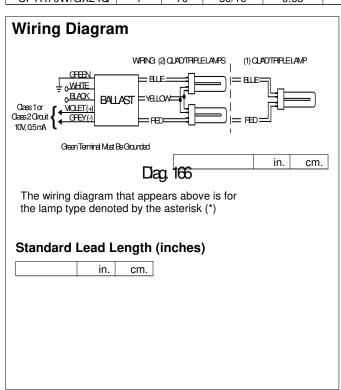
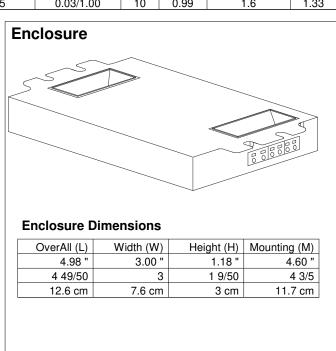


IZT-2T42-M5-LD@120			
Brand Name	MARK 7 0-10V		
Ballast Type	Electronic Dimming		
Starting Method	Programmed Start		
Lamp Connection	Series		
Input Voltage	120-280		
Input Frequency	50/60 HZ		
Status	Active		

Lamp Type	Num.	Rated	Min. Start	Input	Input Power	Ballast Factor	MAX	Power	Lamp Current	B.E.F.
	of	Lamp	Temp	Current	(Watts)	(min/max)	THD	Factor	Crest Factor	
	Lamps	Watts	(°F/C)	(Amps)	(min/max)		%			
CFTR32W/GX24Q	2	32	50/10	0.63	19/75	0.03/1.00	10	0.99	1.6	1.33
* CFTR42W/GX24Q	2	42	50/10	0.82	18/98	0.03/1.00	10	0.99	1.6	1.02
CFTR57W/GX24Q	1	57	50/10	0.55	16/65	0.03/1.00	10	0.99	1.6	1.54
CFTR70W/GX24Q	1	70	50/10	0.63	16/75	0.03/1.00	10	0.99	1.6	1.33









Data is based upon tests performed by Advance Transformer 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

Notes	
NOLES	

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 all plenum requirements.
- 1.3 Ballast shall be provided with poke-in wire trap connectors or integral leads color coded per ANSI C82.11.

Section II - Performance Requirements

- 2.1 Ballast shall be Programmed Start.
- 2.2 VZT-4PSP32-G ballast shall provide Independent Lamp Operation (ILO) allowing remaining lamp(s) to maintain full light output when one or more lamps fail.

IZT-2T42-M5-LD@120

Brand Name MARK 7 0-10V

Ballast Type Electronic Dimming

Lamp Connection | Series

Status

Input Voltage

Input Frequency

Starting Method | Programmed Start

120-280

Active

50/60 HZ

- 2.3 Ballast shall be provided with integral protection circuitry to withstand connection of low voltage control leads to mains power supply. In this event, ballast shall default to maximum light output.
- 2.4 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power.
- 2.5 Ballast shall operate from 50/60 Hz input source of 120V or 277V or 347V with sustained variations of +/- 10% (voltage and frequency). IntelliVolt models shall operate from 50/60 Hz input source of 120V through 277V with sustained variations of +/- 10% (voltage and frequency).
- 2.6 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.
- 2.7 Ballast shall have a Power Factor greater than 0.98 at full light output and greater than 0.90 throughout the dimming range for primary lamp.
- 2.8 Ballast shall have a minimum ballast factor of 1.00 (120V and 277V 1-3 lamp models) or 0.88 (120V and 277V 4 lamp models and 347V 2-3 lamp models) or 1.18 (277V 4 lamp HL models) at maximum light output and 0.03 at minimum light output for primary lamp.
- 2.9 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less.
- 2.10 Ballast input current shall have Total Harmonic Distortion (THD) of less than 10% when operated at nominal line voltage and 100% power.
- 2.11 Ballast shall have a Class A sound rating.
- 2.12 Ballast shall have a minimum starting temperature of 10C (50F) for primary lamp.
- 2.13 Ballast shall provide Lamp EOL Protection Circuit for all T5, T5/HO and CFL lamps.
- 2.14 Ballast shall control lamp light output from 100% 3% relative light output for series operation T8 and CFL lamps, 100% 10% relative light output for parallel operation T8 and 100% 1% relative light output for T5/HO lamps.
- 2.15 Ballast shall ignite the lamps at any light output setting without first going to another output setting.
- 2.16 Ballast shall tolerate sustained open circuit and short circuit output conditions.

Section III - Regulatory Requirements

- 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 comply with ANSI C62.41 Category A for Transient protection.
- 3.4 Ballast shall comply with ANSI C82.11 where applicable.
- 3.5 Ballast shall comply with the requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, Non-Consumer (Class A) for EMI/RFI (conducted and radiated).
- 3.6 Ballast shall comply with NEMA 410 for in-rush current limits.

Section IV - Other

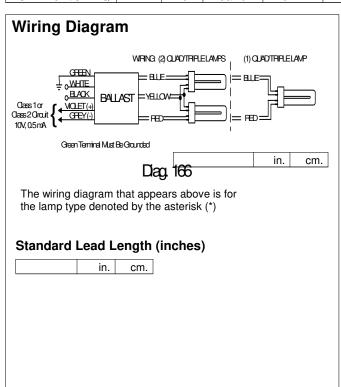
- 4.1 Ballast shall be manufactured in a factory certified to ISO 9001 Quality System Standards.
- 4.2 Ballast shall carry a five-year warranty from date of manufacture against defects in material or workmanship, including replacement, for operation at a maximum case temperature of 70C.
- 4.3 Manufacturer shall have a twenty-year history of producing electronic ballasts for the North American market.
- 4.4 Ballast shall be controlled by a Class 1 or Class 2 low voltage 0-10VDC controller.

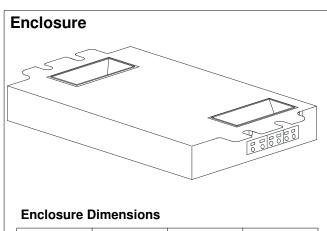
4.5 Ballast shall be Philips Advance part #	or approved equal.



IZT-2T42-M5-LD@277		
Brand Name	MARK 7 0-10V	
Ballast Type	Electronic Dimming	
Starting Method	Programmed Start	
Lamp Connection	Series	
Input Voltage	120-280	
Input Frequency	50/60 HZ	
Status	Active	

Lamp Type	Num.	Rated	Min. Start	Input	Input Power	Ballast Factor	MAX	Power	Lamp Current	B.E.F.
	of	Lamp	Temp	Current	(Watts)	(min/max)	THD	Factor	Crest Factor	
	Lamps	Watts	(°F/C)	(Amps)	(min/max)		%			
CFTR32W/GX24Q	2	32	50/10	0.21	19/75	0.03/1.00	10	0.99	1.6	1.33
* CFTR42W/GX24Q	2	42	50/10	0.36	18/98	0.03/1.00	10	0.99	1.6	1.02
CFTR57W/GX24Q	1	57	50/10	0.24	16/65	0.03/1.00	10	0.99	1.6	1.54
CFTR70W/GX24Q	1	70	50/10	0.27	16/75	0.03/1.00	10	0.99	1.6	1.33





OverAll (L)	Width (W)	Height (H)	Mounting (M)
4.98 "	3.00 "	1.18 "	4.60 "
4 49/50	3	1 9/50	4 3/5
12.6 cm	7.6 cm	3 cm	11.7 cm





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	Ballast Type	Electronic Dimming
A* ADVANCE	Starting Method	Programmed Start
TRANSFORMER CO.	Lamp Connection	Series
lectrical Specifications	Input Voltage	120-280
	Input Frequency	50/60 HZ
Notes:	Status	Active

IZT-2T42-M5-LD@277 Brand Name MARK 7 0-10V

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 all plenum requirements.
- 1.3 Ballast shall be provided with poke-in wire trap connectors or integral leads color coded per ANSI C82.11.

Section II - Performance Requirements

- 2.1 Ballast shall be Programmed Start.
- 2.2 VZT-4PSP32-G ballast shall provide Independent Lamp Operation (ILO) allowing remaining lamp(s) to maintain full light output when one or more lamps fail.
- 2.3 Ballast shall be provided with integral protection circuitry to withstand connection of low voltage control leads to mains power supply. In this event, ballast shall default to maximum light output.
- 2.4 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power.
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- 2.10 Ballast input current shall have Total Harmonic Distortion (THD) of less than 10% when operated at nominal line voltage and 100% power.
- 2.11 Ballast shall have a Class A sound rating.
- 2.12 Ballast shall have a minimum starting temperature of 10C (50F) for primary lamp.
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- 3.3 Ballast shall comply with ANSI C62.41 Category A for Transient protection.
- 3.4 Ballast shall comply with ANSI C82.11 where applicable.
- 3.5 Ballast shall comply with the requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, Non-Consumer (Class A) for EMI/RFI (conducted and radiated).
- 3.6 Ballast shall comply with NEMA 410 for in-rush current limits.

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 70C.
- 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 Class 1 or Class 2 low voltage 0-10VDC controller.

4.5 Ballast shall be Philips Advance part #	or approved equal.