

Representative Image

# Alternate Catalog No. NFZB40E-23
# Catalog No. 1SBH136061R2340

**Description: NFZB40E-23 100-250V50/60HZ-DC Contactor Relay**

**UPC No 3471523105430**

**Home > Contactors & Starters > UL Listed IEC Contactors > AF Contactors**

NFZB contactor relays comply with the latest railway rolling stock standards and allow installation in passengers or driver cabins for trains frequently operating tunnels or undergrounds. They are used for switching auxiliary and control circuits. Improve the compactness of the installations thanks to reduced dimension and side-by-side mounting requiring less 15% width (without spacing) from -40 °C up to +70 °C. Meet all main rollling stocks standards: IEC 60947-4-1, IEC 60947-5-1, IEC 60077-1/-2 and applicable parts of EN 50155 standards, shocks and vibration withstand conforming to IEC 61373 cat. 1, class B. Reach the highest levels in fire and smoke behaviour with compliance to European standard EN 45545-2 (HL2, HL3 hazard levels) in group mounting. Reduce train energy with lighter devices and requiring 68% less coil energy consumption in operation. Electronic coil interface handling large DC voltage fluctuation voltage, including several Uc DC control voltages used for battery supply and accepting sinusoïdal AC 50/60 Hz control supplies included inside Ucmin.... Ucmax voltage range. Max permitted AC 50/60 Hz control voltage must not be exceeded (see technical data). Wide range of auxiliary contact blocks for front and side mounting.

## 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 DC Operation 100 ... 250 V |
| Number of Auxiliary Contacts NO | 4 |
| RoHS Status | Following EU Directive 2011/65/EU |
| Reference Ambient Air Temperature | Close to Contactor for Storage °C<br>Near Contactor for Operation in Free Air °C |
| Rated Operational Voltage | Auxiliary Circuit 690 V |
| Number of Auxiliary Contacts NC | 0 |
| Maximum Operating Altitude Permissible | 3000 m |
| Conventional Free-air Thermal Current | acc. to IEC 60947-5-1, q = 40 °C 16 A |
| Rated Operational Current AC-15 | (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 Frequency | Main Circuit 50Hz<br>Main Circuit 60 Hz |
| Rated Short-time Withstand Current | for 0.1 s A<br>for 1 s A |
| Maximum Electrical Switching Frequency | AC-15 1200 cycles per hour<br>DC-13 900 cycles per hour |
| Rated Insulation Voltage | acc. to IEC 60947-5-1 and VDE 0110 (Gr. C) 690 V |
| Maximum Mechanical Switching Frequency | 6000 cycles per hour |
| 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 |

by ABB

## Specifications

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|---|---|
| Secondary Rated Impulse Withstand Voltage | 6 kV |
| Rated Operational Current DC-13 | (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 |

## 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 | 0.31kg |
| Product Net Depth / Length | 86 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 | 3471523105430 |
| 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 | 16.74 kg |

## Ordering

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| Minimum Order Quantity | 1 |