

Miniature circuit breaker (MCB), 10 A, 1p, characteristic: S



Part no. FAZ-S10/1
278611
EL Number 1695368
(Norway)

General specifications

Product name	Eaton Moeller series xEffect - FAZ MCB
Part no.	FAZ-S10/1
EAN	4015082786113
Product Length/Depth	80 millimetre
Product height	75.5 millimetre
Product width	17.7 millimetre
Product weight	0.11 kilogram
Compliances	UL CSA09 (with supplementary protector only) RoHS conform
Certifications	IEC/EN 60947-2 CSA-C22.2 No. 235 UL 1077 UL (Category Control Number QVNU2, QVNU8) CSA (File No. 204453) North America (UL recognized, CSA certified) CSA (Class No. 3215-30) CE marking UL (File No. E177451) IEC/EN 60898 IEC 61373 EN45545-2
Product Tradename	xEffect - FAZ
Product Type	MCB
Product Sub Type	None

Delivery program

Application	Branch circuits, not as BCPD Switchgear for industrial and advanced commercial applications xEffect - Switchgear for industrial and advanced commercial applications
Number of poles	Single-pole
Number of poles (total)	1
Number of poles (protected)	1
Tripping characteristic	S
Release characteristic	Other
Amperage Rating	10 A
Type	FAZ Miniature circuit breaker

Technical Data - Electrical

Voltage type	AC
Voltage rating	240 V AC / 415 V AC
Voltage rating at DC	60 V DC (per pole)
Voltage rating (UL CSA 13)	277 V AC; 48 V DC
Rated operational voltage (Ue) - max	230 V
Rated insulation voltage (Ui)	440 V
Rated impulse withstand voltage (Uimp)	4 kV
Frequency rating - min	50 Hz
Frequency rating - max	60 Hz
Rated switching capacity (IEC/EN 60947-2)	10 kA
Operational switching capacity	7.5 kA
Rated short-circuit breaking capacity (EN 60898) at 230 V	0 kA
Rated short-circuit breaking capacity (EN 60898) at 400 V	0 kA
Rated short-circuit breaking capacity (IEC 60947-2) at 230 V	10 kA
Rated short-circuit breaking capacity (IEC 60947-2) at 400 V	10 kA
Admissible back-up fuse - max	125 A gL/gG

Selectivity class	3
Lifespan, electrical	10000 operations
Overvoltage category	III
Pollution degree	2
Direction of incoming supply	As required
Technical Data - Mechanical	
Frame	45 mm
Enclosure width	80 mm
Width in number of modular spacings	1
Built-in depth	70.5 mm
Mounting width per pole	17.5 mm
Mounting width	17.5 mm
Mounting Method	Top-hat rail IEC/EN 60715
Mounting position	As required
Degree of protection	IP20 IP40 (when fitted) IP20 (IEC) UL/CSA Type: -
Terminals (top and bottom)	Twin-purpose terminals
Connectable conductor cross section (solid-core) - min	1 mm ²
Connectable conductor cross section (solid-core) - max	25 mm ²
Connectable conductor cross section (multi-wired) - min	1 mm ²
Connectable conductor cross section (multi-wired) - max	25 mm ²
Terminal capacity of screw terminals for main cable	10 mm ² (2x)
Terminal capacity (control cable)	25 mm ² (1x)
Terminal protection	Finger and hand touch safe, DGUV VS3, EN 50274
Busbar material thickness	0.8 mm - 2 mm
Design verification as per IEC/EN 61439 - technical data	
Rated operational current for specified heat dissipation (In)	10 A
Heat dissipation per pole, current-dependent	0 W
Equipment heat dissipation, current-dependent	1.8 W
Static heat dissipation, non-current-dependent	0 W
Heat dissipation capacity	0 W
Ambient operating temperature - min	-25 °C
Ambient operating temperature - max	75 °C
Design verification as per IEC/EN 61439	
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 Resist. of insul. mat. to abnormal heat/fire by internal elect. 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.
10.9.2 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.
Additional information		
Current limiting class	3	
Features		Additional equipment possible
Special features		Ambient temperature hint: a 1 °C increase results in a 0.5% linear reduction of current carrying capacity

Technical data ETIM 9.0

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@ss13-27-14-19-01 [AAB905019])		
Built-in depth	mm	70.5
Release characteristic		Other
Number of poles (total)		1
Number of protected poles		1
Rated current	A	10
Rated voltage	V	230
Rated insulation voltage Ui	V	440
Rated impulse withstand voltage Uimp	kV	4
Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V	kA	0
Voltage type		AC
Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V	kA	0
Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V	kA	10
Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V	kA	10
Frequency	Hz	50 - 60
Power loss	W	1.8
Current limiting class		3
Flush-mounted installation		No
Concurrently switching neutral conductor		No
Over voltage category		3
Pollution degree		2
Additional equipment possible		Yes
Width in number of modular spacings		1
Degree of protection (IP)		IP20
Ambient temperature during operating	°C	-25 - 75
Connectable conductor cross section multi-wired	mm ²	1 - 25
Connectable conductor cross section solid-core	mm ²	1 - 25
Explosion-proof		No