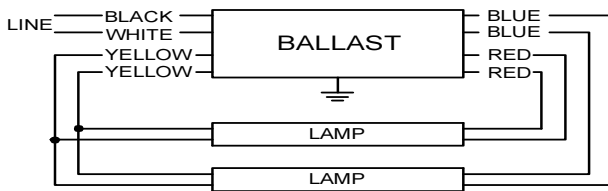


### Electrical Specifications at 120V

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.
F30T12	1	30	50/10	0.25	30	0.95	20	0.98	1.7	3.17
F30T12	2	30	50/10	0.48	58	0.93	20	0.98	1.7	1.60
F40T12	1	40	50/10	0.33	39	0.91	20	0.99	1.7	2.33
* F40T12	2	40	50/10	0.61	72	0.87	20	0.99	1.7	1.21

### Wiring Diagram



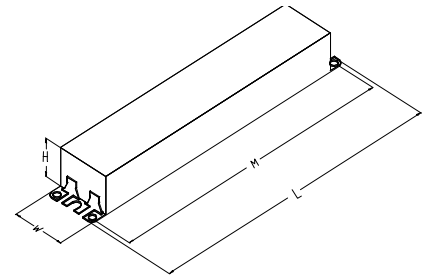
**Diag. 21**

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

### Standard Lead Length (inches)

	in.	cm.		in.	cm.
Black	22	55.9	Yellow/Blue		0
White	22	55.9	Blue/White		0
Blue	26	66	Brown		0
Red	26	66	Orange		0
Yellow	36	91.4	Orange/Black		0
Gray		0	Black/White		0
Violet		0	Red/White		0

### Enclosure



### Enclosure Dimensions

OverAll (L)	Width (W)	Height (H)	Mounting (M)
9.5 "	1.3 "	1.0 "	8.9 "
24.1 cm	3.3 cm	2.5 cm	22.6 cm



Revised 07/28/14

RELB-2S40-N	
Brand Name	AMBISTAR
Ballast Type	Electronic
Starting Method	Rapid Start
Lamp Connection	Series
Input Voltage	120
Input Frequency	60 HZ
Status	Active

## Electrical Specifications at 120V

### Notes:

#### Section I - Physical Characteristics

- Ballast shall be physically interchangeable with standard electromagnetic or standard electronic ballasts, where applicable.
- Ballast shall be provided with integral leads or poke-in wire trap connectors color coded per ANSI C82.11.

#### Section II - Performance Requirements

- Ballast shall be \_\_\_\_\_ (Instant or Rapid) Start.
- Ballast shall provide Independent Lamp Operation (ILO) for Instant Start ballasts allowing remaining lamp(s) to maintain full light output when one or more lamps fail.
- Ballast shall contain auto restart circuitry in order to restart lamps without resetting power
- Ballast shall operate from 60 Hz input source of 120V with sustained variations of +/- 10% (voltage and frequency).
- 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.
- Ballast shall have a Power Factor for primary lamp as follows: greater than 0.98 for RCF and RELB models or greater than 0.50 for REB and RMB models.
- Fixed Output Ballast shall have a minimum ballast factor for primary lamp as follows: 0.85 for linear lamps or 1.0 for CFL lamps.
- Dimming Ballast shall have a minimum ballast factor of 0.85 at maximum light output and 0.15 at minimum light output for primary lamp.
- Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less.
- Ballast input current shall have Total Harmonic Distortion (THD) when operated at nominal line voltage with primary lamp as follows: less than 10% for RCF models, less than 20% for RELB models or less than 150% for REB and RMB models.
- Ballast shall have a Class A sound rating.
- Ballast shall have a minimum starting temperature for primary lamp as follows: 0°F/-18°C for RCF, REB and RMB models, 50°F/10°C for Dimming Ballasts or 50°F/10°C for standard T12 lamps and 60°F/16°C for energy-saving T12 lamps.
- Ballast shall provide Lamp EOL Protection Circuit for CFL and T5 lamps.
- Ballast shall tolerate sustained open circuit and short circuit output conditions.
- Dimming Ballast shall ignite the lamps at any light output setting without first going to another output setting.

#### Section III - Regulatory Requirements

- Ballast shall not contain any Polychlorinated Biphenyl (PCB).
- Ballast shall be Underwriters Laboratories (UL) listed, Class P and Type 1 Outdoor (and Type CC for RMB models); and Canadian Standards Association (CSA) certified where applicable.
- Ballast for CFL lamps shall be rated for use in air-handling spaces.
- Ballast shall comply with ANSI C62.41 Category A for Transient protection.
- Ballast shall comply with ANSI C82.11 where applicable.
- Ballast shall comply with the requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, Consumer (Class B) for EMI/RFI (conducted and radiated).
- Ballast shall comply with NEMA 410 for in-rush current limits.

#### Section IV - Other

- Ballast shall be manufactured in a factory certified to ISO 9001 Quality System Standards.
- Ballast shall carry a warranty from date of manufacture against defects in material or workmanship as follows:  
 RCF models for three years, including replacement, for operation at a maximum case temperature of 85°C  
 RELB models for three years, including replacement, for operation at a maximum case temperature of 70°C  
 RMB models for two years, material only, for operation at a maximum case temperature of 65°C  
 REB T8 models for two years, material only, for operation at a maximum case temperature of 70°C  
 REB-4P32-N Maximum Case Temperature is 90° for two years

# Ambistar RELB2S40N

REB CFL models for two years, material only, for operation at a maximum case temperature of 90°C or 40°C ambient.

REB CFL dimming models for two years, material only, for operation at a maximum case temperature of 65°C

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

4.4 Ballast shall be controlled by a compatible Ambistar two-wire dimmer. When input voltage to dimmer is 120V, control voltage to the ballast (from the dimmer) shall be 120V at full light output and 56V at minimum light output.

4.4 Ballast shall be Philips Advance part # \_\_\_\_\_ or approved equal.

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