

PRODUCT-DETAILS

# AFC09-30-10K-80

## AFC09-30-10K-80 220-230V50Hz 230-240V60Hz Contactor



### Algemene informatie

|               |  |
|---------------|--|
| Type          | AFC09-30-10K-80  |
| Artikelnummer | 1SBL131005R8010  |
| EAN           | 3471523013933  |
| Omschrijving  | AFC09-30-10K-80 220-230V50Hz 230-240V60Hz Contactor  |
| Omschrijving  | The AFC09-30-10K-80 is a 3-pole - 690 V IEC or 600 V UL contactor with 1 N.O built-in auxiliary contact and Push-in terminals, mainly controlling power circuits up to 4 kW / 400 V AC (AC-3) or 5 hp / 480 V AC UL and 25 A (AC-1) or 25 A UL general use. Within the AF platform, AFC contactors offer an optimized operating time for AC controlled applications with electromagnetic coil (control voltage : 220 ... 230 V AC 50 Hz / 230 ... 240 V AC 60 Hz). AFC contactors have a block type design and can be easily extended with add-on auxiliary contact blocks and a wide range of additional accessories. |

### Ordering

|                            |          |
|----------------------------|----------|
| Minimale bestelhoeveelheid | 1 stuk   |
| Numerus douanetarief       | 85364900 |

### Popular Downloads

|                          |                 |
|--------------------------|-----------------|
| Gegevensblad, technische | 1SBC100219C0201 |
|--------------------------|-----------------|

## informatie

|                              |                 |
|------------------------------|-----------------|
| Instructies en handleidingen | 1SBC101061M6801 |
| CAD Dimensional Drawing      | 2CDC001079B0201 |

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**Dimensions**


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|                       |          |
|-----------------------|----------|
| Product netto breedte | 45 mm    |
| Product netto diepte  | 77 mm    |
| Product netto hoogte  | 92.3 mm  |
| Product netto gewicht | 0.306 kg |

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**Technical**


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| Aantal hoofdcontacten NO                                 | 3  |
| Aantal hoofdcontacten NC                                 | 0  |
| Aantal hulpcontacten NO                                  | 1  |
| Aantal hulpcontacten NC                                  | 0  |
| Normen   | IEC/EN 60947-1, IEC/EN 60947-4-1, UL 60947-4-1, CSA C22.2 No. 60947-4-1  |
| Nominaal bedrijfsvoltage                                 | Auxiliary Circuit 690 V<br>Main Circuit 690 V  |
| Toegekende frequentie (f)                                | Auxiliary Circuit 50 / 60 Hz<br>Control Circuit 50 / 60 Hz<br>Main Circuit 50 / 60 Hz  |
| Conventionele vrije-lucht thermische stroom ( $I_{th}$ ) | acc. to IEC 60947-4-1, Open Contactors $\Theta = 40^\circ\text{C}$ 35 A<br>acc. to IEC 60947-5-1, $\Theta = 40^\circ\text{C}$ 16 A             |
| Nominale bedrijfsstroom AC-1 ( $I_e$ )                   | (690 V) 40 °C 25 A<br>(690 V) 60 °C 25 A<br>(690 V) 70 °C 22 A   |
| Nominale bedrijfsstroom AC-3 ( $I_e$ )                   | (415 V) 60 °C 9 A<br>(440 V) 60 °C 9 A<br>(500 V) 60 °C 9.5 A<br>(690 V) 60 °C 7 A<br>(380 / 400 V) 60 °C 9 A<br>(220 / 230 / 240 V) 60 °C 9 A |
| Nominale bedrijfsstroom AC-3e ( $I_e$ )                  | (415 V) 60 °C 9 A<br>(440 V) 60 °C 9 A<br>(500 V) 60 °C 9.5 A<br>(690 V) 60 °C 7 A<br>(380 / 400 V) 60 °C 9 A<br>(220 / 230 / 240 V) 60 °C 9 A |
| Nominale bedrijfsvermogen AC-3 ( $P_e$ )                 | (415 V) 4 kW<br>(440 V) 4 kW<br>(500 V) 5.5 kW<br>(690 V) 5.5 kW<br>(380 / 400 V) 4 kW<br>(220 / 230 / 240 V) 2.2 kW                           |
| Nominale bedrijfsvermogen AC-3e ( $P_e$ )                | (415 V) 4 kW<br>(440 V) 4 kW<br>(500 V) 5.5 kW<br>(690 V) 5.5 kW<br>(380 / 400 V) 4 kW<br>(220 / 230 / 240 V) 2.2 kW                           |
| Nominale bedrijfsstroom AC-15 ( $I_e$ )                  | (500 V) 2 A<br>(690 V) 2 A   |

(24 / 127 V) 6 A  
 (220 / 240 V) 4 A  
 (400 / 440 V) 3 A

|   |   |
|---|---|
| Nominale kortstondige grensstrom ( $I_{cw}$ ) | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 150 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 35 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 60 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 300 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 80 A<br>for 0.1 s 140 A<br>for 1 s 100 A   |
| Maximale breekcapaciteit                      | cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 440 V 250 A<br>cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 690 V 106 A  |
| Maximale elektrische schakelfrequentie        | (AC-1) 600 omwentelingen per uur<br>(AC-15) 1200 omwentelingen per uur<br>(AC-2 / AC-4) 300 omwentelingen per uur<br>(AC-3) 1200 omwentelingen per uur<br>(DC-13) 900 omwentelingen per uur   |
| Nominale bedrijfsstroom DC-1 ( $I_e$ )        | (110 V) 1-Pole, 40 °C 10 A<br>(110 V) 1-Pole, 60 °C 10 A<br>(110 V) 1-Pole, 70 °C 10 A<br>(110 V) 2 Poles in Series, 40 °C 25 A<br>(110 V) 2 Poles in Series, 60 °C 25 A<br>(110 V) 2 Poles in Series, 70 °C 22 A<br>(110 V) 3 Poles in Series, 40 °C 25 A<br>(110 V) 3 Poles in Series, 60 °C 25 A<br>(110 V) 3 Poles in Series, 70 °C 22 A<br>(220 V) 2 Poles in Series, 40 °C 10 A<br>(220 V) 2 Poles in Series, 60 °C 10 A<br>(220 V) 2 Poles in Series, 70 °C 10 A<br>(220 V) 3 Poles in Series, 40 °C 25 A<br>(220 V) 3 Poles in Series, 60 °C 25 A<br>(220 V) 3 Poles in Series, 70 °C 22 A<br>(72 V) 1-Pole, 40 °C 25 A<br>(72 V) 1-Pole, 60 °C 25 A<br>(72 V) 1-Pole, 70 °C 22 A<br>(72 V) 2 Poles in Series, 40 °C 25 A<br>(72 V) 2 Poles in Series, 60 °C 25 A<br>(72 V) 2 Poles in Series, 70 °C 22 A<br>(72 V) 3 Poles in Series, 40 °C 25 A<br>(72 V) 3 Poles in Series, 60 °C 25 A<br>(72 V) 3 Poles in Series, 70 °C 22 A |
| Nominale bedrijfsstroom DC-3 ( $I_e$ )        | (110 V) 1-Pole, 40 °C 6 A<br>(110 V) 1-Pole, 60 °C 6 A<br>(110 V) 1-Pole, 70 °C 6 A<br>(110 V) 2 Poles in Series, 40 °C 25 A<br>(110 V) 2 Poles in Series, 60 °C 25 A<br>(110 V) 2 Poles in Series, 70 °C 22 A<br>(110 V) 3 Poles in Series, 40 °C 25 A<br>(110 V) 3 Poles in Series, 60 °C 25 A<br>(110 V) 3 Poles in Series, 70 °C 22 A<br>(220 V) 2 Poles in Series, 40 °C 6 A<br>(220 V) 2 Poles in Series, 60 °C 6 A<br>(220 V) 2 Poles in Series, 70 °C 6 A<br>(220 V) 3 Poles in Series, 40 °C 25 A<br>(220 V) 3 Poles in Series, 60 °C 25 A<br>(220 V) 3 Poles in Series, 70 °C 22 A<br>(72 V) 1-Pole, 40 °C 25 A<br>(72 V) 1-Pole, 60 °C 25 A<br>(72 V) 1-Pole, 70 °C 22 A<br>(72 V) 2 Poles in Series, 40 °C 25 A<br>(72 V) 2 Poles in Series, 60 °C 25 A<br>(72 V) 2 Poles in Series, 70 °C 22 A<br>(72 V) 3 Poles in Series, 40 °C 25 A<br>(72 V) 3 Poles in Series, 60 °C 25 A<br>(72 V) 3 Poles in Series, 70 °C 22 A       |
| Nominale bedrijfsstroom DC-5 ( $I_e$ )        | (110 V) 1-Pole, 40 °C 4 A<br>(110 V) 1-Pole, 60 °C 4 A  |

|   |   |
|---|---|
|   | (110 V) 1-Pole, 70 °C 4 A<br>(110 V) 2 Poles in Series, 40 °C 10 A<br>(110 V) 2 Poles in Series, 60 °C 10 A<br>(110 V) 2 Poles in Series, 70 °C 10 A<br>(110 V) 3 Poles in Series, 40 °C 25 A<br>(110 V) 3 Poles in Series, 60 °C 25 A<br>(110 V) 3 Poles in Series, 70 °C 22 A<br>(220 V) 2 Poles in Series, 40 °C 4 A<br>(220 V) 2 Poles in Series, 60 °C 4 A<br>(220 V) 2 Poles in Series, 70 °C 4 A<br>(220 V) 3 Poles in Series, 40 °C 9 A<br>(220 V) 3 Poles in Series, 60 °C 9 A<br>(220 V) 3 Poles in Series, 70 °C 9 A<br>(72 V) 1-Pole, 40 °C 9 A<br>(72 V) 1-Pole, 60 °C 9 A<br>(72 V) 1-Pole, 70 °C 9 A<br>(72 V) 2 Poles in Series, 40 °C 25 A<br>(72 V) 2 Poles in Series, 60 °C 25 A<br>(72 V) 2 Poles in Series, 70 °C 22 A<br>(72 V) 3 Poles in Series, 40 °C 25 A<br>(72 V) 3 Poles in Series, 60 °C 25 A<br>(72 V) 3 Poles in Series, 70 °C 22 A |
| Nominale bedrijfsstroom<br>DC-13 ( $I_e$ )    | (24 V) 6 A / 144 W<br>(48 V) 2.8 A / 134 W<br>(72 V) 1 A / 72 W<br>(110 V) 0.55 A / 60 W<br>(125 V) 0.55 A / 69 W<br>(220 V) 0.27 A / 60 W<br>(250 V) 0.27 A / 68 W<br>(400 V) 0.15 A / 60 W<br>(500 V) 0.13 A / 65 W<br>(600 V) 0.1 A / 60 W   |
| Nominaal isolatievoltage<br>( $U_i$ )         | acc. to IEC 60947-4-1 690 V<br>acc. to IEC 60947-5-1 690 V<br>acc. to UL/CSA 600 V  |
| Nominale impuls<br>grensvoltage ( $U_{imp}$ ) | 6 kV  |
| Maximale mechanische<br>schakelfrequentie     | 3600 omwentelingen per uur  |
| Nominale<br>stroomkringspanning<br>( $U_c$ )  | 50 Hz 220 ... 230 V<br>60 Hz 230 ... 240 V  |
| Bedieningsstijd                               | Between Coil De-energization and NC Contact Closing 9 ... 20 ms<br>Between Coil De-energization and NO Contact Opening 4 ... 18 ms<br>Between Coil Energization and NC Contact Opening 7 ... 21 ms<br>Between Coil Energization and NO Contact Closing 10 ... 26 ms   |
| Montage op DIN-rail                           | TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715<br>TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715  |
| Montage door schroeven<br>(niet meegeleverd)  | 2 x M4 screws placed diagonally   |
| Verbindingscapaciteit<br>hoofdcircuit         | Flexible with Ferrule 1/2x 0.5 ... 4 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1x 0.5 ... 4 mm <sup>2</sup><br>Flexible with Insulated Ferrule 2x 0.5 ... 2.5 mm <sup>2</sup><br>Flexible 1/2x 0.5 ... 4 mm <sup>2</sup><br>Rigid Solid 1/2x 1 ... 2.5 mm <sup>2</sup><br>Rigid Stranded 1/2x 4 ... 6 mm <sup>2</sup>  |
| Verbindingscapaciteit<br>hulpcircuit          | Flexible with Ferrule 1/2x 0.5 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1/2x 0.5 ... 1.5 mm <sup>2</sup><br>Flexible 1/2x 0.5 ... 2.5 mm <sup>2</sup><br>Rigid Solid 1/2x 1 ... 2.5 mm <sup>2</sup>   |
| Verbindingscapaciteit<br>controlecircuit      | Flexible with Ferrule 1/2x 0.5 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1/2x 0.5 ... 1.5 mm <sup>2</sup><br>Flexible 1/2x 0.5 ... 2.5 mm <sup>2</sup><br>Rigid Solid 1/2x 1 ... 2.5 mm <sup>2</sup>   |

|                   |   |
|-------------------|---|
| Kabelstriplengte  | Auxiliary Circuit 10 mm<br>Control Circuit 10 mm<br>Main Circuit 10 mm  |
| Beschermingsgraad | acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP20<br>acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20<br>acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP20 |
| Terminaaltype     | Push-in Spring Terminals  |

## Technical UL/CSA

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|--|--|
| NEMA-grootte                                 | 00   |
| Continuous Current Rating NEMA               | 9 A  |
| Horsepower Rating NEMA                       | (115 V AC) Single Phase 1/3 Hp<br>(200 V AC) Three Phase 1-1/2 Hp<br>(230 V AC) Single Phase 1 Hp<br>(230 V AC) Three Phase 1-1/2 Hp<br>(460 V AC) Three Phase 2 Hp<br>(575 V AC) Three Phase 2 Hp                                 |
| Maximale bedrijfsspanning UL/CSA             | Main Circuit 600 V   |
| Algemeen gebruik klasse UL/CSA               | (600 V AC) 25 A  |
| Paardenkrachtklasse UL/CSA                   | (120 V AC) Single Phase 3/4 hp<br>(200 ... 208 V AC) Three Phase 2 hp<br>(220 ... 240 V AC) Three Phase 2 hp<br>(240 V AC) Single Phase 1-1/2 hp<br>(440 ... 480 V AC) Three Phase 5 hp<br>(550 ... 600 V AC) Three Phase 7-1/2 hp |
| Verbindingscapaciteit hoofdcircuit UL/CSA    | Rigid Solid 1/2x 18-14 AWG<br>Rigid Stranded 1/2x 18-10 AWG  |
| Verbindingscapaciteit hulpcircuit UL/CSA     | Rigid Solid 1/2x 18-14 AWG   |
| Verbindingscapaciteit controlecircuit UL/CSA | Rigid Solid 1/2x 18-14 AWG   |

## Environmental

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|--|--|
| Omgevingsluchttemperatuur                        | bij schakelaar zonder thermisch overbelastingsrelais -40 ... 70 °C<br>Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 Uc) -40 ... 60 °C<br>Close to Contactor without Thermal O/L Relay (Uc) -40 ... 70 °C<br>bij schakelaar voor opslag -60 ... +80 °C |
| Klimaatbestendig                                 | Category B according to IEC 60947-1 Annex Q  |
| Maximale werkhoogte toegestaan                   | Without Derating 3000 m  |
| Weerstand tegen trillingen volgens IEC 60068-2-6 | 5 ... 300 Hz 4 g closed position / 2 g open position   |

## Certificates and Declarations

|                                 |                     |
|---------------------------------|---------------------|
| BV-certificaat                  | BV_2634H24898C0     |
| CB-certificaat                  | CB_SE-108891        |
| CQC-certificaat                 | CQC2010010304445624 |
| Declaration of Conformity - CCC | 2020980304001253    |

|                                  |                                    |
|----------------------------------|------------------------------------|
| Conformiteitsverklaring - CE     | 1SBD250024U1000                    |
| Declaration of Conformity - UKCA | 1SBD250045U1000                    |
| UL-certificaat                   | UL-US-2150887-5<br>UL-CA-2142658-5 |

## Container Information

|                              |               |
|------------------------------|---------------|
| Pakketniveau 1 Units         | doos 1 stuk   |
| Pakketniveau 1 Breedte       | 93 mm         |
| Pakketniveau 1 Lengte        | 86 mm         |
| Pakketniveau 1 Hoogte        | 45 mm         |
| Pakketniveau 1 Bruto gewicht | 0.306 kg      |
| Pakketniveau 1 EAN           | 3471523013933 |
| Pakketniveau 3 Units         | 1080 stuk     |

## Classifications

|                                      |  |
|--------------------------------------|--|
| Object classificatiecode             | Q  |
| ETIM 6                               | EC000066 - Magneetschakelaar             |
| ETIM 7                               | EC000066 - Power contactor, AC switching |
| ETIM 8                               | EC000066 - Magneetschakelaar             |
| eClass                               | V11.0 : 27371003                         |
| UNSPSC                               | 39121529                                 |
| IGCC (IDEA granulaire categoriecode) | 4755 >> Contactors                       |

## Categorieën

Laagspanningsproducten en -systemen → Control Producten → Magneetschakelaars → Magneetschakelaars

