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

General Information

Extended Product Type:
Product ID:
EAN:
Catalog Description:
Long Description:

NF44E-13
1SBH137001R1344
3471523100732
NF44E-13 100-250V50/60HZ-DC Contactor Relay
NF contactor relays are used for switching auxiliary and control circuits. NF contactor relays include an electronic coil interface accepting a wide contro I voltage Uc min. ... Uc max. Only four coils cover control voltages between $24 \ldots 500 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ or $20 \ldots 500 \mathrm{~V}$ DC. NF contactor relays can manage lar ge control voltage variations. One coil can be used for different control volt ages used worldwide without any coil change. NF contactor relays have bu ilt-in surge protection and do not require additional surge suppressors. - Po les: 8-pole contactor relays with a non-removable front-mounted auxiliary c ontact block (mechanically-linked auxiliary contacts compliant with Annex L of IEC 60947-5-1 and including the "Mechanically Linked" symbol on the c ontactor relay side) - Control Circuit: AC or DC operated - Accessories: a w ide range of Accessories is available.

Ordering

| Minimum Order Quantity: | 1 piece |
| :--- | :--- |
| Customs Tariff Number: | 85364900 |
| opular Downloads |  |
| Data Sheet, Technical Information: | 1SBC101430D0201 |
| Instructions and Manuals: | 1 SBC101027M6801 |
| Dimensions | 45 mm |
| Product Net Width: | 110.5 mm |
| Product Net Depth: | 86 mm |
| Product Net Weight: | 0.320 kg |

Technical

| Number of Auxiliary Contacts NO: | 4 |
| :--- | :--- |
| Number of Auxiliary Contacts NC: | 4 |
| Standards: | IEC 60947-5-1 and EN 60947-5-1, UL 508, CSA C22.2 N ${ }^{\circ} 14$ |
| Rated Operational Voltage: | Auxiliary Circuit 690 V |
|  | Main Circuit 690 V |
| Rated Frequency (f): | Auxiliary Circuit $50 / 60 \mathrm{~Hz}$ |


| Conventional Free-air Thermal Current ( $\mathrm{I}_{\mathrm{th}}$ ): | acc. to IEC 60947-5-1, $\mathrm{q}=40^{\circ} \mathrm{C} 16 \mathrm{~A}$ |
| :---: | :---: |
| Rated Operational Current AC-15 $\left(I_{e}\right):$ | $\begin{aligned} & (220 / 240 \mathrm{~V}) 4 \mathrm{~A} \\ & (24 / 127 \mathrm{~V}) 6 \mathrm{~A} \\ & (400 / 440 \mathrm{~V}) 3 \mathrm{~A} \\ & (500 \mathrm{~V}) 2 \mathrm{~A} \\ & (690 \mathrm{~V}) 2 \mathrm{~A} \end{aligned}$ |
| Rated Short-time Withstand Current ( $\mathrm{I}_{\mathrm{cw}}$ ): | 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 ( $\mathrm{I}_{\mathrm{e}}$ ): | $\begin{aligned} & (110 \mathrm{~V}) 0.55 \mathrm{~A} / 60 \mathrm{~A} \\ & (125 \mathrm{~V}) 0.55 \mathrm{~A} / 69 \mathrm{~A} \\ & (220 \mathrm{~V}) 0.27 \mathrm{~A} / 60 \mathrm{~A} \\ & (24 \mathrm{~V}) 6 \mathrm{~A} / 144 \mathrm{~A} \\ & (250 \mathrm{~V}) 0.27 \mathrm{~A} / 68 \mathrm{~A} \\ & (400 \mathrm{~V}) 0.15 \mathrm{~A} / 60 \mathrm{~A} \\ & (48 \mathrm{~V}) 2.8 \mathrm{~A} / 134 \mathrm{~A} \\ & (500 \mathrm{~V}) 0.13 \mathrm{~A} / 65 \mathrm{~A} \\ & (600 \mathrm{~V}) 0.1 \mathrm{~A} / 60 \mathrm{~A} \\ & (72 \mathrm{~V}) 1 \mathrm{~A} / 72 \mathrm{~A} \end{aligned}$ |
| Rated Insulation Voltage ( $\mathrm{U}_{\mathbf{i}}$ ): | acc. to UL/CSA 600 V acc. to IEC 60947-5-1 and VDE 0110 (Gr. C) 690 V |
| Rated Impulse Withstand Voltage ( $\mathrm{U}_{\mathrm{imp}}$ ): | 6 kV |
| Maximum Mechanical Switching Frequency: | 6000 cycles per hour |
| Rated Control Circuit Voltage ( $\mathrm{U}_{\mathrm{c}}$ ): | $50 \mathrm{~Hz} 100 \ldots 250 \mathrm{~V}$ $60 \mathrm{~Hz} 100 \ldots 250 \mathrm{~V}$ DC Operation $100 \ldots 250 \mathrm{~V}$ |
| 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 $1 / 2 \times 0.75 \ldots 2.5 \mathrm{~mm}^{2}$ <br> Flexible with Insulated Ferrule $1 \times 0.75 \ldots 2.5 \mathrm{~mm}^{2}$ <br> Flexible with Insulated Ferrule $2 x 0.75 \ldots 1.5 \mathrm{~mm}^{2}$ <br> Rigid $1 / 2 \times 1$... $2.5 \mathrm{~mm}^{2}$ |
| Connecting Capacity Control Circuit: | Flexible with Ferrule $1 / 2 \times 0.75 \ldots 2.5 \mathrm{~mm}^{2}$ <br> Flexible with Insulated Ferrule $1 \times 0.75 \ldots 2.5 \mathrm{~mm}^{2}$ <br> Flexible with Insulated Ferrule $2 x 0.75 \ldots 1.5 \mathrm{~mm}^{2}$ <br> Rigid $1 / 2 \times 1$... $2.5 \mathrm{~mm}^{2}$ |
| 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 IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 |

## Environmental

| Ambient Air Temperature: | Close to Contactor for Storage $-60 \ldots+80^{\circ} \mathrm{C}$ <br> Near Contactor for Operation in Free Air -40 ... $+70^{\circ} \mathrm{C}$ |
| :---: | :---: |
| 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: | $5 \ldots 300 \mathrm{~Hz} 4 \mathrm{~g}$ closed position / 2 g open position |
| Resistance to Shock acc. to IEC 60068-2-27: | Closed, Shock Direction: B1 25 g Open, Shock Direction: B1 5 g <br> Shock Direction: A 30 g <br> Shock Direction: B2 15 g <br> Shock Direction: C1 25 g <br> Shock Direction: C2 25 g |

Technical UL/CSA
Tightening Torque UL/CSA: Auxiliary Circuit $11 \mathrm{in} \cdot \mathrm{lb}$ Control Circuit $11 \mathrm{in} \cdot \mathrm{lb}$

Certificates and Declarations (Document Number)

| 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 |
| DNV GL Certificate: | DNV-GL_TAE00001BV |
| EAC Certificate: | EAC_RU C-FR ME77 B01006 |
| Environmental Information: | 1SBD250152E1000 |
| GOST Certificate: | GOST_POCCFR.ME77.B06804.pdf |
| Instructions and Manuals: | 1SBC101027M6801 |
| LR Certificate: | LRS_C1400038 |
| RINA Certificate: | RINA_ELE084013XG |
| RMRS Certificate: | RMRS_1300132124 |
| RoHS Information: | 1SBD251014E1000 |
| UL Certificate: | UL_20130206-E252354-2-1 |
| UL Listing Card: | UL_E252354 |

Container Information

| Package Level 1 Units: | 1 piece |
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| Package Level 1 Width: | 87 mm |
| Package Level 1 Length: | 113 mm |
| Package Level 1 Height: | 47 mm |
| Package Level 1 Gross Weight: | 0.32 kg |
| Package Level 1 EAN: | 3471523100732 |
| Package Level 2 Units: | 36 piece |
| Package Level 2 Width: | 250 mm |
| Package Level 2 Length: | 300 mm |
| Package Level 2 Height: | 315 mm |
| Package Level 2 Gross Weight: | 11.52 kg |
| Package Level 3 Units: | 864 piece |

Classifications

| Object Classification Code: | K |
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| ETIM 4: | EC000196-Contactor relay |
| ETIM 5: | EC000196-Contactor relay |
| ETIM 6: | EC000196-Contactor relay |
| UNSPSC: | 39121500 |

