

## Miniature circuit breaker (MCB), 4 A, 1p+N, characteristic: C

**Part no.** **FAZ-C4/1N**  
**278666**  
**EL Number** **1695202**  
**(Norway)**

<b>General specifications</b>		
Product name		Eaton Moeller series xEffect - FAZ MCB
Part no.		FAZ-C4/1N
EAN		4015082786663
Product Length/Depth		80 millimetre
Product height		75.5 millimetre
Product width		36 millimetre
Product weight		0.2 kilogram
Compliances		RoHS conform
Certifications		IEC/EN 60947-2 IEC/EN 60898 IEC 61373 EN45545-2
Product Tradename		xEffect - FAZ
Product Type		MCB
Product Sub Type		None
<b>Delivery program</b>		
Application		Switchgear for industrial and advanced commercial applications xEffect - Switchgear for industrial and advanced commercial applications
Number of poles		Single-pole + N
Number of poles (total)		2
Number of poles (protected)		1
Tripping characteristic		C
Release characteristic		C
Amperage Rating		4 A
Type		FAZ Miniature circuit breaker
<b>Technical Data - Electrical</b>		
Voltage type		AC
Voltage rating		240 V AC / 415 V AC
Voltage rating at DC		60 V DC (per pole)
Voltage rating (IEC/EN 60898-1)		240 V AC
Voltage rating (UL)		277 V
Rated operational voltage (Ue) - max		230 V
Operational voltage (IEC/EN 60947-2) - max		254 V AC
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) at max voltage rating		10 kA
Rated switching capacity (IEC/EN 60947-2)		15 kA
Rated switching capacity (IEC/EN 60898-1)		10 kA
Operational switching capacity		7.5 kA
Breaking capacity		10 kA (UL1077)
Rated service short-circuit breaking capacity (IEC/EN 60898-1)		7.5 kA
Rated service short-circuit breaking capacity (IEC/EN 60947-2)		7.5 kA
Rated short-circuit breaking capacity (EN 60898) at 230 V		10 kA
Rated short-circuit breaking capacity (EN 60898) at 400 V		10 kA
Rated short-circuit breaking capacity (IEC 60947-2) at 230 V		15 kA
Rated short-circuit breaking capacity (IEC 60947-2) at 400 V		15 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
<b>Technical Data - Mechanical</b>			
Frame			45 mm
Enclosure width			80 mm
Width in number of modular spacings			2
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)
Terminals (top and bottom)			Twin-purpose terminals
Connectable conductor cross section (solid-core) - min			1 mm <sup>2</sup>
Connectable conductor cross section (solid-core) - max			25 mm <sup>2</sup>
Connectable conductor cross section (multi-wired) - min			1 mm <sup>2</sup>
Connectable conductor cross section (multi-wired) - max			25 mm <sup>2</sup>
Terminal capacity of screw terminals for main cable			10 mm <sup>2</sup> (2x)
Terminal capacity (control cable)			25 mm <sup>2</sup> (1x)
Terminal protection			Finger and hand touch safe, DGUV VS3, EN 50274
Busbar material thickness			0.8 mm - 2 mm
<b>Design verification as per IEC/EN 61439 - technical data</b>			
Rated operational current for specified heat dissipation (I <sub>n</sub> )			4 A
Heat dissipation per pole, current-dependent			0 W
Equipment heat dissipation, current-dependent			1.6 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
<b>Design verification as per IEC/EN 61439</b>			
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.
<b>Additional information</b>		
Current limiting class		3
Features		Concurrently switching N-neutral Additional equipment possible
Special features		Ambient temperature hint: a 1 °C increase results in a 0.5% linear reduction of current carrying capacity
Used with		Miniature circuit breaker FAZ

## 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			C
Number of poles (total)			2
Number of protected poles			1
Rated current	A		4
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		10
Voltage type			AC
Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V	kA		10
Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V	kA		15
Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V	kA		15
Frequency	Hz		50 - 60
Power loss	W		1.6
Current limiting class			3
Flush-mounted installation			No
Concurrently switching neutral conductor			Yes
Over voltage category			3
Pollution degree			2
Additional equipment possible			Yes
Width in number of modular spacings			2
Degree of protection (IP)			IP20
Ambient temperature during operating	°C		-25 - 75
Connectable conductor cross section multi-wired	mm <sup>2</sup>		1 - 25
Connectable conductor cross section solid-core	mm <sup>2</sup>		1 - 25
Explosion-proof			No