



# Electric Automation

Reference: UA30-30-10 Code: 1SBL281022R8610

UA30-30-10 400-415V 50Hz / 415-440V 60Hz Contactor

Buy it at Electric Automation Network



UA30 3-pole contactors for capacitor switching, can be used for the switching of capacitor banks whose inrush current peaks are less than or equal to 100 times nominal rms current. The table below gives the permissible powers according to operational voltage and temperature close to the contactor. It also specifies the maximum peak current  $\hat{I}$  values accepted by the contactor. The capacitors must be discharged (maximum residual voltage at terminals  $\leq 50$  V) before being reenergized when the contactors are making. In these conditions, electrical durability of contactors is equal to 100 000 operating cycles. The UA.. 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

EAN:	3471522074867
Minimum Order Quantity:	1 piece
Customs Tariff Number:	85369085

#### Dimensions

Product Net Width:	54 mm
Product Net Depth:	108.3 mm
Product Net Height:	90 mm
Product Net Weight:	0.710 kg

### Container Information

Package Level 1 Units:	1 piece
Package Level 1 Width:	101 mm
Package Level 1 Length:	115 mm
Package Level 1 Height:	61 mm
Package Level 1 Gross Weight:	0.71 kg
Package Level 1 EAN:	3471522074867
Package Level 2 Units:	24 piece
Package Level 3 Units:	576 piece

#### 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
Rated Operational Voltage:	Main Circuit 690 V Auxiliary Circuit 690 V
Rated Frequency (f):	Supply Circuit 50 Hz Supply Circuit 60 Hz
Conventional Free-air Thermal Current (Ith):	acc. to IEC 60947-5-1, q = 40 °C 16 A
Rated Operational Current AC-15 (I <sub>e</sub> ):	(220 / 240 V) 4 A (24 / 127 V) 6 A (380 / 440 V) 3 A (500 V) 2 A (690 V) 2 A
Short-Circuit Protective Devices:	Auxiliary Circuit - gG Type Fuses 10 A gG Type Fuses 1.5 1.8 A
Rated Short-time Withstand Current (I <sub>cw</sub> ):	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 400 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 65 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 150 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 600 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 225 A for 0.1 s 140 A for 1 s 100 A
Maximum Breaking Capacity:	cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 820 A cos phi=0.45 (cos phi=0.35 for le > 100 A) at 690 V 340 A

Rated Operational Current DC-13 (I_6):(125 V) 1.1 / 138 A (24 V) 6 / 144 A (25 VV) 0.5 / 138 A (45 V) 2.8 / 138 A (47 V) 2.7 / 134 ARated Insulation Voltage (U_1):acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V acc. to IEC 60947-5-1 and VDE 0110 (Gr. C) 690 V acc. to IEC 60947-5-1 and VDE 0110 (Gr. C) 690 V acc. to IU/CSA 600 VRated Insulation Voltage (U_1):8 kVMechanical Durability:10 millionMaximum Mechanical Switching Frequency:3600 cycles per hourCoil Operating Limits:(acc. to IEC 60947-4-1)0.85 1.1 x Uc (at 0 ≤ 55 °C) °CRated Control Circuit Voltage (U_c):50 Hz 400 415 V 60 Hz 415 440 VRated Control Circuit Voltage (U_c):50 Hz 400 415 V 60 Hz 415 440 VCoil Consumption:Pull-in at Max. Rated Control Circuit Voltage 60 Hz 120 VA A verage Holding at Max. Rated Control Circuit Voltage 60 Hz 120 VA A verage Holding at Max. Rated Control Circuit Voltage 60 Hz 120 VA A verage Holding at Max. Rated Control Circuit Voltage 60 Hz 120 VA A verage Holding at Max. Rated Control Circuit Voltage 50 Hz 3 W Average Holding at Max. Rated Control Circuit Voltage 50 Hz 3 W Average Holding Value 50 / 60 Hz 120 VA Average Holding Value 50 / 60 Hz 120 VA Average Pull-in Value 50 Hz 120 VA Average Pull-in Value 50 Hz 120 VA Average Holding Value 50 / 60 Hz 120 VA Average Pull-in Value 50 Hz 120 VA Average Holding Value 50 / 60 Hz 120 VA Average Pull-in Value 50 Hz 120 VA Avera		
Rated Insulation Voitage (U):acc. to IEC 60947-5-1 and VDE 0110 (Gr. C) 690 V acc. to UL/CSA 600 VRated Impulse Withstand Voitage (U <sub>imp</sub> ):8 kVMechanical Durability:10 millionMaximum Mechanical Switching Frequency:3600 cycles per hourCoil Operating Limits:(acc. to IEC 60947-4-1)0.85 1.1 x Uc (at 0 ≤ 55 °C) °CRated Control Circuit Voltage (U <sub>c</sub> ):S0 Hz 400 415 V 60 Hz 415 440 VCoil Consumption:V/A V/AVoilling at Max. Rated Control Circuit Voltage 60 Hz 120 V/A Holding at Max. Rated Control Circuit Voltage 60 Hz 122 V/ACoil Consumption:DescriptionCoil Consumption:Between Coil Energization and NO Contact Closing 8 21 ms Between Coil De-energization and NO Contact Closing 8 21 msConnecting Capacity-Main Circuit:Fexible with Cable End2.5 10 mm² Rigid Cable1 4 mm²Connecting Capacity-Muxiliary Circuit:Fexible with Cable End2.5 10 mm² Rigid Cable1 4 mm²Connecting Capacity-Muxiliary Circuit:Fexible with Cable End2.5 10 mm² Rigid Cable1	Rated Operational Current DC-13 (I <sub>e</sub> ):	(24 V) 6 / 144 A (250 V) 0.55 / 138 A (48 V) 2.8 / 134 A
Mechanical Durability:   10 million     Maximum Mechanical Switching Frequency:   3600 cycles per hour     Coil Operating Limits:   (acc. to IEC 60947.4-1)0.85 1.1 x Uc (at 0 ≤ 55 °C) °C     Rated Control Circuit Voltage (U <sub>c</sub> ):   50 H2 400 415 V     Goil Consumption:   Pull-in at Max. Rated Control Circuit Voltage 50 Hz 120 V-A     Pull-in at Max. Rated Control Circuit Voltage 60 Hz 140 V-A   Pull-in at Max. Rated Control Circuit Voltage 60 Hz 120 V-A     Coil Consumption:   Pull-in at Max. Rated Control Circuit Voltage 60 Hz 120 V-A     Holding at Max. Rated Control Circuit Voltage 60 Hz 120 V-A   Pull-in at Max. Rated Control Circuit Voltage 60 Hz 120 V-A     Coil Consumption:   Pull-in at Max. Rated Control Circuit Voltage 60 Hz 120 V-A     Holding at Max. Rated Control Circuit Voltage 50 Hz 120 V-A   Pull-in at Max. Rated Control Circuit Voltage 50 Hz 120 V-A     Poperate Time:   Between Coil Energization and NO Contact Closing 8 21 ms Between Coil De-energization and NO Contact Closing 8 21 ms Between Coil De-energization and NO Contact Opening 4 11 ms     Connecting Capacity-Main Circuit:   Flexible with Cable End0.75 2.5 mm²     Rigid Cable1 4 mm²   Rigid Cable1 4 mm²     Degree of Protection:   acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP20     Connecting terminals (delivered in open position) Main poil   M5 (+,) pozi	Rated Insulation Voltage (U <sub>i</sub> ):	acc. to IEC 60947-5-1 and VDE 0110 (Gr. C) 690 V
Maximum Mechanical Switching Frequency:3600 cycles per hourCoil Operating Limits:(acc. to IEC 60947-4-1)0.85 1.1 x Uc (at $\theta \le 55 ^\circ$ C) °CRated Control Circuit Voltage (Up):50 Hz 400 415 V 60 Hz 415 440 VPull-in at Max. Rated Control Circuit Voltage 50 Hz 120 V-A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 140 V V-ACoil Consumption:Pull-in at Max. Rated Control Circuit Voltage 60 Hz 120 V-A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 120 V-A Holding at Max. Rated Control Circuit Voltage 60 Hz 120 V-A Holding at Max. Rated Control Circuit Voltage 60 Hz 120 V-A 	Rated Impulse Withstand Voltage (U <sub>imp</sub> ):	8 kV
Coil Operating Limits:(acc. to IEC 60947-4-1)0.85 1.1 x Uc (at 0 ≤ 55 °C) °CRated Control Circuit Voltage (Uc):50 Hz 400 415 V 60 Hz 415 440 VPatter Control Circuit Voltage (Uc):9ull-in at Max. Rated Control Circuit Voltage 50 Hz 120 V-A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 140 V-ACoil Consumption:Pull-in at Max. Rated Control Circuit Voltage 60 Hz 12 V-A Holding at Max. Rated Control Circuit Voltage 60 Hz 12 V-A Holding at Max. Rated Control Circuit Voltage 60 Hz 12 V-A Holding at Max. Rated Control Circuit Voltage 50 Hz 12 V-A Holding at Max. Rated Control Circuit Voltage 50 Hz 12 V-A Holding at Max. Rated Control Circuit Voltage 50 Hz 12 V-A Holding at Max. Rated Control Circuit Voltage 50 Hz 3 W Average Pull-in Value 50 / 60 Hz 3 W Average Pull-in Value 50 / 60 Hz 12 V-A Average Pull-in Value 50 Hz 12 V-A Average Pull-in Value	Mechanical Durability:	10 million
Rated Control Circuit Voltage (Uc):50 Hz 400 415 V 60 Hz 415 440 VColl Consumption:Pull-in at Max. Rated Control Circuit Voltage 50 Hz 120 V-A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 140 V-A Holding at Max. Rated Control Circuit Voltage 60 Hz 122 V-A Holding at Max. Rated Control Circuit Voltage 60 Hz 122 V-A Holding at Max. Rated Control Circuit Voltage 60 Hz 122 V-A Holding at Max. Rated Control Circuit Voltage 60 Hz 122 V-A Holding at Max. Rated Control Circuit Voltage 60 Hz 122 V-A Holding at Max. Rated Control Circuit Voltage 60 Hz 122 V-A Holding at Max. Rated Control Circuit Voltage 50 Hz 122 V-A Holding at Max. Rated Control Circuit Voltage 50 Hz 30W Average Holding Value 50 / 60 Hz 12 V-A Average Pull-in Value 50 Hz 120 V-A Average Pull-in Value 5	Maximum Mechanical Switching Frequency:	3600 cycles per hour
Rated Control Circuit Voltage (U_0):   60 Hz 415 440 V     Pull-in at Max. Rated Control Circuit Voltage 50 Hz 120 V-A   Pull-in at Max. Rated Control Circuit Voltage 60 Hz 140 V-A     Folding at Max. Rated Control Circuit Voltage 60 Hz 12 V-A   Holding at Max. Rated Control Circuit Voltage 60 Hz 12 V-A     Coil Consumption:   Holding at Max. Rated Control Circuit Voltage 50 Hz 12 V-A     Holding at Max. Rated Control Circuit Voltage 50 Hz 12 V-A   Average Holding at Max. Rated Control Circuit Voltage 50 Hz 12 V-A     Operate Time:   Between Coil Energization and NO Contact Closing 8 21 ms     Between Coil De-energization and NO Contact Opening 4 11 ms   Flexible with Cable End2.5 10 mm²     Connecting Capacity-Main Circuit:   Flexible with Cable End0.75 2.5 mm²     Pagid Cable2.   acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary     Terminals IP20   Connecting terminals (delivered in open position) Main poles:	Coil Operating Limits:	(acc. to IEC 60947-4-1)0.85 1.1 x Uc (at $\theta$ $\leq$ 55 °C) °C
V-A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 140 V-A Holding at Max. Rated Control Circuit Voltage 60 Hz 12 V-A Holding at Max. Rated Control Circuit Voltage 60 Hz 12 V-A Holding at Max. Rated Control Circuit Voltage 60 Hz 13 W Holding at Max. Rated Control Circuit Voltage 50 Hz 13 W Average Holding Value 50 / 60 Hz 12 V-A Average Pull-in Value 60 Hz 120 V-	Rated Control Circuit Voltage (U <sub>c</sub> ):	
Operate Time:21 ms Between Coil De-energization and NO Contact Opening 411 msConnecting Capacity-Main Circuit:Flexible with Cable End2.510 mm² Rigid Cable2.516 mm²Connecting Capacity-Auxiliary Circuit:Flexible with Cable End0.752.5 mm² Rigid Cable14 mm²Degree of Protection:acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary reminals IP20Connecting terminals (delivered in open position) Main poles:M 5 (+,-) pozidriv 2 screw with 2x (5.6x6.5 mm) connector	Coil Consumption:	V·A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 140 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 12 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 3 W Holding at Max. Rated Control Circuit Voltage 50 Hz 12 V·A Holding at Max. Rated Control Circuit Voltage 50 Hz 3 W Average Holding Value 50 / 60 Hz 12 V·A Average Holding Value 50 / 60 Hz 3 W Average Pull-in Value 50 Hz 120 V·A
Connecting Capacity-Main Circuit:Rigid Cable2.5 16 mm²Connecting Capacity-Auxiliary Circuit:Flexible with Cable End0.75 2.5 mm² Rigid Cable1 4 mm²Degree of Protection:acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP20Connecting terminals (delivered in open position) Main poles:M 5 (+,-) pozidriv 2 screw with 2x (5.6x6.5 mm) connector	Operate Time:	21 ms Between Coil De-energization and NO Contact Opening
Connecting Capacity-Auxiliary Circuit:   Rigid Cable1 4 mm <sup>2</sup> Degree of Protection:   acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP20     Connecting terminals (delivered in open position) Main poles:   M 5 (+,-) pozidriv 2 screw with 2x (5.6x6.5 mm) connector	Connecting Capacity-Main Circuit:	
Degree of Protection: Terminals IP20   Connecting terminals (delivered in open position) Main poles: M 5 (+,-) pozidriv 2 screw with 2x (5.6x6.5 mm) connector	Connecting Capacity-Auxiliary Circuit:	
poles: connector	Degree of Protection:	
Terminal Type: Screw Terminals		
	Terminal Type:	Screw Terminals

## Environmental

Ambient Air Temperature:	Near Contactor for Operation in Free Air (0.85 $\dots$ 1.1 Uc) -40 $\dots$ +55 °C Near Contactor for Operation in Free Air (Uc) -40 $\dots$ +70 °C Close to Contactor for Storage -60 $\dots$ +80 °C
Climatic Withstand:	acc. to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 specification II
Maximum Operating Altitude Permissible:	3000 m

# Certificates and Declarations (Document Number)

CB Certificate:	CB_FR2880_60002378
CCC Certificate:	CCC_2003010304060095
CSA Certificate:	CSA_1033838_LR056745
cUL Certificate:	UL_071301E39231
Declaration of Conformity - CE:	1SBD250809C2000
EAC Certificate:	EAC_RU C-FR ME77 B01010
GOST Certificate:	GOST_POCCFRME77B07175
RoHS Information:	1SBC101059D0201
UL Certificate:	UL_071301E39231

#### Classifications

ETIM 5:	EC001079 - Capacitor magnet contactor
UNSPSC:	39121529