**Quicktronic® Powersense® T5**

**Dimming Universal Voltage**

**High Efficiency Series**

**Lamp / Ballast Guide**

- 28W T5 - Pentron®
- 2-lamp GTPx28T5/UNV DIM
- Primary Lamp Type: FP28
- Also operates: FP35, FP21, FP14

**Key System Features**

- Industry’s first ballast that combines dimming inputs from 0-10V and/or two-wire AC dimming providing maximum flexibility
- POWERSENSE compatibility with low voltage and power line dimmers
- High Efficiency
- Lamp Detection Technology
- Universal voltage (120-277V)
- 100-1% Dimming Range
- PROStart programmed rapid start
- Anti-flash circuitry – turns on in dimmed mode
- Lightweight and low profile
- Operates at >42kHz
- QUICKSENSE ballast technology (end-of-lamp-life sensing)
- QUICK 60+ ballast and lamp warranty

**SYLVANIA Quicktronic Powersense**

SYLVANIA Quicktronic Powersense ballasts operate linear fluorescent T5 lamps over a wide (100-1%) dimming range and provide true versatility in controls selection. Quicktronic Powersense ballasts feature micro-controller technology to offer the industry’s most adaptable dimming ballast. Compatibility with low voltage controls, power line dimmers and any line voltage from 120V to 277V, provides the flexibility to greatly simplify the specification, purchasing and installation process.

Patented lamp detection technology delivers unmatched performance. Variations in brightness from lamp-to-lamp are virtually eliminated, providing uniform lighting throughout the dimming range. At light levels of >75% unnecessary lamp-coil power is turned off, delivering energy efficiencies comparable to non-dimming instant start electronic ballast. This technology also eases installation and troubleshooting by recognizing failed lamps, faulty wiring or loose connections, and shutting down. When the problem is corrected, the system restarts automatically. All SYLVANIA Professional Series (QTP) electronic ballasts feature high power quality (<10% THD), lightweight, low profile designs.

**System Information**

Quicktronic Powersense ballasts operate from standard low voltage (0-10VDC) fluorescent controllers or compatible 2-wire power line fluorescent dimmers, making them ideal for individual office lighting or automated building applications, both in new construction and retrofit projects.

For the individual office or conference room, installation can be streamlined by using a 2-wire power line dimmer; eliminating the need for additional control wires.

For more advanced systems, such as daylight harvesting or building automation applications, standard low voltage devices (0-10VDC, Class 1 or 2) are used to control the lighting system. In this daylight harvesting example, each lighting fixture (or fixture row) is controlled by its own photosensor, regulating the light output to compensate for changes in natural daylight. Depending upon the specific application, energy savings of up to 60% compared to fixed output electronic systems can be realized.

All Quicktronic Powersense models include a line voltage protection circuit, which protects the ballast in the event that line voltage is inadvertently applied to the low voltage control inputs.
Control Information

QUICKTRONIC POWERSENSE® ballasts are compatible with a wide range of low voltage (0-10VDC) and power line fluorescent controllers available from various manufacturers. Please see controls list and dimming control wiring examples on page 86 & 87 or contact OSRAM SYLVANIA.

Low Voltage Control Specs:
Ballast will source up to 0.5mA for 0-10VDC control purposes. May be wired as a Class 1 or Class 2 circuit—consult Local and National Electrical Codes.

Power Line Control Specs:
Specification-grade fluorescent controls are available for 120V or 277V operation of controllable analog electronic fluorescent ballasts. Controls must be suitably rated for both the type (e.g. Fluorescent Phase-control) and size (e.g. 600W) of the connected load. THD: <10% @ Full Output
Power Factor: >98% @ Full Output
UL Listed Class P, Type 1 Outdoor CSA or C/UL Certified
70°C Max Case Temperature
FCC 47 CFR Part 18 Non-Consumer Class A Sound Rating
ANSI C62.41 Cat. A Transient Protection
No Remote or Tandem Wiring

Dimensions:
2 lamp enclosure
Overall: 16.7” L x 1.68” W x 1.0” H (425 x 43 x 25 mm)
Mounting: 16.2” (411 mm)
Weight: 2.1 lbs each (950 g)

Wiring:
Leads Only

Output Wiring: Lamp wiring for dimming ballasts can differ significantly from non-dimming ballasts and from other manufacturers’ dimming ballasts. Take care to connect lamp lead wires as shown on the applicable ballast diagram.

Input & Control Wiring Options:

LOW-VOLTAGE CONTROL

<table>
<thead>
<tr>
<th>Line</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>White</td>
</tr>
<tr>
<td>0-10VDC</td>
<td>0.56 x 0.56</td>
</tr>
<tr>
<td>VIOLET (+)</td>
<td>GREY (-)</td>
</tr>
</tbody>
</table>

POWERLINE CONTROL

<table>
<thead>
<tr>
<th>Line</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>White</td>
</tr>
<tr>
<td>INSULATE UNUSED LEADS VIOLET (+)</td>
<td>GREY (-)</td>
</tr>
</tbody>
</table>

Specifications subject to change without notice.