PRODUCT-DETAILS

A12-30-01 48V 50Hz / 48V 60Hz

A12-30-01 48V 50Hz / 48V 60Hz Contactor

General Information

Extended Product Type	A12-30-01 48V 50Hz / 48V 60Hz
Product ID	1SBL161001R8301
EAN	3471522041838
Catalog Description	A12-30-01 48V 50Hz / 48V 60Hz Contactor
Long Description	A12 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 A... 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: AC operated with laminated magnet circuit - Accessories: a wide range of accessories is available.

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads

Data Sheet, Technical Information	1SBC100122C0202_Ch02
Instructions and Manuals	FPTC407721P0001

Dimensions

Product Net Width	44 mm
Product Net Depth / Length	74 mm
Product Net Height	74 mm
Product Net Weight	0.34 kg

Technical

Number of Main Contacts NO	3
Number of Main Contacts NC	0
Number of Auxiliary Contacts NO	0
Number of Auxiliary Contacts NC	1
Standards	Devices complying with international standards IEC 947-1 / 947-4-1, and European standards EN 60 947-1 / 60 947-4-1. Electromagnetic compatibility (EMC) acc. to amendment A11 to IEC 947-1, EN 60 947-1 and amendment 2 to IEC 947-4-1
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 28 A acc. to IEC 60947-5-1, q = 40 °C 16 A
Rated Operational Current AC-1 (I_e)	(690 V) 40 °C 27 A (690 V) 55 °C 25 A (690 V) 70 °C 20 A
Rated Operational Current AC-3 (I_e)	(415 V) 55 °C 12 A (440 V) 55 °C 12 A (500 V) 55 °C 12 A (690 V) 55 °C 9 A (380 / 400 V) 55 °C 12 A (220 / 230 / 240 V) 55 °C 12
Rated Operational Power AC-3 (P_e)	(415 V) 5.5 kW (440 V) 5.5 kW (500 V) 7.5 kW (690 V) 7.5 kW (380 / 400 V) 5.5 kW (220 / 230 / 240 V) 3 kW
Rated Operational Power AC-6b (P_e)	(230 / 240 V) 40 °C, 50 / 60 Hz 7 kvar (230 / 240 V) 55 °C, 50 / 60 Hz 7 kvar (230 / 240 V) 70 °C, 50 / 60 Hz 6 kvar (400 / 415 V) 40 °C, 50 / 60 Hz 11 kvar (400 / 415 V) 70 °C, 50 / 60 Hz 9.5 kvar (400 / 415 V) 55 °C, 50 / 60 Hz 11 kvar (440 V) 40 °C, 50 / 60 Hz 12 kvar (440 V) 55 °C, 50 / 60 Hz 12 kvar (440 V) 70 °C, 50 / 60 Hz 10.5 kvar (500 / 550 V), 40 °C, 50 / 60 Hz 14 kvar (500 / 550 V) 55 °C, 50 / 60 Hz 14 kvar (500 / 550 V) 70 °C, 50 / 60 Hz 12 kvar (690 V) 40 °C, 50 / 60 Hz 19 kvar (690 V) 55 °C, 50 / 60 Hz 19 kvar (690 V) 70 °C, 50 / 60 Hz 16.5 kvar
Rated Breaking Capacity AC-3	8 x Ie AC-3
Rated Making Capacity AC-3	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 32 A

Rated Short-time Withstand Current Low Voltage (I_{cw})	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 120 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 28 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 55 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 280 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 70 A
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 440 V 250 A cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 690 V 90 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 (U_i)	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V 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)	50 Hz 48 V 60 Hz 48 V
Coil Consumption	Average Holding Value 50 / 60 Hz 8 V·A Average Pull-in Value 50 Hz 74 V·A Average Pull-in Value 60 Hz 70 V·A
Operate Time	Between Coil De-energization and NC Contact Closing 9 ... 16 ms Between Coil De-energization and NO Contact Opening 4 ... 11 ms Between Coil Energization and NC Contact Opening 7 ... 21 ms Between Coil Energization and NO Contact Closing 10 ... 26 ms
Mounting on DIN Rail	TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715 TH35-15 (35 x 15 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 mm² Rigid Cable 1 ... 4 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 3.5 (+,-) pozidriv 2 screws with cable clamp
Terminal Type	Screw Terminals

Technical UL/CSA

General Use Rating UL/CSA	(600 V AC) 25 A
Horsepower Rating UL/CSA	(200 ... 208 V AC) Three Phase 3 hp (220 ... 240 V AC) Three Phase 3 hp (440 ... 480 V AC) Three Phase 7-1/2 hp (550 ... 600 V AC) Three Phase 10 hp

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	Without Derating 3000 m

Altitude Permissible	
Resistance to Shock acc. to IEC 60068-2-27	Closed, Shock Direction: B1 10 g Open, Shock Direction: B1 5 g Shock Direction: A 20 g Shock Direction: B2 15 g Shock Direction: C1 20 g Shock Direction: C2 20 g
RoHS Status	Following EU Directive 2011/65/EU

Certificates and Declarations (Document Number)

BV Certificate	BV_2634H07559E0
CB Certificate	CB_CN44759
CCC Certificate	CCC_2018010304059156 CCC_2004010309130463
CQC Certificate	CQC2013010304615753 CQC2018010304059156 CQC2004010309130463
CSA Certificate	CSA_1041746
Declaration of Conformity - CCC	2020980304001607 2020980304001616 2020980304001229
Declaration of Conformity - CE	1SBD250801U1000
Declaration of Conformity - UKCA	1SBD250818U1000
DNV Certificate	DNV-GL_TAE00000TX
DNV GL Certificate	DNV-GL_TAE00000TX
EAC Certificate	EAC_RU C-FR ME77 B03599
Environmental Information	1SBD250002E1004
Instructions and Manuals	FPTC407721P0001
LR Certificate	LRS_9830011E4
RINA Certificate	RINA_ELE172319XG001
RMRS Certificate	RMRS_0507015250
RoHS Information	1SBD250801U1000
UL Certificate	UL_20160205-E312527-10-2
UL Listing Card	UL_E312527

Container Information

Package Level 1 Units	1 piece
Package Level 1 Width	78 mm
Package Level 1 Depth / Length	76 mm
Package Level 1 Height	47 mm
Package Level 1 Gross Weight	0.34 kg
Package Level 1 EAN	3471522041838
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	21.42 kg
Package Level 3 Units	1220 piece

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
ETIM 8	EC000066 - Power contactor, AC switching
eClass	V11.0 : 27371003
UNSPSC	39121529

Categories

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