DATASHEET - DMM-63/4-SK



Switch-disconnector, DMM, 63 A, 4 pole, Stop Function optional, Without rotary handle and drive shaft, Vertical connection



Part no. DMM-63/4-SK Catalog No. 1314158

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Delivery program			
Product range			Switch-disconnector Main switch maintenance switch
Part group reference			DMM
Stop Function			optional
			Without rotary handle and drive shaft
Information about equipment supplied			auxiliary contact fitted by user.
Number of poles			4 pole
Auxiliary contacts			
		N/O	0
1		N/C	0
7		14/0	
Degree of Protection			IP20
Design			surface mounting
Contact sequence			$ \begin{array}{c cccc} L1 & L2 & L3 \\ \hline & 1 & 3 & 5 \\ \hline & 1 & 6 & N \end{array} $ $ \begin{array}{c cccc} T1 & T2 & T3 \\ \hline & 1 & 2 & 3 & 3 \\ \hline & 1 & 3 & 3 & 3 \\ \hline $
Contact sequence Motor rating AC-23A, 50 - 60 Hz			$ \begin{array}{c c} & 1 \\ \hline & 1 \\ \hline & 1 \end{array} $ $ \begin{array}{c c} & 1 \\ \hline & 1 \end{array} $ $ \begin{array}{c c} & 1 \\ \hline & 1 \end{array} $ $ \begin{array}{c c} & 1 \\ \hline & 1 \end{array} $ $ \begin{array}{c c} & 1 \\ \hline & 1 \end{array} $
	P	kW	$ \begin{array}{c c} & 1 \\ \hline & 1 \\ \hline & 1 \end{array} $ $ \begin{array}{c c} & 1 \\ \hline & 1 \end{array} $ $ \begin{array}{c c} & 1 \\ \hline & 1 \end{array} $ $ \begin{array}{c c} & 1 \\ \hline & 1 \end{array} $ $ \begin{array}{c c} & 1 \\ \hline & 1 \end{array} $
Motor rating AC-23A, 50 - 60 Hz	P I _u	kW A	$ \begin{array}{c cccc} & 1 & 13 & 15 & 1N \\ \hline & 2 & 4 & 6 & N \end{array} $ $ \begin{array}{c ccccc} & 1 & 12 & 13 & 13 & 13 & 13 & 13 & 13 $

Technical data

Connection technique

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	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	\mathbf{U}_{i}	V	1000
Mounting position			As required

Vertical connection

Contacts

Contacts			
Mechanical variables			
Number of poles			4 pole
Auxiliary contacts			
		N/O	0
		N/C	0
Electrical characteristics			
Rated operational voltage	U _e	V AC	690
Rated uninterrupted current	I _u	Α	63
Note on rated uninterrupted current !u			Rated uninterrupted current l_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 ² s	In = 80: 44 In = 50: 10
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
Heat dissipation per pole, current-dependent	P_{vid}	W	1.3
Switching capacity	· Viu		
Rated breaking capacity cos φ to IEC 60947-3		Α	
400/415 V		Α	504
500 V		Α	264
690 V		Α	200
Safe isolation to EN 61140			
Current heat loss per contact at I _e		W	6
Lifespan, mechanical	Operations		8500
AC			
AC-21A			
Rated operational current switch			
400 V 415 V	I _e	Α	63
500 V	I _e	Α	63
690 V	I _e	Α	63
AC-22A	·e		
Rated operational current switch			
400 V 415 V	I _e	A	63
500 V		A	63
	l _e		
690 V	I _e	Α	63
AC-23A			
Rated operational current switch			20
400 V 415 V	l _e	A	63
500 V	I _e	Α	33
690 V	I _e	Α	25
Motor rating AC-23A, 50 - 60 Hz	Р	kW	
400 V 415 V	Р	kW	30
500 V	Р	kW	22
690 V	Р	kW	22
Terminal capacities Solid		mm ²	2.5 - 16
Flexible with ferrules to DIN 46228		mm ²	
flexible			1.5 - 25
		mm ²	
Stripping length		mm	14
Tightening torque for terminal screw		Nm	2

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

Design vernication as per 166/614 01453			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	63
Heat dissipation per pole, current-dependent	P _{vid}	W	1.3
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 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])

	Yes
	Yes
	No
	No
	No
	1
V	690
V	690 - 690
Α	63
А	40
А	63
	V A A

Rated short-time withstand current low Rated operation power at AC-23, 400 V RW 30 Switching power at 400 V Conditioned rated short-circuit current Iq Rumber of poles Rumber of auxiliary contacts as normally closed contact Rumber of auxiliary contacts as normally closed contact Rumber of auxiliary contacts as normally open contact Rumber of auxiliary contacts as normally open contact Rumber of auxiliary contacts as change-over contact Rumber of auxiliary contacts as change-over contact Rumber of inviting optional Rutor drive pitional Rutor drive pitional Rutor drive pitional Rutor drive integrated Voltage release optional Device construction Suitable for ground mounting Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting entire Suitable for front mounting entire Suitable for intermediate mounting Colour control element Type of control element Type of control element Type of control element Type of electrical connection of main circuit Degree of protection (IP), front side			
Rated operation power at AC-23, 400 V	Rated operation power at AC-3, 400 V	kW	0
Switching power at 400 V kW 0 Conditioned rated short-circuit current Iq kA 100 Number of poles 4 4 Number of auxiliary contacts as normally closed contact 0 0 Number of auxiliary contacts as normally open contact 0 0 Motor drive optional No No Motor drive integrated No No Voltage release optional No No Device construction Suitable for ground mounting Yes Suitable for front mounting 4-hole No No Suitable for front mounting centre No No Suitable for intermediate mounting Yes No Suitable for intermediate mounting Yes No Colour control element Other Other Type of control element Other Other Interlockable No Screw connection Type of electrical connection of main circuit Screw connection Screw connection Degree of protection (IP), front side Ip20	Rated short-time withstand current lcw	kA	1.5
Conditioned rated short-circuit current Iq KA 100 Number of poles 4 4 Number of auxiliary contacts as normally closed contact 6 0 Number of auxiliary contacts as change-over contact 6 0 Motor drive optional No 0 Motor drive integrated No 0 Voltage release optional No 0 Device construction 8 Built-in device fixed built-in technique Suitable for ground mounting Yes No Suitable for front mounting 4-hole No No Suitable for distribution board installation Yes No Suitable for intermediate mounting Yes No Colour control element No No Type of control element Other Other Interlockable No Other Type of electrical connection of main circuit Screw connection Screw connection Degree of protection (IP), front side Forew connection Polantical connection	Rated operation power at AC-23, 400 V	kW	30
Number of poles Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact No Motor drive optional No No No Voltage release optional No Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting 4-hole Suitable for distribution board installation Suitable for intermediate mounting Colour control element Vipe of control element No Colour control element No Type of electrical connection of main circuit Degree of protection (IP), front side	Switching power at 400 V	kW	0
Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact No Motor drive optional Motor drive integrated No Voltage release optional No Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting centre Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Type of electrical connection of main circuit Degree of protection (IP), front side O O O O O O O O O O O O O	Conditioned rated short-circuit current Iq	kA	100
Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact No Motor drive optional No No Voltage release optional No Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting entre Suitable for firont mounting oentre Suitable for distribution board installation Suitable for intermediate mounting Suitable for intermediate mounting Colour control element Type of control element Type of centrol element Degree of protection (IP), front side Degree of protection (IP), front side Degree of protection (IP), front side	Number of poles		4
Number of auxiliary contacts as change-over contact Motor drive optional Motor drive integrated No No Voltage release optional Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting centre Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Type of electrical connection of main circuit Degree of protection (IP), front side Degree of protection (IP), front side	Number of auxiliary contacts as normally closed contact		0
Motor drive optional Motor drive integrated No No Voltage release optional No Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting centre No Suitable for firont mounting centre No Suitable for intermediate mounting Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side No No No No Screw connection No Screw connection No Screw connection No Screw connection No	Number of auxiliary contacts as normally open contact		0
Motor drive integrated No Notage release optional No Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting centre Suitable for first mounting centre Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side	Number of auxiliary contacts as change-over contact		0
Voltage release optional Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting centre Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Interlockable Degree of protection (IP), front side No Built-in device fixed built-in technique Yes No No No Other Other No Screw connection IP20	Motor drive optional		No
Device construction Built-in device fixed built-in technique Yes Suitable for ground mounting 4-hole No Suitable for front mounting centre No Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Interlockable No Type of electrical connection of main circuit Degree of protection (IP), front side Built-in device fixed built-in technique Yes No No Other Other Screw connection IP20	Motor drive integrated		No
Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting centre No Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side Yes No No Other Other Screw connection IP20	Voltage release optional		No
Suitable for front mounting 4-hole Suitable for front mounting centre No Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Other Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side No No No No No No Prove connection No No IP20	Device construction		Built-in device fixed built-in technique
Suitable for front mounting centre Suitable for distribution board installation Yes Suitable for intermediate mounting No Colour control element Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side No No No Interlockable No IP20	Suitable for ground mounting		Yes
Suitable for distribution board installation Yes Suitable for intermediate mounting No Colour control element Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side Yes No Other No Screw connection IP20	Suitable for front mounting 4-hole		No
Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side No No IP20	Suitable for front mounting centre		No
Colour control element Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side Other No Screw connection IP20	Suitable for distribution board installation		Yes
Type of control element Interlockable No Type of electrical connection of main circuit Degree of protection (IP), front side Other No Screw connection IP20	Suitable for intermediate mounting		No
Interlockable No Type of electrical connection of main circuit Screw connection Degree of protection (IP), front side IP20	Colour control element		Other
Type of electrical connection of main circuit Degree of protection (IP), front side Screw connection IP20	Type of control element		Other
Degree of protection (IP), front side IP20	Interlockable		No
	Type of electrical connection of main circuit		Screw connection
Degree of protection (NEMA) Other	Degree of protection (IP), front side		IP20
	Degree of protection (NEMA)		Other

Dimensions

