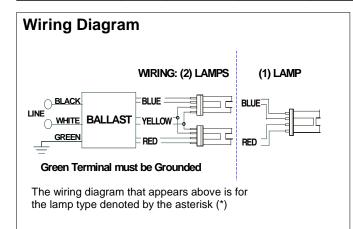
PHILIPS ADVANCE

Electrical Specifications

ICF2S13M1BSQS@120					
Brand Name	SMARTMATE				
Ballast Type	Electronic				
Starting Method	Rapid Start				
Lamp Connection	Series				
Input Voltage	120-277				
Input Frequency	50/60 HZ				
Status	Active				

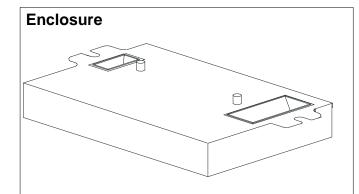
Lamp Type	Num.	Rated	Min. Start	Input Current	Input Power	Ballast	MAX THD	Power	MAX Lamp	B.E.F.
	of Lamps	Lamp Watts	Temp (°F/C)	(Amps)	(ANSI Watts)	Factor	ипр %	Factor	Current Crest Factor	
CFQ13W/G24Q	1	13	0/-18	0.13	16	1.00	10	0.96	1.5	6.25
* CFQ13W/G24Q	2	13	0/-18	0.25	29	1.00	10	0.99	1.5	3.45
	1	13	0/-18	0.13	16	1.00	10	0.96	1.5	6.25
CFTR13W/GX24Q										
	2	13	0/-18	0.25	29	1.00	10	0.99	1.5	3.45
CFTR13W/GX24Q										



Standard Lead Length (inches)

	in.	cm.
Black	0	0
White	0	0
Blue	0	0
Red	0	0
Yellow	0	0
Gray		0
Violet		0

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



Enclosure Dimensions

OverAll (L)	Width (W)	Height (H)	Mounting (M)
4.98 "	2.40 "	0.98 "	2.00 "
4 49/50	2 2/5	0 49/50	2
12.6 cm	6.1 cm	2.5 cm	5.1 cm





Revised 03/03/10

Data is based upon tests performed by Philips Lighting N.A in a controlled environment and representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.



Electrical Specifications

ICF2S13M1BSQS@120					
Brand Name	SMARTMATE				
Ballast Type	Electronic				
Starting Method	Rapid Start				
Lamp Connection	Series				
Input Voltage	120-277				
Input Frequency	50/60 HZ				
Status	Active				

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.





Revised 03/03/10

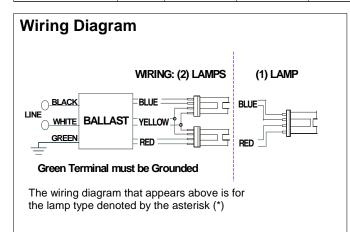
Data is based upon tests performed by Philips Lighting Electronic N.A. in a controlled environment and representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.

PHILIPS ADVANCE

Electrical Specifications

ICF2S13M1BSQS@277					
Brand Name	SMARTMATE				
Ballast Type	Electronic				
Starting Method	Rapid Start				
Lamp Connection	Series				
Input Voltage	120-277				
Input Frequency	50/60 HZ				
Status	Active				

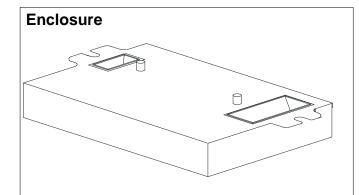
Lamp Type	Num. of	Rated Lamp Watts	Min. Start Temp (F/C)	Input Current (Amps)	Input Power (ANSI	Ballast Factor	MAX THD	Power Factor	MAX Lamp Current Crest	B.E.F.
	Lamps				Watts)		%		Factor	
* CFQ13W/G24Q	1	13	0/-18	0.06	16	1.00	10	0.96	1.5	6.25
CFQ13W/G24Q	2	13	0/-18	0.11	29	1.00	10	0.99	1.5	3.45
	1	13	0/-18	0.06	16	1.00	10	0.96	1.5	6.25
CFTR13W/GX24Q										
	2	13	0/-18	0.11	29	1.00	10	0.99	1.5	3.45
CFTR13W/GX24Q										



Standard Lead Length (inches)

	in.	cm.
Black	0	0
White	0	0
Blue	0	0
Red	0	0
Yellow	0	0
Gray		0
Violet		0

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



Enclosure Dimensions

OverAll (L)	Width (W)	Height (H)	Mounting (M)
4.98 "	2.40 "	0.98 "	2.00 "
4 49/50	2 2/5	0 49/50	2
12.6 cm	6.1 cm	2.5 cm	5.1 cm





Revised 03/03/10

Data is based upon tests performed by Philips Lighting N.A in a controlled environment and representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.



Electrical Specifications

ICF2S13M1BSQS@277					
Brand Name	SMARTMATE				
Ballast Type	Electronic				
Starting Method	Rapid Start				
Lamp Connection	Series				
Input Voltage	120-277				
Input Frequency	50/60 HZ				
Status	Active				

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.





Revised 03/03/10

Data is based upon tests performed by Philips Lighting Electronic N.A. in a controlled environment and representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.