

Miniature circuit breaker (MCB), 80A, 1p, C-Char

Part no. **AZ-C80**
211799

Product name	Eaton Moeller series xEffect - AZ MCB
Part no.	AZ-C80
EAN	4015082117993
Product Length/Depth	90 millimetre
Product height	75 millimetre
Product width	27 millimetre
Product weight	0.224 kilogram
Compliances	RoHS conform
Certifications	IEC/EN 60947-2 IEC 61373 EN45545-2
Product Tradename	xEffect - AZ MCB
Product Type	MCB
Product Sub Type	None
Globally Marketable	Yes
Application	Switchgear for industrial and advanced commercial applications xEffect - Switchgear for industrial and advanced 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	80 A
Type	AZ Miniature circuit breaker
Voltage type	AC
Voltage rating	230 V AC / 400 V AC
Voltage rating at DC	60 V DC (per pole)
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 60947-2)	20 kA
Operational switching capacity	20 kA
Rated short-circuit breaking capacity (EN 60898) at 230 V	0 kA
Rated short-circuit breaking capacity (EN 60898) at 400 V	0 kA
Rated short-circuit breaking capacity (IEC 60947-2) at 230 V	20 kA
Rated short-circuit breaking capacity (IEC 60947-2) at 400 V	20 kA
Admissible back-up fuse - max	200 A gL/gG
Selectivity class	3
Lifespan, electrical	10000 operations
Overvoltage category	III
Pollution degree	2
Direction of incoming supply	As required
Frame	45 mm
Enclosure width	90 mm

Width in number of modular spacings		1.5
Built-in depth		75 mm
Mounting width per pole		27 mm
Mounting width		27 mm
Mounting Method		Top-hat rail IEC/EN 60715
Degree of protection		IP40 (when fitted) IP20
Terminals (top and bottom)		Lift terminals
Connectable conductor cross section (solid-core) - min		2.5 mm ²
Connectable conductor cross section (solid-core) - max		50 mm ²
Connectable conductor cross section (multi-wired) - min		2.5 mm ²
Connectable conductor cross section (multi-wired) - max		50 mm ²
Terminal capacity (control cable)		2.5 mm ² - 50 mm ²
Terminal protection		Finger and hand touch safe, DGUV VS3, EN 50274
Rated operational current for specified heat dissipation (In)		80 A
Heat dissipation per pole, current-dependent		0 W
Equipment heat dissipation, current-dependent		7.14 W
Static heat dissipation, non-current-dependent		0 W
Heat dissipation capacity		0 W
Ambient operating temperature - min		-25 °C
Ambient operating temperature - max		55 °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
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 AZ

Technical data ETIM 8.0

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

Built-in depth	mm	75
Release characteristic		C
Number of poles (total)		1
Number of protected poles		1
Rated current	A	80
Rated voltage	V	230
Rated insulation voltage U_i	V	440
Rated impulse withstand voltage U_{imp}	kV	4
Rated short-circuit breaking capacity I_{cn} according to EN 60898 at 230 V	kA	0
Voltage type		AC
Rated short-circuit breaking capacity I_{cn} according to EN 60898 at 400 V	kA	0
Rated short-circuit breaking capacity I_{cu} according to IEC 60947-2 at 230 V	kA	20
Rated short-circuit breaking capacity I_{cu} according to IEC 60947-2 at 400 V	kA	20
Frequency	Hz	50 - 60
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		1.5
Degree of protection (IP)		IP20
Ambient temperature during operating	°C	-25 - 55
Connectable conductor cross section multi-wired	mm ²	2.5 - 50
Connectable conductor cross section solid-core	mm ²	2.5 - 50
Explosion-proof		No