

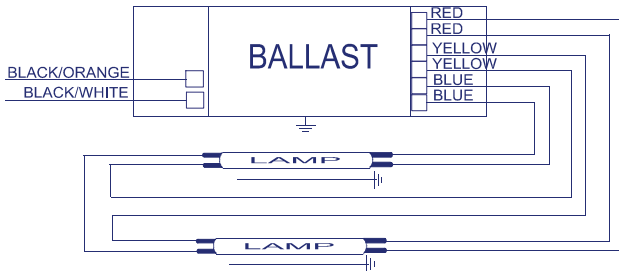


## Electrical Specifications

<b>HCN2S5490CWL@347</b>	
Brand Name	<b>CENTIUM T5</b>
Ballast Type	<b>Electronic</b>
Starting Method	<b>Programmed Start</b>
Lamp Connection	<b>Series</b>
Input Voltage	<b>347-480</b>
Input Frequency	<b>50/60 HZ</b>
Status	<b>Active</b>

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.
F54T5/HO	1	54	-20/-29	0.18	62	1.00	10	0.98	1.7	1.61
* F54T5/HO	2	54	-20/-29	0.35	120	1.00	10	0.98	1.7	0.83
F54T5/HO/ES (49W)	1	49	-20/-29	0.18	58	1.00	10	0.98	1.7	1.72
F54T5/HO/ES (49W)	2	49	-20/-29	0.35	111	1.00	10	0.98	1.7	0.90
FC12T5/HO	1	55	-20/-29	0.16	55	0.87	10	0.98	1.7	1.58
FC12T5/HO	2	55	-20/-29	0.31	106	0.85	10	0.98	1.7	0.80
FT36W/2G11	1	36	-20/-29	0.13	46	1.20	10	0.98	1.7	2.61
FT36W/2G11	2	36	-20/-29	0.26	89	1.20	10	0.98	1.7	1.35
FT50W/2G11	1	50	-20/-29	0.18	61	1.10	10	0.98	1.7	1.80
FT50W/2G11	2	50	-20/-29	0.34	118	1.10	10	0.98	1.7	0.93
FT50W/2G11/RS	1	50	-20/-29	0.18	61	1.10	10	0.98	1.7	1.80
FT50W/2G11/RS	2	50	-20/-29	0.34	118	1.10	10	0.98	1.7	0.93
FT55W/2G11	1	55	-20/-29	0.17	58	0.90	10	0.98	1.7	1.55
FT55W/2G11	2	55	-20/-29	0.33	112	0.90	10	0.98	1.7	0.80

### Wiring Diagram



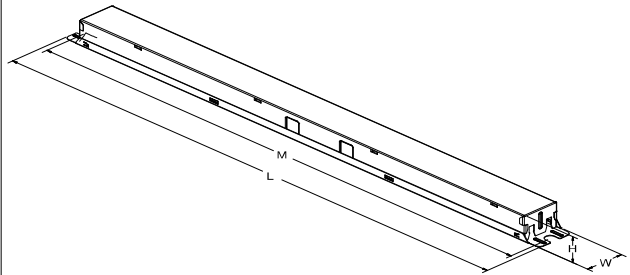
The wiring diagram that appears above is for the lamp type denoted by the asterisk (\*)

### Standard Lead Length (inches)

	in.	cm.
Black		0
White		0
Blue	28	71.1
Red	28	71.1
Yellow	48	121.9
Gray		0
Violet		0

	in.	cm.
Yellow/Blue		0
Blue/White		0
Brown		0
Orange		0
Orange/Black	31	78.7
Black/White	31	78.7
Red/White		0

### Enclosure



### Enclosure Dimensions

OverAll (L)	Width (W)	Height (H)	Mounting (M)
16.70 "	1.18 "	1.00 "	16.34 "
16 7/10	1 9/50	1	16 17/50
42.4 cm	3 cm	2.5 cm	41.5 cm



Revised 03/11/09

Data is based upon tests performed by Advance Transformer 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.

## ADVANCE TRANSFORMER CO.

O'HARE INTERNATIONAL CENTER · 10275 WEST HIGGINS ROAD · ROSEMONT, IL 60018

Customer Support/Technical Service: Phone: 800-372-3331 · Fax: 847-768-7768

Corporate Offices: Phone: 800-322-2086



**Electrical Specifications**

<b>HCN2S5490CWL@347</b>	
Brand Name	<b>CENTIUM T5</b>
Ballast Type	<b>Electronic</b>
Starting Method	<b>Programmed Start</b>
Lamp Connection	<b>Series</b>
Input Voltage	<b>347-480</b>
Input Frequency	<b>50/60 HZ</b>
Status	<b>Active</b>

**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 or poke-in wire trap connectors color-coded per ANSI C82.11.

Section II - Performance

- 2.1 Ballast shall be Programmed Start.
- 2.2 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power.
- 2.3 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).
- 2.4 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.
- 2.5 Ballast shall have a Power Factor greater than 0.98 for primary lamp.
- 2.6 Ballast shall have a minimum ballast factor of 1.0 for primary lamp application.
- 2.7 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less.
- 2.8 Ballast input current shall have Total Harmonic Distortion (THD) of less than 10% when operated at nominal line voltage with primary lamp.
- 2.9 Ballast shall have a Class A sound rating.
- 2.10 Ballast shall have a minimum starting temperature of \_\_\_\_\_ {-18C (0F) or -29C (-20F)} for primary lamp. Consult lamp manufacturer for temperature versus light output characteristics.
- 2.11 Ballast shall provide Lamp EOL Protection Circuit.
- 2.12 Ballast shall tolerate sustained open circuit and short circuit output conditions.
- 2.13 Four-lamp ballast shall have (semi-independent or independent) lamp operation.

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 UL Type CC rating.
- 3.7 Ballast shall comply with NEMA 410 for in-rush current limits.

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. Ballasts with a "90C" designation in their catalog number shall also carry a three-year warranty at a maximum case temperature of 90C.
- 4.3 Manufacturer shall have a twenty-year history of producing electronic ballasts for the North American market.



Revised 03/11/09

Data is based upon tests performed by Advance Transformer 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.

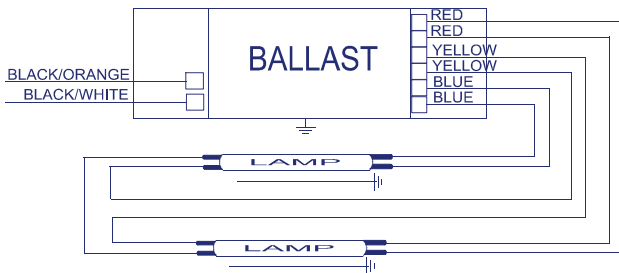


## Electrical Specifications

<b>HCN2S5490CWL@480</b>	
Brand Name	<b>CENTIUM T5</b>
Ballast Type	<b>Electronic</b>
Starting Method	<b>Programmed Start</b>
Lamp Connection	<b>Series</b>
Input Voltage	<b>347-480</b>
Input Frequency	<b>50/60 HZ</b>
Status	<b>Active</b>

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.
F54T5/HO	1	54	-20/-29	0.13	62	1.00	10	0.98	1.7	1.61
* F54T5/HO	2	54	-20/-29	0.25	119	1.00	10	0.98	1.7	0.84
F54T5/HO/ES (49W)	1	49	-20/-29	0.13	58	1.00	10	0.98	1.7	1.72
F54T5/HO/ES (49W)	2	49	-20/-29	0.25	110	1.00	10	0.98	1.7	0.91
FC12T5/HO	1	55	-20/-29	0.12	55	0.87	10	0.98	1.7	1.58
FC12T5/HO	2	55	-20/-29	0.22	106	0.85	10	0.98	1.7	0.80
FT36W/2G11	1	36	-20/-29	0.10	46	1.20	10	0.98	1.7	2.61
FT36W/2G11	2	36	-20/-29	0.19	89	1.20	10	0.98	1.7	1.35
FT50W/2G11	1	50	-20/-29	0.13	61	1.10	10	0.98	1.7	1.80
FT50W/2G11	2	50	-20/-29	0.25	118	1.10	10	0.98	1.7	0.93
FT50W/2G11/RS	1	50	-20/-29	0.13	61	1.10	10	0.98	1.7	1.80
FT50W/2G11/RS	2	50	-20/-29	0.25	118	1.10	10	0.98	1.7	0.93
FT55W/2G11	1	55	-20/-29	0.13	58	0.90	10	0.98	1.7	1.55
FT55W/2G11	2	55	-20/-29	0.24	112	0.90	10	0.98	1.7	0.80

### Wiring Diagram



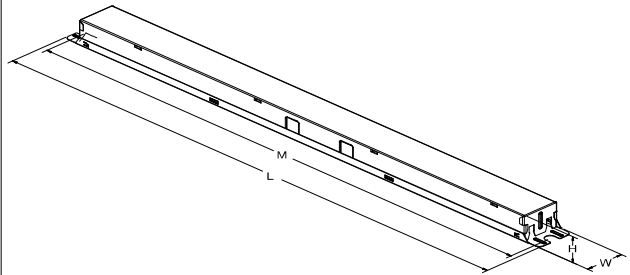
The wiring diagram that appears above is for the lamp type denoted by the asterisk (\*)

### Standard Lead Length (inches)

	in.	cm.
Black		0
White		0
Blue	28	71.1
Red	28	71.1
Yellow	48	121.9
Gray		0
Violet		0

	in.	cm.
Yellow/Blue		0
Blue/White		0
Brown		0
Orange		0
Orange/Black	31	78.7
Black/White	31	78.7
Red/White		0

### Enclosure



### Enclosure Dimensions

OverAll (L)	Width (W)	Height (H)	Mounting (M)
16.70 "	1.18 "	1.00 "	16.34 "
16 7/10	1 9/50	1	16 17/50
42.4 cm	3 cm	2.5 cm	41.5 cm



Revised 03/11/09

Data is based upon tests performed by Advance Transformer 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.

## ADVANCE TRANSFORMER CO.

O'HARE INTERNATIONAL CENTER · 10275 WEST HIGGINS ROAD · ROSEMONT, IL 60018

Customer Support/Technical Service: Phone: 800-372-3331 · Fax: 847-768-7768

Corporate Offices: Phone: 800-322-2086



## Electrical Specifications

HCN2S5490CWL@480	
Brand Name	CENTIUM T5
Ballast Type	Electronic
Starting Method	Programmed Start
Lamp Connection	Series
Input Voltage	347-480
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 or poke-in wire trap connectors color-coded per ANSI C82.11.

#### Section II - Performance

- 2.1 Ballast shall be Programmed Start.
- 2.2 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power.
- 2.3 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).
- 2.4 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.
- 2.5 Ballast shall have a Power Factor greater than 0.98 for primary lamp.
- 2.6 Ballast shall have a minimum ballast factor of 1.0 for primary lamp application.
- 2.7 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less.
- 2.8 Ballast input current shall have Total Harmonic Distortion (THD) of less than 10% when operated at nominal line voltage with primary lamp.
- 2.9 Ballast shall have a Class A sound rating.
- 2.10 Ballast shall have a minimum starting temperature of \_\_\_\_\_ {-18C (0F) or -29C (-20F)} for primary lamp. Consult lamp manufacturer for temperature versus light output characteristics.
- 2.11 Ballast shall provide Lamp EOL Protection Circuit.
- 2.12 Ballast shall tolerate sustained open circuit and short circuit output conditions.
- 2.13 Four-lamp ballast shall have (semi-independent or independent) lamp operation.

#### 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 UL Type CC rating.
- 3.7 Ballast shall comply with NEMA 410 for in-rush current limits.

#### 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. Ballasts with a "90C" designation in their catalog number shall also carry a three-year warranty at a maximum case temperature of 90C.
- 4.3 Manufacturer shall have a twenty-year history of producing electronic ballasts for the North American market.



Revised 03/11/09

Data is based upon tests performed by Advance Transformer 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.

### ADVANCE TRANSFORMER CO.

O'HARE INTERNATIONAL CENTER - 10275 WEST HIGGINS ROAD - ROSEMONT, ILLINOIS 60018  
 TELEPHONE: (847)390-5000 FAX: (847)768-7768