

Part no.

Article no.

Switch-disconnector, 3 pole + N, 63 A, With black rotary handle and drive

DCM-63/1

1314004



Delivery program

Derivery program			
Product range			Switch-disconnector Main switch maintenance switch
Part group reference			DCM
			With black rotary handle and drive shaft
Number of poles			3 pole + N (direct)
Auxiliary contacts			
Ϋ́		N/0	0
7		N/C	0
Notes			1 padlock, Ø 5 mm
Locking facility			Lockable in the 0 (Off) position
Degree of Protection			IP20
Design			surface mounting
Contact sequence			$ \begin{array}{c c} L1 & L2 & L3 \\ \hline 1 & 1 & 1 \\ 2 & 1 \\ 2 & 1 \\ 2 & 1 \\ 1 & 1 \\$
Motor rating AC-23A, 50 - 60 Hz			
400 V	Р	kW	30
Rated uninterrupted current	lu	А	63
Connection technique			Vertical connection

Technical data

General			
Standards			IEC/EN 60947, VDE 0660, IEC/EN 60204, Switch-disconnector according to IEC/EN 60947-3
Certifications			CE, RoHs, KEMA, GOST-R, Lloyds
Ambient temperature			
Operation	9	°C	-25 - +55
Storage	9	°C	-30 - +80
Overvoltage category/pollution degree			111/3
Rated impulse withstand voltage	U _{imp}	kV	6
Rated insulation voltage	Ui	V	690
Mounting position			As required
Protection against direct contact when actuated from front (EN 50274)			Finger and back-of-hand proof

Contacts

Contacts			
Mechanical variables			
Number of poles			3 pole + N (direct)
Auxiliary contacts			
		N/0	0
		N/C	0
Electrical characteristics			
Rated operational voltage	Ue	V AC	415
Rated uninterrupted current	lu	А	63
Note on rated uninterrupted current !u			Rated uninterrupted current lu is specified for max. cross-section.
Short-circuit rating			
fuse			50
Rated conditional short-circuit current	Iq	kA	50
Breaking current		kA	7
max. let-through energy		kA ² s	12
Rated short-time withstand current (1 s current)	I _{cw}	A _{rms}	1500
Note on rated short-time withstand current lcw			Current for a time of 1 second
Rated short-circuit making capacity	I _{cm}	kA _{eff}	1.4
Switching capacity			
Rated breaking capacity $\cos \phi$ to IEC 60947-3		А	
400/415 V		А	504
Safe isolation to EN 61140			
Current heat loss per contact at ${\rm I}_{\rm e}$		W	3.9
Lifespan, mechanical	Operations		10000
AC			
AC-21A			
Rated operational current switch			
400 V 415 V	le	А	63
AC-22A			
Rated operational current switch			
400 V 415 V	I _e	А	63
AC-23A			
Rated operational current switch			
400 V 415 V	l _e	А	63
Motor rating AC-23A, 50 - 60 Hz	Р	kW	
400 V 415 V	Р	kW	30
Terminal capacities			
Solid		mm ²	2.5 - 16
Flexible with ferrules to DIN 46228		mm ²	
flexible		mm ²	1.5 - 25
Max. tightening torque		Nm	3
Technical safety parameters:			
Notes			B10 _d values as per EN ISO 13849-1, table C1

Design verification as per IEC/EN 61439

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Technical data for design verification			
Rated operational current for specified heat dissipation	I _n	А	63
Heat dissipation per pole, current-dependent	P _{vid}	W	3.9
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 6.0

Number of auxiliary contacts as change-over contact

Low voltage industrial companyor	(EG000017) / Switch disconnector (EC0002	1161
		2107

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss8.1-27-37-14-03 [AKF060010]) Version as main switch Yes Version as maintenance-/service switch Yes No Version as safety switch Version as emergency stop installation No Version as reversing switch No ٧ 415 Max. rated operation voltage Ue AC ٧ Rated operating voltage 415 - 415 Rated permanent current lu Δ 63 Rated permanent current at AC-21, 400 V 63 А kW Rated operation power at AC-3, 400 V 0 Rated short-time withstand current lcw kA 1.5 Rated operation power at AC-23, 400 V kW 63 Switching power at 400 V kW 0 Conditioned rated short-circuit current Iq kA 0 3 Number of poles Number of auxiliary contacts as normally closed contact 0 Number of auxiliary contacts as normally open contact 0 0

Motor drive optional

Motor drive integrated

Voltage release optional

Suitable for ground mounting

Suitable for front mounting 4-hole Suitable for front mounting center

Device construction

No

No

No

Yes

No

No

Built-in device fixed built-in technique

Suitable for distribution board installation	Yes
Suitable for intermediate mounting	No
Colour control element	Black
Type of control element	Toggle
Interlockable	No
Type of electrical connection of main circuit	Screw connection
Degree of protection (IP), front side	IP20

Dimensions

