

Representative Image

Alternate Catalog No. NF31EK-12
Catalog No. 1SBH137005R1231

Description: NF31EK-12 48-130V50/60HZ-DC Contactor Relay

UPC No 3471523152625

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NF..K contactor relays are used for switching auxiliary and control circuits. NF contactor relays include an electronic coil interface accepting a wide control voltage Uc min. ... Uc 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. NF..K include Push-in Spring terminals. Only one push is all you need for extremely fast wiring: faster than ever installation, easier than ever wiring, reliable as ever connections. - 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) - Accessories: a wide range of accessories is available.

Descriptors

Category	AF Contactors
Block Contactor Type	Contactor Relay

Specifications

Product Type	AF
Object Classification Code	K
Terminal Type	Push-in Spring Terminals
Rated Control Circuit Voltage	50 Hz /60 Hz DC Operation 48 ... 130 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
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 (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 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 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

by ABB

Specifications

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 Flexible 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 0.5 ... 2.5 m² Flexible with Insulated Ferrule 1/2x 0.5 ... 1.5 m² Flexible 1/2x 0.5 ... 2.5 m² Rigid 1/2x 1 ... 2.5 m²
Wire Stripping Length	Auxiliary Circuit 10 mm Control Circuit 10 mm

Classifications

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

Dimensions

Product Net Weight	0.285 kg
Product Net Depth / Length	77 mm
Product Net Width	45 mm
Product Net Height	92.3 mm

Package Information

Package Level 1 Width	93 mm
Package Level 1 Depth / Length	86 mm
Package Level 1 EAN	3471523152625
Package Level 1 Units	box 1 piece
Package Level 2 Height	315 mm
Package Level 2 Units	box 21 piece
Package Level 3 Units	1080 piece
Package Level 2 Depth / Length	300 mm
Package Level 2 Gross Weight	13.5 kg

Ordering

Minimum Order Quantity	1