

PRODUCT-DETAILS

NF31E-14

NF31E-14 250-500V50/60HZ-DC Contactor Relay



General Information

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|-----------------------|---------------------------------------------|
| Extended Product Type | NF31E-14 |
| Product ID | 1SBH137001R1431 |
| EAN | 3471523100244 |
| Catalog Description | NF31E-14 250-500V50/60HZ-DC Contactor Relay |

Long Description

NF contactor relays are used for switching auxiliary and control circuits. NF contactor relays include an electronic coil interface accepting a wide control voltage U_c min. ... U_c max. Only four coils cover control voltages between 24...500 V 50/60 Hz or 20...500 V DC. NF contactor relays can manage large control voltage variations. One coil can be used for different control voltages used worldwide without any coil change. NF contactor relays have built-in surge protection and do not require additional surge suppressors. - Poles: 4-pole contactor relays (mechanically-linked auxiliary contacts compliant with Annex L of IEC 60947-5-1 and including the "Mechanically Linked" symbol on the contactor relay side) - Control Circuit: AC or DC operated - Accessories: a wide range of Accessories is available.

Classifications

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|----------------------------|----------------------------|
| Object Classification Code | K |
| ETIM 4 | EC000196 - Contactor relay |
| ETIM 5 | EC000196 - Contactor relay |
| ETIM 6 | EC000196 - Contactor relay |
| ETIM 7 | EC000196 - Contactor relay |
| UNSPSC | 39121500 |
| E-Number (Sweden) | 3211453 |

Container Information

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|--------------------------------|---------------|
| Package Level 1 Units | box 1 piece |
| Package Level 1 Width | 87 mm |
| Package Level 1 Depth / Length | 79 mm |
| Package Level 1 Height | 47 mm |
| Package Level 1 Gross Weight | 0.31 kg |
| Package Level 1 EAN | 3471523100244 |
| Package Level 2 Units | box 27 piece |
| Package Level 2 Width | 250 mm |
| Package Level 2 Depth / Length | 300 mm |
| Package Level 2 Height | 315 mm |
| Package Level 2 Gross Weight | 16.74 kg |
| Package Level 3 Units | 1296 piece |

Certificates and Declarations (Document Number)

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|--------------------------------|-------------------------------|
| ABS Certificate | ABS_15-GE1349500-PDA_90682247 |
| BV Certificate | BV_2634H24899B0 |
| CB Certificate | CB_SE-93051 |
| CCC Certificate | CCC_2011010303465426 |
| cUL Certificate | UL_20180227_E252354_2_1 |
| Declaration of Conformity - CE | 1SBD250005U1000 |
| DNV Certificate | DNV-GL_TAE00001BV-3 |
| DNV GL Certificate | DNV-GL_TAE00001BV-3 |
| EAC Certificate | EAC_RU C-FR ME77 B01006 |
| Environmental Information | 1SBD250151E1000 |
| GL Certificate | DNV-GL_TAE00001BV-3 |
| GOST Certificate | GOST_POCCFR.ME77.B06804.pdf |
| Instructions and Manuals | 1SBC101027M6801 |
| LR Certificate | LRS_C1400038 |
| RINA Certificate | RINA_ELE240318XG |
| RMRS Certificate | RMRS_1802702280 |
| RoHS Information | 1SBD250005U1000 |
| UL Certificate | UL_20130206-E252354-2-1 |
| UL Listing Card | UL_E252354 |

Technical UL/CSA

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|-------------------|-------------------------|
| Tightening Torque | Auxiliary Circuit 11 IA |
| UL/CSA | Control Circuit 11 IA |

Environmental

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|------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| 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 | 3000 m |
| Resistance to Vibrations acc. to IEC 60068-2-6 | 5 ... 300 Hz 4 g closed position / 2 g open position |

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

Shock Direction: A 30 K40
Shock Direction: B2 15 K40
Shock Direction: C1 25 K40
Shock Direction: C2 25 K40
Closed, Shock Direction: B1 25 K40
Open, Shock Direction: B1 5 K40

RoHS Status

Following EU Directive 2011/65/EU

Technical

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|----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 | Main Circuit 690 V 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, q = 40 °C 16 A |
| Rated Operational Current AC-15 (I _e) | (220 / 240 V) 4 A (24 / 127 V) 6 A (500 V) 2 A (690 V) 2 A (400 / 440 V) 3 A |
| Rated Short-time Withstand Current (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) | (125 V) 0.55 A / 69 W (24 V) 6 A / 144 W (250 V) 0.27 A / 68 W (48 V) 2.8 A / 134 W (72 V) 1 A / 72 W (110 V) 0.55 A / 60 W (220 V) 0.27 A / 60 W (400 V) 0.15 A / 60 W (500 V) 0.13 A / 65 W (600 V) 0.1 A / 60 W |
| Rated Insulation Voltage (U _i) | acc. to UL/CSA 600 V acc. to IEC 60947-5-1 and VDE 0110 (Gr. C) 690 V |
| Rated Impulse Withstand Voltage (U _{imp}) | 6 kV |
| Maximum Mechanical Switching Frequency | 6000 cycles per hour |
| Rated Control Circuit Voltage (U _c) | 50 Hz 250 ... 500 V 50 Hz / 60 Hz 250 ... 500 V 60 Hz 250 ... 500 V DC Operation 250 ... 500 V |
| Operate Time | Between Coil De-energization and NC Contact Closing 13 ... 98 ms Between Coil De-energization and NO Contact Opening 11 ... 95 ms Between Coil Energization and NC Contact Opening 38 ... 90 ms Between Coil Energization and NO Contact Closing 40 ... 95 ms |
| Connecting Capacity Auxiliary Circuit | Flexible with Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm ² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm ² Rigid 1/2x 1 ... 2.5 mm ² |
| Connecting Capacity Control Circuit | Flexible with Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm ² Rigid 1/2x 1 ... 2.5 mm ² |
| Wire Stripping Length | Auxiliary Circuit 10 mm Control Circuit 10 mm |
| Degree of Protection | acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP40 acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 |
| Terminal Type | Screw Terminals |

Dimensions

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|----------------------------|---------|
| Product Net Width | 45 mm |
| Product Net Depth / Length | 77 mm |
| Product Net Height | 86 mm |
| Product Net Weight | 0.31 kg |

Popular Downloads

| | |
|--------------------------|-----------------|
| Instructions and Manuals | 1SBC101027M6801 |
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Ordering

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| Minimum Order Quantity | 1 piece |
| Customs Tariff Number | 85364900 |

Categories

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

