

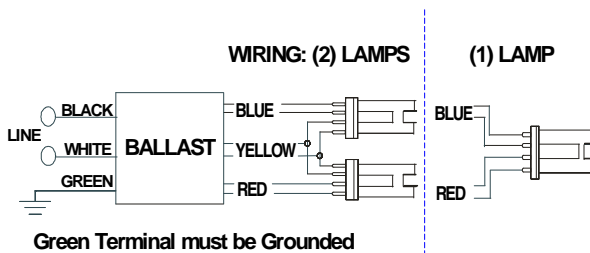


## Electrical Specifications

ICF2S4290CM2LD@120	
Brand Name	SMARTMATE
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.
(1) FC9T5 & (1) FC12T5	2	62	0/-18	0.51	61	0.85	10	0.98	1.5	1.39
* CFM26W/GX24Q	2	26	0/-18	0.46	55	1.00	10	0.98	0.0	1.82
CFM32W/GX24Q	2	32	0/-18	0.57	68	0.98	10	0.98	1.5	1.44
CFM42W/GX24Q	1	42	0/-18	0.39	47	1.05	15	0.98	1.5	2.23
CFM42W/GX24Q	2	42	0/-18	0.78	93	0.97	10	0.97	1.5	1.04
CFM57W/GX24Q	1	57	14/-10	0.50	59	0.94	10	0.98	1.5	1.59
CFM70W/GX24Q	1	70	14/-10	0.63	75	0.96	10	0.98	1.6	1.28
CFQ26W/G24Q	2	26	0/-18	0.43	52	1.00	10	0.98	1.5	1.92
CFS28W/GR10Q	2	28	0/-18	0.48	57	1.00	10	0.98	1.5	1.75
CFS38W/GR10Q	2	38	0/-18	0.55	62	0.80	10	0.98	1.5	1.29
CFTR57W/GX24Q	1	57	14/-10	0.80	59	0.94	10	0.98	1.5	1.59
FT24W/2G11	2	24	0/-18	0.40	48	0.93	10	0.98	1.5	1.94
FT40W/2G11/RS	2	40	0/-18	0.66	78	0.95	10	0.99	1.5	1.22

## Wiring Diagram

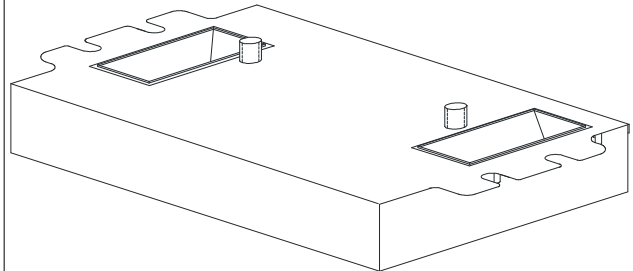


The wiring diagram that appears above is for the lamp type denoted by the asterisk (\*)

## 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



## Enclosure Dimensions

OverAll (L)	Width (W)	Height (H)	Mounting (M)
4.98 "	3.00 "	1.29 "	2.00 "
4 49/50	3	1 29/100	2
12.6 cm	7.6 cm	3.3 cm	5.1 cm



Revised 03/25/09

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## ADVANCE TRANSFORMER CO.

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Corporate Offices: Phone: 800-322-2086



## Electrical Specifications

### 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 available in a plastic/metal can or all metal can construction to meet plenum requirements.
- 1.3 Ballast shall be provided with poke-in wire trap connectors color coded per ANSI C82.11.

#### Section II - Performance

- 2.1 Ballast shall be Programmed Start except for ballasts with -QS suffix, which shall be Rapid 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 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) for primary lamp. Ballasts for PL-H lamps shall have a minimum starting temperature of -30C (-20F) for primary lamp.
- 2.11 Ballast shall provide Lamp EOL Protection Circuit.
- 2.12 Ballast shall tolerate sustained open circuit and short circuit output conditions.

#### 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 be rated for use in air-handling spaces.
- 3.4 Ballast shall comply with ANSI C62.41 Category A for Transient protection.
- 3.5 Ballast shall comply with ANSI C82.11 where applicable.
- 3.6 Ballast shall comply with applicable requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, for Non-Consumer equipment.
- 3.7 Ballast shall comply with NEMA 410 for in-rush current limits.
- 3.8 Ballast shall meet RoHS Compliance Standards

#### 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 75C and three-years for a maximum case temperature of 85C (90C three-year warranty for ICF-1H120-M4-XX, ICF-2S42-90C-M2-XX and ICF-2S70-M4-XX models).
- 4.3 Manufacturer shall have a twenty-year history of producing electronic ballasts for the North American market.

ICF2S4290CM2LD @ 120	
Brand Name	SMARTMATE
Ballast Type	Electronic
Starting Method	Programmed Start
Lamp Connection	Series
Input Voltage	120-277
Input Frequency	50/60 HZ
Status	Active



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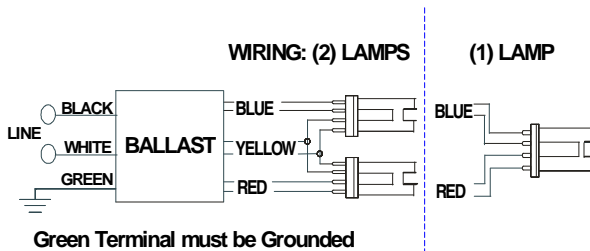


## Electrical Specifications

ICF2S4290CM2LD@277	
Brand Name	SMARTMATE
Ballast Type	Electronic
Starting Method	Programmed Start
Lamp Connection	Parallel
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.
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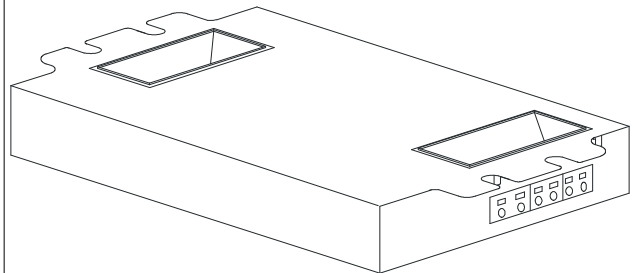


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Red	0	0	Orange		0
Yellow	0	0	Orange/Black		0
Gray		0	Black/White		0
Violet		0	Red/White		0

## Enclosure



## Enclosure Dimensions

OverAll (L)	Width (W)	Height (H)	Mounting (M)
4.98 "	3.00 "	1.29 "	4.60 "
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12.6 cm	7.6 cm	3.3 cm	11.7 cm



Revised 11/14/08

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

<b>ICF2S4290CM2LD@277</b>	
Brand Name	<b>SMARTMATE</b>
Ballast Type	<b>Electronic</b>
Starting Method	<b>Programmed Start</b>
Lamp Connection	<b>Parallel</b>
Input Voltage	<b>120-277</b>
Input Frequency	<b>50/60 HZ</b>
Status	<b>Active</b>



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