



**Switch-disconnector, DMVS, 160 A, 3P + N (solid), Stop Function optional, Without rotary handle and drive shaft, 9 mm connection hole**



**Part no. DMVS-160N/1**  
**Catalog No. 1814187**

**Delivery program**

Product range			Switch-disconnector Main switch maintenance switch
Part group reference			DMVS
Stop Function			optional
			Without rotary handle and drive shaft
<b>Notes</b>			visible contacts
Information about equipment supplied			auxiliary contact fitted by user. including connection materials
Number of poles			3P + N (solid)
<b>Auxiliary contacts</b>			
		N/O	0
		N/C	0
Degree of Protection			IP00 IP20 with terminal cover
Design			surface mounting
Contact sequence			
<b>Motor rating AC-23A, 50 - 60 Hz</b>			
400 V	P	kW	90
Rated uninterrupted current	$I_u$	A	160
Note on rated uninterrupted current $I_u$			Rated uninterrupted current $I_u$ is specified for max. cross-section.
Connection technique			9 mm connection hole

**Technical data**

<b>General</b>			
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	$\theta$	°C	-25 - +55
Storage	$\theta$	°C	-30 - +80
Overvoltage category/pollution degree			III/3
Rated impulse withstand voltage	$U_{imp}$	kV	8

Rated insulation voltage	U <sub>i</sub>	V	1000
Mounting position			As required

## Contacts

Mechanical variables			
Number of poles			3P + N (solid)
Auxiliary contacts			
		N/O	0
		N/C	0
Electrical characteristics			
Rated operational voltage	U <sub>e</sub>	V AC	690
Rated uninterrupted current	I <sub>u</sub>	A	160
Note on rated uninterrupted current I <sub>u</sub>			Rated uninterrupted current I <sub>u</sub> is specified for max. cross-section.
Short-circuit rating			
fuse			500/250
Rated conditional short-circuit current	I <sub>q</sub>	kA	In = 500: 50 In = 250: 100
Breaking current		kA	In = 500: 40 In = 250: 33
max. let-through energy		kA <sup>2</sup> s	In = 500: 1700 In = 250: 380
Rated short-time withstand current (1 s current)	I <sub>cw</sub>	A <sub>rms</sub>	12000
Note on rated short-time withstand current I <sub>cw</sub>			Current for a time of 0.3 seconds
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	1.7

## Switching capacity

Rated breaking capacity cos φ to IEC 60947-3			
400/415 V		A	1280
500 V		A	1248
690 V		A	1120
Safe isolation to EN 61140			
Current heat loss per contact at I <sub>e</sub>		W	2.3
Lifespan, mechanical	Operations		10000
AC			
AC-21A			
Rated operational current switch			
400 V 415 V	I <sub>e</sub>	A	160
500 V	I <sub>e</sub>	A	160
690 V	I <sub>e</sub>	A	160
AC-22A			
Rated operational current switch			
400 V 415 V	I <sub>e</sub>	A	160
500 V	I <sub>e</sub>	A	160
690 V	I <sub>e</sub>	A	160
AC-23A			
Rated operational current switch			
400 V 415 V	I <sub>e</sub>	A	160
500 V	I <sub>e</sub>	A	156
690 V	I <sub>e</sub>	A	140
Motor rating AC-23A, 50 - 60 Hz			
400 V 415 V	P	kW	90
500 V	P	kW	110
690 V	P	kW	132

## Terminal capacities

Flat conductor connection with busbars		mm <sup>2</sup>	120
Terminal screw			M8 x 20
Tightening torque for terminal screw		Nm	14

## Technical safety parameters:

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

Technical data for design verification			
Rated operational current for specified heat dissipation	I <sub>n</sub>	A	160
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	1.7
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			
10.2.3.1 Verification of thermal stability of enclosures			
10.2.3.2 Verification of resistance of insulating materials to normal heat			
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects			
10.2.4 Resistance to ultra-violet (UV) radiation			
10.2.5 Lifting			
10.2.6 Mechanical impact			
10.2.7 Inscriptions			
10.3 Degree of protection of ASSEMBLIES			
10.4 Clearances and creepage distances			
10.5 Protection against electric shock			
10.6 Incorporation of switching devices and components			
10.7 Internal electrical circuits and connections			
10.8 Connections for external conductors			
10.9 Insulation properties			
10.9.2 Power-frequency electric strength			
10.9.3 Impulse withstand voltage			
10.9.4 Testing of enclosures made of insulating material			
10.10 Temperature rise			
10.11 Short-circuit rating			
10.12 Electromagnetic compatibility			
10.13 Mechanical function			

## Technical data ETIM 7.0

Low-voltage industrial components (EG000017) / Switch disconnecter (EC000216)			
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnecter (ec@ss10.0.1-27-37-14-03 [AKF060013])			
Version as main switch			No
Version as maintenance-/service switch			No
Version as safety switch			No
Version as emergency stop installation			Yes
Version as reversing switch			No
Number of switches			1
Max. rated operation voltage U <sub>e</sub> AC		V	690
Rated operating voltage		V	690 - 690
Rated permanent current I <sub>u</sub>		A	160
Rated permanent current at AC-23, 400 V		A	160
Rated permanent current at AC-21, 400 V		A	160

Rated operation power at AC-3, 400 V	kW	0
Rated short-time withstand current I <sub>cw</sub>	kA	12
Rated operation power at AC-23, 400 V	kW	90
Switching power at 400 V	kW	90
Conditioned rated short-circuit current I <sub>q</sub>	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

