

# Switch-disconnector, 4 pole, 40 A, With blue rotary handle and drive shaft, flush mounting, Vertical connection $\,$



Part no. DCM-40/4+CM Article no. 1314111

Delivery program			
Product range			Switch-disconnector Main switch maintenance switch
Part group reference			DCM
			With blue rotary handle and drive shaft
Number of poles			4 pole
Auxiliary contacts			
\ <sup>1</sup>		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			flush mounting
Contact sequence			$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
Motor rating AC-23A, 50 - 60 Hz			
400 V	P	kW	20
Rated uninterrupted current	I <sub>u</sub>	Α	40

### **Technical data**

Connection technique

General

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			III/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

Vertical connection

Contacts			
Mechanical variables			
Number of poles			4 pole
Auxiliary contacts			
		N/0	0
		N/C	0
Electrical characteristics			
Rated operational voltage	U <sub>e</sub>	V AC	415
Rated uninterrupted current	I <sub>u</sub>	Α	40
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		kA²s	12
Rated short-time withstand current (1 s current)	I <sub>cw</sub>	$A_{rms}$	1000
Note on rated short-time withstand current lcw			Current for a time of 1 second
Rated short-circuit making capacity	I <sub>cm</sub>	kA <sub>eff</sub>	2.2
Switching capacity			
Rated breaking capacity cos φ to IEC 60947-3		Α	
400/415 V		Α	320
Safe isolation to EN 61140			
Current heat loss per contact at I <sub>e</sub>		W	3
Lifespan, mechanical	Operations		10000
AC			
AC-21A			
Rated operational current switch			
400 V 415 V	I <sub>e</sub>	Α	40
AC-22A			
Rated operational current switch			
400 V 415 V	I <sub>e</sub>	Α	40
AC-23A			
Rated operational current switch			
400 V 415 V	I <sub>e</sub>	Α	40
Motor rating AC-23A, 50 - 60 Hz	P	kW	
400 V 415 V	P	kW	20
Terminal capacities Solid		mm <sup>2</sup>	2.5 - 16
Flexible with ferrules to DIN 46228		mm <sup>2</sup>	
flexible		mm <sup>2</sup>	1.5 - 25
Max. tightening torque		Nm	3
Technical safety parameters:			

Solid	mm <sup>2</sup> 2.5 - 16
Flexible with ferrules to DIN 46228	mm <sup>2</sup>
flexible	mm <sup>2</sup> 1.5 - 25
Max. tightening torque	Nm 3

 $\mathrm{B10_{d}}$  values as per EN ISO 13849-1, table C1 Notes

## Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	40
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	3
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	0
Static heat dissipation, non-current-dependent	P <sub>vs</sub>	W	0
Heat dissipation capacity	P <sub>diss</sub>	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 bobserved.
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**

Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)

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])

[AKF060010])		
Version as main switch		No
Version as maintenance-/service switch		No
Version as safety switch		No
Version as emergency stop installation		No
Version as reversing switch		No
Max. rated operation voltage Ue AC	V	415
Rated operating voltage	V	415 - 415
Rated permanent current lu	Α	40
Rated permanent current at AC-21, 400 V	Α	40
Rated operation power at AC-3, 400 V	kW	0
Rated short-time withstand current lcw	kA	1
Rated operation power at AC-23, 400 V	kW	0
Switching power at 400 V	kW	20
Conditioned rated short-circuit current Iq	kA	0
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		Built-in device fixed built-in technique
Suitable for ground mounting		Yes
Suitable for front mounting 4-hole		No
Suitable for front mounting center		No

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

## **Dimensions**

