

# UA16-30-10RA 220-230V 50Hz / 230-240V 60Hz



Products Low Voltage Products and Systems Control Products Contactors Block Contactors

## General Information

<b>Extended Product Type:</b>	UA16-30-10RA 220-230V 50Hz / 230-240V 60Hz
<b>Product ID:</b>	1SBL181024R8010
<b>EAN:</b>	3471522300805
<b>Catalog Description:</b>	UA16-30-10RA 220-230V 50Hz / 230-240V 60Hz Contactor
<b>Long Description:</b>	UA16..RA 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 $\leq 50$ 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.

## Additional Information

<b>ABB Industrial IT Suite:</b>	Control IT
<b>Ambient Air Temperature:</b>	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 Close to Contactor for Storage -60 ... +80 °C
<b>CCC Certificate:</b>	CCC_2004010304138319
<b>CSA Certificate:</b>	CSA_1041746
<b>Climatic Withstand:</b>	acc. to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 specification II
<b>Coil Consumption:</b>	Average Holding Value 50 / 60 Hz 8 V·A Average Holding Value 50 / 60 Hz 2 W Average Holding Value 50 Hz 8 V·A Average Holding Value 50 Hz 2 W Average Holding Value 60 Hz 8 V·A Average Holding Value 60 Hz 2 W Average Pull-in Value 50 Hz 70 V·A Average Pull-in Value 60 Hz 80 V·A
<b>Coil Operating Limits:</b>	(acc. to IEC 60947-4-1) 0.85 ... 1.1 x $U_c$ (at $\theta \leq 55$ °C) °C
<b>Coil Voltage Code:</b>	80
<b>Connecting Capacity Auxiliary Circuit:</b>	Rigid Cable 1 ... 4 mm <sup>2</sup> Flexible with Cable End 0.75 ... 2.5 mm <sup>2</sup>
<b>Connecting Capacity Main Circuit:</b>	Rigid Cable 1 ... 4 mm <sup>2</sup> Flexible with Cable End 0.75 ... 2.5 mm <sup>2</sup>
<b>Connecting terminals (delivered in open position) Built-in auxiliary terminals:</b>	M 3.5 (+,-) pozidriv 2 screws with cable clamp
<b>Connecting terminals (delivered in open position) Coils terminals:</b>	M 3.5 (+,-) pozidriv 2 screws with cable clamp
<b>Connecting terminals (delivered in open position) Main poles:</b>	M 3.5 (+,-) pozidriv 2 screws with cable clamp
<b>Conventional Free-air Thermal Current (<math>I_{th}</math>):</b>	acc. to IEC 60947-5-1, $q = 40$ °C 16 A
<b>Country of Origin:</b>	France (FR)
<b>Customs Tariff Number:</b>	85364900

<b>Data Sheet, Technical Information:</b>	1SBC101140C0203
<b>Declaration of Conformity - CE:</b>	1SBD250805U1000
<b>Degree of Protection:</b>	acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP20
<b>Dimension Diagram:</b>	FPTE307847
<b>Drop-out Voltage in % of U<sub>c</sub>:</b>	Approximate 40 ... 65 %
<b>EAC Certificate:</b>	EAC_RU C-FR ME77 B01010
<b>EAN:</b>	3471522300805
<b>ETIM 4:</b>	EC001079 - Capacitor magnet contactor
<b>ETIM 5:</b>	EC001079 - Capacitor magnet contactor
<b>ETIM 6:</b>	EC001079 - Capacitor contactor
<b>Electrical Durability:</b>	U <sub>e</sub> =< 440 V 250000 cycle U <sub>e</sub> = 500 ... 690 V 100000 cycle
<b>Environmental Information:</b>	1SBD250123E1000
<b>GOST Certificate:</b>	GOST_POCCFRME77B07175
<b>IIT Publishing Status:</b>	Level 0 - Information enabled
<b>Industrial IT Certification Level:</b>	0
<b>Instructions and Manuals:</b>	1SBC101002M5501
<b>Insulation Resistance:</b>	(500 V DC) After Durability Test 5 MΩ
<b>Invoice Description:</b>	UA16-30-10RA 220-230V 50Hz / 230-240V 60Hz Contactor
<b>Maximum Breaking Capacity:</b>	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 90 A
<b>Maximum Electrical Switching Frequency:</b>	240 cycles per hour
<b>Maximum Operating Altitude Permissible:</b>	3000 m
<b>Maximum Peak Current:</b>	U <sub>e</sub> = 500 V For Capacitor Switching Î No limit kV·A
<b>Minimum Order Quantity:</b>	1 piece
<b>Minimum Switching Capacity:</b>	17 / 5 volt per milliamp
<b>Mounted Auxiliary Contacts 1st Stack:</b>	1 NO, 0 NC
<b>Mounted Auxiliary Contacts 2nd Stack:</b>	0 NO, 0 NC
<b>Mounting Position:</b>	Position 1 to 5 -Ambient temperature =<55°C and control voltage 0.85 - 1.1 U <sub>c</sub> , Ambient temperature 55 - 70°C and control voltage equal to U <sub>c</sub>
<b>Number of Auxiliary Contacts NC:</b>	0
<b>Number of Auxiliary Contacts NO:</b>	1
<b>Number of Main Contacts NC:</b>	0
<b>Number of Main Contacts NO:</b>	3
<b>Object Classification Code:</b>	Q
<b>Operate Time:</b>	Between Coil Energization and NO Contact Closing 10 ... 26 ms Between Coil De-energization and NO Contact Opening 4 ... 11 ms
<b>Order Multiple:</b>	1 piece
<b>Package Level 1 EAN:</b>	3471522300805
<b>Package Level 1 Gross Weight:</b>	0.46 kg
<b>Package Level 1 Height:</b>	63 mm
<b>Package Level 1 Length:</b>	155 mm
<b>Package Level 1 Units:</b>	1 piece
<b>Package Level 1 Width:</b>	135 mm
<b>Package Level 2 Units:</b>	63 piece
<b>Package Level 3 Units:</b>	260 piece
<b>Power Loss:</b>	at Rated Operating Conditions per Pole 0.1 W
<b>Product Main Type:</b>	UA16RA
<b>Product Name:</b>	Block Contactor

<b>Product Net Depth:</b>	107 mm
<b>Product Net Height:</b>	120 mm
<b>Product Net Weight:</b>	0.460 kg
<b>Product Net Width:</b>	44 mm
<b>Rated Breaking Capacity acc. to IEC 60947-5-1:</b>	10 x le AC-15
<b>Rated Control Circuit Voltage (U<sub>c</sub>):</b>	50 Hz 220 ... 230 V 60 Hz 230 ... 240 V
<b>Rated Frequency (f):</b>	Supply Circuit 50 Hz Supply Circuit 60 Hz
<b>Rated Frequency Limits:</b>	25 ... 400 Hz
<b>Rated Impulse Withstand Voltage (U<sub>imp</sub>):</b>	8 kV
<b>Rated Insulation Voltage (U<sub>i</sub>):</b>	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V acc. to UL/CSA 600 V
<b>Rated Making Capacity acc. to IEC 60947-5-1:</b>	10 x le AC-15
<b>Rated Operational Current AC-15 (I<sub>a</sub>):</b>	(220 / 240 V) 4 A (24 / 127 V) 6 A (380 / 440 V) 3 A (500 V) 2 A (690 V) 2 A
<b>Rated Operational Current DC-13 (I<sub>a</sub>):</b>	(125 V) 1.1 / 138 A (24 V) 6 / 144 A (250 V) 0.55 / 138 A (48 V) 2.8 / 134 A (72 V) 2 / 144 A
<b>Rated Operational Power AC-6b (P<sub>e</sub>):</b>	(690 V) 70 °C, 50 / 60 Hz 17 kvar (690 V) 55 °C, 50 / 60 Hz 21 kvar (690 V) 40 °C, 50 / 60 Hz 22 kvar (500 / 550 V) 70 °C, 50 / 60 Hz 12.5 kvar (500 / 550 V) 55 °C, 50 / 60 Hz 16 kvar (500 / 550 V), 40 °C, 50 / 60 Hz 18 kvar (440 V) 70 °C, 50 / 60 Hz 11 kvar (440 V) 55 °C, 50 / 60 Hz 13 kvar (440 V) 40 °C, 50 / 60 Hz 15 kvar (400 / 415 V) 70 °C, 50 / 60 Hz 10 kvar (400 / 415 V) 55 °C, 50 / 60 Hz 12.5 kvar (400 / 415 V) 40 °C, 50 / 60 Hz 12.5 kvar (230 / 240 V) 70 °C, 50 / 60 Hz 6 kvar (230 / 240 V) 55 °C, 50 / 60 Hz 7.5 kvar (230 / 240 V) 40 °C, 50 / 60 Hz 8 kvar
<b>Rated Operational Voltage:</b>	Main Circuit 690 V Auxiliary Circuit 690 V
<b>Rated Short-time Withstand Current (I<sub>cw</sub>):</b>	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 140 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 30 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
<b>RoHS Information:</b>	1SBC101059D0201
<b>RoHS Status:</b>	No declaration needed
<b>Selling Unit of Measure:</b>	piece
<b>Short Description:</b>	UA16-30-10RA 220-230V 50Hz / 230-240V 60Hz Contactor
<b>Short-Circuit Protective Devices:</b>	Auxiliary Circuit - gG Type Fuses 10 A gG Type Fuses 80 A
<b>Terminal Type:</b>	Screw Terminals
<b>UL Certificate:</b>	UL_20160205-E312527-10-2

UL Listing Card:

UL\_E312527

UNSPSC:

39121529

