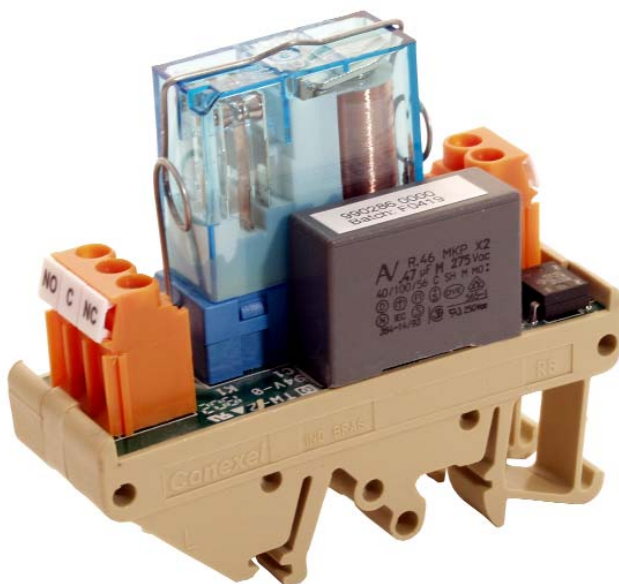


## RSHV-AC Interposing Relay with Leakage Current Immunity



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

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## RSHV-AC Interposing Relay with Leakage Current Immunity

### Specifications:

#### Input

Nominal rating:

120Vac, 23mA  
6.5mA min. holding current

#### Output

Switching capacity

5A @ 220Vac  
5A @ 24Vdc  
0.3A @ 125Vdc  
Ag-Ni 90-10%  
1 form C (SPDT)

Contact material:

Contact arrangement

Switching time (incl. bounce)

0mA leakage

1mA leakage

2.4mA leakage

5.0mA leakage

22ms on, 40 ms off, max. switching frequency 12.5Hz  
15ms on, 41ms off, max. switching frequency 12Hz  
15ms on, 45ms off, max. switching frequency 11Hz  
15ms on, 68ms off, max. switching frequency 7Hz

#### General

Input-output isolation:

Indication:

2500V

none (leakage current would cause an indicating LED to glow even when the relay was not energized)

Wire size:

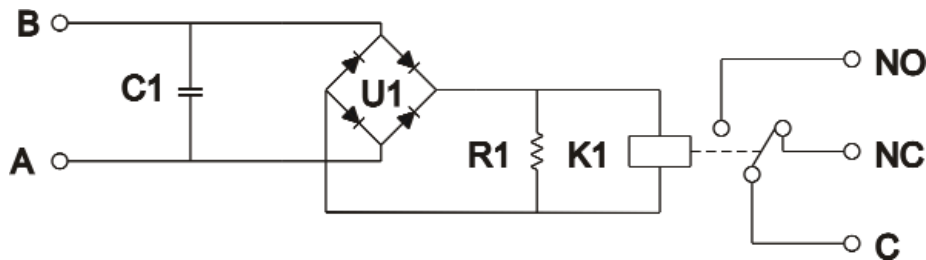
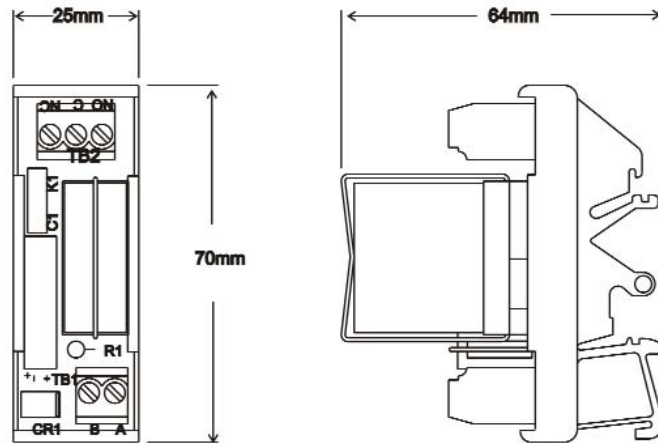
Approval:

26 - 12AWG (0.5 - 2.5mm<sup>2</sup>)

CSA

Catalog number:

9902860000



Note: Weidmüller 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 Weidmüller for details on these two relay modules.