PRODUCT-DETAILS

NSL31E-81

NSL31E-81 24VDC Contactor Relay



360°

General Information

Extended Product Type	NSL31E-81
Product ID	1SBH103001R8131
EAN	3471523056114
Catalog Description	NSL31E-81 24VDC Contactor Relay
Long Description	NSL... contactor relays are used for switching auxiliary circuits and control circuits. - Poles and auxiliary contacts blocks: 4-pole contactor relays, front-mounted add-on auxiliary contact blocks (mechanically-linked auxiliary contacts compliant with Annex L of IEC 60947-5-1 including the "Mechanically Linked" symbol on the contactor relay side) - 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 NSL... contactors are fitted with low consumption DC coils and are suitable for a direct control by PLC outputs.

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

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Popular Downloads

Data Sheet, Technical Information	1SBC100214C0202
Instructions and Manuals	1SBC101020M9701
CAD Dimensional Drawing	2CDC001079B0201

Dimensions

Product Net Width	45 mm
Product Net Depth / Length	72.5 mm
Product Net Height	68 mm
Product Net Weight	0.28 kg

Technical

Number of Auxiliary Contacts NO	3
Number of Auxiliary Contacts NC	1
Standards	IEC 60947-5-1 and EN 60947-5-1, UL 508, CSA C22.2 N°14
Rated Operational Voltage	Auxiliary Circuit 690 V Main Circuit 690 V
Rated Frequency (f)	Auxiliary Circuit 50 / 60 Hz
Conventional Free-air Thermal Current (I_{th})	acc. to IEC 60947-5-1, Θ = 40 °C 10 A
Rated Operational Current AC-15 (I_e)	(500 V) NC 2 (500 V) 2 A (690 V) 2 A (24 / 127 V) 6 A (220 / 240 V) 4 A (400 / 440 V) 3 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	(AC-15) 1200 cycles per hour (DC-13) 900 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) 0.27 A / 60 W (250 V) 0.27 A / 68 W
Rated Insulation Voltage (U_i)	acc. to IEC 60947-5-1 and VDE 0110 (Gr. C) 690 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage (U_{imp})	Auxiliary Circuit 6 kV
Maximum Mechanical Switching Frequency	3600 cycles per hour
Rated Control Circuit Voltage (U_c)	DC Operation 24 V
Operate Time	Between Coil De-energization and NC Contact Closing 15 ... 20 ms Between Coil De-energization and NO Contact Opening 13 ... 17 ms Between Coil Energization and NC Contact Opening 31 ... 53 ms Between Coil Energization and NO Contact Closing 36 ... 59 ms
Connecting Capacity	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm²

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Auxiliary Circuit	Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm² Rigid 1/2x 0.75 ... 2.5 mm²
Connecting Capacity Control Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm² Rigid 1/2x 0.75 ... 2.5 mm²
Wire Stripping Length	Auxiliary Circuit 9 mm Control Circuit 9 mm
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

Technical UL/CSA

Tightening Torque UL/CSA	Auxiliary Circuit 9 in·lb Control Circuit 9 in·lb

Environmental

Ambient Air Temperature	Close to Contactor for Storage -60 ... +80 °C Near Contactor for Operation in Free Air -40 ... 70 °C
Climatic Withstand	Category B according to IEC 60947-1 Annex Q
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 19 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
Resistance to Vibrations	3g Closed Position & 2g Open Position 5 ... 300 Hz

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
Toxic Substances Control Act - TSCA	2CMT2023-006525
WEEE B2C / B2B	Business To Business
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)

Certificates and Declarations

CB Certificate	CB_CN_32453
CCC Certificate	CCC_2007010305248106
CQC Certificate	CQC2007010305248106
Declaration of Conformity - CCC	2020980304001219
Declaration of	1SBD250016U1000

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Conformity - CE	
Declaration of Conformity - UKCA	1SBD250051U1000
GOST Certificate	GOST_POCCCNME77B07821.pdf
UL Certificate	UL_220108-E312527A
UL Listing Card	NOA_E312527.pdf

Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	78 mm
Package Level 1 Depth / Length	80 mm
Package Level 1 Height	48 mm
Package Level 1 Gross Weight	0.28 kg
Package Level 1 EAN	3471523056114
Package Level 2 Units	40 piece
Package Level 2 Width	250 mm
Package Level 2 Depth / Length	315 mm
Package Level 2 Height	195 mm
Package Level 2 Gross Weight	11.2 kg
Package Level 3 Units	960 piece

Classifications

Object Classification Code	K
ETIM 7	EC000196 - Contactor relay
ETIM 8	EC000196 - Contactor relay
ETIM 9	EC000196 - Contactor relay
eClass	V11.0 : 27371001
UNSPSC	39121529
IDEA Granular Category Code (IGCC)	4763 >> Power contactor, DC switching

Accessories

Identifier	Description	Type	Quantity	Unit Of Measure
1SBN050020R1000	RT5/32 Surge Suppressor	RT5/32	1	piece
1SBN050010R1000	RV5/50 Surge Suppressor	RV5/50	1	piece

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Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → NS Contactor Relays → NSL






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