

Switch-disconnector, DMM, 160 A, 4 pole, Emergency switching off function, With red rotary handle and yellow locking ring, in CI-K5 enclosure



Part no. DMM-160/4/I5/P-R  
172797  
EL Number 1405715  
(Norway)

General specifications		
Product name		Eaton DMM Switch-disconnector
Part no.		DMM-160/4/I5/P-R
EAN		4015081693818
Product Length/Depth		280 millimetre
Product height		200 millimetre
Product width		200 millimetre
Product weight		2.47 kilogram
Certifications		IEC/EN 60204 CE VDE 0660 IEC/EN 60947-3 KEMA RoHS Lloyds IEC/EN 60947 EAC
Product Tradename		DMM
Product Type		Switch-disconnector
Product Sub Type		None
Catalog Notes		1 padlock, # 5 mm in CI-K5 enclosure Rated Short-time Withstand Current (Icw) for a time of 1 second
Features & Functions		
Features		Version as emergency stop installation Version as maintenance-/service switch Version as main switch
Fitted with:		Red rotary handle and yellow locking ring
Functions		Emergency switching off function Interlockable
Locking facility		Lockable in the 0 (Off) position
Number of poles		Four-pole
General information		
Accessories		Auxiliary contact fitted by user.
Degree of protection		NEMA 12
Degree of protection (front side)		IP65
Lifespan, mechanical		10,000 Operations
Mounting method		Surface mounting
Mounting position		As required
Overvoltage category		III
Pollution degree		3
Rated impulse withstand voltage (Uimp)		6000 V
Safety parameter (EN ISO 13849-1)		B10d values as per EN ISO 13849-1, table C.1
Suitable for		Ground mounting
Switching angle		90 °
Climatic environmental conditions		
Ambient operating temperature - min		-25 °C
Ambient operating temperature - max		40 °C
Ambient storage temperature - min		-40 °C
Ambient storage temperature - max		80 °C
Terminal capacities		

Terminal capacity		6 - 70 mm <sup>2</sup> , flexible with ferrules to DIN 46228
Stripping length (main cable)		21 mm
Tightening torque		7 Nm, Screw terminals
<b>Electrical rating</b>		
Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3)		1080 A
Rated breaking capacity at 500 V (cos phi to IEC 60947-3)		528 A
Rated breaking capacity at 660/690 V (cos phi to IEC 60947-3)		336 A
Rated insulation voltage (Ui)		1000 V
Rated operational current (Ie) at AC-21, 400 V, 415 V		160 A
Rated operational current (Ie) at AC-21, 500 V		160 A
Rated operational current (Ie) at AC-21, 690 V		160 A
Rated operational current (Ie) at AC-22, 380 V, 400 V, 415 V		160 A
Rated operational current (Ie) at AC-22, 500 V		160 A
Rated operational current (Ie) at AC-22, 690 V		160 A
Rated operational current (Ie) at AC-23A, 400 V, 415 V		140 A
Rated operational current (Ie) at AC-23A, 500 V		66 A
Rated operational current (Ie) at AC-23A, 690 V		42 A
Rated operational power at AC-23A, 400 V, 50 Hz		80 kW
Rated operational power at AC-23A, 500 V, 50 Hz		45 kW
Rated operational power at AC-23A, 690 V, 50 Hz		37 kW
Rated operational power at AC-3, 380/400 V, 50 Hz		0 kW
Rated operational voltage (Ue) at AC - max		690 V
Rated uninterrupted current (Iu)		160 A
Uninterrupted current		Rated uninterrupted current Iu is specified for max. cross-section.
<b>Short-circuit rating</b>		
Breaking current		13.5 kA
Let-through energy		Max. 86,9 kA <sup>2</sup> s
Rated conditional short-circuit current (Iq)		30 kA at 415 V 50 kA
Rated short-time withstand current (Icw)		2.5 kA 2,5 kA, Contacts, 1 second
Short-circuit protection rating		160, Fuse, Contacts
<b>Contacts</b>		
Number of auxiliary contacts (change-over contacts)		0
Number of auxiliary contacts (normally closed contacts)		0
Number of auxiliary contacts (normally open contacts)		0
<b>Actuator</b>		
Actuator color		Red
Actuator type		Short thumb-grip
<b>Design verification</b>		
Equipment heat dissipation, current-dependent Pvid		8 W
Heat dissipation capacity Pdiss		0 W
Heat dissipation per pole, current-dependent Pvid		7.4 W
Rated operational current for specified heat dissipation (In)		160 A
Static heat dissipation, non-current-dependent Pvs		0 W
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		UV resistance only in connection with protective shield.
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.

## Technical data ETIM 9.0

Low-voltage industrial components (EG000017) / Switch disconnecter (low voltage) (EC000216)			
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnecter (ecl@ss13-27-37-14-03 [AKF060018])			
Version as main switch			Yes
Version as maintenance-/service switch			Yes
Version as safety switch			No
Version as emergency stop installation			Yes
Version as reversing switch			No
Number of switches			1
Max. rated operation voltage Ue AC		V	690
Rated operating voltage		V	690 - 690
Rated permanent current Iu		A	160
Rated permanent current at AC-23, 400 V		A	140
Rated permanent current at AC-21, 400 V		A	160
Rated operation power at AC-3, 400 V		kW	0
Rated short-time withstand current Icw		kA	2.5
Rated operation power at AC-23, 400 V		kW	80
Switching power at 400 V		kW	0
Conditioned rated short-circuit current Iq		kA	50
Number of poles			4
Number of auxiliary contacts as normally closed contact			0
Number of auxiliary contacts as normally open contact			0
Number of auxiliary contacts as change-over contact			0
Motor drive optional			No
Motor drive integrated			No
Voltage release optional			No
Device construction			Complete device in housing
Suitable for floor mounting			Yes
Suitable for front mounting 4-hole			No
Suitable for front mounting centre			No
Suitable for distribution board installation			No
Suitable for intermediate mounting			No
Colour control element			Red
Type of control element			Short thumb-grip
Interlockable			Yes
Type of electrical connection of main circuit			Screw connection
With pre-assembled cabling			No
Degree of protection (IP), front side			IP65
Degree of protection (NEMA)			12
Width		mm	200

Height		mm	200
Depth		mm	280
Width in number of modular spacings			