DATASHEET - DMV-250N/3



Switch-disconnector, DMV, 250 A, 3 pole, Stop Function optional, Without rotary handle and drive shaft



DMV-250N/3 Part no. 1814408 Catalog No.

Product range Part group reference Stop Function Notes Information about equipment supplied Auxiliary contacts Designe Designe Contact sequence Motor rating AC-23A, 50 - 60 Hz 400 V PP KW 147 Rated uninterrupted current Stop Function Switch disconnector Manian witch maintenance switch Main a worken maintenance switch DANV Optional Without rotary handle and drive shaft Visible contacts auxiliary contact fitted by user. including connection materials 3 pole PRO 1 PRO				
Motor rating AC-23A, 50 - 60 Hz Motors Motor Part group reference Motor rating AC-23A, 50 - 60 Hz Motor rating AC-23A, 50 - 60 H	Delivery program			
Stop Function Notes Notes Information about equipment supplied Number of poles Auxiliary contacts Degree of Protection Design Contact sequence Contact sequence Motor reating AC-23A, 50 - 60 Hz 400 V P LW 147 React ouninter rupted current Vishou crotary handle and drive shaft visible contacts auxiliary contact filted by user. including connection materials 3 pole NCC D IPO IPO IPO IPO IPO IPO IPO	Product range			Main switch
Notes Information about equipment supplied Infor	Part group reference			DMV
Notes Information about equipment supplied Number of poles Auxiliary contacts Degree of Protection Design Contact sequence Contact sequence Motor rating AC-23A, 50 - 60 Hz 400 V PRIVATION ACCORDANCE AUXILIARY CONTACTS N/C N/C PRIVATION ACCORDANCE Auxiliary contact fitsed by user. including connection materials. 3 pole N/C PO PO PO PO PO PO PO PO PO P	Stop Function			optional
Information about equipment supplied Number of poles Auxiliary contacts NVC Degree of Protection Design Contact sequence Contact sequence Motor rating AC-23A, 50 - 60 Hz 400 V P KW 147 Rated uninterrupted current Auxiliary contact fitted by user. including connection materials 3 pole auxiliary contact fitted by user. including connection materials 3 pole 3 pole 400 V P KW 147 400 V Rated uninterrupted current auxiliary contact fitted by user. including connection materials 3 pole 3 pole 400 V Rated by user. including connection materials 3 pole 400 V Rated by user. including connection materials 3 pole 400 V Rated auxiliary contact fitted by user. including connection materials 3 pole 400 V Rated williary contact fitted by user. including connection materials 3 pole 400 V Rated by user. including connection materials 3 pole 400 V Rated materials Ac-23A, 50 - 60 Hz 400 V Rated uninterrupted current 400 V Rated uninterrupted current				Without rotary handle and drive shaft
Number of poles Auxiliary contacts Number of poles Auxiliary cont	Notes			visible contacts
Auxiliary contacts N/O 0 N/C 0 Degree of Protection Design Contact sequence Contact sequence Motor rating AC-23A, 50 - 60 Hz 400 V Rated uninterrupted current N/O 0 IPO0 IPO0 IPO0 IPO0 IPO0 IPO0 IPO0 IP	Information about equipment supplied			auxiliary contact fitted by user. including connection materials
N/C 0 Degree of Protection Design Contact sequence Contact sequence Motor rating AC-23A, 50 - 60 Hz 400 V Readed uninterrupted current N/C 0 IP00 IP20 with terminal cover Surface mounting L1 L2 L3 L3 L3 L3 L5 L2 L3 L4 L6 T1 T2 T3 V V V V V V V V V V V V V V V V V V V	Number of poles			3 pole
Degree of Protection Design Contact sequence L1 L2 L3 L1 L3 L5 L1 L2 L3 L1 L2 L3 L1 L2 L3 L1 L2 L3 L1 L3 L5 L2 L3 L1 L3 L5 L2 L3 L1 L2 L3 L3 L5 L3 L5 L2 L3 L3 L5 L3 L5 L3 L5 L3 L5 L4 L6 T1 T2 T3 L5 L5 L	Auxiliary contacts			
Degree of Protection Degree of Protection Design Surface mounting Contact sequence L1 L2 L3 L1 L3 L5 L1 L3 L5 L1 L3 L5 L1 L3 L5 L1 L3 L3 L2 L3 L3 L5 L3 L5 L4 L5 L5	4		N/0	0
Design Contact sequence Contact sequence Motor rating AC-23A, 50 - 60 Hz 400 V P KW 147 Rated uninterrupted current IP20 with terminal cover surface mounting L1 L2 L3 L1 L3 L5 L1 L3 L5 L1 L2 L3 T1 T2 T3 Which is a sequence in the contact sequence in the cont	7		N/C	0
Contact sequence L1 L2 L3 L1 L3 L5 L2 L4 66 T1 T2 T3 0 Motor rating AC-23A, 50 - 60 Hz 400 V P kW 147 Rated uninterrupted current lu A 250	Degree of Protection			
Motor rating AC-23A, 50 - 60 Hz 400 V P kW 147 Rated uninterrupted current I _u A 250	Design			surface mounting
Motor rating AC-23A, 50 - 60 Hz 400 V P kW 147 Rated uninterrupted current I _u A 250				
400 V P kW 147 Rated uninterrupted current I _u A 250	Contact sequence			$ \begin{array}{c c} & 1 \\ \hline & 1 \\ \hline & 2 \end{array} $ $ \begin{array}{c} & 1 \\ \hline & 4 \end{array} $ $ \begin{array}{c} & 6 \end{array} $
Rated uninterrupted current I _u A 250	Motor rating AC-23A, 50 - 60 Hz			
	400 V	Р	kW	147
Note on rated uninterrupted current I _u is specified for max. cross-section.	Rated uninterrupted current	Iu	Α	250
	Note on rated uninterrupted current !u			Rated uninterrupted current $\mathbf{I}_{\mathbf{u}}$ is specified for max. cross-section.

Technical data General

delleral			
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	θ	°C	-25 - +55
Storage	9	°C	-30 - +80
Overvoltage category/pollution degree			III/3

Rated impulse withstand voltage Rated insulation voltage	U_{imp}		8
	Ui	V	1000
Mounting position	01	·	As required
Contacts			As required
Mechanical variables			
Number of poles			3 pole
Auxiliary contacts			
		N/O	0
		N/C	0
Electrical characteristics			
Rated operational voltage	U _e	V AC	690
Rated uninterrupted current	Iu	Α	250
Note on rated uninterrupted current !u			Rated uninterrupted current I _u is specified for max. cross-section.
Short-circuit rating			
fuse			500/250
Rated conditional short-circuit current	Iq	kA	In = 500: 50
			In = 250: 100
Breaking current		kA	In = 500: 40 In = 250: 33
max. let-through energy		kA ² s	In = 500: 1700
.			In = 250: 380
Rated short-time withstand current (1 s current)	I _{cw}	A _{rms}	12000
Note on rated short-time withstand current lcw			Current for a time of 0.3 seconds
Heat dissipation per pole, current-dependent	P_{vid}	W	3.75
Switching capacity			
Rated breaking capacity cos φ to IEC 60947-3		Α	
400/415 V		Α	2000
500 V		Α	1760
690 V		А	1120
Safe isolation to EN 61140			
Current heat loss per contact at I _e		W	3.75
Lifespan, mechanical	Operations		10000
AC			
AC-21A			
Rated operational current switch			050
400 V 415 V	l _e	Α	250
500 V	le	Α	250
690 V	l _e	A	250
AC-22A			
Rated operational current switch			
400 V 415 V	l _e	Α	250
500 V	l _e	Α	250
690 V	I _e	Α	250
AC-23A			
Rated operational current switch			
400 V 415 V	I _e	Α	250
500 V	l _e	Α	220
690 V	I _e	Α	140
Motor rating AC-23A, 50 - 60 Hz	Р	kW	
400 V 415 V	Р	kW	147
500 V	P	kW	160
690 V	P	kW	132
Terminal capacities			
Flat conductor connection with busbars		mm ²	120
Terminal screw			M8 x 20
Tightening torque for terminal screw		Nm	14

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 iec/en 01433			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	1000
Heat dissipation per pole, current-dependent	P _{vid}	W	3.75
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 be observed.
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switch gear 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

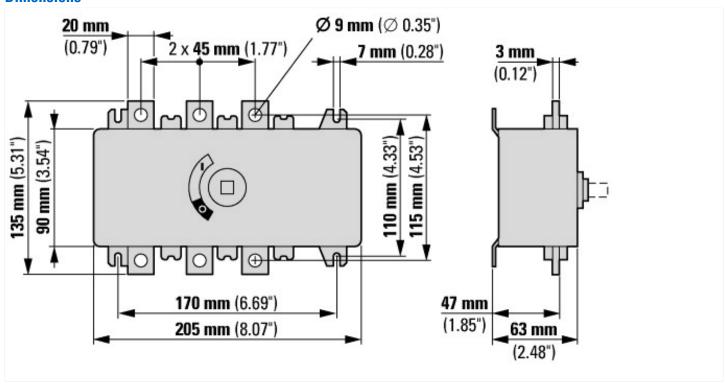
Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)

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])

[rind dodd for]		
Version as main switch		Yes
Version as maintenance-/service switch		Yes
Version as safety switch		No
Version as emergency stop installation		Yes
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	250
Rated permanent current at AC-23, 400 V	А	250
Rated permanent current at AC-21, 400 V	А	250

Rated operation power at AC-3, 400 V	kW	0
Rated short-time withstand current lcw	kA	12
Rated operation power at AC-23, 400 V	kW	140
Switching power at 400 V	kW	140
Conditioned rated short-circuit current Iq	kA	100
Number of poles		3
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		Complete device in housing
Suitable for ground mounting		Yes
Suitable for front mounting 4-hole		No
Suitable for front mounting centre		No
Suitable for distribution board installation		No
Suitable for intermediate mounting		No
Colour control element		Other
Type of control element		Other
Interlockable		No
Type of electrical connection of main circuit		Screw connection
Degree of protection (IP), front side		IP20
Degree of protection (NEMA)		Other

Dimensions



Additional product information (links)

IL008008Z Switch-disconnect	ors
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IL008008Z Switch-disconnectors https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL008008ZU2018_05.pdf