### **DATASHEET - FAZ-B3/2**

Miniature circuit breaker (MCB), 3A, 2p, type B characteristic





Part no. FAZ-B3/2 Catalog No. 278724 Alternate Catalog FAZ-B3/2 No. EL-Nummer 0001691017 (Norway)

Similar to illustration

#### **Delivery program**

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

# **Technical data**

Electrical     Standards   Image:				
Rated operational voltage Ne Ve   Rated operational voltage Ue V AC   Vac Vac 24/415   Rated voltage according to UL Un V AC   Rated switching capacity acc. to IEC/EN 60947-2 Icupter Alore	Electrical			
Note Note   Ve VAC   20/415   Rated voltage according to UL Vn   Ve VAC   480Y/277   Rated switching capacity acc. to IEC/EN 60947-2 Icu   KA 15   Breaking capacity according to UL KA	Standards			
Rated voltage according to UL Un VAC 480Y/277   Rated switching capacity acc. to IEC/EN 60947-2 Icu KA 15   Breaking capacity according to UL KA Icu KA 10 (UL1077)	Rated operational voltage	U <sub>e</sub>	V	
Rated switching capacity acc. to IEC/EN 60947-2 Icu KA 15   Breaking capacity according to UL KA 10 (UL1077)		U <sub>e</sub>	V AC	240/415
Breaking capacity according to UL kA 10 (UL1077)	Rated voltage according to UL	Un	V AC	480Y/277
	Rated switching capacity acc. to IEC/EN 60947-2	l <sub>cu</sub>	kA	15
Max operational voltage according to IEC/EN 60947-2 VAC 440	Breaking capacity according to UL		kA	10 (UL1077)
	Max operational voltage according to IEC/EN 60947-2		V AC	440
Rated switching capacity according to IEC/EN 60947-2 (max operational voltage) I <sub>cu</sub> kA 10	Rated switching capacity according to IEC/EN 60947-2 (max operational voltage)	I <sub>cu</sub>	kA	10
Rated service short-circuit breaking capacity according to IEC/EN 60947-2 (max lcs 7,5 kA operational voltage)		I <sub>cs</sub>		7,5 kA
Rated voltage according to IEC/EN 60898-1 Un VAC 415	Rated voltage according to IEC/EN 60898-1	Un	V AC	415
Rated switching capacity according to IEC/EN 60898-1 I <sub>cn</sub> kA 10	Rated switching capacity according to IEC/EN 60898-1	I <sub>cn</sub>	kA	10
Rated service short-circuit breaking capacity according to IEC/EN 60898-1 I <sub>cs</sub> 7,5 kA	Rated service short-circuit breaking capacity according to IEC/EN 60898-1	I <sub>cs</sub>		7,5 kA

## Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	А	3
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	5
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 7.0**

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

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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])			
Release characteristic			В
Number of poles (total)			2
Number of protected poles			2
Rated current		А	3
Rated voltage		V	400
Rated insulation voltage Ui		V	440
Rated impulse withstand voltage Uimp		kV	4
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
Frequency		Hz	50 - 60
Current limiting class			3
Suitable for flush-mounted installation			No
Concurrently switching N-neutral			No
Over voltage category			3
Pollution degree			2
Additional equipment possible			Yes
Width in number of modular spacings			2
Built-in depth		mm	70.5
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

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: -

# Additional product information (links)

Temperature dependency, derating

https://www.eaton.com/content/dam/eaton/technicaldocumentation/technical-data-tables/Derating table FAZ.pdf