DATASHEET - FAZ-D10/4



Miniature circuit breaker (MCB), 10 A, 4p, characteristic: D

Powering Business Worldwide*

Part no. FAZ-D10/4 Catalog No. 279080 Alternate Catalog FAZ-D10/4

No.

EL-Nummer 1695238

(Norway)

Similar to illustration

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zonion, 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	Α	10
Rated switching capacity acc. to IEC/EN 60947-2	I _{cu}	kA	15
Product range			FAZ

Technical data

Electrical

Standards			EN 45545-2; IEC 61373
Rated operational voltage	U _e	V	
	U _e	V AC	240/415
		V DC	60 (per pole)
Rated switching capacity acc. to IEC/EN 60947-2	I _{cu}	kA	15
Operational switching capacity		kA	7.5
Characteristic			B, C, D, K, S, Z
Max. back-up fuse		A gL/gG	125
Selectivity Class			3
lifespan			
Lifespan	Operations		> 10000
Direction of incoming supply			as required
Mechanical			

Mechanical		
Standard front dimension	mm	45
Enclosure height	mm	80
Mounting width per pole	mm	17.5
Mounting		IEC/EN 60715 top-hat rail
Degree of Protection		IP20, IP40 (when fitted)
Terminals top and bottom		Twin-purpose terminals
Terminal protection		Finger and back-of-hand proof to BGV A2
Terminal capacities	mm ²	
	mm ²	1 x 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

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Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	10
Heat dissipation per pole, current-dependent	P_{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	6
Static heat dissipation, non-current-dependent	P_{vs}	W	0

	0	W	P _{diss}	Heat dissipation capacity
	-40	°C		Operating ambient temperature min.
	75	°C		Operating ambient temperature max.
ity	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
	Meets the product standard's requirements.			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
	Does not apply, since the entire switchgear needs to be evaluated.			10.2.5 Lifting
	Does not apply, since the entire switchgear needs to be evaluated.			10.2.6 Mechanical impact
	Meets the product standard's requirements.			10.2.7 Inscriptions
	Does not apply, since the entire switchgear needs to be evaluated.			10.3 Degree of protection of ASSEMBLIES
	Meets the product standard's requirements.			10.4 Clearances and creepage distances
	Does not apply, since the entire switchgear needs to be evaluated.			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
	Is the panel builder's responsibility.			10.7 Internal electrical circuits and connections
	Is the panel builder's responsibility.			10.8 Connections for external conductors
				10.9 Insulation properties
	Is the panel builder's responsibility.			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
aton will	The panel builder is responsible for the temperature rise calculation. Eato provide heat dissipation data for the devices.			10.10 Temperature rise
ear must be	Is the panel builder's responsibility. The specifications for the switch gear observed. $\label{eq:constraint}$			10.11 Short-circuit rating
ear must be	Is the panel builder's responsibility. The specifications for the switch gear observed. $\label{eq:continuous}$			10.12 Electromagnetic compatibility
struction	The device meets the requirements, provided the information in the instru leaflet (IL) is observed.			10.13 Mechanical function
1	Is the panel builder's responsibility. The specifications for the switchgrobserved. Is the panel builder's responsibility. The specifications for the switchgrobserved. The device meets the requirements, provided the information in the ins			10.12 Electromagnetic compatibility

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])

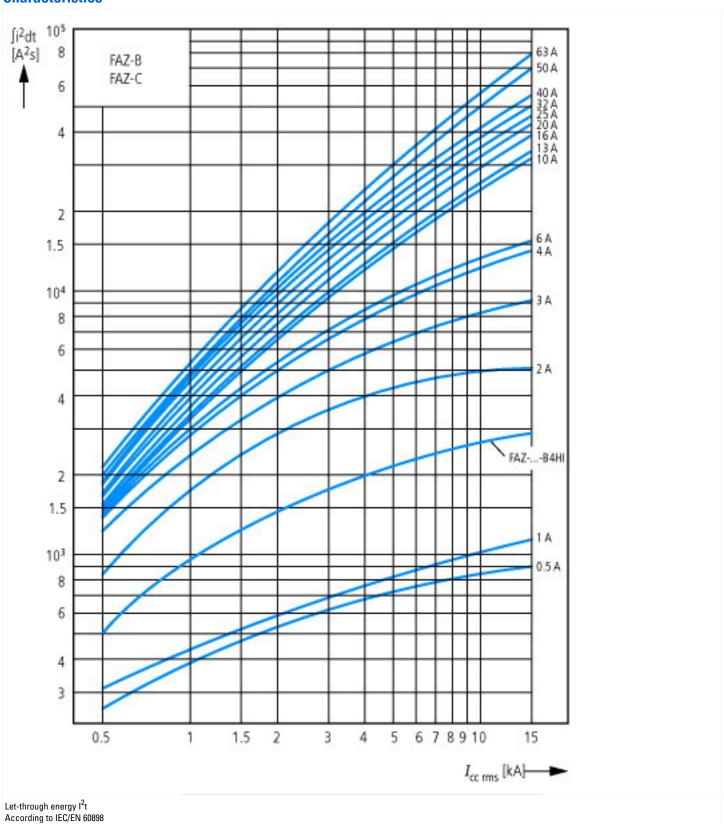
Release characteristic

D

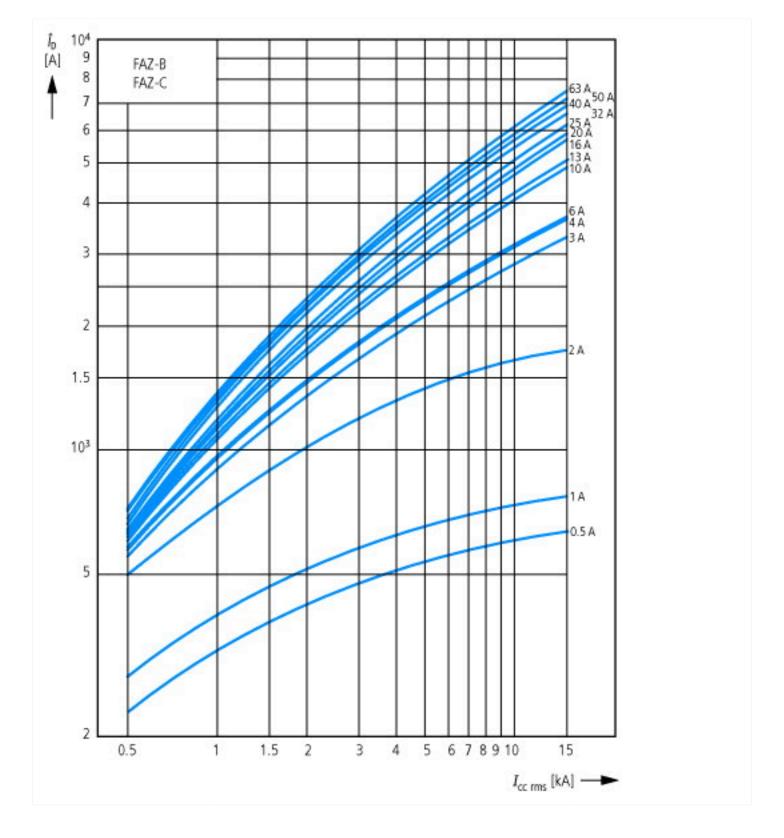
Number of protected poles 4 Rated current A 10 Rated voltage V 400 Rated insulation voltage Ui V 440 Rated impulse withstand voltage Uimp kV 4 Rated short-circuit breaking capacity Icn EN 66898 at 230 V kA 10 Rated short-circuit breaking capacity Icu EC 60897-2 at 230 V kA 15 Rated short-circuit breaking 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 KA 15 AC Current limiting class KA 15 AC Current limiting class No No AC Suitable for flush-mounted installation Yes Yes Concurrently switching N-neutral Yes Yes Over voltage category Yes 3 2 Pollution degree Yes Yes Additional equipment possible Yes Yes	Release characteristic		D
Rated current Rated voltage Rated voltage Rated insulation voltage Uin Rated insulation voltage Uinp Rated impulse withstand voltage Uinp Rated short-circuit breaking capacity Icn EN 60898 at 230 V Rated short-circuit breaking capacity Icn EN 60898 at 420 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icn EC 60947-2 at 230 V Rated short-circuit breaking capacity Icn EC 60947-2 at 400 V Voltage type Voltage type Current limiting class Suitable for flush-mounted installation Concurrently switching N-neutral Over voltage category Pollution degree Additional equipment possible	Number of poles (total)		4
Rated voltage Rated insulation voltage Ui Rated insulation voltage Uiip Rated insulation voltage Uiip Rated insulation voltage Uiip Rated short-circuit breaking capacity Icn EN 60898 at 230 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Voltage type Voltage type Frequency Current limiting class Suitable for flush-mounted installation Concurrently switching N-neutral Over voltage category Pollution degree Additional equipment possible	Number of protected poles		4
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 AC Frequency Hz 50-60 Current limiting class 3 No Suitable for flush-mounted installation No Yes Concurrently switching N-neutral Yes 3 Over voltage category 3 3 Pollution degree 2 2 Additional equipment possible Yes	Rated current	Α	10
Rated impulse withstand voltage Uimp Rated short-circuit breaking capacity Icn EN 60898 at 230 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Voltage type Voltage type Frequency Current limiting class Suitable for flush-mounted installation Concurrently switching N-neutral Over voltage category Pollution degree Additional equipment possible KV 4 4 10 10 10 10 10 10 10 10	Rated voltage	V	400
Rated short-circuit breaking capacity Icn EN 60898 at 230 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Voltage type Voltage type Frequency Current limiting class Suitable for flush-mounted installation Concurrently switching N-neutral Over voltage category Pollution degree Additional equipment possible	Rated insulation voltage Ui	V	440
Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IC	Rated impulse withstand voltage Uimp	kV	4
Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Voltage type AC Frequency Lurrent limiting class Suitable for flush-mounted installation Concurrently switching N-neutral Over voltage category Pollution degree Additional equipment possible KA 15 AC C C C C C C C C C C C C	Rated short-circuit breaking capacity Icn EN 60898 at 230 V	kA	10
Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA Frequency Current limiting class Suitable for flush-mounted installation Concurrently switching N-neutral Over voltage category Pollution degree Additional equipment possible kA 15 AC AC Frequency 50 - 60 No Concurrently switching N-neutral No Yes Additional equipment possible kA 15 AC AC Frequency 3 Suitable for flush-mounted installation No Yes Additional equipment possible Yes	Rated short-circuit breaking capacity Icn EN 60898 at 400 V	kA	10
Voltage type AC Frequency Current limiting class Suitable for flush-mounted installation Concurrently switching N-neutral Over voltage category Pollution degree Additional equipment possible AC AC AC AC AC AC Frequency AC No Yes 3 AC AC AC AC AC AC AC AC AC	Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	kA	15
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	Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V	kA	15
Current limiting class Suitable for flush-mounted installation Concurrently switching N-neutral Over voltage category Pollution degree Additional equipment possible 3 3 4 5 5 6 7 7 8 9 9 9 9 9 9 9 9 9 9 9 9	Voltage type		AC
Suitable for flush-mounted installation Concurrently switching N-neutral Over voltage category Pollution degree Additional equipment possible No Yes 3 2 Additional equipment possible Yes	Frequency	Hz	50 - 60
Concurrently switching N-neutral Over voltage category Pollution degree Additional equipment possible Yes 2 Yes	Current limiting class		3
Over voltage category 3 Pollution degree 2 Additional equipment possible Yes	Suitable for flush-mounted installation		No
Pollution degree 2 Additional equipment possible Yes	Concurrently switching N-neutral		Yes
Additional equipment possible Yes	Over voltage category		3
	Pollution degree		2
Width in number of modular spacings 4	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

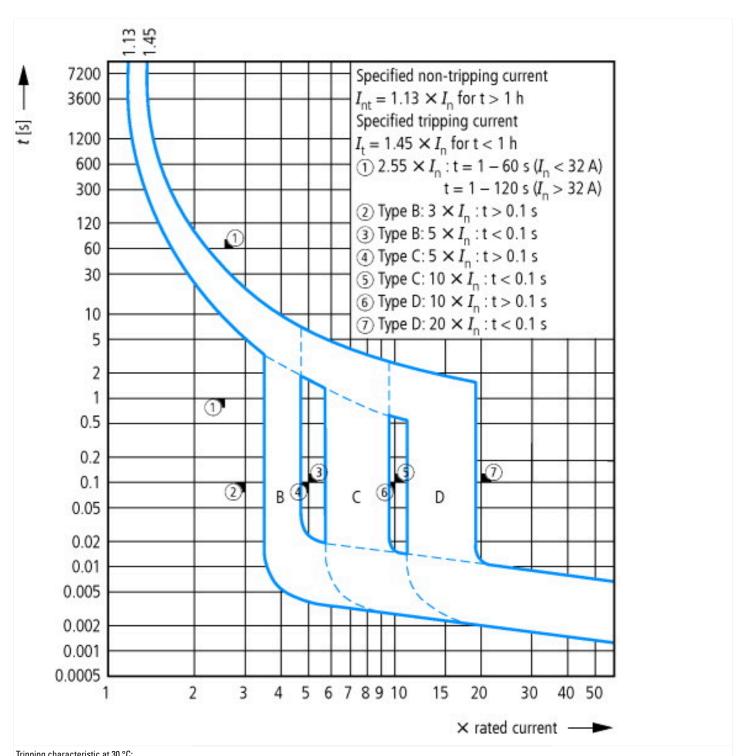
Characteristics



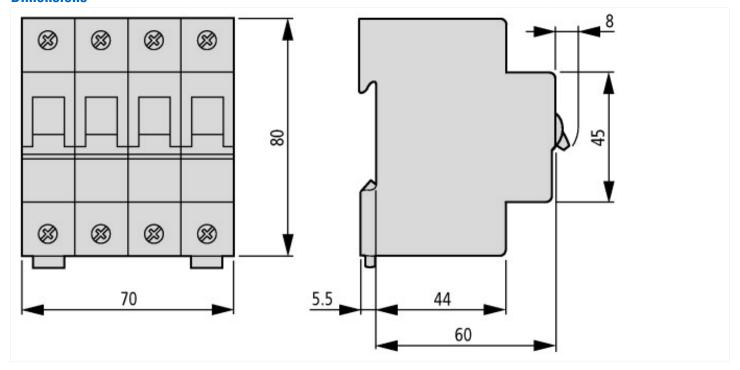








Dimensions



Additional product information (links)

Temperature dependency, derating

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