AF16-40-00-13LU 1/5



PRODUCT-DETAILS

## AF16-40-00-13LU

# AF16-40-00-13LU 100-250V50/60HZ-DC Contactor



General Information	
Extended Product Type	AF16-40-00-13LU
Product ID	1SBL177287R1300
EAN	3471523020597
Catalog Description	AF16-40-00-13LU 100-250V50/60HZ-DC Contactor
Long Description	The AF16-40-00-13LU is a 4-pole - 600 UL contactor with screw terminals, dedicated for UL lighting applications. Thanks to the AF technology, the contactor has a wide control voltage range (100-250 V 50/60 Hz and DC),managing large control voltage variations, reducing panel energy consumptions and ensuring distinct operations in unstable networks. Furthermore, surge protection is built-in, offering a compact solution. AF contactors have a block type design, can be easily extended with add-on auxiliary contact blocks and an additional wide range of accessories.

Ordering	
Minimum Order Quantity	1 piece

#### **Popular Downloads**

AF16-40-00-13LU 2/5

Data Sheet, Technical Information	1SBC100214C0202
Instructions and Manuals	1SBC101027M6801
CAD Dimensional Drawing	2CDC001079B0201

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	
Number of Main Contacts NC	
Number of Auxiliary Contacts NO	•
Number of Auxiliary Contacts NC	
Number of Poles	4
Standards	IEC/EN 60947-1, IEC/EN 60947-4-1, UL 60335-2-40 LZGH2 A2L, UL 508, CS C22.2 No. 60335-2-40 LZGH2 A2L, CSA C22.2 No. 60947-4-
Rated Operational Voltage	Main Circuit 690 \
Rated Frequency (f)	Control Circuit 50 / 60 H Main Circuit 50 / 60 H
Conventional Free-air Thermal Current (I <sub>th</sub> )	acc. to IEC 60947-4-1, Open Contactors $\Theta$ = 40 °C 35 $\mu$
Rated Operational Current AC-1 (I <sub>e</sub> )	(690 V) 40 °C 30 A (690 V) 60 °C 30 A (690 V) 70 °C 26 A
Rated Operational Current AC-3 (I <sub>e</sub> )	(415 V) 60 °C 18 / (440 V) 60 °C 18 / (500 V) 60 °C 15 / (690 V) 60 °C 10.5 / (380 / 400 V) 60 °C 18 / (220 / 230 / 240 V) 60 °C 18 /
Rated Operational Power AC-3 (P <sub>e</sub> )	(400 V) 7.5 kV (410 V) 9 kV (440 V) 9 kV (500 V) 9 kV (690 V) 9 kV (380 / 400 V) 7.5 kV (220 / 230 / 240 V) 4 kV
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 v at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 35 v at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 60 v at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 300 v at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 80 v
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 250 A cos phi=0.45 (cos phi=0.35 for le > 100 A) at 690 V 106 A
Rated Insulation Voltage (U <sub>i</sub> )	acc. to IEC 60947-4-1 690 \ acc. to UL/CSA 600 \

AF16-40-00-13LU 3/5

<u></u>	
Maximum Electrical	(AC-1) 600 cycles per hour
Switching Frequency	2000
Maximum Mechanical Switching Frequency	3600 cycles per hour
Rated Control Circuit	50 Hz 100 250 V
Voltage (U <sub>C</sub> )	60 Hz 100 250 V
rollage (oc)	DC Operation 100 250 V
Power Loss	at Rated Operating Conditions AC-1 per Pole 1.2 W
	at Rated Operating Conditions AC-3 per Pole 0.35 W
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	Flexible with Ferrule 1/2x 0.75 6 mm²
Main Circuit	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 mm² Rigid Stranded 1/2x 1 6 mm²
	<u> </u>
Connecting Capacity	Flexible with Ferrule 1/2x 0.75 2.5 mm <sup>2</sup>
Auxiliary Circuit	Flexible with Insulated Ferrule 2x 0.75 1.5 mm <sup>2</sup> Flexible with Insulated Ferrule 1/2x 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>
Connecting Capacity	Flexible with Ferrule 1/2x 0.75 2.5 mm²
Control Circuit	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 mm²
	Rigid Stranded 1/2x 1 2.5 mm²
Wire Stripping Length	Control Circuit 10 mm
	Main Circuit 10 mm
Degree of Protection	acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20
	acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP20
Tightening Torque	Control Circuit 1.2 N·m Main Circuit 1.5 N·m
Terminal Type	Screw Terminals
Product Name	Block Contactor

Technical UL/CSA	
Maximum Operating Voltage UL/CSA	Main Circuit 600 V
General Use Rating UL/CSA	(600 V AC) 30 A
Connecting Capacity	Rigid Solid 1/2x 16-10 AWG
Main Circuit UL/CSA	Rigid Stranded 1/2x 16-10 AWG
Connecting Capacity	Rigid Solid 1/2x 18-14 AWG
Auxiliary Circuit UL/CSA	Rigid Stranded 1/2x 18-14 AWG
Connecting Capacity	Rigid Solid 1/2x 18-14 AWG
Control Circuit UL/CSA	Rigid Stranded 1/2x 18-14 AWG
Tightening Torque	Control Circuit 11 in-lb
UL/CSA	Main Circuit 13 in lb

Ambient Air	Close to Contactor for Storage -60 +80 °C
Temperature	Near Contactor for Operation in Free Air -40 70 °C

AF16-40-00-13LU 4/5

Climatic Withstand	Category B according to IEC 60947-1 Annex Q
Maximum Operating Altitude Permissible	Without Derating 3000 m
Resistance to Shock acc.	Closed, Shock Direction: B1 25 g
to IEC 60068-2-27	Open, Shock Direction: B1 5 g
	Shock Direction: A 30 g
	Shock Direction: B2 15 g
	Shock Direction: C1 25 g
	Shock Direction: C2 25 g
Resistance to Vibrations	4g Closed Position & 2g Open position 5 300 Hz
Pollution Degree	3

Material Compliance	
Conflict Minerals Reporting Template (CMRT)	9AKK108467A5658
REACH Declaration	2CMT2021-006202
RoHS Information	2CMT2021-006277
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
Toxic Substances Control Act - TSCA	2CMT2023-006525
WEEE B2C / B2B	Business To Business
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)

Certificates and Declarations	
A2L Certificate – UL	9AKK108469A4875;9AKK108469A4879
CB Certificate	CB_SE-113345
Declaration of Conformity - CE	1SBD250062U1000
Declaration of Conformity - UKCA	1SBD250063U1000
UL Certificate	UL_20180227_E312527_7_1

Container Information	
Package Level 1 Units	box 1 piece
Package Level 1 Width	87 mm
Package Level 1 Depth / Length	79 mm
Package Level 1 Height	47 mm
Package Level 1 Gross Weight	0.27 kg
Package Level 1 EAN	3471523020597
Package Level 2 Units	box 27 piece
Package Level 2 Width	250 mm
Package Level 2 Depth / Length	300 mm
Package Level 2 Height	315 mm
Package Level 2 Gross Weight	14.58 kg
Package Level 3 Units	1296 piece

#### Classifications

AF16-40-00-13LU 5/5

Object Classification Code	Q
ETIM 7	EC000066 - Power contactor, AC switching
ETIM 8	EC000066 - Power contactor, AC switching
ETIM 9	EC000066 - Power contactor, AC switching
eClass	V11.0 : 27371003
UNSPSC	39121529
IDEA Granular Category Code (IGCC)	4760 >> Lighting Contactors

### Categories

 $Low\ Voltage\ Products\ and\ Systems \rightarrow Control\ Products \rightarrow Contactors \rightarrow Block\ Contactors \rightarrow AF\ Contactors \rightarrow AF16$ 

