinal 10000 Tightening screws Mechanical merinal 10000 100000 Initiate capacities Mechanical merinal 1000000000000000000000000000000000000	Direction of incoming supply			as required
Mechanical Operations 1000 Mechanical standard front dimension mm 4 Standard front dimension mm 6 mm 100 Enclosure height mm 100 100 100 Mounting width per pole mm 100	lifespan			
Mechanical mm 45 Standard front dimension mm 45 Enclosure height mm 80 Mounting width per pole mm 1.5 Mounting Image: Standard from dimension for top-hat rail IEC/EN 60715 120 Degree of Protection Image: Standard from dimension for top-hat rail IEC/EN 60715 120 Terminals top and bottom Image: Standard from dimension for top-hat rail IEC/EN 60715 120 Terminal capacities Image: Standard from dimension for top-hat rail IEC/EN 60715 Image: Standard from dimension for top-hat rail IEC/EN 60715 Tightening torque of fixing screws Image: Standard from dimension for top-hat rail IEC/EN 60715 Image: Standard from dimension for top-hat rail IEC/EN 60715 Tightening torque of fixing screws Image: Standard from dimension for top-hat rail IEC/EN 60715 Image: Standard from dimension for top-hat rail IEC/EN 60715 Tightening torque of fixing screws Image: Standard from dimension for top-hat rail IEC/EN 60715 Image: Standard from dimension for top-hat rail IEC/EN 60715 Tightening torque of fixing screws Image: Standard from dimension for top-hat rail IEC/EN 60715 Image: Standard from dimension for top-hat rail IEC/EN 60715 Tightening torque of fixing screws Image: St	Electrical	Operations		≧ 4000
Standard front dimensionmm45Enclosure heightmm80Mounting width per polemm1.5MountingMountingMountingDegree of ProtectionMountingI/20Terminals top and bottomMountingFori- purpose terminalsTerminal copacitiesMountingFori- and back-of-hand proof according to BGV A3 and ÖVE-EN 6Tightening torque of fixing screwsMountingI/20Terminal copacitiesMmmI/20Tightening torque of fixing screwsMountingI/20Terminal copacitiesMmmI/20Tightening torque of fixing screwsMountingI/20Terminal copacitiesMmmI/20Tightening torque of fixing screwsMountingI/20Tightening torque of fixing screwsMountingI/20Terminal copacitiesMmmI/20Tightening torque of fixing screwsMountingI/20Tightening torque of fixi	Mechanical	Operations		≧ 10000
Enclosure height mm 80 Mounting width per pole mm 1,5 Mounting ick attachment with 3 latch positions for top-hat rail IEC/EN 60715 Degree of Protection P20 Terminal stop and bottom ick attachment with 3 latch positions for top-hat rail IEC/EN 60715 Terminal protection rine run protection for top-hat rail IEC/EN 60715 Terminal capacities rine run protection for top-hat rail IEC/EN 60715 Terminal capacities rine run protection for top-hat rail IEC/EN 60715 Tightening torque of fixing screws rine run protection Tightening torque of fixing screws rine run protection Find house torque of fixing screws rine run protection Find house torque of fixing screws rine run protection Find house torque of fixing screws rine run protection Find house torque of fixing screws rine run protection Find house torque of fixing screws rine run protection Find house torque of fixing screws rine run protection Find house torque of fixing screws rine run protection Find house torque of fixing screws rine run protection Find house torque of fixing screws rine run protection	Mechanical			
Mounting width per pole mm 1.5 Mounting Lick attachment with 3 latch positions for top-hat rail IEC/EN 60715 Degree of Protection P20 Terminal stop and bottom Feed Terminal protection Feed Terminal capacities Feed Tightening torque of fixing screws Mm Tightening torque of fixing screws Sole	Standard front dimension		mm	45
Mounting Mountin a state Mounting Mounting	Enclosure height		mm	80
Degree of Protection P20 Terminals top and bottom Torminal protection Terminal capacities Finger- and back-of-hand proof according to BGV A3 and ÖVE-EN 6 Tightening torque of fixing screws N/m Tightenss of busbar material Mm	Mounting width per pole		mm	17.5
Terminals top and bottom Terminal protection Twin-purpose terminals Terminal capacities Finger- and back-of-hand proof according to BGV A3 and ÖVE-EN 6 Tightening torque of fixing screws Mm ² 1-25 Tightening torque of fixing screws Mm max 2.4 Tightening torque 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 nm ² 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 ² 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

echnical data for design verification			
echnical data for design vernication			
Rated operational current for specified heat dissipation	In	А	10
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	1.5
Static heat dissipation, non-current-dependent	P _{vs}	W	0
Heat dissipation capacity	P _{diss}	W	0
Operating ambient temperature min.		°C	-40
Operating ambient temperature max.		°C	75

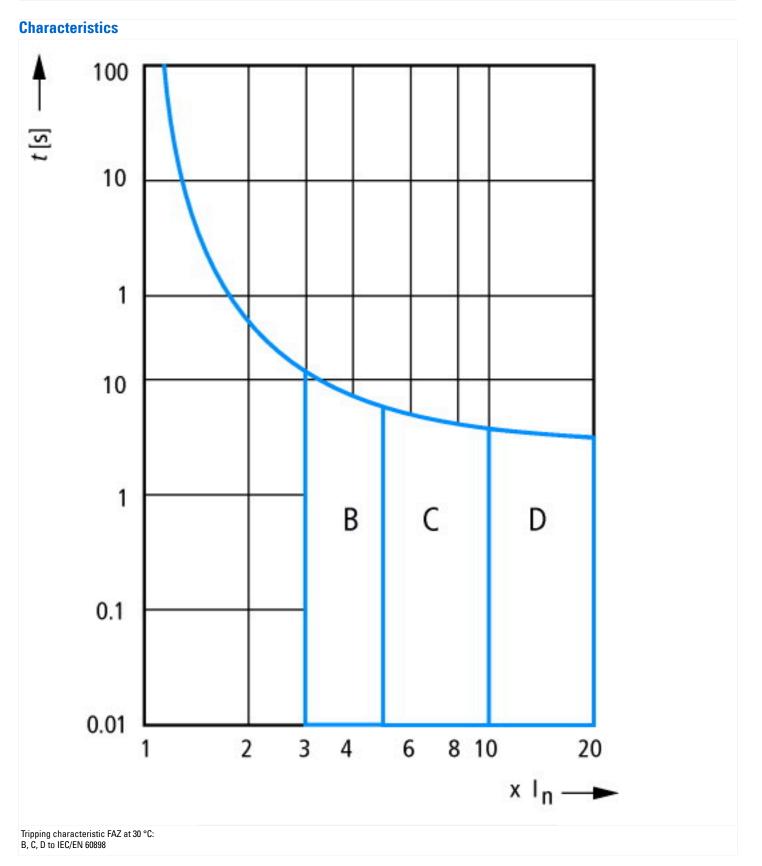
	linear, per +1 °C, results in a 0.5% reduction of current carrying capacity
EC/EN 61439 design verification	
10.2 Strength of materials and parts	
10.2.2 Corrosion resistance	Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures	Meets the product standard's 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 b observed.
10.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear must b 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

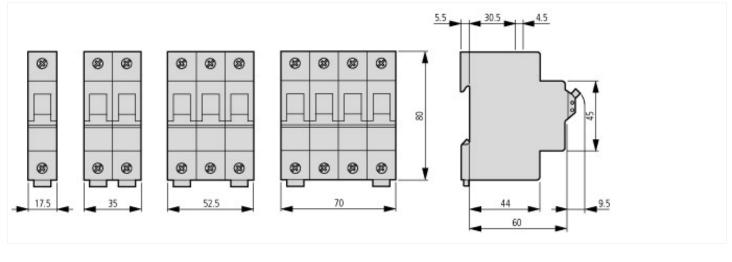
Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042)

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	10
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	25
Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V		kA	25
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



Additional product information (links)

Temperature dependency, derating

https://www.eaton.com/content/dam/eaton/technicaldocumentation/technical-data-tables/Derating table FAZ_T.pdf