

PRODUCT-DETAILS

# NFZ53EK-21 NFZ53EK-21 24-60V50/60HZ 20-60VDC Contactor Relay



Extended Product Type	NFZ53EK-21
Product ID	1SBH136005R2153
EAN	3471523153813
Catalog Description	NFZ53EK-21 24-60V50/60HZ 20-60VDC Contactor Relay
Long Description	NFZK contactor relays are used for switching auxiliary and control circuits. NFZ contactor relays include an electronic coil interface accepting a wide control voltage Uc min Uc max. Only four coils cover control voltages between 24250 V 50/60 Hz or 12250 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 NFZ contactor relays allow direct control by PLC-output ≥ 24 V DC 500 mA and obtain a reduced holding coil consumption. NFZ contactor relays withstand short voltage dips and voltage sags (SEMI F47-0706 compliance) between 24250 V 50/60 Hz NFZ contactor relays have built-in surge protection and do not require additional surge suppressors. NFZK 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: 8-pole contactor relays with a non-removable front-mounted auxiliary contact block (mechanically-linked auxiliary contacts compliant with Annex L of IEC 60947-5-1 and including the "Mechanically Linked" symbol on the contactor relay side)

1 piece
85364900

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Subject to change without notice

Popular Downloads	
Instructions and Manuals	1SBC101054M6801
CAD Dimensional Drawing	2CDC001079B0201
Dimensions	
Product Net Width	45 mm
Product Net Depth / Length	110.5 mm
Product Net Height	92.3 mm
Product Net Weight	0.36 kg
Technical	
Number of Auxiliary Contacts NO	5
Number of Auxiliary Contacts NC	3
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 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 / 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 60947-5-1 690 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

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Potod Control Circuit		
Rated Control Circuit Voltage (U <sub>c</sub> )	50 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	
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	Flexible with Ferrule 1/2x 0.5 2.5 mm <sup>2</sup>	
Auxiliary Circuit	Flexible with Insulated Ferrule 1/2x 0.5 1.5 mm <sup>2</sup> Flexible 1/2x 0.5 2.5 mm <sup>2</sup>	
	Rigid Solid 1/2x 1 2.5 mm <sup>2</sup>	
Connecting Capacity	Flexible with Ferrule 1/2x 0.5 2.5 mm <sup>2</sup>	
Control Circuit	Flexible with Insulated Ferrule 1/2x 0.5 1.5 mm <sup>2</sup>	
	Flexible 1/2x 0.5 2.5 mm² Rigid Solid 1/2x 1 2.5 mm²	
Wire Otripping Length		
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	Rigid Solid 1/2x 18-14 AWG	
Control Circuit UL/CSA		
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	
Olimptic Withology	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 acc. to IEC 60068-2-6	5 300 Hz 4 g closed position / 2 g open position	
RoHS Status	Following EU Directive 2011/65/EU	
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Certificates and Declarations		
	ABS_20-2060694-PDA	
Certificates and Declarations ABS Certificate CB Certificate	ABS_20-2060694-PDA CB_SE-93051M2	
ABS Certificate		
ABS Certificate CB Certificate	CB_SE-93051M2	
ABS Certificate CB Certificate CCC Certificate	CB_SE-93051M2 2020980303000185	
ABS Certificate CB Certificate CCC Certificate CQC Certificate Declaration of Conformity	CB_SE-93051M2 2020980303000185 CQC2019010303267993	

#### NFZ53EK-21

- CE

Declaration of Conformity	1SBD250036U1000
- UKCA	
DNV Certificate	DNV_TAE00001BV-5
LR Certificate	LRS_LR2003684TA
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	91 mm
Package Level 1 Depth / Length	111 mm
Package Level 1 Height	45 mm
Package Level 1 Gross Weight	0.379 kg
Package Level 1 EAN	3471523153813
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	17.055 kg
Package Level 3 Units	1080 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)	3708014

## Categories

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

