

PRODUCT-DETAILS

Ordering

## **NL31E 24V DC**

## NL31E 24V DC Contactor Relay



General Information	
Extended Product Type	NL31E 24V DC
Product ID	1SBH143001R8131
EAN	3471522293817
Catalog Description	NL31E 24V DC Contactor Relay
Long Description	NL 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 NL contactors are fitted with low consumption DC coils and are suitable for a direct control by PLC outputs.

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900
Popular Downloads	
Data Sheet, Technical Information	1SBC100122C0202_Ch03
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 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> )	8 kV
Mechanical Durability	> 20 million
Maximum Mechanical Switching Frequency	6000 cycles per hour
Rated Control Circuit Voltage (U <sub>c</sub> )	DC Operation 24 V
Coil Consumption	Average Holding Value, from Warm State 3 W Average Pull-in Value, from Cold State 3 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	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 Coil Terminals IP20
Terminal Type	Screw Terminals

Environmental	
Ambient Air	Close to Contactor for Storage -60 +80 °C
Temperature	Near Contactor for Operation in Free Air (0.85 1.1 Uc) -40 +55 °C
·	Near Contactor for Operation in Free Air (Uc) -40 +70 °C
Climatic Withstand	acc. to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 specification II
Maximum Operating	3000 m
Altitude Permissible	

 $\label{lem:Resistance} \textbf{Resistance to Shock acc.}$ 

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 Following EU Directive 2011/65/EU

**RoHS Status** 

Certificates and Declarations (Document Number)	
CB Certificate	CB_SE_66833A1
CCC Certificate	CCC_2012010304558126 CCC_2006010304174454
CQC Certificate	CQC2012010304558126
CSA Certificate	CSA_1041746
Declaration of Conformity - CCC	2020980303000256
Declaration of Conformity - CE	1SBD250808U1000
DNV Certificate	DNV_GL_TAE00001UT
DNV GL Certificate	DNV_GL_TAE00001UT
Environmental Information	1SBD250127E1002
GL Certificate	GL_26306_05HH
GOST Certificate	GOST_POCCFRME77B07174
Instructions and Manuals	1SBC101003M5501
RoHS Information	1SBD250808U1000
UL Certificate	UL_110105E48139A

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	3471522293817
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	К
ETIM 4	EC000196 - Contactor relay
ETIM 5	EC000196 - Contactor relay
ETIM 6	EC000196 - Contactor relay
ETIM 7	EC000196 - Contactor relay
eClass	V11.0 : 27371018

NL31E 24V DC 4

UNSPSC 39121500

## Categories

 $Low\ Voltage\ Products\ and\ Systems \rightarrow Control\ Products \rightarrow Contactors \rightarrow Block\ Contactors$ 

