DATASHEET - AZ-3-B80

Miniature circuit breaker (MCB), 80A, 3p, type B characteristic

Part no. AZ-3-B80
174512

Product name	Eaton Moeller series xEffect - AZ MCB
Part no.	AZ-3-B80
EAN	4015081709687
Product Length/Depth	75 millimetre
Product height	90 millimetre
Product width	81 millimetre
Product weight	0.64 kilogram
Compliances	RoHS conform
Certifications	IEC 61373 EN45545-2
Product Tradename	xEffect - AZ MCB
Product Type	MCB
Product Sub Type	None
Application	Switchgear for industrial and advanced commercial applications xEffect - Switchgear for industrial and advanced commercial applications
Number of poles	Three-pole
Number of poles (total)	3
Number of poles (protected)	3
Tripping characteristic	B
Release characteristic	B
Amperage Rating	80 A
Type	AZ Miniature circuit breaker
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)	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
Overvoltage category	III
Pollution degree	2
Width in number of modular spacings	4.5
Built-in depth	75 mm
Degree of protection	IP20
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
Rated operational current for specified heat dissipation (In)	80 A
Heat dissipation per pole, current-dependent	0 W

Equipment heat dissipation, current-dependent			21.3 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			AZ Miniature circuit breaker

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	75
Release characteristic			B
Number of poles (total)			3
Number of protected poles			3
Rated current		A	80
Rated voltage		V	400
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	0
Voltage type			AC
Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V		kA	0
Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V		kA	20
Rated short-circuit breaking capacity Icu 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			4.5
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

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