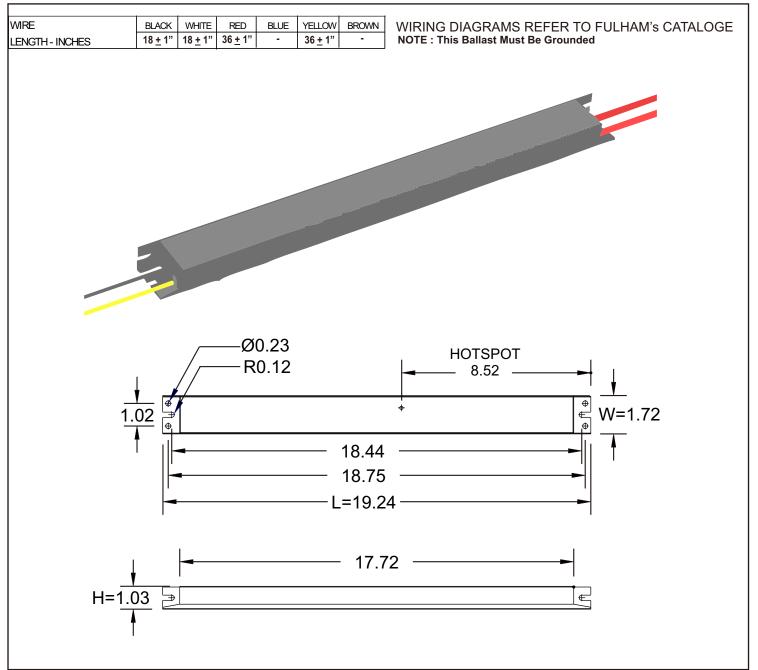


Description : WorkHorse Series Versatile, Solid State Electronic Ballast. Small Case Size, High Power Factor, Light Weight, Available In 120/230/277V 50/60 Hz.

This Ballast Will Operate Following Lamps.

ELECTRICAL/MECHANICAL DATA (230V APPLICATION)



Fulham Co., Inc extends limited warranty only to the original purchaser or to the first user for the period of 5 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 2006-168-1 rev B



Description : WorkHorse Series Versatile, Solid State Electronic Ballast. Small Case Size, High Power Factor, Light Weight, Available In 120/230/277V 50/60 Hz.

This Ballast Will Operate Following Lamps.

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TWIN(CFT/E), 4 PIN

ELECTRICAL DATA (FOR 230V APPLICATION)

INPUT VOLT: 230V ± 10%,	50/60Hz							
LAMP WATTS/TYPE	CFT36W	CFT36W	CFT40W	CFT36W	CFT40W	CFT50W	CFT36W	CFT40W
LAMPS OPERATED	6	5			4			3
WIRING DIAGRAM #	29	28	3		27		2	25
INPUT WATTS	180	158	216	136	183	190	111	149
LINE CURRENT	0.82	0.73	0.98	0.62	0.83	0.87	0.51	0.68
POWER FACTOR	0.95	0.95	0.96	0.94	0.95	0.95	0.94	0.95
BALLAST FACTOR	0.80	0.85	0.95	0.89	0.99	0.82	0.93	1.03
EFFICACY FACTOR	0.45	0.53	0.44	0.66	0.54	0.43	0.84	0.70
THD	30%	31%	29%	32%	30%	30%	34%	31%
EMI/RFI COMPLIANCE			FCC	C PART 18-/	A (NON-CON	ISUMER)		
SOUND RATING					" A "			
BALLAST TYPE				INST	ANT START			
VOLTAGE TRANSIENTS				ANSI C	82.11 - 1993	3		
INPUT/PROTECTION					FUSE			
OUTPUT/PROTECTION					-			
MIN. STARTING TEMP				- 18	⁰ C(0 ⁰ F)			
MAX. CASE TEMP				70 °C	C(158 ⁰ F)			
TYPE "HL" APPROVAL			APPRC	VED FOR H	AZARDOUS	S LOCATION		
ENERGY STAR 4.0					-			
APPROVALS/CLASS			UL /cUL	LISTED, C	LASS " P ",	1 OUTDOOR		

INPUT VOLT: 230V ± 10%,	50/60Hz										
LAMP WATTS/TYPE	CFT50W	CFT55W	CFT36W	CFT50W	CFT55W	CFT96W	CFT55W	CFT96W			
LAMPS OPERATED	3	3			2			1			
WIRING DIAGRAM #	2	5		22		23	16	17			
INPUT WATTS	155	185	82	116	134	206	63	128			
LINE CURRENT	0.71	0.84	0.38	0.53	0.62	0.94	0.29	0.59			
POWER FACTOR	0.95	0.95	0.93	0.94	0.94	0.95	0.92	0.94			
BALLAST FACTOR	0.86	0.95	0.99	0.92	1.04	0.94	0.80	1.10			
EFFICACY FACTOR	0.56	0.51	1.20	0.79	0.77	0.46	1.27	0.87			
THD	31%	30%	35%	33%	33%	29%	37%	33%			
EMI/RFI COMPLIANCE			FCC	PART 18-A (I	NON-CONSUI	MER)					
SOUND RATING				",	A "						
BALLAST TYPE				INSTAN	T START						
VOLTAGE TRANSIENTS				ANSI C82	2.11 - 1993						
INPUT/PROTECTION				FU	JSE						
OUTPUT/PROTECTION					-						
MIN. STARTING TEMP				- 18 ⁰ C	(0°F)						
MAX. CASE TEMP				70 ⁰ C (158 ⁰ F)						
TYPE "HL" APPROVAL			APPRO	VED FOR HA	ZARDOUS LO	CATION					
ENERGY STAR 4.0		-									
APPROVALS/CLASS			UL /cUL	LISTED, CLA	SS " P ", 1 OL	JTDOOR					

Fulham Co., Inc extends limited warranty only to the original purchaser or to the first user for the period of 5 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 <u>call Customer Service at 1-323-599-5000.</u> 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 2006-168-2 rev B



This Is An Original Product From Fulham Co., Inc

Description : WorkHorse Series Versatile, Solid State Electronic Ballast. Small Case Size, High Power Factor, Light Weight, Available In 120/230/277V 50/60 Hz.

This Ballast Will Operate Following Lamps.

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ELECTRICAL DATA (FOR 230V APPLICATION)

INPUT VOLT: 230V ± 10%,	, 50/60Hz									
LAMP WATTS/TYPE	F24T5HO	F24T5HO	F24T5HO	F39T5HO	F39T5HO	F54T5HO	F54T5HO	F80T5HO	-	
LAMPS OPERATED	6	5		4	3	2		1		
WIRING DIAGRAM #	29	28		27	25	22		16		
INPUT WATTS	143	128	110	162	133	115	70	88		
LINE CURRENT	0.66	0.59	0.51	0.74	0.61	0.53	0.33	0.41		
POWER FACTOR	0.95	0.95	0.94	0.95	0.95	0.94	0.93	0.94		
BALLAST FACTOR	0.91	0.95	0.99	0.89	0.94	0.88	0.96	0.87		
EFFICACY FACTOR	0.64	0.74	0.90	0.55	0.70	0.77	1.37	0.98		
THD	32%	32%	33%	31%	32%	33%	36%	34%		
EMI/RFI COMPLIANCE				FCC PART	18-A (NON-0	CONSUMER	.)			
SOUND RATING					" A "					
BALLAST TYPE				IN	ISTANT STA	RT				
VOLTAGE TRANSIENTS				AN	SI C82.11 - 1	1993				
INPUT/PROTECTION					FUSE					
OUTPUT/PROTECTION					-					
MIN. STARTING TEMP				-	· 18 ⁰ C(0 ⁰ F	-)				
MAX. CASE TEMP				7	0 °C (158 °	F)				
TYPE "HL" APPROVAL			AP	PROVED FO	OR HAZARD	OUS LOCAT	ION			
ENERGY STAR 4.0		-								
APPROVALS/CLASS		UL /cUL LISTED, CLASS " P ", 1 OUTDOOR								



This Is An Original Product From Fulham Co., Inc

Description : WorkHorse Series Versatile, Solid State Electronic Ballast. Small Case Size, High Power Factor, Light Weight, Available In 120/230/277V 50/60 Hz.

This Ballast Will Operate Following Lamps.

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ELECTRICAL DATA (FOR 230V APPLICATION)

INPUT VOLT: 230V ± 10%,	50/60Hz											
LAMP WATTS/TYPE	F13T8	F14T8	F15T8	F17T8	F18T8	F25T8	F30T8	F32T8	-			
LAMPS OPERATED		6										
WIRING DIAGRAM #		29										
INPUT WATTS	67	86	102	122	123	167	173	222				
LINE CURRENT	0.31	0.40	0.47	0.56	0.57	0.77	0.79	1.01				
POWER FACTOR	0.93	0.94	0.94	0.94	0.94	0.95	0.95	0.96				
BALLAST FACTOR	0.80	0.92	1.11	1.22	1.04	1.18	0.93	1.18				
EFFICACY FACTOR	1.20	1.08	1.08	1.00	0.85	0.71	0.54	0.53				
THD	35%	34%	33%	32%	33%	31%	31%	28%				
EMI/RFI COMPLIANCE				FCC PART	18-A (NON-C	ONSUMER						
SOUND RATING					" A "							
BALLAST TYPE				IN	STANT STA	RT						
VOLTAGE TRANSIENTS				AN	SI C82.11 - 1	993						
INPUT/PROTECTION					FUSE							
OUTPUT/PROTECTION					-							
MIN. STARTING TEMP				-	18 °C (0°F)						
MAX. CASE TEMP				7	0 °C(158 °F)						
TYPE "HL" APPROVAL			AP	PROVED FC	RHAZARDO	OUS LOCAT	ION					
ENERGY STAR 4.0		-										
APPROVALS/CLASS			UL	/cUL LISTED), CLASS " P	", 1 OUTDO	OR					

INPUT VOLT: 230V ± 10%,	50/60Hz										
LAMP WATTS/TYPE	F13T8	F14T8	F15T8	F18T8	F30T8	F13T8	F14T8	F18T8	F30T8		
LAMPS OPERATED			5				-	4			
WIRING DIAGRAM #		28 27									
INPUT WATTS	60	74	90	109	152	54	64	96	131		
LINE CURRENT	0.28	0.34	0.42	0.51	0.70	0.25	0.30	0.45	0.60		
POWER FACTOR	0.93	0.94	0.94	0.94	0.95	0.93	0.93	0.93	0.94		
BALLAST FACTOR	0.83	0.96	1.18	1.12	0.98	0.79	0.90	1.15	1.04		
EFFICACY FACTOR	1.37	1.31	1.31	1.02	0.64	1.47	1.41	1.20	0.79		
THD	36%	35%	34%	34%	32%	36%	36%	35%	32%		
EMI/RFI COMPLIANCE				FCC PART	18-A (NON-C	CONSUMER)				
SOUND RATING					" A "						
BALLAST TYPE				IN	STANT STA	RT					
VOLTAGE TRANSIENTS				ANS	SI C82.11 - 1	993					
INPUT/PROTECTION					FUSE						
OUTPUT/PROTECTION					-						
MIN. STARTING TEMP				-	18 °C (0°F)					
MAX. CASE TEMP				70	0 °C(158 °F	-)					
TYPE "HL" APPROVAL			API	PROVED FO	R HAZARDO	OUS LOCAT	ION				
ENERGY STAR 4.0		-									
APPROVALS/CLASS			UL	/cUL LISTED), CLASS " F	", 1 OUTDC	OR				

Fulham Co., Inc extends limited warranty only to the original purchaser or to the first user for the period of <u>5 years</u> 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 <u>call Customer Service at 1-323-599-5000</u>. 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.

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 2006-168-4 rev B



This Is An Original Product From Fulham Co., Inc

Description : WorkHorse Series Versatile, Solid State Electronic Ballast. Small Case Size, High Power Factor, Light Weight, Available In 120/230/277V 50/60 Hz.

This Ballast Will Operate Following Lamps.

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ELECTRICAL DATA (FOR 230V APPLICATION)

							,		
INPUT VOLT: 230V ± 10%,	50/60Hz								
LAMP WATTS/TYPE	F14T8	F18T8	F30T8	-	-	-	-	-	-
LAMPS OPERATED		3							
WIRING DIAGRAM #		25							
INPUT WATTS	54	81	108						
LINE CURRENT	0.25	0.37	0.50						
POWER FACTOR	0.93	0.94	0.94						
BALLAST FACTOR	1.05	1.23	1.09						
EFFICACY FACTOR	1.93	1.52	1.01						
THD	36%	35%	33%						
EMI/RFI COMPLIANCE				FCC PART	18-A (NON-0	CONSUMER	R)		
SOUND RATING					" A "				
BALLAST TYPE				IN	STANT STA	RT			
VOLTAGE TRANSIENTS				AN	SI C82.11 - ′	1993			
INPUT/PROTECTION					FUSE				
OUTPUT/PROTECTION					-				
MIN. STARTING TEMP				-	18 °C (0 ° F)			
MAX. CASE TEMP				7	0 ⁰ C(158 ⁰ I	F)			
TYPE "HL" APPROVAL			API	PROVED FC	RHAZARD	OUS LOCA	TION		
ENERGY STAR 4.0					-				
APPROVALS/CLASS			UL	/cUL LISTE	D, CLASS " F	[,] 1 OUTD	OOR		

INPUT VOLT: 230V ± 10%,	50/60Hz									
LAMP WATTS/TYPE	F60T8HO	F60T8HO	F72T8HO	F60T8HO	F72T8HO	-	-	-	-	
LAMPS OPERATED	4		3		2					
WIRING DIAGRAM #	27	2	25	2	2					
INPUT WATTS	202	167	200	123	150					
LINE CURRENT	0.92	0.76	0.91	0.57	0.69					
POWER FACTOR	0.95	0.95	0.95	0.94	0.95					
BALLAST FACTOR	0.85	0.92	0.90	0.98	0.99					
EFFICACY FACTOR	0.42	0.55	0.45	0.79	0.66					
THD	29%	30%	29%	32%	31%					
EMI/RFI COMPLIANCE				FCC PART	18-A (NON-C	ONSUMER)			
SOUND RATING					" A "					
BALLAST TYPE				IN	STANT STAF	RΤ				
VOLTAGE TRANSIENTS				ANS	SI C82.11 - 1	993				
INPUT/PROTECTION					FUSE					
OUTPUT/PROTECTION					-					
MIN. STARTING TEMP				-	18 °C (0 ° F)				
MAX. CASE TEMP				70	0 °C(158 °F)				
TYPE "HL" APPROVAL		APPROVED FOR HAZARDOUS LOCATION								
ENERGY STAR 4.0		-								
APPROVALS/CLASS			UL	/cUL LISTED), CLASS " P	", 1 OUTDO	DOR			

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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 2006-168-5 rev B



This Is An Original Product From Fulham Co., Inc

Description : WorkHorse Series Versatile, Solid State Electronic Ballast. Small Case Size, High Power Factor, Light Weight, Available In 120/230/277V 50/60 Hz.

This Ballast Will Operate Following Lamps.

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ELECTRICAL DATA (FOR 230V APPLICATION)

INPUT VOLT: 230V ± 10%,	50/60Hz							
LAMP WATTS/TYPE	F40T10	F40T10	F40T10	F48T10VHO	F60T10VHO	F72T10VHO	-	-
LAMPS OPERATED	5	4	2		1			
WIRING DIAGRAM #	28	27	22		19			
INPUT WATTS	181	157	99	104	120	141		
LINE CURRENT	0.83	0.72	0.46	0.48	0.55	0.65		
POWER FACTOR	0.95	0.95	0.94	0.94	0.94	0.94		
BALLAST FACTOR	0.89	0.94	1.09	0.85	0.81	0.84		
EFFICACY FACTOR	0.49	0.60	1.10	0.82	0.68	0.60		
THD	30%							
EMI/RFI COMPLIANCE			F	CC PART 18-A	(NON-CONSU	JMER)		
SOUND RATING					" A "			
BALLAST TYPE				INSTA	NT START			
VOLTAGE TRANSIENTS				ANSI C	82.11 - 1993			
INPUT/PROTECTION				F	USE			
OUTPUT/PROTECTION					-			
MIN. STARTING TEMP				- 18 ⁰	⁰ C(0 ⁰ F)			
MAX. CASE TEMP				70 ⁰ C	(158 [°] F)			
TYPE "HL" APPROVAL			APPF	ROVED FOR H	AZARDOUS L	OCATION		
ENERGY STAR 4.0					-			
APPROVALS/CLASS			UL /c	UL LISTED, CL	ASS " P ", 1 C	UTDOOR		

Fulham Co., Inc extends limited warranty only to the original purchaser or to the first user for the period of <u>5 years</u> 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 <u>call Customer Service at 1-323-599-5000</u>. 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.



This Is An Original Product From Fulham Co., Inc

Description : WorkHorse Series Versatile, Solid State Electronic Ballast. Small Case Size, High Power Factor, Light Weight, Available In 120/230/277V 50/60 Hz.

This Ballast Will Operate Following Lamps.

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ELECTRICAL DATA (FOR 230V APPLICATION)

INPUT VOLT: 230V ± 10%,	50/60Hz								
LAMP WATTS/TYPE	F14T12	F15T12	F20T12	-	-	-	-	-	
LAMPS OPERATED		6							
WIRING DIAGRAM #		29							
INPUT WATTS	76	85	112						
LINE CURRENT	0.36	0.40	0.52						
POWER FACTOR	0.93	84.65	0.94						
BALLAST FACTOR	0.77	0.82	0.85						
EFFICACY FACTOR	1.00	0.97	0.75						
THD	35%	34%	33%						
EMI/RFI COMPLIANCE		FCC PART 18-A (NON-CONSUMER)							
SOUND RATING				"	Α "				
BALLAST TYPE				INSTAN	IT START				
VOLTAGE TRANSIENTS				ANSI C82	2.11 - 1993				
INPUT/PROTECTION				Fl	JSE				
OUTPUT/PROTECTION					-				
MIN. STARTING TEMP				- 18 °C	(0°F)				
MAX. CASE TEMP				70 °C (158 ⁰ F)				
TYPE "HL" APPROVAL			APPROV	ED FOR HA	ZARDOUS	OCATION			
ENERGY STAR 4.0					-				
APPROVALS/CLASS			UL /cUL L	ISTED, CLA	ASS " P ", 1	OUTDOOR			

INPUT VOLT: 230V ± 10%,	50/60Hz								
LAMP WATTS/TYPE	F14T12	F15T12	F20T12	F24T12	F30T12	F36T12	F40T12	F42T12	F48T12
LAMPS OPERATED					5				
WIRING DIAGRAM #					28				
INPUT WATTS	69	75	100	91	139	131	173	153	174
LINE CURRENT	0.32	0.35	0.47	0.43	0.64	0.61	0.79	0.71	0.80
POWER FACTOR	0.93	0.93	0.93	0.93	0.94	0.94	0.95	0.94	0.95
BALLAST FACTOR	0.81	0.85	0.89	0.68	0.87	0.86	0.84	0.74	0.81
EFFICACY FACTOR	1.17	1.13	0.90	0.75	0.63	0.65	0.48	0.48	0.47
THD	35%	35%	33%	34%	31%	32%	30%	31%	31%
EMI/RFI COMPLIANCE				FCC PART	18-A (NON-C	CONSUMER			
SOUND RATING					" A "				
BALLAST TYPE				IN	STANT STA	RT			
VOLTAGE TRANSIENTS				AN	SI C82.11 - 1	993			
INPUT/PROTECTION					FUSE				
OUTPUT/PROTECTION					-				
MIN. STARTING TEMP				-	18 °C (0 ° F)			
MAX. CASE TEMP				7	0 ⁰ C(158 ⁰ F	-)			
TYPE "HL" APPROVAL			AP	PROVED FC	R HAZARDO	DUS LOCAT	ION		
ENERGY STAR 4.0					-				
APPROVALS/CLASS			UL	/cUL LISTED	, CLASS " F	", 1 OUTDC	OR		

Fulham Co., Inc extends limited warranty only to the original purchaser or to the first user for the period of 5 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 <u>call Customer Service at 1-323-599-5000.</u> 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 2006-168-7 rev B



Description : WorkHorse Series Versatile, Solid State Electronic Ballast. Small Case Size, High Power Factor, Light Weight, Available In 120/230/277V 50/60 Hz.

This Ballast Will Operate Following Lamps.

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ELECTRICAL DATA (FOR 230V APPLICATION)

INPUT VOLT: 230V ± 10%,	50/60Hz											
LAMP WATTS/TYPE	F14T12	F15T12	F20T12	F24T12	F25T12	F30T12	F36T12	F40T12	F42T12			
LAMPS OPERATED					4							
WIRING DIAGRAM #		27										
INPUT WATTS	60	66	89	80	108	120	114	150	133			
LINE CURRENT	0.29	0.31	0.42	0.38	0.50	0.55	0.53	0.69	0.61			
POWER FACTOR	0.92	0.92	0.93	0.93	0.94	0.94	0.94	0.95	0.94			
BALLAST FACTOR	0.85	0.90	1.03	0.72	1.00	0.93	0.92	0.89	0.90			
EFFICACY FACTOR	1.41	1.36	1.17	0.90	0.93	0.77	0.80	0.59	0.68			
THD	36%	35%	34%	35%	33%	33%	33%	31%	33%			
EMI/RFI COMPLIANCE				FCC PART	18-A (NON-C	ONSUMER)					
SOUND RATING					" A "							
BALLAST TYPE				IN	STANT STA	RT						
VOLTAGE TRANSIENTS				ANS	SI C82.11 - 1	993						
INPUT/PROTECTION					FUSE							
OUTPUT/PROTECTION					-							
MIN. STARTING TEMP				-	18 °C (0°F)						
MAX. CASE TEMP				7	0 ⁰ C(158 ⁰ F	-)						
TYPE "HL" APPROVAL			AP	PROVED FO	R HAZARDO	DUS LOCAT	ION					
ENERGY STAR 4.0		-										
APPROVALS/CLASS			UL	/cUL LISTED), CLASS " P	", 1 OUTDC	OR					

INPUT VOLT: 230V ± 10%,	50/60Hz										
LAMP WATTS/TYPE	F48T12	F60T12	F64T12	F72T12	F14T12	F20T12	F24T12	F25T12	F30T12		
LAMPS OPERATED		-	4				3	•	•		
WIRING DIAGRAM #		2	27				25				
INPUT WATTS	151	186	193	210	51	73	68	93	99		
LINE CURRENT	0.69	0.85	0.89	0.96	0.24	0.34	0.32	0.43	0.46		
POWER FACTOR	0.94	0.95	0.95	0.95	0.93	0.94	0.94	0.94	0.94		
BALLAST FACTOR	0.82	0.79	0.81	0.72	0.89	1.01	0.76	1.04	0.99		
EFFICACY FACTOR	0.55	0.42	0.42	0.34	1.76	1.37	1.12	1.12	1.01		
THD	31%	30%	30%	29%	36%	35%	35%	34%	33%		
EMI/RFI COMPLIANCE				FCC PART	18-A (NON-C	CONSUMER)				
SOUND RATING					" A "						
BALLAST TYPE				IN	STANT STA	RT					
VOLTAGE TRANSIENTS				ANS	SI C82.11 - 1	993					
INPUT/PROTECTION					FUSE						
OUTPUT/PROTECTION					-						
MIN. STARTING TEMP				-	18 °C (0°F)					
MAX. CASE TEMP				7	0 ⁰ C(158 ⁰ F	-)					
TYPE "HL" APPROVAL			AP	PROVED FC	R HAZARDO	DUS LOCAT	ION				
ENERGY STAR 4.0		-									
APPROVALS/CLASS			UL	/cUL LISTED), CLASS " P	", <u>1 OUTDC</u>	OR				

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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 2006-168-8 rev B



Description : WorkHorse Series Versatile, Solid State Electronic Ballast. Small Case Size, High Power Factor, Light Weight, Available In 120/230/277V 50/60 Hz.

This Ballast Will Operate Following Lamps.

TB £ T12

ELECTRICAL DATA (FOR 230V APPLICATION)

INPUT VOLT: 230V ± 10%,	50/60Hz									
LAMP WATTS/TYPE	F36T12	F40T12	F42T12	F48T12	F60T12	F64T12	F72T12	F84T12	-	
LAMPS OPERATED		3								
WIRING DIAGRAM #				2	5					
INPUT WATTS	95	123	112	124	152	161	174	201		
LINE CURRENT	0.44	0.56	0.52	0.57	0.70	0.74	0.79	0.92		
POWER FACTOR	0.94	0.95	0.94	0.94	0.95	0.95	0.95	0.95		
BALLAST FACTOR	0.98	0.96	0.84	0.89	0.85	0.89	0.79	0.79		
EFFICACY FACTOR	1.03	0.79	0.75	0.72	0.56	0.55	0.45	0.39		
THD	34%	32%	33%	32%	31%	31%	30%	29%		
EMI/RFI COMPLIANCE		FCC PART 18-A (NON-CONSUMER)								
SOUND RATING					" A "					
BALLAST TYPE				IN	STANT STA	RT				
VOLTAGE TRANSIENTS				ANS	SI C82.11 - 1	993				
INPUT/PROTECTION					FUSE					
OUTPUT/PROTECTION					-					
MIN. STARTING TEMP		- 18 °C (0 ° F)								
MAX. CASE TEMP		70 °C (158 ° F)								
TYPE "HL" APPROVAL			AP	PROVED FO	R HAZARDO	DUS LOCAT	ION			
ENERGY STAR 4.0					_					
APPROVALS/CLASS			UL	/cUL LISTED	, CLASS " P	", 1 OUTDO	OR			

	50/0011									
INPUT VOLT: 230V ± 10%,	1	1	1	1				1	1	
LAMP WATTS/TYPE	F24T12	F25T12	F30T12	F36T12	F40T12	F42T12	F48T12	F60T12	F64T12	
LAMPS OPERATED		2								
WIRING DIAGRAM #					22					
INPUT WATTS	53	73	76	73	93	86	94	115	121	
LINE CURRENT	0.25	0.34	0.35	0.34	0.43	0.40	0.44	0.53	0.56	
POWER FACTOR	0.92	0.93	0.93	0.93	0.94	0.94	0.94	0.94	0.94	
BALLAST FACTOR	0.81	1.10	1.08	1.05	1.05	0.90	0.95	0.93	0.96	
EFFICACY FACTOR	1.52	1.50	1.42	1.43	1.13	1.04	1.02	0.80	0.80	
THD	36%	35%	35%	35%	34%	34%	34%	33%	32%	
EMI/RFI COMPLIANCE				FCC PART	18-A (NON-C	ONSUMER)	1			
SOUND RATING					" A "					
BALLAST TYPE				IN	STANT STA	RT				
VOLTAGE TRANSIENTS				ANS	SI C82.11 - 1	993				
INPUT/PROTECTION					FUSE					
OUTPUT/PROTECTION					-					
MIN. STARTING TEMP		- 18 °C (0 ° F)								
MAX. CASE TEMP		70 °C (158 ° F)								
TYPE "HL" APPROVAL			AP	PROVED FC	R HAZARDO	DUS LOCAT	ION			
ENERGY STAR 4.0					-					
APPROVALS/CLASS			UL	/cUL LISTED), CLASS " P	", 1 OUTDC	OR			

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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 2006-168-9 rev B



This Is An Original Product From Fulham Co., Inc

Description : WorkHorse Series Versatile, Solid State Electronic Ballast. Small Case Size, High Power Factor, Light Weight, Available In 120/230/277V 50/60 Hz.

This Ballast Will Operate Following Lamps.

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ELECTRICAL DATA (FOR 230V APPLICATION)

INPUT VOLT: 230V ± 10%,	50/60Hz									
LAMP WATTS/TYPE	F72T12	F84T12	F96T12 60W	F96T12 75W	-	-	-	-		
LAMPS OPERATED			2							
WIRING DIAGRAM #			22							
INPUT WATTS	132	152	128	162						
LINE CURRENT	0.61	0.70	0.59	0.74						
POWER FACTOR	0.94	0.95	0.94	0.95						
BALLAST FACTOR	0.87	0.87	0.89	0.94						
EFFICACY FACTOR	0.66	0.57	0.69	0.58						
THD	32%	30%	32%	30%						
EMI/RFI COMPLIANCE	FCC PART 18-A (NON-CONSUMER)									
SOUND RATING				" A '						
BALLAST TYPE				INSTANT	START					
VOLTAGE TRANSIENTS				ANSI C82.1	1 - 1993					
INPUT/PROTECTION				FUS	E					
OUTPUT/PROTECTION				-						
MIN. STARTING TEMP	- 18 °C (0 ° F)									
MAX. CASE TEMP	70 °C(158 °F)									
TYPE "HL" APPROVAL	APPROVED FOR HAZARDOUS LOCATION									
ENERGY STAR 4.0		-								
APPROVALS/CLASS			UL /cUL	LISTED, CLASS	S " P ", 1 OU	TDOOR				

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INPUT VOLT: 230V ± 10%		-	-	-					
LAMP WATTS/TYPE	F18T12HO	F24T12HO	F30T12HO	F36T12HO	F42T12HO	F48T12HO	F60T12HO	-	-
LAMPS OPERATED				3					
WIRING DIAGRAM #				26					
INPUT WATTS	69	69 90 109 120 147 164 194							
LINE CURRENT	0.32	0.42	0.50	0.55	0.68	0.75	0.89		
POWER FACTOR	0.94	0.94	0.94	0.94	0.94	0.95	0.95		
BALLAST FACTOR	0.76	0.79	0.83	0.82	0.87	0.88	0.90		
EFFICACY FACTOR	1.09	0.88	0.76	0.69	0.59	0.54	0.46		
THD	35%	34%	33%	33%	32%	31%	30%		
EMI/RFI COMPLIANCE				FCC PART	18-A (NON-C	ONSUMER)		
SOUND RATING		"A "							
BALLAST TYPE				IN	STANT STA	RT			
VOLTAGE TRANSIENTS				AN	SI C82.11 - 1	993			
INPUT/PROTECTION					FUSE				
OUTPUT/PROTECTION					-				
MIN. STARTING TEMP		- 18 °C (0 ° F)							
MAX. CASE TEMP		70 °C (158 ° F)							
TYPE "HL" APPROVAL		APPROVED FOR HAZARDOUS LOCATION							
ENERGY STAR 4.0					-				
APPROVALS/CLASS			UL	/cUL LISTED), CLASS " P	", 1 OUTDO	OR		

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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 2006-168-10 rev B



This Is An Original Product From Fulham Co., Inc

Description : WorkHorse Series Versatile, Solid State Electronic Ballast. Small Case Size, High Power Factor, Light Weight, Available In 120/230/277V 50/60 Hz.

This Ballast Will Operate Following Lamps.

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ELECTRICAL DATA (FOR 230V APPLICATION)

INPUT VOLT: 230V ± 10%,	50/60Hz										
LAMP WATTS/TYPE	F18T12HO	F24T12HO	F30T12HO	F36T12HO	F42T12HO	F48T12HO	F60T12HO	F64T12HO	F72T12HO		
LAMPS OPERATED		2									
WIRING DIAGRAM #		23									
INPUT WATTS	54	68	83	92	109	120	147	155	172		
LINE CURRENT	0.25	0.32	0.39	0.43	0.51	0.56	0.68	0.71	0.79		
POWER FACTOR	0.93	0.93	0.93	0.93	0.94	0.94	0.94	0.95	0.95		
BALLAST FACTOR	0.80	0.82	0.91	0.91	0.94	0.96	1.00	0.94	1.00		
EFFICACY FACTOR	1.47	1.21	1.09	0.99	0.86	0.80	0.68	0.61	0.58		
THD	36%	35%	35%	34%	34%	33%	32%	32%	31%		
EMI/RFI COMPLIANCE		FCC PART 18-A (NON-CONSUMER)									
SOUND RATING					" A "						
BALLAST TYPE				IN	STANT STA	RT					
VOLTAGE TRANSIENTS				AN	SI C82.11 - 1	1993					
INPUT/PROTECTION					FUSE						
OUTPUT/PROTECTION					-						
MIN. STARTING TEMP		- 18 °C (0 ° F)									
MAX. CASE TEMP		70 °C (158 ° F)									
TYPE "HL" APPROVAL		APPROVED FOR HAZARDOUS LOCATION									
ENERGY STAR 4.0					-						
APPROVALS/CLASS			UL	/cUL LISTE), CLASS " F	• ", 1 OUTD(DOR				

INPUT VOLT: 230V ± 10%,	, 50/60Hz									
LAMP WATTS/TYPE	F84T12HO	F96T12HO 95W	F96T12HO 110W	-	-		-			
LAMPS OPERATED		2								
WIRING DIAGRAM #		23								
INPUT WATTS	203	184	218							
LINE CURRENT	0.93	0.85	1.00							
POWER FACTOR	0.95	0.95	0.95							
BALLAST FACTOR	1.02	0.93	1.26							
EFFICACY FACTOR	0.50	0.51	0.58							
THD	30%	31%	29%							
EMI/RFI COMPLIANCE			FCC PART 18-A	(NON-CONSUM	ER)					
SOUND RATING				' A "						
BALLAST TYPE			INSTAN	NT START						
VOLTAGE TRANSIENTS			ANSI C8	2.11 - 1993						
INPUT/PROTECTION			F	USE						
OUTPUT/PROTECTION				-						
MIN. STARTING TEMP		- 18 °C (0 ° F)								
MAX. CASE TEMP		70 °C (158 ° F)								
TYPE "HL" APPROVAL		APPROVED FOR HAZARDOUS LOCATION								
ENERGY STAR 4.0		-								
APPROVALS/CLASS			UL /cUL LISTED, CL	ASS " P ", 1 OUT	DOOR					

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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 2006-168-11 rev B



Description : WorkHorse Series Versatile, Solid State Electronic Ballast. Small Case Size, High Power Factor, Light Weight, Available In 120/230/277V 50/60 Hz.

This Ballast Will Operate Following Lamps.

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ELECTRICAL DATA (FOR 230V APPLICATION)

INPUT VOLT: 230V ± 10%,	50/60Hz										
LAMP WATTS/TYPE	F48T12VHO	F60T12VHO	F72T12VHO	F96T12VHO	-	-	-				
LAMPS OPERATED			1								
WIRING DIAGRAM #			19								
INPUT WATTS	114	134	148	200							
LINE CURRENT	0.53	0.62	0.68	0.91							
POWER FACTOR	0.94	0.94	0.94	0.95							
BALLAST FACTOR	0.94	0.93	0.89	0.92							
EFFICACY FACTOR	0.82	0.69	0.60	0.46							
THD	33%	32%	32%	30%							
EMI/RFI COMPLIANCE		FCC PART 18-A (NON-CONSUMER)									
SOUND RATING				" A "							
BALLAST TYPE				INSTANT STAF	RT						
VOLTAGE TRANSIENTS			A	NSI C82.11 - 1	993						
INPUT/PROTECTION				FUSE							
OUTPUT/PROTECTION				-							
MIN. STARTING TEMP		- 18 °C (0 ° F)									
MAX. CASE TEMP		70 °C (158 °F)									
TYPE "HL" APPROVAL		APPROVED FOR HAZARDOUS LOCATION									
ENERGY STAR 4.0				-							
APPROVALS/CLASS			UL /cUL LIST	ED, CLASS " P	", 1 OUTDOOI	7					

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