PRODUCT-DETAILS

# NFZ80E-22

# NFZ80E-22 48-130V50/60HZ-DC Contactor Relay



## General Information

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|---|---|
| Extended Product Type | NFZ80E-22 |
| Product ID | 1SBH136001R2280 |
| EAN | 3471523101920 |
| Catalog Description | NFZ80E-22 48-130V50/60HZ-DC Contactor Relay |
| Long Description | NFZ contactor relays are used for switching auxiliary and control circuits. NFZ contactor relays include an electronic coil interface accepting a wide control voltage Uc min. ... Uc max. Only four coils cover control voltages between 24...250 V 50/60 Hz or 12...250 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 NFZ contactor relays allow direct control by PLC-output ≥ 24 V DC 500 mA and obtain a reduced holding coil consumption. NFZ contactor relays withstand short voltage dips and voltage sags (SEMI F47-0706 compliance) between 24...250 V 50/60 Hz NFZ contactor relays have built-in surge protection and do not require additional surge suppressors - Poles: 8-pole contactor relays - Control Circuit: AC or DC operated - Accessories: a wide range of Accessories is available. |

## Ordering

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

## Popular Downloads

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

## Dimensions

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| Product Net Width | 45 mm |
| Product Net Depth / Length | 110.5 mm |
| Product Net Height | 86 mm |
| Product Net Weight | 0.36 kg |

## Technical

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| Number of Auxiliary Contacts NO | 8 |
| Number of Auxiliary Contacts NC | 0 |
| Standards | IEC 60947-5-1 and EN 60947-5-1, UL 508, CSA C22.2 N°14 |
| Rated Operational Voltage | Auxiliary Circuit 690 V<br>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, q = 40 °C 16 A |
| Rated Operational Current AC-15 ($I_e$) | (500 V) 2 A<br>(690 V) 2 A<br>(24 / 127 V) 6 A<br>(220 / 240 V) 4 A<br>(400 / 440 V) 3 A |
| Rated Short-time Withstand Current ($I_{cw}$) | for 0.1 s 140 A<br>for 1 s 100 A |
| Maximum Electrical Switching Frequency | (AC-15) 1200 cycles per hour<br>(DC-13) 900 cycles per hour |
| Rated Operational Current DC-13 ($I_e$) | (24 V) 6 A / 144 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>(125 V) 0.55 A / 69 W<br>(220 V) 0.27 A / 60 W<br>(250 V) 0.27 A / 68 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 ($U_i$) | acc. to IEC 60947-5-1 and VDE 0110 (Gr. C) 690 V<br>acc. to UL/CSA 600 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 48 ... 130 V<br>50 Hz / 60 Hz 48 ... 130 V<br>60 Hz 48 ... 130 V<br>DC Operation 48 ... 130 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 Auxiliary Circuit | Flexible with Ferrule 1/2x 0.75 ... 2.5 mm²<br>Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm²<br>Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm²<br>Rigid 1/2x 1 ... 2.5 mm² |
| Connecting Capacity Control Circuit | Flexible with Ferrule 1/2x 0.75 ... 2.5 mm²<br>Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm²<br>Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm²<br>Rigid 1/2x 1 ... 2.5 mm² |
| 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 IP40<br>acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 |
| Terminal Type | Screw Terminals |

## Technical UL/CSA

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

## Environmental

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| 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 | Closed, Shock Direction: B1 25 K40<br>Open, Shock Direction: B1 5 K40<br>Shock Direction: A 30 K40<br>Shock Direction: B2 15 K40<br>Shock Direction: C1 25 K40<br>Shock Direction: C2 25 K40 |
| RoHS Status | Following EU Directive 2011/65/EU |

## Certificates and Declarations (Document Number)

| | |
|---|---|
| ABS Certificate | ABS_15-GE1349500-PDA_90682247 |
| BV Certificate | BV_2634H24899B0 |
| CB Certificate | CB_SE-93051 |
| CCC Certificate | 2020980303000185 |
| CQC Certificate | CQC2019010303267993 |
| cUL Certificate | UL_20180227_E252354_2_1 |
| Declaration of Conformity - CCC | CQC2011010303465426 |
| 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 B03544 |
| Environmental Information | 1SBD250152E1000 |
| GL Certificate | DNV-GL_TAE00001BV-3 |
| GOST Certificate | GOST_POCCFR.ME77.B07174.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 |

## Container Information

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|---|---|
| Package Level 1 Units | box 1 piece |
| Package Level 1 Width | 87 mm |
| Package Level 1 Depth / Length | 113 mm |
| Package Level 1 Height | 47 mm |

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| Package Level 1 Gross Weight | 0.36 kg |
| Package Level 1 EAN | 3471523101920 |
| Package Level 2 Units | box 18 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 | 12.96 kg |
| Package Level 3 Units | 864 piece |

## 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 |
| eClass | V11.0 : 27371003 |
| UNSPSC | 39121500 |
| E-Number (Finland) | 3706454 |

## Categories

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

