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PRODUCT-DETAILS

# MCRA031AT4

## MCRA031AT4 Mini Contactor Relay 3NO+1NC 120V 50/60Hz

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### General Information

Extended Product Type	MCRA031AT4
Product ID	1SAH102037R9900
EAN	4013614545917
Catalog Description	MCRA031AT4 Mini Contactor Relay 3NO+1NC 120V 50/60Hz

Long Description	The MCRA031AT4 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). The product is suitable for wall or rail mounting.
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### Ordering

EAN	4013614545917
Minimum Order Quantity	1 piece
Customs Tariff Number	85365080

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### Dimensions

Product Net Width	45 mm
Product Net Height	48 mm
Product Net Depth / Length	56 mm
Product Net Weight	0.17 kg

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### Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	46 mm
Package Level 1 Height	58 mm
Package Level 1 Depth / Length	49 mm
Package Level 1 Gross Weight	0.175 kg
Package Level 1 EAN	4013614545917

Package Level 2 Units	box 20 piece
Package Level 2 Width	237 mm
Package Level 2 Height	120 mm
Package Level 2 Depth / Length	102 mm
Package Level 2 Gross Weight	3.55 kg
Package Level 2 EAN	4013614546464

## Environmental

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

## Technical UL/CSA

Contact Rating UL/CSA	A600 Q600
General Use Rating UL/CSA	(600 V AC) 10 A
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
Pilot Duty of Contact Elements acc. UL508	A600 Q600

## Additional Information

Coil Consumption	Average Holding Value 50 Hz 5.3 V·A Average Pull-in Value 50 Hz 5.3 V·A
Coil Operating Limits	(acc. to IEC 60947-5-1) for AC supply 0.85 ... 1.1 x U <sub>c</sub> (at $\theta \leq 55$ °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>
Conventional Free-air Thermal Current (I <sub>th</sub> )	Auxiliary Circuit 16 A

Degree of Protection	Auxiliary Circuit Terminals IP20 Control Circuit Terminals IP20 Main Circuit Terminals IP20
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 Switching Capacity	Auxiliary Circuit 17 V Auxiliary Circuit 5 mA
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
Mounting Position	Any, Position 1-6
Mounting Type	DIN-rail Screw
Number of Auxiliary Contacts NC	1
Number of Auxiliary Contacts NO	3
Number of Poles	0
Number of Main Contacts NC	0
Number of Main Contacts NO	0
Power Loss	at Rated Operating Conditions per Pole 0.4 W
Product Main Type	MCR
Product Name	Mini Contactor
Rated Control Circuit Voltage ( $U_c$ )	120 V AC
Rated Frequency (f)	Auxiliary Circuit 50 Hz Auxiliary Circuit 60 Hz Auxiliary Circuit DC Control Circuit 50 Hz Control Circuit 60 Hz
Rated Impulse Withstand Voltage ( $U_{imp}$ )	Auxiliary Circuit 6 kV Main Circuit 6 kV
Rated Insulation Voltage ( $U_i$ )	750 V
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 ( $I_e$ )	(125 V) 0.7 A (24 V) 5 A (250 V) 0.3 A (440 V) 0.15 A (48 V) 2.5 A
Rated Operational Voltage	Auxiliary Circuit 690 V AC Auxiliary Circuit 440 V DC
Standards	IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-4-1 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

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## Certificates and Declarations (Document Number)

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BV Certificate	BV_M_Range
CB Certificate	1SAA971001-2001
CCC Certificate	CCC_MCR
cULus Certificate	cUL_E48139
Declaration of Conformity - CE	1SAD938502-0305
EAC Certificate	1SAA971001-2701
Instructions and Manuals	2CDC103061M6801
RoHS Information	1SAD038501-0305

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## Classifications

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ETIM 5	EC000196 - Contactor relay
ETIM 6	EC000196 - Contactor relay
ETIM 7	EC000196 - Contactor relay
Object Classification Code	K
UNSPSC	39121500
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)
eClass	7.0 27371001

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## Categories

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