DATASHEET - PL7-C13/1

Miniature circuit breaker (MCB), 13 A, 1p, characteristic: C



Part no. PL7-C13/1 262703

General specifications	
Product name	Eaton Moeller series xPole - PL7 MCB
Part no.	PL7-C13/1
EAN	4015082627034
Product Length/Depth	71 millimetre
Product height	82 millimetre
Product width	17.6 millimetre
Product weight	0.12 kilogram
Compliances	RoHS conform
Product Tradename	xPole - PL7
Product Type	МСВ
Product Sub Type	None
Delivery program	
Application	Switchgear for residential and commercial applications xPole - Switchgear for residential and commercial applications
Number of poles	Single-pole
Number of poles (total)	1
Number of poles (protected)	1
Tripping characteristic	C
Release characteristic	C
Amperage Rating	13 A
Туре	Miniature circuit breaker PL7
Technical Data - Electrical	
Voltage type	AC
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 60898-1)	10 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	0 kA
Rated short-circuit breaking capacity (IEC 60947-2) at 400 V	0 kA
Overvoltage category	
Pollution degree	2
Technical Data - Mechanical	
Width in number of modular spacings	1
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
Design verification as per IEC/EN 61439 - technical data	
Rated operational current for specified heat dissipation (In)	13 A
Heat dissipation per pole, current-dependent	0 W
Equipment heat dissipation, current-dependent	2.5 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
Used with	Miniature circuit breaker PL7

Technical data ETIM 8.0

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

Electric engineering, automation, process control engineering / Electrical installatio (ecl@ss10.0.1-27-14-19-01 [AAB905014])	on, device / Miniature cir	cuit breaker system (MCB) / Miniature circuit breaker (MCB)

Arease characteristic C Number of poles (total) 1 Number of protected poles 1 Number of protected poles A Rated current A Rated voltage V Rated insulation voltage Uimp V Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V V Voltage type KA Rated short-circuit breaking capacity Icn according to EN 60898 at 430 V KA Rated short-circuit breaking capacity Icn according to EN 60898 at 430 V KA Rated short-circuit breaking capacity Icn according to EN 60897 at 430 V KA Rated short-circuit breaking capacity Icn according to EN 60897 at 430 V KA Rated short-circuit breaking capacity Icn according to EN 60897 at 430 V KA Rated short-circuit breaking capacity Icn according to EN 60897 at 430 V KA Rated short-circuit breaking capacity Icn according to EC 60947-2 at 230 V KA Rated short-circuit breaking capacity Icn according to EC 60947-2 at 230 V KA Rated short-circuit breaking capacity Icn according to EC 60947-2 at 430 V KA Rated short-circuit breaking capacity Icn according to EC 60947-2 at 430 V KA			
Number of poles (total) Image: Pole state of poles (total) Image: Pole state of poles (total) Image: Pole state of pole stat	Built-in depth	mm	70.5
Number of protected poles Image: Constraint of protected poles Image: Constraint of protected poles Rated current A Image: Constraint of protected poles Rated voltage V Image: Constraint of protected poles Rated voltage Ui V Image: Constraint of protected poles Rated insulation voltage Uimp V Image: Constraint of protected poles Rated short-circuit breaking capacity Icn according to EN 60898 at 200 V Image: Constraint of protected poles Voltage type KA Image: Constraint of protected poles Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Image: Constraint of protected poles Rated short-circuit breaking capacity Icn according to IEC 60947-2 at 200 V Image: Constraint of poles Rated short-circuit breaking capacity Icn according to IEC 60947-2 at 400 V Image: Constraint of poles Rated short-circuit breaking capacity Icn according to IEC 60947-2 at 400 V Image: Constraint of poles Rated short-circuit breaking capacity Icn according to IEC 60947-2 at 400 V Image: Constraint of poles Rated short-circuit breaking capacity Icn according to IEC 60947-2 at 400 V Image: Constraint of poles Rated short-circuit breaking capacity Icn according to IEC 60947-2 at 400 V Image: Constraint of poles Rated short-circu	Release characteristic		C
Rated current A 13 Rated voltage V 20 Rated isulation voltage Uin V 40 Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V KV 4 Voltage type KV 0 Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V KA 0 Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V KA 0 Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V KA 0 Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V KA 0 Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V KA 0 Rated short-circuit breaking capacity Icn according to IEC 60947-2 at 230 V KA 0 Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V KA 0 Frequency KA 0 0 Frequency KA 0 0 Kurrent Imititing class 0 0 0	Number of poles (total)		1
Rated voltage V 30 Rated insulation voltage Ui V 40 Rated inpulse withstand voltage Uimp KV 40 Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V KA 0 Voltage type KA 0 KA Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V KA 0 Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V KA 0 Rated short-circuit breaking capacity Icn according to EN 60947-2 at 230 V KA 0 Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V KA 0 Frequency KA 0 10 Current limiting class So 60 10	Number of protected poles		1
Rated insulation voltage Ui V 440 Rated inpulse withstand voltage Uimp KV 4 Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V KA 10 Voltage type KA 10 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 400 V KA 10 Rated short-circuit breaking capacity Icn according to IEC 60947-2 at 230 V KA 0 Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V KA 0 Frequency KA 0 10 Frequency KA 0 10 Current limiting class So - 60 10 10	Rated current	А	13
Rated impulse withstand voltage Uimp kV 4 Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V kA 10 Voltage type Image: Comparison of the type of t	Rated voltage	V	230
Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V KA 10 Voltage type KA AC 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 400 V KA 10 Rated short-circuit breaking capacity Icn according to IEC 60947-2 at 230 V KA 0 Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V KA 0 Frequency KA 0 10 Frequency KA 0 10 Current limiting class SO - 60 10 10	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 short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V KA 0 Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V KA 0 Frequency Hz 50-600 Current limiting class S S	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 IEC 60947-2 at 230 V kA 0 Rated short-circuit breaking capacity Icn according to IEC 60947-2 at 230 V kA 0 Frequency kA 0 Current limiting class 50 - 60 60	Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V	kA	10
Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V kA 0 Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V kA 0 Frequency Hz 50 - 60 Current limiting class S S	Voltage type		AC
Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V kA 0 Frequency Hz 50 - 60 Current limiting class Current limiting class Current limiting class	Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V	kA	10
Frequency Hz 50 - 60	Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V	kA	0
Current limiting class 3	Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V	kA	0
	Frequency	Hz	50 - 60
Flush-mounted installation No	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	mm²	1 - 25
Connectable conductor cross section solid-core	mm²	1 - 25
Explosion-proof		No