

## PRODUCT-DETAILS

# AX18-30-10-81

## AX18-30-10-81 24V 50/60Hz Contactor



### General Information

Extended Product Type	AX18-30-10-81
Product ID	1SBL921074R8110
EAN	3471522395818
Catalog Description	AX18-30-10-81 24V 50/60Hz Contactor
Long Description	AX09...AX25 contactors are mainly used for controlling 3-phase motors and power circuits up to 690 V AC. These contactors are of the block type design with: - 3 main poles and 1 built-in auxiliary contact - control circuit: AC operated - add-on auxiliary contact blocks for front or side mounting and a wide range of accessories.

### Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

### Popular Downloads

Instructions and Manuals	9AKK107492A7057
CAD Dimensional Drawing	2CDC001079B0201

## Dimensions

Product Net Width	44 mm
Product Net Depth / Length	74 mm
Product Net Height	74 mm
Product Net Weight	0.326 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
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 $\Theta = 40^\circ\text{C}$ 28 A acc. to IEC 60947-5-1, $\Theta = 40^\circ\text{C}$ 16 A
Rated Operational Current AC-1 ( $I_e$ )	(220 / 240 V) 55 $^\circ\text{C}$ 25 A (690 V) 40 $^\circ\text{C}$ 27 A (690 V) 70 $^\circ\text{C}$ 20 A
Rated Operational Current AC-3 ( $I_e$ )	(415 V) 55 $^\circ\text{C}$ 18 A (440 V) 55 $^\circ\text{C}$ 12 A (500 V) 55 $^\circ\text{C}$ 12 A (690 V) 55 $^\circ\text{C}$ 9 A (380 / 400 V) 55 $^\circ\text{C}$ 18 A (220 / 230 / 240 V) 55 $^\circ\text{C}$ 18 A
Rated Operational Power AC-3 ( $P_e$ )	(415 V) 9 kW (440 V) 5.5 kW (500 V) 7.5 kW (690 V) 7.5 kW (380 / 400 V) 7.5 kW (220 / 230 / 240 V) 4 kW
Rated Operational Current AC-15 ( $I_e$ )	(500 V) NC 2 (500 V) 2 A (690 V) 2 A (24 / 127 V) 6 A (220 / 240 V) 4 A (380 / 400 V) 3 A (400 / 440 V) 2 A
Rated Short-time Withstand Current Low Voltage ( $I_{cw}$ )	at 40 $^\circ\text{C}$ Ambient Temp, in Free Air, from a Cold State 10 s 145 A at 40 $^\circ\text{C}$ Ambient Temp, in Free Air, from a Cold State 15 min 28 A at 40 $^\circ\text{C}$ Ambient Temp, in Free Air, from a Cold State 1 min 60 A at 40 $^\circ\text{C}$ Ambient Temp, in Free Air, from a Cold State 1 s 300 A at 40 $^\circ\text{C}$ 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 90 A
Maximum Electrical Switching Frequency	(AC-1) 600 cycles per hour (AC-15) 1200 cycles per hour (AC-3) 1200 cycles per hour (DC-13) 900 cycles per hour
Rated Operational Current DC-13 ( $I_e$ )	(24 V) 6 A / 144 W (110 V) 1.1 A / 121 W (125 V) 1.1 A / 138 W (220 V) 0.55 A / 121 W (250 V) 0.55 A / 138 W (400 V) 2.8 A / 134 W (500 V) 2 A / 144 W

Rated Insulation Voltage (U <sub>i</sub> )	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V
Rated Impulse Withstand Voltage (U <sub>imp</sub> )	Auxiliary Circuit 6 kV
Maximum Mechanical Switching Frequency	3600 cycles per hour
Rated Control Circuit Voltage (U <sub>c</sub> )	50 Hz 24 V 60 Hz 24 V
Operate Time	Between Coil De-energization and NC Contact Closing 9 ... 16 ms Between Coil De-energization and NO Contact Opening 4 ... 11 ms Between Coil Energization and NC Contact Opening 7 ... 21 ms Between Coil Energization and NO Contact Closing 10 ... 26 ms
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	Screw Terminals

## Technical UL/CSA

General Use Rating UL/CSA	(600 V AC) 30 A
Horsepower Rating UL/CSA	(120 V AC) Single Phase 1 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
Tightening Torque UL/CSA	Auxiliary Circuit 9 in-lb Control Circuit 9 in-lb Main Circuit 9 in-lb

## Environmental

Ambient Air Temperature	Close to Contactor Fitted with Thermal O/L Relay -25 ... 55 °C Close to Contactor without Thermal O/L Relay -40 ... 70 °C Close to Contactor for Storage -60 ... +80 °C Near Contactor for Operation in Free Air -40 ... 70 °C
Climatic Withstand	acc. to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 specification II
Maximum Operating Altitude Permissible	Without Derating 3000 m

## Material Compliance

Conflict Minerals Reporting Template (CMRT)	9AKK108467A5658
REACH Declaration	2CMT2021-006202
RoHS Information	2CMT2021-006277
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
WEEE B2C / B2B	Business To Business
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)

## Certificates and Declarations

CB Certificate	9AKK107492A7072
CCC Certificate	9AKK107492A7089

CCS Certificate	9AKK107492A7096
CQC Certificate	CQC2013010304646608
Declaration of Conformity - CCC	2020980304001066
Declaration of Conformity - CE	1SBD250011U1000
UL Certificate	UL_20140702-E312527-10-5

Container Information

Package Level 1 Units	1 piece
Package Level 1 Width	48 mm
Package Level 1 Depth / Length	78 mm
Package Level 1 Height	79 mm
Package Level 1 Gross Weight	0.34 kg
Package Level 1 EAN	3471522395818
Package Level 2 Units	30 piece
Package Level 2 Width	240 mm
Package Level 2 Depth / Length	295 mm
Package Level 2 Height	145 mm
Package Level 2 Gross Weight	10.2 kg

Classifications

Object Classification Code	Q
ETIM 6	EC000066 - Power contactor, AC switching
ETIM 7	EC000066 - Power contactor, AC switching
ETIM 8	EC000066 - Power contactor, AC switching
eClass	V11.0 : 27371003
UNSPSC	39121529
IDEA Granular Category Code (IGCC)	4755 >> Contactors
E-Number (Finland)	3707327

Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → AX Contactors → AX18

