Miniature circuit breaker (MCB), 1 A, 3p+N, characteristic: D



Part no. FAZ-D1/3N 278983

EL Number 1691206

(Norway)

(INUI Way)	
General specifications	
Product name	Eaton Moeller series xEffect - FAZ MCB
Part no.	FAZ-D1/3N
EAN	4015082789831
Product Length/Depth	80 millimetre
Product height	75.5 millimetre
Product width	72 millimetre
Product weight	0.425 kilogram
Compliances	RoHS conform
Certifications	IEC 61373 EN45545-2
Product Tradename	xEffect - FAZ
Product Type	MCB
Product Sub Type	None
Delivery program	
Application	Switchgear for industrial and advanced commercial applications xEffect - Switchgear for industrial and advanced commercial applications
Number of poles	Three-pole + N
Number of poles (total)	4
Number of poles (protected)	3
Tripping characteristic	D
Release characteristic	D
Amperage Rating	1 A
Туре	FAZ Miniature circuit breaker
Technical Data - Electrical	
Voltage type	AC
Rated operational voltage (Ue) - max	400 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)	15 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
Overvoltage category	III
Pollution degree	2
Technical Data - Mechanical	
Width in number of modular spacings	4
Built-in depth	70.5 mm
Degree of protection	IP20
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

Rated operational current for specified heat dissipation (In)	1A
Heat dissipation per pole, current-dependent	0 W
Equipment heat dissipation, current-dependent	2.5 W
Static heat dissipation, non-current-dependent	0 W
' '	0 W
Heat dissipation capacity	
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 Concurrently switching N-neutral
Special features	Ambient temperature hint: a 1 $^{\circ}\text{C}$ increase results in a 0.5% linear reduction of current carrying capacity
Used with	FAZ Miniature circuit breaker

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])

Release characteristic Number of poles (total) Number of protected poles Rated current Rated voltage Rated insulation voltage Uimp Rated impulse withstand voltage Uimp Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V	[
Number of poles (total) Number of protected poles Rated current Rated voltage Rated insulation voltage Uimp Rated impulse withstand voltage Uimp Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V	Built-in depth	mm	n 70.5	
Number of protected poles Rated current A 1 Rated voltage Rated insulation voltage Uimp Rated impulse withstand voltage Uimp Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V	Release characteristic		D	
Rated current Rated voltage V 400 Rated insulation voltage Ui Rated impulse withstand voltage Uimp Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V	Number of poles (total)		4	
Rated voltage Rated insulation voltage Ui Rated impulse withstand voltage Uimp Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V	Number of protected poles		3	
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 current	А	1	
Rated impulse withstand voltage Uimp	Rated voltage	V	400	
Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V	Rated insulation voltage Ui	V	440	
Voltage type AC Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V kA 10	Rated impulse withstand voltage Uimp	kV	4	
Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V kA 10	Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V $$	kA	10	
	Voltage type		AC	
Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V kA 15	Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V $$	kA	10	
	Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V	kA	15	

Frequency Power loss Current limiting class Flush-mounted installation Concurrently switching neutral conductor Over voltage category Pollution degree Additional equipment possible Width in number of modular spacings Ambient temperature during operating Connectable conductor cross section multi-wired Hz So - 60 W 2.5 3 3 4 Yes 2 4 Pollution degree Pollution degree Portection (IP) Pol			
Power loss Current limiting class Flush-mounted installation Concurrently switching neutral conductor Over voltage category Pollution degree Additional equipment possible Width in number of modular spacings Ambient temperature during operating Connectable conductor cross section multi-wired Connectable conductor cross section solid-core W 2.5 No No Yes 2 4 Pos Pos Pos Pos Pos Pos Pos	Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V	kA	15
Current limiting class Flush-mounted installation Concurrently switching neutral conductor Over voltage category Over voltage category Additional equipment possible Width in number of modular spacings Width in number of modular spacings Ambient temperature during operating Connectable conductor cross section multi-wired Connectable conductor cross section solid-core 3 Yes Yes Yes 4 IP20 Ambient temperature during operating CC -25 - 75 Connectable conductor cross section solid-core mm² 1 - 25 Connectable conductor cross section solid-core	Frequency	Hz	50 - 60
Flush-mounted installation Concurrently switching neutral conductor Over voltage category Pollution degree Additional equipment possible Width in number of modular spacings Wigth in number of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired Connectable conductor cross section solid-core No No Yes 2 4 Pollution degree Pes 4 P20 -25 - 75 Connectable conductor cross section multi-wired mm² 1 - 25 Connectable conductor cross section solid-core mm² 1 - 25	Power loss	W	2.5
Concurrently switching neutral conductor Over voltage category Pollution degree Additional equipment possible Width in number of modular spacings Width in number of modular spacings For protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired Connectable conductor cross section solid-core Yes 4 P20 -25 - 75 Connectable conductor cross section multi-wired mm² 1 - 25 Connectable conductor cross section solid-core mm² 1 - 25	Current limiting class		3
Over voltage category Pollution degree Additional equipment possible Width in number of modular spacings Pegree of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired Connectable conductor cross section solid-core Pegree of mm² 1 - 25	Flush-mounted installation		No
Pollution degree 2 Additional equipment possible Yes Width in number of modular spacings 4 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	Concurrently switching neutral conductor		Yes
Additional equipment possible Width in number of modular spacings Degree of protection (IP) 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	Over voltage category		3
Width in number of modular spacings 4 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	Pollution degree		2
Degree of protection (IP) 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	Additional equipment possible		Yes
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	Width in number of modular spacings		4
Connectable conductor cross section multi-wired mm² 1 - 25 Connectable conductor cross section solid-core mm² 1 - 25	Degree of protection (IP)		IP20
Connectable conductor cross section solid-core mm ² 1 - 25	Ambient temperature during operating	°C	-25 - 75
	Connectable conductor cross section multi-wired	mm²	1 - 25
Explosion-proof No	Connectable conductor cross section solid-core	mm²	1 - 25
	Explosion-proof		No