



FAZ-D20/1 278585 FAZ-D20/1



#### Similar to illustration

### **Delivery program**

Basic function			Miniature circuit-breakers
Number of poles			1 pole
Tripping characteristic			D
Application			Switchgear for industrial and advanced commercial applications
Rated current	l <sub>n</sub>	Α	20
Rated switching capacity acc. to IEC/EN 60947-2		kA	15
Product range			FAZ

#### Technical data Electrical

Refer     Refer <th< th=""><th>Electrical</th><th></th><th></th><th></th></th<>	Electrical			
Image: space s	Standards			
Index servicesIndex	Rated operational voltage	U <sub>e</sub>	V	
Rada switching capacity act. to IEC/EN 60947-2     Ka     Ka     Ka       Operational switching capacity     Ka     5.       Characteristic     Ka     5.0       Max. back-up fuse     Ka     5.0       Selectivity Class     Operational switching capacity     Selectivity Class     Selectivity Class       Lifespan     Operational switching supply     Operational switching capacity     Selectivity Class       Nechanical     Image: Selectivity Class     Selectivity Class     Selectivity Class       Enclosure height     Image: Selectivity Class     Selectivity Class     Selectivity Class       Mounting width er pole     Image: Selectivity Class     Selectivity Class     Selectivity Class       Degree of Protection     Image: Selectivity Class     Selectivity Class     Selectivity Class       Terminal scip and botrom     Image: Selectivity Class     Selectivity Class     Selectivity Class       Terminal capacities     Image: Selectivity Class     Selectivity Class     Selectivity Class       Terminal scip and botrom     Image: Selectivity Class     Selectivity Class     Selectivity Class       Terminal scip and botrom     Image: Selectivity C		Ue	V AC	240/415
Appendional switching capacityIAIAIACharacteristicIIIIMax back-up fuseA gl/glIIISelectivity ClassIIIIIDirection of incoming supplyII <td></td> <td></td> <td>V DC</td> <td>60 (per pole)</td>			V DC	60 (per pole)
Characteristic Partenti <td< td=""><td>Rated switching capacity acc. to IEC/EN 60947-2</td><td></td><td>kA</td><td>15</td></td<>	Rated switching capacity acc. to IEC/EN 60947-2		kA	15
As back-up fuse     Ag/pg     Is       Selectivity Class     Verter     3       Lifespan     Verter     >10000       Direction of incoming supply     Verter     > selocivity Class       Wechanical     Verter     > selocivity Class       Standard front dimension     March     March       Enclosure height     March     March       Mounting width per pole     March     March       Mounting     March     March       Derender of Protection     March     March       Terminal capacities     March     March	Operational switching capacity		kA	7.5
Selectivity Class     Appendix of the selection of incoming supply     Appendix of the selection of the sel	Characteristic			B, C, D
Lifespan Operations >1000   Direction of incoming supply > arequired   Wechanical  Mon   Standard front dimension  Mon   Enclosure height  Mon   Terminal protection  Mon   Mounting width per pole  Mon   Mounting     Degree of Protection     Terminal stop and bottom     Terminal capacities     Immandia capacities <td>Max. back-up fuse</td> <td></td> <td>A gL/gG</td> <td>125</td>	Max. back-up fuse		A gL/gG	125
Direction of incoming supply     is required       Wechanical     srequired       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     15.       Mounting     Mm     12.       Degree of Protection     Mm     12.       Terminal stop and bottom     Mm     12.       Terminal capacities     Mm     12. <td>Selectivity Class</td> <td></td> <td></td> <td>3</td>	Selectivity Class			3
Mechanical     mm     45       Standard front dimension     mm     8       Enclosure height     mm     80       Terminal protection     mm     1iger and back-of-hand proof to BGV A2       Mounting width per pole     mm     15.       Pogree of Protection     Ferminals top and bottom     Ferminals top and bottom     Ferminals apacities       Terminal capacities     mm <sup>2</sup> 12.     Twin-purpose terminals       International protection     mm <sup>2</sup> 12.     Standard (when fitted)       Terminal capacities     mm <sup>2</sup> 12.     Standard (when fitted)       International protection     mm <sup>2</sup> 12.     Standard (when fitted)       Terminal capacities     mm <sup>2</sup> 12.     Standard (when fitted)       International protection     mm <sup>2</sup> 12.     Standard (when fitted)	Lifespan	Operations		> 10000
Standard front dimensionmm#Enclosure heightmm80Terminal protectionFinger and back-of-hand proof to BGV A2Mounting width per polemm1.5MountingFinger and back-of-hand proof to BGV A2Degree of ProtectionFinder ArbitronTerminals top and bottomFinder ArbitronTerminal capacitiesmm²Interminal capacitiesmm²Letter of the back o	Direction of incoming supply			as required
Enclosure height   mm   Bod     Terminal protection   Figer and back-of-hand proof to BGV A2     Mounting width per pole   Figer and back-of-hand proof to BGV A2     Mounting   Figer and back-of-hand proof to BGV A2     Degree of Protection   Figer and back-of-hand proof to BGV A2     Terminal stop and bottom   Figer and back-of-hand proof to BGV A2     Terminal capacities   Figer and back-of-hand proof to BGV A2     Terminal capacities   Figer and back-of-hand proof to BGV A2     Terminal capacities   Figer and back-of-hand proof to BGV A2     Terminal capacities   Figer and back-of-hand proof to BGV A2     Terminal capacities   Figer and back-of-hand proof to BGV A2     Interminal capacities   Figer and F	Mechanical			
Terminal protectionImage: Biger and back-of-hand proof to BGV A2Mounting width per polemm7.5MountingIC/EN 60715 top-hat railDegree of ProtectionImage: Biger and back-of-hand proof to BGV A2Terminals top and bottomImage: Biger and Bige	Standard front dimension		mm	45
Mounting width per pole mm 7.5   Mounting IC/EN 60715 top-hat rail   Degree of Protection IC/EN 60715 top-hat rail   Terminals top and bottom Imm 120, IP40 (when fitted)   Terminal capacities mm <sup>2</sup> Imm 1x25   International capacities mm <sup>2</sup> 1x25   Terminal capacities mm <sup>2</sup> 1x25   International capacities mm <sup>2</sup> 1x25	Enclosure height		mm	80
Mounting   IC/EN 60715 top-hat rail     Degree of Protection   IP20, IP40 (when fitted)     Terminals top and bottom   Imm <sup>2</sup> Terminal capacities   Imm <sup>2</sup>	Terminal protection			Finger and back-of-hand proof to BGV A2
Degree of Protection Fead P20, IP40 (when fitted)   Terminals top and bottom Twin-purpose terminals 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: second sec	Mounting			IEC/EN 60715 top-hat rail
Terminal capacities mm <sup>2</sup> Imm <sup>2</sup>	Degree of Protection			IP20, IP40 (when fitted)
Imm2 1x25   Imm2 1x25   Imm2 2x10   Imm2 082	Terminals top and bottom			Twin-purpose terminals
Image: market in the image: market	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

Technical data for design verification			
Rated operational current for specified heat dissipation	In	А	20
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	2
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)

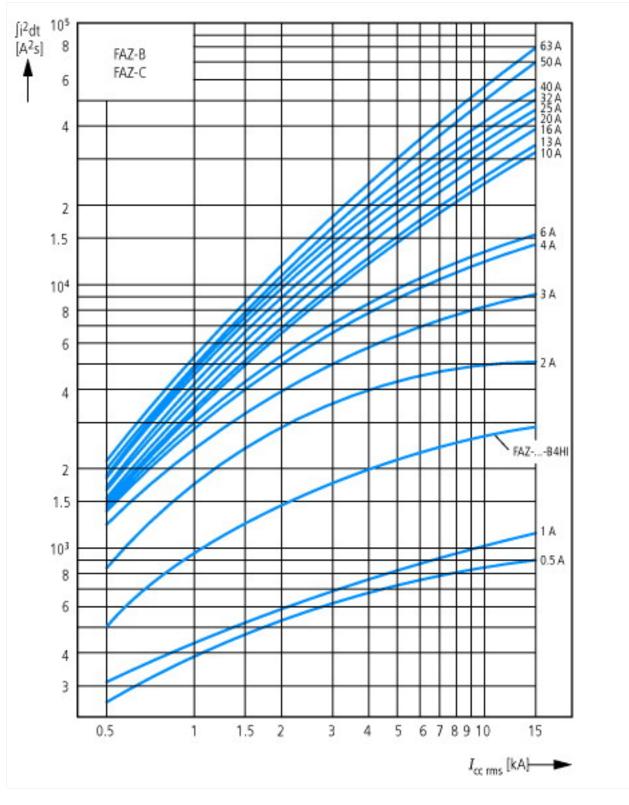
Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss8.1-27-14-19-01 [AAB905011])

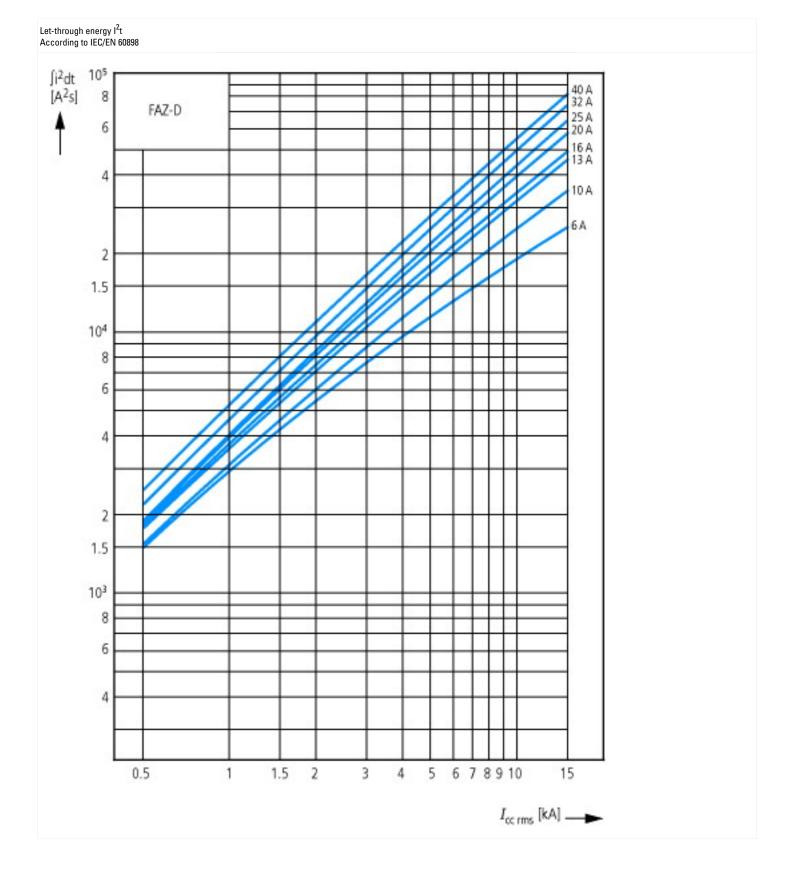
Release characteristic		D
Number of poles (total)		1
Number of protected poles		1
Nominal rated current	А	20
Nominal rated voltage	V	230
Rated short-circuit breaking capacity Icn EN 60898 at 230 V	kA	10
Rated short-circuit breaking capacity Icn EN 60898 at 400 V	kA	10
Rated short-circuit breaking capacity 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		1
Built-in depth	mm	70.5
Additional equipment possible		Yes
Degree of protection (IP)		IP20

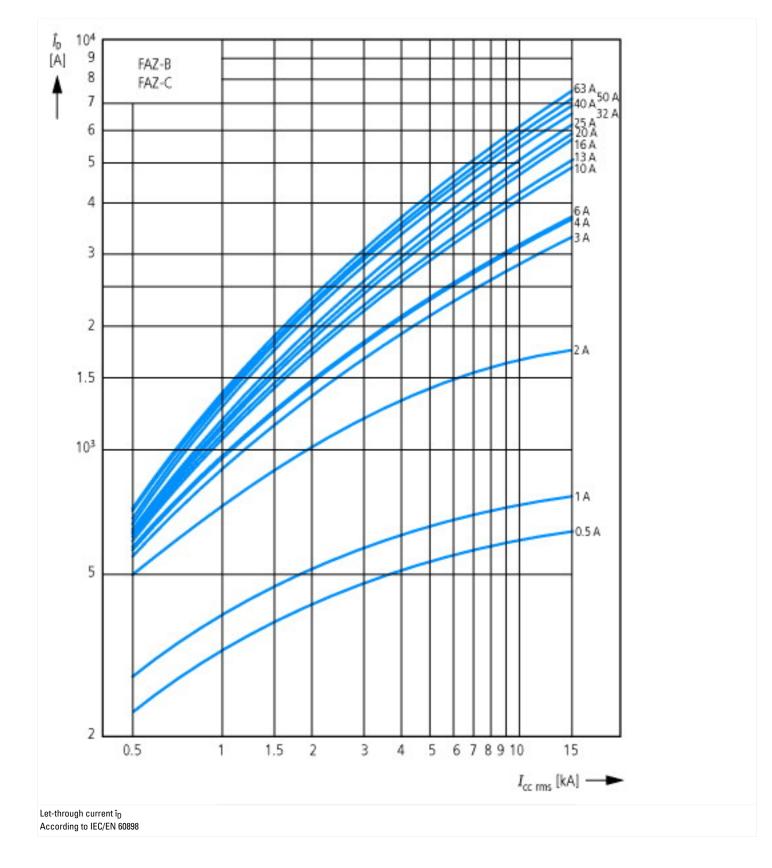
### **Approvals**

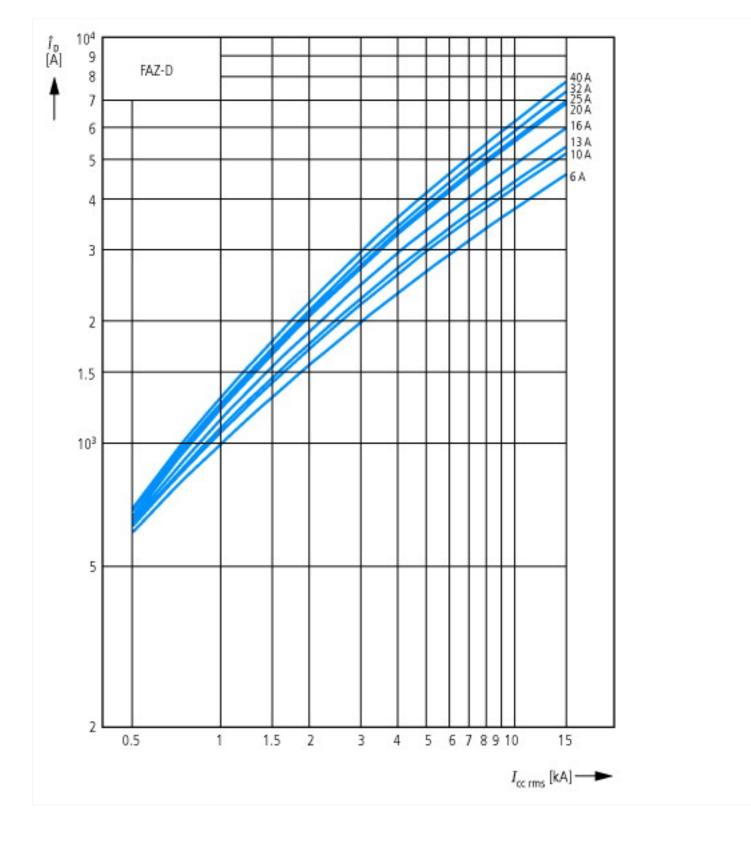
Product Standards	IEC/EN 60947-2; IEC/EN 60898; UL 1077; CSA-C22.2 No. 235; CE marking
UL File No.	E177451
UL Category Control No.	QVNU2, QVNU8
CSA File No.	204453
CSA Class No.	3215-30
North America Certification	UL recognized, CSA certified
Conditions of Acceptability	Supplementary Protector only
Suitable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

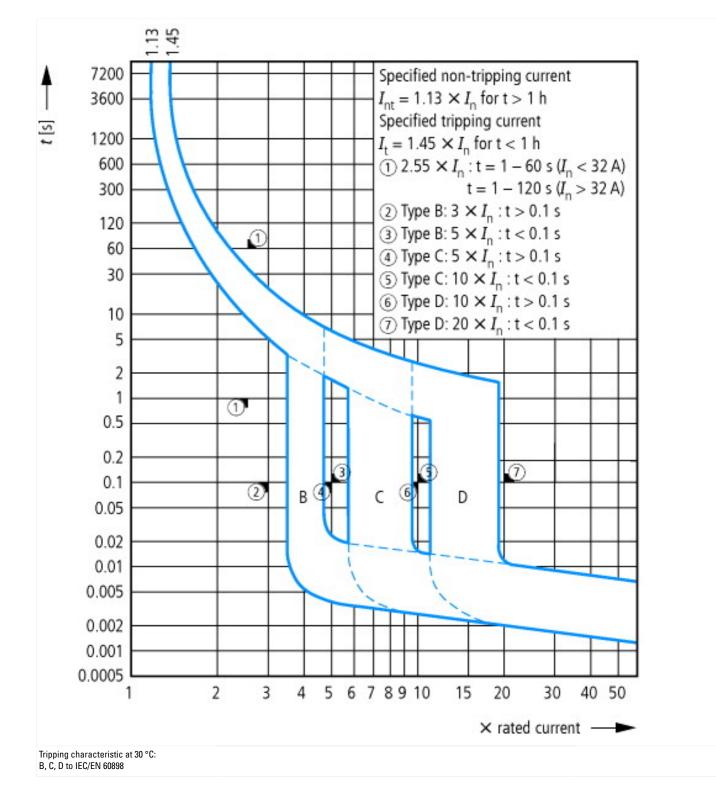
## **Characteristics**



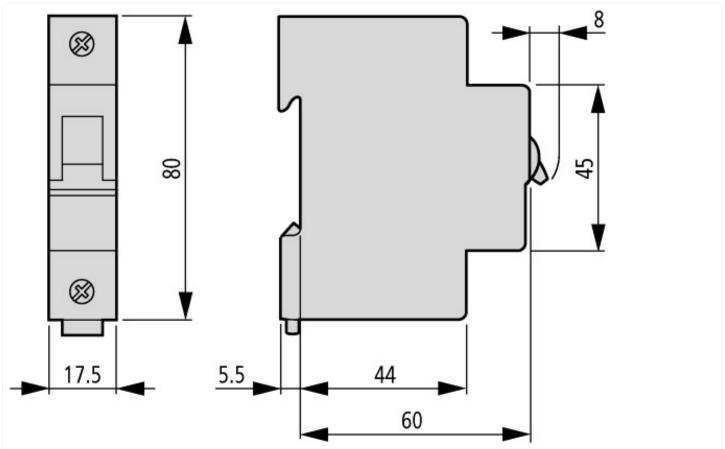








### Dimensions



# Additional product information (links)

### AWA1220-1755 Circiut-breaker

AWA1220-1755 Circiut-breaker

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