DATASHEET - FAZ-C4/3N



Miniature circuit breaker (MCB), 4 A, 3p+N, characteristic: C



Part no.	FAZ-C4/3N
Catalog No.	278967
Alternate Catalog	FAZ-C4/3N
No.	
EL-Nummer	1691126
(Norway)	

Similar to illustration

Delivery program

Basic function			Miniature circuit-breakers
Number of poles			3 pole+N
Tripping characteristic			C
Application			Switchgear for industrial and advanced commercial applications
Rated current	In	А	4
Rated switching capacity acc. to IEC/EN 60947-2	l _{cu}	kA	15
Product range			FAZ

Technical data

ShadaráRadaráRadará and an	Electrical			
NomeNo	Standards			EN 45545-2; IEC 61373
Image: Section of the section of th	Rated operational voltage	Ue	V	
Relevance Number of the second s		Ue	V AC	240/415
Red switching capacity acc to IEC/EN 60947-2 Ru Ru IC I			V DC	60 (per pole)
Braking capacity according to IEC/EN 60947-2 A IUIL1077 Max operational voltage according to IEC/EN 60947-2 (max operational voltage) r, w I Bade solution in control threaking capacity according to IEC/EN 60987-2 (max operational voltage) r, w I Read voltage according to IEC/EN 60987-10 (max operational voltage) r, w I I Read voltage according to IEC/EN 60987-10 (max operational voltage) r, w I I Read voltage according to IEC/EN 60987-10 (max operational voltage) r, w I I Read voltage according to IEC/EN 60987-10 (max operational voltage) r, w I I Read voltage according to IEC/EN 60987-10 (max operational voltage) r, w I I Read voltage according to IEC/EN 60987-10 (max operational voltage) r, w I I Read voltage according to IEC/EN 60987-10 (max operational voltage) r, S I I Read voltage according to IEC/EN 60987-10 (max operational voltage) Read voltage according to IEC/EN 60987-10 (max operational voltage) I I Read voltage according to IEC/EN 60987-10 (max operational voltage) Read voltage according to IEC/EN 60987-10 (max operational voltage) I I </td <td>Rated voltage according to UL</td> <td>Un</td> <td>V AC</td> <td>480Y/277</td>	Rated voltage according to UL	Un	V AC	480Y/277
Nax operational voltage according to IEC/EN 60947-2 (max operational voltage) VAC VAC Rated switching capacity according to IEC/EN 60947-2 (max operational voltage) Sa	Rated switching capacity acc. to IEC/EN 60947-2	l _{cu}	kA	15
Rated switching capacity according to IEC/EN 60947-2 (max operational voltage) Rate Image: Provide state of the state service short-circuit breaking capacity according to IEC/EN 6093-1 Image: Provide state service short-circuit breaking capacity according to IEC/EN 6093-1 Image: Provide state service short-circuit breaking capacity according to IEC/EN 6093-1 Image: Provide state service short-circuit breaking capacity according to IEC/EN 6093-1 Image: Provide state service short-circuit breaking capacity according to IEC/EN 6093-1 Image: Provide state service short-circuit breaking capacity according to IEC/EN 6093-1 Image: Provide state service short-circuit breaking capacity according to IEC/EN 6093-1 Image: Provide state service short-circuit breaking capacity according to IEC/EN 6093-1 Image: Provide state service short-circuit breaking capacity according to IEC/EN 6093-1 Image: Provide state service short-circuit breaking capacity according to IEC/EN 6093-1 Image: Provide state service short-circuit breaking capacity according to IEC/EN 6093-1 Image: Provide state service short-circuit breaking capacity according to IEC/EN 6093-1 Image: Provide state service short-circuit breaking capacity according to IEC/EN 6093-1 Image: Provide state service short-circuit breaking capacity according to IEC/EN 6093-1 Image: Provide state service short-circuit breaking capacity according to IEC/EN 6093-1 Image: Provide state service short-circuit breaking capacity according to IEC/EN 6093-1 Image: Provide state service short-circuit breaking capacity according to IEC/EN 6093-1 Image: Provide state service short-circuit breaking capacity according to IEC/EN 6093-1 Im	Breaking capacity according to UL		kA	10 (UL1077)
Rated services short-circuit breaking capacity according to IEC/EN 60894-1 Ica Ica <th< td=""><td>Max operational voltage according to IEC/EN 60947-2</td><td></td><td>V AC</td><td>440</td></th<>	Max operational voltage according to IEC/EN 60947-2		V AC	440
operational voltage Name Name </td <td>Rated switching capacity according to IEC/EN 60947-2 (max operational voltage)</td> <td>l_{cu}</td> <td>kA</td> <td>10</td>	Rated switching capacity according to IEC/EN 60947-2 (max operational voltage)	l _{cu}	kA	10
Reta switching capacity according to IEC/EN 60898-1 Icn KA Icn Ic		I _{cs}		7,5 KA
Rated service short-circuit breaking capacity according to IEC/EN 60989-1 Ics 5.8A Operational switching capacity according to IEC/EN 60989-1 KA 5.8A Characteristic 6.0, V, S, Z 6.0, V, S, Z Max. back-up fuse AgU/G 15.8A Selectivity Class 6.0, V, S, Z 3.8 Iffespan Operations 6.0 9.000 Direction of incoming supply Operations 9.000 9.000 Nachafford filmension Formation 9.000 9.000 Eclosure height Man 9.000 9.000 Mounting with per pole Formation 9.000 9.000 Gorean of Protection Formation 9.000 9.000 Indimination accounting supply Formation 9.000 9.000 Mounting with per pole Formation 9.000 9.000 Rounding with per pole Formation 9.000 9.000 Reminals top and bottom Formation 9.0	Rated voltage according to IEC/EN 60898-1	Un	V AC	415
Operational switching capacity IA J5 Characteristic B, C, D, K, S, Z Max. back-up fuse AgL/g B, C, D, K, S, Z Selectivity Class Paratom J5 Lifespan Operations J6 Direction of incoming supply Operations J0000 Bickoure height Non ass required Mounting width per pole Mm S Nourding Mm S Derentorial Mm S Mounting width per pole Mm S Mounting protection Mm S Terminal top and bottom Mm S Terminal capacities Mm S Terminal capa	Rated switching capacity according to IEC/EN 60898-1	I _{cn}	kA	10
Characteristic B, C, D, K, S, Z Max. back-up fuse F B, C, D, K, S, Z Selectivity Class 5 5 Ifespan F 6 Direction of incoming supply F 5 Bchont dimension F 6 Enclosure height Man 5 Mounting width per pole F Man Nounting FC/F N00715 top-hat rail Derection FC/F N00715 top-hat rail Terminal stop and bottom F F Terminal protection F F Terminal capacities F man If minal capacities F Man If minal capacities F Man	Rated service short-circuit breaking capacity according to IEC/EN 60898-1	I _{cs}		7,5 kA
Max. back-up fuse A gL/g Is Selectivity Class Jacobian Jacobian Lifespan Vertice Jacobian Lifespan Vertice Jacobian Direction of incoming supply Vertice Jacobian Mechanical Vertice Jacobian Rechanical Max. Jacobian Jacobian Forlow relight Max. Jacobian Jacobian Mounting width per pole Max. Jacobian Jacobian Mounting Max. Jacobian Jacobian Terminal stop and bottom Max. Jacobian Jacobian Terminal capacities Max. Jacobian Jacobian	Operational switching capacity		kA	7.5
Selectivity Class Idea Idea Idea lifespan Operations Idea Idea Lifespan Operations > 10000 Direction of incoming supply Idea as required Mechanical Idea Mm 45 Enclosure height mm 90 90 Mounting width per pole mm 1.5 1.6(2N 60715 top-hat rail Degree of Protection Idea Idea Idea Terminals top and bottom Idea Idea Idea Terminal capacities Idea mm ² Idea Iterminal capacities Idea mm ² Idea	Characteristic			B, C, D, K, S, Z
lifespan Operations Image: sequence of the sequence o	Max. back-up fuse		A gL/gG	125
Lifespan Operations > 1000 Direction of incoming supply as required Mechanical as required Mechanical mm 45 Standard front dimension mm 80 Rounting width per pole mm 1.5 Mounting Pagree of Protection Pagree of Protection Pagree of Protection Terminal stop and bottom Ferminal capacities Ferminal capacities Ferminal capacities	Selectivity Class			3
Direction of incoming supply as required Direction of incoming supply as required Mechanical Mounting front dimension Mounting width per pole Mounting width per pole Mm 45 Mounting width per pole Mm 1.5 1.5 1.5 Mounting Per pole Per pole Per pole 1.20 Per pole 1.20	lifespan			
Mechanical Standard front dimension mm 45 Enclosure height mm 80 Mounting width per pole mm 17.5 Mounting EC/EN 60715 top-hat rail EC/EN 60715 top-hat rail Degree of Protection Ferminals top and bottom Ferminal protection Finer and back-of-hand proof to BGV A2 Terminal capacities mm ² 1x 25	Lifespan	Operations		> 10000
Standard front dimensionmm45Enclosure heightmm80Mounting width per polemm1.5MountingEC/EN 60715 top-hat railDegree of ProtectionPMMI20, IP40 (when fitted)Terminals top and bottomPMMTwin-purpose terminalsTerminal protectionPMMImm2Terminal capacitiesPMMI x25				as required
Enclosure heightmm80Mounting width per polemm1.5MountingEC/EN 60715 top-hat railDegree of ProtectionP20, IP40 (when fitted)Terminal stop and bottomP20, IP40 (when fitted)Terminal protectionP10Terminal capacitiesP10ManagementP10Managemen				
Mounting width per pole mm 1.5 Mounting IEC/EN 60715 top-hat rail Degree of Protection P20, IP40 (when fitted) Terminal stop and bottom Imm Imm Terminal protection Imm Imm Terminal capacities Imm Imm Imm Imm Imm Imm Imm Imm	Standard front dimension		mm	45
Mounting IEC/EN 60715 top-hat rail Degree of Protection IP20, IP40 (when fitted) Terminals top and bottom Image: State of the s	Enclosure height		mm	80
Degree of Protection P20, IP20, IP20 (when fitted) Terminals top and bottom Twin-purpose terminals Terminal protection Finger and back-of-hand proof to BGV A2 Terminal capacities mm ² Imm ² 1x 25	Mounting width per pole		mm	17.5
Terminal stop and bottom Twin-purpose terminals Terminal protection Finger and back-of-hand proof to BGV A2 Terminal capacities mm ² Imm ² 1x 25	Mounting			IEC/EN 60715 top-hat rail
Terminal protection Finger and back-of-hand proof to BGV A2 Terminal capacities mm ² Imm ² 1 x 25	Degree of Protection			IP20, IP40 (when fitted)
Terminal capacities mm ² mm ² 1 x 25	Terminals top and bottom			Twin-purpose terminals
mm ² 1 × 25	Terminal protection			Finger and back-of-hand proof to BGV A2
	Terminal capacities		mm ²	
mm ² 2 × 10			mm ²	1 × 25
			mm ²	2 x 10

Thickness of busbar material	mm	0.8 2
Mounting position		As required

Design verification as per IEC/EN 61439

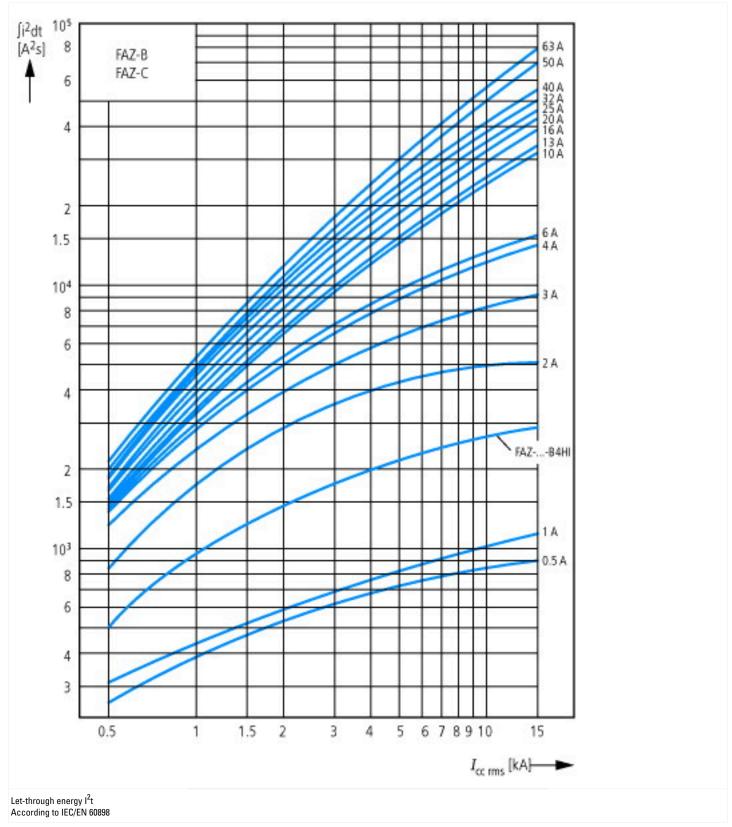
Design vernication as per 120/214 01455			
Technical data for design verification			
Rated operational current for specified heat dissipation	l _n	А	4
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	4.5
Static heat dissipation, non-current-dependent	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
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.

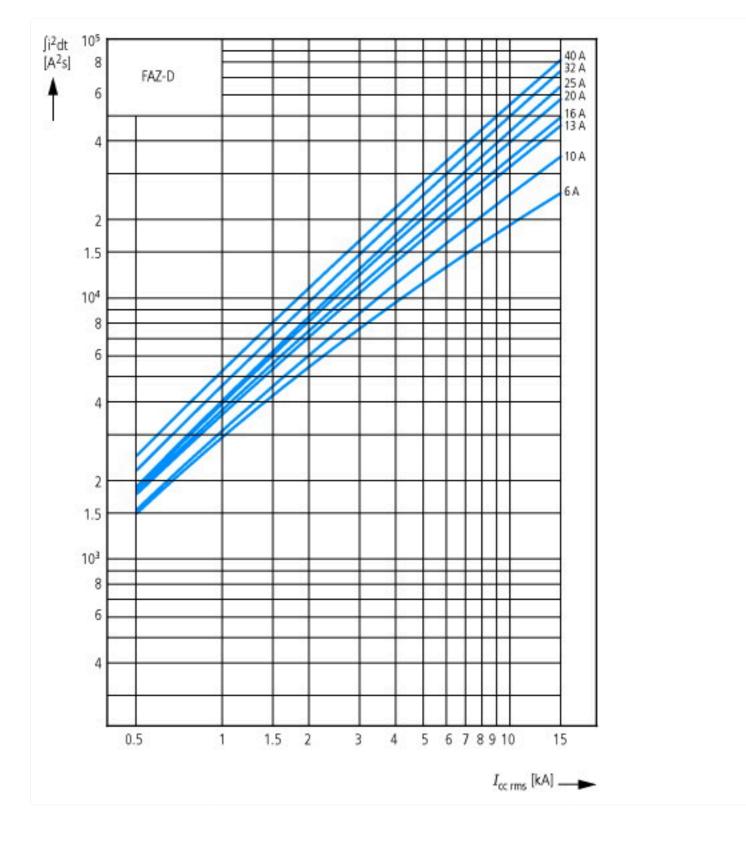
Technical data ETIM 7.0

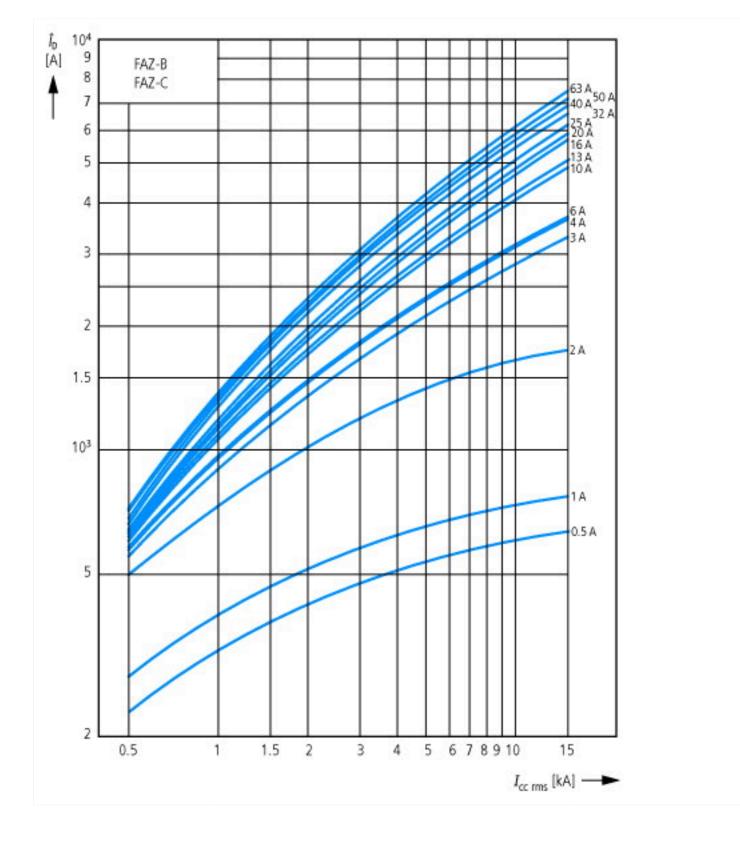
Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042)			
Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss10.0.1-27-14-19-01 [AAB905014])			
Release characteristic		C	
Number of poles (total)		4	
Number of protected poles		3	
Rated current	А	4	
Rated voltage	V	400	
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	10	
Rated short-circuit breaking capacity Icn EN 60898 at 400 V	kA	10	
Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	kA	15	

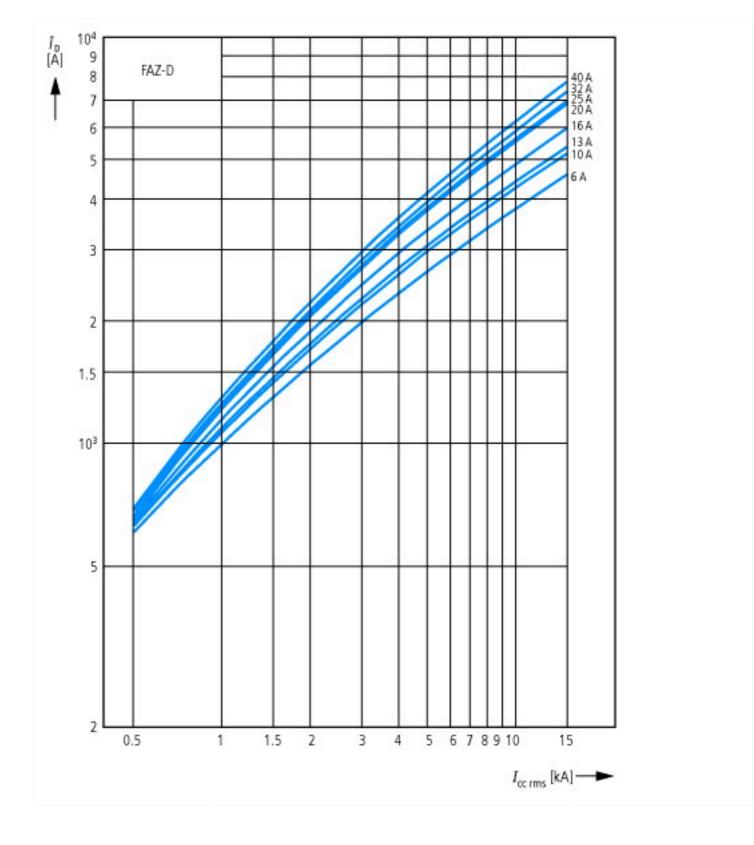
Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V	kA	15
Voltage type		AC
Frequency	Hz	50 - 60
Current limiting class		3
Suitable for flush-mounted installation		No
Concurrently switching N-neutral		Yes
Over voltage category		3
Pollution degree		2
Additional equipment possible		Yes
Width 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

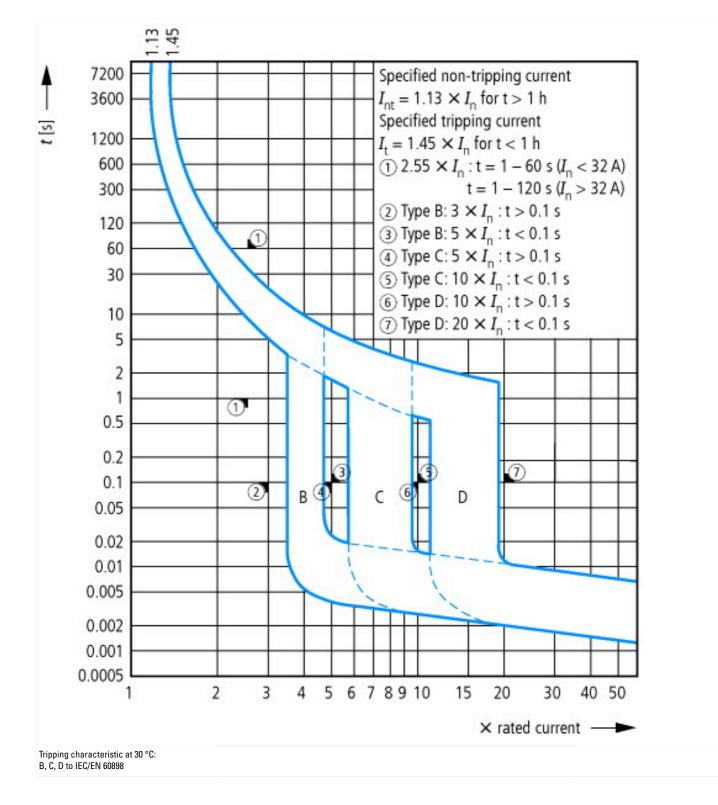
Characteristics



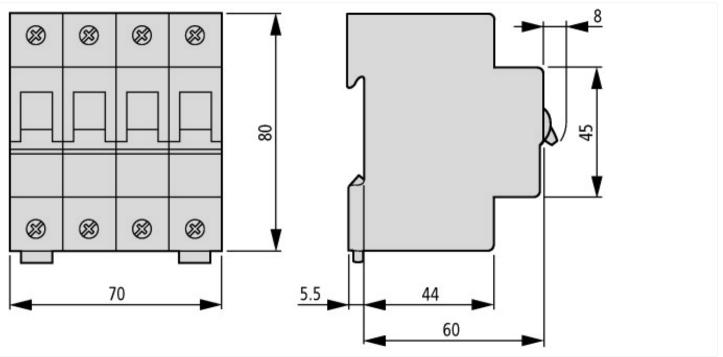








Dimensions



Additional product information (links)

Temperature dependency, derating

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