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PRODUCT-DETAILS

## NF51/11-13

### NF51/11-13 100-250V50/60HZ-DC Contactor relay




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#### General Information

Extended Product Type	NF51/11-13
Product ID	1SBH137001R1359
EAN	3471523107731
Catalog Description	NF51/11-13 100-250V50/60HZ-DC Contactor relay
Long Description	<p>NF51/11 contactor relays are used for switching auxiliary and control circuits including overlapping of lagging / leading contacts NF contactor relays include an electronic coil interface accepting a wide control voltage <math>U_c</math> min. ... <math>U_c</math> max. Only four coils cover control voltages between 24...500 V 50/60 Hz. 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: 8-pole contactor relays with a non-removable front-mounted auxiliary contact block - Control Circuit: AC operated - Accessories: a wide range of Accessories is available.</p>

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#### Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

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#### Popular Downloads

Instructions and Manuals	1SBC101027M6801
CAD Dimensional Drawing	2CDC001079B0201

**Dimensions**

Product Net Width	45 mm
Product Net Depth / Length	110.5 mm
Product Net Height	86 mm
Product Net Weight	0.32 kg

**Technical**

Number of Auxiliary Contacts NO	6
Number of Auxiliary Contacts NC	2
Standards	IEC 60947-5-1 and EN 60947-5-1, UL 508, CSA C22.2 N°14
Rated Operational Voltage	Auxiliary Circuit 690 V
Rated Frequency (f)	Auxiliary Circuit 50 / 60 Hz
Conventional Free-air Thermal Current (I <sub>th</sub> )	acc. to IEC 60947-5-1, q = 40 °C 16 A
Rated Operational Current AC-15 (I <sub>e</sub> )	(500 V) 2 A (690 V) 2 A (24 / 127 V) 6 A (220 / 240 V) 4 A (400 / 440 V) 3 A
Rated Short-time Withstand Current Low Voltage (I <sub>cw</sub> )	for 0.1 s 140 A for 1 s 100 A
Maximum Electrical Switching Frequency	(AC-15) 1200 cycles per hour (DC-13) 900 cycles per hour
Rated Operational Current DC-13 (I <sub>e</sub> )	(24 V) 6 A / 144 W (48 V) 2.8 A / 134 W (72 V) 1 A / 72 W (110 V) 0.55 A / 60 W (125 V) 0.55 A / 69 W (220 V) 0.27 A / 60 W (250 V) 0.27 A / 68 W (400 V) 0.15 A / 60 W (500 V) 0.13 A / 65 W (600 V) 0.1 A / 60 W
Rated Insulation Voltage (U <sub>i</sub> )	acc. to IEC 60947-5-1 and VDE 0110 (Gr. C) 690 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage (U <sub>imp</sub> )	6 kV
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
Mounting on DIN Rail	TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715 TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715
Mounting by Screws (not supplied)	2 x M4 screws placed diagonally
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm <sup>2</sup> Flexible with Insulated Ferrule 1x 0.75 ... 2.5 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
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
Terminal Type	Screw Terminals

### Technical UL/CSA

Tightening Torque UL/CSA	Auxiliary Circuit 11 in-lb Control Circuit 11 in-lb
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### Environmental

Ambient Air Temperature	Close to Contactor for Storage -60 ... +80 °C 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	Without Derating 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 g Closed, Shock Direction: B2 15 g Open, Shock Direction: B1 5 g Shock Direction: A 30 g Shock Direction: B2 15 g Shock Direction: C1 25 g
RoHS Status	Following EU Directive 2011/65/EU

### Certificates and Declarations (Document Number)

ABS Certificate	ABS_20-2060694-PDA
CB Certificate	CB_SE-93051M2
CCC Certificate	CCC_2011010303465426
CQC Certificate	CQC2019010303267993
Declaration of Conformity - CCC	2020980303000175
Declaration of Conformity - CE	1SBD250005U1000
Declaration of Conformity - UKCA	1SBD250036U1000
EAC Certificate	EAC_RU C-FR ME77 B03544
Environmental Information	1SBC100222M0201
Instructions and Manuals	1SBC101027M6801
REACH Declaration	2CMT2021-006202
RoHS Information	2CMT2021-006277
UL Certificate	UL_20180227_E252354_2_1

### Container Information

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
Package Level 1 Gross Weight	0.34 kg
Package Level 1 EAN	3471523107731

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	11.52 kg
Package Level 3 Units	864 piece

## Classifications

Object Classification Code	K
ETIM 4	EC000196 - Contactor relay
ETIM 5	EC000196 - Contactor relay
ETIM 6	EC000196 - Contactor relay
ETIM 7	EC000196 - Contactor relay
ETIM 8	EC000196 - Contactor relay
eClass	V11.0 : 27371003
UNSPSC	39121500

## Categories

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

