

UNIVERSAL® ELECTROMAGNETIC BALLASTS

- 800 mA
- 2-3 1/2' Lamp Applications
- Standard & Weatherproof Models



T12 HO

FOR F24, F30, F36, F42 AND F48T12HO LAMPS

See page 1-3 for additional information on weatherproof applications.

Lamp		Line Volts	Catalog Number	Certification					Line Current (Amps)	Input Power (Watts)	Ballast Factor	Ballast Efficacy Factor	Crest Factor	THD %	Min. F/C Start Temp	Sound Rating	Wiring Diag.	Dim.
Qty.	Descr.			E	UL	SF	IEC	NOM										
F24T12HO - High Power Factor																		
2	Rapid	120	490-XLH-TC-P	•	•			.95	103	.81	0.79	< 2.0	> 32	-20/-29	B	1	D7	
2	Rapid	120	631-LH-TC-P*	•	•			1.13	100	.83	0.83	< 2.0	< 32	-20/-29	B	1	D6	
2	Rapid	347	778-XLH-TC		•			.31	103	.81	0.79	< 2.0	> 32	-20/-29	B	1	D7	
F36T12HO - High Power Factor																		
2	Rapid	120	490-XLH-TC-P	•	•			1.06	121	.84	0.69	< 2.0	< 32	50/10	B	1	D7	
2	Rapid	120	631-LH-TC-P*	•	•			1.20	122	.85	0.69	< 1.9	< 20	-20/-29	B	1	D6	
2	Rapid	347	778-XLH-TC		•			.41	141	.80	0.57	< 2.0	< 32	-20/-29	B	1	D7	
F42T12HO - High Power Factor																		
2	Rapid	120	490-XLH-TC-P	•	•			1.12	130	.86	0.66	< 2.0	< 32	50/10	B	1	D7	
F48T12HO - High Power Factor																		
1	Rapid	120	481-LH-TC-P▼	•	•			.79	82	.84	1.02	< 1.9	> 32	-20/-29	B	12	D7	
1	Rapid	120	490-XLH-TC-P▼	•	•			.82	82	.81	0.99	< 2.0	> 32	-20/-29	B	15	D7	
1	Rapid	120	631-LH-TC-P▼	•	•			1.05	82	.83	1.02	< 1.9	< 32	-20/-29	B	15	D6	
1	Rapid	347	778-XLH-TC▼		•			.32	83	.79	0.95	< 2.0	> 32	-20/-29	B	15	D7	
2	Rapid	120	490-XLH-TC-P	•	•			1.18	139	.87	0.63	< 2.0	< 20	-20/-29	B	1	D7	
2	Rapid	120	631-LH-TC-P	•	•			1.25	137	.85	0.62	< 1.7	< 20	-20/-29	B	1	D6	
2	Rapid	347	778-XLH-TC		•			.42	139	.86	0.62	< 2.0	< 32	-20/-29	B	1	D7	

*Power Factor Corrected to 75% for (2) F24T12HO

*Power Factor Corrected to 85% for (2) F36T12HO

▼Power Factor Corrected to >70%

✕For Distribution Only

See page 1-16 for Dimensions and Wiring Diagrams

Fluorescent-Electromagnetic



- 800-840 mA
- 4'-5'4" Lamp Applications
- Standard and Weatherproof Models

UNIVERSAL® ELECTROMAGNETIC BALLASTS

FOR F48T12HOES, F60T12HO AND
F64T12HO LAMPS

Fluorescent-Electromagnetic

Lamp		Line Volts	Catalog Number	Certification					Line Current (Amps)	Input Power (Watts)	Ballast Factor	Ballast Efficacy Factor	Crest Factor	THD %	Min. F/C Start Temp	Sound Rating	Wiring Diag.	Dim.
Qty.	Descr.			E	UL	SF	RoHS	NOM										
F48T12HOES - High Power Factor																		
1	Rapid	120	481-LH-TC-P▼	•	•			.77	75	.79	1.05	< 1.9	> 32	60/15	B	12	D7	
1	Rapid	120	490-XLH-TC-P▼	•	•			.80	76	.78	1.03	< 2.0	> 32	60/15	B	15	D7	
1	Rapid	120	631-LH-TC-P▼	•	•			1.03	75	.77	1.03	< 1.9	< 32	60/15	B	15	D6	
1	Rapid	347	778-XLH-TC▼	•	•			.31	78	.75	0.97	< 2.0	> 32	60/15	B	15	D7	
2	Rapid	120	490-XLH-TC-P	•	•			1.07	124	.83	0.67	< 2.0	< 32	60/15	B	1	D7	
2	Rapid	120	631-LH-TC-P	•	•			1.15	124	.80	0.64	< 1.9	< 20	60/15	B	1	D6	
2	Rapid	347	778-XLH-TC	•	•			.39	126	.81	0.64	< 2.0	< 32	60/15	B	1	D7	
F60T12HO - High Power Factor																		
1	Rapid	120	481-LH-TC-P	•	•			.86	100	.87	0.87	< 1.9	< 32	-20/-29	B	12	D7	
1	Rapid	120	490-XLH-TC-P	•	•			.92	99	.83	0.84	< 2.0	> 32	-20/-29	B	15	D7	
1	Rapid	120	631-LH-TC-P▼	•	•			1.08	94	.85	0.90	< 1.7	< 32	-20/-29	B	15	D6	
1	Rapid	347	778-XLH-TC▼	•	•			.34	96	.82	0.85	< 2.0	> 32	-20/-29	B	15	D7	
2	Rapid	120	490-XLH-TC-P	•	•			1.42	169	.89	0.53	< 2.0	< 20	-20/-29	B	1	D7	
2	Rapid	347	778-XLH-TC	•	•			.49	169	.88	0.52	< 2.0	< 20	-20/-29	B	1	D7	
F64T12HO - High Power Factor																		
1	Rapid	120	481-LH-TC-P	•	•			.90	102	.87	0.85	< 1.9	< 32	-20/-29	B	12	D7	
1	Rapid	120	490-XLH-TC-P	•	•			.93	101	.84	0.83	< 1.9	> 32	-20/-29	B	15	D7	
1	Rapid	347	778-XLH-TC▼	•	•			.35	103	.82	0.80	< 2.0	> 32	-20/-29	B	15	D7	
2	Rapid	120	490-XLH-TC-P	•	•			1.50	178	.89	0.50	< 1.9	< 20	-20/-29	B	1	D7	
2	Rapid	347	778-XLH-TC	•	•			.52	178	.93	0.52	< 2.0	< 20	-20/-29	B	1	D7	

▼ Power Factor Corrected to >70%

✱ For Distribution Only

See page 1-16 for Dimensions and Wiring Diagrams

UNIVERSAL® ELECTROMAGNETIC BALLASTS

- 800 - 840 mA
- 6' - 8' Lamp Applications
- Standard, Weatherproof & Tanning Models



T12 HO

FOR F72T12HO, F84T12HO, F96T12HO AND F96T12HOES LAMPS

See page 1-3 for additional information on weatherproof applications.

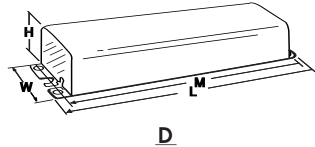
Lamp		Line Volts	Catalog Number	Certification					Line Current (Amps)	Input Power (Watts)	Ballast Factor	Ballast Efficacy Factor	Crest Factor	THD %	Min. F/C Start Temp	Sound Rating	Wiring Diag.	Dim.
Qty.	Descr.			E	UL	SF	ETL	NOM										
F72T12HO - High Power Factor																		
1	Rapid	120	481-LH-TC-P	•	•			.92	106	.89	0.84	< 1.9	< 32	-20/-29	B	12	D7	
1	Rapid	120	490-XLH-TC-P	•	•			.95	107	.86	0.80	< 2.0	> 32	-20/-29	B	15	D7	
1	Rapid	347	778-XLH-TC-✱			•		.35	106	.84	0.79	< 2.0	> 32	-20/-29	B	15	D7	
2	Rapid	120	480-SLH-TC-P	•	•	•	•	1.69	196	.97	0.49	< 1.9	< 20	-20/-29	B	1	D7	
2	Rapid	120	480-XLH-TC-P■	•	•			1.69	196	.97	0.49	< 1.9	< 20	-20/-29	B	1	D7	
2	Rapid	120	490-XLH-TC-P	•	•			1.50	177	.92	0.52	< 1.7	< 10	-20/-29	B	1	D7	
2	Rapid	277	487-SLH-TC-P	•	•	•	•	.74	197	.96	0.48	< 1.7	< 20	-20/-29	B	1	D7	
2	Rapid	277	487-XLH-TC-P■	•	•			.78	208	.95	0.46	< 1.7	< 20	-20/-29	B	1	D7	
2	Rapid	347	778-XLH-TC			•		.54	187	.95	0.51	< 1.7	< 10	-20/-29	B	1	D7	
F84T12HO - High Power Factor																		
1	Rapid	120	481-LH-TC-P	•	•			1.02	119	.88	0.74	< 1.9	< 32	-20/-29	B	12	D7	
2	Rapid	120	480-SLH-TC-P	•	•	•	•	1.87	220	.93	0.42	< 1.9	< 20	-20/-29	B	1	D7	
2	Rapid	120	480-XLH-TC-P■	•	•			1.98	235	.93	0.40	< 1.9	< 20	-20/-29	B	1	D7	
2	Rapid	277	487-SLH-TC-P	•	•	•	•	.87	235	.97	0.41	< 1.9	< 20	-20/-29	B	1	D7	
2	Rapid	277	487-XLH-TC-P■	•	•			.89	244	.95	0.39	< 1.9	< 20	-20/-29	B	1	D7	
F96T12HO - High Power Factor																		
1	Rapid	120	481-LH-TC-P	•	•			1.16	136	.91	0.67	< 1.9	< 20	-20/-29	B	12	D7	
1	Rapid	120	490-XLH-TC-P	•	•			1.10	124	.85	0.65	< 2.0	< 20	-20/-29	B	15	D7	
1	Rapid	347	778-XLH-TC			•		.41	137	.83	0.71	< 2.0	< 32	-20/-29	B	15	D7	
2	Rapid	120	480-SLH-TC-P	•	•	•	•	1.99	237	.96	0.41	< 1.7	< 10	-20/-29	B	1	D7	
2	Rapid	120	480-XLH-TC-P■	•	•			2.15	246	.96	0.39	< 1.7	< 10	-20/-29	B	1	D7	
2	Rapid	277	487-SLH-TC-P	•	•	•	•	.87	237	.95	0.40	< 1.7	< 10	-20/-29	B	1	D7	
2	Rapid	277	487-XLH-TC-P■	•	•			.95	249	.97	0.39	< 1.7	< 10	-20/-29	B	1	D7	
F96T12HOES - High Power Factor																		
1	Rapid	120	481-LH-TC-P	•	•			.96	110	.84	0.77	< 1.9	< 32	60/15	B	12	D7	
1	Rapid	120	490-XLH-TC-P	•	•			.94	106	.81	0.76	< 2.0	< 32	60/15	B	15	D7	
1	Rapid	347	778-XLH-TC			•		.37	116	.83	0.71	< 2.0	< 32	60/15	B	15	D7	
2	Rapid	120	480-SLH-TC-P	•	•	•	•	1.72	202	.89	0.44	< 1.9	< 20	60/15	B	1	D7	
2	Rapid	120	480-XLH-TC-P■	•	•			1.80	209	.89	0.43	< 1.9	< 20	60/15	B	1	D7	
2	Rapid	277	487-SLH-TC-P	•	•	•	•	.75	205	.91	0.44	< 1.9	< 20	60/15	B	1	D7	
2	Rapid	277	487-XLH-TC-P■	•	•			.83	223	.92	0.41	< 1.9	< 20	60/15	B	1	D7	

- ✱ Power Factor Corrected to >85%
- For Replacement Only
- ✱ For Distribution Only

See page 1-16 for Dimensions and Wiring Diagrams

Fluorescent-Electromagnetic

Overall Dimensions		Mounting Dimensions			
Draw #	L	W	H	M	X
D6	11 3/4	3 1/8	1 25/32	11 9/64	2
D7	11 3/4	3 3/16	1 5/8	11 9/64	2
D8	14 5/16	3 3/16	2 5/8	13 3/4	2
D9	19 3/16	3 3/16	2 5/8	18 5/8	2



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WIRING DIAGRAMS

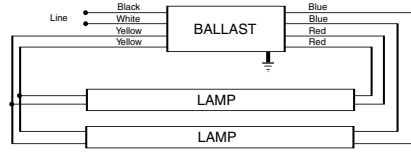


DIAGRAM 1

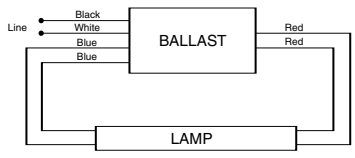
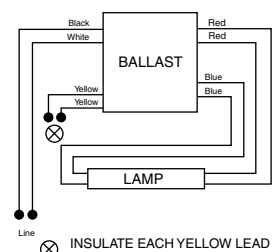


DIAGRAM 12



⊗ INSULATE EACH YELLOW LEAD INDIVIDUALLY

DIAGRAM 15