



FAZ-D13/2 278781 FAZ-D13/2



Similar to illustration

#### **Delivery programme**

Basic function			Miniature circuit breakers
Number of poles			2 pole
Tripping characteristic			D
Application			Switchgear for industrial and advanced commercial applications
Rated current	In	А	13
Rated switching capacity acc. to IEC/EN 60947-2		kA	15
Product range			FAZ

# Technical data

Kine of the second se	Electrical			
Image: space s	Standards			
Index servicesIndex	Rated operational voltage	U <sub>e</sub>	V	
Raded switching capacity acc. to IEC/EN 60947-2     K     K     K       Operational switching capacity     K     K     S       Characteristic     K     K     K       State switching capacity     K     K     K       Max. back-up fuse     K     K     K       Selectivity Class     Operational switching supply     Y     S     S       Direction of incoming supply     Operational     Y     S     S     S       Selectivity Class     Y     Y     S		U <sub>e</sub>	V AC	230/400
Appendix and set of the set			V DC	48 (per pole)
Characteristic Image: Provide State	Rated switching capacity acc. to IEC/EN 60947-2		kA	15
Aglya     Aglya     Indexemption       Max back-up tase     Aglya     125       Selectivity Class     0     1000       Lifespan     Operations     1000       Direction of incoming supply     0     1000       Wechanical     versions     1000       Monting     Max back-of-hand proof to BGV A2     1000       Enclosure height     mn     6     1000       Moutting width per pole     mn     1000 calculated and proof to BGV A2     1000       Moutting     For and back-of-hand proof to BGV A2     1000     1000       Degree of Protection     mn     15     1000     1000       Terminal capacities company     mn     1000     10	Operational switching capacity		kA	7.5
Selectivity Class     Main     Selectivity Class     Selecitivity Class     Selecitity Class     Selecitity Class     Selecit	Characteristic			B, C, D
Lifespan Operations > 1000   Direction of incoming supply > are quired   Wechanical ser quired   Standard front dimension Image Mon   Enclosure height Image Mon   Terminal protection Image Mon   Mounting width per pole Image Image   Mounting Image Image   Degree of Protection Image Image   Terminal capacities Image Image   Image Image Image   Im	Max. back-up fuse		A gL/gG	125
Direction of incoming supply     is required       Vechanical     srequired       Standard front dimension     mm     4       Enclosure height     mm     80       Terminal protection     mm     finger and back-of-hand proof to BGV A2       Mounting width per pole     mm     15.       Mounting     ECEN 60715 top-hat rail     100       Degree of Protection     MM     120. IP40 (when fitted)       Terminal capacities     mm <sup>2</sup> 100. IP40 (when fitted)       Terminal capacities     mm <sup>2</sup> 120. IP40 (when fitted)	Selectivity Class			3
Mechanical     mm     45       Standard front dimension     mm     9	Lifespan	Operations		> 10000
Standard front dimensionmm45Enclosure heightmm80Terminal protectionFinger and back-of-hand proof to BGV A2Mounting width per polemm1.5MountingFinger and back-of-hand proof to BGV A2Degree of ProtectionFinger and back-of-hand proof to BGV A2Terminals top and bottomFinger and back of the proof to BGV A2Terminal capacitiesmm²Ferminal capacitiesmm²Letter to the proofmm²Monting the proofmm²Manting the proofmm²Ma	Direction of incoming supply			as required
Enclosure height   mm   80     Terminal protection   Finger and back-of-hand proof to BGV A2     Mounting width per pole   mm   1.5     Mounting   Finder Auf Stop-hat rail   Pole Pole Stop-hat rail     Degree of Protection   Finder Auf Stop-hat rail   Pole Stop-hat rail     Terminal stop and bottom   Finder Auf Stop-hat rail   Finder Auf Stop-hat rail     Terminal capacities   Finder Auf Stop-hat rail   Finder Auf Stop-hat rail     Terminal capacities   Finder Auf Stop Auf Stop-hat rail   Finder Auf Stop-hat rail     Terminal capacities   Finder Auf Stop Auf Stop-hat rail   Finder Auf Stop Auf Stop-hat rail     Terminal capacities   Finder Auf Stop	Mechanical			
Terminal protectionImage	Standard front dimension		mm	45
Mounting width per pole     mm     1.5       Mounting     IC/EN 60715 top-hat rail       Degree of Protection     IC/EN 60715 top-hat rail       Terminals top and bottom     IC/EN 60715 top-hat rail       Terminals copacities     Imm       Imm     Imm	Enclosure height		mm	80
Mounting Image: Book of the second	Terminal protection			Finger and back-of-hand proof to BGV A2
Degree of Protection P20, IP40 (when fitted)   Terminals top and bottom Twin-purpose terminals   Terminal capacities mm <sup>2</sup> Imm <sup>2</sup>	Mounting width per pole		mm	17.5
Terminals top and bottom Image: Constraint of the second	Mounting			IEC/EN 60715 top-hat rail
Terminal capacities mm <sup>2</sup> mm <sup>2</sup> mm <sup>2</sup> 1x 25   mm <sup>2</sup> 2x 10   Thickness of busbar material mm 08 2	Degree of Protection			IP20, IP40 (when fitted)
Image: market in the second	Terminals top and bottom			Twin-purpose terminals
Image: Second	Terminal capacities		mm <sup>2</sup>	
Thickness of busbar material mm 0.8 2			mm <sup>2</sup>	1 x 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

echnical data for design verification			
Rated operational current for specified heat dissipation	In	А	13
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	4
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
EC/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 b observed.
10.12 Electromagnetic compatibility		Is the panel builder's responsibility. The specifications for the switchgear must b observed.
10.13 Mechanical function		The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

#### **Technical data ETIM 6.0**

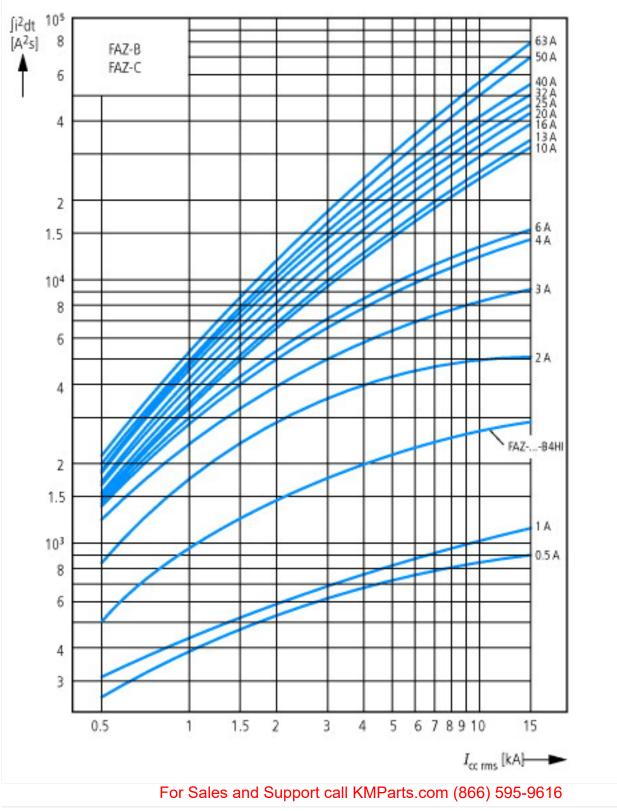
Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042)

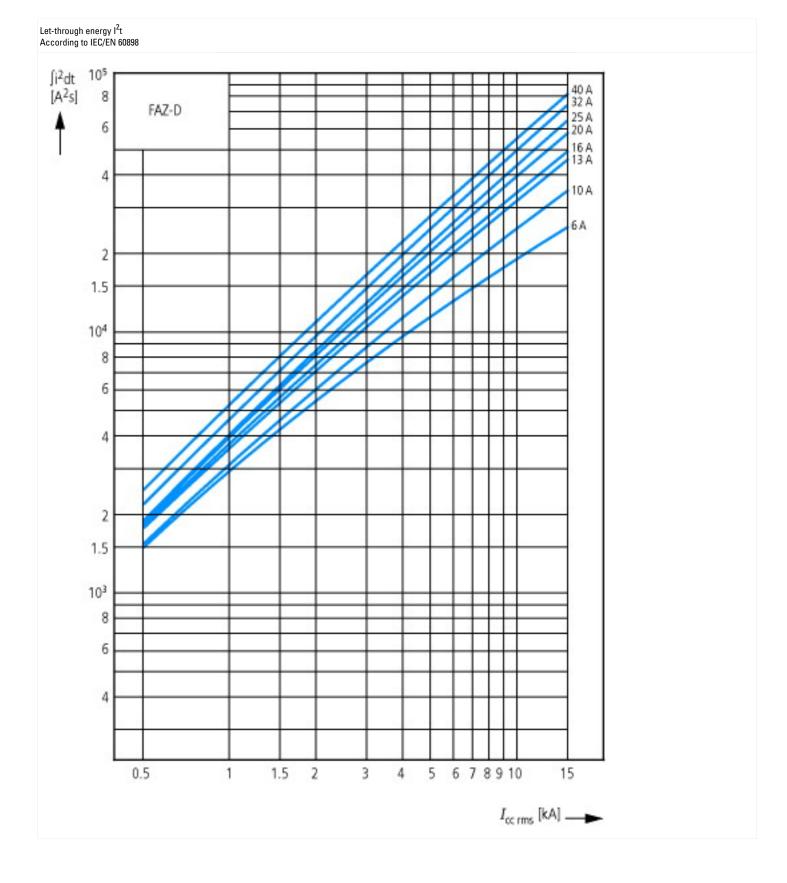
	-/		
Electric engineering, automation, process control engineering / Electrical installati [AAB905011])	ion, device / Minia	ature cir	cuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss8.1-27-14-19-01
Release characteristic			D
Number of poles (total)			2
Number of protected poles			2
Nominal rated current	А	4	13
Nominal rated voltage	V	/	400
Rated short-circuit breaking capacity Icn EN 60898 at 230 V	k	κA	10
Rated short-circuit breaking capacity Icn EN 60898 at 400 V	k	κA	10
Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	k	κA	15
Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V	k	κA	15
Voltage type			AC
Current limiting class			3
Frequency	Н	Ηz	50 - 60
Concurrently switching N-neutral			No
Suitable for flush-mounted installation			No
Over voltage category			3
Pollution degree			2
Width in number of modular spacings			2
Built-in depth	n	nm	70.5
Additional equipment possible			Yes
Degree of protection (IP)			IP20

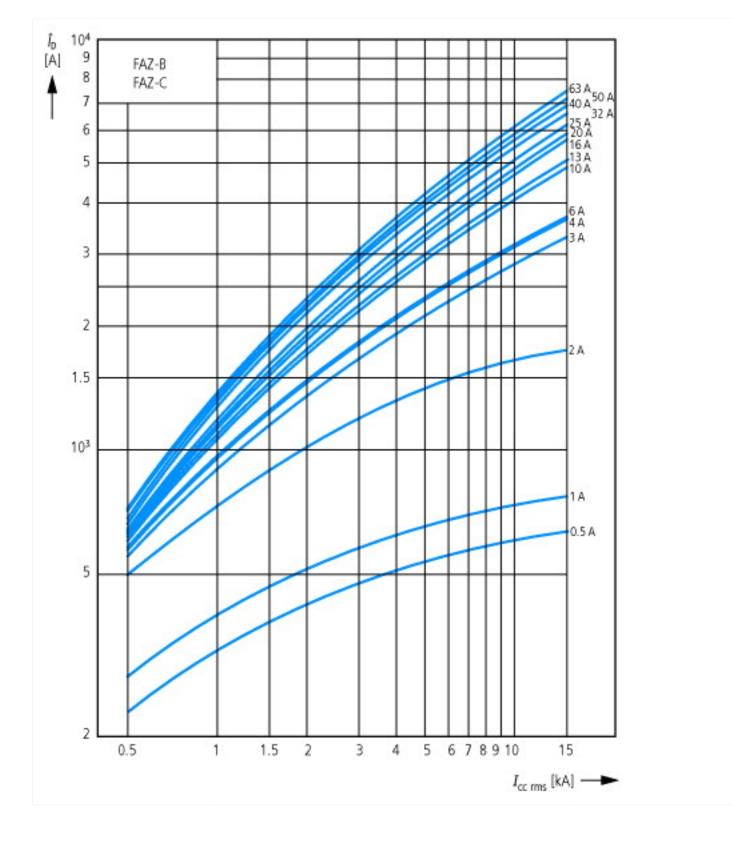
#### **Approvals**

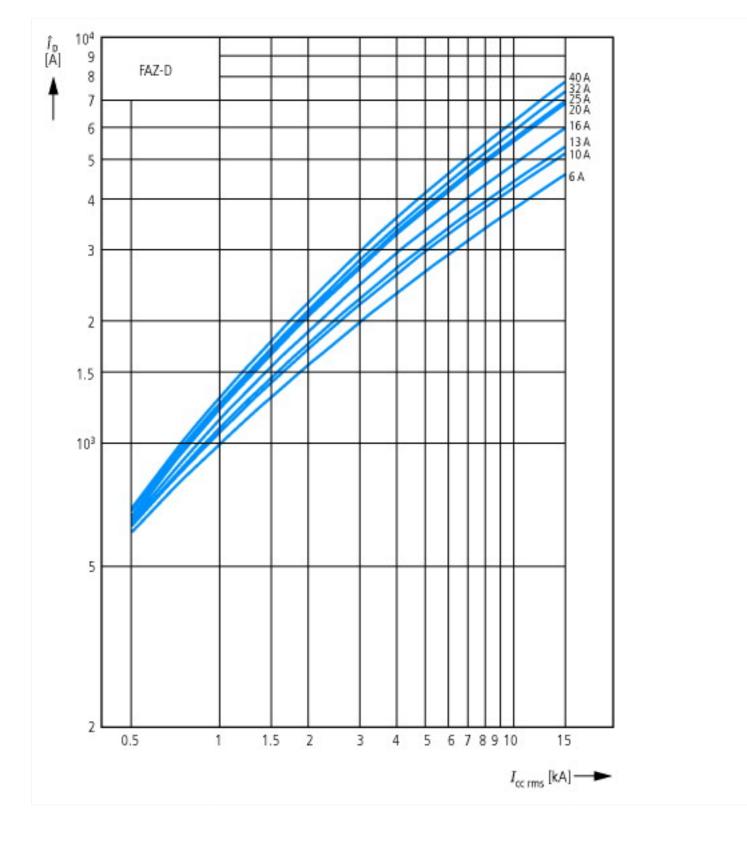
Product Standards	IEC/EN 60947-2; IEC/EN 60898; UL 1077; CSA-C22.2 No. 235; CE marking
UL File No.	E177451
UL Category Control No.	QVNU2, QVNU8
CSA File No.	204453
CSA Class No.	3215-30
North America Certification	UL recognized, CSA certified
Conditions of Acceptability	Supplementary Protector only
Suitable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

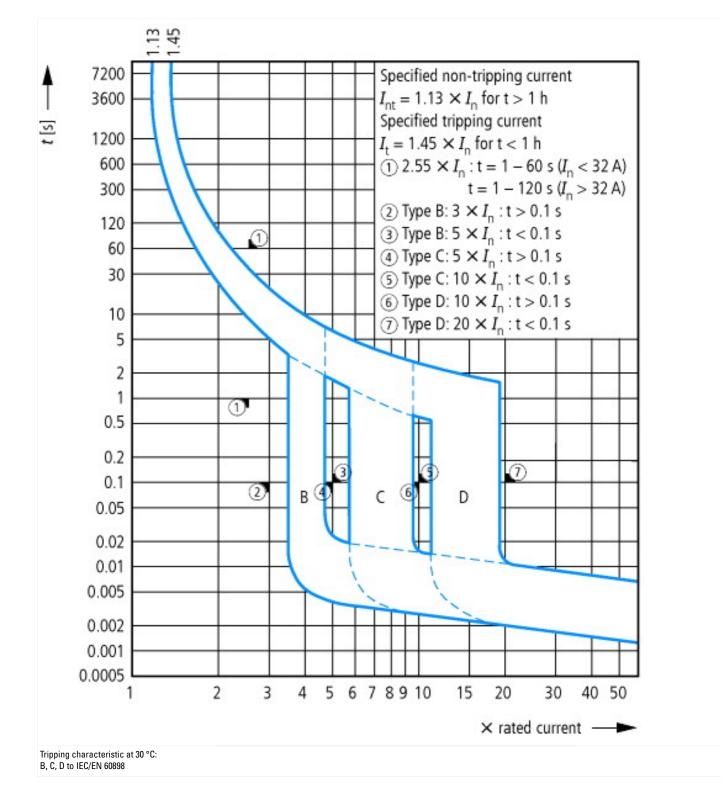
## **Characteristics**



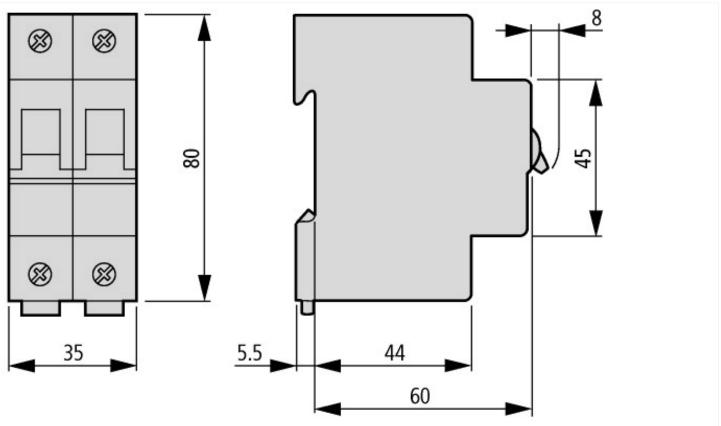








#### Dimensions



# Additional product information (links)

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

ftp://ftp.moeller.net/DOCUMENTATION/AWA\_INSTRUCTIONS/17550701.pdf