

Products Low Voltage Products and Systems Control Products Contactors Block Contactors

### General Information

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| <b>Extended Product Type:</b> | NF22E-13  |
| <b>Product ID:</b>            | 1SBH137001R1322   |
| <b>EAN:</b>                   | 3471523100138   |
| <b>Catalog Description:</b>   | NF22E-13 100-250V50/60HZ-DC Contactor Relay   |
| <b>Long Description:</b>      | NF contactor relays are used for switching auxiliary and control circuits. NF contactor relays include an electronic coil interface accepting a wide control voltage $U_c \text{ min.} \dots U_c \text{ max.}$ 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. |

### Additional Information

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| <b>ABB Industrial IT Suite:</b>                                | Control IT  |
| <b>ABS Certificate:</b>  | ABS_15-GE1349500-PDA_90682247   |
| <b>Ambient Air Temperature:</b>                                | Close to Contactor for Storage -60...+80 °C<br>Near Contactor for Operation in Free Air -40 ... +70 °C  |
| <b>Block Contactor Type:</b>                                   | Contactor Relay   |
| <b>CB Certificate:</b>   | CB_SE_70920A1M2   |
| <b>CCC Certificate:</b>  | CCC_2011010303465426  |
| <b>Climatic Withstand:</b>                                     | Category B according to IEC 60947-1 Annex Q   |
| <b>Coil Voltage Code:</b>                                      | 13  |
| <b>Connecting Capacity Auxiliary Circuit:</b>                  | Flexible with Ferrule 1/2x 0.75 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm <sup>2</sup><br>Rigid 1/2x 1...2.5 mm <sup>2</sup>   |
| <b>Connecting Capacity Control Circuit:</b>                    | Flexible with Ferrule 1/2x 0.75 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm <sup>2</sup><br>Rigid 1/2x 1 ... 2.5 mm <sup>2</sup>   |
| <b>Conventional Free-air Thermal Current (I<sub>th</sub>):</b> | acc. to IEC 60947-5-1, q = 40 °C 16 A   |
| <b>Country of Origin:</b>                                      | France (FR)   |
| <b>Customs Tariff Number:</b>                                  | 85364900  |
| <b>Data Sheet, Technical Information:</b>                      | 1SBC101427D0201   |
| <b>Declaration of Conformity - CE:</b>                         | 1SBD250005U1000   |
| <b>Degree of Protection:</b>                                   | 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   |
| <b>E-number:</b>   | 3211448   |
| <b>EAC Certificate:</b>  | EAC_RU C-FR ME77 B01006   |
| <b>EAN:</b>  | 3471523100138   |
| <b>EPLAN Catalog Tree:</b>                                     | Electrical engineering / Relays, contactors / Contactors  |
| <b>EPLAN Function Definition:</b>                              | Coil / Coil, 2 connection points / Coil for power contactor A1_A2<br>NO contact / NO contact, 2 connection points / NO auxiliary contact 13_14<br>NC contact / NC contact, 2 connection points / NC auxiliary contact 21_22<br>NC contact / NC contact, 2 connection points / NC auxiliary contact 31_32<br>NO contact / NO contact, 2 connection points / NO auxiliary contact 43_44 |
| <b>EPLAN Macro:</b>  | 9AKK106930A0692   |

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| <b>ETIM 4:</b>                                 | EC000196 - Contactor relay   |
| <b>ETIM 5:</b>                                 | EC000196 - Contactor relay   |
| <b>ETIM 6:</b>                                 | EC000196 - Contactor relay   |
| <b>Environmental Information:</b>              | 1SBD250151E1000  |
| <b>GOST Certificate:</b>                       | GOST_POCCFR.ME77.B06804.pdf  |
| <b>IIT Publishing Status:</b>                  | Level 0 - Information enabled  |
| <b>Industrial IT Certification Level:</b>      | 0  |
| <b>Instructions and Manuals:</b>               | 1SBC101027M6801  |
| <b>Invoice Description:</b>                    | NF22E-13 100-250V50/60HZ-DC Contactor Relay  |
| <b>LR Certificate:</b>                         | LRS_C1400038   |
| <b>Low Coil Consumption:</b>                   | No   |
| <b>Maximum Electrical Switching Frequency:</b> | AC-15 1200 cycles per hour<br>DC-13 900 cycles per hour  |
| <b>Maximum Mechanical Switching Frequency:</b> | 6000 cycles per hour   |
| <b>Maximum Operating Altitude Permissible:</b> | 3000 m   |
| <b>Minimum Order Quantity:</b>                 | 1 piece  |
| <b>Mounted Auxiliary Contacts:</b>             | 2 NO, 2 NC   |
| <b>Mounted Auxiliary Contacts 1st Stack:</b>   | 2 NO, 2 NC   |
| <b>Mounted Auxiliary Contacts 2nd Stack:</b>   | 0 NO, 0 NC   |
| <b>Mounting Position:</b>                      | Max. add-on N.C. auxiliary contacts: see accessory fitting details for a NF contactor relay  |
| <b>Mounting Positions:</b>                     | 1SBC500297F0000  |
| <b>Number of Auxiliary Contacts NC:</b>        | 2  |
| <b>Number of Auxiliary Contacts NO:</b>        | 2  |
| <b>Object Classification Code:</b>             | K  |
| <b>Operate Time:</b>                           | 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 |
| <b>Order Multiple:</b>                         | 1 piece  |
| <b>Package Level 1 EAN:</b>                    | 3471523100138  |
| <b>Package Level 1 Gross Weight:</b>           | 0.27 kg  |
| <b>Package Level 1 Height:</b>                 | 47 mm  |
| <b>Package Level 1 Length:</b>                 | 79 mm  |
| <b>Package Level 1 Units:</b>                  | 1 piece  |
| <b>Package Level 1 Width:</b>                  | 87 mm  |
| <b>Package Level 2 Height:</b>                 | 315 mm   |
| <b>Package Level 2 Length:</b>                 | 300 mm   |
| <b>Package Level 2 Units:</b>                  | 54 piece   |
| <b>Package Level 2 Width:</b>                  | 250 mm   |
| <b>Package Level 3 Units:</b>                  | 1296 piece   |
| <b>Product Main Type:</b>                      | NF   |
| <b>Product Name:</b>                           | Block Contactor Relay  |
| <b>Product Net Depth:</b>                      | 77 mm  |
| <b>Product Net Height:</b>                     | 86 mm  |
| <b>Product Net Weight:</b>                     | 0.270 kg   |
| <b>Product Net Width:</b>                      | 45 mm  |
| <b>Product Packing Type:</b>                   | Box  |
| <b>RINA Certificate:</b>                       | RINA_ELE084013XG   |
| <b>RMRS Certificate:</b>                       | RMRS_1300132124  |

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| <b>Rated Control Circuit Voltage (U<sub>c</sub>):</b>       | 50 Hz 100 ... 250 V<br>60 Hz 100 ... 250 V<br>DC Operation 100 ... 250 V  |
| <b>Rated Frequency (f):</b>                                 | Auxiliary Circuit 50 / 60 Hz  |
| <b>Rated Impulse Withstand Voltage (U<sub>imp</sub>):</b>   | 6 kV  |
| <b>Rated Insulation Voltage (U<sub>i</sub>):</b>            | acc. to UL/CSA 600 V<br>acc. to IEC 60947-5-1 and VDE 0110 (Gr. C) 690 V  |
| <b>Rated Operational Current AC-15 (I<sub>e</sub>):</b>     | (220 / 240 V) 4 A<br>(24 / 127 V) 6 A<br>(400 / 440 V) 3 A<br>(500 V) 2 A<br>(690 V) 2 A  |
| <b>Rated Operational Current DC-13 (I<sub>e</sub>):</b>     | (110 V) 0.55 A / 60 W<br>(125 V) 0.55 A / 69 W<br>(220 V) 0.27 A / 60 W<br>(24 V) 6 A / 144 W<br>(250 V) 0.27 A / 68 W<br>(400 V) 0.15 A / 60 W<br>(48 V) 2.8 A / 134 W<br>(500 V) 0.13 A / 65 W<br>(600 V) 0.1 A / 60 W<br>(72 V) 1 A / 72 W |
| <b>Rated Operational Voltage:</b>                           | Auxiliary Circuit 690 V<br>Main Circuit 690 V   |
| <b>Rated Short-time Withstand Current (I<sub>cw</sub>):</b> | for 0.1 s 140 A<br>for 1 s 100 A  |
| <b>Resistance to Shock acc. to IEC 60068-2-27:</b>          | Closed, Shock Direction: B1 25 g<br>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  |
| <b>Resistance to Vibrations acc. to IEC 60068-2-6:</b>      | 5 ... 300 Hz 4 g closed position / 2 g open position  |
| <b>RoHS Date:</b>   | 20090609  |
| <b>RoHS Information:</b>                                    | 1SBD251014E1000   |
| <b>Selling Unit of Measure:</b>                             | piece   |
| <b>Short Description:</b>                                   | NF22E-13 100-250V50/60HZ-DC Contactor Relay   |
| <b>Standards:</b>   | IEC 60947-5-1 and EN 60947-5-1, UL 508, CSA C22.2 N°14  |
| <b>Terminal Type:</b>                                       | Screw Terminals   |
| <b>Tightening Torque:</b>                                   | Auxiliary Circuit 1.2 N·m<br>Control Circuit 1.2 N·m  |
| <b>Tightening Torque UL/CSA:</b>                            | Auxiliary Circuit 11 in·lb<br>Control Circuit 11 in·lb  |
| <b>UL Certificate:</b>                                      | UL_20130206-E252354-2-1   |
| <b>UL Listing Card:</b>                                     | UL_E252354  |
| <b>UNSPSC:</b>  | 39121500  |
| <b>Wire Stripping Length:</b>                               | Auxiliary Circuit 10 mm<br>Control Circuit 10 mm  |
| <b>DNV GL Certificate:</b>                                  | DNV-GL_TAE00001BV   |

