

PRODUCT-DETAILS

# AF38-30-22-13

## AF38-30-22-13 100-250V50/60HZ-DC Contactor



### Informations générales

Extension du type de produit	AF38-30-22-13
Code de produit	1SBL297001R1322
EAN	3471523111738
Description courte	AF38-30-22-13 100-250V50/60HZ-DC Contactor

Description longue	<p>The AF38-30-22-13 is a 3 pole - 690 V IEC or 600 UL contactor with pre-mounted auxiliary contacts and screw terminals, controlling motors up to 18.5 kW / 400 V AC (AC-3) or 25 hp / 480 V UL and switching power circuits up to 50 A (AC-1) or 50 A UL general use. Thanks to the AF technology, the contactor has a wide control voltage range (100-250 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.</p>
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### Commande

Quantité minimum	1 pièce
Code douanier	85364900

### Downloads Préférés

Instructions et manuels	1SBC101027M6801
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CAD Dimensional  
Drawing

2CDC001079B0201

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## Dimensions

Produit Largeur Net	45 mm
Produit Longueur Net	119.5 mm
Produit Hauteur Net	86 mm
Poids net	0.36 kg

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## 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 60947-4-1, CSA C22.2 No. 60947-4-1
Tension	Circuit auxiliaire 690 V Circuit principal 690 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 $\Theta = 40\text{ °C}$ 50 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 50 A (690 V) 60 °C 42 A (690 V) 70 °C 37 A
Courant assignée d' emploi AC-3 ( $I_e$ )	(415 V) 60 °C 38 A (440 V) 60 °C 38 A (500 V) 60 °C 33 A (690 V) 60 °C 24 A (380 / 400 V) 60 °C 38 A (220 / 230 / 240 V) 60 °C 40 A
Courant assignée d' emploi AC-3e ( $I_e$ )	(415 V) 60 °C 38 A (440 V) 60 °C 38 A (500 V) 60 °C 33 A (690 V) 60 °C 24 A (380 / 400 V) 60 °C 38 A (220 / 230 / 240 V) 60 °C 40 A
Puissance assignée d' emploi AC-3 ( $P_e$ )	(400 V) 18.5 kW (415 V) 18.5 kW (440 V) 22 kW (500 V) 22 kW (690 V) 22 kW (380 / 400 V) 18.5 kW (220 / 230 / 240 V) 11 kW
Puissance assignée d' emploi AC-3e ( $P_e$ )	(415 V) 18.5 kW (440 V) 22 kW (500 V) 22 kW (690 V) 22 kW (380 / 400 V) 18.5 kW (220 / 230 / 240 V) 11 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
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Courant assigné de courte durée admissible ( $I_{cw}$ )	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 350 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 50 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 150 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 700 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 225 A for 0.1 s 140 A for 1 s 100 A
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Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 440 V 500 A cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 690 V 200 A
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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
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Courant assignée d'emploi DC-1 ( $I_e$ )	(110 V) 2 Poles in Series, 40 °C 50 A (110 V) 2 Poles in Series, 60 °C 42 A (110 V) 2 Poles in Series, 70 °C 37 A (110 V) 3 Poles in Series, 40 °C 50 A (110 V) 3 Poles in Series, 60 °C 42 A (110 V) 3 Poles in Series, 70 °C 37 A (220 V) 3 Poles in Series, 40 °C 50 A (220 V) 3 Poles in Series, 60 °C 42 A (220 V) 3 Poles in Series, 70 °C 37 A (72 V) 1-Pole, 40 °C 50 A (72 V) 1-Pole, 60 °C 42 A (72 V) 1-Pole, 70 °C 37 A (72 V) 2 Poles in Series, 40 °C 50 A (72 V) 2 Poles in Series, 60 °C 42 A (72 V) 2 Poles in Series, 70 °C 37 A (72 V) 3 Poles in Series, 40 °C 50 A (72 V) 3 Poles in Series, 60 °C 42 A (72 V) 3 Poles in Series, 70 °C 37 A
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Courant assignée d'emploi DC-3 ( $I_e$ )	(110 V) 2 Poles in Series, 40 °C 50 A (110 V) 2 Poles in Series, 60 °C 42 A (110 V) 2 Poles in Series, 70 °C 37 A (110 V) 3 Poles in Series, 40 °C 50 A (110 V) 3 Poles in Series, 60 °C 42 A (110 V) 3 Poles in Series, 70 °C 37 A (220 V) 3 Poles in Series, 40 °C 50 A (220 V) 3 Poles in Series, 60 °C 42 A (220 V) 3 Poles in Series, 70 °C 37 A (72 V) 1-Pole, 40 °C 50 A (72 V) 1-Pole, 60 °C 42 A (72 V) 1-Pole, 70 °C 37 A (72 V) 2 Poles in Series, 40 °C 50 A (72 V) 2 Poles in Series, 60 °C 42 A (72 V) 2 Poles in Series, 70 °C 37 A (72 V) 3 Poles in Series, 40 °C 50 A (72 V) 3 Poles in Series, 60 °C 42 A (72 V) 3 Poles in Series, 70 °C 37 A
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Courant assignée d'emploi DC-5 ( $I_e$ )	(110 V) 2 Poles in Series, 40 °C 50 A (110 V) 2 Poles in Series, 60 °C 42 A (110 V) 2 Poles in Series, 70 °C 37 A (110 V) 3 Poles in Series, 40 °C 50 A (110 V) 3 Poles in Series, 60 °C 42 A (110 V) 3 Poles in Series, 70 °C 37 A (220 V) 3 Poles in Series, 40 °C 25 A (220 V) 3 Poles in Series, 60 °C 25 A (220 V) 3 Poles in Series, 70 °C 25 A (72 V) 1-Pole, 40 °C 25 A (72 V) 1-Pole, 60 °C 25 A (72 V) 1-Pole, 70 °C 25 A
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	(72 V) 2 Poles in Series, 40 °C 50 A (72 V) 2 Poles in Series, 60 °C 42 A (72 V) 2 Poles in Series, 70 °C 37 A (72 V) 3 Poles in Series, 40 °C 50 A (72 V) 3 Poles in Series, 60 °C 42 A (72 V) 3 Poles in Series, 70 °C 37 A
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 60947-4-1 690 V 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	3600 cycles per hour
Rated Control Circuit Voltage ( $U_c$ )	50 Hz 100 ... 250 V 60 Hz 100 ... 250 V DC Operation 100 ... 250 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 Main Circuit	Flexible with Ferrule 1/2x 1.5 ... 10 mm <sup>2</sup> Flexible with Insulated Ferrule 1x 1.5 ... 10 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 1.5 ... 4 mm <sup>2</sup> Rigid Solid 1/2x 2.5 ... 4 mm <sup>2</sup> Rigid Stranded 1/2x 2.5 ... 10 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 1x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm <sup>2</sup> Rigid Solid 1/2x 1 ... 2.5 mm <sup>2</sup> Rigid Stranded 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 Solid 1/2x 1 ... 2.5 mm <sup>2</sup> Rigid Stranded 1/2x 1 ... 2.5 mm <sup>2</sup>
Wire Stripping Length	Auxiliary Circuit 10 mm Control Circuit 10 mm Main Circuit 14 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 IP20
Type de borne	Screw Terminals

## Technique UL/CSA

Maximum Operating Voltage UL/CSA	Circuit principal 600 V
General Use Rating UL/CSA	(600 V AC) 50 A
Puissance nominale UL/CSA	(120 V AC) Single Phase 2 hp (200 ... 208 V AC) Three Phase 10 hp (220 ... 240 V AC) Three Phase 10 hp (240 V AC) Single Phase 5 hp (440 ... 480 V AC) Three Phase 25 hp (550 ... 600 V AC) Three Phase 30 hp
Connecting Capacity Main Circuit UL/CSA	Rigid Solid 1/2x 14-10 AWG Rigid Stranded 1/2x 14-8 AWG
Connecting Capacity Auxiliary Circuit UL/CSA	Rigid Solid 1/2x 18-14 AWG Rigid Stranded 1/2x 18-14 AWG
Connecting Capacity Control Circuit UL/CSA	Rigid Solid 1/2x 18-14 AWG Rigid Stranded 1/2x 18-14 AWG
Tightening Torque UL/CSA	Auxiliary Circuit 11 in-lb Control Circuit 11 in-lb Main Circuit 22 in-lb

## Environnement

Température de l'air ambiant	Close to Contactor Fitted with Thermal O/L Relay -25 ... 60 °C Close to Contactor without Thermal O/L Relay -40 ... 70 °C Close to Contactor for Storage -60 ... +80 °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
Résistance aux chocs selon CEI 60068-2-27	Closed, Shock Direction: B1 25 g Open, Shock Direction: B1 5 g Shock Direction: A 30 g Shock Direction: B2 15 g Shock Direction: C1 25 g Shock Direction: C2 25 g
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
Certificat BV	BV_2634H24898C0
CB Certificate	CB_SE-96552M1
CCC Certificate	CCC_2010010304445623
CQC Certificate	CQC2010010304445623 CQC2020010304294316
Declaration of Conformity - CCC	2020980304001254 2020980304001052
Déclaration de Conformité - CE	1SBD250000U1000

Declaration of Conformity - UKCA	1SBD250031U1000
Certificat DNV	DNV_TAE00001AF-4
EAC Certificate	EAC_RU_FRME77B03447
Certificat GOST	GOST_POCCFR.ME77.B07175.pdf
KC Certificate	KC_HW02016-15001C
Certificat LR	LRS_LR2002723TA-02
Certificat RINA	RINA_ELE240318XG
Certificat RMRS	RMRS_1802705280
Certificat UL	UL-US-2150887-5 UL-CA-2142658-5
UL Listing Card	E312527

## Emballage

Emballage Niveau 1 Unités	box 1 pièce
Emballage Niveau 1 Largeur	87 mm
Emballage Niveau 1 Longueur	121 mm
Emballage Niveau 1 Hauteur	47 mm
Emballage Niveau 1 Poids	0.36 kg
Emballage Niveau 1 EAN	3471523111738
Emballage Niveau 2 Unités	box 18 pièce
Emballage Niveau 2 Largeur	250 mm
Emballage Niveau 2 Longueur	300 mm
Emballage Niveau 2 Hauteur	315 mm
Emballage Niveau 2 Poids	12.96 kg
Emballage Niveau 3 Unités	864 pièce

## 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 >> Iec Contactors

