## Reversing contactor combination, 380 V 400 V: 5.5 kW, 24 V DC, DC operation



Part no. DIULM12/21(24VDC) 107023

General specifications	
Product name	Eaton Moeller® series DIUL contactor combination
Part no.	DIULM12/21(24VDC)
EAN	4015081067916
Product Length/Depth	117 millimetre
Product height	68 millimetre
Product width	90 millimetre
Product weight Product weight	0.718 kilogram
Compliances	CE Marked RoHS Compliant
Certifications	UL Category Control No.: NLDX IEC/EN 60947-4-1 CE UL File No.: E29096 CSA File No.: 012528 CSA-C22.2 No. 60947-4-1-14 UL 60947-4-1 CSA Class No.: 2411-03, 3211-04 UL Listed CSA Certified CSA UL
Product Tradename	DIUL
Product Type	Contactor combination
Product Sub Type	None
Catalog Notes	IE3-fähige Geräte sind mit dem Logo auf der Verpackung gekennzeichnet.
Features & Functions	
Features	Mechanical interlock
Functions	Reversing safety
General information	
Application	Contactor combinations for starting motors with two directions of rotation
Degree of protection	IP20 NEMA Other
Product category	Contactor combinations
Suitable for	Also motors with efficiency class IE3
Utilization category	AC-3: Normal AC induction motors: starting, switch off during running AC-4: Normal AC induction motors: starting, plugging, reversing, inching
Voltage type	DC
Climatic environmental conditions	
Ambient operating temperature - min	-25 °C
Ambient operating temperature - max	60 °C
Terminal capacities	
Terminals	Screw terminals
Electrical rating	
Rated operational current (Ie) at AC-1, 380 V, 400 V, 415 V	12 A
Rated operational current (Ie) at AC-3, 380 V, 400 V, 415 V	12 A
Rated operational power at AC-3, 380/400 V, 50 Hz	5.5 kW
Rated operational power at AC-3, 690 V, 50 Hz	6.5 kW
Rated operational power at AC-4, 220/230 V, 50 Hz	2 kW
Rated operational power at AC-4, 660/690 V, 50 Hz	4.4 kW
Magnet system	
Duty factor	100 %
Rated control supply voltage (Us) at AC, 50 Hz - min	0 V

Rated control supply voltage (Us) at AC, 50 Hz - max	0 V
Rated control supply voltage (Us) at AC, 60 Hz - min	0 V
Rated control supply voltage (Us) at AC, 60 Hz - max	0 V
Rated control supply voltage (Us) at DC - min	24 V
Rated control supply voltage (Us) at DC - max	24 V
Communication	
Connection	Screw connection
Contacts	
Number of auxiliary contacts (normally closed contacts)	0
Number of auxiliary contacts (normally open contacts)	2
Design verification	
Equipment heat dissipation, current-dependent Pvid	2.4 W
Heat dissipation capacity Pdiss	0 W
Heat dissipation per pole, current-dependent Pvid	0.8 W
Rated operational current for specified heat dissipation (In)	12 A
Static heat dissipation, non-current-dependent Pvs	4.5 W
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 Resist. of insul. mat. to abnormal heat/fire by internal elect. 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.
10.9.2 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 9.0**

Low-voltage industrial components (EG000017) / Combination of contactors (EC000010)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Contactor (LV) / Combination of contactor (ecl@ss13-27-37-10-09 [AGZ572019])					
Function			Reversing contactor		
Rail mounting possible			No		
Rated control supply voltage AC 50 Hz	\	V	0 - 0		
Rated control supply voltage AC 60 Hz	1	V	0 - 0		
Rated control supply voltage DC	\	V	24 - 24		
Voltage type for actuating			DC		
Number of normally closed contacts as main contact			0		
Number of normally open contacts as main contact			6		
Type of electrical connection of main circuit			Screw connection		
Voltage type (operating voltage)			AC		
Operating voltage AC 50 Hz	١	V	24 - 690		

Operating voltage AC 60 Hz	V	24 - 690
Operating voltage DC	V	0 - 0
Rated operation current le at AC-1, 400 V	Α	12
Rated operation current le at AC-3, 400 V	Α	12
Rated operation power at AC-3, 400 V	kW	5.5
Rated operation power NEMA	kW	7.4
Number of auxiliary contacts as normally closed contact		0
Number of auxiliary contacts as normally open contact		2
Number of auxiliary contacts as change-over contact		0
Type of electrical connection for auxiliary- and control current circuit		Screw connection
Degree of protection (IP)		IP20
Degree of protection (NEMA)		Other
Width	mm	90
Height	mm	68
Depth	mm	117