

PRODUCT-DETAILS

# AFC16-30-10K-80

## AFC16-30-10K-80 220-230V50Hz 230-240V60Hz Contactor



### General Information

Extended Product Type	AFC16-30-10K-80
Product ID	1SBL171005R8010
EAN	3471523014558
Catalog Description	AFC16-30-10K-80 220-230V50Hz 230-240V60Hz Contactor
Long Description	The AFC16-30-10K-80 is a 3 poles - 690 V IEC or 600V UL contactor with 1 N.O built-in auxiliary contact and Push-In terminals, controlling motors up to 7.5 kW / 400 V AC (AC-3) or 10 hp / 480 V AC UL and switching power circuits up to 30 A (AC-1) or 30 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

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

### Popular Downloads

Data Sheet, Technical Information	1SBC100219C0201
Instructions and Manuals	1SBC101060M6801

---

## Dimensions

---

Product Net Width	45 mm
Product Net Depth / Length	77 mm
Product Net Height	92.3 mm
Product Net Weight	0.306 kg

---

## Technical

---

Number of Main Contacts NO	3
Number of Main Contacts NC	0
Number of Auxiliary Contacts NO	1
Number of Auxiliary Contacts NC	0
Standards	IEC 60947-1 / 60947-4-1 and EN 60947-1 / 60947-4-1, UL 508, CSA C22.2 N° 14
Rated Operational Voltage	Auxiliary Circuit 690 V Main Circuit 690 V
Rated Frequency (f)	Auxiliary Circuit 50 / 60 Hz Main Circuit 50 / 60 Hz
Conventional Free-air Thermal Current ( $I_{th}$ )	acc. to IEC 60947-4-1, Open Contactors $q = 40\text{ °C}$ 35 A acc. to IEC 60947-5-1, $q = 40\text{ °C}$ 16 A
Rated Operational Current AC-1 ( $I_e$ )	(690 V) 40 °C 30 A (690 V) 60 °C 30 A (690 V) 70 °C 26 A
Rated Operational Current AC-3 ( $I_e$ )	(415 V) 60 °C 18 A (440 V) 60 °C 18 A (500 V) 60 °C 15 A (690 V) 60 °C 10.5 A (380 / 400 V) 60 °C 18 A (220 / 230 / 240 V) 60 °C 18 A
Rated Operational Power AC-3 ( $P_e$ )	(415 V) 9 kW (440 V) 9 kW (500 V) 9 kW (690 V) 9 kW (380 / 400 V) 7.5 kW (220 / 230 / 240 V) 4 kW
Rated Operational Current 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
Rated Short-time Withstand Current Low Voltage ( $I_{cw}$ )	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
Rated Operational Current DC-13 ( $I_b$ )	(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
Rated Insulation Voltage ( $U_i$ )	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V acc. to IEC 60947-5-1 and VDE 0110 (Gr. C) 690 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage ( $U_{imp}$ )	6 kV
Maximum Mechanical Switching Frequency	3600 cycles per hour
Rated Control Circuit Voltage ( $U_c$ )	50 Hz 220 ... 230 V 60 Hz 230 ... 240 V
Operate Time	Between Coil De-energization and NC Contact Closing 9 ... 20 ms Between Coil De-energization and NO Contact Opening 4 ... 18 ms Between Coil Energization and NC Contact Opening 7 ... 21 ms Between Coil Energization and NO Contact Closing 10 ... 26 ms
Connecting Capacity Main Circuit	Flexible with Ferrule 1/2x 0.5 ... 4 mm <sup>2</sup> Flexible with Insulated Ferrule 1x 0.5 ... 4 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 0.5 ... 2.5 mm <sup>2</sup> Flexible 1/2x 0.5 ... 4 mm <sup>2</sup> Rigid 1/2x 1 ... 6 mm <sup>2</sup>
Connecting Capacity Auxiliary Circuit	Flexible with Insulated Ferrule 1/2x 0.5 ... 1.5 mm <sup>2</sup> Flexible 1/2x 0.5 ... 4 mm <sup>2</sup> Rigid 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 1/2x 1 ... 2.5 mm <sup>2</sup>
Wire Stripping Length	Auxiliary Circuit 10 mm Control Circuit 10 mm Main Circuit 12 mm
Degree of 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
Terminal Type	Push-in Spring Terminals

## Technical UL/CSA

General Use Rating UL/CSA	(600 V AC) 30 A
Horsepower Rating UL/CSA	(120 V AC) Single Phase 1-1/2 hp (200 ... 208 V AC) Three Phase 5 hp (220 ... 240 V AC) Three Phase 5 hp (240 V AC) Single Phase 3 hp (440 ... 480 V AC) Three Phase 10 hp (550 ... 600 V AC) Three Phase 15 hp

## Environmental

Ambient Air Temperature	Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 $U_c$ ) -40 ... 60 °C Close to Contactor without Thermal O/L Relay ( $U_c$ ) -40 ... 70 °C
-------------------------	--

	Close to Contactor for Storage -60 ... +80 °C
Climatic Withstand	Category B according to IEC 60947-1 Annex Q
Maximum Operating Altitude Permissible	Without Derating 3000 m
Resistance to Vibrations acc. to IEC 60068-2-6	5 ... 300 Hz 4 g closed position / 2 g open position

## Certificates and Declarations (Document Number)

CB Certificate	CB_SE-96551M1
CQC Certificate	CQC2010010304445624
Declaration of Conformity - CCC	2020980304001253
Declaration of Conformity - CE	1SBD250024U1000
Instructions and Manuals	1SBC101060M6801
RoHS Information	1SBD251089E1000
UL Certificate	UL_20191021-E312527_7_1

## Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	93 mm
Package Level 1 Depth / Length	86 mm
Package Level 1 Height	45 mm
Package Level 1 Gross Weight	0.306 kg
Package Level 1 EAN	3471523014558
Package Level 3 Units	1080 piece

## Classifications

Object Classification Code	Q
ETIM 6	EC000066 - Power contactor, AC switching
ETIM 7	EC000066 - Power contactor, AC switching
eClass	V11.0 : 27371003

## Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors

