EcoSystem Ballasts for linear T5 Lamps

Lamp	No. of Lamps	Model	Case Size	Input Voltage (VAC)	Input Current (A)	Input Power (W)	Ballast Factor (BF)	System Lumens (lm)	System Efficacy (lm/W)	Ballast Efficacy Factor	Relative Efficacy (RSE)
F35T5 (57.1 in) 	1	EC5 T535 J UNV 1	J	277 240 120	0.15 0.18 0.35	42.0 42.3 42.2	1.0 1.0 1.0	3650 3650 3650	87 87 87	2.38 2.38 2.38	0.83 0.83 0.83
F28T5 (45.2 in)	1	EC5 T528 J UNV 1	J	277 240 120	0.12 0.14 0.27	32.6 32.9 32.9	1.0 1.0 1.0	2900 2900 2900	89 88 88	3.07 3.04 3.04	0.86 0.85 0.85
	2	EC5 T528 J UNV 2	J	277 240 120	0.23 0.27 0.54	64.5 65.0 65.2	1.0 1.0 1.0	5800 5800 5800	90 89 89	1.55 1.54 1.53	0.87 0.86 0.86
F21T5 (33.4 in)	1	EC5 T521 J UNV 1	J	277 240 120	0.09 0.12 0.22	25.8 25.8 25.8	1.0 1.0 1.0	2100 2100 2100	81 81 81	3.88 3.88 3.88	0.81 0.81 0.81
	2	EC5 T521 J UNV 2	J	277 240 120	0.17 0.20 0.39	46.0 47.2 47.2	1.0 1.0 1.0	4200 4200 4200	91 89 89	2.17 2.12 2.12	0.91 0.89 0.89
F14T5 (21.6 in)	1	EC5 T514 J UNV 1	J	277 240 120	0.07 0.08 0.16	19.0 19.2 19.2	1.0 1.0 1.0	1350 1350 1350	71 70 70	5.26 5.21 5.21	0.74 0.74 0.74
	2	EC5 T514 J UNV 2	J	277 240 120	0.12 0.14 0.28	32.8 33.3 33.3	1.0 1.0 1.0	2700 2700 2700	82 81 81	3.05 3.00 3.00	0.85 0.85 0.85

Specifications

Standards

- California Energy Commission (CEC) Listed
- UL Listed (evaluated to the requirements of UL935)
- CSA certified (evaluated to the requirements of C22.2 No. 74)
- Some models are NOM Listed
- Class P thermally protected
- Meets ANSI C82.11 High Frequency Ballast Standard
- Meets FCC Part 18 Non-Consumer requirements for EMI/RFI emissions
- Meets ANSI C62.41 Category A surge protection standards up to and including 4 kV
- Manufacturing facilities employ ESD reduction practices that comply with the requirements of ANSI/ESD S20.20
- Lutron Quality Systems registered to ISO 9001.2000

Performance

- Operating Voltage: 120, 220/240, 277 V~ at 50 or 60 Hz
- Grounding: ballast and fixture must be grounded for proper dimming
- Dimming Range: 100% to 10% measured relative light output
- Lamp Starting: programmed rapid start
- Lamp Current Crest Factor: less than 1.7
- Light Output Variation: Constant ±2% light output for line voltage variations of ±10%
- Lamp Life: Average lamp life meets or exceeds specified lamp ratings
- Power Factor: 0.95 minimum
- Total Harmonic Distortion (THD): Less than 20%
- Inaudible in a 27 dBA ambient
- Maximum Inrush Current: 3 A per ballast at 277 V~, 7A per ballast at 120 V~
- Class 2 Output: +20 V⎓, 50mA maximum (one daylight sensor, one keypad and one occupancy sensor can be connected)

Environment

- Minimum lamp starting temperature: 50 °F (10 °C)
- Relative humidity: less than 90% non-condensing
- Sound Rating: inaudible in a 27 dB ambient
- Maximum ballast case temperature: 75 °C (167 °F)

Ballast Wiring & Mounting

- Ballast is grounded by a mounting screw to the fixture
- Terminal blocks on the ballast accept the following wire gauges:
  Power Wiring, Lamp Wiring, and *EcoSystem* Bus:
  only one #18 AWG solid per terminal
  Class 2 Sensors:
  only one #22 AWG solid per terminal
- Only one wire per terminal
- Class 2 sensor wiring must be separated from all power and Class 1 wiring, consult all applicable local and national codes
- Ballast mounts using two screws (or sheet metal feature and one screw) within a fluorescent fixture
- Wiring from the ballast to lamp sockets shall not exceed 7 ft. for T8, T5, and T5HO lamps
- Wiring from the ballast to lamps sockets shall not exceed 3 ft. for T5 Twin Tube lamps

Lamp Seasoning

Refer to lamp manufacturer for lamp seasoning requirements prior to dimming