

PRODUCT-DETAILS

# AF80-30-22-14

## AF80-30-22-14 250-500V50/60HZ-DC Contactor



### Informations générales

Extension du type de produit	AF80-30-22-14
Code de produit	1SBL397001R1422
EAN	3471523133143
Description courte	AF80-30-22-14 250-500V50/60HZ-DC Contactor
Description longue	The AF80-30-22-14 is a 3 pole - 1000 V IEC or 600 UL contactor with pre-mounted auxiliary contacts and screw terminals, controlling motors up to 37 kW / 400 V AC (AC-3) or 60 hp / 480 V UL and switching power circuits up to 125 A (AC-1) or 105 A UL general use. Thanks to the AF technology, the contactor has a wide control voltage range (250-500 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. AF contactors have a block type design, can be easily extended with add-on auxiliary contact blocks and an additional wide range of accessories.

### Commande

Quantité minimum	1 pièce
Code douanier	85364900

### Downloads Préférés

Instructions et manuels	1SBC101036M6801
CAD Dimensional Drawing	2CDC001079B0201

## Dimensions

Produit Largeur Net	70 mm
Produit Longueur Net	149 mm
Produit Hauteur Net	125.5 mm
Poids net	1.22 kg

## Technique

Number of Main Contacts NO	3
Number of Main Contacts NC	0
Number of Auxiliary Contacts NO	2
Number of Auxiliary Contacts NC	2
Normes et standards	IEC/EN 60947-1, IEC/EN 60947-4-1, UL 60947-1, UL 60947-4-1, CSA C22.2 No. 60947-1:22, CSA C22.2 No. 60947-4-1:22
Tension	Circuit auxiliaire 690 V Circuit principal 1000 V
Fréquence assignée (f)	Circuit auxiliaire 50 / 60 Hz Circuit de commande 50 / 60 Hz Circuit principal 50 / 60 Hz
Courant thermique conventionnel à l'air libre ( $I_{th}$ )	acc. to IEC 60947-4-1, Open Contactors $\Theta = 40\text{ °C}$ 130 A acc. to IEC 60947-5-1, $\Theta = 40\text{ °C}$ 16 A
Courant assignée d'emploi AC-1 ( $I_e$ )	(690 V) 40 °C 125 A (690 V) 60 °C 100 A (690 V) 70 °C 85 A
Courant assignée d'emploi AC-3 ( $I_e$ )	(415 V) 60 °C 80 A (440 V) 60 °C 80 A (500 V) 60 °C 65 A (690 V) 60 °C 49 A (1000 V) 60 °C 25 A (380 / 400 V) 60 °C 80 A (220 / 230 / 240 V) 60 °C 80 A
Courant assignée d'emploi AC-3e ( $I_e$ )	(415 V) 60 °C 80 A (440 V) 60 °C 80 A (500 V) 60 °C 65 A (690 V) 60 °C 49 A (380 / 400 V) 60 °C 80 A (220 / 230 / 240 V) 60 °C 80 A
Puissance assignée d'emploi AC-3 ( $P_e$ )	(400 V) 37 kW (415 V) 45 kW (440 V) 45 kW (500 V) 45 kW (690 V) 45 kW (1000 V) 35 kW (380 / 400 V) 37 kW (220 / 230 / 240 V) 22 kW
Puissance assignée d'emploi AC-3e ( $P_e$ )	(415 V) 45 kW (440 V) 45 kW (500 V) 45 kW (690 V) 45 kW (380 / 400 V) 37 kW (220 / 230 / 240 V) 22 kW
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 ( $I_{cw}$ )	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 780 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 140 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 300 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1200 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 450 A

	for 0.1 s 140 A for 1 s 100 A
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 440 V 1150 A cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 690 V 750 A
Maximum Electrical Switching Frequency	(AC-1) 600 cycles per hour (AC-15) 1200 cycles per hour (AC-2 / AC-4) 150 cycles per hour (AC-3) 1200 cycles per hour (DC-13) 900 cycles per hour
Courant assignée d'emploi DC-1 (I <sub>g</sub> )	(110 V) 2 Poles in Series, 40 °C 125 A (110 V) 2 Poles in Series, 60 °C 100 A (110 V) 2 Poles in Series, 70 °C 85 A (110 V) 3 Poles in Series, 40 °C 125 A (110 V) 3 Poles in Series, 60 °C 100 A (110 V) 3 Poles in Series, 70 °C 85 A (220 V) 3 Poles in Series, 40 °C 125 A (220 V) 3 Poles in Series, 60 °C 100 A (220 V) 3 Poles in Series, 70 °C 85 A (72 V) 1-Pole, 40 °C 125 A (72 V) 1-Pole, 60 °C 100 A (72 V) 1-Pole, 70 °C 85 A (72 V) 2 Poles in Series, 40 °C 125 A (72 V) 2 Poles in Series, 60 °C 100 A (72 V) 2 Poles in Series, 70 °C 85 A (72 V) 3 Poles in Series, 40 °C 125 A (72 V) 3 Poles in Series, 60 °C 100 A (72 V) 3 Poles in Series, 70 °C 85 A
Courant assignée d'emploi DC-3 (I <sub>g</sub> )	(110 V) 2 Poles in Series, 40 °C 125 A (110 V) 2 Poles in Series, 60 °C 100 A (110 V) 2 Poles in Series, 70 °C 85 A (110 V) 3 Poles in Series, 40 °C 125 A (110 V) 3 Poles in Series, 60 °C 100 A (110 V) 3 Poles in Series, 70 °C 85 A (220 V) 3 Poles in Series, 40 °C 125 A (220 V) 3 Poles in Series, 60 °C 100 A (220 V) 3 Poles in Series, 70 °C 85 A (72 V) 1-Pole, 40 °C 125 A (72 V) 1-Pole, 60 °C 100 A (72 V) 1-Pole, 70 °C 85 A (72 V) 2 Poles in Series, 40 °C 125 A (72 V) 2 Poles in Series, 60 °C 100 A (72 V) 2 Poles in Series, 70 °C 85 A (72 V) 3 Poles in Series, 40 °C 125 A (72 V) 3 Poles in Series, 60 °C 100 A (72 V) 3 Poles in Series, 70 °C 85 A
Courant assignée d'emploi DC-5 (I <sub>g</sub> )	(110 V) 2 Poles in Series, 40 °C 125 A (110 V) 2 Poles in Series, 60 °C 100 A (110 V) 2 Poles in Series, 70 °C 85 A (110 V) 3 Poles in Series, 40 °C 125 A (110 V) 3 Poles in Series, 60 °C 100 A (110 V) 3 Poles in Series, 70 °C 85 A (220 V) 3 Poles in Series, 40 °C 125 A (220 V) 3 Poles in Series, 60 °C 100 A (220 V) 3 Poles in Series, 70 °C 85 A (72 V) 1-Pole, 40 °C 125 A (72 V) 1-Pole, 60 °C 100 A (72 V) 1-Pole, 70 °C 85 A (72 V) 2 Poles in Series, 40 °C 125 A (72 V) 2 Poles in Series, 60 °C 100 A (72 V) 2 Poles in Series, 70 °C 85 A (72 V) 3 Poles in Series, 40 °C 125 A (72 V) 3 Poles in Series, 60 °C 100 A (72 V) 3 Poles in Series, 70 °C 85 A
Courant assignée d'emploi DC-13 (I <sub>g</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
Tension assignée d'isolement (U <sub>i</sub> )	acc. to IEC 60947-4-1 1000 V acc. to IEC 60947-5-1 690 V acc. to UL/CSA 600 V
Tension assignée de tenue aux chocs (U <sub>imp</sub> )	8 kV

Maximum Mechanical Switching Frequency	3600 cycles per hour
Rated Control Circuit Voltage (U <sub>c</sub> )	50 Hz 250 ... 500 V 60 Hz 250 ... 500 V DC Operation 250 ... 500 V
Durée de fonctionnement nominale	Entre la mise hors tension de la bobine et la fermeture du contact NC (normally closed) 19 ... 105 ms Entre la mise hors tension de la bobine et l'ouverture du contact NO (normally open) 17 ... 100 ms Entre la mise sous tension de la bobine et l'ouverture du contact NC 38 ... 95 ms Entre la mise sous tension de la bobine et la fermeture du contact NO 42 ... 100 ms
Montage sur rail DIN	TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715
Mounting by Screws (not supplied)	2 x M4 or 2 x M6 screws placed diagonally
Connecting Capacity Main Circuit	Flexible with Ferrule 1/2x 6 ... 50 mm <sup>2</sup> Flexible with Insulated Ferrule 1/2x 6 ... 50 mm <sup>2</sup> Rigid Stranded 1x 6 ... 70 mm <sup>2</sup> Rigid Stranded 2x 6 ... 50 mm <sup>2</sup>
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm <sup>2</sup> Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm <sup>2</sup> Rigid 1/2x 1 ... 2.5 mm <sup>2</sup>
Connecting Capacity Control Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm <sup>2</sup> Rigid 1/2x 1 ... 2.5 mm <sup>2</sup>
Wire Stripping Length	Auxiliary Circuit 10 mm Control Circuit 10 mm Main Circuit 17 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 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP10
Type de borne	Screw Terminals

## Technique UL/CSA

NEMA Size	3
Continuous Current Rating NEMA	90 A
Horsepower Rating NEMA	(200 V AC) Three Phase 25 Hp (230 V AC) Three Phase 30 Hp (460 V AC) Three Phase 50 Hp (575 V AC) Three Phase 50 Hp
Maximum Operating Voltage UL/CSA	Circuit principal 600 V
General Use Rating UL/CSA	(600 V AC) 105 A
Puissance nominale UL/CSA	(120 V AC) Single Phase 7-1/2 hp (200 ... 208 V AC) Three Phase 25 hp (220 ... 240 V AC) Three Phase 30 hp (240 V AC) Single Phase 15 hp (440 ... 480 V AC) Three Phase 60 hp (550 ... 600 V AC) Three Phase 75 hp
Connecting Capacity Main Circuit UL/CSA	Rigid Stranded 1/2x 6-1 AWG
Tightening Torque UL/CSA	Auxiliary Circuit 11 in-lb Control Circuit 11 in-lb Main Circuit 53 in-lb

## Environnement

Température de l'air ambiant	Close to Contactor Fitted with Thermal O/L Relay -40 ... 70 °C Close to Contactor without Thermal O/L Relay -40 ... 70 °C Close to Contactor for Storage -60 ... +80 °C
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Climatic Withstand	Category B according to IEC 60947-1 Annex Q
Altitude de fonctionnement maximale autorisée	Without Derating 3000 m
REACH Declaration	2CMT2021-006202
Résistance aux chocs selon CEI 60068-2-27	Closed, Shock Direction: A 25 g Closed, Shock Direction: B1 25 g Closed, Shock Direction: B2 15 g Closed, Shock Direction: C1 25 g Closed, Shock Direction: C2 25 g Open, Shock Direction: B1 5 g
Resistance to Vibrations acc. to IEC 60068-2-6	5 ... 300 Hz 3 g closed position / 3 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
Certificat BV	BV_2634H36994B1
CB Certificate	CB_SE-96557M3
CCC Certificate	CCC_2013010304646569
CQC Certificate	CQC2013010304646569
Declaration of Conformity - CCC	2020980304001255
Déclaration de Conformité - CE	1SBD250000U1000
Declaration of Conformity - UKCA	1SBD250031U1000
Certificat DNV	DNV_TAE00001AF-4
EAC Certificate	EAC_RU_FRME77B03447
KC Certificate	KC_HW02016-15011C
Certificat LR	LRS_LR2002723TA-02
Certificat RINA	RINA_ELE084013XG
Certificat RMRS	RMRS_1802705280
Certificat UL	UL-US-L312527-1141-10303102-9 UL-CA-L312527-4141-10303102-9
UL Listing Card	UL_E312527

### Emballage

Emballage Niveau 1 Unités	box 1 pièce
Emballage Niveau 1 Largeur	180 mm
Emballage Niveau 1 Longueur	150 mm
Emballage Niveau 1 Hauteur	102 mm
Emballage Niveau 1 Poids	1.36 kg
Emballage Niveau 1 EAN	3471523133143
Emballage Niveau 2 Unités	box 6 pièce
Emballage Niveau 2 Largeur	250 mm
Emballage Niveau 2 Longueur	300 mm
Emballage Niveau 2	300 mm

Hauteur

Emballage Niveau 2 Poids 8.16 kg

Emballage Niveau 3 144 pièce Unités

## Classifications

Code de classification d'objet	Q
ETIM 4	EC000066 - Magnet contactor, AC-switching
ETIM 5	EC000066 - Magnet contactor, AC-switching
ETIM 6	EC000066 - contacteur de puissance pour commutation de courant alternatif
ETIM 7	EC000066 - Power contactor, AC switching
ETIM 8	EC000066 - Power contactor, AC switching
eClass	V11.0 : 27371003
UNSPSC	39121529
Code de catégorie granulaire IDEA (IGCC)	4758 >> lec Contactors
E-Number (Finland)	3707133

