Fluorescent Starters

Technical Information

Pulsestarter EFS 400

Lamp types: 18-65W linear lamps T8/T12, 16-38w tc-dd, 18-26w TC-DE, 24-36w tc-l 22-60w circular and U-tubes

- Supply voltage: 200-260V AC 50/60 HZ single lamps
- Operating temperature: -30˚C to +75˚C
- Preheat: 2.0S nominal @ 20˚C
- 3.0S nominal @ -40˚C
- HV pulsing: Single pulse 1500V maximum
- Safety shutdown: Within 2.5 seconds @ 20˚C, Within 3.5 seconds @ -40˚C
- Markings: CE and ENC 12

Pulsestarter Technical Section

More than 20 years of research, development and production provide the most reliably proven Electronic Starter for fluorescent lamps in the world.

Specified for many prestigious projects worldwide, the Pulsestarter has set international performance standards which are still to be equalled.

The Pulsestarter offers a number of advantages in relation to conventional devices:

- Fully optimised electronic ignition sequence
- Significantly extends standard lamp life
- Improved lumen maintenance
- Automatic failed lamp safety shut down
- Automatic reset
- Smooth no flicker starting
- Low temperature starting
- Long life performance

The Pulsestarter increases lamp life and therefore significantly reduces harmful mercury waste.

The Pulsestarter is environmentally friendly.

Pulsestarter was the world's first electronic starter to provide a fully optimised programmed strike mode for fluorescent lamps. It has been much refined since its conception in the 1980s.

T8 (26mm) lamps are more difficult to strike than their T12 (38mm) predecessors, and have less robust cathode assemblies. Cathode wear during starting is the limiting factor on tube life, and with the introduction of energy saving T8 lamps, this has increased.

When a tube reaches the end of its life, a lamp failure monitoring circuit shuts the starter down until the lamp is replaced - avoiding repeated attempts to strike failed or faulty lamps and preventing excessive heat build up in the control gear and intrusive flashing.

Although more costly than the unit it replaces, Pulsestarter offers in real terms a 70% reduction in fluorescent maintenance labour costs, as well as extending tube life by over 50%.

At the 7,500 hours nominal life quoted by most lamp manufacturers, the user can expect to have suffered 30% failures due to cathode damage. At this point the light output has fallen to only 90% of design lumens.

The Pulsestarter programme strike mode was developed to ensure that the new lamps delivered a real saving - and not just an energy saving which could be cancelled by increased maintenance costs.

Pulsestarter avoids the problem of cold striking by fully heating the cathodes to optimum operating temperature before applying a controlled striking pulse. Therefore wear during starting is virtually eliminated, and tube life is extended to the point where lumen deficiency determines replacement. If the Pulsestarter had been fitted, the early cathode failures would have been eliminated, and the user could have chosen to relamp at a point when lamp output had fallen to a predetermined level. Typically, if 85% of design lumen output was considered the minimum acceptable level, the lamps could be changed at 15,000 hours. With Pulsestarter, the cathodes would still be functioning 100%.

Using solid state construction, Pulsestarter offers long life performance, and need not be replaced during planned lighting maintenance - saving the cost of replacement starter switches.

Our policy of achieving international approvals is your assurance of our consistent quality.