PRODUCT-DETAILS

TAE50-30-11 77-143V DC

TAE50-30-11 77-143V DC Contactor



General Information

Extended Product Type	TAE50-30-11 77-143V DC
Product ID	1SBL359061R6211
EAN	3471522114167
Catalog Description	TAE50-30-11 77-143V DC Contactor
Long Description	TAE50 contactors are mainly used for controlling 3-phase motors and generally for controlling power circuits up to 690 V AC / 1000 V AC or 220 V DC. The contactors can also be used for many other applications such as isolation, capacitor switching, lighting. The TAE... series 1-stack 3-pole contactors are of the block type design. - Main poles and auxiliary contact blocks: 3 main poles and 2 built-in auxiliary contacts, front-mounted add-on auxiliary contact blocks - Control circuit: DC operated with standard double-winding DC coils (with add-on factory-mounted lagging contact for insertion of the"holding" winding). TAE... contactors offer a large coil voltage range - Accessories: a wide range of accessories is available.

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

© 2024 ABB. All rights reserved.

Popular Downloads

Data Sheet, Technical Information	1SNC001003C0202
Instructions and Manuals	FPTC407700P0003

Dimensions

Product Net Width	94 mm
Product Net Depth / Length	108 mm
Product Net Height	110 mm
Product Net Weight	1.24 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	1
Rated Operational Voltage	Auxiliary Circuit 690 V Main Circuit 1000 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 100 A acc. to IEC 60947-5-1, Θ = 40 °C 16 A
Rated Operational Current AC-1 (I_e)	(690 V) 40 °C 100 A (690 V) 55 °C 85 A (690 V) 70 °C 70 A
Rated Operational Current AC-3 (I_e)	(415 V) 55 °C 50 A (440 V) 55 °C 45 A (500 V) 55 °C 45 A (690 V) 55 °C 35 A (1000 V) 55 °C 23 A (380 / 400 V) 55 °C 50 A (220 / 230 / 240 V) 55 °C 53
Rated Operational Power AC-3 (P_e)	(415 V) 25 kW (440 V) 25 kW (500 V) 30 kW (690 V) 30 kW (1000 V) 30 kW (380 / 400 V) 22 kW (220 / 230 / 240 V) 15 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 100 A
Rated Short-time Withstand Current Low	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 650 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 110 A

© 2024 ABB. All rights reserved.

Voltage (I_{cw})	at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 250 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1000 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 370 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 1300 A cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 690 V 630 A
Maximum Electrical Switching Frequency	(AC-1) 300 cycles per hour (AC-2 / AC-4) 150 cycles per hour (AC-3) 300 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) 1 A / 72 W (110 V) 0.55 A / 60 W (125 V) 0.55 A / 69 W (220 V) 0.30 A / 66 W (250 V) 0.3 / 75 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
Mechanical Durability	5 million
Maximum Mechanical Switching Frequency	3600 cycles per hour
Rated Control Circuit Voltage (U_c)	DC Operation 77 ... 143 V
Coil Consumption	Holding DC (Umin / Umax) 1.7 / 6.5 W Pull-in at Max. Rated Control Circuit Voltage DC 450 W Pull-in DC (Umin / Umax) 120 / 250 W
Operate Time	Between Coil De-energization and NC Contact Closing 8 ... 18 ms Between Coil De-energization and NO Contact Opening 5 ... 15 ms Between Coil Energization and NC Contact Opening 10 ... 27 ms Between Coil Energization and NO Contact Closing 30 ... 30 ms
Mounting on DIN Rail	TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715 TH75-25 (75 x 25 mm Mounting Rail) acc. to IEC 60715
Mounting by Screws (not supplied)	2 x M6 screws placed diagonally
Connecting Capacity Main Circuit	Flexible with Cable End 6 ... 16 mm² Rigid Cable 6 ... 25 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 IP10
Connecting Terminals (delivered in open position) Main Poles	M 6 (+,-) pozidriv 2 screws with 1x (13 x 10 mm) connector
Terminal Type	Screw Terminals

Technical UL/CSA

General Use Rating UL/CSA	(600 V AC) 80 A
Horsepower Rating UL/CSA	(200 ... 208 V AC) Three Phase 15 hp (220 ... 240 V AC) Three Phase 20 hp (440 ... 480 V AC) Three Phase 40 hp (550 ... 600 V AC) Three Phase 50 hp

Environmental

© 2024 ABB. All rights reserved.

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 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

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

ASEFA Certificate	ASEFA_03001-11001
CB Certificate	CB_CN45323
CCC Certificate	CCC_2018010304129269
CQC Certificate	CQC2018010304129269
Declaration of Conformity - CCC	2020980304001621
Declaration of Conformity - CE	1SBD250806U1000
Declaration of Conformity - UKCA	1SBD250823U1000
EAC Certificate	EAC_RU C-FR ME77 B01010
GOST Certificate	GOST_POCCFRME77B07175
LOVAG Certificate	LOVAG_FR01003
UL Certificate	UL-US-L312527-1101-21215991-6 UL-CA-2139468-4
UL Listing Card	UL_E312527

Container Information

Package Level 1 Units	1 piece
Package Level 1 Width	140 mm
Package Level 1 Depth / Length	146 mm
Package Level 1 Height	96 mm
Package Level 1 Gross Weight	1.24 kg
Package Level 1 EAN	3471522114167
Package Level 2 Units	box 20 piece
Package Level 2 Width	503 mm
Package Level 2 Depth / Length	153 mm
Package Level 2 Height	307 mm
Package Level 2 Gross Weight	24.8 kg

© 2024 ABB. All rights reserved.

Package Level 3 Units	160 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

Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → TAL and TAE Contactors → TAE50



© 2024 ABB. All rights reserved.