

PRODUCT-DETAILS

## NF22E-13 NF22E-13 100-250V50/60HZ-DC Contactor Relay



General Information	
Extended Product Type	NF22E-13
Product ID	1SBH137001R1322
EAN	3471523100138
Catalog Description	NF22E-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 24500 V 50/60 Hz or 20500 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.

60947-5-1 and including the "Mechanically Linked" symbol on the contactor relay Control Circuit: AC or DC operated - Accessories: a wide range of Accessories is a	
Ordering	
Minimum Order Quantity	1 piece
Customs Tariff Number	85364900
Popular Downloads	
Instructions and Manuals	1SBC101027M6801
CAD Dimensional Drawing	2CDC001079B0201

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Dimensions	
Product Net Width	45 mm
Product Net Depth / Length	77 mm
Product Net Height	86 mm
Product Net Weight	0.27 kg
Technical	
Number of Auxiliary Contacts NO	2
Number of Auxiliary Contacts NC	2
Standards	IEC/EN 60947-1, IEC/EN 60947-5-1, UL 508, CSA C22.2 No. 14-13
Rated Operational Voltage	Auxiliary Circuit 690 V
Rated Frequency (f)	Auxiliary Circuit 50 / 60 Hz Control Circuit 50 / 60 Hz
Conventional Free-air Thermal Current (I <sub>th</sub> )	acc. to IEC 60947-5-1, Θ = 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 / 69 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 / 65 W (500 V) 0.13 A / 65 W
Rated Insulation Voltage $(U_i)$	acc. to IEC 60947-5-1 690 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 NC 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 mm² Flexible with Insulated Ferrule 1x 0.75 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 1.5 mm² Rigid Solid 1/2x 1 2.5 mm² Rigid Stranded 1/2x 1 2.5 mm²
Connecting Capacity	Flexible with Ferrule 1/2x 0.75 2.5 mm <sup>2</sup>

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Control Circuit	Flexible with Insulated Ferrule 1x 0.75 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 1.5 mm² Rigid Solid 1/2x 1 2.5 mm² Rigid Stranded 1/2x 1 2.5 mm²
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	
Connecting Capacity Auxiliary Circuit UL/CSA	Rigid Solid 1/2x 18-14 AWG Rigid Stranded 1/2x 18-14 AWG
Tightening Torque UL/CSA	Auxiliary Circuit 11 in·lb Control Circuit 11 in·lb

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 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	Following EU Directive 2011/65/EU

Certificates and Declarations	
ABS Certificate	ABS_20-2060694-PDA
BV Certificate	BV_2634H24899C0
CB Certificate	CB_SE-93051M2
CCC Certificate	2020980303000185
CQC Certificate	CQC2019010303267993
Declaration of Conformity - CCC	CQC2011010303465426
Declaration of Conformity - CE	1SBD250005U1000
Declaration of Conformity - UKCA	1SBD250036U1000
DNV Certificate	DNV_TAE00001BV-5
EAC Certificate	EAC_RU C-FR ME77 B03544
GOST Certificate	GOST_POCCFR.ME77.B06804.pdf
KC Certificate	KC-HW02016-21031A
LR Certificate	LRS_LR2003684TA
RINA Certificate	RINA_ELE240318XG
RMRS Certificate	RMRS_1802702280
UL Certificate	UL_20180227_E252354_2_1
UL Listing Card	UL_E252354

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Container Information	
Package Level 1 Units	box 1 piece
Package Level 1 Width	87 mm
Package Level 1 Depth / Length	79 mm
Package Level 1 Height	47 mm
Package Level 1 Gross Weight	0.27 kg
Package Level 1 EAN	3471523100138
Package Level 2 Units	box 27 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	14.58 kg
Package Level 3 Units	1296 piece

Classifications	
Object Classification Code	К
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 : 27371001
UNSPSC	39121529
IDEA Granular Category Code (IGCC)	4763 >> Power contactor, DC switching
E-Number (Finland)	3706401
E-Number (Sweden)	3211448

## Categories

 $Low\ Voltage\ Products\ and\ Systems \rightarrow Control\ Products \rightarrow Contactors \rightarrow Block\ Contactors$ 

