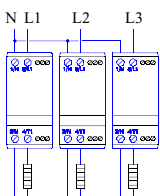
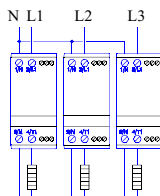
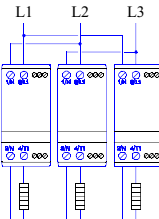
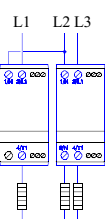
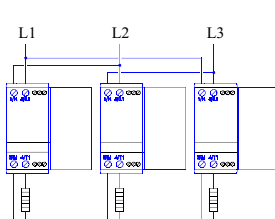
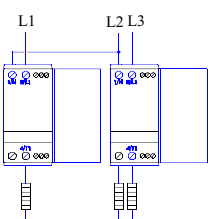
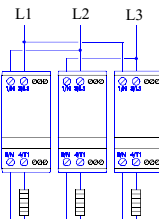
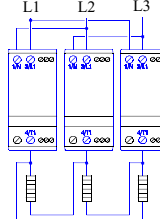
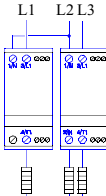
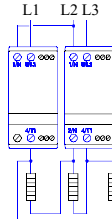


Application hints Contactors type SC X

Applications hints SC 1 DA L Semiconductor “Low Noise” Contactor

Single Phase 230 V AC	Single Phase 400 V AC	3 Ph with Neutral 230/400 V	3 Ph with Neutral 400/690 V
SC 1 DA 2330 L = 6.9 kW Max SC 1 DA 2350 L = 11.5 kW Max 	SC 1 DA 4030 L = 12 kW Max 	3 x SC 1 DA 2330 L = 20.7 kW Max 3 x SC 1 DA 2350 L = 34.5 kW Max 	3 x SC 1 DA 4030 L = 36 kW Max 
3 Ph without Neutral 230 V	3 Ph without Neutral 230 V	3 Ph without Neutral 230 V	3 Ph without Neutral 230 V
3 x SC 1 DA 2330 L = 20.7 kW Max 	2 x SC 1 DA 2330 L = 11.9 kW Max 	3 x SC 1 DA 2350 L = 34.5 kW Max 	2 x SC 1 DA 2350 L = 19.9 kW Max 
3Ph without Neutral 400/480V	3Ph without Neutral 400/480V	3Ph without Neutral 400/480V	3Ph without Neutral 400/480V
3 x SC 1 DA 4030 L = 36 kW Max 	3 x SC 1 DA 4030 L = 20.7 kW Max 	2 x SC 1 DA 4030 L = 20.7 kW Max  Economy circuit Star connection	2 x SC 1 DA 4030 L = 20.7 kW Max  Economy circuit Delta connection

Application hints Contactors type SC X

Short-circuit Protection

Short-circuit protection:

Short-circuit protection by fuses.

Short-circuit protection is divided into 2 levels Type 1 / Type 2

Type 1: Short-circuit protects the installation

Type 2: Short-circuit protects the installation and the semiconductors inside the contactor.

Short-circuit Protection by Fuses

Contactor type SC 1 DX (L)

Type 1: SC 1 DX XX15 protection max 50 A. gL/gG.

Type 1: SC 1 DX XX30 (L) protection max 50 A. gL/gG.

Type 1: SC 1 DX XX50 (L) protection max 50 A. gL/gG.

Type 2: SC 1 DX XXXX (L) protection max I²t of the fuse 1800 A²S

Type 2: SC 1 DX 6015 protection max I²t of the fuse 450 A²S

Recommended fuse : Ferraz

SC 1 DX XX30 (L) 660 RB 10-30

SC 1 DX XX50 (L) 6.621 CP URGA

22x58/50

Siemens

Sillized 5SD4 60 Max 500V

Sillized 5SD4 60 Max 500V

Contactor type SC 2 DX

Type 1: SC 2 DX XX30 protection max 50 A. gL/gG.

Type 1: SC 2 DX XX50 protection max 50 A. gL/gG.

Type 2: SC 2 DX XXXX protection max I²t of the fuse 1800 A²S

Recommended fuse : Ferraz

SC 2 DX XX30 660 RB 10-30

SC 2 DX XX50 6.621 CP URGA

22x58/50

Siemens

Sillized 5SD4 60 Max 500 V

Sillized 5SD4 60 Max 500 V

Contactor type SC 3 DX

Type 1: SC 3 DX XX10 protection max 35 A. gL/gG.

Type 1: SC 3 DX XX20 protection max 35 A. gL/gG.

Type 2: SC 3 DX XXXX protection max I²t of the fuse 450 A²S

Recommended fuse : Ferraz

SC 3 DX XX10 660 RB 10-30

SC 3 DX XX20 660 RB 10-30

Siemens

Sillized 5SD4 80A Max 500 V

Sillized 5SD4 80A Max 500 V

Utilisation Categories (IEC 947-4-3)

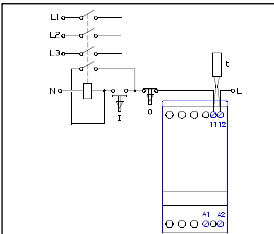
AC - 51 Switching of resistive loads

AC - 55a Switching of electric discharge lamp controls

AC - 55b Switching of incandescent lamps

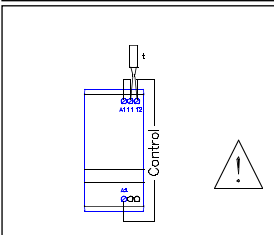
AC - 56a Switching of transformers

Thermal Overload Protection



The thermostat is connected in series with the control circuit of the main contactor. When the temperature of the heatsink exceeds 100°C the main contactor will switch Off. A manual reset is necessary to restart this circuit.

Thermal Overload Protection

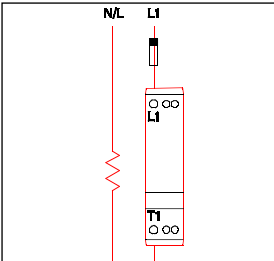


The thermostat is connected in series with the control circuit of the main contactor. When the temperature of the heatsink exceeds 100°C the control voltage is switched Off.

Important:

When the heatsink temperature has dropped approximately 30°C the control will automatically be switched On and for some applications this is not acceptable

Short Circuit Protection with fuse (22.5 mm Type)



Short Circuit Protection for SC1 DX XX15 (15 A Type)

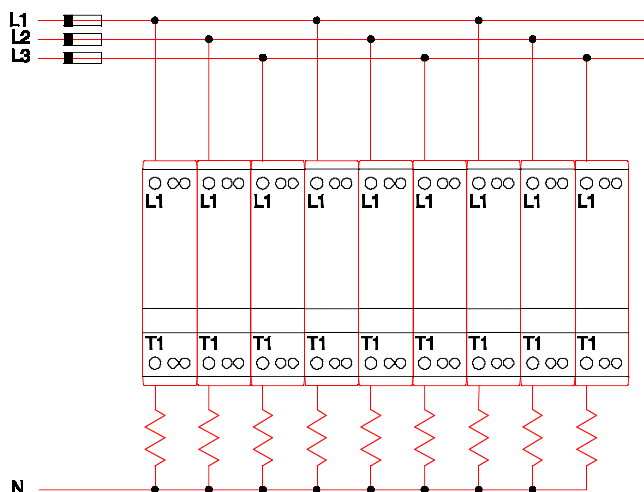
Line Voltage Up to 480 V. Due to the oversized Output SCR's the contactor is fully protected by a standard fuse up to 16 A. Operating Class gL/gG.. No need for Ultra Fast Fuses

Max Load at 230 V: 3.5 kW

Max Load at 400 V: 6.0 kW

Max Load at 480 V: 7.2 kW

Common Short Circuit Protection



Short Circuit Protection for several Contactors e.g. SC1 DX XX15

Max Fuse 50 A gL/gG for Short Circuit Coordination type 1

SC1 DX 2315

Max Fuse 1800 A²s

e.g. Siemens SILIZED 5SD4 60

For Short Circuit Coordination type 2

SC1 DX 4015

Max Fuse 1800 A²s

e.g. Siemens SILIZED 5SD4 60

For Short Circuit Coordination type 2

SC1 DX 6015

Max Fuse 450 A²s

e.g. Siemens SILIZED 5SD4 50

For Short Circuit Coordination type 2

*UL: Use thermal overload protection as required by the National Electric Code. Maximum surrounding temperature 40°C.