## **DATASHEET - FAZ-Z2/4**



Miniature circuit breaker (MCB), 2 A, 4p, characteristic: Z



Part no.	FAZ-Z2/4
Catalog No.	279109
Alternate Catalog	FAZ-Z2/4
No.	
EL-Nummer	0001695296
(Norway)	

Similar to illustration

#### **Delivery program**

Basic function			Miniature circuit-breakers
Number of poles			4 pole
Tripping characteristic			Z
Application			Switchgear for industrial and advanced commercial applications
Rated current	In	Α	2
Rated switching capacity acc. to IEC/EN 60947-2	I <sub>cu</sub>	kA	10
Product range			FAZ

# Technical data

ShardarSee and performed and peri	Electrical			
Image: state of the state of	Standards			
Image: Probability of the section o	Rated operational voltage	Ue	V	
Red switching capacity acc. to IEC/EN 60947-2IIIOperational switching capacityI55CharacteristicI555Max. back-up fuseII55Selectivity ClassIII1IfespanOperationII11Direction fincoming supplyOperationII11Becksore flagIII111Recharded MitteringIIIIIIIBrader fort dimensionIII <td></td> <td>Ue</td> <td>V AC</td> <td>240/415</td>		Ue	V AC	240/415
Operational switching capacity   Ka   5     Characteristic   6,0,K,S,Z     Max. back-up fuse   AgU/03   5     Selectivity Class   AgU/03   5     Itespan   Perations   5     Detectional supply   Fee   3     Machard functioning supply   Perations   sequired     Machard functioning supply   Fee   3     Machard functioning supply   Perations   sequired     Machard functioning supply   Fee   3     Machard functioning supply   Perations   Sequired     Machard functioning supply   Fee   Sequired   Sequired     Mathard functioning supply   Fee   Sequired   Sequired   Sequired     Mathard functioning supply   Fee   Sequired   Sequired   Sequired   Sequired   Sequired   Sequired   Sequired   Sequired   Sequired			V DC	60 (per pole)
CharacteristicRefRefRefRefMax back-up fuseMax back-up fuseSecondSecondSecondSecond Second Secon	Rated switching capacity acc. to IEC/EN 60947-2	l <sub>cu</sub>	kA	10
Max. back-up fuse     AglyG     AglyG     Jack and methods       Selectivity Class     AglyG     Jack and methods     Jack and methods       Lifespan     Operation     Jointo     Jack and methods     Jack and methods       Direction of incoming supply     Operation     Jack and methods     Jack and methods     Jack and methods       Selectivity Class     Direction of incoming supply     Jack and methods     Jack and methods     Jack and methods       Max. back-up better be	Operational switching capacity		kA	7.5
Selectivip Class     Selectivip Class<	Characteristic			B, C, D, K, S, Z
Ideam     Image: Market State	Max. back-up fuse		A gL/gG	125
Lifespan     Operations     Image: Section of incoming supply     > 1000       Mechanical     se quired       Standard front dimension     Image: Section of incoming supply     Section of incoming supply       Mounting width per pole     Image: Section of incoming supply     Section of incoming supply       Mounting     Image: Section of incoming supply     Image: Section of incoming supply     Section of incoming supply       Section of incoming width per pole     Image: Section of incoming supply     Image: Section of incoming supply     Section of incoming supply       Section of incoming supply     Image: Section of incoming supply     Image: Section of incoming supply     Section of incoming supply       Section of incoming supply     Image: Section of incoming supply     Section of incoming supply     Section of incoming supply       Section of incoming supply     Image: Section of incoming supply     Section of incoming supply     Section of incoming supply       Section of incoming supply     Image: Section of incoming supply     Section of incoming supply     Section of incoming supply       Section of incoming supply     Image: Section of incoming supply     Section of incoming supply     Section of incoming supply       Section of incoming supply     Image: Section of inc	Selectivity Class			3
Direction of incoming supply     Image: Provide a sequired       Mechanical     sequired       Standard front dimension     Image: Provide a sequired       Enclosure height     mm     \$       Mounting width per pole     mm     \$       Mounting     Image: Provide a sequired     Image: Provide a sequired       Degree of Protection     Image: Provide a sequired     Image: Provide a sequired       Terminals top and bottom     Image: Provide a sequired     Image: Provide a sequired       Terminal capacities     Image: Provide a sequired     Image: Provide a sequired       Image: Provide a sequired a	lifespan			
Mechanical     mm     45       Standar front dimension     mm     6     mm     6       Inclosure height     mm     0     15     15       Mounting width per pole     Mm     15     16/to 15/to 1-hat rail     16/to 15/to 1-hat rail       Degree of Protection     Imm     160/to 15/to 1-hat rail     16/to 15/to 1-hat rail     16/to 15/to 1-hat rail       Terminals top and bottom     Imm     Imm     160/to 15/to 1-hat rail     16/to 15/to 1-hat rail       Terminal protection     Imm	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   EC   Forminals top and bottom   Forminal stop and bottom stop and bottom   Forminal stop and bottom stop and bottom   Forminal stop and bottom stop and bottom stop and bottom   Forminal stop and bottom				as required
Enclosure height   mm   80     Mounting width per pole   mm   1.5     Mounting   IEC/EN 60715 top-hat rail   IEC/EN 60715 top-hat rail     Degree of Protection   F00, IP40 (when fitted)   IEC/EN 60715 top-hat rail     Terminals top and bottom   F00, IP40 (when fitted)   IEC/EN 60715 top-hat rail     Terminal protection   F00, IP40 (when fitted)   IEC/EN 60715 top-hat rail     Terminal capacities   F00, IP40 (when fitted)   IEC/EN 60715 top-hat prof to BGV A2     Interminal capacities   F00, IP40 (when fitted)   IEC/EN 60715 top-hat prof to BGV A2     Interminal capacities   F00, IP40 (when fitted)   IEC/EN 60715 top-hat prof to BGV A2     Interminal capacities   F00, IP40 (when fitted)   IEC/EN 60715 top-hat prof to BGV A2     Interminal capacities   F00, IP40 (when fitted)   IEC/EN 60715 top-hat prof to BGV A2     Interminal capacities   F00, IP40 (when fitted)   IEC/EN 60715 top-hat prof to BGV A2     Interminal capacities   F00, IP40 (when fitted)   IEC/EN 60715 top-hat prof to BGV A2     Interminal capacities   F00, IP40 (when fitted)   IEC/EN 60715 top-hat prof to BGV A2     Interminal capacities   F00, IP40 (when fitted)   IEC/EN 60715 top-hat prof to BGV A2 <tr< td=""><td>Mechanical</td><td></td><td></td><td></td></tr<>	Mechanical			
Mounting width per pole   Mounting   1.5     Mounting   IC/EN 60715 top-hat rail     Degree of Protection   F02, IP40 (when fitted)     Terminals top and bottom   Mounting     Terminal capacities   Mounting     Interminal capacities   Mounting <			mm	45
Mounting   Image: Book of the second of th	Enclosure height		mm	80
Degree of Protection P20, IP40 (when fitted)   Terminals top and bottom Twin-purpose terminals   Terminal protection Twin-purpose terminals   Terminal capacities mm <sup>2</sup> Income mm <sup>2</sup> Terminal capacities mm <sup>2</sup> Income mm <sup>2</sup> Terminal capacities mm <sup>2</sup> Income mm <sup>2</sup>	Mounting width per pole		mm	17.5
Terminals top and bottomTeiminal protectionTeiminal protectionTeiminal protectionTeiminal protection BGV A2Terminal capacitiesImma	Mounting			IEC/EN 60715 top-hat rail
Terminal protection Finger and back-of-hand proof to BGV A2   Terminal capacities mm <sup>2</sup> Imme 1×25   Imme 2×10   Imme Imme   Imme Imme   Imme 2×10   Imme Imme   Imme Imme   Imme Imme   Imme Imme   Imme Imme	Degree of Protection			IP20, IP40 (when fitted)
Terminal capacities mm <sup>2</sup> Imm <sup>2</sup> 1x 25   Imm <sup>2</sup> 1x 25   Imm <sup>2</sup> 2x 10   Imm <sup>2</sup> Imm <sup>2</sup> Imm <sup>2</sup> Imm <sup>2</sup> Imm <sup>2</sup> Imm <sup>2</sup>	Terminals top and bottom			Twin-purpose terminals
Image: Second	Terminal protection			Finger and back-of-hand proof to BGV A2
Image: Section of the section of t	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	In	А	2
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	11.1

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**

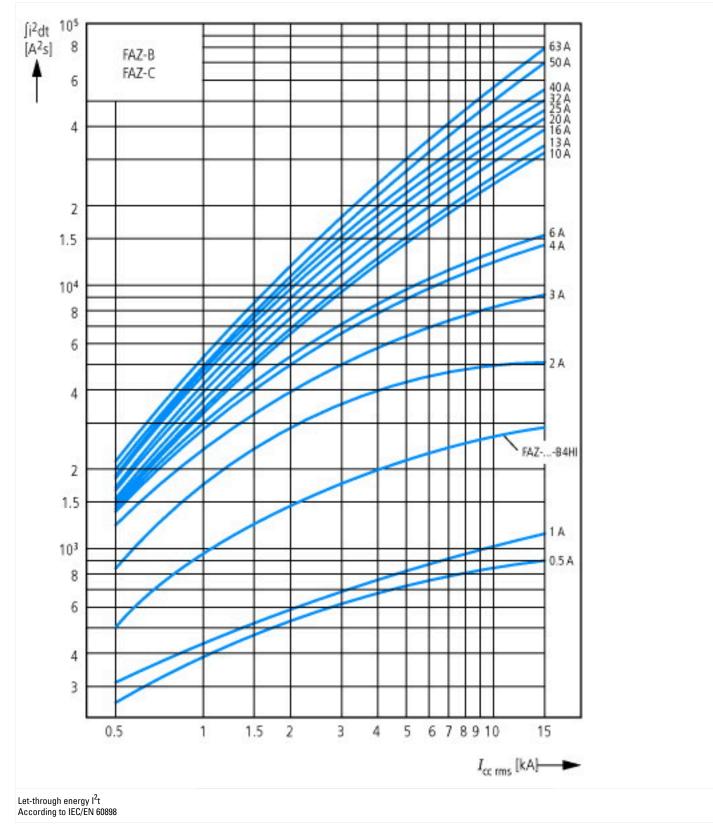
Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042)

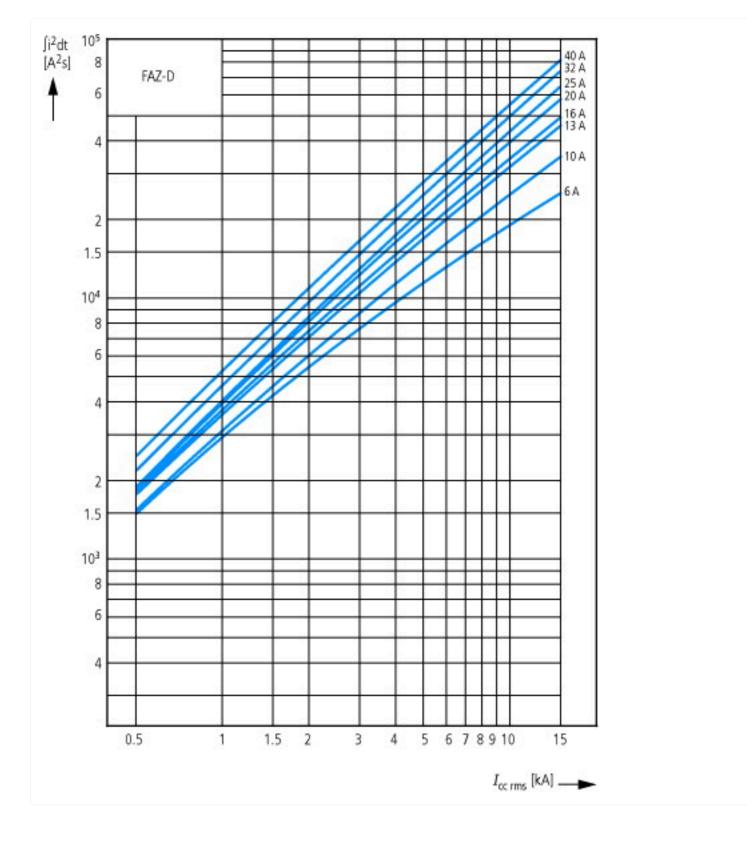
Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss10.0.1-27-14-19-01 [AAB905014])

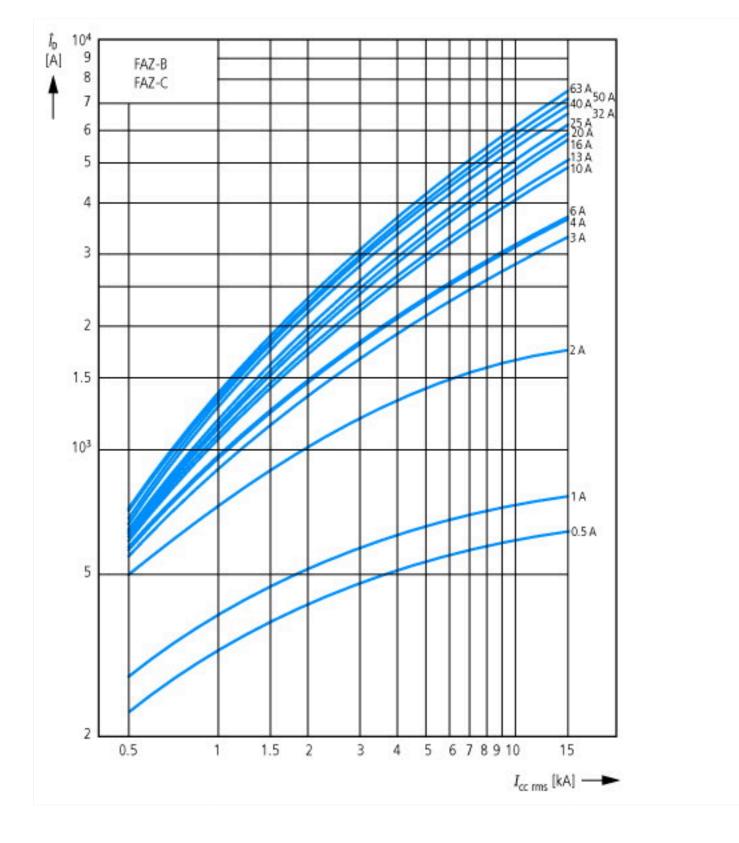
Release characteristic		Z
Number of poles (total)		4
Number of protected poles		4
Rated current	А	2
Rated voltage	V	400
Rated insulation voltage Ui	V	440
Rated impulse withstand voltage Uimp	kV	4
Rated short-circuit breaking capacity Icn EN 60898 at 230 V	kA	0
Rated short-circuit breaking capacity Icn 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		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

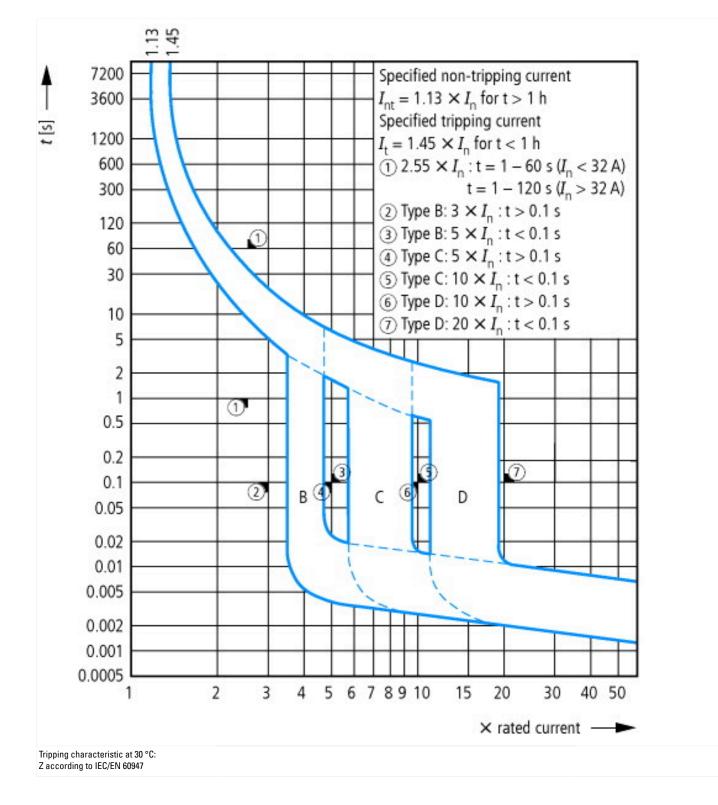
## **Characteristics**



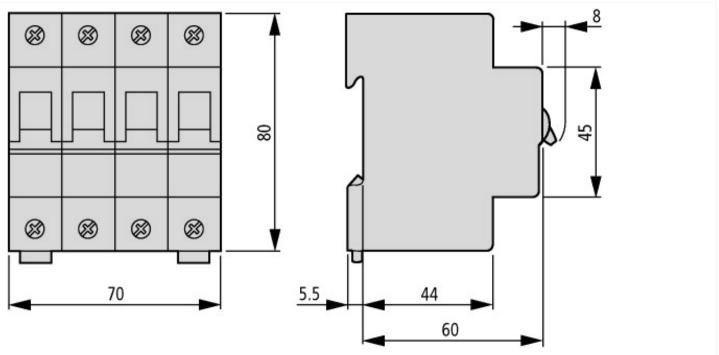








## **Dimensions**



# Additional product information (links)

AWA1220-1755 Circiut-breaker AWA1220-1755 Circiut-breaker

https://es-assets.eaton.com/DOCUMENTATION/AWA\_INSTRUCTIONS/17550701.pdf

Temperature dependency, derating

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