



PRODUCT-DETAILS

# UA16-30-10RA 110V 50Hz / 110-120V 60Hz

## UA16-30-10RA 110V 50Hz / 110-120V 60Hz

### Contactors



General Information	
Extended Product Type	UA16-30-10RA 110V 50Hz / 110-120V 60Hz
Product ID	1SBL181024R8410
EAN	3471522300843
Catalog Description	UA16-30-10RA 110V 50Hz / 110-120V 60Hz Contactor
Long Description	<p>The UA16-30-10RA 110V 50Hz / 110-120V 60Hz is a 3-pole contactors for capacitor switching, can be used in installations in which the peak current far exceeds 100 times nominal rms current. The contactors are delivered complete with their damping resistors and must be used without additional inductances (see table below). The capacitors must be discharged (maximum residual voltage at terminals <math>\leq 50</math> V) before being re-energized when the contactors are making. Their electrical durability is 250 000 operating cycles for <math>U_e &lt; 500</math> V and 100 000 operating cycles for <math>500\text{ V} \leq U_e \leq 690</math> V. The UA..RA contactors are fitted with a special front mounted block, which ensures the serial insertion of 3 damping resistors into the circuit to limit the current peak on energization of the capacitor bank. Their connection also ensures capacitor precharging in order to limit the second current peak occurring upon making of the main poles. The insertion of resistors allows to damp the highest current peak of the capacitor when switching on, whatever its level. The UA..RA series 3-pole contactors are of the block type design. - Main poles and auxiliary contacts: 3 main poles, 1 built-in auxiliary contact - Control circuit: AC operated with laminated magnet circuit - Accessories: a wide range of accessories is available.</p>

Ordering	
Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads	
Data Sheet, Technical Information	1SBC101140C0203
Instructions and Manuals	1SBC101002M5501
CAD Dimensional Drawing	2CDC001079B0201
Dimension Diagram	FPTE307847

Dimensions	
Product Net Width	44 mm
Product Net Depth / Length	107 mm
Product Net Height	120 mm
Product Net Weight	0.46 kg

Technical	
Number of Main Contacts NO	3
Number of Main Contacts NC	0
Number of Auxiliary Contacts NO	1
Number of Auxiliary Contacts NC	0
Standards	IEC/EN 60947-1, IEC/EN 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 60947-5-1, $\Theta = 40\text{ }^{\circ}\text{C}$ 16 A
Rated Operational Power AC-6b (P <sub>e</sub> )	(230 / 240 V) 40 °C, 50 / 60 Hz 8 kvar (230 / 240 V) 55 °C, 50 / 60 Hz 7.5 kvar (230 / 240 V) 70 °C, 50 / 60 Hz 6 kvar (400 / 415 V) 40 °C, 50 / 60 Hz 12.5 kvar (400 / 415 V) 70 °C, 50 / 60 Hz 10 kvar (400 / 415 V) 55 °C, 50 / 60 Hz 12.5 kvar (440 V) 40 °C, 50 / 60 Hz 15 kvar (440 V) 55 °C, 50 / 60 Hz 13 kvar (440 V) 70 °C, 50 / 60 Hz 11 kvar (500 / 550 V), 40 °C, 50 / 60 Hz 18 kvar (500 / 550 V) 55 °C, 50 / 60 Hz 16 kvar (500 / 550 V) 70 °C, 50 / 60 Hz 12.5 kvar (690 V) 40 °C, 50 / 60 Hz 22 kvar (690 V) 55 °C, 50 / 60 Hz 21 kvar (690 V) 70 °C, 50 / 60 Hz 17 kvar
Rated Operational Current AC-15 (I <sub>e</sub> )	(500 V) 2 A (690 V) 2 A (24 / 127 V) 6 A (220 / 240 V) 4 A

	(380 / 400 V) 3 A
Short-Circuit Protective Devices	Auxiliary Circuit - gG Type Fuses 10 A gG Type Fuses 80 A
Rated Short-time Withstand Current Low Voltage ( $I_{cw}$ )	for 0.1 s 140 A for 1 s 100 A
Maximum Breaking Capacity	$\cos \phi=0.45$ ( $\cos \phi=0.35$ for $I_e > 100$ A) at 440 V 250 A $\cos \phi=0.45$ ( $\cos \phi=0.35$ for $I_e > 100$ A) at 690 V 90 A
Maximum Electrical Switching Frequency	240 cycles per hour
Rated Operational Current DC-13 ( $I_e$ )	(24 V) 6 A / 144 W (48 V) 2.8 A / 134 W (72 V) 2 / 144 W (110 V) 1.1 A / 121 W (125 V) 1.1 / 138 W (220 V) 0.55 A / 121 W (250 V) 0.55 / 138 W
Rated Insulation Voltage ( $U_i$ )	acc. to IEC 60947-4-1 1000 V acc. to IEC 60947-5-1 690 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage ( $U_{imp}$ )	8 kV
Rated Control Circuit Voltage ( $U_c$ )	50 Hz 110 V 60 Hz 110 ... 120 V
Coil Consumption	Average Holding Value 50 / 60 Hz 8 V-A Average Holding Value 50 Hz 8 V-A Average Holding Value 60 Hz 8 V-A Average Pull-in Value 50 Hz 70 V-A Average Pull-in Value 60 Hz 80 V-A
Operate Time	Between Coil De-energization and NO Contact Opening 4 ... 11 ms Between Coil Energization and NO Contact Closing 10 ... 26 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 Cable End 1x 0.75 ... 2.5 mm <sup>2</sup> Rigid Solid 1x 1 ... 4 mm <sup>2</sup>
Connecting Capacity Auxiliary Circuit	Flexible with Cable End 1/2x 0.75 ... 2.5 mm <sup>2</sup> Rigid Solid 1/2x 1 ... 4 mm <sup>2</sup>
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
Connecting Terminals (delivered in open position) Main Poles	M 3.5 (+,-) pozidriv 2 screws with cable clamp
Terminal Type	Screw Terminals

## Technical UL/CSA

Connecting Capacity Main Circuit UL/CSA	1x 18-10 AWG
Tightening Torque UL/CSA	Auxiliary Circuit 9 in-lb Control Circuit 9 in-lb Main Circuit 9 in-lb

## Environmental

Ambient Air Temperature	Close to Contactor for Storage -60 ... +80 °C Near Contactor for Operation in Free Air (0.85 ... 1.1 $U_c$ ) -40 ... +55 °C Near Contactor for Operation in Free Air ( $U_c$ ) -40 ... 70 °C
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Climatic Withstand	acc. to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 specification II
Maximum Operating Altitude Permissible	Without Derating 3000 m

## Material Compliance

Conflict Minerals Reporting Template (CMRT)	9AKK108467A5658
REACH Declaration	2CMT2021-006202
RoHS Information	2CMT2021-006277
RoHS Status	Following EU Directive 2011/65/EU
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	CB_CN-58851
CCC Certificate	CCC_2018010304059154
CQC Certificate	CQC2004010304138319 CQC2018010304059153 CQC2018010304059154 CQC2007010304257961
Declaration of Conformity - CCC	2020980304001605 2020980304001618 2020980304001619 2020980304001218
Declaration of Conformity - CE	1SBD250805U1000
Declaration of Conformity - UKCA	1SBD250822U1000
GOST Certificate	GOST_POCCFRME77B07175
UL Certificate	UL-US-L312527-1102-51017991-2 UL-CA-L312527-4102-51017991-2
UL Listing Card	UL_E312527

## Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	135 mm
Package Level 1 Depth / Length	155 mm
Package Level 1 Height	63 mm
Package Level 1 Gross Weight	0.46 kg
Package Level 1 EAN	3471522300843
Package Level 2 Units	box 63 piece
Package Level 2 Width	300 mm
Package Level 2 Depth / Length	245 mm
Package Level 2 Height	308 mm
Package Level 2 Gross Weight	28.98 kg
Package Level 3 Units	260 piece

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

Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → UA and UA..RA Contactors → UA16RA

