



PRODUCT-DETAILS

# UA110-30-00RA-81

## UA110-30-00RA 24V 50Hz Contactor



General Information	
Extended Product Type	UA110-30-00RA-81
Product ID	1SFL451024R8100
EAN	7320500260531
Catalog Description	UA110-30-00RA 24V 50Hz Contactor
Long Description	A 3-phase Contactor suitable for Capacitor switching application. Maximum permissible peak current 100 times the nominal RMS current. Operated with a control voltage, versions from 24V to 690 V

Ordering	
Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads	
Data Sheet, Technical Information	1SBC101145L0202
Instructions and	5309660-60

Manuals

CAD Dimensional Drawing	2CDC001079B0201
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Dimensions

Product Net Width	90 mm
Product Net Depth / Length	155.6 mm
Product Net Height	170 mm
Product Net Weight	1.8 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	0
Rated Operational Voltage	Main Circuit 1000 V
Rated Frequency (f)	Main Circuit 50 Hz
Conventional Free-air Thermal Current (I <sub>th</sub> )	acc. to IEC 60947-4-1, Open Contactors $\Theta = 40\text{ }^{\circ}\text{C}$ 160 A
Rated Operational Current AC-1 (I <sub>e</sub> )	(690 V) 40 °C 160 A (690 V) 55 °C 145 A (690 V) 60 °C 145 A (690 V) 70 °C 130 A
Rated Operational Current AC-3 (I <sub>e</sub> )	(415 V) 55 °C 110 A (440 V) 55 °C 100 A (500 V) 55 °C 100 A (690 V) 55 °C 82 A (1000 V) 55 °C 30 A (380 / 400 V) 55 °C 110 A (220 / 230 / 240 V) 55 °C 110 A
Rated Operational Power AC-6b (P <sub>e</sub> )	(230 / 240 V) 40 °C, 50 / 60 Hz 45 kvar (230 / 240 V) 55 °C, 50 / 60 Hz 40 kvar (230 / 240 V) 70 °C, 50 / 60 Hz 35 kvar (400 / 415 V) 40 °C, 50 / 60 Hz 80 kvar (400 / 415 V) 70 °C, 50 / 60 Hz 60 kvar (400 / 415 V) 55 °C, 50 / 60 Hz 70 kvar (440 V) 40 °C, 50 / 60 Hz 85 kvar (440 V) 55 °C, 50 / 60 Hz 75 kvar (440 V) 70 °C, 50 / 60 Hz 70 kvar (500 / 550 V), 40 °C, 50 / 60 Hz 95 kvar (500 / 550 V) 55 °C, 50 / 60 Hz 82 kvar (500 / 550 V) 70 °C, 50 / 60 Hz 78 kvar (690 V) 40 °C, 50 / 60 Hz 130 kvar (690 V) 55 °C, 50 / 60 Hz 110 kvar (690 V) 70 °C, 50 / 60 Hz 100 kvar
Rated Breaking Capacity AC-3	8 x I <sub>e</sub> AC-3
Rated Making Capacity AC-3	10 x I <sub>e</sub> AC-3
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 440 V 1160 A cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 690 V 800 A
Maximum Electrical Switching Frequency	(AC-1) 300 cycles per hour (AC-2 / AC-4) 150 cycles per hour (AC-3) 300 cycles per hour

Rated Insulation Voltage (U <sub>i</sub> )	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage (U <sub>imp</sub> )	Main Circuit 8 kV
Mechanical Durability	10 million
Maximum Mechanical Switching Frequency	3600 cycles per hour
Coil Operating Limits	(acc. to IEC 60947-4-1) 0.85 x U <sub>c</sub> Min. ... 1.1 x U <sub>c</sub> Max. (at θ ≤ 70 °C)
Rated Control Circuit Voltage (U <sub>c</sub> )	50 Hz 24 V 60 Hz 24 V
Coil Consumption	Holding at Max. Rated Control Circuit Voltage 50 Hz 22 V-A Holding at Max. Rated Control Circuit Voltage 60 Hz 26 V-A Pull-in at Max. Rated Control Circuit Voltage 50 Hz 350 V-A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 450 V-A
Operate Time	Between Coil De-energization and NC Contact Closing 7 ... 15 ms Between Coil Energization and NO Contact Closing 10 ... 25 ms
Connecting Capacity Main Circuit	Bar 30 mm <sup>2</sup> Flexible with Cable End 2 x 6 ... 35 mm <sup>2</sup> Rigid 2 x 6 ... 65 mm <sup>2</sup>
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 2x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm <sup>2</sup> Flexible 2x0.75 ... 2.5 mm <sup>2</sup> Solid 2 x 1 ... 4 mm <sup>2</sup> Stranded 2 x 1 .... 4 mm <sup>2</sup>
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 IP10
Connecting Terminals (delivered in open position) Main Poles	M8 hexagon socket screw with single connector
Terminal Type	Cable Clamp

## Technical UL/CSA

Maximum Operating Voltage UL/CSA	Main Circuit 600 V
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## Environmental

Ambient Air Temperature	Close to Contactor Fitted with Thermal O/L Relay (0.85 ... 1.1 U <sub>c</sub> ) -25 ... 50 °C Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 U <sub>c</sub> ) -40 ... 70 °C Close to Contactor for Storage -60 ... +80 °C
Maximum Operating Altitude Permissible	Without Derating 3000 m
Resistance to Shock acc. to IEC 60068-2-27	Half-sine Pulse for 11 ms, No Change in Contact Position, Open, Shock Direction: A 20 g Half-sine Pulse for 11 ms, No Change in Contact Position, Closed, Shock Direction: A 20 g Half-sine Pulse for 11 ms, No Change in Contact Position, Closed, Shock Direction: B1 15 g Half-sine Pulse for 11 ms, No Change in Contact Position, Closed, Shock Direction: C1 20 g Half-sine Pulse for 11 ms, No Change in Contact Position, Closed, Shock Direction: C2 20 g Half-sine Pulse for 11 ms, No Change in Contact Position, Open, Shock Direction: B1 5 g Half-sine Pulse for 11 ms, No Change in Contact Position, Open, Shock Direction: B2 15 g Half-sine Pulse for 11 ms, No Change in Contact Position, Open, Shock Direction: C1 20 g Half-sine Pulse for 11 ms, No Change in Contact Position, Open, Shock

Direction: C2 20 g

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		
CB Certificate		SE-72477
cULus Certificate		20160916- E36588
Declaration of Conformity - CE		2CMT2015-005436
Declaration of Conformity - UKCA		2CMT2020-006118

Container Information		
Package Level 1 Units		box 1 piece
Package Level 1 Width		170 mm
Package Level 1 Depth / Length		140 mm
Package Level 1 Height		170 mm
Package Level 1 Gross Weight		2 kg
Package Level 1 EAN		7320500260531

Classifications		
Object Classification Code		Q
ETIM 4	EC001079 - Capacitor magnet contactor	
ETIM 5	EC001079 - Capacitor magnet contactor	
ETIM 6	EC001079 - Capacitor contactor	
ETIM 7	EC001079 - Capacitor contactor	
ETIM 8	EC001079 - Capacitor contactor	
eClass		V11.0 : 27371006
UNSPSC		39121529
IDEA Granular Category Code (IGCC)	4756 >> Capacitor magnet contactor	

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## Categories

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Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → UA and UA..RA Contactors → UA110RA

