

PRODUCT-DETAILS

# NF31E-14

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



### Información General

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extended Product Type | NF31E-14                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Product ID            | 1SBH137001R1431                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| EAN                   | 3471523100244                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Catalog Description   | NF31E-14 250-500V50/60HZ-DC Contactor Relay                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Long Description      | <p>NF contactor relays are used for switching auxiliary and control circuits. NF contactor relays include an electronic coil interface accepting a wide control voltage <math>U_c</math> min. ... <math>U_c</math> 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.</p> |

### Clasificaciones

|                            |                            |
|----------------------------|----------------------------|
| 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                    |

## Información de Embalaje

|                                |               |
|--------------------------------|---------------|
| 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    |

## Certificados y Declaraciones (Número de Documento)

|                                |                               |
|--------------------------------|-------------------------------|
| ABS Certificate                | ABS_15-GE1349500-PDA_90682247 |
| BV Certificate                 | BV_2634H24899B0               |
| CB Certificate                 | CB_SE-89845                   |
| 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

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

## Ambiente

|                                                |                                                                                                          |
|------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Ambient Air Temperature                        | Close to Contactor for Storage -60 ... +80 °C<br>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

|                                                       |                                                                                                                                                                                                                                                                        |
|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of Auxiliary<br>Contacts NO                    | 3                                                                                                                                                                                                                                                                      |
| Number of Auxiliary<br>Contacts NC                    | 1                                                                                                                                                                                                                                                                      |
| Standards                                             | IEC 60947-5-1 and EN 60947-5-1, UL 508, CSA C22.2 N°14                                                                                                                                                                                                                 |
| Rated Operational<br>Voltage                          | Auxiliary Circuit 690 V<br>Main Circuit 690 V                                                                                                                                                                                                                          |
| Rated Frequency (f)                                   | Auxiliary Circuit 50 / 60 Hz                                                                                                                                                                                                                                           |
| Conventional Free-air<br>Thermal Current ( $I_{th}$ ) | acc. to IEC 60947-5-1, $q = 40^\circ\text{C}$ 16 A                                                                                                                                                                                                                     |
| Rated Operational<br>Current AC-15 ( $I_e$ )          | (220 / 240 V) 4 A<br>(24 / 127 V) 6 A<br>(500 V) 2 A<br>(690 V) 2 A<br>(400 / 440 V) 3 A                                                                                                                                                                               |
| Rated Short-time<br>Withstand Current ( $I_{cw}$ )    | for 0.1 s 140 A<br>for 1 s 100 A                                                                                                                                                                                                                                       |
| Maximum Electrical<br>Switching Frequency             | AC-15 1200 cycles per hour<br>DC-13 900 cycles per hour                                                                                                                                                                                                                |
| Rated Operational<br>Current DC-13 ( $I_e$ )          | (125 V) 0.55 A / 69 W<br>(24 V) 6 A / 144 W<br>(250 V) 0.27 A / 68 W<br>(48 V) 2.8 A / 134 W<br>(72 V) 1 A / 72 W<br>(110 V) 0.55 A / 60 W<br>(220 V) 0.27 A / 60 W<br>(400 V) 0.15 A / 60 W<br>(500 V) 0.13 A / 65 W<br>(600 V) 0.1 A / 60 W                          |
| Rated Insulation Voltage<br>( $U_i$ )                 | acc. to UL/CSA 600 V<br>acc. to IEC 60947-5-1 and VDE 0110 (Gr. C) 690 V                                                                                                                                                                                               |
| Rated Impulse<br>Withstand Voltage ( $U_{imp}$ )      | 6 kV                                                                                                                                                                                                                                                                   |
| Maximum Mechanical<br>Switching Frequency             | 6000 cycles per hour                                                                                                                                                                                                                                                   |
| Rated Control Circuit<br>Voltage ( $U_c$ )            | 50 Hz 250 ... 500 V<br>50 Hz / 60 Hz 250 ... 500 V<br>60 Hz 250 ... 500 V<br>DC Operation 250 ... 500 V                                                                                                                                                                |
| Operate Time                                          | Between Coil De-energization and NC Contact Closing 13 ... 98 ms<br>Between Coil De-energization and NO Contact Opening 11 ... 95 ms<br>Between Coil Energization and NC Contact Opening 38 ... 90 ms<br>Between Coil Energization and NO Contact Closing 40 ... 95 ms |
| Connecting Capacity<br>Auxiliary Circuit              | Flexible with Ferrule 1/2x 0.75 ... 2.5<br>Flexible with Insulated Ferrule 2x 0.75 ... 1.5<br>Flexible with Insulated Ferrule 1x 0.75 ... 2.5<br>Rigid 1/2x 1 ... 2.5 m <sup>2</sup>                                                                                   |
| Connecting Capacity<br>Control Circuit                | Flexible with Ferrule 1/2x 0.75 ... 2.5 m <sup>2</sup><br>Flexible with Insulated Ferrule 1x 0.75 ... 2.5 m <sup>2</sup><br>Flexible with Insulated Ferrule 2x 0.75 ... 1.5 m <sup>2</sup><br>Rigid 1/2x 1 ... 2.5 m <sup>2</sup>                                      |
| Wire Stripping Length                                 | Auxiliary Circuit 10 mm<br>Control Circuit 10 mm                                                                                                                                                                                                                       |
| Degree of Protection                                  | acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP20<br>acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20                                                                                                                                      |
| Terminal Type                                         | Screw Terminals                                                                                                                                                                                                                                                        |

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

| Descargas Populares      |                 |
|--------------------------|-----------------|
| Instructions and Manuals | 1SBC101027M6801 |

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

| Categorías |
|------------|
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Productos y sistemas de baja tensión → Aparatos de control → Contactores → Contactores

