

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

**Part no.** DIULEM/21/MV(230V50HZ,240V60HZ)  
**Article no.** 051849  
**Catalog No.** XTMR9A21F

**Delivery program**

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	2.2
380 V 400 V	P	kW	4
660 V 690 V	P	kW	4
AC-4			
220 V 230 V	P	kW	1.5
380 V 400 V	P	kW	3
660 V 690 V	P	kW	3

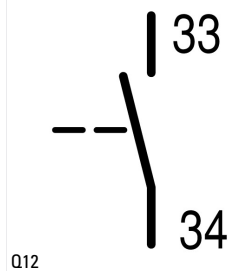
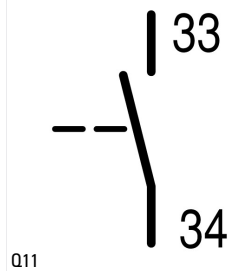
Actuating voltage			230 V 50 Hz, 240 V 60 Hz
Voltage AC/DC			AC operation

**Individual components of the combination**

Contactor Q11 DILEM-10  
 + 11DILEM

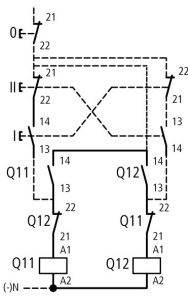
Contactor Q12 DILEM-10  
 + 11DILEM

**Spare auxiliary contacts**



Mechanical interlock +

Circuit diagram



Contact sequence (IN)

## Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	$I_n$	A	9
Heat dissipation per pole, current-dependent	$P_{vid}$	W	0.82
Equipment heat dissipation, current-dependent	$P_{vid}$	W	2.45
Static heat dissipation, non-current-dependent	$P_{vs}$	W	1.8
Heat dissipation capacity	$P_{diss}$	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	50
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			
10.2.2.1 Verification of thermal stability of enclosures			Meets the product standard's requirements.
10.2.2.2 Verification of resistance of insulating materials to normal heat			Meets the product standard's requirements.
10.2.2.3 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			
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			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			
10.11 Short-circuit rating			
10.12 Electromagnetic compatibility			
10.13 Mechanical function			

## Technical data ETIM 6.0

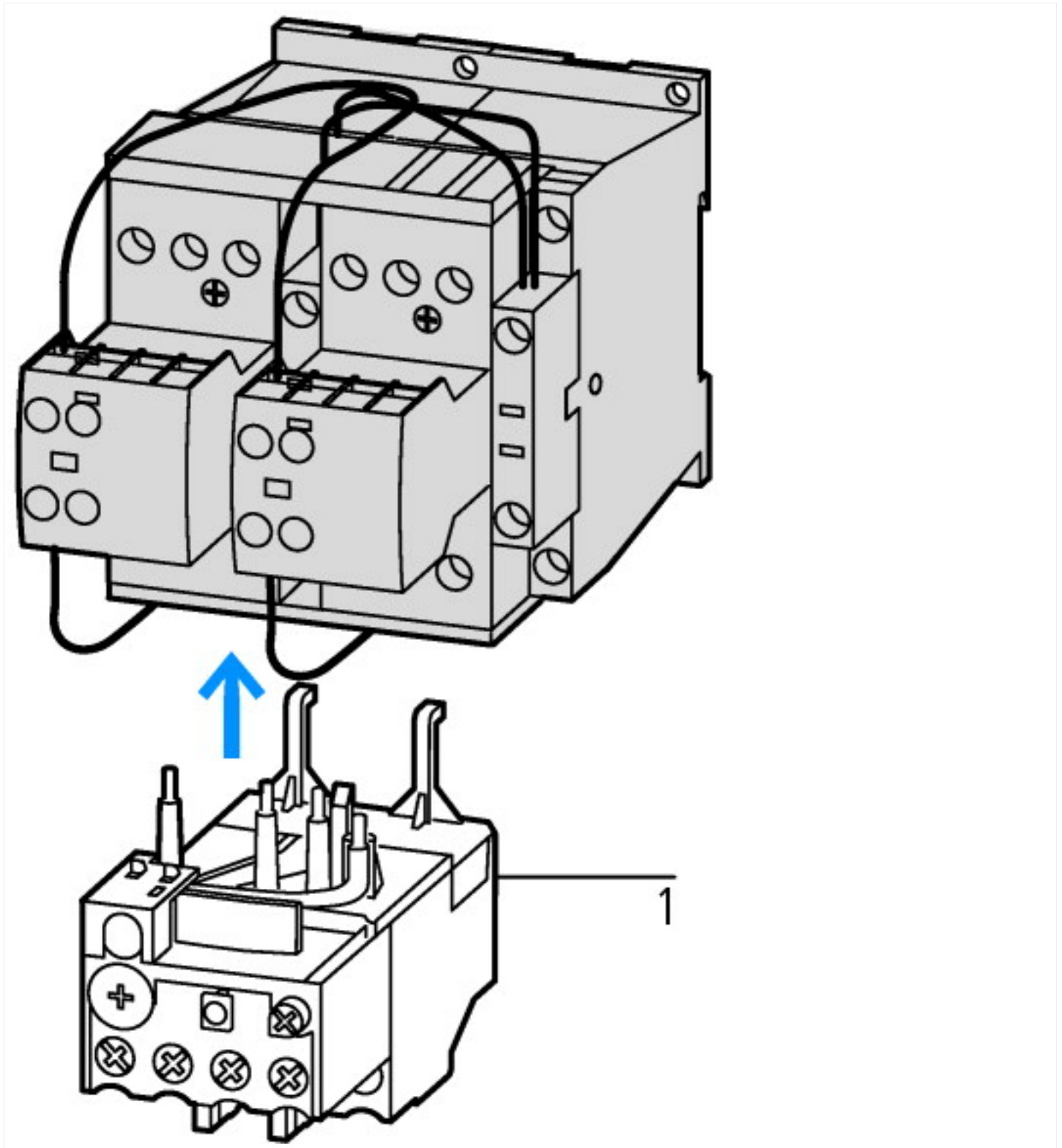
Low-voltage industrial components (EG000017) / Combination of contactors (EC000010)			
Electric engineering, automation, process control engineering / Low-voltage switch technology / Contactor (LV) / Combination of contactor (ecl@ss8.1-27-37-10-09 [AGZ572011])			
Function			Reversing safety
Rated control supply voltage $U_s$ at AC 50HZ		V	230 - 230
Rated control supply voltage $U_s$ at AC 60HZ		V	240 - 240
Rated control supply voltage $U_s$ at DC		V	0 - 0
Voltage type for actuating			AC
Rated operation current $I_e$ at AC-3, 400 V		A	9

Rated operation power at AC-3, 400 V	kW	4
Type of electrical connection of main circuit		Screw connection
Degree of protection (IP)		IP20

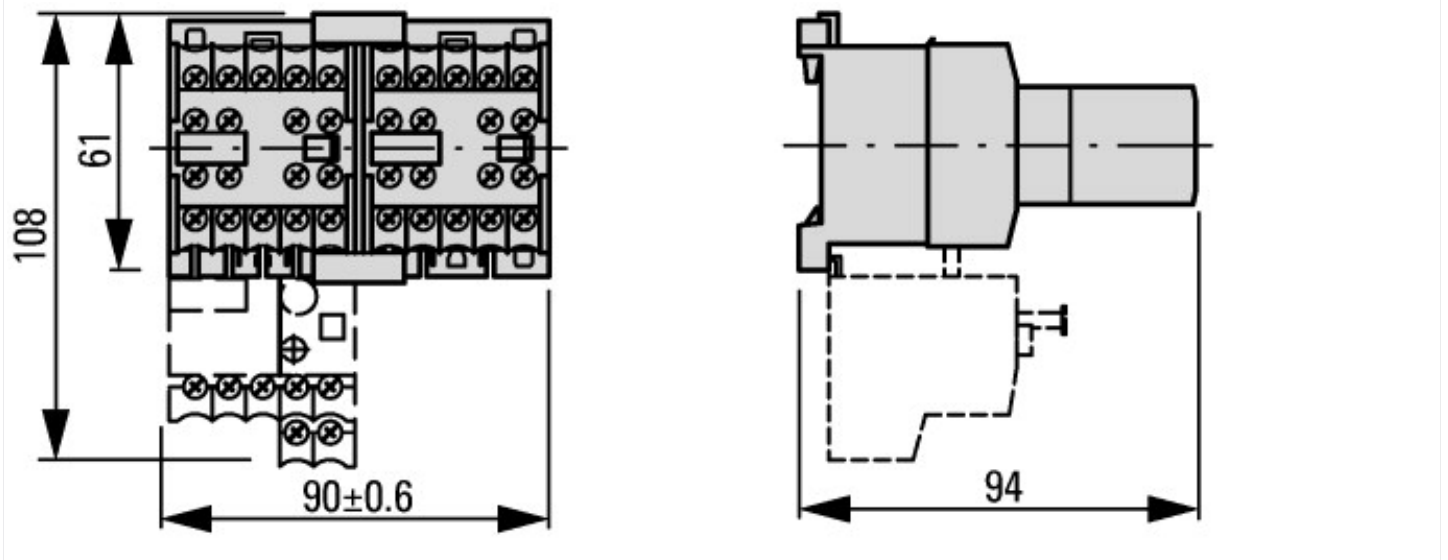
## Approvals

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.		3211-04
North America Certification		UL listed, CSA certified
Specially designed for North America		No

## Characteristics



## Dimensions



## Additional product information (links)

### IL03407067Z (AWA2120-1049) Reversing combinations

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[ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL03407067Z2010\\_10.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407067Z2010_10.pdf)