# DATASHEET - FAZ-Z8/2

Miniature circuit breaker (MCB), 8A, 2p, Z-Char, AC





Part no.FAZ-Z8/2Catalog No.278823Alternate CatalogFAZ-Z8/2No.EL-NummerIG95268(Norway)

Similar to illustration

### **Delivery program**

Basic function			Miniature circuit-breakers
Number of poles			2 pole
Tripping characteristic			Z
Application			Switchgear for industrial and advanced commercial applications
Rated current	In	А	8
Rated switching capacity acc. to IEC/EN 60947-2	l <sub>cu</sub>	kA	10
Product range			FAZ

# Technical data

Red operational worksige     No     FUE     Red operational worksige     No     Red operational worksige	Electrical			
Image: state of the state of	Standards			
VDBiopaperialRed switching capacity act. to EC/EN 60947-2FuKa1Operational switching capacityKa5.0 K.S.ZMax. back-up fuseSectorSectorSectorSelectivity ClassPersonVSectorItespanPersonVSectorDirection finctioning supplyPersonSectorSelectivity ClassPersonSectorSelectivity ClassPersonSectorItespanPersonSectorBrenchardSectorSectorSelectivity ClassSectorSectorSelectivity ClassSectorSectorItespanPersonSectorBrenchardSectorSectorBrenchardSectorSectorSelectivity ClassSectorSectorBrenchardSectorSectorBrenchardSectorSectorSelectivity ClassSectorSectorSelectivity ClassSectorSectorBrenchardSectorSectorSelectivity ClassSectorSectorSelectivity ClassSectorSectorSelectivity ClassSectorSectorSelectivity ClassSectorSectorSelectivity ClassSectorSectorSelectivity ClassSectorSectorSelectivity ClassSectorSectorSelectivity ClassSectorSectorSelectivity ClassSectorSectorSelectivity ClassSecto	Rated operational voltage	Ue	V	
Red switching capacity acc. to EVC/EN 60947-2I I I I ContractaristicI I<		Ue	V AC	240/415
Operational switching capacity   Ka   FA   5     Characteristic   6,0,K,S,Z     Max. back-up fuse   5   5     Selectivity Class   7   6     Lifespan   Poerational   5   6     Direction of incoming supply   Poerational   1   6     Machard ford timension   Poerational   5   6     Suddard ford timension   Max   6   6   6     Mounting width per pole   Max   6 <t< td=""><td></td><td></td><td>V DC</td><td>60 (per pole)</td></t<>			V DC	60 (per pole)
Characteristic 6,0, K, S, Z   Max. back-up fuse 6,0, K, S, Z   Max. back-up fuse 5   Selectivity Class 3   Lifespan 0   Direction of incoming supply 0   Direction of incoming supply 0   Macharita 1   Selectivity Class 1   Superior 1   Direction of incoming supply 0   Macharita 1   Selectivity Class 1   Selectivity Class 1   Selectivity Class 1   Selectivity Class 1   Direction of incoming supply 1   Selectivity Class 1	Rated switching capacity acc. to IEC/EN 60947-2	l <sub>cu</sub>	kA	10
Max.back-up fuse   A gl/g0   Jack     Selectivity Class   A gl/g0   Jack     Lifespan   Deretion   Joo00     Direction of incoming supply   as required     Mother   as required     Selectivity Class   mm   Selectivity Class     Mother   mm   Selectivity Class   Selectivity Class     Direction of incoming supply   mm   Selectivity Class   Selectivity Class     Selectivity Class   mm   Selectivity Class   Selectivity Class     Mother   mm   Selectivity Class   Selectivity Class     Selectivity Class   mm   Selectivity Class   Selectivity Class	Operational switching capacity		kA	7.5
Selectivity Class     Peratoms     Peratoms     Peratoms     Portune     Portune <td>Characteristic</td> <td></td> <td></td> <td>B, C, D, K, S, Z</td>	Characteristic			B, C, D, K, S, Z
Ifespan     Image: Marking and	Max. back-up fuse		A gL/gG	125
Irispan     Operations     Potention     Potention <th< td=""><td>Selectivity Class</td><td></td><td></td><td>3</td></th<>	Selectivity Class			3
Direction of incoming supply     Image     Image <th< td=""><td>lifespan</td><td></td><td></td><td></td></th<>	lifespan			
Mechanical     mm     45       Standard front dimension     mm     6     mm     6       Declosure height     mm     0     75     75       Mounting width per pole     Mm     15/k 00715 top-hat rail     70/k 00/k 00/k 00/k 00/k 00/k 00/k 00/k	Lifespan	Operations		> 10000
Standard front dimension   mm   4     Enclosure height   mm   80     Mounting width per pole   mm   15.     Mounting   EC/EN 60715 top-hat rail   EC/EN 60715 top-hat rail     Degree of Protection   FM   120. IP40 (when fitted)     Terminal stop and bottom   FM   FM   Finger and back-of-hand proof to BGV A2     Terminal capacities   mm <sup>2</sup> 1 × 25   mm   1 × 25     Terminal capacities   mm <sup>2</sup> 2 × 10   mm   1 × 25     Thickness of busbar material   mm   mm   8 × 2   1 × 25	Direction of incoming supply			as required
Enclosure height   mm   8     Mounting width per pole   mm   1.5     Mounting   IEC/EN 60715 top-hat rail   IEC/EN 60715 top-hat rail     Degree of Protection   FV   IEC/EN 60715 top-hat rail     Terminals top and bottom   FV   IEC/EN 60715 top-hat rail     Terminal protection   FV   Imm   Imm     Terminal capacities   mm   Imm   Imm   Imm     Mm   Mm   Mm   Imm   Imm <td>Mechanical</td> <td></td> <td></td> <td></td>	Mechanical			
Mounting width per pole   nm   1.5     Mounting   IC/EN 60715 top-hat rail     Degree of Protection   F02, IP40 (when fitted)     Terminal stop and bottom   Mm   Timipose terminals     Terminal capacities   nm²   Timenar     Inspect   nm²   1x25     Terminal capacities   mn²   1x2	Standard front dimension		mm	45
Mounting   IC/EN 60715 top-hat rail     Degree of Protection   P20, IP40 (when fitted)     Terminals top and bottom   VIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Enclosure height		mm	80
Degree of Protection   P20, IP40 (when fitted)     Terminals top and bottom   File     Terminal protection   File     Terminal capacities   Imm <sup>2</sup> Immer   1×25     Terminal capacities   Imm <sup>2</sup> Terminal capacities   I	Mounting width per pole		mm	17.5
Terminals top and bottom   Image: Sector S	Mounting			IEC/EN 60715 top-hat rail
Terminal protection Image: market of - hand proof to BGV A2   Terminal capacities mm <sup>2</sup> Image: market of - hand proof to BGV A2   Image: market of - hand p	Degree of Protection			IP20, IP40 (when fitted)
Terminal capacities ma <sup>2</sup> Imm <sup>2</sup> 1×25   Imm <sup>2</sup> 2×10   Imm <sup>2</sup> 1<0	Terminals top and bottom			Twin-purpose terminals
Image: second	Terminal protection			Finger and back-of-hand proof to BGV A2
Image:	Terminal capacities		mm <sup>2</sup>	
Thickness of busbar material mm 0.8 2			mm <sup>2</sup>	1 × 25
			mm <sup>2</sup>	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	I <sub>n</sub>	А	8
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	6.7

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
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])

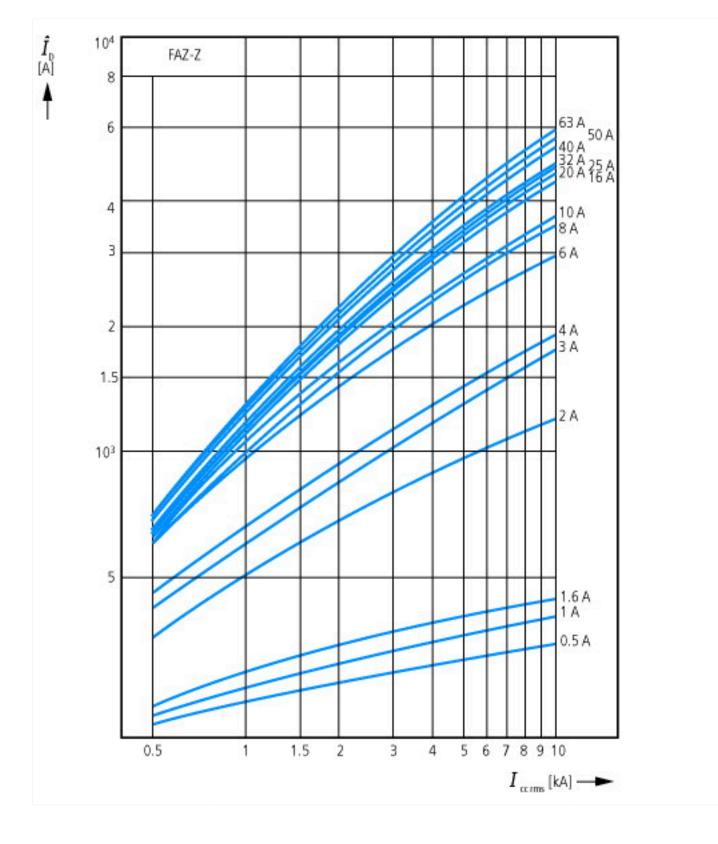
Release characteristic			Z
Number of poles (total)			2
Number of protected poles			2
Rated current	А	4	8
Rated voltage	v	/	400
Rated insulation voltage Ui	V	/	440
Rated impulse withstand voltage Uimp	k	٨V	4
Rated short-circuit breaking capacity Icn EN 60898 at 230 V	k	κA	0
Rated short-circuit breaking capacity Icn EN 60898 at 400 V	k	κA	0
Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	k	κA	10
Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V	k	κA	10
Voltage type			AC
Frequency	н	Ηz	50 - 60
Current limiting class			3
Suitable for flush-mounted installation			No
Concurrently switching N-neutral			No
Over voltage category			3
Pollution degree			2

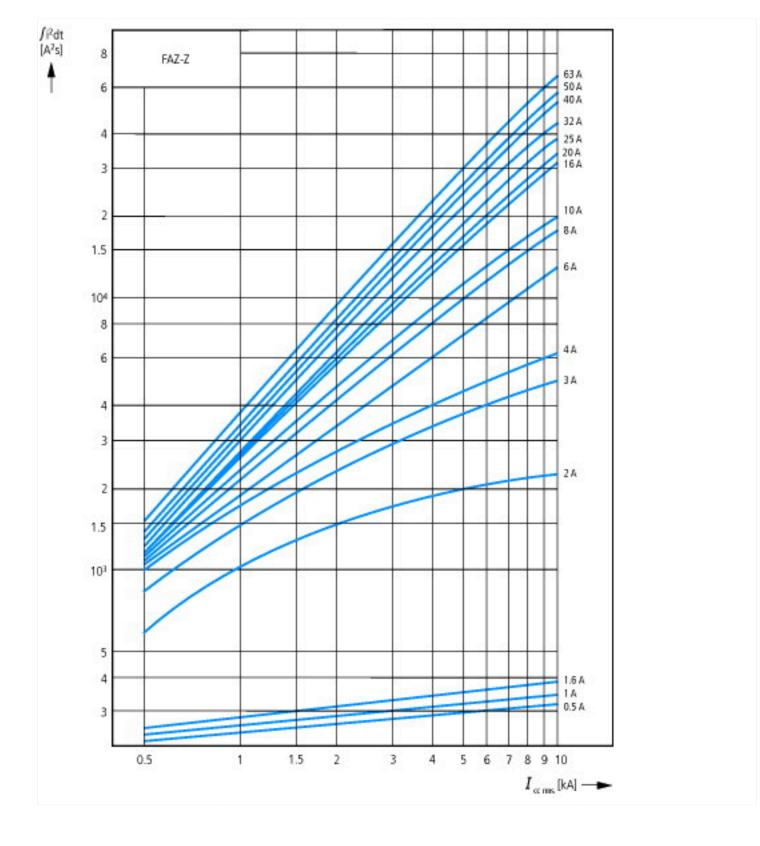
Additional equipment possible		Yes
Width in number of modular spacings		2
Built-in depth	mm	70.5
Degree of protection (IP)		IP20
Ambient temperature during operating	°C	-25 - 75
Connectable conductor cross section multi-wired	mm²	1 - 25
Connectable conductor cross section solid-core	mm²	1 - 25

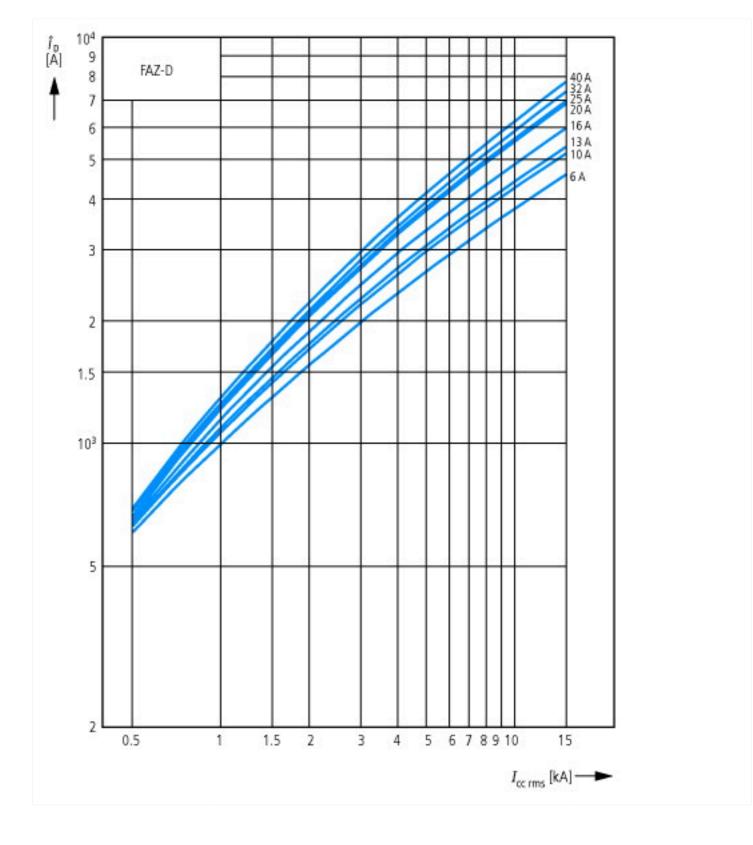
#### **Approvals** Product Standards IEC/EN 60947-2; IEC/EN 60898; UL 1077; CSA-C22.2 No. 235; CE marking UL File No. E177451 QVNU2, QVNU8 UL Category Control No. 204453 CSA File No. CSA Class No. 3215-30 North America Certification UL recognized, CSA certified Conditions of Acceptability Supplementary Protector only Suitable for Branch Circuits; not as BCPD Current Limiting Circuit-Breaker No Max. Voltage Rating 480Y/277 VAC; 96 VDC Degree of Protection IEC: IP20; UL/CSA Type: -

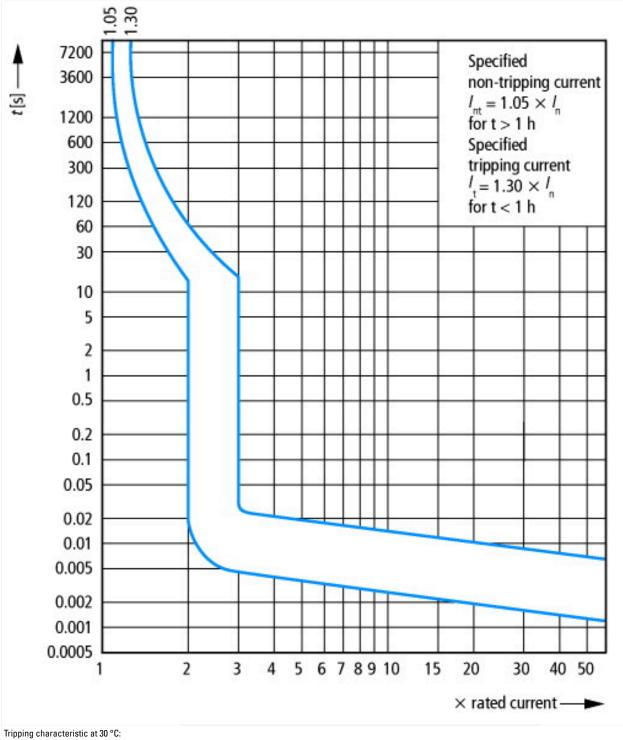
# **Characteristics**





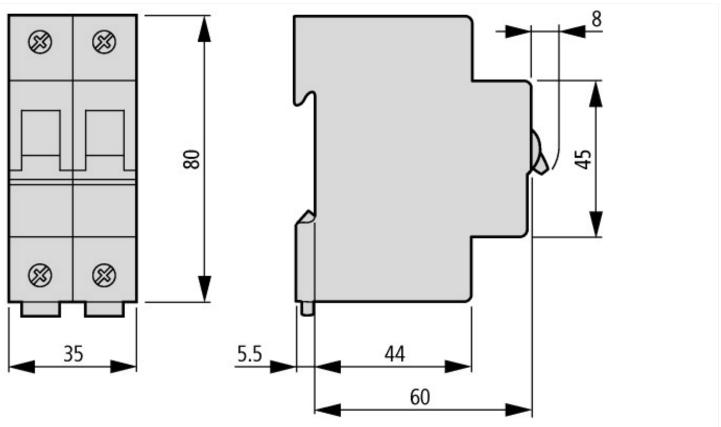






04/09/2020

## **Dimensions**



# Additional product information (links)

AWA1220-1755 Circiut-breaker

AWA1220-1755 Circiut-breaker Temperature dependency, derating ftp://ftp.moeller.net/DOCUMENTATION/AWA\_INSTRUCTIONS/17550701.pdf

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