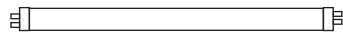


SPECIFICATION SHEET : IH3-UNV-272T12HO

This Is An Original Product From Fulham Co., Inc

Description : Universal Voltage, Auto Restart With Cold Starting Feature For Refrigeration Application/s.

This Ballast Will Operate Following Lamps.



**F48T8HO, F60T8HO,
F72T8HO (1 LAMP ONLY)**



**F48T10VHO, F60T10VHO,
F72T10VHO, F96T12HO
(1 LAMP ONLY)**

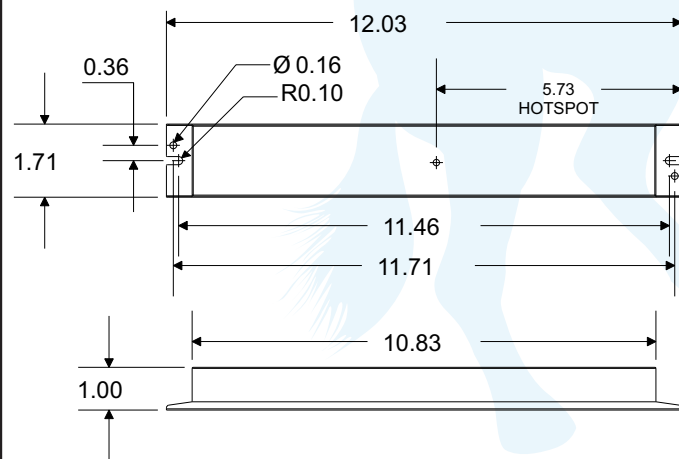


**F48T12HO, F60T12HO, F72T12HO
F96T12VHO(215W)**

ELECTRICAL DATA (120V APPLICATION)

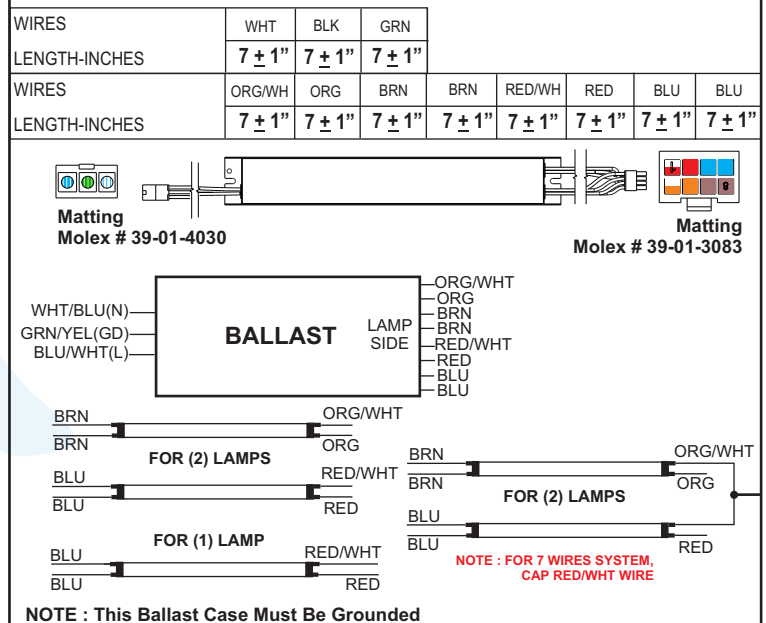
INPUT VOLT: 120V ± 10%, 50/60Hz											
LAMP WATTS/TYPE	F48T8HO	F60T8HO	F72T8HO	F48T12HO	F60T12HO	F72T12HO	F96T12HO	F48T10VHO	F60T10VHO	F72T10VHO	F96T12VHO
LAMPS OPERATED	1										
INPUT WATTS	55	66	81	55	66	74	93	61	72	82	102
LINE CURRENT:	0.46	0.55	0.68	0.47	0.56	0.62	0.78	0.51	0.60	0.69	0.85
BALLAST FACTOR	1.17	1.16	1.16	0.89	0.89	0.88	0.95	0.50	0.52	0.50	0.48
EFFICACY FACTOR	2.15	1.75	1.44	1.61	1.35	1.19	1.02	0.83	0.72	0.60	0.48
POWER FACTOR	> .9										
THD	< 10 %										
CURRENT CREST FACTOR	< 1.7										
EMI/RFI COMPLIANCE	FCC PART 18-A (Non-Consumer)										
SOUND RATING	"A"										
BALLAST TYPE	PROGRAMMED PREHEAT START										
VOLTAGE TRANSIENTS	ANSI 62.41										
INPUT/PROTECTION	FUSE										
OUTPUT/PROTECTION	DEACTIVATED LAMP PROTECTION										
MIN. OPERATING TEMP	-30 °C (- 22 ° F)										
MAX. CASE TEMP	70 °C (158 ° F)										
TYPE	"CC"										
APPROVALS/CLASS	UL /cUL LISTED, CLASS " P ", 1 OUTDOOR										

MECHANICAL DATA



Where : L = Length, W = Width, H = Height

WIRING DIAGRAM



Fulham Co., Inc extends limited warranty only to the original purchaser or to the first user for the period of **3 years** from the date of manufacture as indicated by the date code stamped on each product and when properly installed and under normal conditions of use. For additional warranty guide line, please refer to our Complete Product Catalog OR call Customer Service at 1-323-599-5000.

DUE TO A PROGRAM OF CONTINUOUS IMPROVEMENT, FULHAM Co., INC RESERVES THE RIGHT TO MAKE ANY VARIATION IN DESIGN OR CONSTRUCTION TO THE EQUIPMENT DESCRIBED.

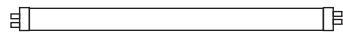
Address : 12705 South Van Ness Ave., Hawthorne, CA 90250 Tel.: 1-323-599-5000, Fax.: 1-323-754-9060. Website: www.fulham.com 2006-143-1-1 rev E

SPECIFICATION SHEET : IH3-UNV-272T12HO

This Is An Original Product From Fulham Co., Inc

Description : Universal Voltage, Auto Restart With Cold Starting Feature For Refrigeration Application/s.

This Ballast Will Operate Following Lamps.



**F48T8HO, F60T8HO,
F72T8HO (1 LAMP ONLY)**



**F48T10VHO, F60T10VHO,
F72T10VHO, F96T12HO
(1 LAMP ONLY)**

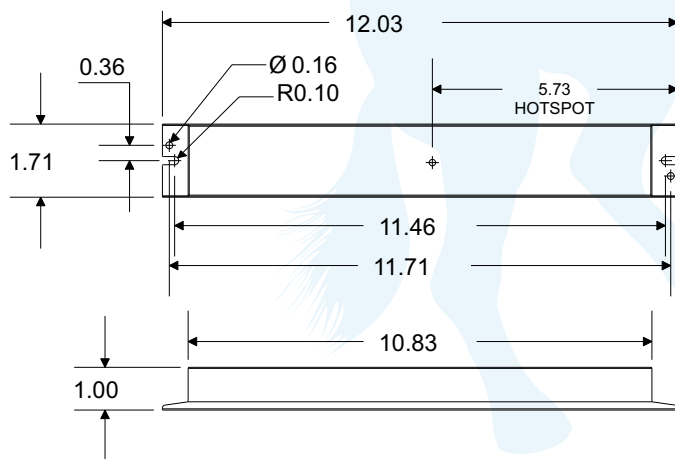


**F48T12HO, F60T12HO, F72T12HO
F96T12VHO(215W)**

ELECTRICAL DATA (120V APPLICATION)

INPUT VOLT: 120V ± 10%, 50/60Hz							
LAMP WATTS/TYPE	F48T8HO	F60T8HO	F48T12HO	F60T12HO	F72T12HO	F48T10VHO	F60T10VHO
LAMPS OPERATED	2						
INPUT WATTS	108	131	107	130	145	120	139
LINE CURRENT:	0.91	1.10	0.90	1.09	1.21	1.00	1.09
BALLAST FACTOR	1.17	1.15	0.89	0.90	0.88	0.50	0.51
EFFICACY FACTOR	1.09	0.87	0.83	0.69	0.61	0.42	0.37
POWER FACTOR	> .9						
THD	< 10 %						
CURRENT CREST FACTOR	< 1.7						
EMI/RFI COMPLIANCE	FCC PART 18-A (Non-Consumer)						
SOUND RATING	" A "						
BALLAST TYPE	PROGRAMMED PREHEAT START						
VOLTAGE TRANSIENTS	ANSI 62.41						
INPUT/PROTECTION	FUSE						
OUTPUT/PROTECTION	DEACTIVATED LAMP PROTECTION						
MIN. OPERATING TEMP	-30 °C (- 22 ° F)						
MAX. CASE TEMP	70 °C (158 ° F)						
TYPE	"CC"						
APPROVALS/CLASS	UL /cUL LISTED, CLASS " P ", 1 OUTDOOR						

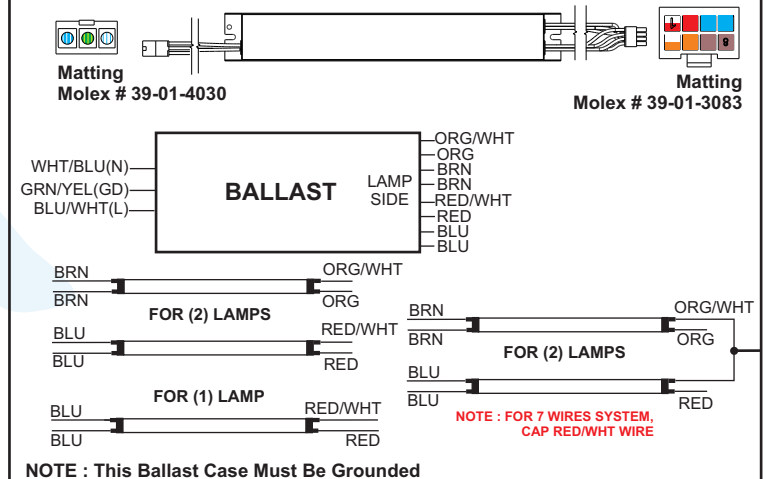
MECHANICAL DATA



Where : L = Length, W = Width, H = Height

WIRING DIAGRAM

WIRES	WHT	BLK	GRN					
LENGTH-INCHES	7 ± 1"	7 ± 1"	7 ± 1"					
WIRES	ORG/WH	ORG	BRN	BRN	RED/WH	RED	BLU	BLU
LENGTH-INCHES	7 ± 1"	7 ± 1"	7 ± 1"	7 ± 1"	7 ± 1"	7 ± 1"	7 ± 1"	7 ± 1"



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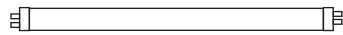
Address : 12705 South Van Ness Ave., Hawthorne, CA 90250 Tel.: 1-323-599-5000, Fax.: 1-323-754-9060. Website: www.fulham.com 2006-143-1-2 rev E

SPECIFICATION SHEET : IH3-UNV-272T12HO

This Is An Original Product From Fulham Co., Inc

Description : Universal Voltage, Auto Restart With Cold Starting Feature For Refrigeration Application/s.

This Ballast Will Operate Following Lamps.



**F48T8HO, F60T8HO,
F72T8HO (1 LAMP ONLY)**



**F48T10VHO, F60T10VHO,
F72T10VHO, F96T12HO
(1 LAMP ONLY)**

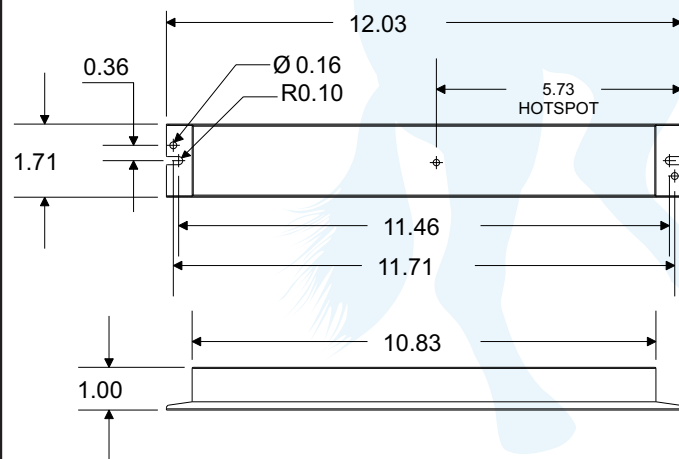


**F48T12HO, F60T12HO, F72T12HO
F96T12VHO(215W)**

ELECTRICAL DATA (230V APPLICATION)

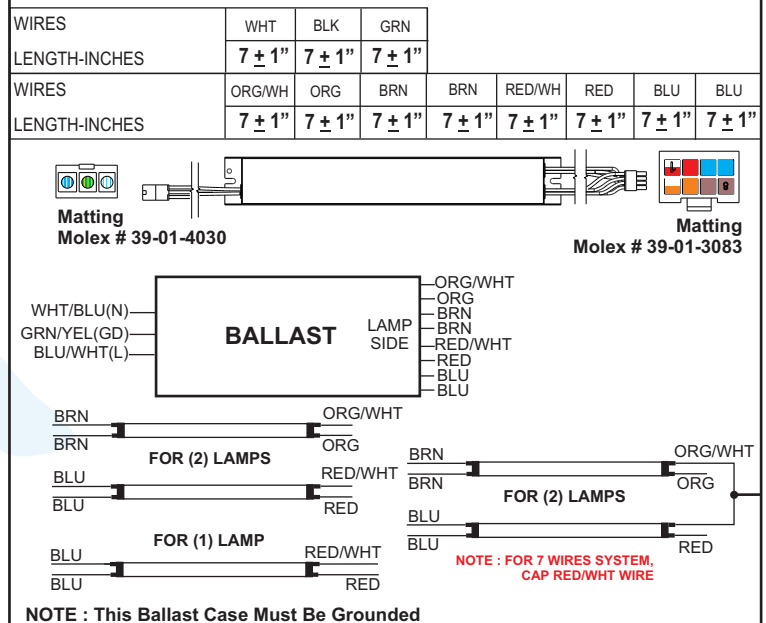
INPUT VOLT: 230V ± 10%, 50/60Hz											
LAMP WATTS/TYPE	F48T8HO	F60T8HO	F72T8HO	F48T12HO	F60T12HO	F72T12HO	F96T12HO	F48T10VHO	F60T10VHO	F72T10VHO	F96T12VHO
LAMPS OPERATED	1										
INPUT WATTS	54	67	80	55	66	74	92	60	71	81	101
LINE CURRENT:	0.24	0.30	0.35	0.25	0.30	0.33	0.40	0.27	0.32	0.36	0.45
BALLAST FACTOR	1.17	1.18	1.16	0.89	0.89	0.89	0.92	0.50	0.52	0.49	0.49
EFFICACY FACTOR	2.15	1.76	1.45	1.61	1.35	1.21	1.01	0.83	0.72	0.61	0.48
POWER FACTOR	> .9										
THD	< 10 %										
CURRENT CREST FACTOR	< 1.7										
EMI/RFI COMPLIANCE	FCC PART 18-A (Non-Consumer)										
SOUND RATING	"A"										
BALLAST TYPE	PROGRAMMED PREHEAT START										
VOLTAGE TRANSIENTS	ANSI 62.41										
INPUT/PROTECTION	FUSE										
OUTPUT/PROTECTION	DEACTIVATED LAMP PROTECTION										
MIN. OPERATING TEMP	-30 °C (-22 °F)										
MAX. CASE TEMP	70 °C (158 °F)										
TYPE	"CC"										
APPROVALS/CLASS	UL /cUL LISTED, CLASS "P", 1 OUTDOOR										

MECHANICAL DATA



Where : L = Length, W = Width, H = Height

WIRING DIAGRAM



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DUE TO A PROGRAM OF CONTINUOUS IMPROVEMENT, FULHAM Co., INC RESERVES THE RIGHT TO MAKE ANY VARIATION IN DESIGN OR CONSTRUCTION TO THE EQUIPMENT DESCRIBED.

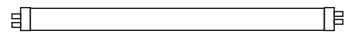
Address : 12705 South Van Ness Ave., Hawthorne, CA 90250 Tel.: 1-323-599-5000, Fax.: 1-323-754-9060. Website: www.fulham.com 2006-143-2-1 rev E

SPECIFICATION SHEET : IH3-UNV-272T12HO

This Is An Original Product From Fulham Co., Inc

Description : Universal Voltage, Auto Restart With Cold Starting Feature For Refrigeration Application/s.

This Ballast Will Operate Following Lamps.



**F48T8HO, F60T8HO,
F72T8HO (1 LAMP ONLY)**



**F48T10VHO, F60T10VHO,
F72T10VHO, F96T12HO
(1 LAMP ONLY)**

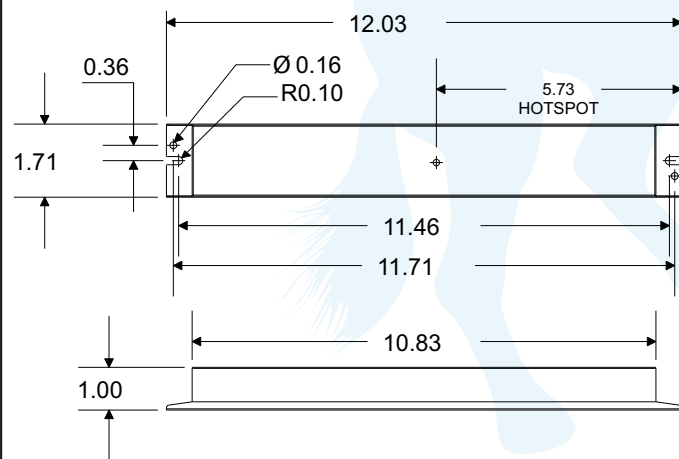


**F48T12HO, F60T12HO, F72T12HO
F96T12VHO(215W)**

ELECTRICAL DATA (230V APPLICATION)

INPUT VOLT: 230V ± 10%, 50/60Hz							
LAMP WATTS/TYPE	F48T8HO	F60T8HO	F48T12HO	F60T12HO	F72T12HO	F48T10VHO	F60T10VHO
LAMPS OPERATED	2						
INPUT WATTS	107	130	105	127	141	118	136
LINE CURRENT:	0.47	0.57	0.46	0.56	0.62	0.52	0.59
BALLAST FACTOR	1.17	1.17	0.89	0.90	0.87	0.50	0.51
EFFICACY FACTOR	1.10	0.90	0.85	0.70	0.62	0.43	0.38
POWER FACTOR	> .9						
THD	< 10 %						
CURRENT CREST FACTOR	< 1.7						
EMI/RFI COMPLIANCE	FCC PART 18-A (Non-Consumer)						
SOUND RATING	" A "						
BALLAST TYPE	PROGRAMMED PREHEAT START						
VOLTAGE TRANSIENTS	ANSI 62.41						
INPUT/PROTECTION	FUSE						
OUTPUT/PROTECTION	DEACTIVATED LAMP PROTECTION						
MIN. OPERATING TEMP	-30 °C (- 22 ° F)						
MAX. CASE TEMP	70 °C (158 ° F)						
TYPE	"CC"						
APPROVALS/CLASS	UL /cUL LISTED, CLASS " P ", 1 OUTDOOR						

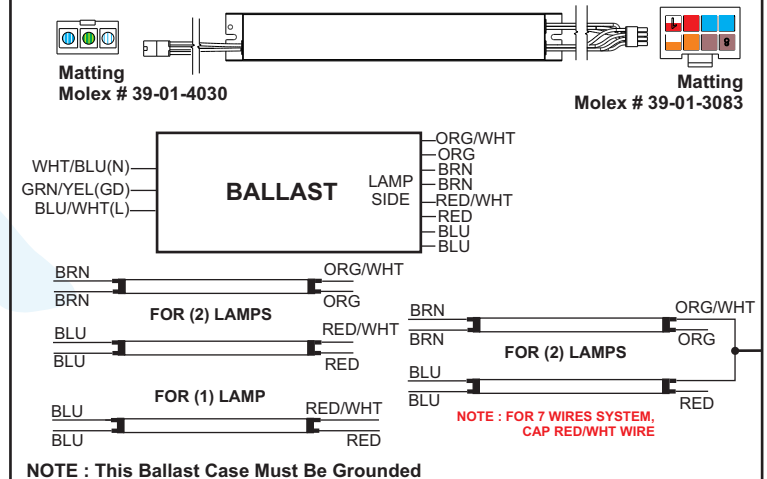
MECHANICAL DATA



Where : L = Length, W = Width, H = Height

WIRING DIAGRAM

WIRES	WHT	BLK	GRN					
LENGTH-INCHES	7 ± 1"	7 ± 1"	7 ± 1"					
WIRES	ORG/WH	ORG	BRN	BRN	RED/WH	RED	BLU	BLU
LENGTH-INCHES	7 ± 1"	7 ± 1"	7 ± 1"	7 ± 1"	7 ± 1"	7 ± 1"	7 ± 1"	7 ± 1"



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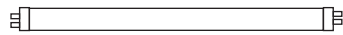
Address : 12705 South Van Ness Ave., Hawthorne, CA 90250 Tel.: 1-323-599-5000, Fax.: 1-323-754-9060. Website: www.fulham.com 2006-143-2-2 rev E

SPECIFICATION SHEET : IH3-UNV-272T12HO

This Is An Original Product From Fulham Co., Inc

Description : Universal Voltage, Auto Restart With Cold Starting Feature For Refrigeration Application/s.

This Ballast Will Operate Following Lamps.



**F48T8HO, F60T8HO,
F72T8HO (1 LAMP ONLY)**



**F48T10VHO, F60T10VHO,
F72T10VHO, F96T12HO
(1 LAMP ONLY)**

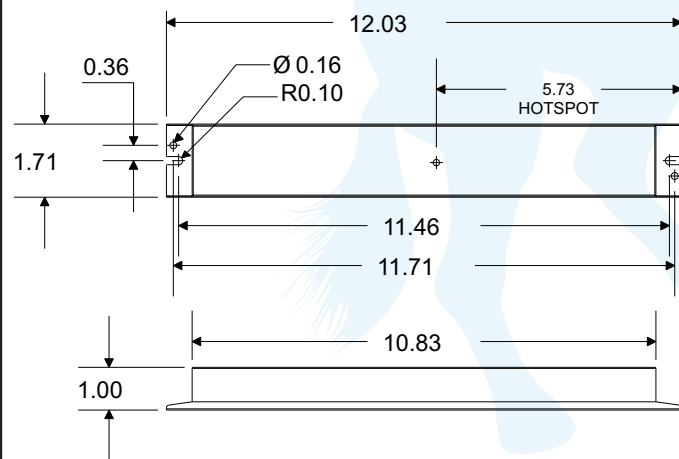


**F48T12HO, F60T12HO, F72T12HO
F96T12VHO(215W)**

ELECTRICAL DATA (277V APPLICATION)

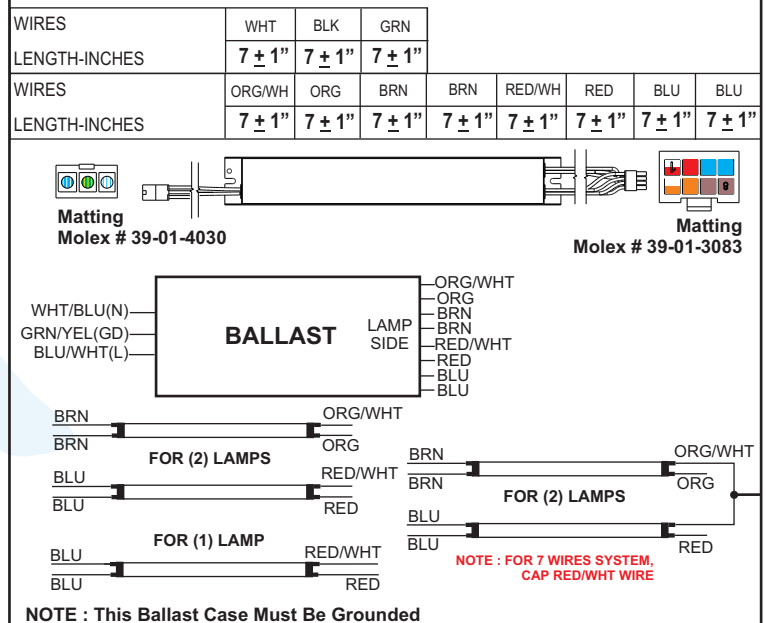
INPUT VOLT: 277V ± 10%, 50/60Hz											
LAMP WATTS/TYPE	F48T8HO	F60T8HO	F72T8HO	F48T12HO	F60T12HO	F72T12HO	F96T12HO	F48T10VHO	F60T10VHO	F72T10VHO	F96T12VHO
LAMPS OPERATED	1										
INPUT WATTS	54	67	80	56	66	74	92	60	71	80	101
LINE CURRENT:	0.21	0.25	0.30	0.21	0.25	0.28	0.34	0.23	0.27	0.30	0.38
BALLAST FACTOR	1.16	1.18	1.16	0.89	0.90	0.89	0.92	0.50	0.52	0.49	0.49
EFFICACY FACTOR	2.14	1.77	1.45	1.61	1.35	1.20	1.01	0.83	0.72	0.61	0.48
POWER FACTOR	> .9										
THD	< 10 %										
CURRENT CREST FACTOR	< 1.7										
EMI/RFI COMPLIANCE	FCC PART 18-A (Non-Consumer)										
SOUND RATING	"A"										
BALLAST TYPE	PROGRAMMED PREHEAT START										
VOLTAGE TRANSIENTS	ANSI 62.41										
INPUT/PROTECTION	FUSE										
OUTPUT/PROTECTION	DEACTIVATED LAMP PROTECTION										
MIN. OPERATING TEMP	-30 °C (- 22 ° F)										
MAX. CASE TEMP	70 °C (158 ° F)										
TYPE	"CC"										
APPROVALS/CLASS	UL /cUL LISTED, CLASS " P ", 1 OUTDOOR										

MECHANICAL DATA



Where : L = Length, W = Width, H = Height

WIRING DIAGRAM



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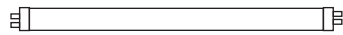
Address : 12705 South Van Ness Ave., Hawthorne, CA 90250 Tel.: 1-323-599-5000, Fax.: 1-323-754-9060. Website: www.fulham.com 2006-143-3-1 rev E

SPECIFICATION SHEET : IH3-UNV-272T12HO

This Is An Original Product From Fulham Co., Inc

Description : Universal Voltage, Auto Restart With Cold Starting Feature For Refrigeration Application/s.

This Ballast Will Operate Following Lamps.



**F48T8HO, F60T8HO,
F72T8HO (1 LAMP ONLY)**



**F48T10VHO, F60T10VHO,
F72T10VHO, F96T12HO
(1 LAMP ONLY)**

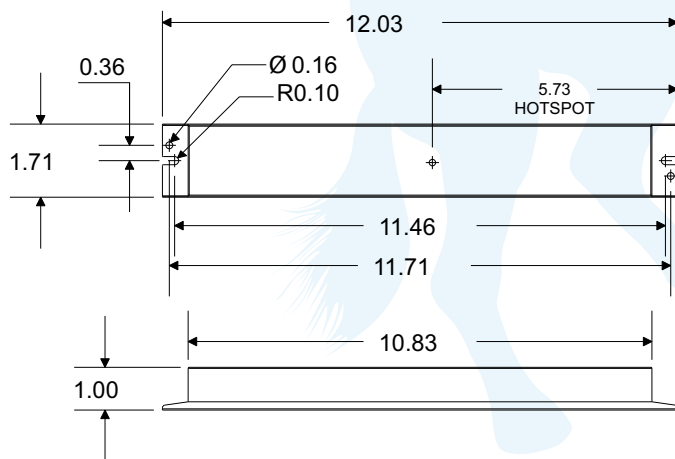


**F48T12HO, F60T12HO, F72T12HO
F96T12VHO(215W)**

ELECTRICAL DATA (277V APPLICATION)

INPUT VOLT: 277V ± 10%, 50/60Hz							
LAMP WATTS/TYPE	F48T8HO	F60T8HO	F48T12HO	F60T12HO	F72T12HO	F48T10VHO	F60T10VHO
LAMPS OPERATED	2						
INPUT WATTS	106	131	105	127	141	118	135
LINE CURRENT:	0.39	0.48	0.39	0.47	0.52	0.43	0.50
BALLAST FACTOR	1.17	1.17	0.90	0.89	0.87	0.50	0.51
EFFICACY FACTOR	1.10	0.90	0.85	0.70	0.62	0.43	0.38
POWER FACTOR	> .9						
THD	< 10 %						
CURRENT CREST FACTOR	< 1.7						
EMI/RFI COMPLIANCE	FCC PART 18-A (Non-Consumer)						
SOUND RATING	" A "						
BALLAST TYPE	PROGRAMMED PREHEAT START						
VOLTAGE TRANSIENTS	ANSI 62.41						
INPUT/PROTECTION	FUSE						
OUTPUT/PROTECTION	DEACTIVATED LAMP PROTECTION						
MIN. OPERATING TEMP	-30 °C (- 22 ° F)						
MAX. CASE TEMP	70 °C (158 ° F)						
TYPE	"CC"						
APPROVALS/CLASS	UL /cUL LISTED, CLASS " P ", 1 OUTDOOR						

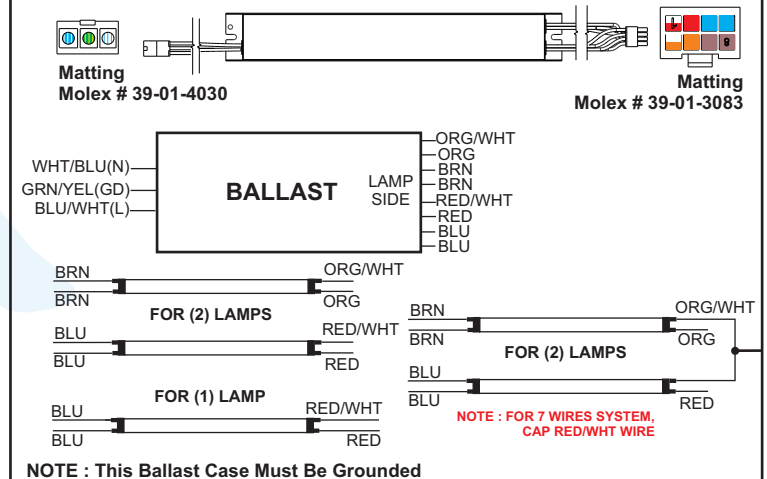
MECHANICAL DATA



Where : L = Length, W = Width, H = Height

WIRING DIAGRAM

WIRES	WHT	BLK	GRN					
LENGTH-INCHES	7 ± 1"	7 ± 1"	7 ± 1"					
WIRES	ORG/WH	ORG	BRN	BRN	RED/WH	RED	BLU	BLU
LENGTH-INCHES	7 ± 1"	7 ± 1"	7 ± 1"	7 ± 1"	7 ± 1"	7 ± 1"	7 ± 1"	7 ± 1"



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DUE TO A PROGRAM OF CONTINUOUS IMPROVEMENT, FULHAM Co., INC RESERVES THE RIGHT TO MAKE ANY VARIATION IN DESIGN OR CONSTRUCTION TO THE EQUIPMENT DESCRIBED.

Address : 12705 South Van Ness Ave., Hawthorne, CA 90250 Tel.: 1-323-599-5000, Fax.: 1-323-754-9060. Website: www.fulham.com 2006-143-3-2 rev E