



## **AF09-30-01-11 (1SBL137001R1101)**

URL:<https://www.sxplc.com/af09-30-01-11-1sbl137001r1101>

### **Product data sheet**

Dimensions

Product Net Width:

45 mm

Product Net Depth / Length:

77 mm

Product Net Height:

86 mm

Product Net Weight:

0.27 kg

Technical

Number of Main Contacts NO:

3

Number of Main Contacts NC:

0

Number of Auxiliary Contacts NO:

0

Number of Auxiliary Contacts NC:

1

Standards:

IEC/EN 60947-1, IEC/EN 60947-4-1, UL 60947-4-1, CSA C22.2 No. 60947-4-1

Rated Operational Voltage:

Auxiliary Circuit 690 V

Main Circuit 690 V

Rated Frequency (f):

Auxiliary Circuit 50 / 60 Hz

Control Circuit 50 / 60 Hz

Main Circuit 50 / 60 Hz

Conventional Free-air Thermal Current (I<sub>th</sub>):

acc. to IEC 60947-4-1, Open Contactors  $\Theta = 40\text{ }^{\circ}\text{C}$  35 A

acc. to IEC 60947-5-1,  $\Theta = 40\text{ }^{\circ}\text{C}$  16 A

Rated Operational Current AC-1 (I<sub>e</sub>):

(690 V) 40  $^{\circ}\text{C}$  25 A

(690 V) 60  $^{\circ}\text{C}$  25 A

(690 V) 70  $^{\circ}\text{C}$  22 A

Rated Operational Current AC-3 (I<sub>e</sub>):

(415 V) 60  $^{\circ}\text{C}$  9 A

(440 V) 60  $^{\circ}\text{C}$  9 A

(500 V) 60  $^{\circ}\text{C}$  9.5 A

(690 V) 60  $^{\circ}\text{C}$  7 A

(380 / 400 V) 60 °C 9 A

(220 / 230 / 240 V) 60 °C 9 A

Rated Operational Current AC-3e (Ie):

(415 V) 60 °C 9 A

(440 V) 60 °C 9 A

(500 V) 60 °C 9.5 A

(690 V) 60 °C 7 A

(380 / 400 V) 60 °C 9 A

(220 / 230 / 240 V) 60 °C 9 A

Rated Operational Power AC-3 (Pe):

(400 V) 4 kW

(415 V) 4 kW

(440 V) 4 kW

(500 V) 5.5 kW

(690 V) 5.5 kW

(380 / 400 V) 4 kW

(220 / 230 / 240 V) 2.2 kW

Rated Operational Power AC-3e (Pe):

(415 V) 4 kW

(440 V) 4 kW

(500 V) 5.5 kW

(690 V) 5.5 kW

(380 / 400 V) 4 kW

(220 / 230 / 240 V) 2.2 kW

Rated Operational Current AC-15 (Ie):

(500 V) 2 A

(690 V) 2 A

(24 / 127 V) 6 A

(220 / 240 V) 4 A

(400 / 440 V) 3 A

Rated Short-time Withstand Current Low Voltage (I<sub>cw</sub>):

at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 150 A

at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 35 A

at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 60 A

at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 300 A

at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 80 A

for 0.1 s 140 A

for 1 s 100 A

Maximum Breaking Capacity:

cos phi=0.45 (cos phi=0.35 for I<sub>e</sub> > 100 A) at 440 V 250 A

cos phi=0.45 (cos phi=0.35 for I<sub>e</sub> > 100 A) at 690 V 106 A

Maximum Electrical Switching Frequency:

(AC-1) 600 cycles per hour

(AC-15) 1200 cycles per hour

(AC-2 / AC-4) 300 cycles per hour

(AC-3) 1200 cycles per hour

(DC-13) 900 cycles per hour

Rated Operational Current DC-1 (I<sub>e</sub>):

(110 V) 1-Pole, 40 °C 10 A

(110 V) 1-Pole, 60 °C 10 A

(110 V) 1-Pole, 70 °C 10 A

(110 V) 2 Poles in Series, 40 °C 25 A

(110 V) 2 Poles in Series, 60 °C 25 A

(110 V) 2 Poles in Series, 70 °C 22 A

(110 V) 3 Poles in Series, 40 °C 25 A

(110 V) 3 Poles in Series, 60 °C 25 A

(110 V) 3 Poles in Series, 70 °C 22 A

(220 V) 2 Poles in Series, 40 °C 10 A

Show more

Rated Operational Current DC-3 (I<sub>e</sub>):

(110 V) 1-Pole, 40 °C 6 A

(110 V) 1-Pole, 60 °C 6 A

(110 V) 1-Pole, 70 °C 6 A

(110 V) 2 Poles in Series, 40 °C 25 A

(110 V) 2 Poles in Series, 60 °C 25 A

(110 V) 2 Poles in Series, 70 °C 22 A

(110 V) 3 Poles in Series, 40 °C 25 A

(110 V) 3 Poles in Series, 60 °C 25 A

(110 V) 3 Poles in Series, 70 °C 22 A

(220 V) 2 Poles in Series, 40 °C 6 A

Show more

Rated Operational Current DC-5 (I<sub>e</sub>):

(110 V) 1-Pole, 40 °C 4 A

(110 V) 1-Pole, 60 °C 4 A

(110 V) 1-Pole, 70 °C 4 A



(110 V) 2 Poles in Series, 40 °C 10 A

(110 V) 2 Poles in Series, 60 °C 10 A

(110 V) 2 Poles in Series, 70 °C 10 A

(110 V) 3 Poles in Series, 40 °C 25 A

(110 V) 3 Poles in Series, 60 °C 25 A

(110 V) 3 Poles in Series, 70 °C 22 A

(220 V) 2 Poles in Series, 40 °C 4 A

Show more

Rated Operational Current DC-13 (I<sub>e</sub>):

(24 V) 6 A / 144 W

(48 V) 2.8 A / 134 W

(72 V) 1 A / 72 W

(110 V) 0.55 A / 60 W

(125 V) 0.55 A / 69 W

(220 V) 0.27 A / 60 W

(250 V) 0.27 A / 68 W

(400 V) 0.15 A / 60 W

(500 V) 0.13 A / 65 W

(600 V) 0.1 A / 60 W

Rated Insulation Voltage (Ui):

acc. to IEC 60947-4-1 690 V

acc. to IEC 60947-5-1 690 V

acc. to UL/CSA 600 V

Rated Impulse Withstand Voltage (Uimp):

6 kV

Maximum Mechanical Switching Frequency:

3600 cycles per hour

Rated Control Circuit Voltage (Uc):

50 Hz 24 ... 60 V

60 Hz 24 ... 60 V

DC Operation 20 ... 60 V

Operate Time:

Between Coil De-energization and NC Contact Closing 13 ... 98 ms

Between Coil De-energization and NO Contact Opening 11 ... 95 ms

Between Coil Energization and NC Contact Opening 38 ... 90 ms

Between Coil Energization and NO Contact Closing 40 ... 95 ms

Mounting on DIN Rail:

TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715

TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715

Mounting by Screws (not supplied):

2 x M4 screws placed diagonally

Connecting Capacity Main Circuit:

Flexible with Ferrule 1/2x 0.75 ... 6 mm<sup>2</sup>

Flexible with Insulated Ferrule 1x 0.75 ... 4 mm<sup>2</sup>

Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm<sup>2</sup>

Rigid Solid 1/2x 1 ... 4 mm<sup>2</sup>

Rigid Stranded 1/2x 1 ... 6 mm<sup>2</sup>

Connecting Capacity Auxiliary Circuit:

Flexible with Ferrule 1/2x 0.75 ... 2.5 mm<sup>2</sup>

Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm<sup>2</sup>

Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm<sup>2</sup>

Rigid Solid 1/2x 1 ... 2.5 mm<sup>2</sup>

Rigid Stranded 1/2x 1 ... 2.5 mm<sup>2</sup>

Connecting Capacity Control Circuit:

Flexible with Ferrule 1/2x 0.75 ... 2.5 mm<sup>2</sup>

Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm<sup>2</sup>

Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm<sup>2</sup>

Rigid Solid 1/2x 1 ... 2.5 mm<sup>2</sup>

Rigid Stranded 1/2x 1 ... 2.5 mm<sup>2</sup>

Wire Stripping Length:

Auxiliary Circuit 10 mm

Control Circuit 10 mm

Main Circuit 10 mm

Degree of Protection:

acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP20

acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20

acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP20

Terminal Type:

Screw Terminals

Technical UL/CSA

NEMA Size:

00

Continuous Current Rating NEMA:

9 A

Horsepower Rating NEMA:

(115 V AC) Single Phase 1/3 Hp

(200 V AC) Three Phase 1-1/2 Hp

(230 V AC) Single Phase 1 Hp

(230 V AC) Three Phase 1-1/2 Hp

(460 V AC) Three Phase 2 Hp

(575 V AC) Three Phase 2 Hp

Maximum Operating Voltage UL/CSA:

Main Circuit 600 V

General Use Rating UL/CSA:

(600 V AC) 25 A

Horsepower Rating UL/CSA:

(120 V AC) Single Phase 3/4 hp

(200 ... 208 V AC) Three Phase 2 hp

(220 ... 240 V AC) Three Phase 2 hp

(240 V AC) Single Phase 1-1/2 hp

(440 ... 480 V AC) Three Phase 5 hp

(550 ... 600 V AC) Three Phase 7-1/2 hp

Connecting Capacity Main Circuit UL/CSA:

Rigid Solid 1/2x 16-10 AWG

Rigid Stranded 1/2x 16-10 AWG

Connecting Capacity Auxiliary Circuit UL/CSA:

Rigid Solid 1/2x 18-14 AWG

Rigid Stranded 1/2x 18-14 AWG

Connecting Capacity Control Circuit UL/CSA:

Rigid Solid 1/2x 18-14 AWG

Rigid Stranded 1/2x 18-14 AWG

Tightening Torque UL/CSA:

Auxiliary Circuit 11 in·lb

Control Circuit 11 in·lb

Main Circuit 13 in·lb

