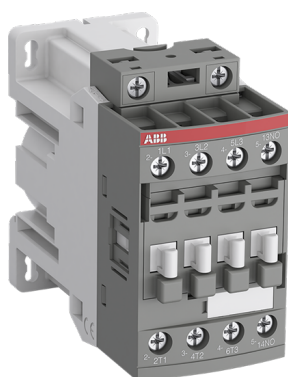


PRODUCT-DETAILS

AF12Z-30-01-30

AF12Z-30-01-30 24VDC Contactor



Informations générales

| | |
|------------------------------|--------------------------------|
| Extension du type de produit | AF12Z-30-01-30 |
| Code de produit | 1SBL156001R3001 |
| EAN | 3471523113695 |
| Description courte | AF12Z-30-01-30 24VDC Contactor |

| | |
|--------------------|--|
| Description longue | <p>The AF12Z-30-01-30 is a 3-pole - 690 V IEC or 600 UL contactor with one built-in auxiliary contact and screw terminals, controlling motors up to 5.5 kW / 400 V AC (AC-3) or 7-1/2 hp / 480 V UL and switching power circuits up to 28 A (AC-1) or 28 A UL general use. Thanks to the AF technology, the contactor has a 24 V DC coil, featuring a reduced holding coil consumption down to 1.7 W and offering the possibility of a direct control by PLC-output ≥ 250 mA 24 V DC, without need of additional interface relay, 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> |
|--------------------|--|

Commande

| | |
|------------------|----------|
| Quantité minimum | 1 pièce |
| Code douanier | 85364900 |

Downloads Préférés

| | |
|-------------------------|-----------------|
| Instructions et manuels | 1SBC101053M6801 |
| CAD Dimensional Drawing | 2CDC001079B0201 |

Dimensions

| | |
|----------------------|---------|
| Produit Largeur Net | 45 mm |
| Produit Longueur Net | 97 mm |
| Produit Hauteur Net | 86 mm |
| Poids net | 0.43 kg |

Technique

| | |
|--|---|
| Number of Main Contacts NO | 3 |
| Number of Main Contacts NC | 0 |
| Number of Auxiliary Contacts NO | 0 |
| Number of Auxiliary Contacts NC | 1 |
| 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 principal 50 / 60 Hz |
| Courant thermique conventionnel à l'air libre (I_{th}) | acc. to IEC 60947-4-1, Open Contactors $\Theta = 40\text{ }^{\circ}\text{C}$ 35 A acc. to IEC 60947-5-1, $\Theta = 40\text{ }^{\circ}\text{C}$ 16 A |
| Courant assignée d'emploi AC-1 (I_e) | (690 V) 40 $^{\circ}\text{C}$ 28 A (690 V) 60 $^{\circ}\text{C}$ 28 A (690 V) 70 $^{\circ}\text{C}$ 24 A |
| Courant assignée d'emploi AC-3 (I_e) | (415 V) 60 $^{\circ}\text{C}$ 12 A (440 V) 60 $^{\circ}\text{C}$ 12 A (500 V) 60 $^{\circ}\text{C}$ 12.5 A (690 V) 60 $^{\circ}\text{C}$ 9 A (380 / 400 V) 60 $^{\circ}\text{C}$ 12 A (220 / 230 / 240 V) 60 $^{\circ}\text{C}$ 12 A |
| Courant assignée d'emploi AC-3e (I_e) | (415 V) 60 $^{\circ}\text{C}$ 12 A (440 V) 60 $^{\circ}\text{C}$ 12 A (500 V) 60 $^{\circ}\text{C}$ 12.5 A (690 V) 60 $^{\circ}\text{C}$ 9 A (380 / 400 V) 60 $^{\circ}\text{C}$ 12 A (220 / 230 / 240 V) 60 $^{\circ}\text{C}$ 12 A |
| Puissance assignée d'emploi AC-3 (P_e) | (415 V) 5.5 kW (440 V) 5.5 kW (500 V) 7.5 kW (690 V) 7.5 kW (380 / 400 V) 5.5 kW (220 / 230 / 240 V) 3 kW |
| Puissance assignée d'emploi AC-3e (P_e) | (415 V) 5.5 kW (440 V) 5.5 kW (500 V) 7.5 kW (690 V) 7.5 kW (380 / 400 V) 5.5 kW (220 / 230 / 240 V) 3 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 150 A
 at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 35 A
 at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 60 A
 at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 300 A
 at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 80 A
 for 0.1 s 140 A
 for 1 s 100 A

Maximum Breaking Capacity cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 440 V 250 A
 cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 690 V 106 A

Maximum Electrical Switching Frequency (AC-1) 600 cycles per hour
 (AC-15) 1200 cycles per hour
 (AC-2 / AC-4) 300 cycles per hour
 (AC-3) 1200 cycles per hour
 (DC-13) 900 cycles per hour

Courant assignée d'emploi DC-1 (I_e) (110 V) 1-Pole, 40 °C 15 A
 (110 V) 1-Pole, 60 °C 15 A
 (110 V) 1-Pole, 70 °C 15 A
 (110 V) 2 Poles in Series, 40 °C 27 A
 (110 V) 2 Poles in Series, 60 °C 27 A
 (110 V) 2 Poles in Series, 70 °C 24 A
 (110 V) 3 Poles in Series, 40 °C 27 A
 (110 V) 3 Poles in Series, 60 °C 27 A
 (110 V) 3 Poles in Series, 70 °C 24 A
 (220 V) 2 Poles in Series, 40 °C 15 A
 (220 V) 2 Poles in Series, 60 °C 15 A
 (220 V) 2 Poles in Series, 70 °C 15 A
 (220 V) 3 Poles in Series, 40 °C 27 A
 (220 V) 3 Poles in Series, 60 °C 27 A
 (220 V) 3 Poles in Series, 70 °C 24 A
 (72 V) 1-Pole, 40 °C 27 A
 (72 V) 1-Pole, 60 °C 27 A
 (72 V) 1-Pole, 70 °C 24 A
 (72 V) 2 Poles in Series, 40 °C 27 A
 (72 V) 2 Poles in Series, 60 °C 27 A
 (72 V) 2 Poles in Series, 70 °C 24 A
 (72 V) 3 Poles in Series, 40 °C 27 A
 (72 V) 3 Poles in Series, 60 °C 27 A
 (72 V) 3 Poles in Series, 70 °C 24 A

Courant assignée d'emploi DC-3 (I_e) (110 V) 1-Pole, 40 °C 7 A
 (110 V) 1-Pole, 60 °C 7 A
 (110 V) 1-Pole, 70 °C 7 A
 (110 V) 2 Poles in Series, 40 °C 27 A
 (110 V) 2 Poles in Series, 60 °C 27 A
 (110 V) 2 Poles in Series, 70 °C 24 A
 (110 V) 3 Poles in Series, 40 °C 27 A
 (110 V) 3 Poles in Series, 60 °C 27 A
 (110 V) 3 Poles in Series, 70 °C 24 A
 (220 V) 2 Poles in Series, 40 °C 7 A
 (220 V) 2 Poles in Series, 60 °C 7 A
 (220 V) 2 Poles in Series, 70 °C 7 A
 (220 V) 3 Poles in Series, 40 °C 27 A
 (220 V) 3 Poles in Series, 60 °C 27 A
 (220 V) 3 Poles in Series, 70 °C 24 A
 (72 V) 1-Pole, 40 °C 27 A
 (72 V) 1-Pole, 60 °C 27 A
 (72 V) 1-Pole, 70 °C 24 A
 (72 V) 2 Poles in Series, 40 °C 27 A
 (72 V) 2 Poles in Series, 60 °C 27 A
 (72 V) 2 Poles in Series, 70 °C 24 A
 (72 V) 3 Poles in Series, 40 °C 27 A
 (72 V) 3 Poles in Series, 60 °C 27 A
 (72 V) 3 Poles in Series, 70 °C 24 A

| | |
|---|---|
| Courant assignée d'emploi DC-5 (I_e) | (110 V) 1-Pole, 40 °C 4 A (110 V) 1-Pole, 60 °C 4 A (110 V) 1-Pole, 70 °C 4 A (110 V) 2 Poles in Series, 40 °C 15 A (110 V) 2 Poles in Series, 60 °C 15 A (110 V) 2 Poles in Series, 70 °C 15 A (110 V) 3 Poles in Series, 40 °C 27 A (110 V) 3 Poles in Series, 60 °C 27 A (110 V) 3 Poles in Series, 70 °C 24 A (220 V) 2 Poles in Series, 40 °C 4 A (220 V) 2 Poles in Series, 60 °C 4 A (220 V) 2 Poles in Series, 70 °C 4 A (220 V) 3 Poles in Series, 40 °C 12 A (220 V) 3 Poles in Series, 60 °C 12 A (220 V) 3 Poles in Series, 70 °C 12 A (72 V) 1-Pole, 40 °C 12 A (72 V) 1-Pole, 60 °C 12 A (72 V) 1-Pole, 70 °C 12 A (72 V) 2 Poles in Series, 40 °C 27 A (72 V) 2 Poles in Series, 60 °C 27 A (72 V) 2 Poles in Series, 70 °C 24 A (72 V) 3 Poles in Series, 40 °C 27 A (72 V) 3 Poles in Series, 60 °C 27 A (72 V) 3 Poles in Series, 70 °C 24 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) | DC Operation 24 V |
| Durée de fonctionnement nominale | Entre la mise hors tension de la bobine et la fermeture du contact NC (normally closed) 22 ... 57 ms Entre la mise hors tension de la bobine et l'ouverture du contact NO (normally open) 17 ... 29 ms Entre la mise sous tension de la bobine et l'ouverture du contact NC 20 ... 35 ms Entre la mise sous tension de la bobine et la fermeture du contact NO 27 ... 53 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 0.75 ... 6 mm ² Flexible with Insulated Ferrule 1x 0.75 ... 4 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm ² Rigid Solid 1/2x 1 ... 4 mm ² Rigid Stranded 1/2x 1 ... 6 mm ² |
| Connecting Capacity Auxiliary Circuit | Flexible with Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm ² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm ² Rigid Solid 1/2x 1 ... 2.5 mm ² |

| | |
|--|--|
| | Rigid Stranded 1/2x 1 ... 2.5 mm ² |
| Connecting Capacity Control Circuit | Flexible with Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm ² Rigid Solid 1/2x 1 ... 2.5 mm ² Rigid Stranded 1/2x 1 ... 2.5 mm ² |
| Wire Stripping Length | Auxiliary Circuit 10 mm Control Circuit 10 mm Main 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 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP20 |
| Type de borne | Screw Terminals |

Technique UL/CSA

| | |
|---|---|
| NEMA Size | 0 |
| Continuous Current Rating NEMA | 18 A |
| Horsepower Rating NEMA | (115 V AC) Single Phase 1 Hp (200 V AC) Three Phase 3 Hp (230 V AC) Single Phase 2 Hp (230 V AC) Three Phase 3 Hp (460 V AC) Three Phase 5 Hp (575 V AC) Three Phase 5 Hp |
| Maximum Operating Voltage UL/CSA | Circuit principal 600 V |
| General Use Rating UL/CSA | (600 V AC) 28 A |
| Puissance nominale UL/CSA | (120 V AC) Single Phase 1 hp (200 ... 208 V AC) Three Phase 3 hp (220 ... 240 V AC) Three Phase 3 hp (240 V AC) Single Phase 2 hp (440 ... 480 V AC) Three Phase 7-1/2 hp (550 ... 600 V AC) Three Phase 10 hp |
| Connecting Capacity Main Circuit UL/CSA | Rigid Solid 1/2x 16-10 AWG Rigid Stranded 1/2x 16-10 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 13 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 |
| 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-108879 |
| CCC Certificate | CCC_2010010304445624 |
| CQC Certificate | CQC2010010304445624 CQC2020010304298240 |
| Declaration of Conformity - CCC | 2020980304001253 2020980304001082 |
| Déclaration de Conformité - CE | 1SBD250000U1000 |
| Declaration of Conformity - UKCA | 1SBD250031U1000 |
| Certificat DNV | DNV_TAE00001AF-4 |
| EAC Certificate | EAC_RU_FRME77B03447 |
| Certificat RINA | RINA_ELE240318XG |
| Certificat RMRS | RMRS_1802705280 |
| Certificat UL | UL-US-2150887-5 UL-CA-2142658-5 |

Emballage

| | |
|--------------------------------|----------------|
| Emballage Niveau 1 Unités | box 1 pièce |
| Emballage Niveau 1 Largeur | 96 mm |
| Emballage Niveau 1 Longueur | 112 mm |
| Emballage Niveau 1 Hauteur | 50 mm |
| Emballage Niveau 1 Poids | 0.475 kg |
| Emballage Niveau 1 EAN | 3471523113695 |
| Emballage Niveau 2 Unités | crate 12 pièce |
| Emballage Niveau 2 Largeur | 51 mm |
| Emballage Niveau 2 Longueur | 98 mm |
| Emballage Niveau 2 Hauteur | 114 mm |
| Emballage Niveau 2 Poids | 5.7 kg |
| Emballage Niveau 3 Unités | 576 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 |
| E-Number (Finland) | 3709057 |

