



Switch-disconnector, DMM, 160 A, 3 pole, With black rotary handle and drive shaft

Part no. **DMM-160/3**
 Catalog No. **6093347**

Delivery program

Product range			Switch-disconnector Main switch maintenance switch								
Part group reference			DMM With black rotary handle and drive shaft								
Notes			visible contacts								
Information about equipment supplied			auxiliary contact fitted by user. including connection materials								
Number of poles			3 pole								
Auxiliary contacts											
		N/O	0								
		N/C	0								
Degree of Protection			IP20								
Design			surface mounting								
Contact sequence			<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>1</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>0</td> <td></td> <td></td> <td></td> </tr> </table>	1	X	X	X	0			
1	X	X	X								
0											
Motor rating AC-23A, 50 - 60 Hz											
400 V	P	kW	80								
Rated uninterrupted current	I_u	A	160								
Note on rated uninterrupted current I_u			Rated uninterrupted current I_u is specified for max. cross-section.								

Technical data

General

Standards			IEC/EN 60947, VDE 0660, IEC/EN 60204 Switch-disconnector according to IEC/EN 60947-3
Certifications			CE, RoHs, KEMA, EAC, Lloyds
Ambient temperature			
Operation	θ	°C	-25 - +55
Storage	θ	°C	-30 - +80
Overtoltage category/pollution degree			III/3
Rated impulse withstand voltage	U_{imp}	kV	6
Rated insulation voltage	U_i	V	1000
Mounting position			As required

Contacts

Mechanical variables			
Number of poles			3 pole
Auxiliary contacts			
		N/O	0
		N/C	0
Electrical characteristics			

Rated operational voltage	U_e	V AC	690
Rated uninterrupted current	I_u	A	160
Note on rated uninterrupted current I_u			Rated uninterrupted current I_u is specified for max. cross-section.
Short-circuit rating			
fuse			125
Rated conditional short-circuit current	I_q	kA	415 V: 30 690 V: 50
Breaking current		kA	13.7
max. let-through energy		kA^2s	134
Rated short-time withstand current (1 s current)	I_{cw}	A_{rms}	2500
Note on rated short-time withstand current I_{cw}			Current for a time of 1 second
Heat dissipation per pole, current-dependent	P_{vid}	W	7.4

Switching capacity

Rated breaking capacity $\cos \varphi$ to IEC 60947-3		A	
400/415 V		A	10000
500 V		A	528
690 V		A	336
Safe isolation to EN 61140			
Current heat loss per contact at I_e		W	7.4
Lifespan, mechanical	Operations		10000
AC			
AC-21A			
Rated operational current switch			
400 V 415 V	I_e	A	160
500 V	I_e	A	160
690 V	I_e	A	160
AC-22A			
Rated operational current switch			
400 V 415 V	I_e	A	160
500 V	I_e	A	160
690 V	I_e	A	160
AC-23A			
Rated operational current switch			
400 V 415 V	I_e	A	160
500 V	I_e	A	66
690 V	I_e	A	42
Motor rating AC-23A, 50 - 60 Hz			
400 V 415 V	P	kW	80
500 V	P	kW	45
690 V	P	kW	37

Terminal capacities

Flexible with ferrules to DIN 46228		mm^2	
flexible		mm^2	6 - 70
Stripping length		mm	21
Tightening torque for terminal screw		Nm	7

Technical safety parameters:

Notes			B10 _q values as per EN ISO 13849-1, table C1
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Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I_n	A	160
Heat dissipation per pole, current-dependent	P_{vid}	W	7.4
Equipment heat dissipation, current-dependent	P_{vid}	W	0
Static heat dissipation, non-current-dependent	P_{vs}	W	0

Heat dissipation capacity	P_{diss}	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	55
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
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 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric 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 Insulation properties			
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 7.0

Low-voltage industrial components (EG000017) / Switch disconnecter (EC000216)			
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnecter (ec@ss10.0.1-27-37-14-03 [AKF060013])			
Version as main switch			Yes
Version as maintenance-/service switch			Yes
Version as safety switch			No
Version as emergency stop installation			No
Version as reversing switch			No
Number of switches			1
Max. rated operation voltage U_e AC		V	690
Rated operating voltage		V	690 - 690
Rated permanent current I_u		A	160
Rated permanent current at AC-23, 400 V		A	160
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 I_{cw}		kA	2.5
Rated operation power at AC-23, 400 V		kW	75
Switching power at 400 V		kW	0
Conditioned rated short-circuit current I_q		kA	50
Number of poles			3
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		Built-in device fixed built-in technique
Suitable for ground 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		Yes
Colour control element		Other
Type of control element		Other
Interlockable		No
Type of electrical connection of main circuit		Screw connection
Degree of protection (IP), front side		IP20
Degree of protection (NEMA)		Other

Assets (links)

Declaration of CE Conformity

00003270

Instruction Leaflets

IL008025ZU2018_05

Additional product information (links)

IL008025ZU Switch-disconnector DCM, DMM

IL008025ZU Switch-disconnector DCM, DMM ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL008025ZU2018_12.pdf