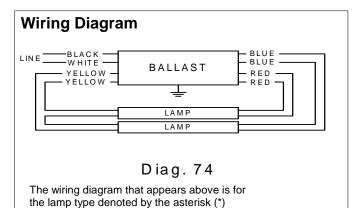
# **PHILIPS ADVANCE**

# **Electrical Specifications**

ICN2S24N@120V						
Brand Name	CENTIUM T5					
Ballast Type	Electronic					
Starting Method	Programmed Start					
Lamp Connection	Series					
Input Voltage	120-277					
Input Frequency	50/60 HZ					
Status	Active					

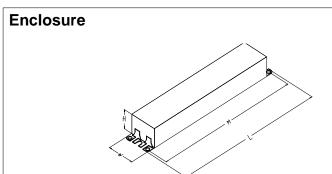
Lamp Type	Num. of Lamps	Rated Lamp Watts	Min. Start Temp (F/C)	Input Current (Amps)	Input Power (ANSI Watts)	Ballast Factor	MAX THD %	Power Factor	MAX Lamp Current Crest Factor	B.E.F.
F24T5/HO	1	24	0/-18	0.23	27	1.03	15	0.97	1.7	3.81
* F24T5/HO	2	24	0/-18	0.45	54	1.03	10	0.97	1.7	1.91
F39T5/HO	1	39	0/-18	0.15	41	0.96	15	0.97	1.7	2.34
FC12T5	1	40	0/-18	0.32	39	0.85	15	0.97	1.7	2.18
FC9T5	1	22	0/-18	0.22	26	0.97	15	0.97	1.7	3.73
FC9T5	2	22	0/-18	0.41	49	0.99	15	1.70	1.7	2.02
FT24W/2G11	1	24	0/-18	0.21	25	0.99	15	0.97	1.7	3.96
FT24W/2G11	2	24	0/-18	0.43	51	1.02	10	0.97	1.7	2.00
FT36W/2G11	1	36	0/-18	0.26	31	0.84	15	0.97	1.7	2.71
FT40W/2G11/RS	1	40	0/-18	0.36	42	0.94	15	0.97	1.7	2.24



Standard Lead Length (inches)

	in.	cm.
Black	24	61
White	24	61
Blue	27	68.6
Red	27	68.6
Yellow	47	119.4
Gray		0
Violet		0

in.	cm.
	0
	0
	0
	0
	0
	0
	0
	in.



# **Enclosure Dimensions**

OverAll (L)	Width (W)	Height (H)	Mounting (M)
9.5 "	1.3 "	1.0 "	8.9 "
9 1/2	1 3/10	1	8 9/10
24.1 cm	3.3 cm	2.5 cm	22.6 cm







Revised 02/12/13

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**

ICN2S24N@120V						
Brand Name	CENTIUM T5					
Ballast Type	Electronic					
Starting Method	Programmed Start					
Lamp Connection	Series					
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 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 02/12/13

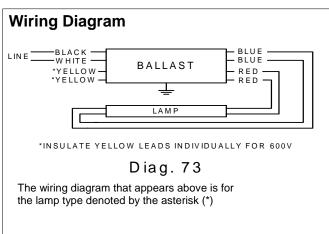
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# PHILIPS ADVANCE

# **Electrical Specifications**

ICN2S24N@277V						
Brand Name	CENTIUM T5					
Ballast Type	Electronic					
Starting Method	Programmed Start					
Lamp Connection	Series					
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.
* F24T5/HO	1	24	0/-18	0.10	27	1.03	10	0.97	1.7	3.81
F24T5/HO	2	24	0/-18	0.19	53	1.04	15	0.97	1.7	1.96
F39T5/HO	1	39	0/-18	0.15	41	0.96	15	0.97	1.7	2.34
FC12T5	1	40	0/-18	0.14	38	0.94	15	0.97	1.7	2.47
FC9T5	1	22	0/-18	0.11	28	1.02	15	0.97	1.7	3.64
FC9T5	2	22	0/-18	0.18	49	0.97	10	0.97	1.7	1.98
FT24W/2G11	1	24	0/-18	0.10	26	0.99	15	0.97	1.7	3.81
FT24W/2G11	2	24	0/-18	0.18	50	1.01	10	0.97	1.7	2.02
FT36W/2G11	1	36	0/-18	0.12	31	0.84	15	0.97	1.7	2.71
FT40W/2G11/RS	1	40	0/-18	0.16	43	0.95	15	0.97	1.7	2.21

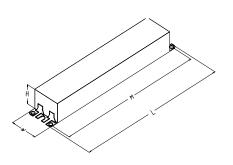


# Standard Lead Length (inches)

	in.	cm.
Black	24	61
White	24	61
Blue	27	68.6
Red	27	68.6
Yellow	47	119.4
Gray		0
Violet		0

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





### **Enclosure Dimensions**

OverAll (L)	Width (W)	Height (H)	Mounting (M)
9.5 "	1.3 "	1.0 "	8.9 "
9 1/2	1 3/10	1	8 9/10
24.1 cm	3.3 cm	2.5 cm	22.6 cm







Revised 07/17/12

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# **Electrical Specifications**

# ICN2S24N@277V Brand Name CENTIUM T5 Ballast Type Electronic Starting Method Programmed Start Lamp Connection Series 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 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 07/17/12

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