Triad®

Universal™ Lighting Technologies

Compact Fluorescent Ballasts

Featuring Installer-Friendly Universal Input Voltage

Universal's newest TRIAD® electronic compact fluorescent ballasts feature installer-friendly universal input voltage (108 to 305 volts) and metal case designs for compliance with all plenum and construction code requirements. They also offer an end-of-lamp-life shutdown with auto-reset circuit that meets ANSI/NEMA requirements—a feature that eliminates lamp/socket damage while allowing you to replace failed lamps after shutdown without turning off the power.

Our new universal voltage compact fluorescent ballasts offer both 1- and 2-lamp operation—and they're ideal for a wide variety of downlight and surface mount applications, including atriums, hotel corridors, elevators, and vandal-resistant fixtures. All models operate multiple lamp types for added versatility in many different applications.

These ballasts are designed and manufactured for long life. Lamps can be mounted in close proximity to these ballasts because they have no temperature-critical components near the can sides. And their circuit board potting enhances reliability by lowering case temperatures. These new ballasts are also backed by the TRIAD® five year warranty.

All universal voltage compact fluorescent ballasts incorporate Programmed Rapid Start (PRS) technology that increases lamp life for those frequently switched applications where occupancy sensors are used. PRS is recommended by all lamp manufacturers.

Universal meets compact fluorescent requirements throughout North America. Our universal voltage products have received NOM certification in Mexico. And for the Canadian market, we have three new 347 volt compact fluorescent models that offer outstanding reliability and lamp performance.

Triad® Universal™ Lighting Technologies

Features and Benefits

- Universal input voltage of 108 to 305 volts
  - Installer-friendly—ensures you have the right ballast every time
  - Reduces inventory costs and requirements
- Metal can construction
  - Meets all plenum requirements
  - No exposed plastic (Base Exit/Base Exit Stud versions)
  - Maximum heat transfer to fixture
- 1- or 2-lamp operation of multiple lamp applications
- End-of-lamp-life shutdown circuit
  - Meets ANSI/NEMA requirements
  - Eliminates lamp/socket damage
- Auto-reset of lamp after shutdown
  - Allows you to replace lamp without turning off power
- THD<10%; Power Factor >.98
- Programmed Rapid Starting (PRS)
  - Increases lamp life for frequently-switched applications (occupancy sensors)
  - Meets all requirements of rapid start specifications and more

* 75°C Temperature Test Point
  - Maximum Case Temperature of 75°C
  - Allows for easy ballast/fixture testing, assuring proper temperature application

Versatility For 13-42 Watt Quad, Triple, And Multi-Lamp Applications

Our C213UNV, C218UNV, and C2642UNV operate a variety of quad, triple, and multi-lamp applications from 13 to 42 watts. The same ballast can operate one or two lamps in most applications. The bottom exit (“BE”) and bottom exit leads with mounting studs (“BES”) versions are ideal for downlight applications, while the side exit (“SE”) versions are suitable for wall sconces, ceiling and outdoor fixtures.

C213UNVSE, C213UNVBE, C213UNVBES

- Operates: 1 or 2 13 watt quad or triple lamps

C218UNVSE, C218UNVBE, C218UNVBES

- Operates: 1 or 2 18 watt quad or triple lamps

C2642UNVSE, C2642UNVBE, C2642UNVBES

- Operates: 1 or 2 26 watt quad/triple lamps
  1 32 watt triple lamp
  1 42 watt multi lamp
  1 or 2 24/27 watt long twin tube T5 lamps

Unique Solutions For 2D And New T5 Circline Lamps

The new universal voltage ballasts also operate 2D and the new T5 circline lamps for wall sconces and other decorative wall and ceiling-mounted fixtures. Available with connectors for side exit (SE) leads, the “SE” versions come with a white metal can to reduce shadowing in the fixture while also providing maximum heat dissipation away from the sensitive electronic components.

C213UNVSE

- Operates: 1 or 2 16 watt 2D lamps
  1 or 2 10 watt 2D lamps

C218UNVSE

- Operates: 1 or 2 21 watt 2D lamps

C2642UNVSE

- Operates: 1 FC9T5 22 watt circline lamp
  1 FC12T5 40 watt circline lamp
  1 28 watt 2D lamp
  1 38 watt 2D lamp

347 Volt Compact Fluorescent Ballasts for 13-42 Watts

Our brand new line of 347 volt electronic compact fluorescent ballasts covers lamp applications from 13 to 42 watts. These models also feature the metal housing for maximum heat transfer and long ballast life. Programmed rapid starting makes this product line ideal for use with occupancy sensors, as well as continuous operation applications.

C213/347SE, C213/347BE, C213/347BES

- Operates: 1 or 2 13 watt quad or triple lamps
  1 or 2 16 watt 2D lamps

C218/347SE, C218/347BE, C218/347BES

- Operates: 1 or 2 18 watt quad or triple lamps
  1 or 2 21 watt 2D lamps

C2642/347SE, C2642/347BE, C2642/347BES

- Operates: 1 or 2 26 watt quad/triple/multi lamps
  1 32 watt quad/triple/multi lamp
  1 42 watt quad/triple/multi lamp
  1 28 watt 2D lamps
  1 or 2 24/27 watt long twin tube T5 lamps
  1 FC9T5 22 watt circline lamp
  1 FC12T5 40 watt circline lamp

Compact Fluorescent Ballasts

Catalog Number	Line Volts	Lamp Type	Qty	Input Watts	Nominal Line Amps	Power Factor	Ballast Factor	Total Harmonic Distortion	Crest Factor	Wiring Dia.
C213UNV										
	120	CFQ/M13W	2	33	0.28	>.98	.98	<10%	<1.7	2
	277	CFQ/M13W	2	33	0.12	>.98	.98	<10%	<1.7	2
	120	CFQ/M13W	1	19	0.16	>.98	1.00	<10%	<1.7	1
	277	CFQ/M13W	1	19	0.07	>.98	1.00	<10%	<1.7	1
	120	CFS10W/GR10q	2/1	26/15	0.22/0.12	>.95	1.02	<10%	<1.7	5/4
	277	CFS10W/GR10q	2/1	26/15	0.10/0.06	>.95	1.02	<10%	<1.7	5/4
	120	CFS16W/GR10q	2/1	33/19	0.28/0.15	>.98	.95	<10%	<1.7	5/4
	277	CFS16W/GR10q	2/1	33/19	0.15/0.07	>.98	.95	<10%	<1.7	5/4
C218UNV										
	120	CFQ/M18W	2	40	0.34	>.98	.98	<10%	<1.5	2
	277	CFQ/M18W	2	40	0.15	>.98	.98	<10%	<1.5	2
	120	CFQ/M18W	1	22	0.18	>.98	1.00	<10%	<1.5	1
	277	CFQ/M18W	1	22	0.08	>.98	1.00	<10%	<1.5	1
	120	CFS21W/GR10q	2/1	43/24	0.37/0.18	>.98	.95/.98	<10%	<1.7	5/4
	277	CFS21W/GR10q	2/1	43/24	0.16/0.08	>.98	.95/.98	<10%	<1.7	5/4
C2642UNV										
	120	CFQ/TR26W	2	56	0.49	>.98	.98	<10%	<1.5	1
	277	CFQ/TR26W	2	56	0.21	>.98	.98	<10%	<1.5	1
	120	CFQ/TR26W	1	28	0.25	>.98	1.02	<10%	<1.5	1
	277	CFQ/TR26W	1	28	0.11	>.98	1.02	<10%	<1.5	1
	120	CFM42W	1	48	0.42	>.98	.98	<10%	<1.5	1
	277	CFM42W	1	48	0.18	>.98	.98	<10%	<1.5	1
	120	CFTR32W	1	36	0.32	>.98	1.00	<10%	<1.5	1
	277	CFTR32W	1	36	0.14	>.98	1.00	<10%	<1.5	1
	120	FC9T5-22W	1	25	0.22	>.98	1.00	<10%	<1.5	3
	277	FC9T5-22W	1	25	0.10	>.98	1.00	<10%	<1.5	3
	120	FC12T5-40W	1	42	0.37	>.98	.98	<10%	<1.5	3
	277	FC12T5-40W	1	42	0.16	>.98	.98	<10%	<1.5	3
	120	FT24W/2G11	2/1	52/30	0.45/0.26	>.95	.85/.90	<10%	<1.6	2/1
	277	FT24W/2G11	2/1	52/30	0.20/0.11	>.95	.85/.90	<10%	<1.6	2/1
	120	CFS28W/GR10q	1	31	0.27	>.95	.95	<10%	<1.6	4
	277	CFS28W/GR10q	1	31	0.12	>.95	.95	<10%	<1.6	4
	120	CFS38W/GR10q	1	33	0.29	>.95	.80	<10%	<1.6	4
	277	CFS38W/GR10q	1	33	0.13	>.95	.80	<10%	<1.6	4
C2642/347										
	347	CFQ/TR26W	2	57	0.17	>.98	.98	<10%	<1.5	2
	347	CFQ/TR26W	1	29	0.09	>.98	1.02	<10%	<1.5	1
	347	CFM42W	1	49	0.15	>.98	1.00	<10%	<1.5	1
	347	CFTR32W	1	36	0.11	>.98	.98	<10%	<1.5	1
	347	FT24W/2G11	2/1	53/31	0.16/0.09	>.95	.85/.90	<10%	<1.6	2/1
	347	CFS28W/GR10q	1	32	0.10	>.95	.95	<10%	<1.6	4
	347	FC9T5-22W	1	25	0.07	>.98	1.00	<10%	<1.5	3
	347	FC12T5-40W	1	42	0.13	>.98	.98	<10%	<1.5	3
C213/347										
	347	CFQ/M13W	2	33	0.10	>.98	.98	<10%	<1.7	2
	347	CFQ/M13W	1	17	0.05	>.98	1.00	<10%	<1.7	1
	347	CFS16W/GR10q	2/1	33/19	0.10/0.06	>.98	.95/.98	<10%	<1.7	5/4
C218/347										
	347	CFQ/M18W	2	0.44	0.12	>.98	.98	<10%	<1.5	2
	347	CFQ/M18W	1	0.36	0.07	>.98	1.00	<10%	<1.5	1
	347	CFS21W/GR10q	2/1	0.37	0.13/0.07	>.98	.94/.97	<10%	<1.7	5/4

WIRING DIAGRAMS FOR COMPACT FLUORESCENT BALLASTS

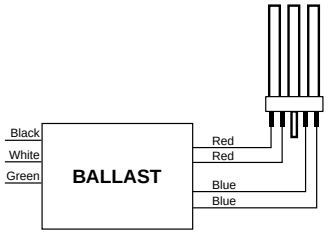
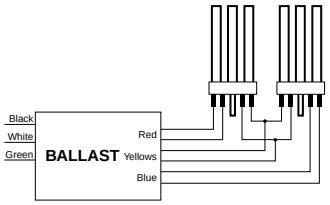
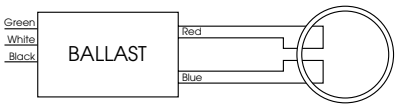


Diagram 1



Series lamp operation

Diagram 2



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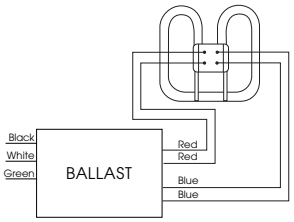

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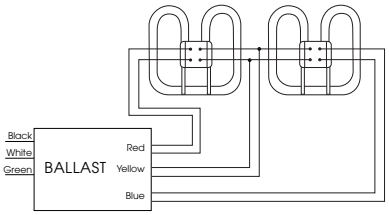

Series lamp operation

Diagram 5

IT'S EASY TO REACH US

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