PRODUCT-DETAILS

TAL40-30-10 17-32V DC

TAL40-30-10 17-32V DC Contactor



General Information

Extended Product Type	TAL40-30-10 17-32V DC
Product ID	1SBL323061R5110
EAN	3471522325518
Catalog Description	TAL40-30-10 17-32V DC Contactor
Long Description	The TAL40-30-10 17-32V DC is a contactor 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 TAL... 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. TAL... contactors are fitted with low consumption DC coils and offer a large coil voltage range.

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

© 2024 ABB. All rights reserved.

Popular Downloads

Data Sheet, Technical Information	1SBC100122C0202_CH02
Instructions and Manuals	1SBC101007M5501
CAD Dimensional Drawing	2CDC001079B0201
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)	Auxiliary Circuit 50 / 60 Hz Main Circuit 50 / 60 Hz
Conventional Free-air Thermal Current (I_{th})	acc. to IEC 60947-4-1, Open Contactors Θ = 40 °C 65 A acc. to IEC 60947-5-1, Θ = 40 °C 16 A
Rated Operational Current AC-1 (I_e)	(690 V) 40 °C 60 A (690 V) 55 °C 60 A (690 V) 70 °C 42 A
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 A
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	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 63 A
Rated Short-time	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 400 A

© 2024 ABB. All rights reserved.

Withstand Current Low Voltage (I_{cw})	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 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 A / 144 W (48 V) 2.8 A / 134 W (72 V) 2 / 144 W (110 V) 0.55 A / 60 W (125 V) 1.1 / 138 W (220 V) 0.55 A / 121 W (250 V) 0.55 / 138 W
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
Maximum Mechanical Switching Frequency	3600 cycles per hour
Rated Control Circuit Voltage (U_c)	DC Operation 17 ... 32 V
Coil Consumption	Holding DC (Umin / Umax) 2.7 / 9 W Pull-in DC (Umin / Umax) 2.7 / 9 W
Operate Time	Between Coil De-energization and NO Contact Opening 12 ... 18 ms Between Coil Energization and NO Contact Closing 55 ... 110 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 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
Horsepower Rating UL/CSA	(200 ... 208 V AC) Three Phase 10 hp (220 ... 240 V AC) Three Phase 15 hp (440 ... 480 V AC) Three Phase 30 hp (550 ... 600 V AC) Three Phase 40 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 -40 ... 55 °C Close to Contactor without Thermal O/L Relay (Ucmin-Ucmax) according

© 2024 ABB. All rights reserved.

	to IEC 60077 -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

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
WEEE B2C / B2B	Business To Business
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)

Certificates and Declarations

CB Certificate	CB_FR3452-60022335-515371E
CCC Certificate	CCC_2004010304112235
CQC Certificate	CQC2004010304112235
Declaration of Conformity - CCC	2020980304001612
Declaration of Conformity - CE	1SBD250804U1000
Declaration of Conformity - UKCA	1SBD250821U1000
EAC Certificate	EAC_RU C-FR ME77 B01010
GOST Certificate	GOST_POCCFRME77B07175
UL Certificate	UL-US-L312527-4104-71017991-2 UL-CA-L312527-4104-71017991-2

Container Information

Package Level 1 Units	box 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	3471522325518
Package Level 2 Units	box 20 piece
Package Level 2 Width	300 mm
Package Level 2 Depth / Length	245 mm
Package Level 2 Height	308 mm

© 2024 ABB. All rights reserved.

Package Level 2 Gross Weight	17 kg
Package Level 3 Units	384 piece

Classifications

Object Classification Code	Q
ETIM 7	EC000066 - Power contactor, AC switching
ETIM 8	EC000066 - Power contactor, AC switching
ETIM 9	EC000066 - Power contactor, AC switching
eClass	V11.0 : 27371003
UNSPSC	39121529
IDEA Granular Category Code (IGCC)	4756 >> Capacitor magnet contactor

Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → TAL and TAE Contactors → TAL40



© 2024 ABB. All rights reserved.