Datasheet

RSHV-AC Interposing Relay
with Leakage Current Immunity

The RSHV-AC was designed for applications using PLC triac outputs. Typically a triac is used with an RC circuit (a “snubber”) in parallel. The snubber protects the triac from false triggering due to back-EMF from inductive loads but also creates an off-state leakage current. This is because the snubber creates a circuit between the AC power source and the load when the triac is turned off.

Off-state leakage currents of 2.5-4mA are not uncommon although 1-2mA is more likely. However, even 1mA of off-state leakage can interfere with the operations of AC coil interposing relays. A relay with a 120V nominal AC coil could latch closed when the triac turns off due to the leakage current. This can damage equipment and create a potential safety hazard.

The RSHV-AC provides immunity to up to 6.5mA of off-state leakage current.

Features:
- socket mounted relay
- 1 form C (SPDT), 5A rating
- 6.5mA leakage current immunity
- mounts on 32mm and 35mm DIN rail
- CSA approved
# RSHV-AC Interposing Relay with Leakage Current Immunity

## Specifications:

### Input
- Nominal rating:

### Output
- Switching capacity:

### Contact material:
- Contact arrangement:
- Switching time (incl. bounce):
  - 0 mA leakage
  - 1 mA leakage
  - 2.4 mA leakage
  - 5.0 mA leakage

## General
- Input-output isolation:
- Indication:
- Wire size:
- Approval:
- Catalog number:

### Technical Details:

<table>
<thead>
<tr>
<th>Input Nominal rating</th>
<th>Output Switching capacity</th>
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<tbody>
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<td>5A @ 220Vac</td>
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### Indication:
- none (leakage current would cause an indicating LED to glow even when the relay was not energized)

### Wire size:
- 26 - 12AWG (0.5 - 2.5mm²)

### Approval:
- CSA

### Catalog number:
- 99028800000

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Note: Weidmuller offers 2 other relay modules with off-state leakage current immunity ratings. The MC6RF is just 8mm wide and includes a fuse. Leakage current immunity is over 5mA but the LED starts to glow at approximately 2.5mA. The PRS with optional plug-in snubber provides immunity up to 1.6mA. The PRS is a socket mounted relay rated up to 16A. Consult Weidmuller for details on these two relay modules.