

Star-delta contactor combination, 380 V 400 V: 37 kW, 400 V 50 Hz, AC operation



Part no. SDAINLM70(400V50HZ)
Catalog No. 101386
Alternate Catalog No. XTSD070D11N

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.				
Description	Operating frequency: maximum 30 starts per hour				
Rated operational current					
AC-3					
380 V 400 V	I_e	A	70		
Max. rating for three-phase motors, 50 - 60 Hz					
AC-3					
220 V 230 V	P	kW	18.5		
380 V 400 V	P	kW	37		
500 V	P	kW	45		
660 V 690 V	P	kW	37		
Max. changeover time	s	20			
Actuating voltage	400 V 50 Hz				
Voltage AC/DC	AC operation				
Individual components of the combination					
Mains contactor Q11	Part no.	DILM40 + DILM150-XHI31			
Delta contactor Q15	Part no.	DILM40 + DILM150-XHI11			
Star contactor Q13	Part no.	DILM40 + DILM150-XHI11			
Timing relay K1	Part no.	ETR4-51			

Design verification as per IEC/EN 61439

Technical data for design verification	I_n	A	70
Rated operational current for specified heat dissipation	I_n	A	70
Heat dissipation per pole, current-dependent	P_{vid}	W	6.7
Equipment heat dissipation, current-dependent	P_{vid}	W	20
Static heat dissipation, non-current-dependent	P_{vs}	W	8.7
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 Us at AC 50HZ	V 400 - 400
Rated control supply voltage Us at AC 60HZ	V 0 - 0
Rated control supply voltage Us at DC	V 0 - 0
Voltage type for actuating	AC
Rated operation current Ie at AC-1, 400 V	70
Rated operation current Ie at AC-3, 400 V	A 70
Rated operation power at AC-3, 400 V	kW 37
Rated operation power NEMA	kW 0
Number of normally closed contacts as main contact	0
Number of main contacts as normally open contact	9
Type of electrical connection for auxiliary- and control current circuit	EV000415
Type of electrical connection of main circuit	Screw connection
Degree of protection (IP)	IP00
Degree of protection (NEMA)	Other
Rail mounting possible	Yes