Two Wire Electronic Time Delay Switch for Exhaust Fans

Installation Instructions

2031VETF and 31VETF Series

250V 10A Total Load
Fan Load 2A Max.

REGISTERED PATENT
REGISTERED DESIGN

The Clipsal 31VETF Series is an electronic time delay switch which provides extended exhaust fan operations to ensure proper ventilation in bathrooms and toilets.

This latest, revised model of our popular 31VETF represents our third generation of evolving electronic technology. The 31VETF Series does not require a direct neutral connection and is consequently known as a two wire device.

It uses a single switch to operate both lighting and an exhaust fan. Both loads switch on simultaneously when the switch is operated, but when the lighting is turned off, the exhaust fan continues to run for several minutes.

Time Delay Intervals Available

The 31VETF Series is adjustable to allow fans to continue to run from 3 minutes to 10 minutes (approximately) after the lighting is turned off. The delay adjustment is accessible on the rear of the device.

Operation

Turning on the switch will cause both the lights and the fan to operate. The electronic timer starts when the switch is turned off. The lights are controlled directly by the switch, however, the fan will run for its preset timer period when the lights are turned off. Turning the lights on and off again, while the fan is still running, will cause the timer period to restart.

The fan will activate for a timer cycle whenever power is re-applied to the unit. eg. initial installation, power failure/return, fan replacement.

Wiring Details

Wiring should be done as shown. An additional switch can be fitted to override the timer and turn the fan off. It must be placed in the ‘Fan Load’ connection as shown in this diagram.
In some installations this switch may be required to comply with the wiring rules. Should it be necessary to mount the 31VETF remotely from the switching location, a Clipsal Cat. No. 30MD can be used. (see fig.1) Wiring between this switch and the 31VETF should be carried out with regard to the following guide lines:

a. Both line and fan must be wired in a common cable (eg. twin). This will avoid electrical interference effects on the 31VETF.

b. The total load current (fan plus light) must not exceed 10A.

c. Maximum allowable cable lengths between the 31VETF and the remote switch are:

<table>
<thead>
<tr>
<th>Cable Size</th>
<th>Max Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>1mm²</td>
<td>20 metres</td>
</tr>
<tr>
<td>2mm²</td>
<td>20 metres</td>
</tr>
</tbody>
</table>

d. Not suitable for use with fluorescent loads.

**Ratings**

<table>
<thead>
<tr>
<th>Operation Voltage</th>
<th>200-280V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Total Load</td>
<td>10A</td>
</tr>
<tr>
<td>Maximum Light Load</td>
<td>10A</td>
</tr>
<tr>
<td>Maximum Fan Load</td>
<td>2A</td>
</tr>
<tr>
<td>Minimum Fan Load</td>
<td>40mA</td>
</tr>
</tbody>
</table>

Offstate Leakage Current through Fan........8mA at 25˚C Max.

Operating Temperature Range..............10˚C to +45˚C

**NOTE:** Two wire devices obtain their power through the ‘Load’. This results in current flow, through the ‘Fan Load’ in the OFF state. Due to advances in technology and design, Clipsal two wire devices draw only 8mA @ 25˚C.

Fig. 1 31VETF Series wiring diagrams

**NOTE:** Some installations may require an additional isolating switch in the ‘Fan Load’ circuit to comply with the wiring rules.

---

**Product of Clipsal Australia Pty Ltd**

ABN 27 007 873 529

12 Park Terrace, Bowden, South Australia 5007

Telephone (08) 8269 0511

Facsimile (08) 8340 1724

E-Mail plugin@clipsal.com.au

National Customer Service Enquiries:

Tel 1300 2025 25

Fax 1300 2025 56

© Copyright Clipsal Australia Pty Ltd 2006.

All rights reserved.

F352/04

CLIPCOM12760