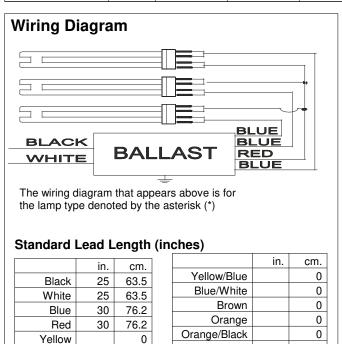
# PHILIPS ADVANCE

# **Electrical Specifications**

ICN-3TTP40-SC@120V							
Brand Name	CENTIUM						
Ballast Type	Electronic						
Starting Method	Instant Start						
Lamp Connection	Parallel						
Input Voltage	120-277						
Input Frequency	50/60 HZ						
Status	Active						

Lamp Type	Num. of Lamps	Rated Lamp Watts	Min. Start Temp (F/C)	Input Current (Amps)	Input Power (ANSI Watts)	Ballast Factor	MAX THD %	Power Factor	MAX Lamp Current Crest Factor	B.E.F.
FT40W/2G11	2	40	0/-18	0.61	73	0.96	10	0.98	1.5	1.32
* FT40W/2G11	3	40	0/-18	0.83	99	0.88	10	0.98	1.6	0.89
FT40W/2G11/ES (25W)	2	25	0/-18	0.51	60	0.96	10	0.98	1.7	1.60
FT40W/2G11/ES (25W)	3	25	0/-18	0.67	82	0.88	10	0.98	1.7	1.07
FT40W/2G11/RS	2	40	0/-18	0.61	73	0.96	10	0.98	1.5	1.32
FT40W/2G11/RS	3	40	0/-18	0.83	99	0.88	10	0.98	1.6	0.89



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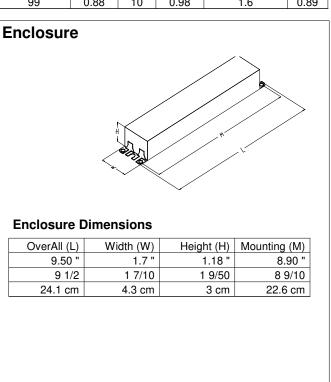
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Red/White





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Revised 11/13/08

Data is based upon tests performed by Philips Lighting N.A in a controlled environment and representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.



# **Electrical Specifications**

ICN-3TTP40-SC@120V						
Brand Name	CENTIUM					
Ballast Type	Electronic					
Starting Method	Instant Start					
Lamp Connection	Parallel					
Input Voltage	120-277					
Input Frequency	50/60 HZ					
Status	Active					

#### Notes:

Section I - Physical Characteristics

- 1.1 Ballast shall be physically interchangeable with standard electromagnetic or standard electronic ballasts, where applicable.
- 1.2 Ballast shall be provided with integral leads color-coded per ANSI C82.11.

#### Section II - Performance

- 2.1 Ballast shall be (Instant, Rapid or Programmed) Start.
- 2.2 Ballast shall provide Independent Lamp Operation (ILO) for Instant Start ballasts allowing remaining lamp(s) to maintain full light output when one or more lamps fail.
- 2.3 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power (except T8/HO ballast).
- 2.4 Ballast shall operate from 50/60 Hz input source of (120V through 277V or 347V through 480V) with sustained variations of
- +/- 10% (voltage and frequency).
- 2.5 Ballast shall be high frequency electronic type and operate lamps at a frequency above 42 kHz to avoid interference with infrared devices and eliminate visible flicker.
- 2.6 Ballast shall have a Power Factor greater than 0.98 for primary lamp.
- 2.7 Ballast shall have a minimum ballast factor for primary lamp application as follows: 0.75 for Low Watt, 0.85 for Normal Light Output and 1.20 for High Light.
- 2.8 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less.
- 2.9 Ballast input current shall have Total Harmonic Distortion (THD) of less than 10% when operated at nominal line voltage with primary lamp.
- 2.10 Ballast shall have a Class A sound rating for all 4-foot lamps and smaller.
- \_ [-18C (0F) for standard T8 and Long Twin Tube lamps, 10C (50F) for 2.11 Ballast shall have a minimum starting temperature of standard T12 lamps, 0C (32F) for Slimline T8 lamps, -29C (-20F) for HO lamps,] for primary lamp application. Ballast shall have a minimum starting temperature of 16C (60F) for energy-saving lamps.
- 2.12 Ballast shall tolerate sustained open circuit and short circuit output conditions.
- 2.13 Ballast for T8 lamps shall provide lamp striation-reduction circuitry.
- 2.14 Ballast for FT5 lamps shall provide lamp EOL protection circuitry.

### Section III - Regulatory

- 3.1 Ballast shall not contain any Polychlorinated Biphenyl (PCB).
- 3.2 Ballast shall be Underwriters Laboratories (UL) listed, Class P and Type 1 Outdoor; and Canadian Standards Association (CSA) certified where applicable.
- 3.3 Ballast shall comply with ANSI C62.41 Category A for Transient protection.
- 3.4 Ballast shall comply with ANSI C82.11 where applicable.
- 3.5 Ballast shall comply with applicable requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, for Non-Consumer equipment.
- 3.6 Ballast shall comply with NEMA 410 for in-rush current limits.
- 3.7 Ballast for T8 lamps shall meet NEMA Premium/CEE High Performance T8 Lighting System Specifications.
- 3.8 Ballast shall meet RoHS Compliance Standards

## Section IV - Other

- 4.1 Ballast shall be manufactured in a factory certified to ISO 9001 Quality System Standards.
- 4.2 Ballast shall carry a five-year warranty from date of manufacture against defects in material or workmanship, including replacement, for operation at a maximum case temperature of 70C.
- 4.3 Manufacturer shall have a twenty-year history of producing electronic ballasts for the North American market.
- 4.4 Energy saving T8 lamps (25W, 28W or 30W) may experience lamp striations if operated on ballasts not rated for their use.





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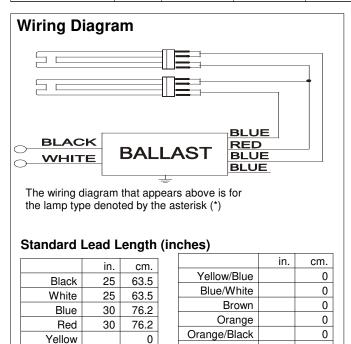
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# PHILIPS ADVANCE

# **Electrical Specifications**

ICN-3TTP40-SC@277V							
Brand Name	CENTIUM						
Ballast Type	Electronic						
Starting Method	Instant Start						
Lamp Connection	Parallel						
Input Voltage	120-277						
Input Frequency	50/60 HZ						
Status	Active						

Lamp Type	Num. of Lamps	Rated Lamp Watts	Min. Start Temp (F/C)	Input Current (Amps)	Input Power (ANSI Watts)	Ballast Factor	MAX THD %	Power Factor	MAX Lamp Current Crest Factor	B.E.F.
* FT40W/2G11	2	40	0/-18	0.27	72	0.96	10	0.98	1.5	1.33
FT40W/2G11	3	40	0/-18	0.35	97	0.88	10	0.98	1.6	0.91
FT40W/2G11/ES (25W)	2	25	0/-18	0.22	60	0.96	10	0.98	1.7	1.60
FT40W/2G11/ES (25W)	3	25	0/-18	0.29	80	0.88	10	0.98	1.7	1.10
FT40W/2G11/RS	2	40	0/-18	0.27	72	0.96	10	0.98	1.5	1.33
FT40W/2G11/RS	3	40	0/-18	0.35	97	0.88	10	0.98	1.6	0.91



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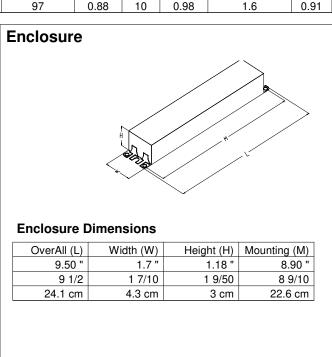
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Revised 11/13/08

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# **Electrical Specifications**

## ICN-3TTP40-SC@277V Brand Name | CENTIUM Ballast Type | Electronic Starting Method Instant Start Lamp Connection | Parallel Input Voltage | 120-277 Input Frequency 50/60 HZ Status **Active**

#### Notes:

Section I - Physical Characteristics

- 1.1 Ballast shall be physically interchangeable with standard electromagnetic or standard electronic ballasts, where applicable.
- 1.2 Ballast shall be provided with integral leads color-coded per ANSI C82.11.

#### Section II - Performance

- (Instant, Rapid or Programmed) Start. 2.1 Ballast shall be
- 2.2 Ballast shall provide Independent Lamp Operation (ILO) for Instant Start ballasts allowing remaining lamp(s) to maintain full light output when one or more lamps fail.
- 2.3 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power (except T8/HO ballast).
- 2.4 Ballast shall operate from 50/60 Hz input source of (120V through 277V or 347V through 480V) with sustained variations of
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- 2.7 Ballast shall have a minimum ballast factor for primary lamp application as follows: 0.75 for Low Watt, 0.85 for Normal Light Output and 1.20 for High Light.
- 2.8 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less.
- 2.9 Ballast input current shall have Total Harmonic Distortion (THD) of less than 10% when operated at nominal line voltage with primary lamp.
- 2.10 Ballast shall have a Class A sound rating for all 4-foot lamps and smaller.
- 2.11 Ballast shall have a minimum starting temperature of \_\_\_\_\_ [-18C (0F) for standard T8 and Long Twin Tube lamps, 10C (50F) for standard T12 lamps, 0C (32F) for Slimline T8 lamps, -29C (-20F) for HO lamps,] for primary lamp application. Ballast shall have a minimum starting temperature of 16C (60F) for energy-saving lamps.
- 2.12 Ballast shall tolerate sustained open circuit and short circuit output conditions.
- 2.13 Ballast for T8 lamps shall provide lamp striation-reduction circuitry.
- 2.14 Ballast for FT5 lamps shall provide lamp EOL protection circuitry.

### Section III - Regulatory

- 3.1 Ballast shall not contain any Polychlorinated Biphenyl (PCB).
- 3.2 Ballast shall be Underwriters Laboratories (UL) listed, Class P and Type 1 Outdoor; and Canadian Standards Association (CSA) certified where applicable.
- 3.3 Ballast shall comply with ANSI C62.41 Category A for Transient protection.
- 3.4 Ballast shall comply with ANSI C82.11 where applicable.
- 3.5 Ballast shall comply with applicable requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, for Non-Consumer equipment.
- 3.6 Ballast shall comply with NEMA 410 for in-rush current limits.
- 3.7 Ballast for T8 lamps shall meet NEMA Premium/CEE High Performance T8 Lighting System Specifications.
- 3.8 Ballast shall meet RoHS Compliance Standards

## Section IV - Other

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- 4.2 Ballast shall carry a five-year warranty from date of manufacture against defects in material or workmanship, including replacement, for operation at a maximum case temperature of 70C.
- 4.3 Manufacturer shall have a twenty-year history of producing electronic ballasts for the North American market.
- 4.4 Energy saving T8 lamps (25W, 28W or 30W) may experience lamp striations if operated on ballasts not rated for their use.





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