# Ext-N

#### Miniature circuit breaker (MCB), 3A, 2p, S-Char, AC

Powering Business Worldwide

Part no. FAZ-S3/2 Catalog No. 278807 Eaton Catalog No. FAZ-S3/2 EL-Nummer 1695376

Similar to illustration

#### **Delivery program**

71.3			
Basic function			Miniature circuit-breakers
Number of poles			2 pole
Tripping characteristic			S
Application			Switchgear for industrial and advanced commercial applications
Rated current	In	Α	3
Rated switching capacity acc. to IEC/EN 60947-2		kA	10
Product range			FAZ

## **Technical data**

#### **Electrical**

2.004.104.1			
Standards			IEC/EN 60947-2 IEC/EN 60898
Rated operational voltage	U <sub>e</sub>	V	
	U <sub>e</sub>	V AC	240/415
		V DC	60 (per pole)
Rated switching capacity acc. to IEC/EN 60947-2		kA	10
Operational switching capacity		kA	7.5
Characteristic			B, C, D
Max. back-up fuse		A gL/gG	125
Selectivity Class			3
Lifespan	Operations		> 10000
Direction of incoming supply			as required
Mechanical			

Standard front dimension	mm	45
Enclosure height	mm	80
Terminal protection		Finger and back-of-hand proof to BGV A2
Mounting width per pole	mm	17.5
Mounting		IEC/EN 60715 top-hat rail
Degree of Protection		IP20, IP40 (when fitted)
Terminals top and bottom		Twin-purpose terminals
Terminal capacities	mm <sup>2</sup>	
	mm <sup>2</sup>	1 x 25
	mm <sup>2</sup>	2 x 10
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	Α	3
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	2.8
Static heat dissipation, non-current-dependent	$P_{vs}$	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
E/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 installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss8.1-27-14-19-01 [AAB905011])

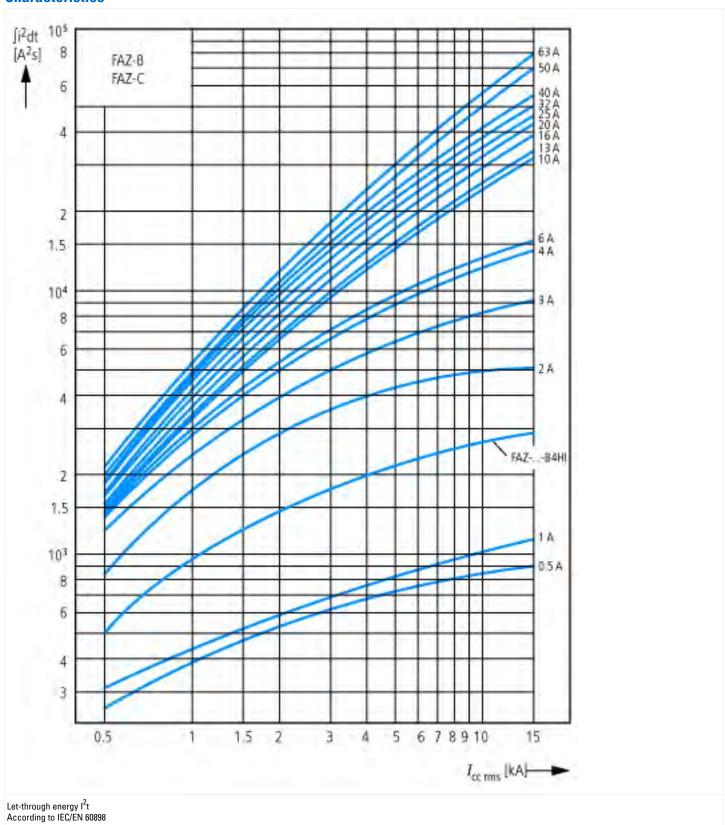
Release characteristic		-
Number of poles (total)		2
Number of protected poles		2
Nominal rated current	Α	3
Nominal rated voltage	V	230
Rated short-circuit breaking capacity Icn EN 60898 at 230 V	kA	0
Rated short-circuit breaking capacity Icn EN 60898 at 400 V	kA	0
Rated short-circuit breaking capacity 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
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

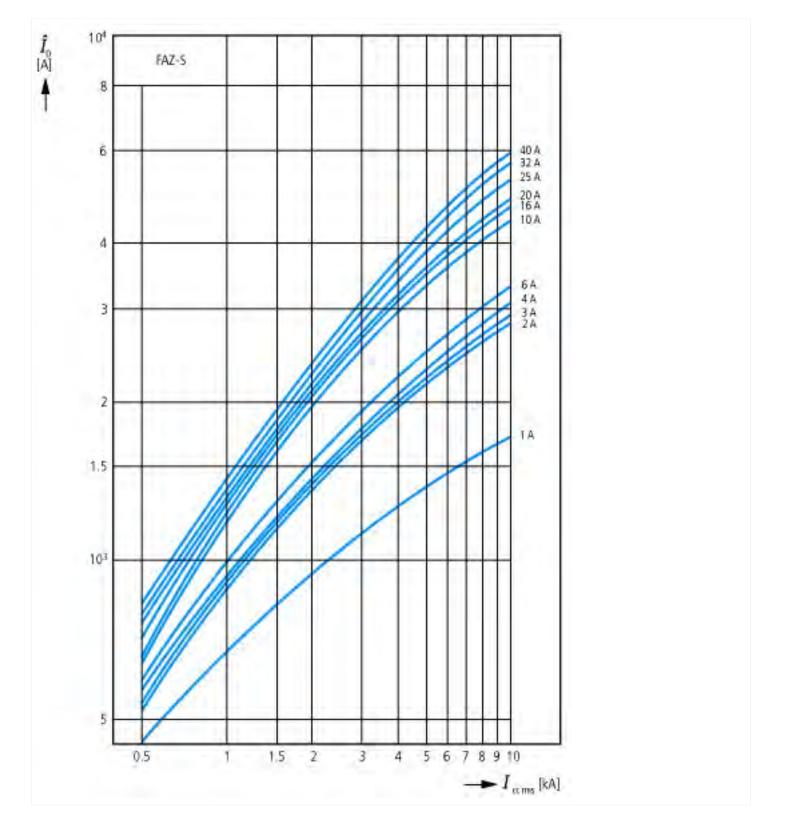
# **Approvals**

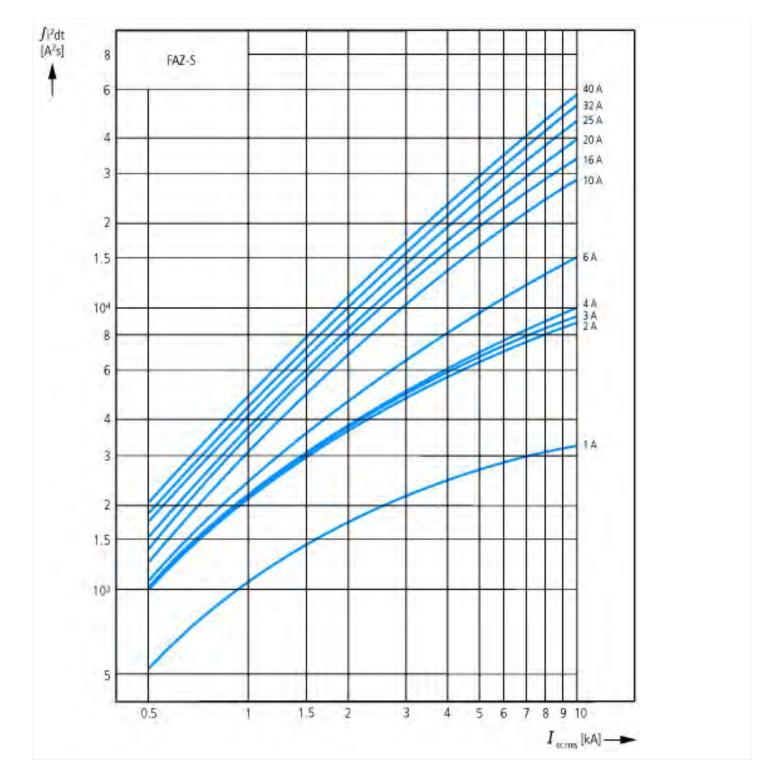
Product Standards	IEC/EN 60947-2: IEC/EN 60898: UL 1077: CSA-C22.2 No. 235: CE marking

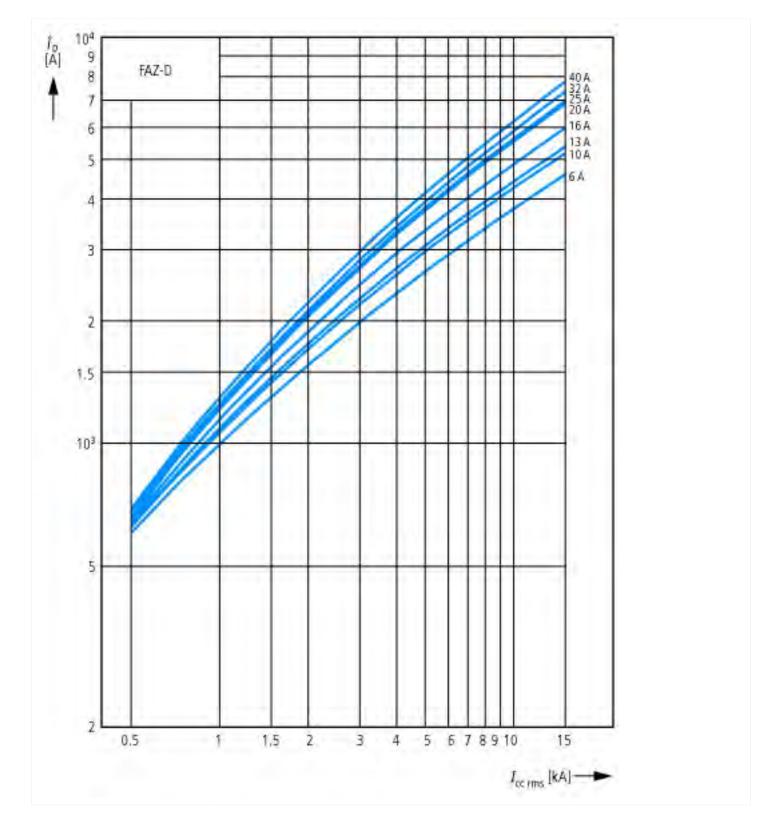
UL File No.	E177451
UL Category Control No.	QVNU2, QVNU8
CSA File No.	204453
CSA Class No.	3215-30
North America Certification	UL recognized, CSA certified
Conditions of Acceptability	Supplementary Protector only
Suitable for	Branch Circuits; not as BCPD
Current Limiting Circuit-Breaker	No
Max. Voltage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

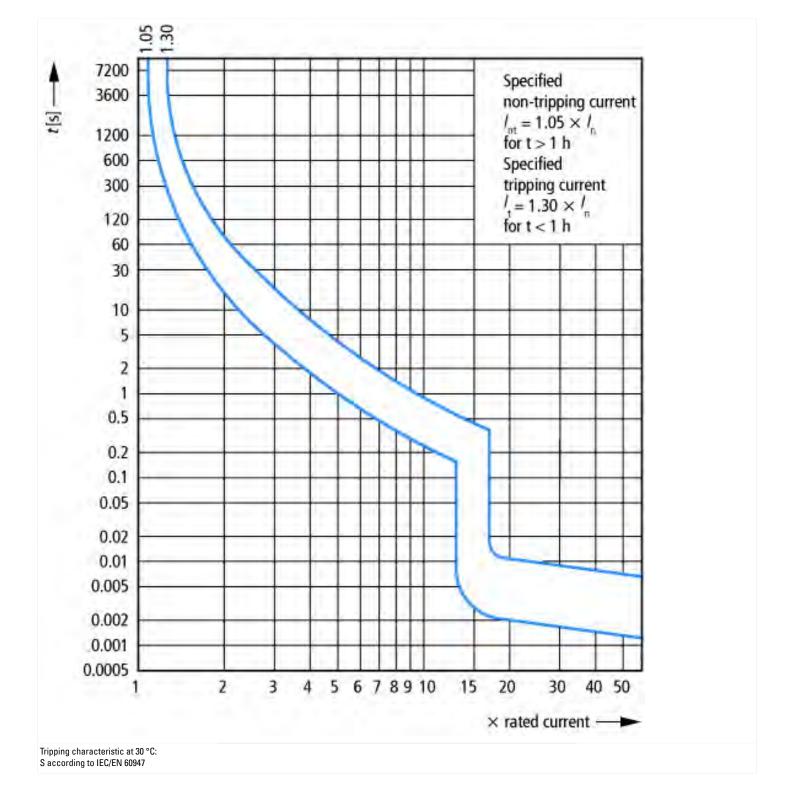
#### **Characteristics**



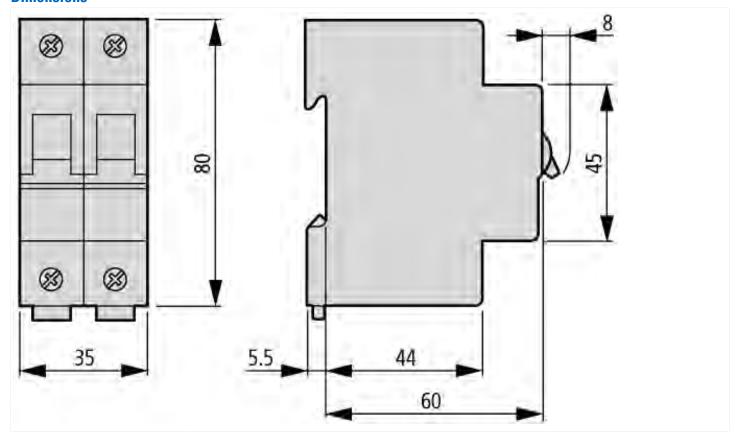








### **Dimensions**



## **Additional product information (links)**

AWA1220-1755 Circiut-breaker

AWA1220-1755 Circiut-breaker

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