



PRODUCT-DETAILS

NFZ31EK-30

NFZ31EK-30 24VDC Contactor Relay



General Information	
Extended Product Type	NFZ31EK-30
Product ID	1SBH136005R3031
EAN	3471523153493
Catalog Description	NFZ31EK-30 24VDC Contactor Relay
Long Description	<p>NFZ..K contactor relays are used for switching auxiliary and control circuits. NFZ..K contactors relays with coil 30 include a 24 V DC electronic coil interface with a built-in surge suppression, obtaining a reduced holding coil consumption up to 1.7 W for a low panel energy consumption and a direct control by PLC-output ≥ 250 mA 24 V DC, without need of additional interface relay.Only NFZ..-30 contactor relays need to respect the polarity on the coil terminals (A1+ and A2-). NFZ..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.</p>

Ordering	
Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads	
Instructions and Manuals	1SBC101054M6801
CAD Dimensional Drawing	2CDC001079B0201

Dimensions	
Product Net Width	45 mm
Product Net Depth / Length	97 mm
Product Net Height	92.3 mm
Product Net Weight	0.435 kg

Technical	
Number of Auxiliary Contacts NO	3
Number of Auxiliary Contacts NC	1
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 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, $\Theta = 40\text{ °C}$ 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 Low Voltage (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 60947-5-1 690 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)	DC Operation 24 V
Coil Consumption	Average Holding Value DC 1.7 W Average Pull-in Value, from Cold State 6 W
Operate Time	Between Coil De-energization and NC Contact Closing 22 ... 57 ms

	Between Coil De-energization and NO Contact Opening 17 ... 29 ms Between Coil Energization and NC Contact Opening 20 ... 35 ms Between Coil Energization and NO Contact Closing 27 ... 53 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 0.5 ... 2.5 mm² Flexible with Insulated Ferrule 1/2x 0.5 ... 1.5 mm² Flexible 1/2x 0.5 ... 2.5 mm² Rigid Solid 1/2x 1 ... 2.5 mm²
Connecting Capacity Control Circuit	Flexible with Ferrule 1/2x 0.5 ... 2.5 mm² Flexible with Insulated Ferrule 1/2x 0.5 ... 1.5 mm² Flexible 1/2x 0.5 ... 2.5 mm² Rigid Solid 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	Push-in Spring Terminals

Technical UL/CSA

Connecting Capacity Auxiliary Circuit UL/CSA	Rigid Solid 1/2x 18-14 AWG
Connecting Capacity Control Circuit UL/CSA	Rigid Solid 1/2x 18-14 AWG

Environmental

Ambient Air Temperature	Close to Contactor for Storage -60 ... +80 °C Near Contactor for Operation in Free Air -40 ... 70 °C Near Contactor for Operation in Free Air (0.85 ... 1.1 Uc) -40 ... +60 °C Near Contactor for Operation in Free Air (Uc) -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	4g Closed Position & 2g Open position 5 ... 300 Hz

Material Compliance

Conflict Minerals Reporting Template (CMRT)	9AKK108467A5658
REACH Declaration	2CMT2021-006202
RoHS Information	2CMT2021-006277
RoHS Status	Following EU Directive 2011/65/EU
Toxic Substances Control Act - TSCA	2CMT2023-006525
WEEE B2C / B2B	Business To Business
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)

Certificates and Declarations

ABS Certificate	ABS_20-2060694-PDA
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
KC Certificate	KC-HW02016-21029A
LR Certificate	LRS_LR2003684TA-02
RINA Certificate	RINA_ELE240318XG
RMRS Certificate	RMRS_1802702280
UL Certificate	UL_20180227_E252354_2_1

Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	96 mm
Package Level 1 Depth / Length	112 mm
Package Level 1 Height	50 mm
Package Level 1 Gross Weight	0.467 kg
Package Level 1 EAN	3471523153493
Package Level 2 Units	crate 12 piece
Package Level 2 Width	245 mm
Package Level 2 Depth / Length	245 mm
Package Level 2 Height	153 mm
Package Level 2 Gross Weight	5.6 kg

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 : 27371001
UNSPSC	39120000

Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → NF Contactor Relays

