

PRODUCT-DETAILS

# MC1C301ATWD

## MC1C301ATWD Mini Contactor 24 V DC - 3 NO - 0 NC - Screw Terminals



### General Information

Extended Product Type	MC1C301ATWD
Product ID	1SAL220372R9901
EAN	4013614542862
Catalog Description	MC1C301ATWD Mini Contactor 24 V DC - 3 NO - 0 NC - Screw Terminals
Long Description	The MC1C301ATWD mini contactor is a dimension optimized 3 pole contactor with 1 NC auxiliary contact and screw terminals. This device is a great solution when high performances are needed but the space is limited. Mini contactors are used in residential buildings, commercial buildings and industrial applications for the control of single or three-phase loads up to 4 kW (AC-3) and 20 A / 690 V (AC-1) or switching of control signals. The product is equipped with an extended operating limits coil and it's suitable for wall or rail mounting.

### Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85365080

### Popular Downloads

Instructions and Manuals	2CDC103061M6801
CAD Dimensional Drawing	2CDC001079B0201

## Dimensions

Product Net Width	45 mm
Product Net Height	48 mm
Product Net Depth / Length	68 mm
Product Net Weight	0.25 kg

## Technical

Number of Poles	3
Mini Contactor Type	Mini Contactor
Rated Operational Voltage	Auxiliary Circuit 690 V AC Auxiliary Circuit 440 V DC Main Circuit 690 V AC Main Circuit 440 V DC
Rated Frequency (f)	Auxiliary Circuit 50 Hz Auxiliary Circuit 60 Hz Auxiliary Circuit DC Control Circuit DC Main Circuit 50 Hz Main Circuit 60 Hz Main Circuit DC
Rated Impulse Withstand Voltage ( $U_{imp}$ )	Auxiliary Circuit 6 kV Main Circuit 6 kV
Rated Insulation Voltage ( $U_i$ )	750 V
Number of Main Contacts NC	0
Number of Main Contacts NO	3
Rated Operational Current AC-1 ( $I_e$ )	(690 V) 55 °C 20 A (690 V) 70 °C 16 A (230 V) 55 °C 20 A (230 V) 70 °C 16 A (400 V) 55 °C 20 A (400 V) 70 °C 16 A (500 V) 55 °C 20 A (500 V) 70 °C 16 A
Rated Operational Power AC-3 ( $P_e$ )	(230 V) Three Phase 2.2 kW (400 V) Three Phase 4 kW (500 V) Three Phase 4 kW (690 V) Three Phase, NO 4 kW
Rated Short-time Withstand Current Low Voltage ( $I_{cw}$ )	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 72 A
Number of Auxiliary Contacts NC	1
Number of Auxiliary Contacts NO	0
Rated Operational Current AC-15 ( $I_e$ )	(240 V) 6 A (400 V) 4 A (500 V) 2.5 A (690 V) 1.5 A
Rated Operational Current DC-13 ( $I_e$ )	(24 V) 5 A (48 V) 2.5 A (125 V) 0.55 A (250 V) 0.3 A (440 V) 0.15 A
Conventional Free-air Thermal Current ( $I_{th}$ )	Auxiliary Circuit 10 A Main Circuit 20 A
Rated Control Circuit Voltage ( $U_c$ )	24 V DC
Coil Operating Limits	(acc. to IEC 60947-4-1) for DC supply 0.85 ... 1.1 x $U_c$ (at $\theta \leq 55$ °C)
Degree of Protection	Auxiliary Circuit Terminals IP20

	Control Circuit Terminals IP20 Main Circuit Terminals IP20
Mechanical Durability	10000000 cycle
Minimum Switching Capacity	Auxiliary Circuit 17 V Auxiliary Circuit 5 mA
Maximum Electrical Switching Frequency	(AC-1) 300 cycles per hour (AC-15) 360 cycles per hour (AC-3) 1200 cycles per hour (DC-1) 600 cycles per hour (DC-13) 360 cycles per hour (DC-3) 600 cycles per hour
Connecting Capacity Main Circuit	Flexible with Ferrule 1x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Ferrule 2x 0.75 ... 1.5 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> Flexible 1/2x 0.75 ... 2.5 mm <sup>2</sup> Rigid 1x 0.75 ... 4 mm <sup>2</sup> Rigid 2x 0.75 ... 2.5 mm <sup>2</sup>
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 2x 0.75 ... 1.5 mm <sup>2</sup> Flexible with Ferrule 1x 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> Flexible 1/2x 0.75 ... 2.5 mm <sup>2</sup> Rigid 1x 0.75 ... 4 mm <sup>2</sup> Rigid 2x 0.75 ... 2.5 mm <sup>2</sup>
Connecting Capacity Control Circuit	Flexible with Ferrule 1x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Ferrule 2x 0.75 ... 1.5 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> Flexible 1/2x 0.75 ... 2.5 mm <sup>2</sup> Rigid 1/2x 0.75 ... 2.5 mm <sup>2</sup>
Wire Stripping Length	Auxiliary Circuit 9 mm Control Circuit 9 mm Main Circuit 9 mm
Tightening Torque	Auxiliary Circuit 0.8 ... 1.0 N·m Control Circuit 0.8 N·m Main Circuit 0.8 ... 1.0 N·m
Recommended Screw Driver	Pozidriv 2
Mounting on DIN Rail	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
Power Loss	at Rated Operating Conditions AC-1 per Pole 0.7 W
Standards	IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1 UL 60947-5-1

## Technical UL/CSA

Maximum Operating Voltage UL/CSA	Main Circuit 600 V AC
Full Load Amps Motor Use	(115 V AC) Single Phase 9.8 A (200 V AC) Three Phase 11 A (220 ... 240 V AC) Three Phase 9.6 A (230 V AC) Single Phase 10 A (440 ... 480 V AC) Three Phase 7.6 A (550 ... 600 V AC) Three Phase 6.1 A
Horsepower Rating UL/CSA	(115 V AC) Single Phase 0.5 Hp (200 V AC) Three Phase 3 Hp (220 ... 240 V AC) Three Phase 3 Hp (230 V AC) Single Phase 1.5 Hp (440 ... 480 V AC) Three Phase 5 Hp (550 ... 600 V AC) Three Phase 5 Hp
General Use Rating UL/CSA	(600 V AC) 20 A
Contact Rating UL/CSA	A600 Q600
Connecting Capacity Main	Stranded 1/2x 18-12 AWG

Circuit UL/CSA	
Connecting Capacity Auxiliary Circuit UL/CSA	Stranded 1/2x 18-12 AWG
Tightening Torque UL/CSA	Auxiliary Circuit 7 in-lb Control Circuit 7 in-lb Main Circuit 7 in-lb

## Environmental

Ambient Air Temperature	Operation -40 ... +70 °C Storage -55 ... +80 °C
Maximum Operating Altitude Permissible	3000 m
Resistance to Shock acc. to IEC 60068-2-27	11 ms Pulse 25g
Resistance to Vibrations acc. to IEC 60068-2-6	5g / 3 ... 150 Hz
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019

## Certificates and Declarations

BV Certificate	1SAA971000-0201
CB Certificate	1SAA971000-2001
CQC Certificate	CQC2019010304197131
Declaration of Conformity - CCC	2020980304001602
Declaration of Conformity - CE	1SAD101100-3201
Declaration of Conformity - UKCA	1SAD201100-3201
RINA Certificate	1SAA971000-0801
UL Certificate	E191658-19880826

## Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	46 mm
Package Level 1 Height	70 mm
Package Level 1 Depth / Length	49 mm
Package Level 1 Gross Weight	0.255 kg
Package Level 1 EAN	4013614542862
Package Level 2 Units	box 10 piece
Package Level 2 Width	243 mm
Package Level 2 Height	80 mm
Package Level 2 Depth / Length	106 mm
Package Level 2 Gross Weight	2.61 kg
Package Level 2 EAN	4013614543364

## Classifications

Object Classification Code	Q
ETIM 5	EC000066 - Magnet contactor, AC-switching

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
E-Number (Finland)	3709714

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## Categories

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

