

RHP Hybrid Solid-State Relays

Crouzet Products / Automation Controls / Solid State Relays / Hybrid Solid State Relays

PRODUCT FEATURES

The RHP series "Hybrid" SSR combines the benefits of electromechanical relays with those of a solid-state relay. The result is a compact relay capable of 5M+ operations at the rated load current!

- + 20 amp output at 240Vac (resistive)
- + Compact 17.5mm housing
- + No additional heat sink required
- + >5 million operations at full-load current
- + Quiet operation
- + 2000Vac optical isolation
- + UL/cUL Listed, CE Compliant

[RHP hybrid solid-state relay press release](#)

[RoHS Information](#)



RHP Series Hybrid Solid State Relays

Current	Output voltage	Input voltage	Termination	Switching	Part number
20 A	90-260 V AC	3-32 V DC	Screw Terminal	Zero crossing	84138000
20 A	90-260 V AC	90-260 V AC	Screw Terminal	Zero crossing	84138001
20 A	90-260 V AC	90-260 V AC	Screw Terminal	Bistable	84138101
20 A	90-260 V AC	90-260 V AC	Screw Terminal	Day/Night Contactor	84138201

Hybrid Power Relay – RHP (Single Pole Relay)

- 20 Amp output (Resistive only)
- Every SSR advantage without the drawbacks
- Lifetime > 5 million operations full load
- Noiseless
- Functions: contactor – bistable
- 17.5 mm DIN rail mount
- UL/cUL (listed)
- Label NF-USE
- CE compliant

Operation:

Contactor

Output of the contactor is closed when the input is On.
Output of the contactor is opened when the input is Off.
Led is On when the output is closed.

Bistable Relay

Output of the bistable changes of status for every pulse on the input and stays in its position between pulses.
Front plate push button allows to select the operation mode:
Stop – led off – output off
On forced – led flashing – output on
Auto – led on – bistable relay operation

Day/night contactor

Output of the contactor is closed when the input is On
Output of the contactor is opened when the input is Off.
Front plate push button allows to select the operation mode:
Stop – led off – output off
On forced – led flashing – output on – back to the Auto mode at the next change of the input.
Auto – led on – day/night contactor operation

Compliance

CEI/EN 60947-4-3 (industrial environment)
CEI/EN 60669-2-1 (household environment)
CEI/EN 60601-1 (medical environment)
CEI/EN 60947-7-1 (connections in industrial env.)
CEI/EN 60998-2-1 (connections in household env.)

Insulation:

Installation category: 3
pollution: 3
CEI60664-1: 4KV/3
dielectric CEI/EN 60669-2-1:
2 KV/1mm / 1mA / 50 Hz

Insulation CEI/EN 60669-2-1:
> 5M Ω /500VDC / 1 min

Vibrations CEI/EN 60068-2-6: frequencies: 10 to 55 Hz
magnitude: 0,35 mm



Type

Part number

AC input contactor	84 138 001
DC input contactor	84 138 000
AC input distable relay	84 138 101
AC input day/night contactor	84 138 201

Specifications

Power supply	90-260 Vac
Frequency	50 / 60 Hz
Max. power consumption	11 VA

Input Control

Voltage	90-260 Vac	0-32 Vdc
Frequency	50 / 60 Hz	
Value		
Input OFF	0 – 46 Vac	0 – 1 Vdc
Input ON	76 – 260 Vac	4 – 32 Vdc
Min. time input	50 ms	50 ms

Output

Voltage	90-260 Vac
Max. current	20A in AC1 / AC51 / AC7a
Overload current 20A	AC-51: 1,25 x I _e – 60s: 50 – 30 (CEI 60947-4-3)
Min current	100mA in AC1 / AC51 / AC7a
Frequency	50 / 60 Hz
Contact	N.O.
Switching frequency	6 / min
lifetime	> 5,000,000
leakage current	< 5 mA
Acoustic noise	
ON position	< 35 dB @ 1m
switching	< 50 dB @ 0.5m
terminal capacity	2 x 1.5 mm ² with ferrule
2 x 2.5 mm ² without ferrule	
1 x 4 mm ² without ferrule	
Torque	1Nm maxi. screw M3 (CEI 60947-1)

Operating temperature:	–5°C to +55°C
Storage temperature	–40°C to +85°C
Humidity	90 to 95% non-condensing
Housing	self extinguish
protection	housing IP 50
(CEI 60529)	terminal IP 20
weight	70 gr

