## **DATASHEET - DMV-1000N/3**



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



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

Delivery program			
Product range			Switch-disconnector Main switch maintenance switch
Part group reference			DMV
Stop Function			optional
			Without rotary handle and drive shaft
Notes			visible contacts
Information about equipment supplied			auxiliary contact fitted by user. including connection materials
Number of poles			3 pole
Auxiliary contacts			
1		N/0	0
<b>7</b>		N/C	0
Degree of Protection			IP00 IP20 with terminal cover
Design			surface mounting
Contact sequence			L1 L2 L3 $ \begin{array}{c ccccc}  & 1 & 1 & 3 & 5 \\ \hline  & 1 & 1 & 6 & \\ \hline  & 1 & 1 & 72 & 73 & \\ \hline  & 1 & 1 & 1 & 1 & 1 & 1 \\ \hline  & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ \hline  & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ \hline  & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & $
Motor rating AC-23A, 50 - 60 Hz			
400 V	Р	kW	425
Rated uninterrupted current	l <sub>u</sub>	Α	1000

# Technical data General

Note on rated uninterrupted current  $!_{\mathsf{u}}$ 

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 uninterrupted current  $\mathbf{I}_{\mathbf{u}}$  is specified for max. cross-section.

Read invalidation voicinage   U	Rated impulse withstand voltage	$U_{imp}$	kV	12
Manuface position			V	
Contracts         Feet Page 1         Contract Page 1         Page 2		91	·	
Mechanisms of pipeles         Applie         Spuile           Autiliary contracts         NOC         0           Recording of pipeles         NOC         0           Record contracted recording of pipeles         Us         VAC         60           Read operational voltage         Us         VAC         60           Note on read animaterapped current l <sub>1</sub> In         A         100           Short occur trating         In         A         In         A0           Break deministration absort-circuit current         In         A         In         10000600           Read conditional short-circuit current         In         A         In         1000070           Breaking current         In         A         In         1000070           Read dishert-time withstand current low         In         A         In         1000070           Read absort-time withstand current low         In         A         2000         1000070           Read instractions project, current         In         A         8000072         2000070         4000070         4000070         4000070         4000070         4000070         4000070         4000070         4000070         4000070         4000070         4000070         <				as required
Assiliary contacts				
Bit chircle   Characteristics   No.   No	Number of poles			3 pole
Note	Auxiliary contacts			
Peter in a characteristics   Peter in a content of the content o			N/0	0
Rated operational voltage			N/C	0
Rated uninterrupted current lu   Note on nated uninterrupted current lu   is specified for max. cross-section.   Short-circuit rating	Electrical characteristics			
Note on rated uninterrupted current 1, sepecified for max. cross-section.	Rated operational voltage	U <sub>e</sub>	V AC	690
Short-circuit raining         Ituse         1000-8310           Rated conditional short-circuit current         Iq         AC         In - 1000-30           Breaking current         In - 1000-30         In - 1000-70           max, let-through energy         In - 5000-200         In - 5000-200           Rated short-time withstand current (I s current)         In - 6000-200         Current for a time of 0.3 seconds           Note on rated short-time withstand current (we have the same short same with stand current tow         Payed         May         Motion Canada           Note on rated short-time withstand current (apendent         Payed         May         Motion Canada         Motion Canada           Note or stated short-time withstand current (apendent         Payed         May         Motion Canada           Switching capacity         West         AC         Motion           Switching capacity         Payed         AC         Motion           Switching capacity cose to life 60047-3         AC         AC         AC         AC           Switching capacity cose to life 60047-3         Payed         AC	Rated uninterrupted current	I <sub>u</sub>	Α	1000
Rated conditional short-circuit current   Image: Rated characteristic current   Image: Rated short-time withstand current [1] s current [	Note on rated uninterrupted current !u			Rated uninterrupted current $I_{\rm u}$ is specified for max. cross-section.
Rated conditional short-circuit current         Iq         kA         In = 1000: 50           Breaking current         Lo         kA         In = 1000: 70           max. let-through energy         Lo         kB         In = 1000: 200           Rated short-time withstand current (1 s current)         Icw         Am         8000           Note on rated short-time withstand current (s current)         Ped         W         4.75           Heat dissipations per pole, current-dependent         Ped         W         4.75           Switching capacity         A         4.60         4.00           Switching capacity         A         4.60         4.00           So0 V         A         4.60         4.00           680 V         A         4.00         4.75           Current heat loss per contact at I <sub>e</sub> W         4.75         4.75           AC         A         4.00         4.75           AC 21A         B         4.00         4.75           AC 21A         B         4.00         1.00           B 80 V         Icw         A         1.00           B 80 V         Icw         A         1.00           B 80 V         Icw         A         1.0	Short-circuit rating			
Receiving current	fuse			1000/630
Breaking current         kA         in = 1000.770           max. let-through energy         kA*s         in = 500.835           Rated short-time withstand current (I s current)         I/ev         kA*s         3000           Note on rated short-time withstand current (low         User of the sime of 0.3 seconds           Note on rated short-time withstand current (low)         User of the sime of 0.3 seconds           Switching capacity         User of 0.2         User of 100 capacity           Rated pasking capacity cos of to EC 60947-3         A         6072           Sob V         A         6002           Sob V         A         6002           Safe isolation to EN 81140         Y         40         400           Current heat loss per contact at I <sub>q</sub> Y         400         400         400           AC 21         Y         400         400         400         400         400         400         400         400         400         400         400         400         400         400         400         400         400         400         400         400         400         400         400         400         400         400         400         400         400         400         400         400 <td>Rated conditional short-circuit current</td> <td>Iq</td> <td>kA</td> <td></td>	Rated conditional short-circuit current	Iq	kA	
Rated short-time withstand current (1 s current)				
max. let-through energy         LA*s         In = 1000- 42000 in = 638: 2200           Rated short-time withstand current (1 s current)         Icw         Arms         Current for a time of 0.3 seconds           Note on rated short-time withstand current (tow         Period         W         4.75           Switching capacity         V         4.75           Rated breaking capacity cos op to IEC 80947-3         A         6072           500 V         A         4600           680 V         A         3466           Current heal loss per contact at I.e         W         4.75           Lifespan, mechanical         Operations         5000           AC-21A         Fact and operational current switch         Fact and 1000           AC-21A         Rated operational current switch         I.e         A           400 V 415 V         I.e         A         1000           680 V         I.e         A         1000           AC-22A         I.e         A         1000           Rated operational current switch         I.e         A         1000           AC-23A         Rated operational current switch         I.e         A         1000           AC-23A         Rated operational current switch         I.e <t< td=""><td>Breaking current</td><td></td><td>kA</td><td></td></t<>	Breaking current		kA	
In = 533 3200   Rated short-time withstand current [1 s current)	max. let-through energy		kA <sup>2</sup> s	
Note on rated short-time withstand current low         Prid         W         44.75           Heat dissipation per pole, current-dependent         Prid         W         44.75           Switching capacity           Weaking capacity cos g to IEC 80947-3         A         6072           500 V         A         6072           500 V         A         4000           Safe isolation to EN 61140         A         400           Current heat loss per contact at l <sub>g</sub> W         44.75           Lifespan, mechanical         Operations         So00           AC-21A         So00           Rated operational current switch         I <sub>g</sub> A         1000           500 V         I <sub>g</sub> A         1000           690 V         I <sub>g</sub> A         1000           690 V         I <sub>g</sub> A         1000           AC-22A         I <sub>g</sub> A         1000           AC-23A         I <sub>g</sub> A         79           Actor (Signal Pr	- C.			
Heat dissipation per pole, current-dependent         P <sub>rid</sub> W         44.75           Switching capacity         A         6072           400/415 V         A         6072           500 V         A         3496           689 V         A         3396           Safe isolation to EN 61140         W         44.75           Current heat loss per contact at l <sub>e</sub> W         44.75           Lifespan, mechanical         Operations         5000           AC-21A         Safe disperational current switch         V         4000 415 V           400 V 415 V         l <sub>e</sub> A         1000           690 V         l <sub>e</sub> A         1000           AC-22A         Rated operational current switch         I <sub>e</sub> A         1000           690 V         l <sub>e</sub> A         1000           Rated operational current switch         I <sub>e</sub> <	Rated short-time withstand current (1 s current)	I <sub>cw</sub>	$A_{rms}$	36000
Switching capacity           Rate of breaking capacity cos φ to IEC 60947-3         A         6072           500 V         A         4000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000         6000 <td>Note on rated short-time withstand current lcw</td> <td></td> <td></td> <td>Current for a time of 0.3 seconds</td>	Note on rated short-time withstand current lcw			Current for a time of 0.3 seconds
Rated breaking capacity cos φ to IEC 69947-3         A         A           400/415 V         A         6072           500 V         A         400           690 V         A         3496           Current heat loss per contact at I <sub>0</sub> V         4.75           Lifespan, mechanical         Operations         Y         4.75           AC-21A         V	Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	44.75
A00/415 V   A   6002   500 V   A   4600     690 V   A   3496     Current heat loss per contact at I <sub>0</sub>   W   44.75     Lifespan, mechanical   A   1000     AC-21A   Rated operational current switch   I <sub>0</sub>   A   1000     AC-22A   Rated operational current switch   I <sub>0</sub>   A   1000     AC-22A   Rated operational current switch   I <sub>0</sub>   A   1000     AC-23A   Rated operational current switch   I <sub>0</sub>   A   1000     AC-23A   I <sub>0</sub>   A   1000     AC-25A   A   1000     AC-25A   A   1000     AC-25A   A   1000				
Sol V   Sol P   Sol				
690 V         Safe isolation to EN 61140         W         4.75           Current heat loss per contact at I <sub>e</sub> W         44.75           Lifespan, mechanical         Operations         B000           AC-21A         Fated operational current switch         Fated operational current switch         Fated operational current switch         Inc.         A         1000           500 V         I <sub>e</sub> A         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000				
Safe isolation to EN 61140       W       44.75         Current heat loss per contact at I₀       Operations       Food         AC       AC-21A       Food         Rated operational current switch       I₀       A         400 V 415 V       I₀       A       1000         500 V       I₀       A       1000         AC-22A       I₀       A       1000         AC-22A       I₀       A       1000         500 V       I₀       A       1000         500 V       I₀       A       1000         500 V       I₀       A       1000         690 V       I₀       A       1000         AC-23A       Food Patrons       Food Patrons       Food Patrons         Rated operational current switch       I₀       A       1000         AC-23A       Food Patrons       Food Patrons       Food Patrons         Motor rating AC-23A, 50 - 60 Hz       I₀       A       437         Motor rating AC-23A, 50 - 60 Hz       P       KW				
Current heat loss per contact at l <sub>e</sub> W       44.75         Lifespan, mechanical       Operations       5000         AC       AC-21A       5000         Rated operational current switch       Ie       A       1000         500 V       Ie       A       1000         690 V       Ie       A       1000         AC-22A       A       1000         Rated operational current switch       Ie       A       1000         500 V       Ie       A       1000         690 V       Ie       A       1000         AC-23A       Ie       A       1000         AC-23A       Ie       A       759         500 V       Ie       A       759         500 V       Ie       A       755         690 V       Ie       A       755         690 V       Ie       A       755         690 V       Ie       A       759         500 V       Ie       A       755         690 V       Ie       A       437         Motor rating AC-23A, 50 - 60 Hz       P       KW			Α	3496
Lifespan, mechanical       Operations       5000         AC-21A       Fated operational current switch       Ie       A         400 V 415 V       Ie       A       1000         500 V       Ie       A       1000         690 V       Ie       A       1000         AC-22A       Ie       A       1000         8 ated operational current switch       Ie       A       1000         690 V       Ie       A       1000         AC-23A       Ie       A       1000         Rated operational current switch       Ie       A       759         500 V       Ie       A       755         690 V       Ie       A       375         Motor rating AC-23A, 50 - 60 Hz       P       kW				
AC-21A  Rated operational current switch  400 V 415 V  1e A 1000  500 V  1e A 1000  AC-22A  Rated operational current switch  400 V 415 V  1e A 1000  AC-32A  Rated operational current switch  400 V			W	
AC-21A  Rated operational current switch  400 V 415 V		Operations		5000
Rated operational current switch       Ie       A       1000         500 V       Ie       A       1000         690 V       Ie       A       1000         AC-22A       Rated operational current switch       Ie       A       1000         500 V       Ie       A       1000         690 V       Ie       A       1000         AC-23A       Rated operational current switch       Ie       A       759         500 V       Ie       A       575         690 V       Ie       A       407         Motor rating AC-23A, 50 - 60 Hz       P       kW				
400 V 415 V   Ie				
Soul V			^	1000
690 V				
AC-22A  Rated operational current switch  400 V 415 V  Ie A 1000  500 V  Ie A 1000  690 V  Ie A 1000  AC-23A  Rated operational current switch  400 V 415 V  Ie A 759  500 V  Ie A 575  690 V  Ie A 575  Motor rating AC-23A, 50 - 60 Hz  P KW			Α	
Rated operational current switch       Ie       A       1000         500 V       Ie       A       1000         690 V       Ie       A       1000         AC-23A       A       1000         Rated operational current switch       Ie       A       759         500 V       Ie       A       575         690 V       Ie       A       437         Motor rating AC-23A, 50 - 60 Hz       P       kW		I <sub>e</sub>	Α	1000
400 V 415 V       Ie       A       1000         500 V       Ie       A       1000         690 V       Ie       A       1000         AC-23A       Rated operational current switch       Ie       A       759         500 V       Ie       A       575         690 V       Ie       A       437         Motor rating AC-23A, 50 - 60 Hz       P       kW				
500 V				
690 V		l <sub>e</sub>	Α	
AC-23A  Rated operational current switch  400 V 415 V  Ie A 759  500 V  Ie A 575  690 V  Ie A 437  Motor rating AC-23A, 50 - 60 Hz	500 V	l <sub>e</sub>	Α	1000
Rated operational current switch       I <sub>e</sub> A       759         500 V       I <sub>e</sub> A       575         690 V       I <sub>e</sub> A       437         Motor rating AC-23A, 50 - 60 Hz       P       kW	690 V	l <sub>e</sub>	Α	1000
400 V 415 V	AC-23A			
500 V				
690 V I <sub>e</sub> A 437  Motor rating AC-23A, 50 - 60 Hz P kW	400 V 415 V	l <sub>e</sub>	Α	759
Motor rating AC-23A, 50 - 60 Hz P kW	500 V	l <sub>e</sub>	Α	575
	690 V	l <sub>e</sub>	Α	437
	Motor rating AC-23A, 50 - 60 Hz	Р	kW	
400 V 415 V P kW 425	400 V 415 V	P	kW	425
500 V P kW 425	500 V	Р	kW	425
690 V P kW 425		Р	kW	425
Terminal capacities	-			
Flat conductor connection with busbars mm <sup>2</sup> 600	Flat conductor connection with busbars		$mm^2$	600
Terminal screw M12 x 35	Terminal screw			M12 x 35
Tightening torque for terminal screw Nm 28	Tightening torque for terminal screw		Nm	28

Notes	B10 <sub>d</sub> values as per EN ISO 13849-1, table C1
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## Design verification as per IEC/EN 61439

Design vernication as per ico/cit 01455			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	1000
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	44.75
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**

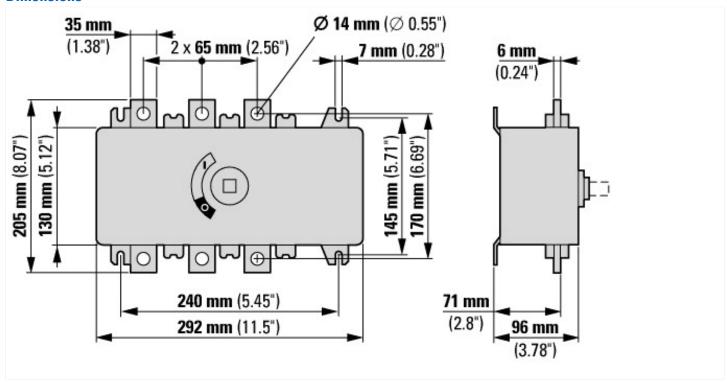
Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)

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])

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	kW	0
Rated short-time withstand current lcw	kA	36
Rated operation power at AC-23, 400 V	kW	425
Switching power at 400 V	kW	375
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		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
Degree of protection (NEMA)		Other

### **Dimensions**



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

IL008008Z S	witch-disconnectors
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IL008008Z Switch-disconnectors https://es-assets.eaton.com/DOCUMENTATION/AWA\_INSTRUCTIONS/IL008008ZU2018\_05.pdf