DATASHEET - QM40/3N



Changeover switch, QM, 40 A, 2 x 3 pole + N (switched), without rotary handle, With drive shaft, 6 mm square



Part no. QM40/3N 1319970 Catalog No.

Delivery	program
Product range	

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Product range			Changeover switches
Part group reference			QM
Stop Function			optional
			without rotary handle With drive shaft, 6 mm square
Information about equipment supplied			auxiliary contact fitted by user.
Number of poles			2 x 3 pole + N (switched)
Auxiliary contacts			
1		N/0	0
7		N/C	0
Degree of Protection			IP20
Design			rear mounting
Rated uninterrupted current	I _u	Α	40
Note on rated uninterrupted current $\boldsymbol{!}_{\boldsymbol{u}}$			Rated uninterrupted current $\mathbf{I}_{\mathbf{u}}$ is specified for max. cross-section.

Technical data

General

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Standards			IEC/EN 60947, VDE 0660, IEC/EN 60204 Switch-disconnector according to IEC/EN 60947-3
Certifications			CE, RoHs
Ambient temperature			
Operation	8	°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			Top-hat rail mounting
Mounting position			As required
Contacts			

Contacts			
Mechanical variables			
Number of poles			2 x 3 pole + N (switched)
Auxiliary contacts			
		N/0	0
		N/C	0
Electrical characteristics			
Rated uninterrupted current	I _u	Α	40
Note on rated uninterrupted current !u			Rated uninterrupted current $\mathbf{I}_{\mathbf{u}}$ is specified for max. cross-section.
Heat dissipation per pole, current-dependent	P _{vid}	W	4

Switching capacity

Switching Capacity					
Safe isolation to EN 61140					
Current heat loss per contact at I _e	W 4				
Terminal capacities					
Solid	mm ² 2.5 - 16				
Flexible with ferrules to DIN 46228	mm ²				
flexible	mm ² 2.5 - 10				
Flexible	mm ² 4 - 10				
Stripping length	mm 10				
Tightening torque for terminal screw	Nm 1.8				
Technical safety parameters:					
Notes	B10 _d values as per EN ISO 13849-1, table C1				

Design verification as per IEC/EN 61439

Design vernication as per ieu/en 01439			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	40
Heat dissipation per pole, current-dependent	P _{vid}	W	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
EC/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 observed.
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switchgear must observed.
10.13 Mechanical function			The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

Technical data ETIM 5.0

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@ss8-27-37-14-03 [AKF060009])

Version as switch disconnector compact Yes

Version as main switch		No
Version as maintenance-/service switch		No
Version as safety switch		No
Version as emergency stop installation		No
Max. rated operation voltage Ue AC	V	690
Rated permanent current lu	Α	40
Rated operation power AC-3, 400 V	kW	11
Rated operation power at AC-23, 400 V	kW	15
Conditioned rated short-circuit current Iq	kA	0
Number of poles		8
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		No
Suitable for front mounting center		No
Suitable for distribution board installation		No
Suitable for intermediate mounting		No
Type of control element		-
Interlockable		No
Connection type main current circuit		Screw connection
Degree of protection (IP), front side		IP20

Dimensions 67 mm (2.64") 132 mm (5.2") 37.5 mm (1.48") 70 mm (2.76") 64 mm (2.52" 4.1 mm (0.16")

12.5 mm (0.49")

53.5 mm (2.11")