



Part no.



Similar to illustration

#### **Delivery program** Basic function Miniature circuit-breakers Number of poles 3 pole С Tripping characteristic Application Switchgear for industrial and advanced commercial applications Rated current I<sub>n</sub> А 6 Rated switching capacity acc. to IEC/EN 60947-2 kA 15 Product range FAZ

# **Technical data**

E	lectrical	
S	tandards	

Read operational voltage     U     V       Image: Provide structure	Standards			IEC/EN 60947-2 IEC/EN 60898
Image: section of the section of th	Rated operational voltage	U <sub>e</sub>	V	
Rated switching capacity acc. to EC/EN 60947-2 KA 5   Operational switching capacity KA 5   Characteristic KA 5, C, D   Max. back-up fuse S 5   Selectivity Class S 3   Lifespan Operations sereuired   Moritorion of incoming supply Operations sereuired   Mechanical S sereuired   Ferninal protection Man S S   Nounting with per pole Man S S   Nounting S S S   Perminal stop and bottom S S S   Ferminal capacities Man S S   Ferminal capacities Man S S   Ferminal stop and bottom S S S   Terminal capacities Man S S   Ferminal		U <sub>e</sub>	V AC	240/415
Operational switching capacity kA 5   Characteristic BC, D   Max. back-up fuse AgUG9   Selectivity Class AgUG9   Selectivity Class 3   Lifespan Operations 3   Direction of incoming supply a required   Mechanical Image: Selectivity Class 3   Exclosure height mm 4   Fording victure protection mm 5   Mounting width per pole mm 15   Mounting Forminal solution 15   Perentional mm 15   Forminal solution mm 15   Forminal solution mm 15   Forminal solution mm 15   Forminal capacities mm 15   F			V DC	60 (per pole)
Characteristic Row Back up fuse B, D   Max. back-up fuse Agl/g 125   Selectivity Class 9 30000   Lifespan Operations 10000   Direction of incoming supply os required 10000   Nachantical mm 8   Standard front dimension mm 10000   Forminal protection mm 10000   Mounting with per pole mm 10000   Mounting 10000 1000000000000000000000000000000000000	Rated switching capacity acc. to IEC/EN 60947-2		kA	15
Max. back-up fuse AgL/G Is   Selectivity Class Operations 3   Lifespan Operations >10000   Direction of incoming supply >0000 sequired   Max. back-up fuse sequired sequired   Direction of incoming supply mm 8   Max. back-up fuse mm 80   Enclosure height mm 15   Mounting width per pole mm 15   Mounting Forminal top and bottom 15000 for direction   Terminal stop and bottom mm 152 (KN 60715 top-hat rail   Terminal capacities mm 122 (KN 60715 top-hat rail   Terminal capacities mm 123 (KN 60715 top-hat rail   Terminal ca	Operational switching capacity		kA	7.5
Selectivity Class	Characteristic			B, C, D
Lifespan Operations > 10000   Direction of incoming supply as required   Mechanical serverived   Standard front dimension mm 45   Enclosure height mm 80   Terminal protection mm 15   Mounting width per pole mm 15/Life Hord Function   Mounting Enclosure height Enclosure height   Degree of Protection Enclosure height Enclosure height   Terminals top and bottom mm 15/Life Hord Function   Terminal capacities mm 120,IP40 (when fitted)   Terminal capacities mm 125	Max. back-up fuse		A gL/gG	125
Direction of incoming supply     is required       Mechanical       Standard front dimension     mm     45       Enclosure height     mm     80       Terminal protection     mm     Finger and back-of-hand proof to BGV A2       Mounting width per pole     mm     1.5       Mounting     EC/EN 60715 top-hat rail     EC/EN 60715 top-hat rail       Degree of Protection     mm <sup>2</sup> EV/EN 60715 top-hat rail       Terminal stop and bottom     mm <sup>2</sup> Five-pup fitted)       Terminal capacities     mm <sup>2</sup> Five-pup fitted)       Terminal capacities     mm <sup>2</sup> Five-pup fitted)       Terminal capacities     mm <sup>2</sup> Five-pup fitted)       Thickness of busbar material     Getter fitted     Standard	Selectivity Class			3
Mechanical       Standard front dimension     mm     45       Enclosure height     mm     80       Terminal protection     mm     Finger and back-of-hand proof to BGV A2       Mounting width per pole     mm     17.5       Degree of Protection     POO     POO     POO       Terminal stop and bottom     POO     POO     POO     POO       Terminal capacities     mm <sup>2</sup> Iz25     Iz26     Iz26       Thickness of busbar material     Mm     8     Standard proof     Standard proof	Lifespan	Operations		> 10000
Standard front dimensionmm45Enclosure heightmm80Terminal protectionFinger and back-of-hand proof to BGV A2Mounting width per polemm1.5MountingPer poleIEC/EN 60715 top-hat railDegree of Protectionrwin-purpose terminalsTerminal stop and bottommm²1x25Terminal capacitiesmm²x10Thickness of busbar materialmm²8.2	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   17.5     Mounting   Finger and back-of-hand proof to BGV A2   Finger and back-of-hand proof to BGV A2     Degree of Protection   Finde and protection   Finde and protection     Terminal stop and bottom   Finde and protection   Finde and protection     Terminal capacities   Finde and protect	Mechanical			
Terminal protectionFinger and back-of-hand proof to BGV A2Mounting width per polemm1.5MountingFinger and back-of-hand proof to BGV A2MountingFinger and back-of-hand proof to BGV A2Degree of ProtectionFinger and back-of-hand proof to BGV A2Terminals top and bottomFinger and back-of-hand proof to BGV A2Terminal capacitiesMmImmaSinger and back-of-hand proof to BGV A2Terminal capacitiesFinger and back-of-hand proof to BGV A2Terminal capacitiesMm2Imma1x25Thickness of busbar materialImmaImmaSinger A2ImmaSinger A2ImmaSinger A2ImmaSinger A2ImmaSinger A2	Standard front dimension		mm	45
Mounting width per pole   mm   1.5     Mounting   IEC/EN 60715 top-hat rail     Degree of Protection   IE20, IP40 (when fitted)     Terminals top and bottom   mm <sup>2</sup> Terminal capacities   Imm <sup>2</sup> Imm <sup>2</sup> 1x 25     Thickness of busbar material   Imm <sup>2</sup>	Enclosure height		mm	80
Mounting IEC/EN 60715 top-hat rail   Degree of Protection IP20, IP40 (when fitted)   Terminals top and bottom rwin-purpose terminals   Terminal capacities mm²   Imm² 1 × 25   Thickness of busbar material Imm²	Terminal protection			Finger and back-of-hand proof to BGV A2
Degree of Protection IP20, IP40 (when fitted)   Terminals top and bottom Twin-purpose terminals   Terminal capacities mm <sup>2</sup> Inchange 1x 25   Inchange mm <sup>2</sup> Thickness of busbar material mm	Mounting width per pole		mm	17.5
Terminals top and bottom Image: Marce of the sector of t	Mounting			IEC/EN 60715 top-hat rail
Terminal capacities mm <sup>2</sup> Imm <sup>2</sup> 1x 25   Imm <sup>2</sup> 2x 10   Thickness of busbar material Imm <sup>2</sup>	Degree of Protection			IP20, IP40 (when fitted)
Image: market in the image: market	Terminals top and bottom			Twin-purpose terminals
Thickness of busbar material Image: Base of the second s	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**

<b>5</b>			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	А	6
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	4.4
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

C/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 observed.
10.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear must 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 installatio [AAB905011])	on, device / Miniature (	circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss8.1-27-14-19-01
Release characteristic		C
Number of poles (total)		3
Number of protected poles		3
Nominal rated current	А	6
Nominal rated voltage	V	400
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
Current limiting class		3
Frequency	Hz	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		3
Built-in depth	mm	70.5
Additional equipment possible		Yes
Degree of protection (IP)		IP20

# Approvals

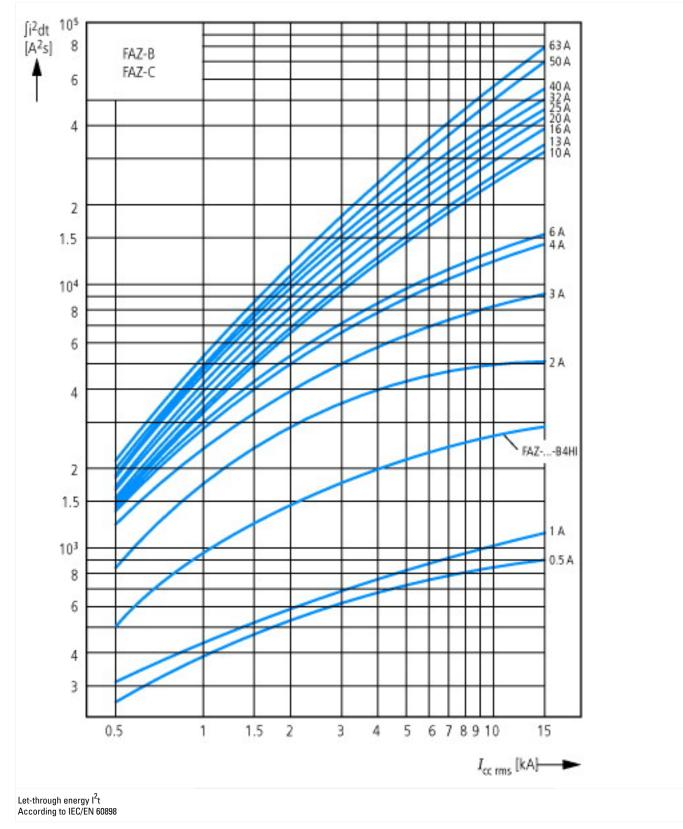
Product Standards

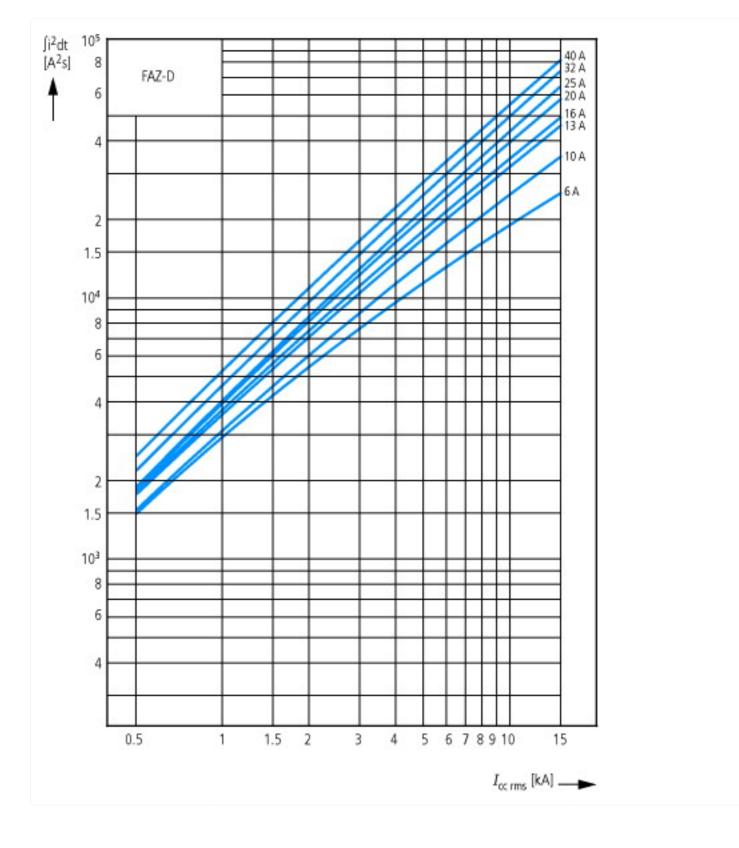
UL File No.

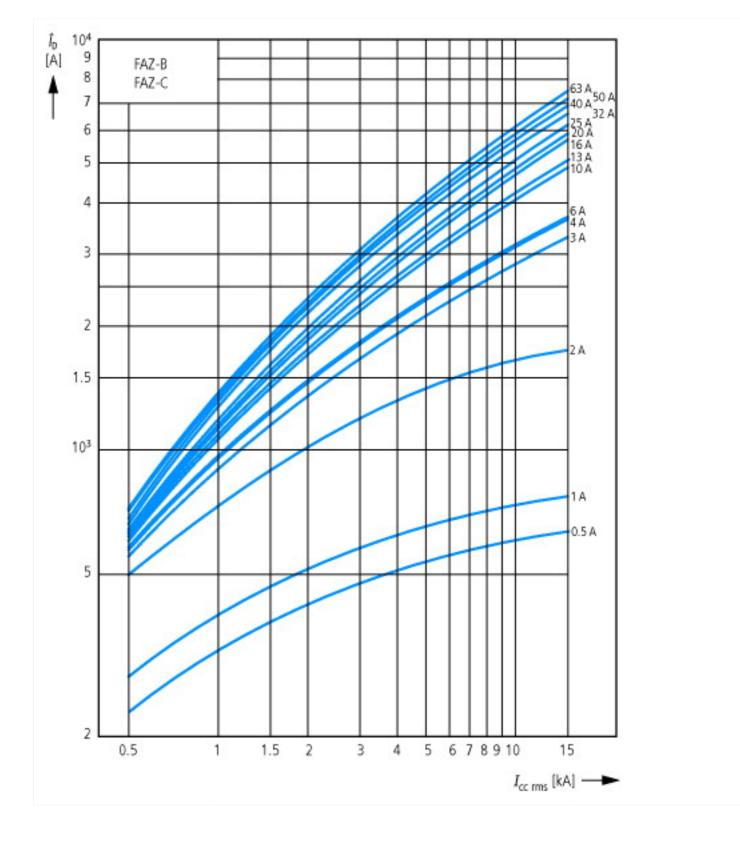
IEC/EN 60947-2; IEC/EN 60898; UL 1077; CSA-C22.2 No. 235; CE marking E177451

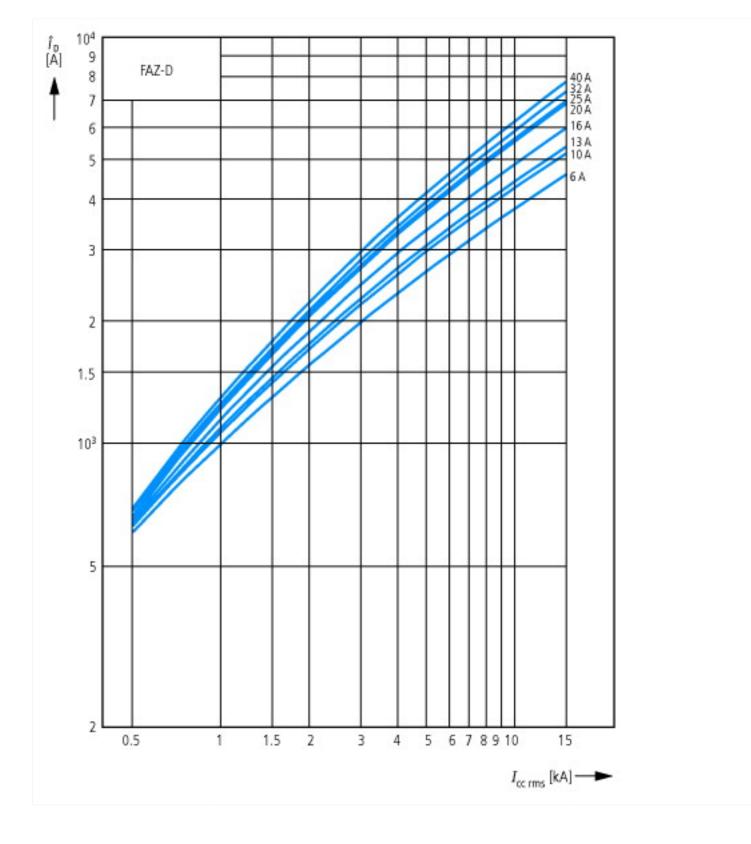
UL Category Control No.	QVNU2, QVNU8
CSA File No.	204453
CSA Class No.	3215-30
North America Certification	UL recognized, CSA certified
Conditions of Acceptability	Supplementary Protector only
Suitable for	Branch Circuits; not as BCPD
Current Limiting Circuit-Breaker	No
Max. Voltage Rating	480Y/277 VAC
Degree of Protection	IEC: IP20; UL/CSA Type: -

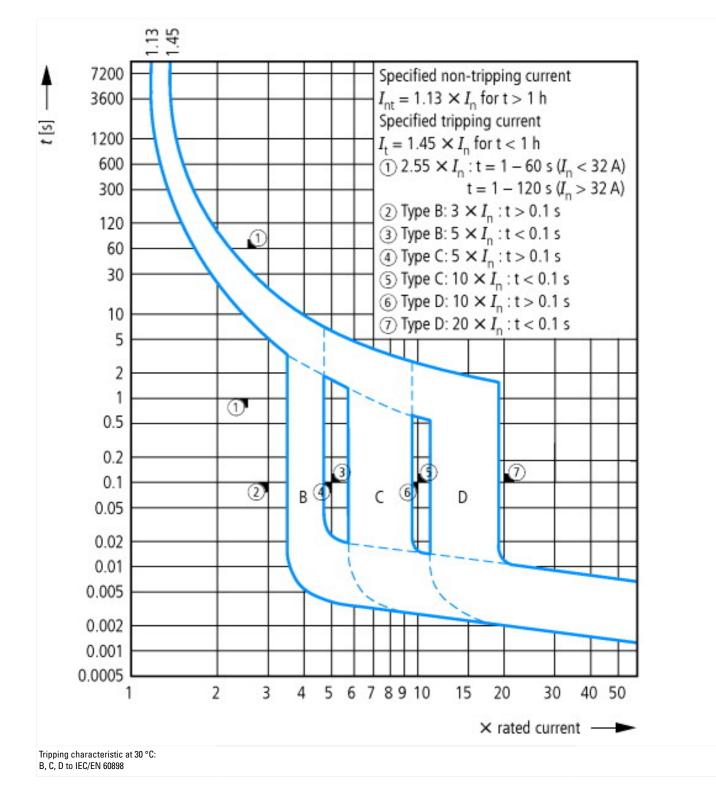
# **Characteristics**



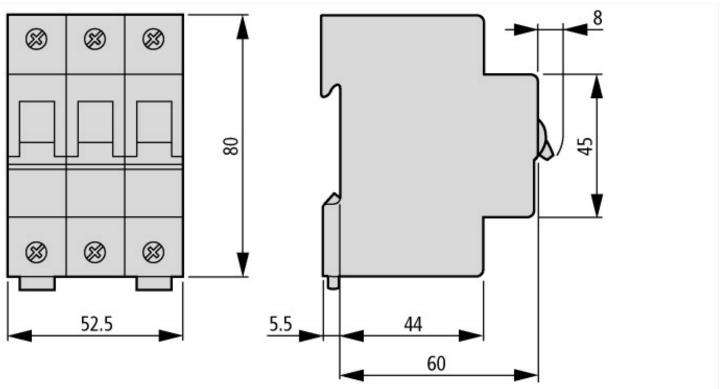








# Dimensions



# Additional product information (links)

### AWA1220-1755 Circiut-breaker

AWA1220-1755 Circiut-breaker

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