

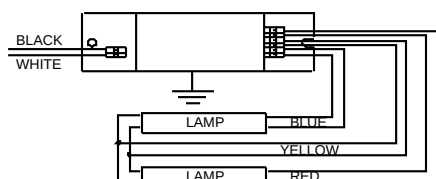


Electrical Specifications

VCN-2S28	
Brand Name	CENTIUM
Ballast Type	Electronic
Starting Method	Program Rapid Start
Lamp Connection	Series
Input Voltage	277
Input Frequency	50/60HZ
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.
* F21T5	2	21	50/10	0.20	52	1.00	10	0.98	1.6	1.92
F28T5	2	28	50/10	0.25	66	1.00	10	0.98	1.6	1.52

Wiring Diagram



Diag. 103

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

Standard Lead Length (inches)

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

Enclosure



Fig. A1

Enclosure Dimensions

OverAll (L)	Width (W)	Height (H)	Mounting (M)
13.1875 "	1.53125 "	1.109375 "	12.78125 "
13 3/16	1 17/32	1 7/64	12 25/32
33.5 cm	3.9 cm	2.8 cm	32.5 cm

Revised 02/18/1998



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Electrical Specifications

Notes:

1 Physical Requirements

- 1.1 Ballast must be physically interchangeable with a magnetic core & coil ballast.
- 1.2 Ballast must have permanently connected leads integral to the ballast, color coded to ANSI C82.11 (latest version).
- 1.3 Ballast must be formed from recyclable steel painted in accordance with UL 935 standards. Plastic products with gaseous discharges are not allowed.

2 Lighting Performance Requirements

- 2.1 Ballast must have a ballast factor of:
 - 2.1.1 .75-.78 for a low wattage design (LW).
 - 2.1.2 .85-.92 for a normal light output design.
- 2.2 Ballast must have a maximum input wattage (ANSI) as indicated on the data sheet.
- 2.3 Ballast must have a Ballast Efficacy Factor greater than or equal to as indicated on the data sheet.
- 2.4 Ballast must be able to start and operate the specified lamps at a minimum temperature of (-20,0,32,50,60) degrees Fahrenheit as indicated on the data sheet and shall be in accordance with lamp manufacturer recommendations.
- 2.5 Ballast must be sound rated A. (T12/HO and T12/Slimline rated B).
- 2.6 Ballast must be designed and UL listed to operate the number of lamps as indicated on the data sheet.

3 Electrical Performance Requirements

- 3.1 Ballast THD shall be less than 10% for the main lamp desing (as indicated on the data sheet).
- 3.2 Lamp Current Crest Factor shall not exceed 1.6 for the main lamp design.
- 3.3 Ballast Power Factor must be greater than 98% for the main lamp design.
- 3.4 Ballast output frequency shall be greater than 20kHz and less than 30kHz or greater than 42kHz. Ballast output shall not be between 30 and 42kHz for any lamp combination.
- 3.5 Ballast must operate between 108-132V(120V), 249-305V(277V), and 312-382V(347V), 60 Hz.
- 3.6 Ballast must maintain light output at +/- 10% during a voltage fluctuation of +/- 10%.
- 3.7 Ballast shall be (Instant Start Parallel, Rapid Start Series, Programmed Rapid Start Series) as indicated on the data sheet.
- 3.8 All ballasts for Compact Fluorescent Lamps (CFL) and T5 diameter lamps must contain a lamp End-Of-Life (EOL) detection and shut down circuit in accordance with ANSI/IEC proposed standards and must be operated on a rapid start ballast. Compact Fluorescent and Long Twin Tube T5 lamps (BIAX, PL-L, DULUX-L) shall not be operated on an instant start circuit.

4 Regulatory Requirements

- 4.1 Ballast shall meet ANSI C82.11 limits for Total Harmonic Distortion (THD).
- 4.2 Ballast shall meet FCC Part 18 non-consumer standards for electrical equipment (Class A).
- 4.3 Ballast shall meet ANSI 62.41 Category A standards for Transient Voltage protection.
- 4.4 Ballast shall meet UL 935 standards and be UL listed and CSA approved.
- 4.5 Ballast shall be UL Class P and Type 1 Outdoor.
- 4.6 Ballast shall contain no Polychlorinated Biphenyl (PCBs) in accordance with US law.

4.7 Ballast shall meet all US state and federal efficacy laws and all Canadian provincial and federal efficacy laws.

5 Other

5.1 Ballast shall carry a 5 year warranty (from date of manufacture) with PLUS 90 system protection warranty (must register). Warranty shall be valid at case temperatures of 70C or less.

5.2 Manufacturer must have a 15 year history of designing and manufacturing electronic ballasts for the North American market.

5.3 Ballast must be manufactured in a facility Certified to ISO 9002 Quality System Standards.

5.4 Ballast must be ordered and shipped from a distribution center Certified to ISO 9002 Quality System Standards.

5.5 Ballast must be Advance Transformer Co. _____ brand, part # _____. All proposed substitutes must be submitted to the specifying authority two weeks prior to bid due date. Submittal does not guarantee acceptance.

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