## DATASHEET - PL7-C20/3N

## Miniature circuit breaker (MCB), 20 A, 3p+N, characteristic: C



PL7-C20/3N 263996

Product name	Eaton Moeller series xPole - PL7 MCB
Part no.	PL7-C20/3N
EAN	4015082639969
Product Length/Depth	71 millimetre
Product height	82 millimetre
Product width	70.4 millimetre
Product weight	0.456 kilogram
Compliances	RoHS conform
Product Tradename	xPole - PL7
Product Type	МСВ
Product Sub Type	None
Application	Switchgear for residential and commercial applications xPole - Switchgear for residential and commercial applications
Number of poles	Three-pole + N
Number of poles (total)	2
Number of poles (protected)	1
Tripping characteristic	C
Release characteristic	C B
Amperage Rating	20 A
Туре	Miniature circuit breaker PL7
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	4.5 kA
Rated short-circuit breaking capacity (EN 60898) at 400 V	4.5 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	III III III III III III III III III II
Pollution degree	2
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>
Rated operational current for specified heat dissipation (In)	20 A
Heat dissipation per pole, current-dependent	0 W
Equipment heat dissipation, current-dependent	10.1 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
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.
Current limiting class	3
Features	Additional equipment possible Concurrently switching N-neutral
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 installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss10.0.1-27-14-19-01 [AAB905014])					
Built-in depth	mr	m 7	70.5		
Release characteristic		(	C		
Number of poles (total)		2	2		
Number of protected poles		1	1		
Rated current	A	2	20		
Rated voltage	V	2	230		
Rated insulation voltage Ui	V	L	440		
Rated impulse withstand voltage Uimp	kV	/ /	4		
Rated short-circuit breaking capacity Icn according to EN 60898 at 230 ${\rm V}$	kA	A 4	4.5		
Voltage type		1	AC		
Rated short-circuit breaking capacity Icn according to EN 60898 at 400 ${\rm V}$	kA	A 4	4.5		
Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V $$	kA	4 (	0		
Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V $$	kA	4 (	0		
Frequency	Hz	z 5	50 - 60		
Current limiting class		3	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		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