

PRODUCT-DETAILS

# NF31EK-12

## NF31EK-12 48-130V50/60HZ-DC Contactor Relay



### Informations générales

Extension du type de produit	NF31EK-12
Code de produit	1SBH137005R1231
EAN	3471523152625
Description courte	NF31EK-12 48-130V50/60HZ-DC Contactor Relay

Description longue	<p>The NF31EK-12 is a 690 V IEC or 600 UL 4-pole contactor relay with Push-in Spring terminals, used for switching auxiliary and control circuits. Only one push is all you need for extremely fast wiring: faster than ever installation, easier than ever wiring, reliable as ever connections.</p> <p>Thanks to the AF technology, the contactor relay has a wide control voltage range (48-130 V 50/60 Hz and DC), managing large control voltage variations, reducing panel energy consumptions and ensuring distinct operations in unstable networks. Furthermore, surge protection is built-in, offering a compact solution. NF contactor relays have a block type design, can be easily extended with add-on auxiliary contact blocks and an additional wide range of accessories.</p> <p>These contactor relays include mechanically-linked auxiliary contacts compliant with Annex L of IEC 60947-5-1 and are side-marked with the "Mechanically Linked" symbol.</p>
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### Commande

Quantité minimum	1 pièce
Code douanier	85364900

### Downloads Préférés

Instructions et manuels	1SBC101054M6801
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## Dimensions

Produit Largeur Net	45 mm
Produit Longueur Net	77 mm
Produit Hauteur Net	92.3 mm
Poids net	0.285 kg

## Technique

Number of Auxiliary Contacts NO	3
Number of Auxiliary Contacts NC	1
Normes et standards	IEC/EN 60947-1, IEC/EN 60947-5-1, UL 508, CSA C22.2 No. 14-13
Tension	Circuit auxiliaire 690 V Circuit principal 690 V
Fréquence assignée (f)	Circuit auxiliaire 50 / 60 Hz Circuit de commande 50 / 60 Hz
Courant thermique conventionnel à l'air libre ( $I_{th}$ )	acc. to IEC 60947-5-1, $\Theta = 40\text{ °C}$ 16 A
Courant assignée d'emploi 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
Courant assigné de courte durée admissible ( $I_{cw}$ )	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
Courant assignée d'emploi 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
Tension assignée d'isolement ( $U_i$ )	acc. to IEC 60947-5-1 690 V acc. to UL/CSA 600 V
Tension assignée de tenue aux chocs ( $U_{imp}$ )	6 kV
Maximum Mechanical Switching Frequency	6000 cycles per hour
Rated Control Circuit Voltage ( $U_c$ )	50 Hz 48 ... 130 V 60 Hz 48 ... 130 V DC Operation 48 ... 130 V
Durée de fonctionnement nominale	Entre la mise hors tension de la bobine et la fermeture du contact NC (normally closed) 13 ... 98 ms Entre la mise hors tension de la bobine et l'ouverture du contact NO (normally open) 11 ... 95 ms Entre la mise sous tension de la bobine et l'ouverture du contact NC 38 ... 90 ms Entre la mise sous tension de la bobine et la fermeture du contact NO 40 ... 95 ms
Montage sur rail DIN	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 mm <sup>2</sup> 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 Control Circuit	Flexible with Ferrule 1/2x 0.5 ... 2.5 mm <sup>2</sup> 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>
Wire Stripping Length	Auxiliary Circuit 10 mm Control Circuit 10 mm
Indice de 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
Type de borne	Push-in Spring Terminals

## Technique 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

## Environnement

Température de l'air ambiant	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
Altitude de fonctionnement maximale autorisée	Without Derating 3000 m
REACH Declaration	2CMT2021-006202
Resistance to Vibrations acc. to IEC 60068-2-6	5 ... 300 Hz 4 g closed position / 2 g open position
Informations RoHS	2CMT2021-006277
Statut RoHS	Following EU Directive 2011/65/EU

## Certificats et Déclarations (Numéro de document)

Certificat ABS	ABS_20-2060694-PDA
CB Certificate	CB_SE-93051M2
CCC Certificate	2020980303000185
CQC Certificate	CQC2019010303267993
Declaration of Conformity - CCC	CQC2011010303465426
Déclaration de Conformité - CE	1SBD250005U1000
Declaration of Conformity - UKCA	1SBD250036U1000
Certificat DNV	DNV_TAE00001BV-5
KC Certificate	KC-HW02016-21031A
Certificat LR	LRS_LR2003684TA
Certificat RINA	RINA_ELE240318XG
Certificat RMRS	RMRS_1802702280
Certificat UL	UL_20180227_E252354_2_1

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## Emballage

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Emballage Niveau 1 Unités	box 1 pièce
Emballage Niveau 1 Largeur	93 mm
Emballage Niveau 1 Longueur	86 mm
Emballage Niveau 1 Hauteur	45 mm
Emballage Niveau 1 Poids	0.3 kg
Emballage Niveau 1 EAN	3471523152625
Emballage Niveau 2 Unités	box 21 pièce
Emballage Niveau 2 Largeur	250 mm
Emballage Niveau 2 Longueur	300 mm
Emballage Niveau 2 Hauteur	315 mm
Emballage Niveau 2 Poids	13.5 kg
Emballage Niveau 3 Unités	1080 pièce

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## Classifications

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Code de classification d'objet	K
ETIM 4	EC000196 - Contactor relay
ETIM 5	EC000196 - Contactor relay
ETIM 6	EC000196 - contacteur auxiliaire, relais
ETIM 7	EC000196 - Contactor relay
ETIM 8	EC000196 - Contactor relay
eClass	V11.0 : 27371001
UNSPSC	39121529
Code de catégorie granulaire IDEA (IGCC)	4763 >> Power contactor, DC switching
E-Number (Finland)	3707942
E-Number (Sweden)	3210632

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## Catégories

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Produits basse tension → Produits de Contrôle, Protection et sécurité machines → Contacteurs → Contacteurs monoblocs → NF  
 Contactor Relays

