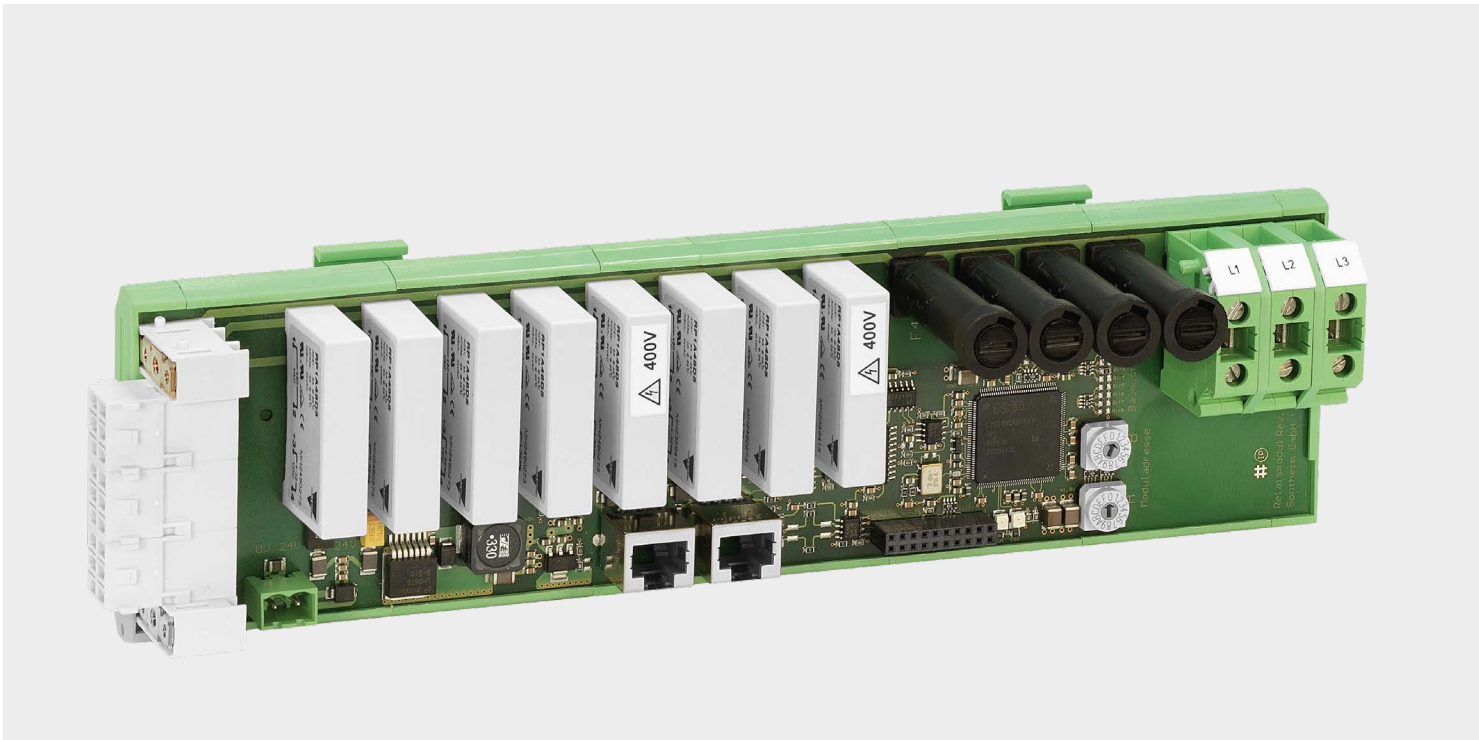# Sontheim

Relay module

Small, fast and cost-saving

Relay module

The relay module allows the control of up to eight heating cartridges with 400 V. It is designed in the open construction typical for the Light family and impresses with its very good price-performance ratio. With its extremely short conversion times for signal processing and high process reliability, this module is also ideally suited for continuous operation in complex machine networks.

Key Features

- Controlling up to 8 heating cartridges

- Integrated safety functions

- Small dimensions

- Simple top hat rail mounting

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 two blocks with four relay each.

Relay

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

Technical Data

CPU	ARM 7-based
CAN	1× CAN interface according to ISO 11898, Connection with RJ45 socket
Operating system display	1× LED green for operating mode (run) 1× LED red for error status (err) 1× LED green for power supply
Setting	of module address via 2 HEX switches of baud rate via solder jumper
Dimensions (l×w×h)	285 mm × 77 mm × 37 mm
Weight	185 g with clamps 155 g without clamps
Type of installation	Hat rail
Storage temperature	−30 °C up to +70 °C
Operating temperature	0 °C up to +60 °C (extended temperature range is optionally available)
Humidity	90 % non-condensing
Conformity for EMC directives	EN 61000-6-4 and EN 61000-6-2 (Industrial sector)
Power supply	12 V DC up to 30 V DC

Relay-Data	
Load voltage range	2 – 530 V AC
Peak reverse voltage	1000 V
Input – load circuit	4 kV AC
Nominal frequency range	45 – 65 Hz
Power factor	> 0,5
Switch-on zero voltage	< 10 V
Approvals	UL, cUL, VDE
CE-Identification	Yes

Pin assignment

RJ 45

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

LEDs and switches

Several status LEDs allow to visualize 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 solder jumpers. It is turned to 250 Kbit/s as a standard.

Signal processing

There is a powerful ARM7 microcontroller on the module for controlling the relay and the CAN protocol. Additionally, heartbeat is integrated into the device.

CAN interface

The integrated CAN interface is designed in accordance to DS 301 and 401 for a flexible use in different places and tasks in the CAN bus network. All Sontheim CAN interfaces comply to ISO 11898.

Order information

V966305100	RM-Relay module

Mobile Automation

Industrial Automation

Diagnostics

Connectivity

We are looking forward to your enquiry!

Sontheim Industrie Elektronik GmbH

Georg-Krug-Straße 2
D-87437 Kempten
Phone: +49 (0) 831 575900-0
Fax: +49 (0) 831 575900-72
Email: info@s-i-e.de

Sontheim Electronic Systems L.P.

201 West 2nd Street
Davenport, IA 52801, USA
Phone: +1 563 888 1471
Email: info@sontheim-esys.com

www.s-i-e.de