



Star-delta contactor combination, 380 V 400 V: 7.5 kW, 110 V 50 Hz, 120 V 60 Hz, AC operation



Part no. **SDAINLM16(110V50HZ,120V60HZ)**
 Catalog No. **278308**
 Alternate Catalog No. **XTSD016B10A**

Delivery program

Product range			Contactor combinations
Application			Star-delta motor starting for contactor combinations
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 _e	A	16

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

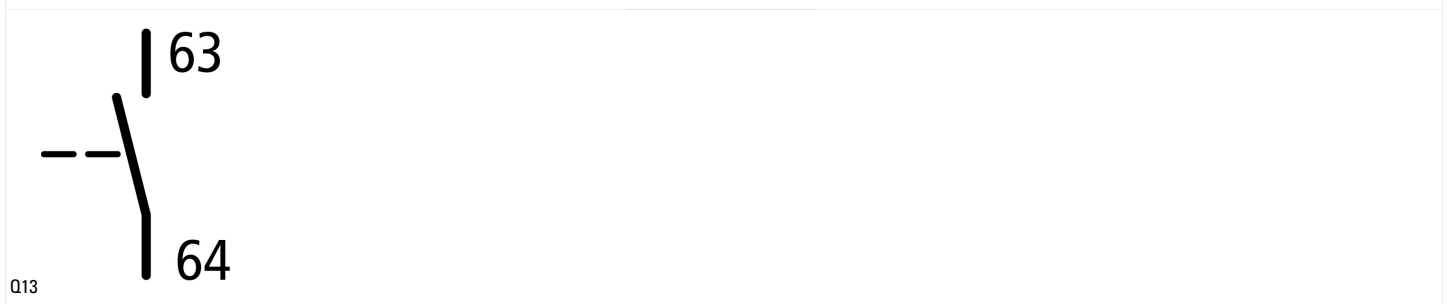
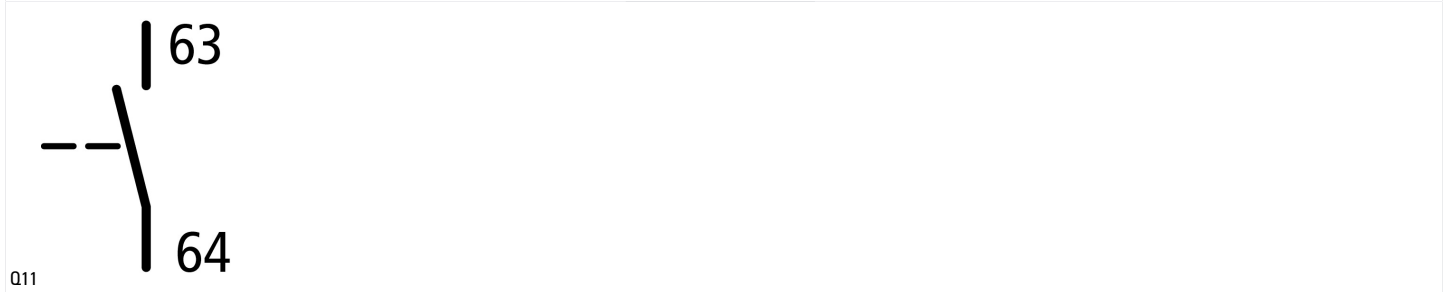
AC-3			
220 V 230 V	P	kW	4
380 V 400 V	P	kW	7.5
500 V	P	kW	7.5
660 V 690 V	P	kW	7.5
Max. changeover time		s	20

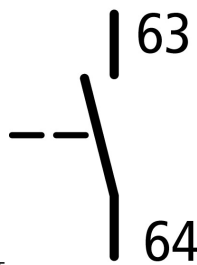
Actuating voltage			110 V 50 Hz, 120 V 60 Hz
Voltage AC/DC			AC operation

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

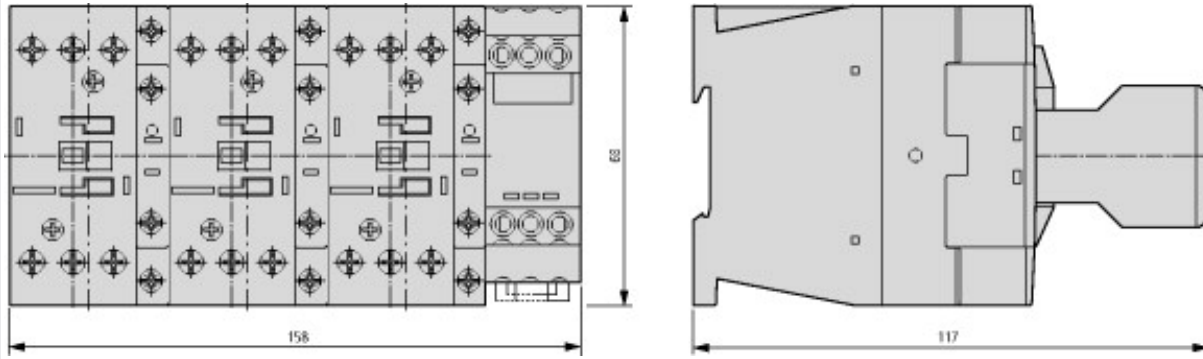
Technical data for design verification			
Rated operational current for specified heat dissipation	I_n	A	9.28
Heat dissipation per pole, current-dependent	P_{vid}	W	0.94
Equipment heat dissipation, current-dependent	P_{vid}	W	2.82
Static heat dissipation, non-current-dependent	P_{vs}	W	4.8
Heat dissipation capacity	P_{diss}	W	0
Operating ambient temperature 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 7.0

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@ss10.0.1-27-37-10-09 [AGZ572014])			
Function	Star-delta contactor		
Rated control supply voltage U_s at AC 50HZ	V		110 - 110
Rated control supply voltage U_s at AC 60HZ	V		120 - 120
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
Rated operation power NEMA	kW	0
Type of electrical connection of main circuit		Screw connection
Degree of protection (IP)		IP20
Degree of protection (NEMA)		Other

Dimensions



Basic unit with auxiliary contact module

Assets (links)

Declaration of CE Conformity

00002875

Instruction Leaflets

IL03407030Z2018_05

IL03407043Z2018_05

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/IL03407030Z2018_05.pdf