#### **DATASHEET - FAZT-B3/3N**



#### Miniature circuit breaker (MCB), 3A, 3Np, B-Char, AC

Powering Business Worldwide\*

Part no. FAZT-B3/3N Catalog No. 241070 Alternate Catalog FAZT-B3/3N

No.

**EL-Nummer** 1605679

(Norway)

Similar to illustration

**Delivery program** 

Delivery program			
Basic function			Miniature circuit-breakers
Number of poles			3 pole+N
Tripping characteristic			В
Application			Switchgear for industrial and advanced commercial applications
Rated current	In	Α	3
Rated switching capacity acc. to IEC/EN 60947-2	I <sub>cu</sub>	kA	25
Product range			FAZ-T

## **Technical data**

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Standards			IEC/EN 60947-2
Rated voltage according to IEC/EN 60947-2	$U_{n}$	V AC	415
Rated switching capacity acc. to IEC/EN 60947-2	I <sub>cu</sub>	kA	25
Rated service short-circuit breaking capacity according to IEC/EN 60947-2	I <sub>cs</sub>		12,5 kA
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	15
Rated service short-circuit breaking capacity according to IEC/EN 60947-2 (max operational voltage)	I <sub>cs</sub>		7,5 kA
Max operational voltage DC according to IEC/EN 60947-2		V DC	60/pole
Rated voltage according to IEC/EN 60898-1	$U_{n}$	V AC	415
Rated switching capacity according to IEC/EN 60898-1	I <sub>cn</sub>	kA	15
Rated service short-circuit breaking capacity according to IEC/EN 60898-1	I <sub>cs</sub>		7,5 kA
Rated insulation voltage	Ui	V	440
Rated frequency	f	Hz	50/60
Characteristic			B, C, D
Direction of incoming supply			as required
lifespan			
Electrical	Operations		≧ 4000
Mechanical	Operations		≧ 10000

#### Mechanical

Wechanical		
Standard front dimension	mm	45
Enclosure height	mm	80
Mounting width per pole	mm	17.5
Mounting		Quick attachment with 3 latch positions for top-hat rail IEC/EN 60715
Degree of Protection		IP20
Terminals top and bottom		Twin-purpose terminals
Terminal protection		Finger- and back-of-hand proof according to BGV A3 and ÖVE-EN 6
Terminal capacities	$mm^2$	1 - 25
Tightening torque of fixing screws	N/m	max. 2.4
Thickness of busbar material	mm	0.8 (exept N 0.5 SU)
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	7.8
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 switch gear must be observed. $\label{eq:constraint}$
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switch gear must be observed. $\label{eq:constraint}$
10.13 Mechanical function			The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

#### **Technical data ETIM 7.0**

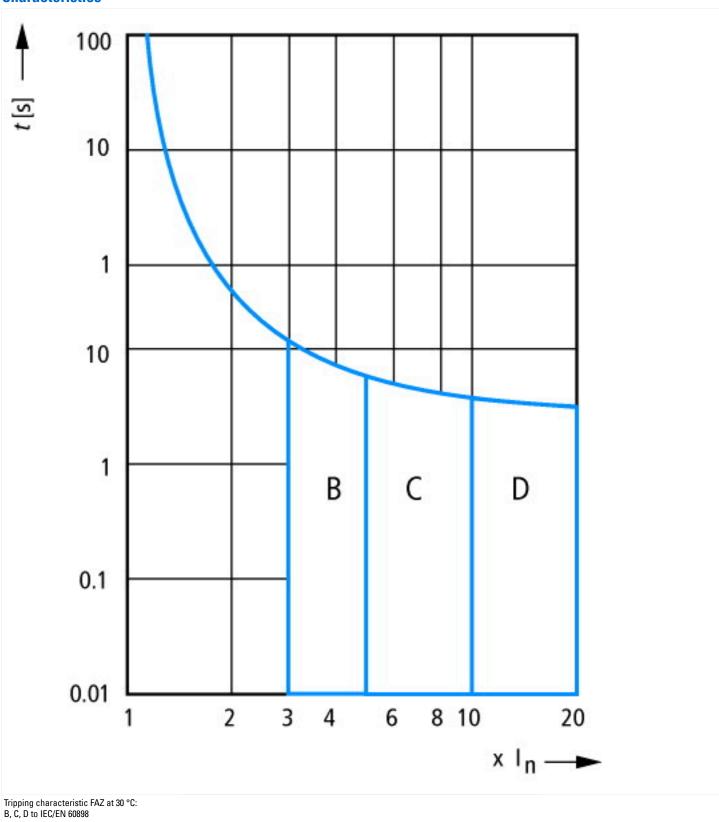
Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042)

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])

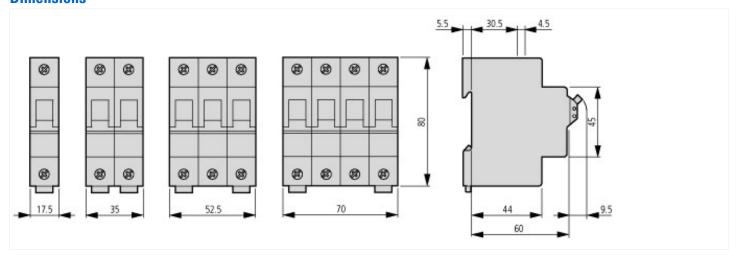
Number of poles (total) Number of protected poles Rated current Rated voltage Rated insulation voltage Ui Rated insulation voltage Uimp Rated short-circuit breaking capacity Icn EN 60898 at 230 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity	(ecl@ss10.0.1-27-14-19-01 [AAB905014])		
Number of protected poles  Rated current A B Rated voltage V BRATED STATES STAT	Release characteristic		В
Rated current Rated voltage V 230 Rated insulation voltage Ui Rated impulse withstand voltage Uimp Rated short-circuit breaking capacity Icn EN 60898 at 230 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	Number of poles (total)		4
Rated voltage Rated insulation voltage Ui Rated impulse withstand voltage Uimp Rated short-circuit breaking capacity Icn EN 60898 at 230 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit	Number of protected poles		3
Rated insulation voltage Ui  Rated impulse withstand voltage Uimp  kV 4  Rated short-circuit breaking capacity Icn EN 60898 at 230 V kA 15  Rated short-circuit breaking capacity Icn EN 60898 at 400 V kA 15  Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V kA 25  Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 25  Voltage type  AC  Frequency  Hz 50-60  Current limiting class	Rated current	Α	3
Rated impulse withstand voltage Uimp  kV 4  Rated short-circuit breaking capacity Icn EN 60898 at 230 V  Rated short-circuit breaking capacity Icn EN 60898 at 400 V  Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V  kA 25  Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V  kA 25  Voltage type  AC  Frequency  Current limiting class  3	Rated voltage	V	230
Rated short-circuit breaking capacity Icn EN 60898 at 230 V kA 15 Rated short-circuit breaking capacity Icn EN 60898 at 400 V kA 15 Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V kA 25 Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 25 Voltage type AC Frequency Hz 50 - 60 Current limiting class 3	Rated insulation voltage Ui	V	440
Rated short-circuit breaking capacity Icn EN 60898 at 400 V kA 25 Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V kA 25 Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 25 Voltage type AC Frequency Hz 50 - 60 Current limiting class 3	Rated impulse withstand voltage Uimp	kV	4
Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V kA 25  Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 25  Voltage type AC  Frequency Hz 50 - 60  Current limiting class 3	Rated short-circuit breaking capacity Icn EN 60898 at 230 V	kA	15
Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 25  Voltage type AC  Frequency Hz 50 - 60  Current limiting class 3	Rated short-circuit breaking capacity Icn EN 60898 at 400 V	kA	15
Voltage type AC Frequency Hz 50 - 60 Current limiting class 3	Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	kA	25
Frequency Hz 50 - 60 Current limiting class 3	Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V	kA	25
Current limiting class 3	Voltage type		AC
	Frequency	Hz	50 - 60
Suitable for flush-mounted installation No	Current limiting class		3
	Suitable for flush-mounted installation		No

Concurrently switching N-neutral		Yes
Over voltage category		3
Pollution degree		2
Additional equipment possible		Yes
Width in number of modular spacings		4
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

### **Characteristics**



### **Dimensions**



# **Additional product information (links)**

Temperature dependency, derating

 $https://www.eaton.com/content/dam/eaton/technical documentation/technical-data-tables/Derating\ table\ FAZ\_T.pdf$