## DATASHEET - FAZ6-B10/3N



Miniature circuit breaker (MCB), 10A, 3pole+N, type B characteristic, 6 kA



Part no.FAZ6-B10/3NCatalog No.239156Alternate CatalogFAZ6-B10/3NNo.FAZ6-B10/3N

Similar to illustration

## **Design verification as per IEC/EN 61439**

Technical data for design verification			
Rated operational current for specified heat dissipation	In	А	10
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	6.1
Operating ambient temperature min.		°C	-40
Operating ambient temperature max.		°C	75
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)

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)			4
Number of protected poles			3
Rated current		A	10
Rated voltage	,	V	400
Rated insulation voltage Ui	,	V	440
Rated impulse withstand voltage Uimp	I	kV	4

Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V   KA   6     Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V   KA   0     Notage type   KA   0     Voltage type   KA   0     Frequency   KA   0     Current limiting class   50-60   0     Suitable for flush-mounted installation   KA   0     Concurrently switching N-neutral   MC   No     Over voltage category   MC   S     Pollution degree   MC   S     Midthin number of modular spacings   MC   No     Built-in depth   MC   S     Degree of protection (IP)   MC   MC     Anbient temperature during operating   MC   S     Anbient temperature during space s			
Rated short-circuit breaking capacity lcu IEC 60947-2 at 230 V     KA     0       Rated short-circuit breaking capacity lcu IEC 60947-2 at 230 V     KA     0       Voltage type     C     C       Voltage type     C     C       Frequency     C     S0-60       Current limiting class     S     S0-60       Suitable for flush-mounted installation     F     S0-60       Concurrently switching N-neutral     No     S0-60       Over voltage category     S     S0-60       Pollution degree     S     S0-60       Additional equipment possible     S     S0-60       Width in number of modular spacings     S     S       Buil-in depth     S     S       Degree of protection (IP)     S     S       Anbient temperature during operating     C     S       Anbient temperature during operating     S     S       Concetable conductor cross section multi-wired     S     S	Rated short-circuit breaking capacity Icn EN 60898 at 230 V	kA	6
Rated short-circuit breaking capacity lou IEC 60947-2 at 400 V   KA   0     Voltage type   C   C     Frequency   Frequency   50-60     Current limiting class   Suitable for flush-mounted installation   Suitable for flush-mounted installation   No     Concurrently switching N-neutral   Voltage taegory   Voltage taegory   Suitable for flush-mounted installation   Suitable for flush-mounted installation <td>Rated short-circuit breaking capacity Icn EN 60898 at 400 V</td> <td>kA</td> <td>6</td>	Rated short-circuit breaking capacity Icn EN 60898 at 400 V	kA	6
Voltage type     AC       Frequency     60 B Z     50 - 60       Current limiting class     50 - 60     50 - 60       Suitable for flush-mounted installation     50 - 60     50 - 60       Concurrently switching N-neutral     No     50 - 60       Concurrently switching N-neutral     Yes     50 - 60       Over voltage category     60 - 60     70       Pollution degree     70     70       Addtional equipment possible     Yes     70       Width in number of modular spacings     mm     70       Built-in depth     mm     70       Degree of protection (IP)     Fon     70       Ambient temperature during operating     Cor     75       Concectable conductor cross section multi-wired     mm     125	Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	kA	10
Frequency Image: Prequency Frequency Frequency 50-60   Current limiting class Suitable for flush-mounted installation Suitable for flush-mounted installation Suitable for flush-mounted installation No   Concurrently switching N-neutral Main Suitable for flush-mounted installation Suitable for flu	Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V	kA	10
Current limiting class   3     Suitable for flush-mounted installation   Mo     Concurrently switching N-neutral   Yes     Over voltage category   Mo     Pollution degree   2     Additional equipment possible   Yes     Width in number of modular spacings   Mo     Degree of protection (IP)   Mo     Anbient temperature during operating   °C     Suite temperature during operating   °C     Mo   Size Size Size Size Size Size Size Size	Voltage type		AC
Suitable for flush-mounted installation   Mo     Soncurrently switching N-neutral   Yes     Over voltage category   J     Pollution degree   J     Additional equipment possible   Yes     With in number of modular spacings   Yes     Built-in depth   Yes     Degree of protection (IP)   Mm     Ambient temperature during operating   Yes     Suitable conductor cross section multi-wired   Yes     Yes   Yes	Frequency	Hz	50 - 60
Concurrently switching N-neutralPail	Current limiting class		3
Nor voltage category 3   Pollution degree 3   Additional equipment possible 5   Withh in number of modular spacings 6 4   Built-in depth 7 6   Degree of protection (IP) 6 72   Ambient temperature during operating 6 6   Second and a space of protection (IP) 6 72   Ambient temperature during operating 6 6   Second and a space of protection (IP) 6 72   Ambient temperature during operating 6 6   Second and a space of protection (IP) 125	Suitable for flush-mounted installation		No
Pollution degree   2     Additional equipment possible   Yes     Width in number of modular spacings   mm   70.5     Buit-in depth   IP0     Apple of protection (IP)   °C   25.75     Ambient temperature during operating   mm <sup>2</sup> 125	Concurrently switching N-neutral		Yes
Additional equipment possible Mesian   Width in number of modular spacings Image: Constraint of modular spacings   Built-in depth mm   Degree of protection (IP) Image: Constraint of modular spacings   Ambient temperature during operating Image: Constraint of modular spacings   Image: Constraint of modular spacing operating Image: Constraint of modular spacing operating	Over voltage category		3
Width in number of modular spacings Image: Content of modular spacings Image: Content of modular spacings   Built-in depth Image: Content of modular spacings Image: Content of modular spacings   Degree of protection (IP) Image: Content of modular spacings Image: Content of modular spacings   Ambient temperature during operating Image: Content of modular spacings Image: Content of modular spacings   Connectable conductor cross section multi-wired Image: Content of modular spacings Image: Content of modular spacings	Pollution degree		2
Built-in depth mm 70.5   Degree of protection (IP) C P20   Ambient temperature during operating C 25 - 75   Connectable conductor cross section multi-wired mm <sup>2</sup> 1 - 25	Additional equipment possible		Yes
Degree of protection (IP) IP20   Ambient temperature during operating °C -25 - 75   Connectable conductor cross section multi-wired Imm² 1 - 25	Width in number of modular spacings		4
Ambient temperature during operating °C -25 - 75   Connectable conductor cross section multi-wired mm <sup>2</sup> 1 - 25	Built-in depth	mm	70.5
Connectable conductor cross section multi-wired mm <sup>2</sup> 1 - 25	Degree of protection (IP)		IP20
	Ambient temperature during operating	°C	-25 - 75
Connectable conductor cross section solid-core mm <sup>2</sup> 1 - 25	Connectable conductor cross section multi-wired	mm²	1 - 25
	Connectable conductor cross section solid-core	mm²	1 - 25

## Additional product information (links)

Temperature dependency, derating

https://www.eaton.com/content/dam/eaton/technicaldocumentation/technical-data-tables/Derating table FAZ6.pdf