

## **General Information**

Extended Product Type: NF40E-13

 Product ID:
 1SBH137001R1340

 EAN:
 3471523100039

Catalog Description: NF40E-13 100-250V50/60HZ-DC Contactor Relay

Long Description: NF 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. - Poles: 4-pole contactor relays - Control Circuit: AC or DC operated - Accessories: a wide range of

Accessories is available.

## Categories

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

Ordering

 Minimum Order Quantity:
 1 piece

 Customs Tariff Number:
 85369085

 EAN:
 3471523100039

**Dimensions** 

Product Net Depth: 77 mm

Product Net Height: 86 mm

Product Net Weight: 0.270 kg

Product Net Width: 45 mm

**Container Information** 

87 mm Package Level 1 Width: Package Level 1 Length: 79 mm 47 mm Package Level 1 Height: Package Level 1 Gross Weight: 0.27 kg Package Level 1 EAN: 3471523100039 Package Level 2 Units: 54 piece Package Level 2 Width: 250 mm 300 mm Package Level 2 Length: Package Level 2 Height: 315 mm Package Level 3 Units: 1296 piece Package Level 1 Units: 1 piece

## **Technical**

Number of Auxiliary Contacts NO: 4
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 Main Circuit 690 V

Rated Frequency (f): Auxiliary Circuit 50 / 60 Hz

Conventional Free-air Thermal acc. to IEC 60947-5-1, q = 40 °C 16 A

Current (I<sub>th</sub>):

Rated Operational Current AC-15

(I<sub>e</sub>):

(220 / 240 V) 4 A

AC-15 1200 cycles per hour

DC-13 900 cycles per hour

(110 V) 0.55 A / 60 W

(24 / 127 V) 6 A (400 / 440 V) 3 A (500 V) 2 A (690 V) 2 A

Rated Short-time Withstand Current for 0.1 s 140 A

(I<sub>cw</sub>): for 1 s 100 A

Maximum Electrical Switching

Frequency:

**Rated Operational Current DC-13** 

(l<sub>e</sub>):

(125 V) 0.55 A / 69 W (220 V) 0.27 A / 60 W (24 V) 6 A / 144 W (250 V) 0.27 A / 68 W (400 V) 0.15 A / 60 W

(48 V) 2.8 A / 134 W (500 V) 0.13 A / 65 W (600 V) 0.1 A / 60 W (72 V) 1 A / 72 W

Rated Insulation Voltage (Ui): acc. to UL/CSA 600 V

acc. to IEC 60947-5-1 and VDE 0110 (Gr. C) 690 V

Rated Impulse Withstand Voltage

(U<sub>imp</sub>):

**Maximum Mechanical Switching** 

Frequency:

6000 cycles per hour

Rated Control Circuit Voltage (U<sub>c</sub>): 50 Hz 100 ... 250 V

60 Hz 100 ... 250 V DC Operation 100 ... 250 V

**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

**Connecting Capacity Auxiliary** 

Circuit:

Flexible with Ferrule 1/2x 0.75 ... 2.5 mm<sup>2</sup> Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm<sup>2</sup> Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm<sup>2</sup>

Rigid 1/2x 1...2.5 mm<sup>2</sup>

Connecting Capacity Control Circuit: Flexible with Ferrule 1/2x 0.75 ... 2.5 mm<sup>2</sup>

Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm<sup>2</sup> Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm<sup>2</sup>

Rigid 1/2x 1 ... 2.5 mm<sup>2</sup>

Wire Stripping Length: Auxiliary Circuit 10 mm

Control Circuit 10 mm

acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP20 Degree of Protection:

acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20

**Terminal Type:** Screw Terminals

**Environmental** 

Climatic Withstand: Category B according to IEC 60947-1 Annex Q

**Maximum Operating Altitude** 

Permissible:

3000 m

Resistance to Vibrations acc. to IEC 5 ... 300 Hz 4 g closed position / 2 g open position

60068-2-6:

Resistance to Shock acc. to IEC

60068-2-27:

Closed, Shock Direction: B1 25 g Open, Shock Direction: B1 5 g Shock Direction: A 30 g Shock Direction: B2 15 g Shock Direction: C1 25 g Shock Direction: C2 25 g

**RoHS Status:** Planned to follow EU Directive 2002/95/EC August 18, 2005 and amendment after 2008 Q1

**Ambient Air Temperature:** Close to Contactor for Storage -60...+80 °C

Near Contactor for Operation in Free Air -40 ... +70 °C

Technical UL/CSA

Tightening Torque UL/CSA: Auxiliary Circuit 11 in·lb

Control Circuit 11 in:lb

**Certificates and Declarations (Document Number)** 

Instructions and Manuals: 1SBC101027M6801

**ABS Certificate:** ABS\_15-GE1349500-PDA\_90682247

**CB Certificate:** CB SE 70920A1M2 **CCC Certificate:** CCC 2011010303465426 Data Sheet, Technical Information: 1SBC101429D0201 **Declaration of Conformity - CE:** 1SBD250005U1000 **DNV Certificate: DNV E11683** 

**EAC Certificate:** 

EAC\_RU C-FR ME77 B01006

**GL Certificate:** GL\_3786612HH

**GOST Certificate:** GOST POCCFR.ME77.B06804.pdf

LR Certificate: LRS C1400038 **RINA Certificate:** RINA\_ELE084013XG **RMRS Certificate:** RMRS\_1300132124 **RoHS Information:** 1SBD251014E1000 **UL Certificate:** UL 20130206-E252354-2-1

UL E252354 **UL Listing Card:** 

Classifications

**E-nummer:** 3211456

ETIM 4:EC000196 - Contactor relayETIM 5:EC000196 - Contactor relayETIM 6:EC000196 - Contactor relay

**UNSPSC**: 39121500

Object Classification Code: K

