QUICKTRONIC HELIOS™ CF
UNV Dimming Systems

**Professional Series**

### Lamp / Ballast Guide

**Primary Systems**
- 26W T4 - DULUX D/E, T/E
- 1 or 2 lamp QTP2X26CF/UNV DIM-DM

**Also operates:**
- 13W T4 - DULUX D/E, T/E (1 or 2 lamps)
- 18W T4 - DULUX D/E, T/E (1 or 2 lamps)
- 32W T4 - DULUX T/E (1 lamp)
- 42W T4 - DULUX T/E (1 lamp)

### Key System Features
- Universal input voltage (120-277V)
- Dual entry, color coded connectors
- PROStart® program rapid start ballast
- QUICKSENSE® ballast technology
- High power factor
- Low harmonic distortion
- Small size and lightweight
- Metal enclosure
- UL, CSA, FCC
- QUICK 60+ warranty
- 100%-3% dimming range
- 0-10V control
- Anti-flash circuitry - turns on in dimmed mode
- RoHS compliant
- Lead-free solder and manufacturing process

### System Information

SYLVANIA QUICKTRONIC HELIOS CF dual entry dimming ballasts operate DULUX® D/E and T/E lamps with full lumen output and optimal system performance over a wide dimming range (100% to 3%).

This ballast features one mounting style of low profile, lightweight enclosures to provide simple assembly for any fixture application.

Universal input voltage (120-277V) and multi-lamp multi-watt capability allow for fewer SKUs to support a wide range of applications.

Dual entry, color coded, wire trap connectors located on the side and bottom allow for increased mounting flexibility with one ballast and also increased ease of installation.

QUICKTRONIC HELIOS CF ballasts are RoHS compliant and feature lead-free solder and manufacturing process.

Set the standard for quality, QUICKTRONIC HELIOS CF dual entry dimming systems are covered by the QUICK 60+ warranty, the first and most comprehensive system warranty in the industry.

### Application Information

SYLVANIA QUICKTRONIC CF ballasts are ideally suited for:
- Recessed downlights
- Wall sconces
- Ceiling fixtures
- Commercial
- Retail, hospitality, institutional
- Occupancy sensors
- Daylight harvesting
- Energy management
- Load shedding

### QTP CF DIM

**QTP2x26CF/UNV DIM-DM Metal Case**
- Dual Entry Metal with Side & Bottom Mount Capabilities

### Compact Fluorescent
Controllable Lighting Systems

**Compact Fluorescent
Controllable Lighting Systems**

**SAVINGS PER YEAR** vs **LIGHT LEVEL**

*Based on 4000 hrs./yr., $0.11/kWh, and 120V operation

Savings per Year (80% Light Level) = Cost of operation (100% Light Level) – Cost of operation (80% Light Level)

**Savings per Year**

- 1 Lamp Fixture: $16.04
- 2 Lamp Fixture: $18.04

### Daylight Harvesting Scenario

- Window / Natural Light Source
- Desired Illuminance E_r
- Constant setpoint value
- Light Sensor 1
- Light Sensor 2
- Light Sensor 3

- Daylight harvesting
- Energy management
- Load shedding

**ECS440 - 6-13**

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QUICKTRONIC®

HELIOS™

CF Dual Entry Dimming Systems

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### System Information

QUICKTRONIC HELIOS ballasts operate standard low voltage (0-10VDC) controllers making them ideal for applications such as daylight harvesting or building automation applications where standard low voltage devices (0-10VDC, Class 1 or 2) are used to control the lighting system.

PROStart programmed rapid start is the optimum starting method, providing up to 100,000 switching cycles for use on occupancy sensors and building control systems.

QUICKSENSE® end-of-lamp-life sensing technology helps to protect against overheated bases and sockets, as well as cracking of the glass wall. QUICKSENSE ballast technology uses dynamic end-of-lamp-life sensing to avoid false shutdowns caused by some static sensing methods and will auto-reset when the end-of-life lamps are replaced with new ones.

A complete OSRAM SYLVANIA System Performance Guide showing performance characteristics of lamps and ballasts is available upon request.
WARNING:
Install and wire these ballast and controls in accordance with the National Electrical Code (NEC), all applicable Federal, State and local electrical codes, as well as the specific instructions provided with the 0-10Vdc compatible control that you purchased. Installation should be performed by qualified personnel only.

These instructions are guidelines only. Installation may vary for different controls/fixtures/applications. Be sure to follow the control instructions and all applicable codes and standards when installing dimming systems.

Please contact controls manufacturer listed in the OSRAM SYLVANIA Inc. controls cross reference for compatible controls and instruction wiring.

NOTE: HELIOS Dimming ballasts source < 0.5mA (0-10VDC control input)
## QUICKTRONIC® HELIOS™ 0-10V Controls Information

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<th>Controls Manufacturer</th>
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Please contact controls manufacturers to order/specify controls. For the latest controls list go to www.sylvania.com

Also for more information, refer to the LCA (Lighting Controls Association) site: http://lightingcontrolsassociation.org

These 0-10V controls listed to the left operate in conjunction with SYLVANIA QUICKTRONIC® PROFESSIONAL HELIOS™ Dimming Electronic Ballast:

- **T5HO Dimming Ballast**
  - 49671 QT1x54/120PH0-DIM
  - 49672 QT1x54/277PH0-DIM
  - 49673 QT2x54/120PH0-DIM
  - 49674 QT2x54/277PH0-DIM

- **CF Dimming Ballast**
  - 51836 QTP2x26CF/UNV DIM-DM
**SPECIFICATION DATA**

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<th>OSRAM SYLVANIA Description</th>
<th>Input Current (AMPS)</th>
<th>Lamp Type</th>
<th>Rated Lumens (lm)</th>
<th>No. of Lamps</th>
<th>Ballast Factor (BF)</th>
<th>System Standards</th>
<th>Mean Lumens (W)</th>
<th>Input Power (W)</th>
<th>System Efficacy (lm/W)</th>
<th>BEF</th>
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1. System Efficacy calculation based on lowest input power value.
2. Ballast Efficiency Factor (BEF) shown = (Ballast Factor x 100) divided by Input Power (Note: calculation based on lowest wattage value).

**HELIOS™ (0-10V) CF Fluorescent Dimming Systems, UNV (120-277V)**

- **Dimensions:**
  - Metal case: 4.95" L x 2.93" W x 1.35" H (125mm L x 74mm W x 34mm H)
  - Mounting: Utilize flanges (4.57" L), or (2) #8-32 x 0.375" Long
- **Wiring:** Push-in connectors (no leads provided), Use 18AWG solid copper wire only
- **Packaging:**
  - Quantity: 20 pieces per case
  - Weight: 1.30 lbs ea. (metal case)

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**Photo Sensor 0-10VDC Wiring Example**

**Control Information**

- **Dimming Control:** 0-10VDC two wire control (10V = full output, 0V = minimum output)
- **QUICKTRONIC HELIOS™ ballasts are compatible with a wide range of 0-10V controllers available from various manufacturers.**
- **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.

**System Life / Warranty**

QUICKTRONIC products are covered by the QUICK 60+ warranty, a comprehensive lamp and ballast system warranty. For additional details, refer to the QUICK 60+ warranty bulletin.

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