

- AC solid state relay for PCB mounting.
- Zero switching.
- Low leakage current.
- High surge current capability.
- 5 A load current/1/2 HP
- Up to 650 V<sub>p</sub> non-repetitive voltage.
- Up to 280 V<sub>RMS</sub> line voltage.
- 2 Input ranges: 3-12 VDC, 10-32 VDC.
- Isolation: OPTO (Input-output) 4 KV.

## SPECIFICATIONS

Input	RP 130 240-5-OLC	RP 130 240-5-OXC
Control voltage range	3-12 VDC	10-32 VDC
Pick up voltage, max.	3 VDC	10 VDC
Drop out voltage, min.	1 VDC	1 VDC
Reverse voltage, max.	6 VDC	6 VDC
Resp. time pick up, max.	1/2 cycle	1/2 cycle
Resp. time drop out, max.	1/2 cycle	1/2 cycle
Input impedance	330 Ω	1.5 KΩ

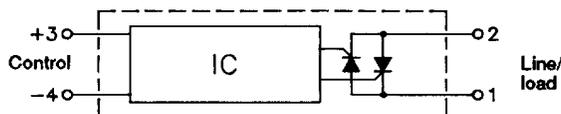
## Output

Load current, max.	5 A <sub>RMS</sub>
Load current, min.	20 mA <sub>RMS</sub>
Overload current t=1 s, max	15 A
Non-rep. surge current t=20 ms, max.	120 A <sub>p</sub>
Off-state leakage curr. @ rated voltage:	
typ.	10 μA <sub>RMS</sub> @ T <sub>j</sub> =25°C
max.	1 mA <sub>RMS</sub>
I <sup>2</sup> t for fusing t=10 ms, max.	130 A <sup>2</sup> s
di/dt, max.	100 A/μs
On-state voltage @ rated current, max.	1 V <sub>RMS</sub>
dV/dt Off-state, max.	500 V/μs
dV/dt Comm., max.	500 V/μs
Line voltage range	12-280 VAC
Non-rep. voltage, max.	650 V <sub>p</sub>
Zero voltage turn-on:	
typ.	± 4 V
max.	± 15 V
Line frequency range	47-63 Hz
Power factor, min.	< 0.1

## Thermal data

Operating temp. range	-40 to +80°C
Storage temp. range	-40 to +100°C
Junction temperature, max.	125°C
Thermal resistance junction-ambient, max.	22°C/W
Thermal resistance junction-case, max.	15°C/W

## WIRING DIAGRAM



◇ Items not produced by the holder of the ISO 9001 certificate

## Isolation

Input-output	
Voltage	4000 VAC <sub>RMS</sub>
Resistance, min.	10 <sup>10</sup> Ω
Capacitance, max.	8 pF

## Note on application

This relay is intended for use where it is essential that the leakage current is low.

Consequently, the relay does not contain any overvoltage protection, and in applications where overvoltage may occur, f.inst. at inductive loads, the relay should be protected by means of an external varistor having a diameter of min. 10 mm and a rated value of 250 VAC.

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130: Zero switching

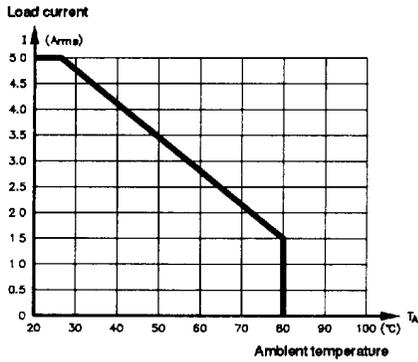
Line voltage  
240: 12-280 VAC

Load current  
5: 5 A

Control voltage  
OLC: 3-12 VDC  
OHC: 10-32 VDC

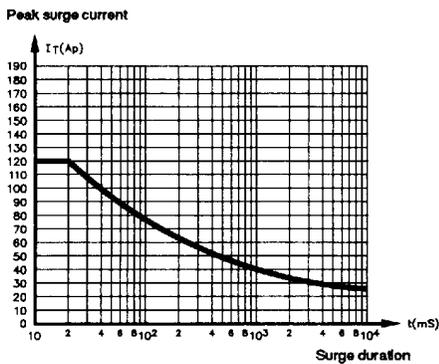
◇ R P	130	240	-5	-OLC -OHC
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**Derating curve**



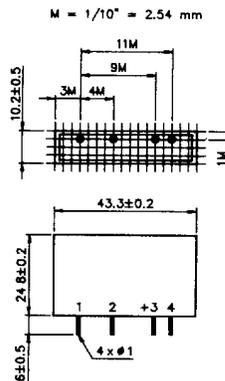
**Non-repetitive surge current curve**  
f=50 Hz.

The curve is only applicable in case of faults such as completely or partly short-circuited loads. The curve is *not* applicable for normal operation.



**MECHANICAL DATA**

Housing material/colour: Noryl GFN 1, black  
 Terminals: Tin-plated phos. bronze  
 Potting compound: Polyurethane



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