



Representative Image

Alternate Catalog No. NF31E-11 Catalog No. 1SBH137001R1131

Description: NF31E-11 24-60V50/60HZ 20-60VDC Contactor Relay

UPC No 3471523100213

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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. Note: NF..E-11 not suitable for a direct control by PLC-output. NF..E-11 type available in some countries: please consult your ABB representative.

Descriptors

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|----------------------|-----------------|
| Category | AF Contactors |
| Block Contactor Type | Contactor Relay |

Specifications

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| Product Type | AF |
| Object Classification Code | K |
| Terminal Type | Screw Terminals |
| Rated Control Circuit Voltage | 50 Hz /60 Hz 24 ... 60 V DC Operation 20 ... 60 V |
| Resistance to Vibrations acc. to IEC 60068-2-6 | 5 ... 300 Hz 4 g closed position / 2 g open position |
| Number of Auxiliary Contacts NO | 3 |
| RoHS Status | Following EU Directive 2011/65/EU |
| Reference Ambient Air Temperature | Close to Contactor for Storage °C Near Contactor for Operation in Free Air °C |
| Rated Operational Voltage | Auxiliary Circuit 690 V Main Circuit 690 V |
| Number of Auxiliary Contacts NC | 1 |
| Tightening Torque UL/CSA | Auxiliary Circuit 11 IA Control Circuit 11 IA |
| Maximum Operating Altitude Permissible | 3000 m |
| Standards | IEC 60947-5-1 and EN 60947-5-1, UL 508, CSA C22.2 N°14 |
| Conventional Free-air Thermal Current | acc. to IEC 60947-5-1, $q = 40 \text{ °C}$ 16 A |
| Rated Operational Current AC-15 | (220 / 240 V) 4 A (24 / 127 V) 6 A (500 V) 2 A (690 V) 2 A (400 / 440 V) 3 A |
| Rated Frequency | Auxiliary Circuit 50 Hz Auxiliary Circuit 60 Hz |
| Rated Short-time Withstand Current | for 0.1 s A for 1 s A |
| Maximum Electrical Switching Frequency | AC-15 1200 cycles per hour DC-13 900 cycles per hour |
| Rated Insulation Voltage | acc. to UL/CSA 600 V acc. to IEC 60947-5-1 and VDE 0110 (Gr. C) 690 V |
| Maximum Mechanical Switching Frequency | 6000 cycles per hour |

Specifications

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| 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 |
| Secondary Rated Impulse Withstand Voltage | 6 kV |
| Rated Operational Current DC-13 | (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 |
| Connecting Capacity Control Circuit | Flexible with Ferrule Flexible with Insulated Ferrule Rigid |
| 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 |
| Connecting Capacity Auxiliary Circuit | Flexible with Ferrule 1/2x 0.75 ... 2.5 m ² Flexible with Insulated Ferrule 1x 0.75 ... 2.5/2x 0.75 ... 1.5 m ² Rigid 1/2x 1 ... 2.5 m ² |
| Wire Stripping Length | Auxiliary Circuit 10 mm Control Circuit 10 mm |

Classifications

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| ETIM 4 | EC000196 - Contactor relay |
| ETIM 6.0 | EC000196 - Contactor relay |
| ETIM 7 | EC000196 - Contactor relay |
| ETIM 5.0 | EC000196 - Contactor relay |

Dimensions

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| Product Net Weight | 0.27 kg |
| Product Net Depth / Length | 77 mm |
| Product Net Width | 45 mm |
| Product Net Height | 86 mm |

Package Information

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| Package Level 1 Width | 87 mm |
| Package Level 1 Depth / Length | 79 mm |
| Package Level 1 EAN | 3471523100213 |
| Package Level 1 Units | box 1 piece |
| Package Level 2 Height | 315 mm |
| Package Level 2 Units | 27 piece |
| Package Level 3 Units | 1296 piece |
| Package Level 2 Depth / Length | 300 mm |
| Package Level 2 Gross Weight | 14.58 kg |

Ordering

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| Minimum Order Quantity | 1 |
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