# DATASHEET - DMM-40/1+SK



Switch-disconnector, DMM, 40 A, 3P + N (solid), With blue rotary handle (Type C) and drive shaft, Vertical connection



Part no. DMM-40/1+SK Catalog No. 1314054

Delivery program			
Product range			Switch-disconnector Main switch maintenance switch
Part group reference			DMM
			With blue rotary handle (Type C) and drive shaft
Information about equipment supplied			auxiliary contact fitted by user.
Number of poles			3P + N (solid)
Auxiliary contacts			
•		N/0	0
7		N/C	0
Notes			1 padlock, #5 mm
Locking facility			Lockable in the 0 (Off) position
Degree of Protection			IP20
Design			flush mounting
Contact sequence			$ \begin{array}{c cccc} L1 & L2 & L3 \\ \hline                                   $
Motor rating AC-23A, 50 - 60 Hz			
400 V	Р	kW	22
Rated uninterrupted current	l <sub>u</sub>	Α	40
Note on rated uninterrupted current !u			Rated uninterrupted current $\mathbf{I}_{\mathbf{u}}$ is specified for max. cross-section.
Connection technique			Vertical connection

# Technical data

		IEC/EN 60947, VDE 0660, IEC/EN 60204 Switch-disconnector according to IEC/EN 60947-3
		CE, RoHs, KEMA, EAC, Lloyds
θ	°C	-25 - +55
θ	°C	-30 - +80
		III/3
$U_{imp}$	kV	6
Ui	V	1000
	8 U <sub>imp</sub>	8 °C

Mounting position			As required
Contacts			7.10 ( Oquillo 0
Mechanical variables			
Number of poles			3P + N (solid)
Auxiliary contacts			
		N/O	0
		N/C	0
Electrical characteristics			
Rated operational voltage	U <sub>e</sub>	V AC	690
Rated uninterrupted current	Iu	Α	40
Note on rated uninterrupted current !u			Rated uninterrupted current $I_u$ is specified for max. cross-section.
Short-circuit rating			
fuse			80/50
Rated conditional short-circuit current	Iq	kA	In = 80: 50
			In = 50: 100
Breaking current		kA	In = 80: 9.7 In = 50: 9.6
max. let-through energy		kA <sup>2</sup> s	In = 80: 44
			In = 50: 10
Rated short-time withstand current (1 s current)	I <sub>cw</sub>	A <sub>rms</sub>	1000
Note on rated short-time withstand current lcw			Current for a time of 1 second
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	4
Switching capacity		٨	
Rated breaking capacity cos φ to IEC 60947-3 400/415 V		A	320
500 V		A	264
690 V		A	200
Safe isolation to EN 61140		^	200
Current heat loss per contact at I <sub>e</sub>		W	4
Lifespan, mechanical	Operations	-	8500
AC	орстинина		0000
AC-21A			
Rated operational current switch			
400 V 415 V	I <sub>e</sub>	Α	40
500 V	I <sub>e</sub>	Α	40
690 V	I <sub>e</sub>	Α	40
AC-22A	·e	, ,	
Rated operational current switch			
400 V 415 V	I <sub>e</sub>	Α	40
500 V	I <sub>e</sub>	A	40
690 V	I <sub>e</sub>	A	63
AC-23A	·e	,,	
Rated operational current switch			
400 V 415 V	l <sub>e</sub>	A	40
500 V		A	33
690 V	l <sub>e</sub>	A	25
	l <sub>e</sub>		2.0
Motor rating AC-23A, 50 - 60 Hz 400 V 415 V	P P	kW	22
400 V 415 V 500 V	P P	kW	22
690 V	P	kW	22
Terminal capacities	•	K.V.V	
Solid		mm <sup>2</sup>	2.5 - 16
Flexible with ferrules to DIN 46228		mm <sup>2</sup>	
flexible			1.5 - 25
HUAIDIG		mm <sup>2</sup>	
Stripping length		mm	14

Tightening torque for terminal screw	N	Vm	2
Technical safety parameters:			
Notes			B10 <sub>d</sub> values as per EN ISO 13849-1, table C1

# **Design verification as per IEC/EN 61439**

Design verincation as per ille/liv 01433			
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	4
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 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**

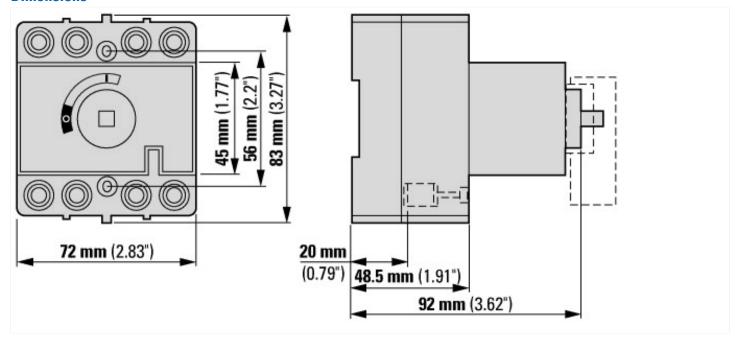
Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss10.0.1-27-37-14-03 [AKF060013])

[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 Ue AC	V	690
Rated operating voltage	V	690 - 690
Rated permanent current lu	Α	40
Rated permanent current at AC-23, 400 V	Α	40

А	40
kW	0
kA	1
kW	22
kW	0
kA	100
	3
	0
	0
	0
	No
	No
	No
	Built-in device fixed built-in technique
	Yes
	No
	No
	Yes
	No
	Other
	Toggle
	No
	Screw connection
	IP20
	Other
	kW kA kW

## **Dimensions**



## **Assets (links)**

**Declaration of CE Conformity** 

00003270

**Instruction Leaflets** 

IL008025ZU2018\_05

## **Additional product information (links)**

IL008025ZU Switch-disconnector DCM, DMM