



PRODUCT-DETAILS

UA16-30-10RA 500V 50Hz / 600V 60Hz
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Contactor



General Information

Extended Product Type	UA16-30-10RA 500V 50Hz / 600V 60Hz
Product ID	1SBL181024R5510
EAN	3471522300553
Catalog Description	UA16-30-10RA 500V 50Hz / 600V 60Hz Contactor

Long Description

The UA16-30-10RA 500V 50Hz / 600V 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 ≤ 50 V) before being re-energized when the contactors are making. Their electrical durability is 250 000 operating cycles for $U_e < 500$ V and 100 000 operating cycles for $500 \text{ V} \leq U_e \leq 690$ 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.

Ordering

Minimum Order Quantity	1 piece
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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
Number of Poles	3P
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 _{th})	acc. to IEC 60947-5-1, $\Theta = 40\text{ }^{\circ}\text{C}$ 16 A
Rated Operational Current AC-15 (I _e)	(500 V) 2 A (690 V) 2 A (24 / 127 V) 6 A (220 / 240 V) 4 A (380 / 400 V) 3 A
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 Operational Power AC-6b (P _e)	(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
Short-Circuit Protective	Auxiliary Circuit - gG Type Fuses 10 A

Devices	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
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
Electrical Durability	$U_e \leq 440$ V 250000 cycle $U_e = 500 \dots 690$ V 100000 cycle
Maximum Electrical Switching Frequency	240 cycles per hour
Minimum Switching Capacity	17 / 5 VLT4K
Rated Control Circuit Voltage (U_c)	50 Hz 500 V 60 Hz 600 V
Coil Consumption	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
Power Loss	at Rated Operating Conditions per Pole 0.1 W at 6 A per Pole 0.1 W
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 0.75 ... 2.5 mm ² Rigid Cable 1 ... 4 mm ²
Connecting Capacity Auxiliary Circuit	Flexible with Cable End 0.75 ... 2.5 mm ² Rigid Cable 1 ... 4 mm ²
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
Tightening Torque	Auxiliary Circuit 1 N·m Control Circuit 1 N·m Main Circuit 1 N·m
Terminal Type	Screw Terminals
Product Name	Block Contactor

Technical UL/CSA

Tightening Torque UL/CSA	Auxiliary Circuit 9 in·lb Control Circuit 9 in·lb Main Circuit 9 in·lb
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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
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
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

CB Certificate	CB_CN-58851
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	3471522300553
Package Level 2 Units	box 63 piece
Package Level 2 Gross Weight	28.98 kg

External Classifications and Standards

Object Classification Code	Q
ETIM 7	EC001079 - Capacitor contactor
ETIM 8	EC001079 - Capacitor contactor
ETIM 9	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

