DATASHEET - DMV-1000N/3



Switch-disconnector, DMV, 1000 A, 3 pole, Stop Function optional, Without rotary handle and drive shaft



DMV-1000N/3 Part no. 1814445 Catalog No.

Product range Product range Part group reference Stop Function Notes Information about equipment supplied Information about equipment supplied Auxiliary contacts Purple Protection Designe Ornate of Protection Designe Ornate of Protection Designe Ornate of Sequence Ornate of Sequence Ornate of Sequence Ornate sequence Ornate sequence Motor rating AC-23A, 50 - 60 Hz 400 V P NW 425 Rated uninterrupted current DAW Optional Mains weeken maintenance switch Mains weeken witch Mains weeken maintenance switch Motor rating AC-23A, 50 - 60 Hz 400 V P NW 425 Rated uninterrupted current DAW Optional Switch terminal cover Switch disconnector materials Visible contacts applied applied visible contacts applied visible contacts applied applied applied visible contacts applied applied visible contacts applied applied visible contacts applied a				
Motor rating AC-23A, 50-60 Hz Action	Delivery program			
Stop Function 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 P NW QZ5 Information about equipment supplied Without ratary handlo and drive sheft Visible cortacts auxiliary contact titled by user. including connection materials 3 pole N/O 0 IPO 0	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 Contract sequence Motor reting AC-23A, 50 - 60 Hz 400 V P NWC Auxiliary Contacts Visible contacts auxiliary contact fitted by user. including connection materials 3 pole 1 PO 1 P	Stop Function			optional
Information about equipment supplied Number of poles Auxiliary contacts Polegree of Protection Design Contact sequence Contact sequence Motor rating AC-23A, 50 - 60 Hz 400 V P KW 425 Bated uninterrupted current auxiliary contact fitted by user. including connection materials applied auxiliary contact fitted by user. including connection materials applied auxiliary contact fitted by user. including connection materials applied auxiliary contact fitted by user. including connection materials applied auxiliary contact fitted by user. including connection materials applied auxiliary contact fitted by user. including connection materials applied auxiliary contact fitted by user. including connection materials applied applied Applied Auxiliary contact fitted by user. including connection materials applied Applied Auxiliary contact fitted by user. including connection materials applied Applied Auxiliary contact fitted by user. including connection materials Applied Auxiliary contact fitted by user. including connection materials Applied Auxiliary contact fitted by user. including connection materials Applied Auxiliary contact fitted by user. including connection materials Applied Auxiliary contact fitted by user. including connection materials Auxiliary contact f				Without rotary handle and drive shaft
Number of poles Auxiliary contacts No 0	Notes			visible contacts
Auxiliary contacts N/O D N/C D Protection Protecti	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 Read uninterrupted current N/C 0 N/C 0 IP00 IP20 with terminal cover surface mounting L1 L2 L3 L3 L3 L1 L3 L3 L2 L3 L3 L3 L2 L3 L3 L3 L3 L5 L2 L3 L3 L3 L3 L5 L3 L3 L3 L3 L3 L5 L3 L3 L3 L3 L5 L3 L	Number of poles			3 pole
Degree of Protection Design Contact sequence Contact sequence Motor rating AC-23A, 50 - 60 Hz 400 V P KW 425 Rated uninterrupted current N/C IP00 IP20 with terminal cover Surface mounting L1 L2 L3 L2 L3 L3 L5 L2 L4 6 T1 T2 T3 L3 L5 L2 L4 6 T1 T2 T3 L3 L5 L3 L5 L4 L6 T1 T2 T3 L5 L5 L2 L4 L5 L5	Auxiliary contacts			
Degree of Protection Degree of Protection Design Surface mounting Contact sequence L1 L2 L3 L1 L3 L5 L2 L4 6 T1 T2 T3 L2 L3 L3 L5 L4 L5 R5 L5 L5 R5 L5 L5 R5 L5	1		N/0	0
Design Contact sequence Contact sequence Motor rating AC-23A, 50 - 60 Hz 400 V P kW 425 Rated uninterrupted current IP20 with terminal cover surface mounting L1 L2 L3 L1 L3 L5 L1 L3 L5 L1 L2 L3 L2 L3 L3 L5 L1 L2 L3 L3 L5 L1 L2 L3 L3 L5 L1 L3 L3 L2 L3 L3 L5 L3 L5 L4 L6 T1 T2 T3 L3 L5 L4 L6 T1 T2 T3 L5 L5 L5 L5 L6 L5 L7 L5 L7 L5 L7 L5 L8	7		N/C	0
Contact sequence L1 L2 L3 L1 L3 L5 L2 L4 66 T1 T2 T3 UNIT T2 T3 UNIT T2 T3 UNIT T2 T3 UNIT T3 T3 UNIT T4 T4 T5 UNIT T4 T5 UNIT T5 T5 UNIT T5 T5 UNIT T5 T5 UNIT T6 T5 UNIT T6 T5 UNIT T7 T7 T5 UNIT T7 T7 UNIT T7 T5 UN	Degree of Protection			
Motor rating AC-23A, 50 - 60 Hz 400 V P kW 425 Rated uninterrupted current I _u A 1000	Design			surface mounting
Motor rating AC-23A, 50 - 60 Hz 400 V P kW 425 Rated uninterrupted current I _u A 1000				
400 V P kW 425 Rated uninterrupted current I _u A 1000	Contact sequence			$ \begin{array}{c c} & 1 \\ \hline & 1 \\ \hline & 2 \end{array} $ $ \begin{array}{c} & 1 \\ \hline & 4 \end{array} $ $ \begin{array}{c} & 5 \\ \hline & 6 \end{array} $
Rated uninterrupted current I _u A 1000	Motor rating AC-23A, 50 - 60 Hz			
	400 V	Р	kW	425
Note on rated uninterrupted current I _u is specified for max. cross-section.	Rated uninterrupted current	Iu	Α	1000
	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	U _{imp}	kV	12
Rated insulation voltage	Ui	V	1000
Mounting position	91		As required
Contacts			As required
Mechanical variables			
Number of poles			3 pole
Auxiliary contacts			
		N/0	0
		N/C	0
Electrical characteristics			
Rated operational voltage	U _e	V AC	690
Rated uninterrupted current	Iu	Α	1000
Note on rated uninterrupted current $\mathbf{I}_{\mathbf{u}}$			Rated uninterrupted current I _u is specified for max. cross-section.
Short-circuit rating			
fuse			1000/630
Rated conditional short-circuit current	Iq	kA	In = 1000: 50
			In = 630: 100
Breaking current		kA	In = 1000: 70 In = 630: 65
max. let-through energy		kA ² s	In = 1000: 4200
			In = 630: 3200
Rated short-time withstand current (1 s current)	I _{cw}	A _{rms}	36000
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	35.3
Switching capacity			
Rated breaking capacity cos φ to IEC 60947-3		Α	
400/415 V		Α	6072
500 V		Α	4600
690 V		Α	3496
Safe isolation to EN 61140			
Current heat loss per contact at I _e		W	44.75
Lifespan, mechanical	Operations		5000
AC			
AC-21A			
Rated operational current switch			
400 V 415 V	l _e	Α	1000
500 V	le	Α	1000
690 V	l _e	Α	1000
AC-22A			
Rated operational current switch			
400 V 415 V	I _e	Α	1000
500 V	I _e	Α	1000
690 V	I _e	Α	1000
AC-23A			
Rated operational current switch			
400 V 415 V	I _e	Α	759
500 V	I _e	Α	575
690 V	I _e	Α	437
Motor rating AC-23A, 50 - 60 Hz	P	kW	
400 V 415 V	P	kW	425
500 V	P	kW	425
690 V	P	kW	425
Terminal capacities			
Flat conductor connection with busbars		mm ²	600
Terminal screw			M12 x 35
Tightening torque for terminal screw		Nm	28

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	1000
Heat dissipation per pole, current-dependent	P _{vid}	W	35.3
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.	uioo	°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])

[and dood to]/		
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	1000
Rated permanent current at AC-23, 400 V	Α	759
Rated permanent current at AC-21, 400 V	Α	1000

Rated operation power at AC-3, 400 V MW 0 Rated short-time withstand current low 4A 36 Rated poperation power at AC-23, 400 V 4M 25 Switching power at 400 V 5M 35 Conditioned rated short-circuit current lq 4M 30 Number of poles 4M 30 Number of auxiliary contacts as normally closed contact 4M 6 Number of auxiliary contacts as change-over contact 4M 6 Motor drive optional 4M 7M No Motor drive integrated 4M 7M No Voltage release optional 4M 7M No Suitable for ground mounting 4M 7M No Suitable for front mounting 4-hole 4M 7M No Suitable for front mounting centre 7M 7M No Suitable for intermediate mounting 4M 7M No Suitable for intermediate mounting 4M 7M No Control element 4M 7M No			
Rated operation power at AC-23, 400 V Switching power at 400 V Conditioned rated short-circuit current Iq Number of poles Number of poles Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open 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 Number of invivi integrated Notor drive integrated device in housing Notor drive integrated device in housing Notor distribution board installation Notor drive integrated device in housing	Rated operation power at AC-3, 400 V	kW	0
Switching power at 400 V kW 375 Conditioned rated short-circuit current Iq kA 100 Number of poles 3 3 Number of auxiliary contacts as normally closed contact 6 6 Number of auxiliary contacts as normally open contact 6 6 Number of auxiliary contacts as change-over contact 6 7 Motor drive optional 6 No Motor drive integrated 7 No Voltage release optional 8 7 No Suitable for ground mounting 7 Yes Suitable for front mounting 4-hole 7 No Suitable for front mounting centre 7 No Suitable for distribution board installation 7 Yes Suitable for intermediate mounting 7 No Colour control element 7 No Type of control element 7 Other Interlockable 7 Other Type of electrical connection of main circuit 8 7 Other Type of electrical conn	Rated short-time withstand current lcw	kA	36
Conditioned rated short-circuit current Iq kA 100 Number of poles 3 3 Number of auxiliary contacts as normally closed contact 0 0 Number of auxiliary contacts as normally open contact 0 0 Mumber of auxiliary contacts as change-over contact 0 0 Motor drive optional No No Motor drive integrated No No Voltage release optional No No Device construction Complete device in housing Suitable for ground mounting Yes No Suitable for front mounting 4-hole No No Suitable for front mounting centre Yes No Suitable for intermediate mounting Yes No Suitable for intermediate mounting Yes No Colour control element Other Other Type of control element No Other Interlockable No Other Type of electrical connection of main circuit No Other Type of electrical connection of main circuit	Rated operation power at AC-23, 400 V	kW	425
Number of poles 3 Number of auxiliary contacts as normally open contact 0 Number of auxiliary contacts as change-over contact 0 Number of auxiliary contacts as change-over contact No Motor drive optional No Motor drive integrated No Voltage release optional 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 Yes 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 P20	Switching power at 400 V	kW	375
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 Notor drive optional Notor drive integrated No Notor drive integrated No No Voltage release optional No Complete device in housing Ves Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting oentre Suitable for distribution board installation 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	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 Motor drive integrated No Voltage release optional Device construction Suitable for ground mounting Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting entre Suitable for firont mounting centre Suitable for front mounting centre Suitable for fortn mounting centre Suitable for ottroil element Suitable for intermediate mounting Colour control element Type of control element Interlockable Ro Screw connection Screw connection P20 P20	Number of poles		3
Number of auxiliary contacts as change-over contact Motor drive optional Motor drive integrated Voltage release optional Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting centre Suitable for front mounting centre Suitable for front mounting centre Suitable for fortn mounting centre Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Type of control element Type of electrical connection of main circuit Degree of protection (IP), front side	Number of auxiliary contacts as normally closed contact		0
Motor drive optional Motor drive integrated Motor drive integrated No Voltage release optional No Device construction Complete device in housing Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting centre Suitable for distribution board installation 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 Screw connection Screw connection Screw connection	Number of auxiliary contacts as normally open contact		0
Motor drive integratedNoVoltage release optionalNoDevice constructionComplete device in housingSuitable for ground mountingYesSuitable for front mounting 4-holeNoSuitable for front mounting centreNoSuitable for distribution board installationYesSuitable for intermediate mountingNoColour control elementOtherType of control elementOtherInterlockableNoType of electrical connection of main circuitScrew connectionDegree of protection (IP), front sideIP20	Number of auxiliary contacts as change-over contact		0
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 Yes 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	Motor drive 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 Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side Complete device in housing Yes No No Other No 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 Type of electrical connection of main circuit Degree of protection (IP), front side Yes No No 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 distribution board installation Suitable for intermediate mounting No Colour control element Type of control element Other Type of control element Interlockable No Type of electrical connection of main circuit Degree of protection (IP), front side No Interlockable IP20	Device construction		Complete device in housing
Suitable for front mounting centre 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 No No No No Screw connection 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 Other No Screw connection IP20	Suitable for front mounting 4-hole		No
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 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 No 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

