



**Star-delta contactor combination, 7.5kW/400V/AC3**



Powering Business Worldwide™

**Part no.** SDAINLM16(230V50HZ,240V60HZ)  
**Catalog No.** 278311  
**Eaton Catalog No.** XTSD016B10F  
**EL-Nummer (Norway)** 4130485

**Delivery program**

Product range			Contactor combinations
Application			Star-delta motor starting for contactor combinations
Accessories			Star-delta combinations SDAINL
Utilization category			NAC-3: Normal AC induction motors: starting, switch off during running
Notes			Also suitable for motors with efficiency class IE3. IE3-ready devices are identified by the logo on their packaging.
Description			Operating frequency: maximum 30 starts per hour

**Rated operational current**

AC-3			
380 V 400 V	I <sub>e</sub>	A	16

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

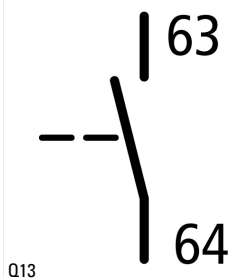
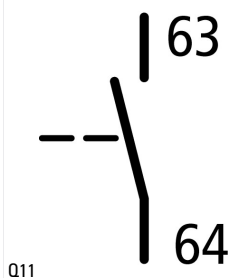
AC-3			
220 V 230 V	P	kW	4
380 V 400 V	P	kW	7.5
500 V	P	kW	7.5
660 V 690 V	P	kW	7.5

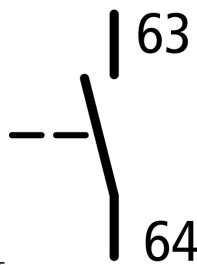
Max. changeover time		s	20
Actuating voltage			230 V 50 Hz, 240 V 60 Hz
Voltage AC/DC			AC operation

**Individual components of the combination**

Mains contactor Q11		Part no.	DILM9-10 + DILA-XHI20
Delta contactor Q15		Part no.	DILM9-01 + DILA-XHI20
Star contactor Q13		Part no.	DILM7-01 + DILA-XHI20
Timing relay K1		Part no.	ETR4-51

Spare auxiliary contacts





Q15

## Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	$I_n$	A	9.28
Heat dissipation per pole, current-dependent	$P_{vid}$	W	0.94
Equipment heat dissipation, current-dependent	$P_{vid}$	W	2.82
Static heat dissipation, non-current-dependent	$P_{vs}$	W	4.8
Heat dissipation capacity	$P_{diss}$	W	0
Operating ambient temperature max.		°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 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			Star-delta contactor
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	16

Rated operation power at AC-3, 400 V

kW 7.5

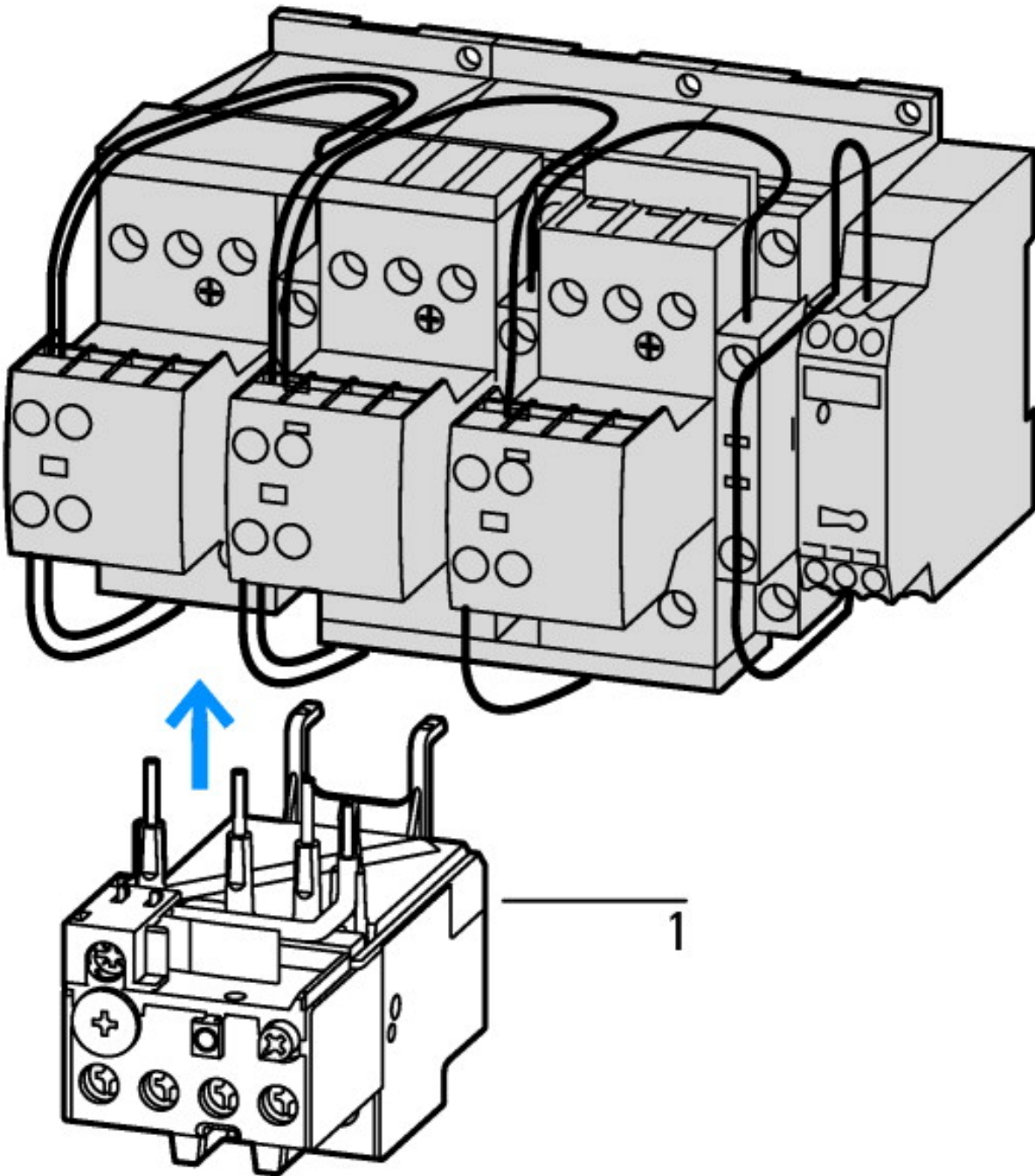
Type of electrical connection of main circuit

Screw connection

Degree of protection (IP)

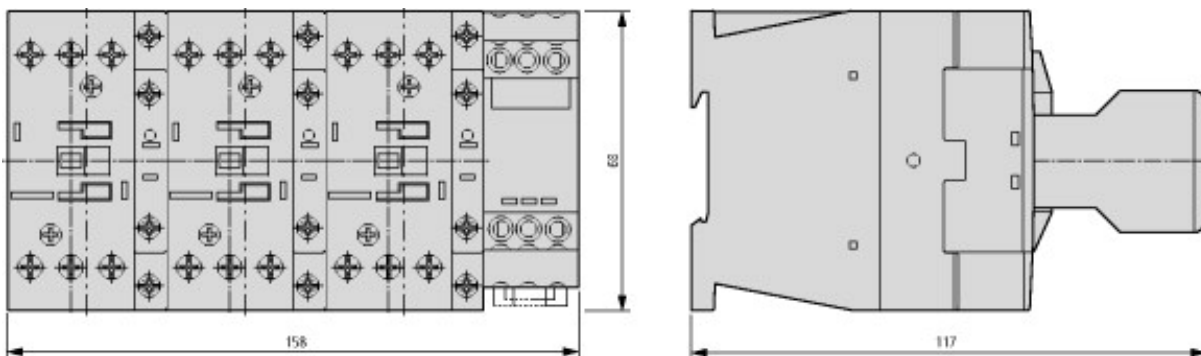
IP20

## 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)