## DATASHEET - PL7-C20/1

## Miniature circuit breaker (MCB), 20 A, 1p, characteristic: C



Part no. PL7-C20/1 262705

General specifications	
Product name	Eaton Moeller series xPole - PL7 MCB
Part no.	PL7-C20/1
EAN	4015082627058
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	С
Amperage Rating	20 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 <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>
Design verification as per IEC/EN 61439 - technical data	
Rated operational current for specified heat dissipation (In)	20 A
Heat dissipation per pole, current-dependent	0 W
Equipment heat dissipation, current-dependent	3.2 W

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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 8.0**

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])

Built-in depth   mm   70.5     Release characteristic   C     Number of poles (total)   I     Number of protected poles   I     Rated current   A     Rated voltage   V     Rated insulation voltage Ui   V     Rated insulation voltage Uimp   KV     Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V   KV     Voltage ture   OC	(eci@ss10.0.1-27-14-19-01 [AAB905014])		
Number of poles (total)INumber of protected polesIRated currentARated voltageVRated insulation voltage UiVRated insulation voltage UimpKVRated short-circuit breaking capacity Icn according to EN 60898 at 230 VI	Built-in depth	mm	70.5
Number of protected polesIRated currentA20Rated voltageV30Rated insulation voltage UiV440Rated impulse withstand voltage UimpKV40Rated short-circuit breaking capacity Icn according to EN 60898 at 230 VKA1	Release characteristic		C
Rated currentA20Rated voltageV30Rated insulation voltage UiV40Rated inpulse withstand voltage UimpKV40Rated short-circuit breaking capacity Icn according to EN 60898 at 230 VKA10	Number of poles (total)		1
Rated voltage V 230   Rated insulation voltage Ui V 440   Rated inpulse withstand voltage Uimp KV 40   Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V KA 10	Number of protected poles		1
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	Rated current	А	20
Rated impulse withstand voltage Uimp kV 4   Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V kA 10	Rated voltage	V	230
Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V kA 10	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	Voltage type		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 Icu 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
Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V kA 0	Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V	kA	0
Frequency Hz 50 - 60	Frequency	Hz	50 - 60
Current limiting class 3	Current limiting class		3
Flush-mounted installation No	Flush-mounted installation		No
Concurrently switching neutral conductor 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	n <sup>2</sup> 1 - 25
Connectable conductor cross section solid-core	mm²	n <sup>2</sup> 1 - 25
Explosion-proof		No