PRODUCT-DETAILS

NF31E-11

NF31E-11 24-60V50/60HZ 20-60VDC Contactor Relay



General Information

Extended Product Type	NF31E-11
Product ID	1SBH137001R1131
EAN	3471523100213
Catalog Description	NF31E-11 24-60V50/60HZ 20-60VDC 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 (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. Note: NF..E-11 not suitable for a direct control by PLC-output. NF..E-11 type available in some countries: please consult your ABB representative.

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads

Instructions and Manuals	1SBC101027M6801

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	3
Number of Auxiliary Contacts NC	1
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 Current (I_{th})	acc. to IEC 60947-5-1, q = 40 °C 16 A
Rated Operational Current AC-15 (I_e)	(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 (I_{cw})	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_e)	(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_i)	acc. to IEC 60947-5-1 and VDE 0110 (Gr. C) 690 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage (U_{imp})	6 kV
Maximum Mechanical Switching Frequency	6000 cycles per hour
Rated Control Circuit Voltage (U_c)	50 Hz 24 ... 60 V 50 Hz / 60 Hz 24 ... 60 V 60 Hz 24 ... 60 V DC Operation 20 ... 60 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 mm² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm² Rigid 1/2x 1 ... 2.5 mm²
Connecting Capacity Control 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 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 IP40

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

Technical UL/CSA

Tightening Torque	Auxiliary Circuit 11 IA
UL/CSA	Control Circuit 11 IA

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	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 K40 Open, Shock Direction: B1 5 K40 Shock Direction: A 30 K40 Shock Direction: B2 15 K40 Shock Direction: C1 25 K40 Shock Direction: C2 25 K40
RoHS Status	Following EU Directive 2011/65/EU

Certificates and Declarations (Document Number)

ABS Certificate	ABS_15-GE1349500-PDA_90682247
BV Certificate	BV_2634H24899B0
CB Certificate	CB_SE-93051
CCC Certificate	2020980303000185
CQC Certificate	CQC2019010303267993
cUL Certificate	UL_20180227_E252354_2_1
Declaration of Conformity - CCC	CQC2011010303465426
Declaration of Conformity - CE	1SBD250005U1000
DNV Certificate	DNV-GL_TAE00001BV-3
DNV GL Certificate	DNV-GL_TAE00001BV-3
EAC Certificate	EAC_RU C-FR ME77 B03544
Environmental Information	1SBD250151E1000
GL Certificate	DNV-GL_TAE00001BV-3
GOST Certificate	GOST_POCCFR.ME77.B06804.pdf
Instructions and Manuals	1SBC101027M6801
LR Certificate	LRS_C1400038
RINA Certificate	RINA_ELE240318XG
RMRS Certificate	RMRS_1802702280
RoHS Information	1SBD250005U1000
UL Certificate	UL_20130206-E252354-2-1
UL Listing Card	UL_E252354

Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	87 mm
Package Level 1 Depth /	79 mm

Length	
Package Level 1 Height	47 mm
Package Level 1 Gross Weight	0.27 kg
Package Level 1 EAN	3471523100213
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	K
ETIM 4	EC000196 - Contactor relay
ETIM 5	EC000196 - Contactor relay
ETIM 6	EC000196 - Contactor relay
ETIM 7	EC000196 - Contactor relay
eClass	V11.0 : 27371003
UNSPSC	39121529
E-Number (Finland)	3705814
E-Number (Sweden)	3211471

Categories

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

