

PRODUCT-DETAILS

TNL31E 50-90V DC

TNL31E 50-90V DC Contactor Relay



General Information

Extended Product Type	TNL31E 50-90V DC
Product ID	1SBH143061R5531
EAN	3471522328557
Catalog Description	TNL31E 50-90V DC Contactor Relay
Long Description	TNL... contactor relays are used for switching auxiliary circuits and control circuits - Poles: 4-pole contactor relays (mechanically linked contact elements available) - 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 TNL... contactor relays 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 Information	1SNC001003C0202
Instructions and Manuals	1SBC101003M5501
Dimension Diagram	FPTE307872

Dimensions

Product Net Width	44 mm
Product Net Depth / Length	97 mm
Product Net Height	78 mm
Product Net Weight	0.52 kg

Technical

Number of Auxiliary Contacts NO	3
Number of Auxiliary Contacts NC	1
Rated Operational Voltage	Auxiliary Circuit 690 V
Rated Frequency (f)	Auxiliary Circuit 50 / 60 Hz
Conventional Free-air Thermal Current (I_{th})	acc. to IEC 60947-5-1, $\Theta = 40\text{ °C}$ 16 A
Rated Operational Current AC-15 (I_{θ})	(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
Rated Short-time Withstand Current Low Voltage (I_{cw})	for 0.1 s 140 A for 1 s 100 A
Maximum Electrical Switching Frequency	1200 cycles per hour
Rated Operational Current DC-13 (I_{θ})	(24 V) 6 / 144 A (48 V) 2.8 / 134 A (72 V) 1 / 72 A (125 V) 0.55 / 69 A (250 V) 0.3 / 75 A
Rated Insulation Voltage (U_i)	acc. to IEC 60947-5-1 690 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage (U_{imp})	8 kV
Mechanical Durability	> 20 million
Maximum Mechanical Switching Frequency	6000 cycles per hour
Rated Control Circuit Voltage (U_c)	DC Operation 50 ... 90 V
Coil Consumption	Holding DC (U_{min} / U_{max}) 2.5 / 8.5 W Pull-in DC (U_{min} / U_{max}) 2.5 / 8.5 W
Operate Time	Between Coil De-energization and NC Contact Closing 16 ... 27 ms Between Coil De-energization and NO Contact Opening 10 ... 17 ms Between Coil Energization and NC Contact Opening 20 ... 70 ms Between Coil Energization and NO Contact Closing 50 ... 100 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 Auxiliary Circuit	Flexible with Cable End 0.75 ... 2.5 mm ² Rigid Cable 1 ... 4 mm ²
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
Terminal Type	Screw Terminals

Environmental

Ambient Air Temperature	Close to Contactor for Storage -60 ... +80 °C Near Contactor for Operation in Free Air -40 ... 55 °C Near Contactor for Operation in Free Air (Ucmin-Ucmax) according to IEC 60077 -40 ...+70 °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)

CB Certificate	CB_SE_66912A1
CCC Certificate	CCC_2012010304558126 CCC_2006010304170816
CQC Certificate	CQC2012010304558126
CSA Certificate	CSA_1041746
Declaration of Conformity - CCC	2020980303000256
Declaration of Conformity - CE	1SBD250808U1000
Declaration of Conformity - UKCA	1SBD250825U1000
EAC Certificate	EAC_RU C-FR ME77 B01006
Environmental Information	1SBD250127E1002
GOST Certificate	GOST_POCCFRME77B07174
Instructions and Manuals	1SBC101003M5501
REACH Declaration	2CMT2021-006202
RoHS Information	2CMT2021-006277

Container Information

Package Level 1 Units	1 piece
Package Level 1 Width	86 mm
Package Level 1 Depth / Length	141 mm
Package Level 1 Height	51 mm
Package Level 1 Gross Weight	0.52 kg
Package Level 1 EAN	3471522328557
Package Level 2 Units	box 28 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	14.56 kg
Package Level 3 Units	336 piece

Classifications

Object Classification Code	K
ETIM 4	EC000196 - Contactor relay
ETIM 5	EC000196 - Contactor relay
ETIM 6	EC000196 - Contactor relay
ETIM 7	EC000196 - Contactor relay
ETIM 8	EC002552 - Power contactor, DC switching
eClass	V11.0 : 27371018
UNSPSC	39121500

Categories

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

