

PRODUCT-DETAILS

# MCRK031ATD

## MCRK031ATD Mini Contactor Relay 3NO+1NC 24VDC 2W



### General Information

Extended Product Type	MCRK031ATD
Product ID	1SAH100534R9900
EAN	4013614547027
Catalog Description	MCRK031ATD Mini Contactor Relay 3NO+1NC 24VDC 2W
Long Description	The MCRK031ATD mini contactor relay is a dimension optimized 4 pole contactor relay with 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 switching of control signals up to 6 A / 240 V (AC-15). Thanks to the very low energy consumption coil, this product can be directly controlled by a PLC. The product is suitable for wall or rail mounting.

### Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85365080
Product Main Type	MCR

### Popular Downloads

Instructions and Manuals	2CDC103061M6801
CAD Dimensional Drawing	2CDC001079B0201

## Dimensions

Product Net Width	45 mm
Product Net Depth / Length	68 mm
Product Net Height	48 mm
Product Net Weight	0.235 kg

## Technical

Coil Consumption	Average Holding Value DC 2 W Average Pull-in Value DC 2 W
Coil Operating Limits	(acc. to IEC 60947-5-1) for DC supply 0.85 ... 1.1 x U <sub>c</sub> (at $\theta \leq 55^\circ\text{C}$ )
Connecting Capacity Auxiliary 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 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>
Maximum Electrical Switching Frequency	(AC-15) 360 cycles per hour (DC-13) 360 cycles per hour
Mechanical Durability	10000000 cycle
Mini Contactor Type	Mini Contactor Relay
Minimum Mounting Distance	Other Device Same Type, Horizontal 0 mm
Minimum Switching Capacity	Auxiliary Circuit 17 V Auxiliary Circuit 5 mA
Mounting Position	1 ... 6
Mounting Type	DIN-Rail Screw
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
Number of Auxiliary Contacts NC	1
Number of Auxiliary Contacts NO	3
Number of Main Contacts NC	0
Number of Main Contacts NO	0
Number of Poles	0
Power Loss	at Rated Operating Conditions per Pole 0.4 W
Rated Control Circuit Voltage (U <sub>c</sub> )	24 V DC
Rated Frequency (f)	Auxiliary Circuit 50 Hz Auxiliary Circuit 60 Hz Auxiliary Circuit DC Control Circuit DC
Rated Impulse Withstand Voltage (U <sub>imp</sub> )	Auxiliary Circuit 6 kV
Rated Insulation Voltage (U <sub>i</sub> )	750 V
Rated Operational Current AC-15 (I <sub>θ</sub> )	(240 V) 6 A (400 V) 4 A (500 V) 2.5 A

	(690 V) 1.5 A
Rated Operational Current DC-13 ( $I_{\theta}$ )	(24 V) 5 A (48 V) 2.5 A (125 V) 0.55 A (250 V) 0.3 A (440 V) 0.15 A
Rated Operational Voltage	Auxiliary Circuit 690 V AC Auxiliary Circuit 440 V DC
Recommended Screw Driver	Pozidriv 2
Short-Circuit Protective Devices	gG Type Fuses 10 A
Standards	IEC/EN 60947-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-5-1
Terminal Type	Screw Terminals
Tightening Torque	Auxiliary Circuit 0.8 ... 1.0 N·m Control Circuit 0.8 N·m
Wire Stripping Length	Auxiliary Circuit 9 mm Control Circuit 9 mm

## Technical UL/CSA

Connecting Capacity Auxiliary Circuit UL/CSA	Stranded 1/2x 18-12 AWG
Contact Rating UL/CSA	A600 Q600
General Use Rating UL/CSA	(600 V AC) 10 A
Maximum Operating Voltage UL/CSA	600 V AC
Pilot Duty UL/CSA	A600 Q600 A600 Q600
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
Conventional Free-air Thermal Current ( $I_{th}$ )	Auxiliary Circuit 10 A
Degree of Protection	Auxiliary Circuit Terminals IP20 Control Circuit Terminals IP20 Main Circuit Terminals IP20
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 Information	2CMT2021-006277
WEEE B2C / B2B	Business To Business
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)

## Certificates and Declarations

CB Certificate	1SAA971001-2001
CQC Certificate	CQC2019010303193580
Declaration of Conformity - CCC	2020980303000255
Declaration of Conformity - CE	1SAD101100-3201
Declaration of Conformity - UKCA	1SAD201100-3201
UL Certificate	E48139-19880829

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## Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	46 mm
Package Level 1 Depth / Length	49 mm
Package Level 1 Height	70 mm
Package Level 1 Gross Weight	0.24 kg
Package Level 1 EAN	4013614547027
Package Level 2 Units	box 10 piece
Package Level 2 Width	243 mm
Package Level 2 Depth / Length	106 mm
Package Level 2 Height	80 mm
Package Level 2 Gross Weight	2.46 kg
Package Level 2 EAN	4013614547423

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## Classifications

eClass	V11.0 : 27371001
ETIM 6	EC000196 - Contactor relay
ETIM 7	EC000196 - Contactor relay
ETIM 8	EC000196 - Contactor relay
ETIM 9	EC000196 - Contactor relay
Object Classification Code	K
UNSPSC	39121500

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## Categories

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

