## DATASHEET - FAZ-C50/3

Miniature circuit breaker (MCB), 50 A, 3p, characteristic: C



Part no.	FAZ-C50/3
Catalog No.	278878
Alternate Catalog	FAZ-C50/3
No.	
EL-Nummer	1695187
(Norway)	

Similar to illustration

#### **Delivery program**

Basic function			Miniature circuit-breakers
Number of poles			3 pole
Tripping characteristic			C
Application			Switchgear for industrial and advanced commercial applications
Rated current	In	А	50
Rated switching capacity acc. to IEC/EN 60947-2	l <sub>cu</sub>	kA	15
Product range			FAZ

### **Technical data**

Iectrical			
			IEC/EN 60947-2 IEC/EN 60898
ated operational voltage	Ue	V	
	U <sub>e</sub>	V AC	240/415
		V DC	60 (per pole)
lated voltage according to UL	Un	V AC	480Y/277
lated switching capacity acc. to IEC/EN 60947-2	l <sub>cu</sub>	kA	15
Breaking capacity according to UL		kA	5 (UL1077)
perational switching capacity		kA	7.5
haracteristic			B, C, D, K, S, Z
Лах. back-up fuse		A gL/gG	125
electivity Class			3
fespan			
Lifespan	Operations		> 10000
Direction of incoming supply			as required
lechanical			
tandard front dimension		mm	45
inclosure height		mm	80
Aounting width per pole		mm	17.5
Aounting			IEC/EN 60715 top-hat rail
Degree of Protection			IP20, IP40 (when fitted)
erminals top and bottom			Twin-purpose terminals
erminal protection			Finger and back-of-hand proof to BGV A2
erminal capacities		mm <sup>2</sup>	
		mm <sup>2</sup>	1 x 25
		mm <sup>2</sup>	2 x 10
hickness of busbar material		mm	0.8 2
Aounting position			As required

# Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	А	50

Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	14.9
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
IEC/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 8.0**

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@ss10.0.1-27-14-19-01 [AAB905014])

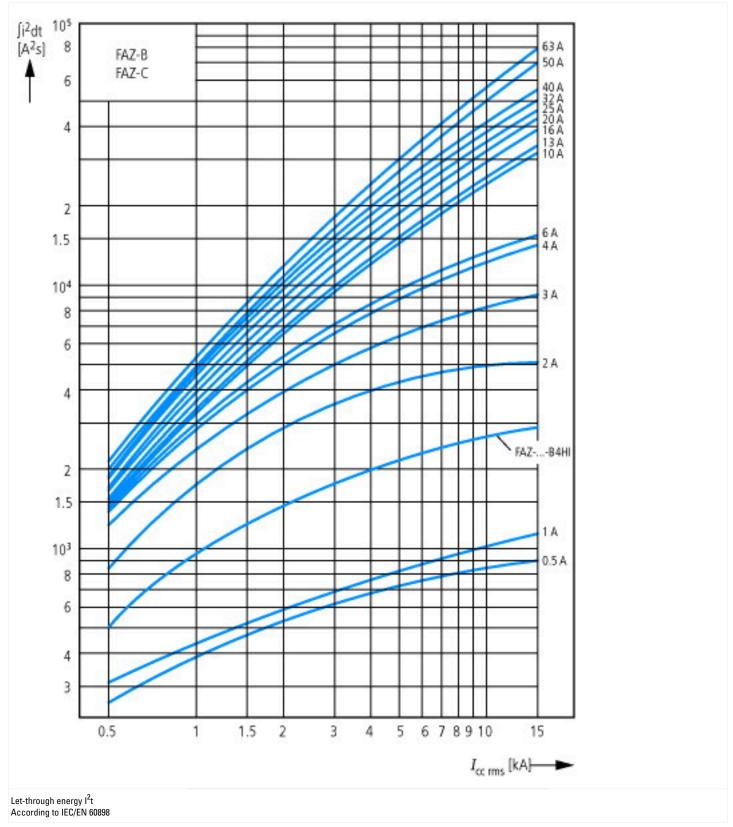
mm	70.5
	С
	3
	3
А	50
V	400
V	440
kV	4
kA	10
	AC
kA	10
kA	15
kA	15
Hz	50 - 60
	3
	No
	A V V kV kA kA kA kA

Concurrently switching neutral conductor		No
Over voltage category		3
Pollution degree		2
Additional equipment possible		Yes
Width in number of modular spacings		3
Degree of protection (IP)		IP20
Ambient temperature during operating	°C	-25 - 75
Connectable conductor cross section multi-wired	mm²	1 - 25
Connectable conductor cross section solid-core	mm²	1 - 25
Explosion-proof		No

## **Approvals**

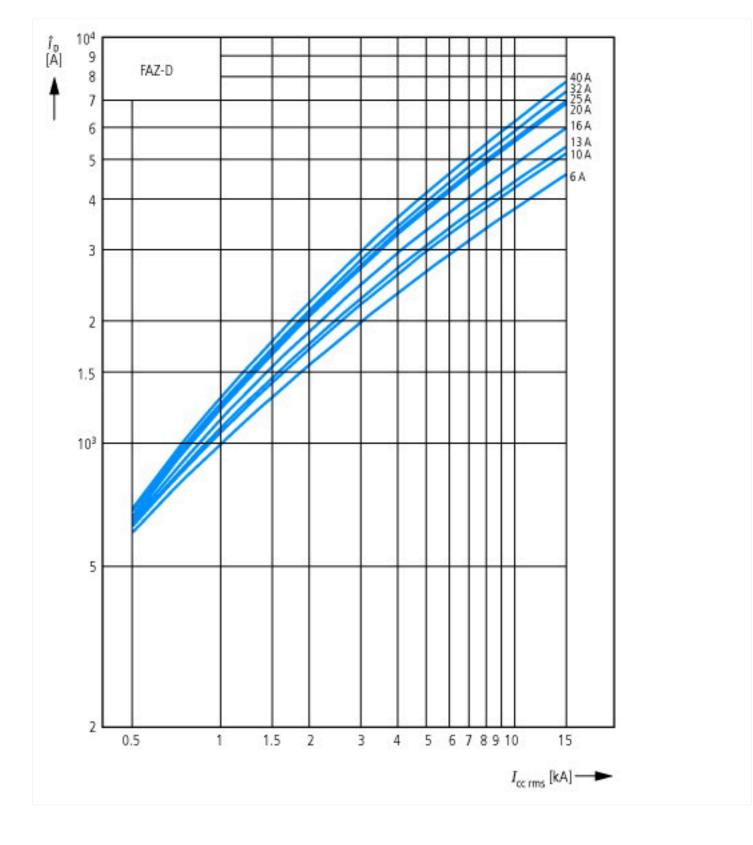
CE markingL File No.E177451L Category Control No.VNU2, QVNU8SA File No.QVNU2, QVNU8SA File No.204453SA Class No.3215-30orth America CertificationVL recognized, CSA certifiedonditions of AcceptabilitySA Classuitable forSa Classuitable forSa Classuitable forNouitable forMouitable forNouitable forMouitable forMouitable forNouitable forMouitable forMouitable forNouitable forMouitable forMouitable forMouitable forMouitable forMouitable forMouita		
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SA Class No.   3215-30     orth America Certification   UL recognized, CSA certified     onditions of Acceptability   Supplementary Protector only     uitable for   Branch Circuits; not as BCPD     urrent Limiting Circuit-Breaker   No     lax. Voltage Rating   480Y/277 VAC	UL Category Control No.	QVNU2, QVNU8
orth America CertificationUL recognized, CSA certifiedonditions of AcceptabilitySupplementary Protector onlyuitable forBranch Circuits; not as BCPDurrent Limiting Circuit-BreakerNolax. Voltage RatingSease	CSA File No.	204453
onditions of Acceptability Supplementary Protector only   uitable for Branch Circuits; not as BCPD   urrent Limiting Circuit-Breaker No   lax. Voltage Rating 480Y/277 VAC	CSA Class No.	3215-30
uitable for March Circuits; not as BCPD Branch Circuits; not as BCPD No	North America Certification	UL recognized, CSA certified
urrent Limiting Circuit-Breaker No No A80Y/277 VAC	Conditions of Acceptability	Supplementary Protector only
lax. Voltage Rating 480Y/277 VAC	Suitable for	Branch Circuits; not as BCPD
	Current Limiting Circuit-Breaker	No
egree of Protection IEC: IP20; UL/CSA Type: -	Max. Voltage Rating	480Y/277 VAC
	Degree of Protection	IEC: IP20; UL/CSA Type: -

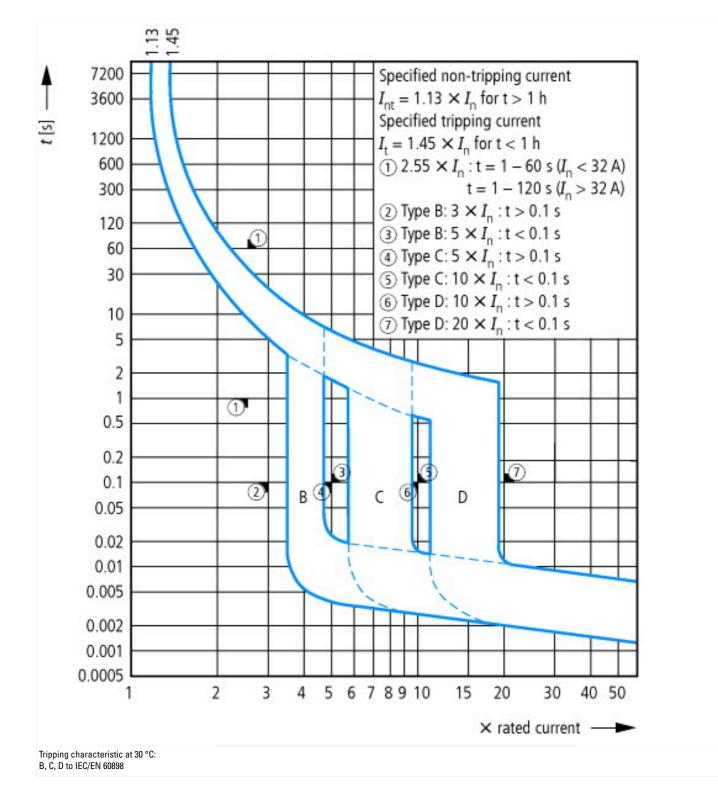
### **Characteristics**



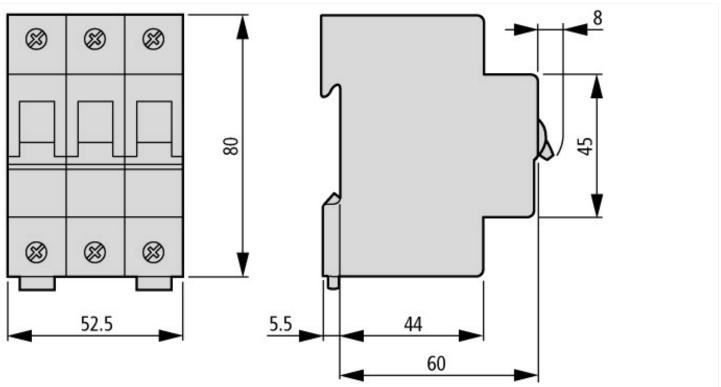








## Dimensions



## Additional product information (links)

AWA1220-1755 Circiut-breaker	
AWA1220-1755 Circiut-breaker	https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/17550701.pdf
Temperature dependency, derating	https://www.eaton.com/content/dam/eaton/technicaldocumentation/technical-data-tables/Derating table FAZ.pdf