

RCCB, 80A, 4p, 100mA, Type G/F



Part no. FRCDM-80/4/01-G/F
EP-501276

Product name	Eaton Moeller series xEffect - FRCDM Type B, B+, Bfq RCCB
Part no.	FRCDM-80/4/01-G/F
EAN	9010653039136
Product Length/Depth	80 millimetre
Product height	80 millimetre
Product width	70 millimetre
Product weight	0.32 kilogram
Certifications	CE
Product Tradename	xEffect - FRCDM Type B, B+, Bfq
Product Type	RCCB
Product Sub Type	None
Globally Marketable	Yes
Application	Switchgear for industrial and advanced commercial applications
Number of poles	Four-pole
Tripping time	10 ms delayed Short time-delayed
Amperage Rating	80 A
Rated short-circuit strength	10 kA
Fault current rating	0.1 A
Type	Residual current circuit-breakers, Digital, Type G/F (ÖVE E 8601)
Voltage rating (IEC/EN 60947-2)	240/415
Voltage rating - min	196
Voltage rating - max	264
Rated operational voltage (Ue) - max	415 V
Rated insulation voltage (Ui)	440 V
Rated impulse withstand voltage (Uimp)	4 kV
Rated fault current - min	100 mA
Frequency rating	50/60 Hz
Short-circuit rating	80 A (max. admissible back-up fuse)
Leakage current type	F
Rated residual making and breaking capacity	800 A
Admissible back-up fuse overload - max	80 A gG/gL
Rated short-time withstand current (Icw)	10 kA
Surge current capacity	3 kA
Pollution degree	2
Lifespan, electrical	4000 operations
Rated switching capacity (resistive load) of auxiliary contact at 30 V DC	2 A
Rated switching capacity (resistive load) of auxiliary contact at 240 V AC	0.25 A
Switching duty with resistive load of auxiliary contact - max	60 W
Switching voltage at AC of auxiliary contact - max	240 V
Switching voltage at DC of auxiliary contact - max	220 V
Switching current of auxiliary contact - max	2 A
Switching capacity of auxiliary contact - min	10 µA, 10 mV DC
Terminal capacity of auxiliary contact	0.25 mm ² - 1.5 mm ²

Frame		Standard front dimension: 45 mm
Width in number of modular spacings		4
Built-in width (number of units)		70 mm (4 SU)
Built-in depth		80 mm
Mounting Method		DIN rail Quick attachment with 2 latch positions for DIN-rail IEC/EN 60715
Mounting position		As required
Degree of protection		IP20 IP20, IP40 with suitable enclosure
Terminals (top and bottom)		Twin-purpose terminals
Terminal capacity (solid wire)		1.5 mm ² - 35 mm ²
Connectable conductor cross section (solid-core) - min		1 mm ²
Connectable conductor cross section (solid-core) - max		35 mm ²
Terminal capacity (stranded cable)		16 mm ² (2x)
Connectable conductor cross section (multi-wired) - min		10 mm ²
Connectable conductor cross section (multi-wired) - max		35 mm ²
Terminal protection		Finger and hand touch safe, DGUV VS3, EN 50274
Contact position indicator color		Red / green
Tightening torque		2 Nm - 2.4 Nm
Busbar material thickness		0.8 mm - 2 mm
Lifespan, mechanical		20000 operations
Permitted storage and transport temperature - min		-35 °C
Permitted storage and transport temperature - max		60 °C
Climatic proofing		25-55 °C / 90-95% relative humidity according to IEC 60068-2
Rated operational current for specified heat dissipation (In)		80 A
Heat dissipation per pole, current-dependent		3.225 W
Equipment heat dissipation, current-dependent		12.9 W
Static heat dissipation, non-current-dependent		0 W
Heat dissipation capacity		0 W
Ambient operating temperature - min		-25 °C
Ambient operating temperature - max		60 °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.
10.2.4 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.

Features		Additional equipment possible
Functions		Short-time delayed tripping
Special features		As per inscription