

Relay module



Key Features

- Control of up to 8 high voltage relays for e.g. heating cartridges
- Safety functions
- Compact dimensions
- Top hat rail mounting
- Attractive price-performance ratio

The relay module is a module for controlling up to 8 high voltage relays with 400V for e.g. heating cartridges. Its housing is designed for saving costs while being mounted in a control cabinet. The device possesses the shortest conversion times and a high process reliability. That makes it the best choice for continuous operation in complex machine networks.

Housing

The compact housing is made for being in a control cabinet. It contains a top hat rail mount and a front cover with all interfaces for better overview in the control cabinet. The technician will note the convenience while working at the bus cabling.

Power supply

Phase L1 is only looped in. L2 and L3 are used for controlling the consumers. There is a current measurement integrated that enables a monitoring of each relay. It is build in 2 blocks with 4 relays each.

Relais

A key feature of the relay module is its high process reliability. Its RP1 is a semiconductor relay for embedded board assembly with 3 regulated control currents for handling its consumers. Major advantages are both a high surge current and interference resistivity while switching AC loads.

LEDs and switches

Several status LEDs allow to visualise different operating modes and warning messages from its safety functions like heartbeat telegrams. Configuration of the module address and baud rate can be done via HEX switches and braze jumpers. The relay module is turned to 250 Kbit as a standard.

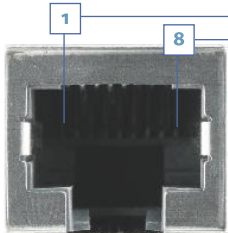
Signal processing

There is a powerful ARM7 micro-controller on the module for controlling the relays and the CAN protocol. Additionally, heartbeat is integrated into the device.

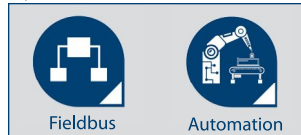
CAN-Interface

The integrated CAN-interface is designed in accordance to DS301 and 401 for a flexible use in different places and tasks in the CAN-bus network. All Sontheim CAN-interfaces comply to ISO11898.

Relay module	Technical Data
Housing	
Dimensions (l × w × h)	285 mm × 77 mm × 37 mm
Weight	185 g with clamps 155 g without clamps
Assembly	Top hat rail
Temperature range	Operating 0 °C to 60 °C extended range available upon enquiry Storage -30 °C to 70 °C
Humidity	90 %, non-condensing
Conformity to EMI guidelines	EN 61000-6-4 and EN 61000-6-2 (industrial applications)
Power supply	12V DC to 30V DC
Operating status	1 × LED green for operating mode (Run) 1 × LED red for error status (Err) 1 × LED green for power supply
Micro-controller	ARM 7-based
CAN	Interface according to ISO 11898 Connection via RJ45 connector
Settings	Module address with 2 HEX-switches Baud rate via braze jumpers
Relay data	
Load voltage	2 – 530 VAC
Peak off-state voltage	1000 V
Input load circuit	4 kVAC
Rated frequency range	45 – 65 Hz
Power factor	> 0,5
Zero potential for power on	< 10 V
Certificates	UL, cUL, VDE
CE	yes

RJ45	Pin	Pin assignment
	1	–
	2	–
	3	–
	4	CAN L (low)
	5	CAN H (high)
	6	–
	7	CAN GND (ground)
	8	–

A product out of the Sontheim Portfolio:



Ordering information

V966305100

RM-Relay module