# DATASHEET - DMM-125/3



Switch-disconnector, DMM, 125 A, 3 pole, With black rotary handle and drive shaft  $\,$ 



Part no. DMM-125/3 Catalog No. 6093344

Delivery program			
Product range			Switch-disconnector Main switch maintenance switch
Part group reference			DMM
			With black 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
7		N/C	0
Degree of Protection			IP20
Design			surface mounting
Contact sequence			L1 L2 L3 $ \begin{array}{ccccccccccccccccccccccccccccccccccc$
Motor rating AC-23A, 50 - 60 Hz			
400 V	P	kW	59

#### **Technical data**

Rated uninterrupted current

Note on rated uninterrupted current !u

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r	_	-	_		_	
u	е	и	u	н	d	п

		IEC/EN 60947, VDE 0660, IEC/EN 60204 Switch-disconnector according to IEC/EN 60947-3
		CE, RoHs, KEMA, EAC, Lloyds
θ	°C	-25 - +55
θ	°C	-30 - +80
		III/3
$U_{imp}$	kV	6
Ui	V	1000
		As required
		3 pole
	N/0	0
	N/C	0
	8 U <sub>imp</sub>	8 °C  U <sub>imp</sub> kV  U <sub>i</sub> V

Α

125

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

nateu operational voltage	ue	V AC	030
Rated uninterrupted current	I <sub>u</sub>	Α	125
Note on rated uninterrupted current !u			Rated uninterrupted current $I_u$ is specified for max. cross-section.
Short-circuit rating			
fuse			125
Rated conditional short-circuit current	Iq	kA	415 V: 30 690 V: 50
Breaking current		kA	13.7
max. let-through energy		kA <sup>2</sup> s	134
Rated short-time withstand current (1 s current)	I <sub>cw</sub>	$A_{rms}$	2500
Note on rated short-time withstand current lcw	···	0	Current for a time of 1 second
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	4.5
Switching capacity	· Viu		
Rated breaking capacity cos φ to IEC 60947-3		Α	
400/415 V		Α	10000
500 V		Α	528
690 V		Α	336
Safe isolation to EN 61140			
Current heat loss per contact at l <sub>e</sub>		W	4.5
Lifespan, mechanical	Operations		10000
AC			
AC-21A			
Rated operational current switch			
400 V 415 V	l <sub>e</sub>	Α	125
500 V	I <sub>e</sub>	Α	125
690 V	I <sub>e</sub>	Α	125
AC-22A	6		
Rated operational current switch			
400 V 415 V	I <sub>e</sub>	Α	125
500 V	I <sub>e</sub>	Α	125
690 V		A	125
	I <sub>e</sub>	A	123
AC-23A			
Rated operational current switch 400 V 415 V		Δ.	125
	l <sub>e</sub>	A	
500 V	l <sub>e</sub>	Α	66
690 V	l <sub>e</sub>	Α	42
Motor rating AC-23A, 50 - 60 Hz	Р	kW	
400 V 415 V	Р	kW	59
500 V	Р	kW	45
690 V	P	kW	37
Terminal capacities Flexible with ferrules to DIN 46228		2	
		mm <sup>2</sup>	
flexible		mm <sup>2</sup>	6 - 70
Stripping length		mm	21
Tightening torque for terminal screw		Nm	7
Fechnical safety parameters:			P10 yelyon on par EN ICO 12040 1 4-1-1-0-01
Notes			B10 <sub>d</sub> values as per EN ISO 13849-1, table C1
Design verification as per IEC/EN 61439			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	125
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	4.5
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	0
Static heat dissipation, non-current-dependent		W	0
otaao naat aissipaaon, non-carrent-uepenuent	$P_{vs}$	VV	<b>"</b>

V AC 690

Rated operational voltage

Heat dissipation capacity	P <sub>diss</sub>	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 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		No
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	125
Rated permanent current at AC-23, 400 V	А	125
Rated permanent current at AC-21, 400 V	Α	125
Rated operation power at AC-3, 400 V	kW	0
Rated short-time withstand current lcw	kA	2.5
Rated operation power at AC-23, 400 V	kW	59
Switching power at 400 V	kW	0
Conditioned rated short-circuit current Iq	kA	50
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

No
No
Built-in device fixed built-in technique
Yes
No
No
Yes
No
Other
Other
No
Screw connection
IP20
Other

## **Assets (links)**

**Declaration of CE Conformity** 

00003270

**Instruction Leaflets** 

IL008025ZU2018\_05

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

IL008025ZU Switch-disconnector DCM, DMM