PRODUCT-DETAILS

AL40-30-10 250V DC

AL40-30-10 250V DC Contactor

General Information

Extended Product Type	AL40-30-10 250V DC
Product ID	1SBL323001R3810
EAN	3471522289384
Catalog Description	AL40-30-10 250V DC Contactor
Long Description	AL40 contactors are mainly used for controlling 3-phase motors and generally for controlling power circuits up to 690 V AC or 220 V DC. The contactors can also be used for many other applications such as isolation, capacitor switching, lighting. The AL... series 1-stack 3-pole contactors are of the block type design. - Main poles and auxiliary contact blocks: 3 main poles, 1 built-in auxiliary contact, front and side-mounted add-on auxiliary contact blocks - Control circuit: DC operated with solid core magnet circuit. The polarity on the coil terminals (A1+ and A2-) must be respected - Accessories: a wide range of accessories is available. AL... contactors are fitted with low consumption DC coils and are suitable for a direct control by PLC outputs.

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads

Data Sheet, Technical Information	1SBC100122C0202_Ch02
Instructions and Manuals	1SBC101007M5501
Instructions and	1SBC101008M5501

Manuals (Part 2)	
Dimension Diagram	FPTE307864

Dimensions

Product Net Width	54 mm
Product Net Depth / Length	125.3 mm
Product Net Height	90 mm
Product Net Weight	0.85 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
Rated Operational Voltage	Auxiliary Circuit 690 V Main Circuit 690 V
Rated Frequency (f)	Supply Circuit 50 / 60 Hz
Conventional Free-air Thermal Current (I_{th})	acc. to IEC 60947-4-1, Open Contactors q = 40 °C 65 A acc. to IEC 60947-5-1, q = 40 °C 16 A
Rated Operational Current AC-1 (I_e)	(690 V) 40 °C 60 (690 V) 55 °C 60 (690 V) 70 °C 42
Rated Operational Current AC-3 (I_e)	(415 V) 55 °C 37 A (440 V) 55 °C 37 A (500 V) 55 °C 33 A (690 V) 55 °C 21 A (380 / 400 V) 55 °C 37 A (220 / 230 / 240 V) 55 °C 40
Rated Operational Power AC-3 (P_e)	(415 V) 18.5 kW (440 V) 22 kW (500 V) 22 kW (690 V) 18.5 kW (380 / 400 V) 18.5 kW (220 / 230 / 240 V) 11 kW
Rated Breaking Capacity AC-3 acc. to IEC 60947-4-1	8 x Ie AC-3
Rated Making Capacity AC-3 acc. to IEC 60947-4-1	10 x Ie AC-3
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
Short-Circuit Protective Devices	Auxiliary Circuit - gG Type Fuses 10 A gG Type Fuses 63 A
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 440 V 470 A cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 690 V 175 A
Maximum Electrical Switching Frequency	(AC-1) 600 cycles per hour (AC-2 / AC-4) 300 cycles per hour (AC-3) 1200 cycles per hour
Rated Operational Current DC-13 (I_e)	(24 V) 6 / 144 A (48 V) 2.8 / 134 A (72 V) 2 / 144 A (125 V) 1.1 / 138 A (250 V) 0.55 / 138 A
Rated Insulation Voltage	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V

(U_i)	acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage (U_{imp})	8 kV
Mechanical Durability	10 million
Maximum Mechanical Switching Frequency	3600 cycles per hour
Rated Control Circuit Voltage (U_c)	DC Operation 250 V
Coil Consumption	Average Holding Value, from Warm State 3.5 W Average Pull-in Value, from Cold State 3.5 W
Operate Time	Between Coil De-energization and NO Contact Opening 12 ... 18 ms Between Coil Energization and NO Contact Closing 55 ... 110 ms
Connecting Capacity Main Circuit	Flexible with Cable End 2.5 ... 10 mm² Rigid Cable 2.5 ... 16 mm²
Connecting Capacity Auxiliary Circuit	Flexible with Cable End 0.75 ... 2.5 mm² Rigid Cable 1 ... 4 mm²
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 5 (+,-) pozidriv 2 screw with 2x (5.6x6.5 mm) connector
Terminal Type	Screw Terminals

Technical UL/CSA

General Use Rating UL/CSA	(600 V AC) 60 A

Environmental

Ambient Air Temperature	Close to Contactor Fitted with Thermal O/L Relay -25 ... 55 °C Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 Uc) -40 ... 55 °C Close to Contactor without Thermal O/L Relay (Uc) -40 ... 70 °C Close to Contactor for Storage -60 ... +80 °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
Resistance to Shock acc. to IEC 60068-2-27	Closed, Shock Direction: A 20 g Closed, Shock Direction: B1 15 g Closed, Shock Direction: C1 20 g Closed, Shock Direction: C2 14 g Open, Shock Direction: A 10 g Open, Shock Direction: B1 5 g Open, Shock Direction: C1 8 g Open, Shock Direction: C2 8 g Shock Direction: B2 10 g
RoHS Status	Following EU Directive 2011/65/EU

Certificates and Declarations (Document Number)

ASEFA Certificate	ASEFA_05703BT
CB Certificate	CB_FR3193_60016914_509747
CQC Certificate	CQC2004010304112235
CSA Certificate	CSA_1033838_LR056745
Declaration of Conformity - CCC	2020980304001612
Declaration of Conformity - CE	1SBD250804U1000
DNV Certificate	DNV_GL_TAE00001UN-1
DNV GL Certificate	DNV_GL_TAE00001UN-1

Environmental Information	1SBD250122E1002
GL Certificate	GL_26144_05HH
GOST Certificate	GOST_POCCFRME77B07175
Instructions and Manuals	1SBC101007M5501
Instructions and Manuals (Part 2)	1SBC101008M5501
LOVAG Certificate	LOVAG_FR03026-FR03034
RoHS Information	1SBD250804U1000

Container Information

Package Level 1 Units	1 piece
Package Level 1 Width	100 mm
Package Level 1 Depth / Length	134 mm
Package Level 1 Height	62 mm
Package Level 1 Gross Weight	0.85 kg
Package Level 1 EAN	3471522289384
Package Level 2 Units	box 20 piece
Package Level 2 Gross Weight	17 kg

Classifications

Object Classification Code	Q
ETIM 4	EC000066 - Magnet contactor, AC-switching
ETIM 5	EC000066 - Magnet contactor, AC-switching
ETIM 6	EC000066 - Power contactor, AC switching
ETIM 7	EC000066 - Power contactor, AC switching
eClass	V11.0 : 27371003
UNSPSC	39121529

Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors