

PRODUCT-DETAILS

## **TAL30-30-01 17-32V DC**TAL30-30-01 17-32V DC Contactor



General Information	
Extended Product Type	TAL30-30-01 17-32V DC
Product ID	1SBL283061R5101
EAN	3471522324511
Catalog Description	TAL30-30-01 17-32V DC Contactor
Long Description	TAL30 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 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 addon 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
Popular Downloads	
Data Sheet, Technical	1SNC001003C0202
Instructions and Manuals	1SBC101007M5501

Rated Impulse

8 kV

Product Net Height	Dimensions	
Length	Product Net Width	54 mm
Technical	Product Net Depth / Length	125.3 mm
Technical  Number of Main Contacts NO Number of Main Contacts NC Number of Auxiliary Contacts NC  Rated Operational Current AC-1 (lg) Rated Operational Current AC-3 (lg) Rated Operational Rate	Product Net Height	90 mm
Number of Main Contacts NO Number of Main Contacts NC Number of Auxiliary Contacts NO Number of Auxiliary Number No Number of Auxiliary Number of Auxiliar	Product Net Weight	0.85 kg
Contacts NO Number of Main Contacts NO Number of Main Contacts NO Number of Auxiliary Contacts NO Number of Auxiliary Contacts NC Rated Operational Contacts NC Rated Operational Current AC-3 (a) Rated Operational Current AC-3 (b) Rated Operational Current AC-3 (c) Rated Operational Power AC-3 (c) Rated Operational Rated Rate	Technical	
Contacts NC  Number of Auxiliary Contacts NO  Number of Auxiliary Contacts NO  Number of Auxiliary Contacts NC  Rated Operational Auxiliary Circuit 690 \ Main Main Circuit 690 \ Main Circuit 690 \ Main Main Circuit 690 \ Main Circuit 690 \ Main Main Circuit 690 \ Main Main Main Main Main Main Ma	Number of Main Contacts NO	3
Contacts NO Number of Auxiliary Contacts NC Rated Operational Voltage Rated Frequency (f) Conventional Free-air Conventional Free-air Acc. to IEC 60947-4-1, Open Contactors q = 40 °C 65 / Rated Operational Current AC-1 (le) Rated Operational Current AC-3 (le) Rated Operational Power RAC-3 (le) Rated Operational RAC-3 (le) Rated Operational RAC-3 (le) Rated Operational RAC-3 (le) RAC-4 (le) RAC-3 (le) RAC-4 (le) RAC-3 (le) RAC-4 (le) RA	Number of Main Contacts NC	0
Contacts NC	Number of Auxiliary Contacts NO	0
Main Circuit 690     Rated Frequency (f)     Conventional Free-air     Conventional Free-air     Conventional Free-air     Conventional Free-air     Conventional Free-air     Conventional Current (I <sub>II</sub> )     Rated Operational     Current AC-1 (Ie)     (690 V) 40 °C 52 (690 V) 55 °C 52 (690 V) 70 °C 33 (690 V) 75 °C 32 (790 V) 75 °C 32 °C 32 (790 V) 75 °C 32 °C	Number of Auxiliary Contacts NC	1
Conventional Free-air Thermal Current (Ith)	Rated Operational Voltage	Auxiliary Circuit 690 V Main Circuit 690 V
Thermal Current (I <sub>th</sub> )  Rated Operational  (G90 V, 40 °C 5 E  Current AC-1 (I <sub>e</sub> )  (G90 V, 50 °C 5 E  Current AC-1 (I <sub>e</sub> )  (G90 V, 70 °C 3 E  Rated Operational  (Urrent AC-3 (I <sub>e</sub> )  (A41 V) 55 °C 32 E  (G90 V) 55 °C 18 E  (G90 V) 18	Rated Frequency (f)	Supply Circuit 50 60 Hz
Current AC-1 (le) (590 V) 55 °C.5 (690 V) 70 °C.3 (690 V) 55 °	Conventional Free-air Thermal Current (I <sub>th</sub> )	acc. to IEC 60947-4-1, Open Contactors q = 40 °C 65 A acc. to IEC 60947-5-1, q = 40 °C 16 A
Current AC-3 (le)  (440 V) 55 °C 28 (500 V) 55 °C 28 (690 V) 15 km (690	Rated Operational Current AC-1 (I <sub>e</sub> )	(690 V) 40 °C 55 (690 V) 55 °C 55 (690 V) 70 °C 39
AC-3 (Pe)  (440 Y) 18.5 kW (500 V) 18.5 kW (690 V) 15 kW (380 / 400 V) 15 kW (380 / 400 V) 15 kW (320 / 230 / 240 V) 9 kW (220 / 230 / 240 V) 9 kW (220 / 230 / 240 V) 9 kW AC-3 acc. to IEC 60947-4- 1  Rated Making Capacity AC-3 acc. to IEC 60947-4- 1  Rated Operational (500 V) 2 / (24 / 127 V) 6 / (220 / 240 V) 4 / (380 / 400 V) 3 / (220 / 240 V) 4 / (380 / 400 V) 3 / (220 / 240 V) 4 / (380 / 400 V) 3 / (220 / 240 V) 4 / (380 / 400 V) 3 / (	Rated Operational Current AC-3 (I <sub>e</sub> )	(415 V) 55 °C 32 A (440 V) 55 °C 32 A (500 V) 55 °C 28 A (690 V) 55 °C 18 A (380 / 400 V) 55 °C 32 A (220 / 230 / 240 V) 55 °C 33
Rated Breaking Capacity AC-3 acc. to IEC 60947-4-1 Rated Making Capacity RC-3 acc. to IEC 60947-4-1 Rated Operational Current AC-15 (I <sub>e</sub> ) Rote AC-3 acc. to IEC 60947-4-1 Rated Operational Current AC-15 (I <sub>e</sub> ) Rote AC-3 acc. to IEC 60947-4-1 Rated Operational Current AC-15 (I <sub>e</sub> ) Rote AC-3 acc. to IEC 60947-4-1 Rated Operational Current AC-15 (I <sub>e</sub> ) Rote AC-3 acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 No. Acc. to IEC 60947-4-	Rated Operational Power AC-3 (P <sub>e</sub> )	(415 V) 15 kW (440 V) 18.5 kW (500 V) 18.5 kW (690 V) 15 kW (380 / 400 V) 15 kW
AC-3 acc. to IEC 60947-4-1  Rated Operational (500 V) 2 A Current AC-15 (le) (690 V) 2 A (24 / 127 V) 6 A (220 / 240 V) 4 A (380 / 400 V) 3 A Short-Circuit Protective Auxiliary Circuit - gG Type Fuses 10 A Devices gG Type Fuses 63 A Maximum Breaking cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 470 A Capacity cos phi=0.45 (cos phi=0.35 for le > 100 A) at 690 V 175 A Maximum Electrical (AC-1) 600 cycles per hour Switching Frequency (AC-2 / AC-4) 300 cycles per hour (AC-3) 1200 cycles per hour (AC-3) 1200 cycles per hour (AC-1) (125 V) 1.1 / 138 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	Rated Breaking Capacity AC-3 acc. to IEC 60947-4- 1	8 x le AC-3
Current AC-15 (I <sub>e</sub> )  (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  Cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 470 A  Capacity  Cos phi=0.45 (cos phi=0.35 for le > 100 A) at 690 V 175 A  Maximum Electrical  (AC-1) 600 cycles per hou  Switching Frequency  (AC-2 / AC-4) 300 cycles per hou  (AC-3) 1200 cycles per hou  (AC-3) 1200 cycles per hou  (AC-3) 1200 cycles per hou  (AC-1) (I <sub>e</sub> )  (48 V) 2.8 A / 134 W (125 V) 1.1 / 138 A (125 V) 0.55 / 138 A  Rated Insulation Voltage  acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 N	Rated Making Capacity AC-3 acc. to IEC 60947-4- 1	10 x le AC-3
Devices	Rated Operational Current AC-15 (I <sub>e</sub> )	(500 V) 2 A (690 V) 2 A (24 / 127 V) 6 A (220 / 240 V) 4 A (380 / 400 V) 3 A
Capacity cos phi=0.45 (cos phi=0.35 for le > 100 Å) at 690 V 175 Å  Maximum Electrical (AC-1) 600 cycles per hour (AC-2 / AC-4) 300 cycles per hour (AC-3) 1200 cycles per	Short-Circuit Protective Devices	Auxiliary Circuit - gG Type Fuses 10 A gG Type Fuses 63 A
Switching Frequency (AC-2 / AC-4) 300 cycles per hour (AC-3) 1200 cycles per hour (AC-	Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 470 A cos phi=0.45 (cos phi=0.35 for le > 100 A) at 690 V 175 A
Current DC-13 (I <sub>e</sub> ) (48 V) 2.8 A / 134 W (72 V) 2 / 144 A (125 V) 1.1 / 138 A (250 V) 0.55 /	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 Insulation Voltage acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 \		(24 V) 6 A / 144 W (48 V) 2.8 A / 134 W (72 V) 2 / 144 A (125 V) 1.1 / 138 A (250 V) 0.55 / 138 A
	=	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V acc. to UL/CSA 600 V

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Withstand	Voltage	(U <sub>imp</sub>
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	40 ''''
Mechanical Durability	10 million
Maximum Mechanical	3600 cycles per hour
Switching Frequency	
Rated Control Circuit	DC Operation 17 32 V
Voltage (U <sub>c</sub> )	
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 NC Contact Closing 18 28 ms
	Between Coil De-energization and NO Contact Opening 12 18 ms
	Between Coil Energization and NC Contact Opening 25 75 ms
	Between Coil Energization and NO Contact Closing 55 110 ms
Connecting Capacity	Flexible with Cable End 2.5 10 mm <sup>2</sup>
Main Circuit	Rigid Cable 2.5 16 mm <sup>2</sup>
Connecting Capacity	Flexible with Cable End 0.75 2.5 mm²
Auxiliary Circuit	Rigid Cable 1 4 mm²
Degree of Protection	acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP40
Connecting Terminals	M 5 (+,-) pozidriv 2 screw with 2x (5.6x6.5 mm) connector
(delivered in open	
position) Main Poles	
Terminal Type	Screw Terminals

## **Environmental** Ambient Air Close to Contactor Fitted with Thermal O/L Relay -25 ... +55 °C Close to Contactor without Thermal O/L Relay -40 ... +55 $^{\circ}$ C Temperature 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 Resistance to Shock acc. Closed, Shock Direction: A 20 K40 to IEC 60068-2-27 Closed, Shock Direction: B1 15 K40 Closed, Shock Direction: C1 20 K40 Closed, Shock Direction: C2 14 K40 Open, Shock Direction: A 10 K40 Open, Shock Direction: B1 5 K40 Open, Shock Direction: C1 8 K40 Open, Shock Direction: C2 8 K40 Shock Direction: B2 10 K40 **RoHS Status** Following EU Directive 2011/65/EU

Certificates and Declarations (Document Number)	
CB Certificate	CB_FR3452-60022335-515371E
CCC Certificate	CCC_2004010304112235
CQC Certificate	CQC2004010304112235
CSA Certificate	CSA_1033838_LR056745
Declaration of Conformity - CCC	2020980304001612
Declaration of Conformity - CE	1SBD250804U1000
EAC Certificate	EAC_RU C-FR ME77 B01010
Environmental Information	1SBD250122E1002
GOST Certificate	GOST_POCCFRME77B07175
Instructions and Manuals	1SBC101007M5501
RoHS Information	1SBD250804U1000

## **Container Information**

TAL30-30-01 17-32V DC 4

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	3471522324511
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
Package Level 2 Gross Weight	17 kg
Package Level 3 Units	384 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
eClass	V11.0 : 27371018
UNSPSC	39121529

## Categories

 $\textbf{Low Voltage Products and Systems} \rightarrow \textbf{Control Products} \rightarrow \textbf{Contactors} \rightarrow \textbf{Block Contactors}$ 

