

PRODUCT-DETAILS

**Ordering** 

## **TNL31ERT 77-143V DC**

## TNL31ERT 77-143V DC Contactor Relay



General Information	
Extended Product Type	TNL31ERT 77-143V DC
Product ID	1SBH143060R6231
EAN	3471522364067
Catalog Description	TNL31ERT 77-143V 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.

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900
Popular Downloads	
Data Sheet, Technical Information	15NC001003C0202
Instructions and Manuals	1SBC101006M5501
Dimension Diagram	FPTE307902

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 Main Contacts NO	0
Number of Main Contacts NC	0
Number of Auxiliary Contacts NO	3
Number of Auxiliary Contacts NC	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 <sub>th</sub> )	acc. to IEC 60947-5-1, q = 40 °C 16 A
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
Short-Circuit Protective Devices	Auxiliary Circuit - gG Type Fuses 10 A
Maximum Electrical Switching Frequency	1200 cycles per hour
Rated Operational Current DC-13 (I <sub>e</sub> )	(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 <sub>i</sub> )	acc. to IEC 60947-5-1 and VDE 0110 (Gr. C) 690 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage (U <sub>imp</sub> )	6 kV
Mechanical Durability	> 20 million
Maximum Mechanical Switching Frequency	6000 cycles per hour
Rated Control Circuit Voltage (Uc)	DC Operation 77 143 V
Coil Consumption	Holding DC (Umin / Umax) 2.5 / 8.5 W Pull-in DC (Umin / Umax) 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
Connecting Capacity Auxiliary Circuit	Rigid or Flexible with Cable Lug 0.75 2.5 mm²
Degree of Protection	acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP10
Terminal Type	Ring-Tongue Terminals

Environmental	
Climatic Withstand	acc. to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 specification II
Maximum Operating	3000 m
Altitude Permissible	

TNL31ERT 77-143V DC

Resistance to Shock acc. to IEC 60068-2-27

Half-sine Pulse for 11 ms, No Change in Contact Position, Open, Shock Direction: A 10 m/s<sup>2</sup> Half-sine Pulse for 11 ms, No Change in Contact Position, Closed, Shock Direction: A 20 m/s<sup>2</sup> Half-sine Pulse for 11 ms, No Change in Contact Position, Closed, Shock Direction: B1 15 m/s² Half-sine Pulse for 11 ms, No Change in Contact Position, Closed, Shock Direction: B2 10 m/s<sup>2</sup> Half-sine Pulse for 11 ms, No Change in Contact Position, Closed, Shock Direction: C1 20 m/s<sup>2</sup>  $Half\text{-}sine\ Pulse\ for\ 11\ ms,\ No\ Change\ in\ Contact\ Position,\ Closed,\ Shock$ Direction: C2 14 m/s<sup>2</sup> Half-sine Pulse for 11 ms, No Change in Contact Position, Open, Shock Direction: B1 5 m/s<sup>2</sup> Half-sine Pulse for 11 ms, No Change in Contact Position, Open, Shock Direction: B2 10 m/s<sup>2</sup> Half-sine Pulse for 11 ms, No Change in Contact Position, Open, Shock Direction: C1 8 m/s<sup>2</sup>  ${\it Half-sine \ Pulse \ for \ 11 \ ms, \ No \ Change \ in \ Contact \ Position, \ Open, \ Shock}$ Direction: C2 8 m/s<sup>2</sup> 3

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
cUR Certificate	UL_20140915-E252354_4_2
Declaration of Conformity - CCC	2020980303000256
Declaration of Conformity - CE	1SBD250808U1000
EAC Certificate	EAC_RU C-FR ME77 B01006
Environmental Information	1SBD250127E1002
GOST Certificate	GOST_POCCFRME77B07174
Instructions and Manuals	1SBC101006M5501
RoHS Information	1SBD250808U1000
UL Certificate	UL_20140915-E252354_4_2
UL Listing Card	E252354

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	3471522364067
Package Level 2 Units	box 28 piece
Package Level 2 Gross Weight	14.56 kg

Classifications	
Object Classification Code	К

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ETIM 4	EC000196 - Contactor relay
ETIM 5	EC000196 - Contactor relay
ETIM 6	EC000196 - Contactor relay
ETIM 7	EC000196 - Contactor relay
eClass	V11.0 : 27371018
UNSPSC	39121500

## Categories

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

