



FAZ-D40/2 278787 FAZ-D40/2



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	40
Rated switching capacity acc. to IEC/EN 60947-2		kA	15
Product range			FAZ

# Technical data

Animation       Animation       Excention         Note       Vertion       Second         Animation       Note       Second         Animation       Noin       Second	Electrical			
Image: space s	Standards			
Index servicesIndex	Rated operational voltage	U <sub>e</sub>	V	
Rada switching capacity act. to IEC/EN 60947-2       K       K       S         Operational switching capacity       K       K       S         Characteristic       K       K       S         Max. back-up fuse       K       K       S         Selectivity Class       Perations       Y       S         Elfespan       Operation       Y       S         Direction of incoming supply       Operations       Y       S         Nechanical       N       M       S         Rechanical       N       N       S         Rechanical S       N       N       S         Rechanical S       N <td></td> <td>U<sub>e</sub></td> <td>V AC</td> <td>230/400</td>		U <sub>e</sub>	V AC	230/400
Analysis       Ka       5         Operational switching capacity       5, 0         Characteristic       6, 0         Max. back-up fuse       Agl/g0       5         Salectivity Class       7       3         Direction of incoming supply       0       3         Direction of incoming supply       a required       3         Vectarical       7       3         Terminal protection       7       3         Munting width per pole       mm       5       3         Munting width per pole       mm       1000       3       3         Direction of incoming supply       7       3 <td< td=""><td></td><td></td><td>V DC</td><td>48 (per pole)</td></td<>			V DC	48 (per pole)
Characteristic     A g A g A g A g A g A g A g A g A g A g	Rated switching capacity acc. to IEC/EN 60947-2		kA	15
Agkabash       Agkabash       Agkabash       Is       Is         Selectivity Class       Versions       Joint       Joint       Joint         Lifespan       Versions       Joint       Joint       Joint       Joint         Direction of incoming supply       Versions       Versions       Joint       Joint       Joint         Mechanical       Versions       Mark       Mark       Selectivity Class       Joint       Joint         Standard front dimension       Mark       Mark       Mark       Selectivity Class       Mark       Selectivity Class       Mark       Selectivity Class       Mark       Selectivity Class       Selecitity Class       Selecitity Class       Sel	Operational switching capacity		kA	7.5
Selectivity Class   Perations   Image: Selectivity Class   Selectivity Cla	Characteristic			B, C, D
Lifespan   Operations   >10000     Direction of incoming supply   as required     Wechanical   required     Standard front dimension   nm   4     Enclosure height   nm   8     Terminal protection   nm   15     Mounting width per pole   ref   ref     Mounting   Imm   15     Degree of Protection   Imm   120, IP40 (when fitted)     Terminal capacities   nm²   120, IP40 (when fitted) <	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       E/CN 60715 top-hat rail       mm         Digree of Protection       Mm       120, P40 (when fitted)         Terminal stop and bottom       mm <sup>2</sup> 120, P40 (when fitted)         Terminal capacities       mm <sup>2</sup> 125         Item material       mm <sup>2</sup> 125         Items of busbar material       mm <sup>2</sup> 120, Parameterial	Selectivity Class			3
Mechanical       mm       45         Standard front dimension       mm       45         Enclosure height       mm       80         Terminal protection       mm       1inger and back-of-hand proof to BGV A2         Mounting width per pole       mm       15.5         Mounting       EC/EN 60715 top-hat rail       120.1144         Degree of Protection       Fm       120.11440(when fitted)         Terminals top and bottom       Fm       120.1140(when fitted)         Terminal capacities       mm <sup>2</sup> 1xac         Terminal capacities       mm <sup>2</sup> 1x25         Internet       mm <sup>2</sup> 1x10         Terminals top and bottom       Fm       1x25         Terminal capacities       mm <sup>2</sup> 1x10         Terminal capacities       mm <sup>2</sup> 1x10	Lifespan	Operations		> 10000
Standard front dimension     mm     \$       Enclosure height     mm     80       Terminal protection     Finger and back-of-hand proof to BGV A2       Mounting width per pole     mm     1.5       Degree of Protection     FICH 60715 top-hat rail       Terminals top and bottom     mm²     Fich 60715 top-hat rail       Terminal capacities     mm²     Twin-purpose terminals       Mounting     mm²     1×25       Mounting     mm²     2×10	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     Finger and back-of-hand proof to BGV A2     Finger and back-of-hand proof to BGV A2       Degree of Protection     Mm     1.5       Terminal stop and bottom     Finger     Finger and proof to BGV A2       Terminal capacities     Mm     1.5       Terminal capacities     Mm     1.5       Intermediation     Mm     1.5       Terminal capacities     Mm     1.5       Intermediation     Mm     1.5       Intermediation     Mm     1.5       Terminal capacities     Mm     1.5       Intermediation     1.5     <	Mechanical			
Terminal protectionImage: Biger and back-of-hand proof to BGV A2Mounting width per polemm1.5MountingImage: Biger and back-of-hand proof to BGV A2Image: Biger and back-of-hand proof to BGV A2Degree of ProtectionImage: Biger and back-of-hand proof to BGV A2Image: Biger and back-of-hand proof to BGV A2Terminals top and bottomImage: Biger and back-of-hand proof to BGV A2Image: Biger and back-of-hand proof to BGV A2Terminal capacitiesImage: Biger and back-of-hand proof to BGV A2Image: Biger and back-of-hand proof to BGV A2Terminal capacitiesImage: Biger and back-of-hand proof to BGV A2Image: Biger and B	Standard front dimension		mm	45
Mounting width per polemm1.5MountingICICICDegree of ProtectionICICICTerminals top and bottomICICImnopuls terminalsTerminal capacitiesImnopulsImnopu	Enclosure height		mm	80
Mounting     Image:	Terminal protection			Finger and back-of-hand proof to BGV A2
Degree of Protection   Image: Protection   Protection   Protection     Terminals top and bottom   Image: Protection   Twin-purpose terminals     Terminal capacities   mm <sup>2</sup> Image: Protection     Image: Protection   mm <sup>2</sup> Image: Protection	Mounting width per pole		mm	17.5
Terminals top and bottom   Image: Base of the sector of th	Mounting			IEC/EN 60715 top-hat rail
Terminal capacities   mm <sup>2</sup> mm <sup>2</sup> mm <sup>2</sup> mm <sup>2</sup> 1×25     Information   mm <sup>2</sup> mm <sup>2</sup> 2×10     Thickness of busbar material   mm	Degree of Protection			IP20, IP40 (when fitted)
Image:	Terminals top and bottom			Twin-purpose terminals
Thickness of busbar material   mm   2 x 10     08   08   0.2	Terminal capacities		mm <sup>2</sup>	
Thickness of busbar material mm 0.82			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	40
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	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
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 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 6.0**

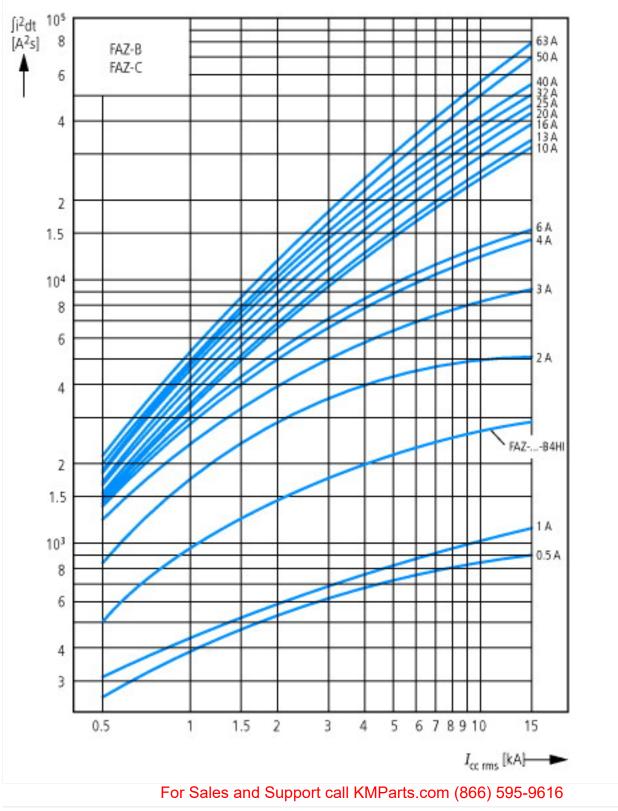
Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042)

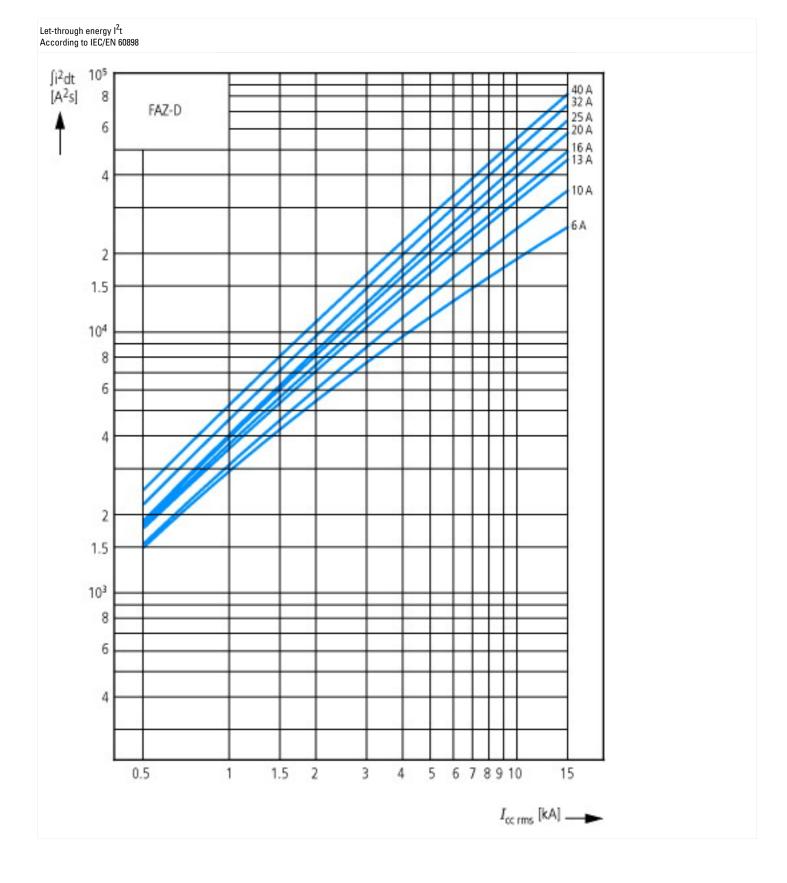
Electric engineering, automation, process control engineering / Electrical installati [AAB905011])	on, device / Miniature c	circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss8.1-27-14-19-01
Release characteristic		D
Number of poles (total)		2
Number of protected poles		2
Nominal rated current	А	40
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		2
Built-in depth	mm	70.5
Additional equipment possible		Yes
Degree of protection (IP)		IP20

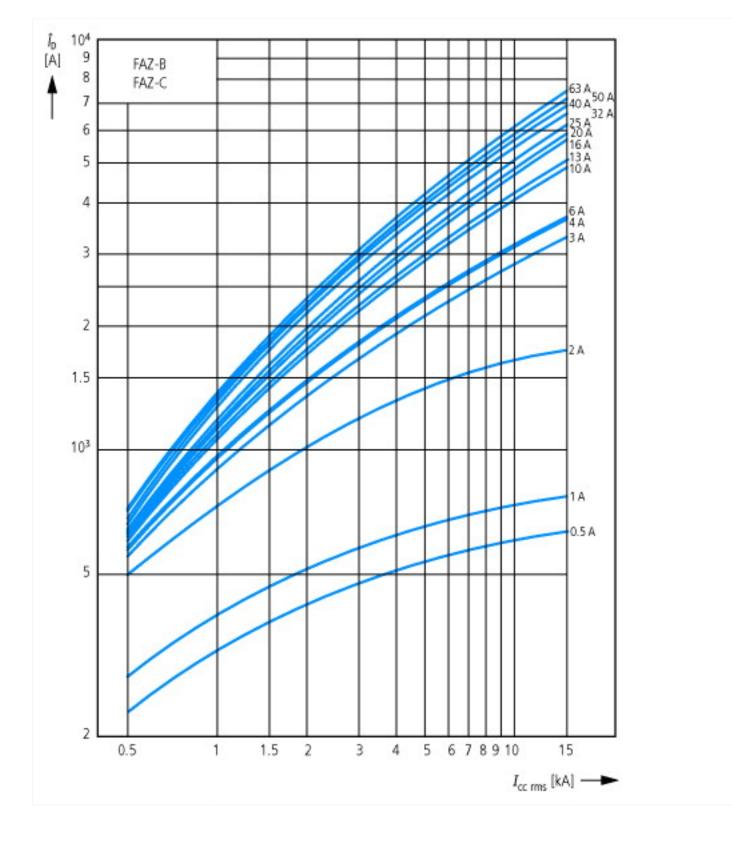
#### **Approvals**

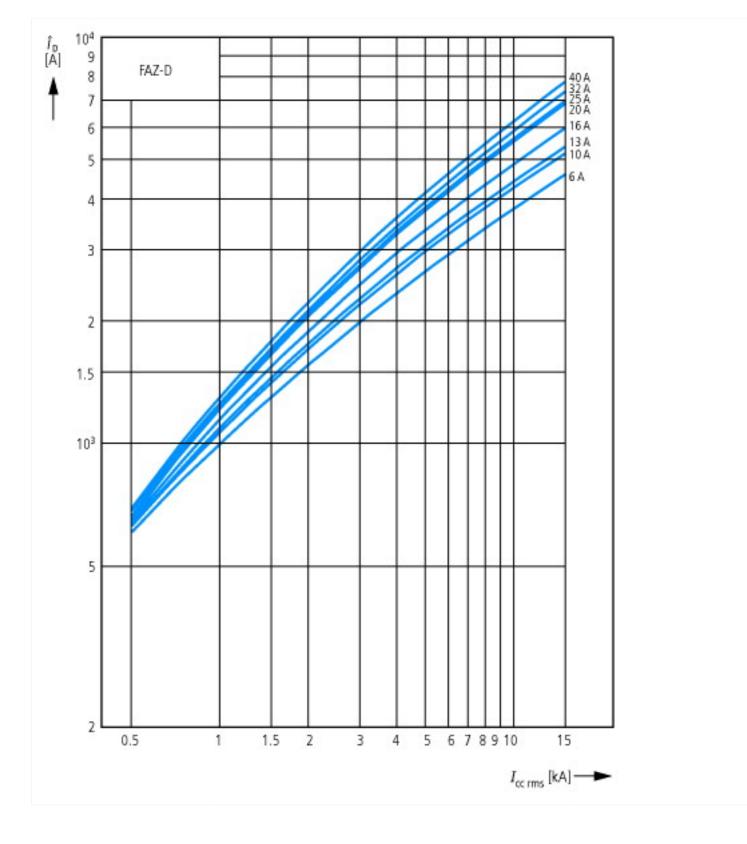
Product Standards	IEC/EN 60947-2; IEC/EN 60898; UL 1077; CSA-C22.2 No. 235; CE marking
UL File No.	E177451
UL Category Control No.	QVNU2, QVNU8
CSA File No.	204453
CSA Class No.	3215-30
North America Certification	UL recognized, CSA certified
Conditions of Acceptability	Supplementary Protector only
Suitable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

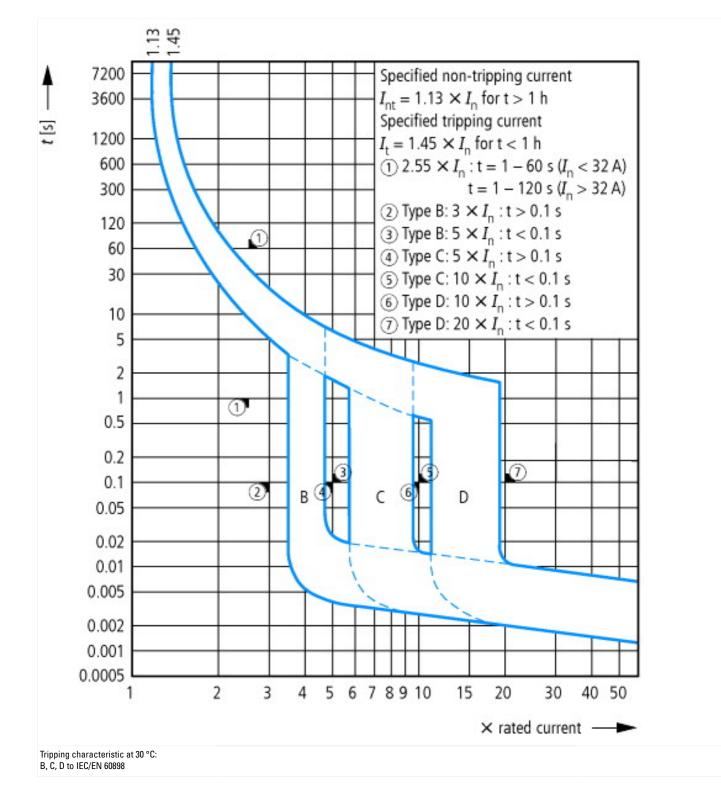
## **Characteristics**



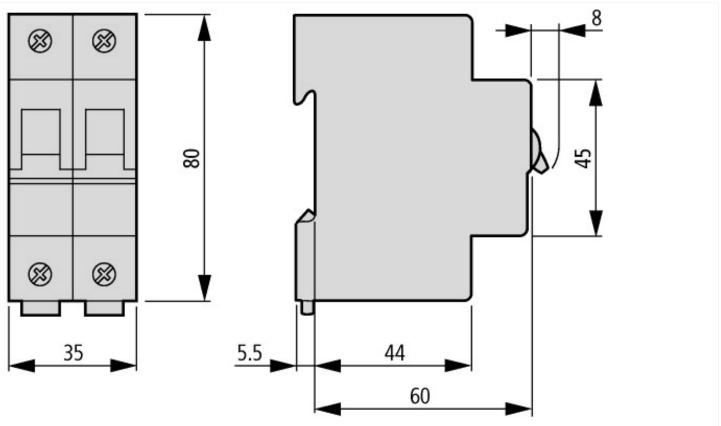








#### Dimensions



# Additional product information (links)

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

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