DATASHEET - FAZ-Z4/1

Miniature circuit breaker (MCB), 4 A, 1p, characteristic: Z





Part no.FAZ-Z4/1Catalog No.278622Alternate CatalogFAZ-Z4/1No.EL-Nummer1695250(Norway)

Similar to illustration

Delivery program

Miniature circuit-breakers 1 pole Z
Z
Switchgear for industrial and advanced commercial applications
4
A 10
FAZ

Technical data

Rade operational worksome Rade operational worksome Read operational worksome Re	Electrical			
Image: state s	Standards			
Number of the sector of the	Rated operational voltage	U _e	V	
Rated switching capacity act. to EC/EN 60947-2 Icu KA Icu Icu <td></td> <td>U_e</td> <td>V AC</td> <td>240/415</td>		U _e	V AC	240/415
Apperational switching capacity KA FA			V DC	60 (per pole)
Dranker derivitie B B C <thc< th=""> C <thc< th=""></thc<></thc<>	Rated switching capacity acc. to IEC/EN 60947-2	l _{cu}	kA	10
Max.back-up fuse Max.back-up fuse Max.back-up fuse Selectivity Class Selectivity Class Generation Ifespan Itespan Itespan Vertion Itespan Vertion Itespan Vertion Itespan Vertion Vert	Operational switching capacity		kA	7.5
Selectivity Class Parations	Characteristic			B, C, D, K, S, Z
ifespan Operations image: provide sector of incoming supply Direction of incoming supply se required Mechanical se required Mechanical mm sector of incoming supply Standard front dimension mm sector of incoming supply Mounting width per pole mm sector of incoming supply Mounting mm sector of incoming supply Degree of Protection mm sector of incoming supply Terminal sop and bottom mm incoming supply Terminal capacities mm ² incoming supply Interminal capacities mm ² incoming supply	Max. back-up fuse		A gL/gG	125
Lifespan Operations > 10000 Direction of incoming supply as required Mechanical stradard front dimension Mon Standard front dimension mm \$ Beclosure height mm \$ Mounting width per pole mm \$ Mounting 15 Enclosure height Degree of Protection Mou F Enclosure height Terminals top and bottom Mon Enclosure height F Terminal capacities Min \$ 1000 Terminal capacities Min \$ \$ Terminal capacities Min \$	Selectivity Class			3
Direction of incoming supply is required Mechanical Manual Standard front dimension mm 45 Enclosure height mm 80 Mounting width per pole mm 15.5 Mounting IEC/EN 60715 top-hat rail 120,1P40 (when fitted) Degree of Protection Mounting IEC/EN 60715 top-hat rail Terminals top and bottom Mounting IEC/EN 60715 top-hat rail Terminal protection Mounting Imm IEC/EN 60715 top-hat rail Terminal protection Mounting Imm IEC/EN 60715 top-hat rail Terminal protection Mounting Imm Imm Immeuse Terminal protection Mounting Imm Immeuse Immeuse Terminal capacities Mounting Immeuse Immeuse Immeuse Terminal capacities Mounting Immeuse Immeuse Immeuse Terminal capacities Immeuse Immeuse Immeuse Immeuse Terminal capacities Immeuse Immeuse Immeuse Immeuse Terminal capacities Immeuse Immeuse	lifespan			
Mechanical Image: I	Lifespan	Operations		> 10000
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 Formal Society Formals Terminals top and bottom Formal Society Formals Terminal capacities Formal Society Formal Society Imm No No Imm No Standard from titled Imm Standard from titled Formals Imm No Standard from titled Imm No Standard from titled Imm No Standard from titled Imm Standard from titled Standard from titled Imm	Direction of incoming supply			as required
Enclosure height mm 80 Mounting width per pole mm 1.5 Mounting EC/EN 60715 top-hat rail EC/EN 60715 top-hat rail Degree of Protection Form purpose terminals Form purpose terminals Terminal protection Form purpose terminals Finger and back-of-hand proof to BGV A2 Terminal capacities mm ² 1×25 mm ² 2×10 2×10 Terminal for busbar material 80 80				
Mounting width per pole mm 1.5 Mounting Ferder of Protection Ferder of Protection Ferder of Protection Terminals top and bottom Ferder of Protection Ferder of Protection Ferder of Protection Terminal rotection Ferder of Protection Ferder of Protection Ferder of Protection Terminal capacities Ferder of Protection Ferder of Protection Ferder of Protection Terminal capacities Ferder of Protection Ferder of Protection Ferder of Protection Terminal capacities Ferder of Protection Ferder of Protection Ferder of Protection Terminal capacities Ferder of Protection Ferder of Protection Ferder of Protection Terminal capacities Ferder of Protection Ferder of Protection Ferder of Protection Terminal capacities Ferder of Protection Ferder of Protection Ferder of Protection Terminal capacities Ferder of Protection Ferder of Protection Ferder of Protection Terminal capacities Ferder of Protection Ferder of Protection Ferder of Protection Ferder of Protection Terminal capacities Ferder of Protecticapaciticapaciticapaciticapaciticapaciticapaciticapaciti	Standard front dimension		mm	45
Mounting IC/EN 60715 top-hat rail Degree of Protection IP20, IP40 (when fitted) Terminals top and bottom IPC Terminal protection IPC Terminal capacities IPC Immediate Immediate Immediat Im	Enclosure height		mm	80
Degree of Protection Image: Base	Mounting width per pole		mm	17.5
Terminals top and bottom Image: Section	Mounting			
Terminal protection Image: sector of the	Degree of Protection			IP20, IP40 (when fitted)
Terminal capacities mm ² Imm ²	Terminals top and bottom			Twin-purpose terminals
Image:	Terminal protection			Finger and back-of-hand proof to BGV A2
Thickness of busbar material Market Market Market Market	Terminal capacities		mm ²	
Thickness of busbar material mm 0.8 2			mm ²	1 x 25
			mm ²	2 x 10
Mounting position As required	Thickness of busbar material		mm	0.8 2
	Mounting position			As required

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	А	4
Heat dissipation per pole, current-dependent	P _{vid}	W	0

Equipment heat dissipation, current-dependent	P _{vid}	W	4
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])

(eci@ss10.0.1-27-14-19-01 [AAB905014])		
Release characteristic		Z
Number of poles (total)		1
Number of protected poles		1
Rated current	А	4
Rated voltage	V	230
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	0
Rated short-circuit breaking capacity Icn EN 60898 at 400 V	kA	0
Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	kA	10
Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V	kA	10
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

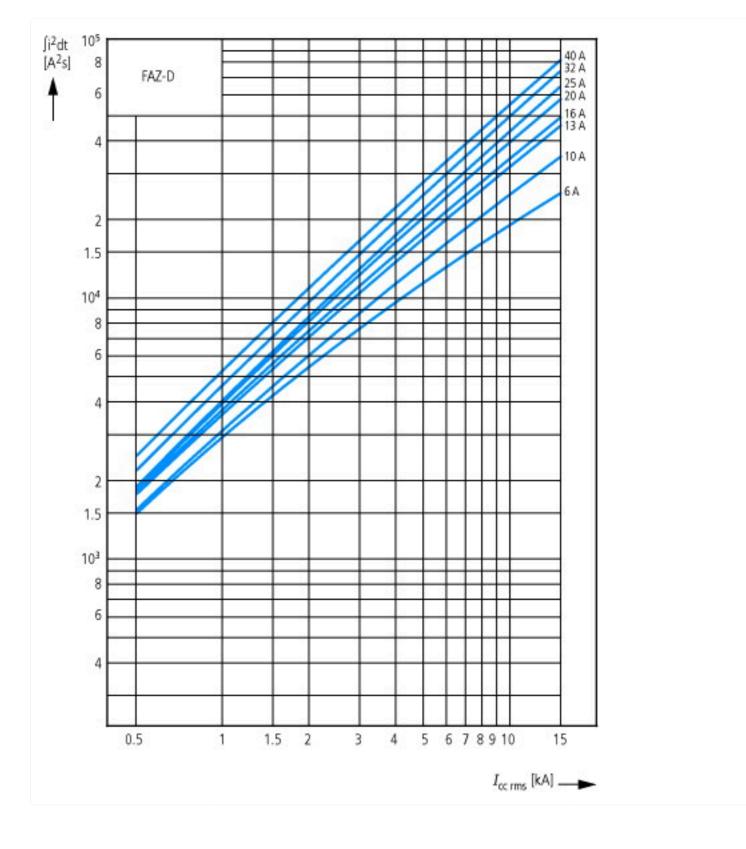
Pollution degree			2
Additional equipment possible			Yes
Width in number of modular spacings			1
Built-in depth	1	mm	70.5
Degree of protection (IP)			IP20
Ambient temperature during operating		°C	-25 - 75
Connectable conductor cross section multi-wired	1	mm²	1 - 25
Connectable conductor cross section solid-core	1	mm²	1 - 25

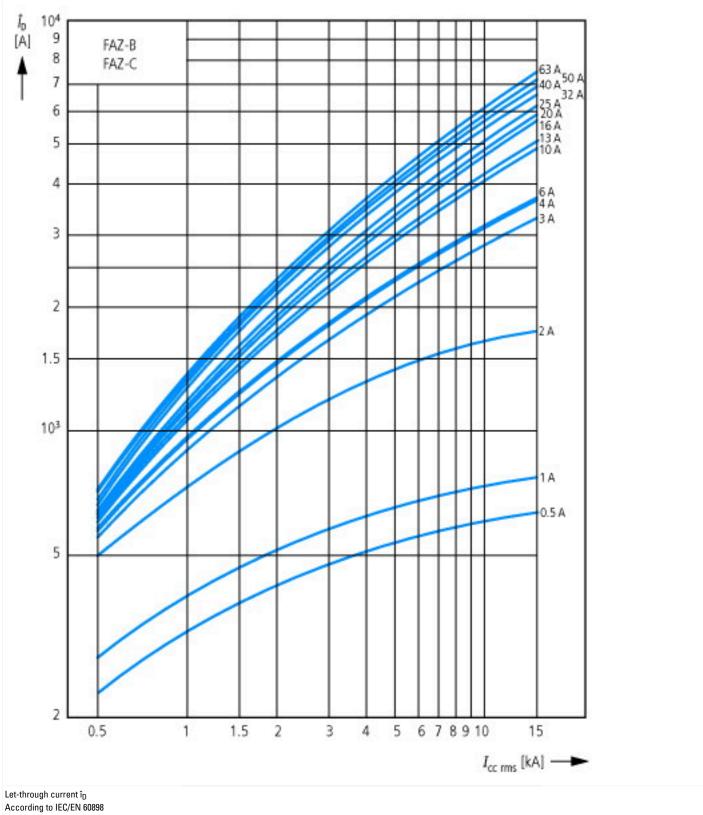
Approvals

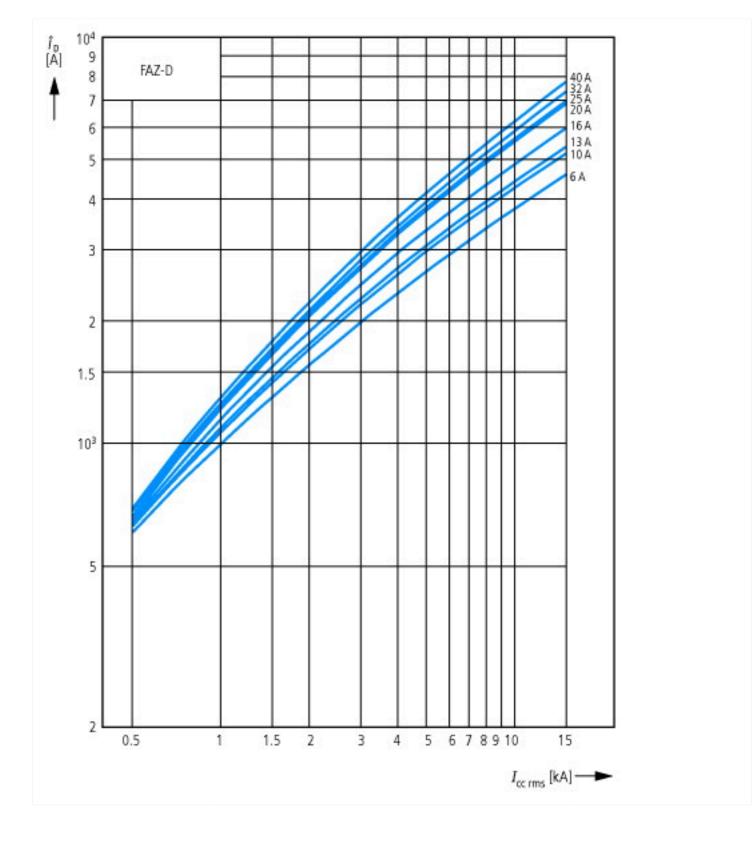
Product Standards	IEC/EN 60947-2; IEC/EN 60898; EN 45545-2; IEC 61373; UL 1077; CSA-C22.2 No. 235; CE marking
UL File No.	E177451
UL Category Control No.	QVNU2, QVNU8
CSA File No.	204453
CSA Class No.	3215-30
North America Certification	UL recognized, CSA certified
Conditions of Acceptability	Supplementary Protector only
Suitable for	Branch Circuits; not as BCPD
Current Limiting Circuit-Breaker	No
Max. Voltage Rating	277 VAC; 48 VDC
Degree of Protection	IEC: IP20; UL/CSA Type: -

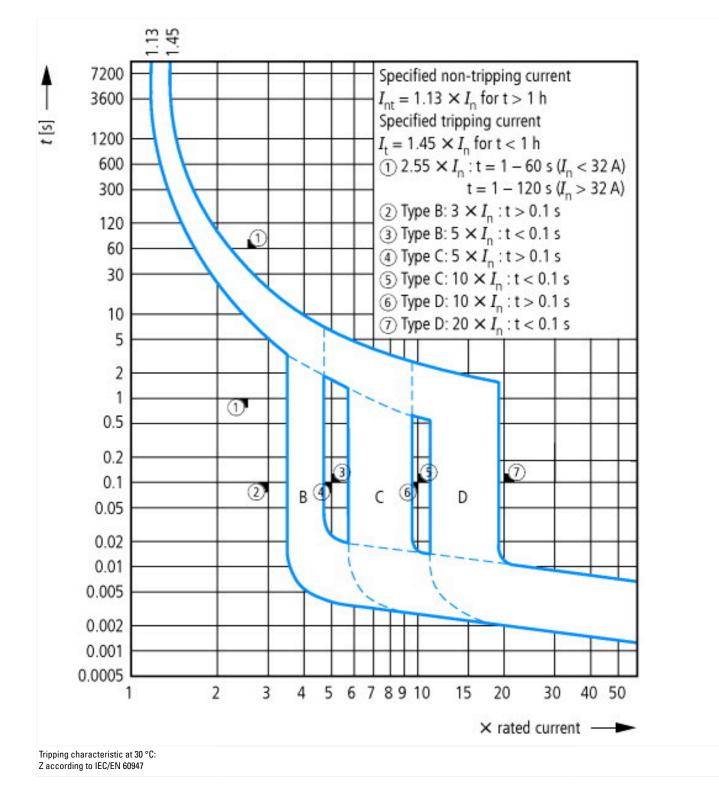
Characteristics



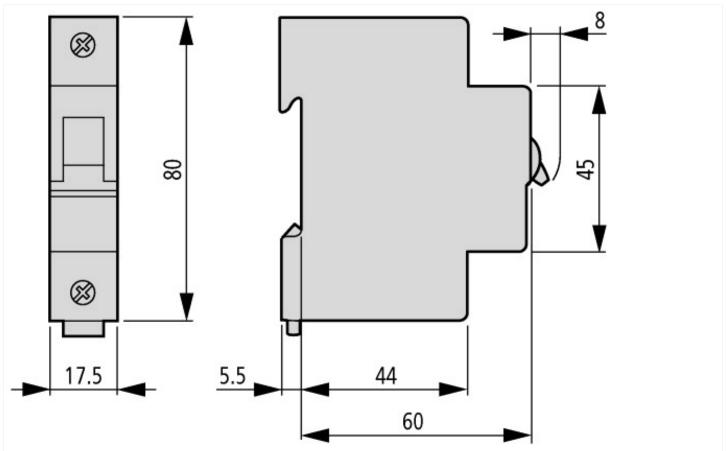








Dimensions



Additional product information (links)

Temperature dependency, derating

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