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SDAINLM45(230V50HZ,240V60HZ) - Star-delta contactor combination, 380 V 400 V: 22 kW, 230 V 50 Hz, 240 V 60 Hz, AC operation



278386 SDAINLM45(230V50HZ,240V60HZ)

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278386 SDAINLM45(230V50HZ,240V60HZ)

Star-delta contactor combination, 380 V 400 V: 22 kW, 230 V 50 Hz, 240 V 60 Hz, AC operation

Alternate Catalog No. XTSD045C10F

EL-Nummer (Norway) 4130488

Star-delta contactor combination, Application: Star-delta motor starting for contactor combinations, Operating frequency: maximum 30 starts per hour, Accessories: Star-delta combinations SDAINL, Utilization category: NAC-3: Normal AC induction motors: starting, switch off during running, Rated operational current AC-3 380 V 400 V: $I_e = 45$ A, Max. rating for three-phase motors, 50 - 60 Hz AC-3 220 V 230 V: P= 11 kW, 380 V 400 V: P= 22 kW, 500 V: P= 30 kW, 660 V 690 V: P= 22 kW, Max. changeover time: 20 s, Actuating voltage: 230 V 50 Hz, 240 V 60 Hz, Voltage AC/DC: AC operation, Individual components of the combination Mains contactor Q11: DILM25-10, + DILA-XH20, Delta contactor Q15: DILM25-01, + DILA-XH20 Part no., Star contactor Q13: DILM17-01, + DILA-XH20 Part no., Timing relay K1: ETR4-51 Part no., Notes: Also suitable for motors with efficiency class IE3

- [Delivery program](#)
- [Design verification as per IEC/EN 61439](#)
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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 [I_e]

AC-3 380 V 400 V [I_e]

45 A

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

AC-3 220 V 230 V [P]

11 kW

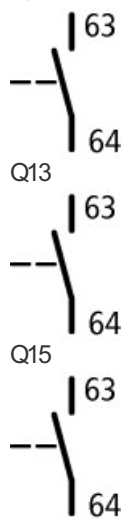
AC-3 380 V 400 V [P]

22 kW

AC-3 500 V [P]

30 kW

AC-3660 V 690 V [F]
 22 kW
 Max. changeover time
 < 20 s
 Actuating voltage
 230 V 50 Hz, 240 V 60 Hz
 Voltage AC/DC
 AC operation
 Individual components of the combination
 Mains contactor Q11
 DILM25-10
 + DILA-XH20 Part no.
 Delta contactor Q15
 DILM25-01
 + DILA-XH20 Part no.
 Star contactor Q13
 DILM17-01
 + DILA-XH20 Part no.
 Timing relay K1
 ETR4-51 Part no.
 Q11



Design verification as per IEC/EN 61439

Technical data for design verification

Rated operational current for specified heat dissipation [I_r]

45 A

Heat dissipation per pole, current-dependent [P_{vid}]

4.1 W

Equipment heat dissipation, current-dependent [P_{vid}]

12.4 W

Static heat dissipation, non-current-dependent [P_{vs}]

6.2 W

Heat dissipation capacity [P_{diss}]

0 W

Operating ambient temperature min.

-25 °C

Operating ambient temperature max.

+60 °C

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 Strength of materials and parts 10.2.3.1 Verification of thermal stability of enclosures

Meets the product standard's requirements.

10.2 Strength of materials and parts 10.2.3.2 Verification of resistance of insulating materials to normal heat

Meets the product standard's requirements.

10.2 Strength of materials and parts 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 Strength of materials and parts 10.2.4 Resistance to ultra-violet (UV) radiation

Meets the product standard's requirements.

10.2 Strength of materials and parts 10.2.5 Lifting

Does not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts 10.2.6 Mechanical impact
Does not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts 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 Insulation properties 10.9.3 Impulse withstand voltage
Is the panel builder's responsibility.

10.9 Insulation properties 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

230 - 230 V

Rated control supply voltage U_s at AC 60Hz

240 - 240 V

Rated control supply voltage U_s at DC

0 - 0 V

Voltage type for actuating

AC

Rated operation current I_e at AC-3, 400 V

45 A

Rated operation power at AC-3, 400 V

22 kW

Rated operation power NEVA

0 kW

Type of electrical connection of main circuit

Screw connection

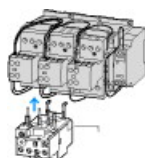
Degree of protection (IP)

IP00

Degree of protection (NEVA)

Other

Characteristics



Accessories

1: Overload relay

Dimensions



Basic unit with auxiliary contact module

CAD data

- [Product-specific CAD data](#)
(Web)
- [3D Preview](#)
(Web)

DWG files

- [DA-CD-sdainl_bg2](#)
File
(Web)

edz files

- [DA-CE-ETN.SDAINLM45\(230V50HZ,240V60HZ\)](#)
File
(Web)

Step files


- [DA-CS-sdainl_bg2](#)
File
(Web)

Product photo




[2210PIC-212](#)
Photo

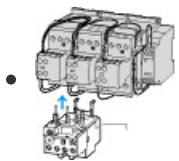
Dimensions single product

- 
[221X010](#)
Line drawing
Star-delta combination

3D drawing

- 
[2210DRW-2](#)
Line drawing
Star-delta combination, size 2

Explosion drawing



[2210CON-1](#)
Line drawing
Star-delta combination, size 2

Standards

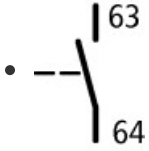


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Logo

IE3-ready logo 4c

Wiring diagram



210S070

Line drawing

Contactor contact representation

Instruction Leaflet

- [Wiring for contactor combinations \(IL03407030Z\)](#)
Asset
former AWA2100-2139
(PDF, 05/2018, multilingual)
- [DILM17 - DILM32, XTCE018 - XTCE032 Contactors: complete devices \(IL03407044Z\)](#)
Asset
former AWA2100-2292
(PDF, 05/2018, multilingual)

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