




**Reversing contactor combination, 3p, +2S free, 4kW/400V/AC3**

**Part no.** DIULM9/21(24VDC)  
**Article no.** 107022  
**Catalog No.** XTCR009B21TD

**Delivery programme**

Product range			Contactor combinations
Application			Star-delta motor starting for contactor combinations
Accessories			DIUL reversing combinations
Utilization category			NAC-3: Normal AC induction motors: starting, switch off during running AC-4: Normal AC induction motors: starting, plugging, reversing, inching
			
Notes			Also suitable for motors with efficiency class IE3. IE3-ready devices are identified by the logo on their packaging.

**Rated operational current**

AC-3			
380 V 400 V	I <sub>e</sub>	A	9

**Max. rating for three-phase motors, 50 - 60 Hz**

AC-3			
220 V 230 V	P	kW	2.5
380 V 400 V	P	kW	4
660 V 690 V	P	kW	4.5
AC-4			
220 V 230 V	P	kW	1.5
380 V 400 V	P	kW	2.5
660 V 690 V	P	kW	3.6

Actuating voltage			24 V DC
Voltage AC/DC			DC operation

Individual components of the combination

Contactor Q11 DILM9-01 + DILA-XHI20

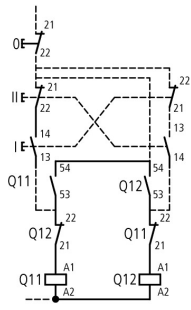
Contactor Q12 DILM9-01 + DILA-XHI20

Spare auxiliary contacts



Mechanical interlock +

Circuit diagram



Contact sequence

## Design verification as per IEC/EN 61439

Technical data for design verification			
Equipment heat dissipation, current-dependent	$P_{vid}$	W	0
Heat dissipation capacity	$P_{diss}$	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	60
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.

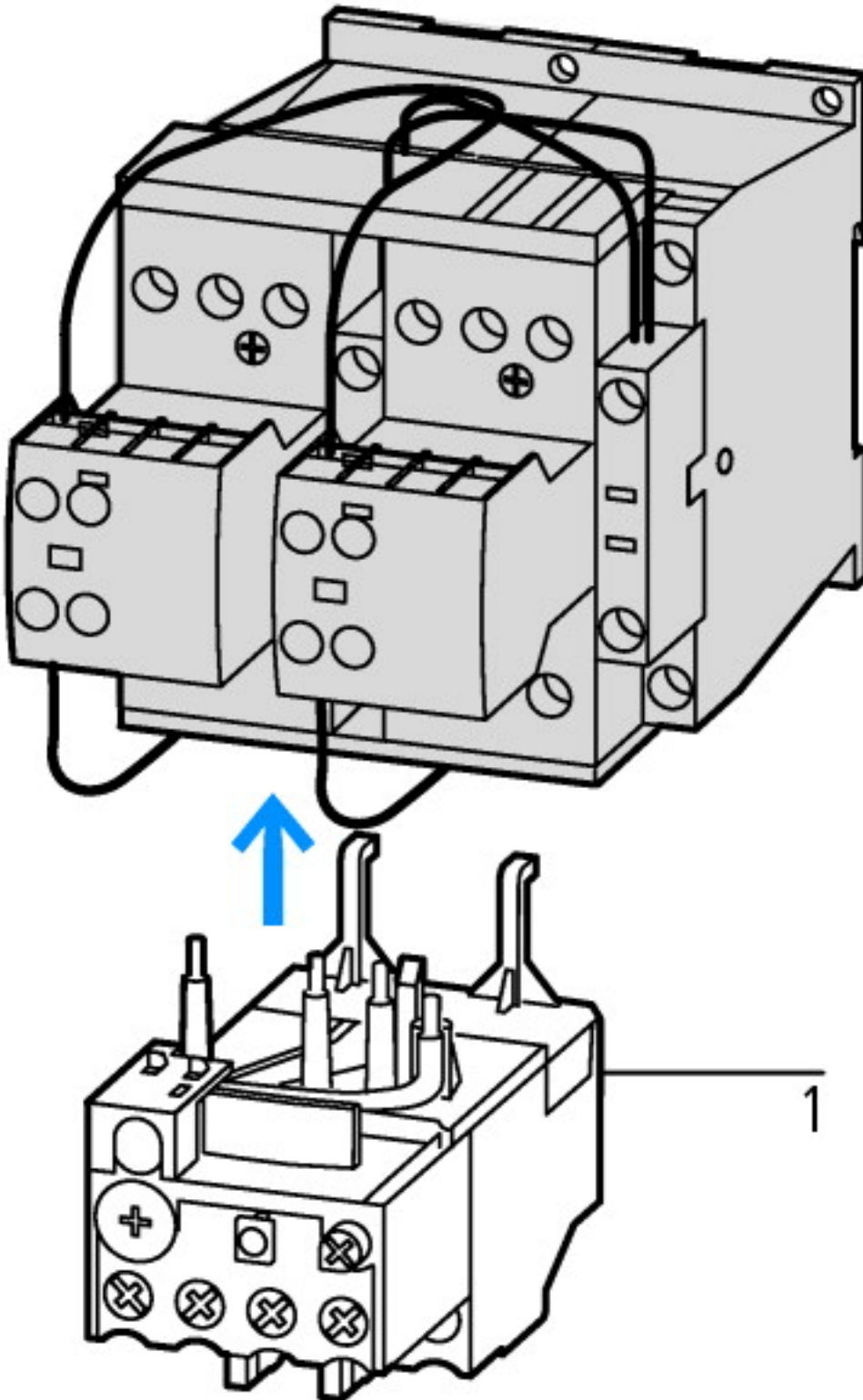
## Technical data ETIM 5.0

Low-voltage industrial components (EG000017) / Starter combination (EC000010)			
Electric engineering, automation, process control engineering / Low-voltage switch technology / Contactor (LV) / Combination of contactor (ecl@ss8-27-37-10-09 [AGZ572010])			
Function			Reversing safety
Rated control supply voltage $U_s$ at AC 50HZ		V	0 - 0
Rated control supply voltage $U_s$ at AC 60HZ		V	0 - 0
Rated control supply voltage $U_s$ at DC		V	24 - 24
Voltage type for actuating			DC
Rated operation current $I_e$ at AC-3, 400 V		A	9
Rated operation power at AC-3, 400 V		kW	4
Connection type main current circuit			Screw connection

## Approvals

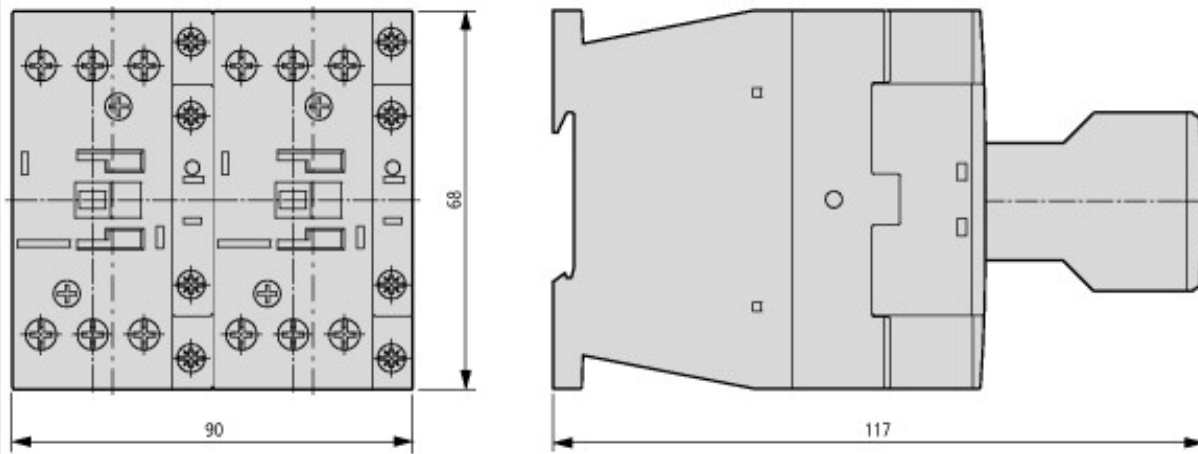
Product Standards	IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking
UL File No.	E29096
UL Category Control No.	NLDX
CSA File No.	012528
CSA Class No.	2411-03, 3211-04
North America Certification	UL listed, CSA certified
Specially designed for North America	No

## Characteristics



1: Overload relay

## Dimensions



Basic unit with auxiliary contact module

## Additional product information (links)

### IL03407030Z (AWA2100-2139) Wiring for contactor combinations

IL03407030Z (AWA2100-2139) Wiring for contactor combinations

[ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL03407030Z2011\\_07.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407030Z2011_07.pdf)