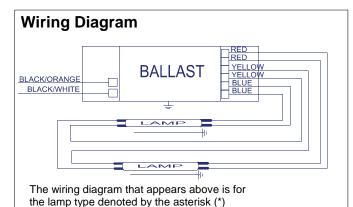
PHILIPS ADVANCE

Electrical Specifications

HCN2S5490CWL@347				
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			

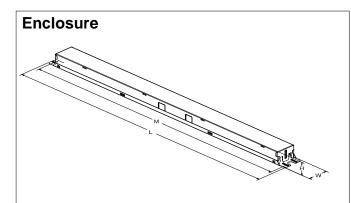
Lamp Type	Num. of Lamps	Rated Lamp Watts	Min. Start Temp (°F/C)	Input Current (Amps)	Input Power (ANSI Watts)	Ballast Factor	MAX THD %	Power Factor	MAX Lamp Current Crest Factor	B.E.F.
F54T5/HO	1	54	-20/-29	0.18	62	1.00	10	0.98	1.7	1.61
* F54T5/HO	2	54	-20/-29	0.35	120	1.00	10	0.98	1.7	0.83
F54T5/HO/ES (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



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 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

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Electrical Specifications

HCN2S5490CWL@347				
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, 347V 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

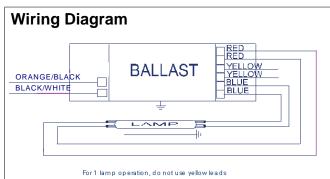
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PHILIPS ADVANCE

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			

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

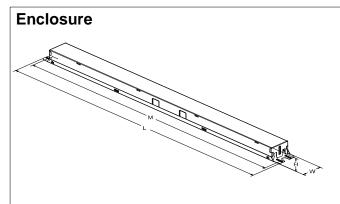


The wiring diagram that appears above is for the lamp type denoted by the asterisk (*)

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 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

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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

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- 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

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- 4.3 Manufacturer shall have a twenty-year history of producing electronic ballasts for the North American market.



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