



BALLASTS

Applications

- Office
- Education
- Retail
- Industrial
- Parking



SELECTOR GUIDE

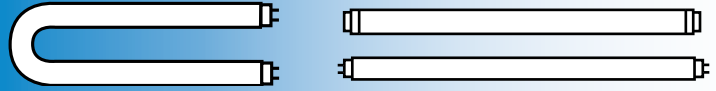
Core Products

A complete range of solutions for nearly every application



BALLAST SELECTOR GUIDE

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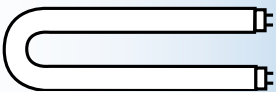
No. of Lamps	Lamp	Input Volts	Catalog Nbr	Ballast Family	Start Type	Line Current (Amps)	Input Power (Watts)	Ballast Factor	Also Operates						
									F32T8ES	F28T8	F25T8	F17T8	F40T8		
F32T8 & F32T8/U															
1	F32T8 & F32T8/U	120 - 277	B132IUNVHP-N	HP Electronic	IS	0.25 - 0.11	30	0.88	X	X	X	X	X		
			B132IUNVEL-N	ULTim8	IS	0.21 - 0.09	25	0.77	X	X	X	X	X		
			B132IUNVHE-N	ULTim8	IS	0.25 - 0.11	28	0.87	X	X	X	X	X		
			B132PUNVHE-B	ULTim8	PRS	0.24 - 0.11	29	0.86	X	X	X	X			
2	F32T8 & F32T8/U	120	B232I120RES-M	HomeStar	IS	0.83	56	0.88	X	X	X	X			
			B232IUNV-C	Std Electronic	IS	0.48 - 0.20	58 - 56	0.88			X	X	X		
			B232IUNVHP-N	HP Electronic	IS	0.46 - 0.19	55 - 53	0.88	X	X	X	X	X		
					B232IUNVEL-N	ULTim8	IS	0.42 - 0.18	49	0.77	X	X	X	X	
					B232IUNVHE-N	ULTim8	IS	0.47 - 0.20	55	0.86	X	X	X	X	
					B232IUNV104-A	Std Electronic	IS	0.54 - 0.24	65 - 64	1.04	X	X	X	X	
					B232IUNVHEH-A	ULTim8	IS	0.62 - 0.26	74 - 72	1.18	X	X	X	X	
					B232PUNVEL-B	ULTim8	PRS	0.38 - 0.16	46 - 44	0.71	X	X	X	X	
					B232PUNVHE-B	ULTim8	PRS	0.46 - 0.20	55 - 54	0.88	X	X	X	X	
					B232PUNVHEH-A	ULTim8	PRS	0.65 - 0.28	77 - 76	1.17	X	X	X	X	
				347	B232I347EL-A	ULTim8	IS	0.15	51	0.78	X	X	X	X	X
					B232I347HE-A	ULTim8	IS	0.17	58	0.88	X	X		X	X
		B232P347HE-A	ULTim8		PRS	0.17	58	0.88	X	X	X	X	X		
3	F32T8 & F32T8/U	120 - 277	B332IUNVHP-A	HP Electronic	IS	0.71 - 0.31	84 - 83	0.88	X	X	X	X	X		
			B332IUNVEL-A	ULTim8	IS	0.58 - 0.25	70 - 69	0.77	X	X	X	X	X		
			B332IUNVHE-A	ULTim8	IS	0.70 - 0.30	83 - 81	0.87	X	X	X	X	X		
			B332PUNVEL-A	ULTim8	PRS	0.58 - 0.25	70 - 69	0.71	X	X	X	X	X		
			B332PUNVHE-A	ULTim8	PRS	0.70 - 0.30	84 - 82	0.88	X	X	X	X	X		
		B332PUNVHEH-A	ULTim8	PRS	0.93 - 0.40	112 - 109	1.15	X	X	X	X				
		347 - 480	B332IHRVHB-E	ULTim8	IS	0.32 - 0.24	110 - 109	1.18	X	X					
		120 - 277	B432IUNVHP-A	HP Electronic	IS	0.93 - 0.40	112 - 108	0.88	X	X	X	X	X		
			B432IUNVEL-A	ULTim8	IS	0.80 - 0.34	97 - 96	0.77	X	X	X	X	X		
			B432IUNVHE-A	ULTim8	IS	0.91 - 0.38	109 - 106	0.87	X	X	X	X	X		
			B432IUNVHEH-E	ULTim8	IS	1.25 - 0.54	150 - 146	1.15	X	X	X	X	X		
			B432PUNVEL-A	ULTim8	PRS	0.76 - 0.33	91 - 90	0.71	X	X	X	X	X		
			B432PUNVHE-A	ULTim8	PRS	0.91 - 0.39	109 - 107	0.87	X	X	X	X	X		
		B432PUNVHEH-E	ULTim8	PRS	1.20 - 0.50	143 - 141	1.15	X	X	X	X				
				347	B432I347EL-A	ULTim8	IS	0.28	101	0.78	X	X	X	X	X
					B432I347HE-A	ULTim8	IS	0.32	113	0.88	X	X	X	X	X
		B432P347HE-A	ULTim8		PRS	0.32	113	0.88	X	X	X	X	X		

ULTim8 Instant Start are some of the most efficient ballasts in the industry for maximum energy savings.

- Available in high efficiency HE normal (.88), EL low (.77), and HEH high (1.18) ballast factor versions.
- "True" parallel lamp operation: independent lamp operation simplifies troubleshooting, if one lamp fails, the others stay lit.
- Backed by 5 year warranty when operated at 75°C maximum case temperature

ULTim8 Programmed Start ballasts enjoy the same benefits as Instant Start plus:

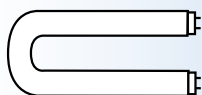
- Available in high efficiency HE normal (.88), EL low (.71), and HEH high (1.18) ballast factor versions.
- Programmed Start models feature "soft start" technology to provide long lamp life in high cycle applications such as motion sensors.
- Same 5 year warranty as instant or 3 year warranty for HEH models when operated at 90C case temperature.



T8

No. of Lamps	Lamp	Input Volts	Catalog Nbr	Ballast Family	Start Type	Line Current (Amps)	Input Power (Watts)	Ballast Factor	Also Operates		
									F96T8ES	F72T8	F48T8
Long T8											
1	F72T8	120	B244I120HE	High Efficiency	IS	0.42	50	1.03		X	X
		277	B244I277HE-A	High Efficiency	IS	0.19	52	1.04		X	X
	F96T8	120 - 277	B259IUNVHP-A	HP Electronic	IS	0.60 - 0.26	72 - 71	1.08			
			B259IUNVEL-A	ULTim8	IS	0.54 - 0.24	64	0.99	X		
		347	B259I347HP	HP Electronic	IS	0.20	68	1.05			
2	F72T8	120	B244I120HE	High Efficiency	IS	0.70	82	0.88		X	X
		277	B244I277HE-A	High Efficiency	IS	0.30	82	0.87		X	X
	F96T8	120 - 277	B259IUNVHP-A	HP Electronic	IS	0.95 - 0.40	113 - 110	0.88			
			B259IUNVEL-A	ULTim8	IS	0.84 - 0.36	101 - 99	0.78	X		
		347	B259I347HP	HP Electronic	IS	0.93 - 0.39	111 - 108	0.88	X		

No. of Lamps	Lamp	Input Volts	Catalog Nbr	Ballast Family	Start Type	Line Current (Amps)	Input Power (Watts)	Ballast Factor	Also Operates		
									F48T8HO	F60T8HO	F72T8HO
T8HO											
1	F96T8HO	120 - 277	B286PUNVHE-S	ULTim8	PS	0.80 - 0.36	96	1.00	X		
2	F96T8HO	120 - 277	B286PUNVHE-S	ULTim8	PS	1.57 - 0.67	187 - 184	0.95	X		



T12

No. of Lamps	Lamp	Input Volts	Catalog Nbr	Ballast Family	Start Type	Standard Lamps			Energy Saving Lamps		
						Line Current (Amps)	Input Power (Watts)	Ballast Factor	Line Current (Amps)	Input Power (Watts)	Ballast Factor
F40T12 & F40T12/U											
2	F40T12 & F40T12/U	120	B234SR120M-A	Basic-12	RS	0.63	71	0.9	0.49	59	0.86

T12: HO & VHO

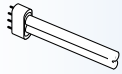


No. of Lamps	Lamp	Input Volts	Catalog Nbr	Ballast Family	Start Type	Line Current (Amps)	Input Power (Watts)	Ballast Factor	Also Operates		
									F72T12HO	F60T12HO	F48T12HO
Long T8											
1	F96T12HO	227	B295PUNVHE-S	Basic-12	PS	0.88 - 0.38	104 - 103	0.92	X	X	X
	F96T12HOES-95W	227	B295PUNVHE-S	Basic-12	PS	0.73 - 0.32	87	0.92	X	X	X
2	F96T12HO	227	B295PUNVHE-S	Basic-12	PS	1.72 - .72	204 - 197	0.88	X	X	X
	F96T12HOES-95W	227	B295PUNVHE-S	Basic-12	PS	1.45 - 0.61	170 - 167	0.88	X	X	X

T12: SLIMLINE



No. of Lamps	Lamp	Input Volts	Catalog Nbr	Ballast Family	Start Type	Standard Lamps			Energy Saving Lamps		
						Line Current (Amps)	Input Power (Watts)	Ballast Factor	Line Current (Amps)	Input Power (Watts)	Ballast Factor
1	F48T12	120 - 277	B260IUNVHP	Basic-12	IS	.39 - .18	47	1.1	.32 - .15	38 - 39	1.1
2						.61 - .27	75 - 74	0.95	.57 - .25	67 - 66	0.93
1	F60T12	120 - 277	B260IUNVHP	Basic-12	IS	0.49 - 0.22	58	1.1	-	-	-
2						0.77 - 0.33	92 - 91	0.92	-	-	-
1	F72T12	120 - 277	B260IUNVHP	Basic-12	IS	0.55 - 0.25	68 - 67	1.06	-	-	-
2						0.09 - 0.39	109 - 107	0.91	-	-	-
1	F96T12	120 - 277	B260IUNVHP	Basic-12	IS	0.70 - 0.31	85 - 84	1.05	0.59 - 0.26	72 - 70	1.03
2		120	B260I120M-A			For use only with Energy Saving Lamps		0.93	107	0.88	
		120 - 277	B260IUNVHP			1.16 - 0.50	139 - 137	0.88	0.96 - 0.40	112 - 110	0.88



LONG TWIN T5

No. of Lamps	Lamp	Input Volts	Catalog Nbr	Ballast Family	Start Type	Line Current (Amps)	Input Power (Watts)	Ballast Factor	Also Operates		
									F54T5HO	F24T5HO	F39T5HO
1	FT18W/2G11	120 - 277	CT218UNVME	CF Electronic	PRS	0.19 - 0.07	23	1.00			
2			CT218UNVME	CF Electronic	PRS	0.37 - 0.16	42	0.98			
1	FT24W/2G11	120 - 277	C2642UNVME	CF Electronic	PRS	0.22 - 0.10	26	1.01			
			B224PUNV-C	Accustart T5	PRS	0.23 - 0.10	27	1.02		X	X
		347	C2642/347ME	CF Electronic	PRS	0.09	29	0.90			
2	FT24W/2G11	120 - 277	C2642UNVME	CF Electronic	PRS	0.40 - 0.18	47 - 49	0.98			
			C242UNVME	CF Electronic	PRS	0.43 - 0.19	51 - 50	1.02			
			B224PUNV-C	Accustart T5	PRS	0.43 - 0.18	52 - 51	1.00		X	
		347	C242/347ME	CF Electronic	PRS	0.14	49	1.02			
1	FT36W/2G11	120 - 277	C242UNVME	CF Electronic	PRS	0.29 - 0.14	34 - 33	0.88			
			B224PUNV-C	Accustart T5	PRS	0.30 - 0.13	36	0.90		X	X
			B254PUNV-D	Accustart T5	PRS	0.37 - 0.18	45	1.22	X		
2	FT36W/2G11	120 - 277	C242UNVME	CF Electronic	PRS	0.57 - 0.25	64	0.83			
			B239PUNV-D	Accustart T5	PRS	0.59 - 0.26	71 - 70	0.94		X	X
			B254PUNV-D	Accustart T5	PRS	0.73 - 0.30	87	1.20	X		
		347	C242/347ME	CF Electronic	PRS	0.19	64	0.90			
1	FT40W/2G11	120	C240SI120RH	Std Electronic	IS	0.40	40	1.02			
		277	C240SI277RH	Std Electronic	IS	0.17	40	1.02			
		120 - 277	C242UNVME	CF Electronic	PRS	0.40 - 0.18	47	1.08			
			C240PUNVHP-B	HP Electronic	PRS	0.34 - 0.15	41 - 40	1.00			
2	FT40W/2G11	120	C240SI120RH	Std Electronic	IS	0.61	67	0.88			
		277	C240SI277RH	Std Electronic	IS	0.27	67	0.88			
		120 - 277	C242UNVME	CF Electronic	PRS	0.78 - 0.34	93 - 87	1.00			
			C240PUNVHP-B	HP Electronic	PRS	0.63 - 0.27	76 - 73	0.90			
1	FT50W/2G11	120 - 277	B254PUNV-D	Accustart T5	PRS	0.47 - 0.21	57	1.00	X		
		347	B254P347-D	Accustart T5	PRS	0.17	58	1.12	X		
		347 - 480	B254PHRVHB-E	Accustart T5	PRS	0.19 - 0.15	65	1.12	X		
2	FT50W/2G11	120 - 277	B254PUNV-D	Accustart T5	PRS	0.93 - 0.40	111 - 108	1.00	X		
		347	B254P347-D	Accustart T5	PRS	0.31	106	1.10	X		
		347 - 480	B254PHRVHB-E	Accustart T5	PRS	0.33 - 0.25	115 - 114	1.10	X		
3	FT50W/2G11	120 - 277	B454PUNV-E	Accustart T5	PRS	1.49 - 0.64	179 - 177	1.13	X		
4	FT50W/2G11	120 - 277	B454PUNV-E	Accustart T5	PRS	1.98 - 0.84	240 - 235	1.10	X		
			B454PUNVHB-E	Accustart T5	PRS	1.98 - 0.84	240 - 235	1.10	X		
1	FT55W/2G11	120 - 277	C242UNVME	CF Electronic	PRS	0.38 - 0.17	46	0.83			
			B254PUNV-D	Accustart T5	PRS	0.47 - 0.21	56	1.00	X		
		347	C242/347ME	CF Electronic	PRS	0.13	43	0.83			
			B254P347-D	Accustart T5	PRS	0.17	57	0.92	X		
		347 - 480	B254PHRVHB-E	Accustart T5	PRS	0.19 - 0.14	61	0.92	X		
2	FT55W/2G11	120 - 277	B254PUNV-D	Accustart T5	PRS	0.93 - 0.39	112 - 109	1.00	X		
		347	B254P347-D	Accustart T5	PRS	0.30	102	0.90	X		
		347 - 480	B254PHRVHB-E	Accustart T5	PRS	0.33 - 0.24	109 - 108	0.90	X		
3	FT55W/2G11	120 - 277	B454PUNV-E	Accustart T5	PRS	1.45 - 0.62	174 - 171	0.93	X		
4	FT55W/2G11	120 - 277	B454PUNV-E	Accustart T5	PRS	1.91 - 0.80	229 - 223	0.90	X		
			B454PUNVHB-E	Accustart T5	PRS	1.91 - 0.80	229 - 223	0.90	X		

T5: STD & HO



No. of Lamps	Lamp	Input Volts	Catalog Nbr	Ballast Family	Start Type	Primary Lamp			Also Operates	
						Line Current (Amps)	Input Power (Watts)	Ballast Factor	F14T5	F21T5
2	F28T5	120 - 277	B228PUNV85-D	Accustart T5	PRS	0.48 - 0.21	54 - 53	0.85	X	X
			B228PUNV90-C	Accustart T5	PRS	0.48 - 0.21	58 - 56	0.90	X	X
			B228PUNV95-D	Accustart T5	PRS	0.51 - 0.22	61 - 60	0.95	X	X
			B228PUNV-C	Accustart T5	PRS	0.55 - 0.23	63 - 61	1.00	X	X
			B228PUNV-N	Accustart T5	PRS	0.55 - 0.23	66 - 64	1.00	X	X
			B228PUNV115-D	Accustart T5	PRS	0.59 - 0.25	69 - 68	1.15	X	X

No. of Lamps	Lamp	Input Volts	Catalog Nbr	Ballast Family	Start Type	Primary Lamp			Also Operates	
						Line Current (Amps)	Input Power (Watts)	Ballast Factor	F39T5HO	FT36W/2G11
1	F24T5HO	120 - 277	B224PUNV-C	Accustart T5	PRS	0.19 - 0.10	28	1.02	X	X
2	F24T5HO	120 - 277	B224PUNV-C	Accustart T5	PRS	0.45 - 0.23	53 - 52	1.00	X	X

No. of Lamps	Lamp	Input Volts	Catalog Nbr	Ballast Family	Start Type	Primary Lamp			Also Operates	
						Line Current (Amps)	Input Power (Watts)	Ballast Factor	FT50W/2G11	FT55W/2G11
1	F39T5HO	120 - 277	B239PUNV-D	Accustart T5	PRS	0.32 - 0.18	47	1.02	X	X
2	F39T5HO	120 - 277	B239PUNV-D	Accustart T5	PRS	0.75 - 0.39	89 - 88	1.00	X	X

No. of Lamps	Lamp	Input Volts	Catalog Nbr	Ballast Family	Start Type	Primary Lamp			Also Operates	
						Line Current (Amps)	Input Power (Watts)	Ballast Factor	F14T5	F21T5
1	F54T5HO	120 - 277	B254PUNV-D	Accustart T5	PRS	0.54 - 0.24	64	1.02	X	X
		347 - 480	B254PHRVHB-E	Accustart T5	PRS	0.19 - 0.15	66	1.02	X	X
2	F54T5HO	120 - 277	B254PUNV-D	Accustart T5	PRS	1.03 - 0.43	120 - 117	1.00	X	X
			B254PUNVHB-D	Accustart T5	PRS	0.96 - 0.41	116 - 113	1.00	X	X
		347	B254P347-D	Accustart T5	PRS	0.35	120	1.00	X	X
		347 - 480	B254PHRVHB-E	Accustart T5	PRS	0.35 - 0.26	120 - 119	1.00	X	X
3	F54T5HO	120 - 277	B454PUNV-E	Accustart T5	PRS	1.52 - 0.66	181 - 178	1.05	X	X
4	F54T5HO	120 - 277	B454PUNV-E	Accustart T5	PRS	2.01 - 0.86	240 - 234	1.00	X	X
			B454PUNVHB-E	Accustart T5	PRS	1.96 - 0.84	235 - 229	1.00	X	X



No. of Lamps	Lamp	Input Volts	Catalog Nbr	Ballast Family	Start Type	Primary Lamp			Also Operates	
						Line Current (Amps)	Input Power (Watts)	Ballast Factor	CFS28W/GR10q	CFS38W/GR10q
1	FC9T5-22W	120 - 277	C2642UNVME	CF Electronic	PRS	0.21 - 0.10	25	1.00	X	X
		347	C2642/347ME	CF Electronic	PRS	0.08	26	0.98	X	
2	FC9T5-22W	120 - 277	C242UNVME	CF Electronic	PRS	0.42 - 0.19	50	1.05	X	
		347	C242/347ME	CF Electronic	PRS	0.14	47	1.05	X	
1	FC12T5-40W	120 - 277	C2642UNVME	CF Electronic	PRS	0.35 - 0.16	42	0.98	X	X
		347	C2642/347ME	CF Electronic	PRS	0.12	40	0.98	X	
2	FC12T5-40W	120 - 277	C242UNVME	CF Electronic	PRS	0.65 - 0.29	80 - 79	0.98	X	
		347	C242/347ME	CF Electronic	PRS	0.22	71	0.98	X	
1 & 1	FC9T5-22W & FC12T5-40W	120 - 277	C242UNVME	CF Electronic	PRS	0.54 - 0.24	66 - 64	0.98	X	
		347	C242/347ME	CF Electronic	PRS	0.18	59	0.98	X	
1	FC12T5-55W	120 - 277	B254PUNV-D	Accustart T5	PRS	0.45 - 0.20	55	1.00		
2	FC12T5-55W	120 - 277	B254PUNV-D	Accustart T5	PRS	0.88 - 0.38	107 - 104	1.00		



COMPACT

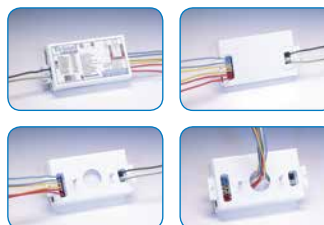
Lamp	Input Volts	Catalog Nbr	Ballast Family	Start Type	One Lamp			Two Lamp		
					Line Current (Amps)	Input Power (Watts)	Ballast Factor	Line Current (Amps)	Input Power (Watts)	Ballast Factor
13W/G24q or 13W/GX24q	120 - 277	C213UNVME	CF Electronic	PRS	0.15 - 0.07	18	1.00	0.26 - 0.11	30	1.00
	347	C213/347ME	CF Electronic	PRS	0.06	18	1.00	0.10	33	0.98
13W/2GX7	120 - 277	CT213UNVME	CF Electronic	PRS	0.12 - 0.06	15	0.98	0.22 - 0.10	26	0.98
18W/G24q or 18W/GX24q	120 - 277	C218UNVME	CF Electronic	PRS	0.16 - 0.07	19	1.00	0.30 - 0.13	35	0.95
	347	C218/347ME	CF Electronic	PRS	0.06	21	1.00	0.11	38	0.98
18W/2G11/RS	120 - 277	CT218UNVME	CF Electronic	PRS	0.19 - 0.07	23	1.00	0.37 - 0.16	43 - 42	0.98
26W/G24q or 26W/GX24q	120 - 277	C2642UNVME	CF Electronic	PRS	0.25 - 0.11	28	1.02	0.47 - 0.21	56	0.98
		C242UNVME	CF Electronic	PRS	-	-	-	0.46 - 0.20	56 - 55	1.02
	347	C2642/347ME	CF Electronic	PRS	0.09	31	1.02	0.17	57	0.98
		C242/347ME	CF Electronic	PRS	-	-	-	0.14	44	1.02
32W/GX24q	120 - 277	C2642UNVME	CF Electronic	PRS	0.30 - 0.13	36	1.00	-	-	-
		C242UNVME	CF Electronic	PRS	-	-	-	0.58 - 0.26	69 - 67	1.00
	347	C2642/347ME	CF Electronic	PRS	0.11	36	0.98	-	-	-
		C242/347ME	CF Electronic	PRS	-	-	-	0.19	62	1.00
42W/GX24q	120 - 277	C2642UNVME	CF Electronic	PRS	0.41 - 0.18	48	0.98	-	-	-
		C242UNVME	CF Electronic	PRS	0.40 - 0.18	45	1.00	0.76 - 0.32	91 - 90	0.98
	347	C2642/347ME	CF Electronic	PRS	0.15	50	1.00	-	-	-
		C242/347ME	CF Electronic	PRS	0.13	42	1.00	0.25	80	0.98
57W/GX24q	120 - 277	C242UNVME	CF Electronic	PRS	0.52 - 0.21	58 - 57	1.00	-	-	-
	347	C242/347ME	CF Electronic	PRS	0.18	61	1.00	-	-	-
70W/GX24q	120 - 277	C242UNVME	CF Electronic	PRS	0.61 - 0.27	73 - 72	1.00	-	-	-
	347	C242/347ME	CF Electronic	PRS	0.21	74	1.00	-	-	-

ME - Side and Bottom Exit Terminals

Fits Virtually Every J-box Cover & Fixture Application



The Multi-Exit ballast lead wire connectors accommodate side and bottom lead exit requirements, and the Snap mount adapter plate adds bottom-exit studs and additional flexibility for replacement of older magnetic ballasts.



Multi-E Kits Contain

- Multi-Exit Ballast
- Snap-mount adapter plate
- Lead wire set
- Wire extraction tool
- Instructions

Multi-E Kit Products:

- C213UNVME000K
- C218UNVME000K
- C2642UNVME000K

HIGH PRESSURE SODIUM LAMP BALLASTS

Lamp Type	Lamp Watts	ANSI Code	Input Volts	Catalog Nbr	Circuit Type	Input Power (Watts)	Max. Input Current
High Pressure Sodium	35 W	S76	120	S35120RCEM	Reactor	43	1.15/0.68
			120	1233-251W	Reactor	43	1.15/0.68
	50 W	S68	120	S50120RCEM	Reactor	60	1.50/0.90
			120	1233-35W	Reactor	60	1.50/0.90
			120/208/240/277	S50MLTC3M	HX-HPF	64	1.24/0.60/0.52/0.45
			120/277	12210-236C-TC	HX-HPF, F-Can	71	1.05/0.45
	70 W	S62	120	S70120RCEM	Reactor	83	2.10/0.90
			120	1233-142W	Reactor	83	2.10/0.90
			480 (120V Aux)	S7048TLC3M	HX-HPF	94	0.34
			120/208/240/277	S70MLTC3M	HX-HPF	94	1.40/0.83/0.72/0.62
			120/277/347	S70TRILC3M	HX-HPF	94	1.50/0.65/0.50
			120/277	12210-237C-TC	HX-HPF, F-Can	97	1.60/0.70
	100 W	S54	120/347	12210-552C-TC	HX-HPF, F-Can	109	2.00/0.80
			120	S100120RCEM	Reactor	117	2.90/1.80
			120	1233-10W	Reactor	114	2.90/1.80
			480 (120V Aux)	S10048TLC3M	HX-HPF	135	0.57
			120/208/240/277	S100MLTC3M	HX-HPF	122	2.20/1.30/1.10/0.95
			120/277/347	S100TRILC3M	HX-HPF	130	2.20/0.95/0.70
	150 W	S55	120/277	12210-239C-TC	HX-HPF, F-Can	125	2.00/0.90
			120	S150120RCEM	Reactor	171	4.40/2.20
			120	1233-154W	Reactor	170	4.40/2.20
			480 (120V Aux)	S15048TLC3M	HX-HPF	189	0.72
			120/208/240/277	S150MLTC3M	HX-HPF	188	3.00/1.65/1.50/1.30
			120/277/347	S150TRILC3M	HX-HPF	188	3.00/1.35/1.00
	200 W	S66	120/277	12210-241C-TC	HX-HPF, F-Can	185	2.80/1.20
			480 (120V Aux)	S20048TAC4M	CWA	245	0.56
			120/208/240/277	S200MLTAC4M	CWA	230	2.10/1.20/1.00/0.88
			120/277/347	S200TRIAC4M	CWA	240	2.00/0.86/0.68
	250 W	S50	480 (120V Aux)	S25048TAC4M	CWA	285	0.62
			120/208/240/277/480	S250ML5AC40	CWA	300	2.50/1.55/1.25/1.05/0.65
			120/208/240/277	S250MLTAC4M	CWA	300	2.60/1.55/1.30/1.15
			120/277/347	S250TRIAC4M	CWA	295	2.40/1.05/0.85
	400 W	S51	480 (120V Aux)	S40048TAC4M	CWA	465	1.1
			480 (120V Aux)	S40048TAC5M	CWA	467	1.05
			120/208/240/277/480	S400ML5AC4M	CWA	465	4.00/2.30/2.00/1.70/1.10
			120/208/240/277/480	S400ML5AC5M	CWA	468	4.40/2.62/2.21/1.90/1.05
			120/208/240/277	S400MLTAC4M	CWA	440	3.80/2.20/1.80/1.60
			120/208/240/277	S400MLTAC5M	CWA	470	4.00/2.30/2.00/1.80
	600W	S106	120/277/347	S400TRIAC4M	CWA	465	3.95/1.70/1.35
			120/208/240/277	S600MLTAC5M	CWA	640	5.10/3.10/2.70/2.35
	1000 W	S52	480 (120V Aux)	S100048TAC5M	CWA	1100	2.45
			120/208/240/277/480	S1000ML5AC5M	CWA	1100	9.45/5.45/4.75/4.10/2.35
120/208/240/277			S1000MLTAC5M	CWA	1100	9.50/5.50/4.80/4.20	
120/277/347			S1000TRIAC5M	CWA	1100	9.60/4.30/3.40	

PROBE-START METAL HALIDE LAMP BALLASTS

Lamp Type	Lamp Watts	ANSI Code	Input Volts	Catalog Nbr	Circuit Type	Input Power (Watts)	Max. Input Current
Metal Halide (Probe-Start)	175 W	M57	120/277	1110-245SC-TC	CWA, F-Can	205	1.75/0.75
			120/347	1110-564C-TC	CWA, F-Can	205	1.75/0.62
		M57 or M107	480 (120V Aux)	M17548TAC3M	CWA	200	0.51
			120/208/240/277/480	M175ML5AC3M	CWA	208/210	1.90/1.10/0.95/0.85/0.50
			120/208/240/277	M175MLTAC3M	CWA	205	1.82/1.13/0.93/0.85
			120/277/347	M175TRIAC30	CWA	211	1.90/0.80/0.65
	250 W	M58	120/277	1110-246C-TC	CWA, F-Can	295	2.50/1.10
			120/277	1111-246C-TC *	CWA, F-Can	300	2.50/1.10
			120/347	1110-566C-TC	CWA, F-Can	295	2.50/0.95
			480 (120V Aux)	M25048TAC4M	CWA	284	0.61
			120/208/240/277/480	M250ML5AC3M	CWA	280	2.50/1.50/1.25/1.10/0.65
			120/208/240/277/480	M250ML5AC4M	CWA	282	2.42/1.40/1.20/1.00/0.60
			120/208/240/277	M250MLTAC3M	CWA	297	2.65/1.58/1.30/1.13
			120/208/240/278	M250MLTAC4M	CWA	290	3.05/1.65/1.55/1.25
			120/277/347	M250TRIAC3M	CWA	295	2.55/1.10/0.85
			400 W	M59	120/277	1110-247SC-TC	CWA, F-Can
	120/277	1111-247SC-TC *			CWA, F-Can	460	3.90/1.70
	120/347	1110-568C-TC			CWA, F-Can	460	3.90/1.30
	480 (120V Aux)	M40048TAC4M			CWA	458	1.00
	120/208/240/277/480	M400ML5AC4M			CWA	458	4.00/2.30/2.00/1.70/1.00
	120/208/240/277	M400MLTAC4M			CWA	458	3.94/2.20/1.93/1.69
	120/277/347	M400TRIAC4M			CWA	455	3.80/1.50/1.30
	480 (120V Aux)	M100048TAC5M			CWA	1080	2.30
	1000 W	M47	120/208/240/277/480	M1000ML5AC5M	CWA	1080	9.15/5.25/4.55/3.95/2.30
			120/208/240/277	M1000MLTAC5M	CWA	1080	8.95/5.15/4.50/3.90
			120/277/347	M1000TRIAC5M	CWA	1080	9.00/3.90/3.20
			120	M1050120AC5M	CWA	1130	9.40
	1050 W	-	120	M1050120AC5M	CWA	1130	9.40
	1250 W	M180	120/240	M125024DAC5M	CWA	1360	11.50/5.75
	1500 W	M48	480 (120V Aux)	M150048TAC5M	CWA	1620	3.50
			120/208/240/277	M1500MLTAC5M	CWA	1615	14.30/8.30/7.20/6.20
			208/240/277/480	M1500MLHAC5M	CWA	1625	7.90/7.00/6.00/3.50
120/277/347			M1500TRIAC5M	CWA	1610	13.70/6.00/4.70	
1650 W	M112	208/240/277/480	M1650MLHAC5M	CWA	1765	8.75/7.60/6.60/3.80	

* Two of these ballasts are required to operate the lamp. Electrical data are for two ballasts.

PULSE-START METAL HALIDE LAMP BALLASTS

Lamp Type	Lamp Watts	ANSI Code	Input Volts	Catalog Nbr	CWA Circuit Type	Input Power (Watts)	Max. Input Current
Pulse Start Metal Halide	35 W	M130	120	1120-251A-TC	CWA, F-Can	55	0.50
			120/208/240/277	M35MLTLC3M	HX-HPF	50	0.82/0.48/0.42/0.36
			120/277/347	M35TRILC3M	HX-HPF	54	0.84/0.40/0.30
	50 W	M110	120/277	11210-236C-TC	HX-HPF, F-Can	70	0.64/0.65
			120/208/240/277	M50MLTLC3M **	HX-HPF	65	1.25/0.70/0.60/0.55
			120/277/347	M50TRILC3M **	HX-HPF	67	1.30/0.61/0.48
	70 W	M98, M143 (C98)	120/277	11210-506C-TC **	HX-HPF, F-Can	89	2.00/0.90
			120/347	11210-554C-TC	HX-HPF, F-Can	90	2.00/0.80
			480 (120V Aux)	M7048TLC3M	HX-HPF	95	0.50
			480 (120V Aux)	M7048TLC3E **	HX-HPF	91	0.45
			120/208/240/277	M70MLTLC3E **	HX-HPF	89	1.70/1.00/0.85/0.75
			120/208/240/277	M70MLTLC3M	HX-HPF	95	1.70/1.04/0.87/0.78
			120/277/347	M70TRILC3E **	HX-HPF	89	1.75/0.75/0.60
			120/277/347	M70TRILC3M	HX-HPF	91	1.85/0.80/0.65
		M85 (Double Ended)	120/277	11210-277C-TC	HX-HPF, F-Can	98	2.00/0.90
			120/208/240/277	M70MLTLC3D	HX-HPF	95	1.70/1.04/0.87/0.78
	100 W	M90, M140 (C90)	120/277	11210-239C-TC	HX-HPF, F-Can	125	2.20/1.00
			120/347	11210-606C-TC	HX-HPF, F-Can	125	2.20/0.70
			480 (120V Aux)	M10048TLC3M **	HX-HPF	127	0.60
			120/208/240/277	M100MLTLC3E **	HX-HPF	124	2.60/1.55/1.30/1.15
			120/208/240/277	M100MLTLC30	HX-HPF	127	2.60/1.55/1.30/1.15
			120/277/347	M100TRILC3E **	HX-HPF	124	2.60/1.15/0.90
		120/277/347	M100TRILC3M	HX-HPF	129	2.60/1.15/0.90	
	M91 (double ended)	120/208/240/277	M100MLTLC3D	HX-HPF	130	2.30/1.30/1.10/0.95	
	150 W	M102, M142 (C142)	120/277	11210-539C-TC	HX-HPF, F-Can	185	3.70/1.60
			480 (120V Aux)	M15048TLC3E **	HX-HPF	185	1.00
			480 (120V Aux)	M15048TLC3M	HX-HPF	187	1.00
			120/208/240/277	M150MLTLC3M	HX-HPF	185	3.32/1.93/1.66/1.48
			120/208/240/277	M150MLTLC3E **	HX-HPF	182	3.40/1.95/1.70/1.50
			120/208/240/277	M150MLTAC3M	CWA	188	1.60/1.00/0.80/0.70
			120/208/240/277	M150MLTAC3E **	CWA	182	1.60/1.00/0.80/0.70
			120/277/347	M150TRILC3E **	HX-HPF	182	3.35/1.45/1.15
		120/277/347	M150TRILC3M	HX-HPF	185	3.32/1.48/1.15	
		M81 (double ended)	120/277	11210-242C-TC	HX-HPF, F-Can	185	3.70/1.60
	120/208/240/277	M150MLTLC3D	HX-HPF	185	3.32/1.93/1.66/1.48		
	175 W	M152, M137	480 (120V Aux)	P17548TAC3L **	CWA	198	0.42
			480 (120V Aux)	P17548TAC4E **	CWA	198	0.40
			120/208/240/277/480	P175ML5AC3M	CWA	210	1.80/1.10/0.90/0.78/0.45
			120/208/240/277	P175MLTAC3M	CWA	208	1.86/1.23/0.98/0.87
			120/208/240/277	P175MLTAC3L **	CWA	198	1.70/1.00/0.85/0.75
			120/208/240/277	P175MLTAC40 **	CWA	198	1.75/1.00/0.90/0.75
			120/208/240/277	P175MLTAC4L **	CWA	198	1.70/0.95/0.85/0.75
	200 W	M136	120/208/240/277/480	P200ML5AC3M	CWA	233	2.66/1.52/1.31/1.12/0.68
			120/208/240/277	P200MLTAC3L **	CWA	227	2.05/1.20/1.05/0.90
			120/277/347	P200TRIAC3M	CWA	240	2.70/1.04/0.87
	250 W	M153, M138	480 (120V Aux)	P25048TAC4L **	CWA	283	0.60
			120/208/240/277/480	P250ML5AC4E **	CWA	281	2.40/1.40/1.20/1.05/0.60
			120/208/240/277/480	P250ML5AC4M	CWA	285	2.45/1.42/1.22/1.05/0.62
			120/208/240/277	P250MLTAC4E **	CWA	281	2.40/1.40/1.20/1.05
			120/208/240/277	P250MLTAC4L	CWA	283	2.60/1.50/1.30/1.10
			120/277/347	P250TRIAC4E **	CWA	281	2.45/1.05/0.85
	320 W	M154, M132	277	P320277RCM	Reactor	358	3.70/1.65
480 (120V Aux)			P32048TAC4L **	CWA	361	0.80	
120/208/240/277/480			P320ML5AC4E **	CWA	357	3.10/1.80/1.55/1.35/0.80	
120/208/240/277/480			P320ML5AC4L	CWA	363	3.10/1.80/1.55/1.35/0.80	
120/208/240/277			P320MLTAC4E **	CWA	356	3.10/1.80/1.55/1.35	
120/208/240/277			P320MLTAC40	CWA	365	4.10/2.50/2.00/1.85	
120/277/347			P320TRIAC4E **	CWA	356	3.75/1.65/1.25	
350 W	M131	480 (120V Aux)	P35048TAC4E **	CWA	393	0.85	
		120/208/240/277/480	P350ML5AC40	CWA	397	3.35/1.85/1.65/1.40/0.80	
		120/208/240/277	P350MLTAC4E **	CWA	389	3.25/1.80/1.60/1.40	
		120/277/347	P350TRIAC4E **	CWA	389	3.75/1.65/1.25	
		120/277/347	P350TRIAC4M	CWA	400	3.85/1.70/1.30	

** High efficiency ballasts that meet DOE efficiency requirements for metal halide lighting fixtures (MHLF) and also meet efficiency of CSA C863-16 Standard.

PULSE-START METAL HALIDE LAMP BALLASTS

Lamp Type	Lamp Watts	ANSI Code	Input Volts	Catalog Nbr	CWA Circuit Type	Input Power (Watts)	Max. Input Current
Pulse Start Metal Halide	400 W	M155, M138, M128, M172 (C172)	480 (120V Aux)	P40048TAC4E **	CWA	447	1.00
			480 (120V Aux)	P40048TAC4L	CWA	454	1.00
			120/208/240/277/480	P400ML5AC4E **	CWA	442	3.80/2.20/1.90/1.60/0.95
			120/208/240/277/480	P400ML5AC4L	CWA	454	3.90/2.25/1.90/1.65/0.95
			120/208/240/277	P400MLTAC4E **	CWA	442	3.90/2.25/1.95/1.70
			120/208/240/277	P400MLTAC4L	CWA	454	3.90/2.25/1.95/1.70
			120/277/347	P400TRIAC4E **	CWA	442	3.70/1.60/1.30
			120/277/347	P400TRIAC4M	CWA	454	4.05/1.75/1.40
	450 W	M144	480 (120V Aux)	P45048TAC4E **	CWA	501	1.10
			120/208/240/277	P450MLTAC4E **	CWA	496	4.35/2.55/2.15/1.90
	750 W	M149	480 (120V Aux)	P75048TAC5M **	CWA	822	1.80
			120/208/240/277/480	P750ML5AC5M **	CWA	820	6.95/4.00/3.50/3.00/1.75
			120/208/240/277	P750MLTAC5M **	CWA	823	7.10/4.10/3.55/3.10
	875W	M166	120/277/347	P750TRIAC5M **	CWA	820	7.05/3.05/2.45
			120/208/240/277	P875MLTAC5M **	CWA	945	7.90/4.55/3.95/3.45
	1000 W	M141	480 (120V Aux)	P100048TAC5M **	CWA	1080	2.30
			120/208/240/277/480	P1000ML5AC5E **	CWA	1068	8.95/5.15/4.45/3.85/2.25
			120/208/240/277/480	P1000ML5AC5M	CWA	1080	8.95/5.15/4.45/3.85/2.25
			120/208/240/277	P1000MLTAC5E **	CWA	1068	9.00/5.20/4.50/3.90
			120/208/240/277	P1000MLTAC5M	CWA	1070	8.80/5.10/4.50/4.10
		347/480	P1000483AC5E **	CWA	1068	3.20/2.35	

** High efficiency ballasts that meet DOE efficiency requirements for metal halide lighting fixtures (MHLF) and also meet efficiency of CSA C863-16 Standard.

MULTI-5 UNI-PAK

Lamp Type	Lamp Watts	ANSI Code	Input Volts	Catalog Nbr	Circuit Type	Input Power (Watts)	Max. Input Current
High Pressure Sodium	250 W	S50	120/208/240/277/480	S250ML5AC40555K	CWA	300	2.50/1.55/1.25/1.05/0.65
	500 W	S51	120/208/240/277/480	S400ML5AC4M555K	CWA	465	4.00/2.30/2.00/1.70/1.10
	1000 W	S52	120/208/240/277/480	S1000ML5AC5M555K	CWA	1048	9.10/5.40/4.60/4.10/2.45
Metal Halide	175 W	M57	120/208/240/277/480	M175ML5AC3M555K	CWA	208/210	1.90/1.10/0.95/0.85/0.50
	250 W	M58	120/208/240/277/480	M250ML5AC3M555K	CWA	280	2.50/1.50/1.25/1.10/0.65
	400 W	M59	120/208/240/277/480	M400ML5AC4M555K	CWA	458	4.00/2.30/2.00/1.70/1.00
	1000 W	M47	120/208/240/277/480	M1000ML5AC5M555K	CWA	1060	8.80/5.20/4.40/3.90/2.30
Pulse Start Metal Halide	250 W	M153	120/208/240/277/480	P250ML5AC4L555K	CWA	233	2.45/1.42/1.22/1.05/0.62
	320 W	M154	120/208/240/277/480	P320ML5AC4L555K	CWA	363	3.10/1.80/1.55/1.35/0.80
	400 W	M155	120/208/240/277/480	P400ML5AC4L555K	CWA	454	3.90/2.25/1.90/1.65/0.95
	750 W	M149	120/208/240/277/480	P750ML5AC5M555K	CWA	820	6.95/4.00/3.50/3.00/1.75



Multi-5 Uni-Pak is the only HID replacement kit that offers these great benefits:

1. Gives you five taps in one: 120, 208, 240, 277 and 480 volt.
2. Packages the right ballast and lamp to ensure system compatibility — all in an easy-to-carry box.
3. Prewired capacitor (plus ignitor if needed) saves installation time and reduces wiring errors
4. Color-coded leads to reduce the risk of incorrect wiring.
5. Simple installation instruction and troubleshooting tips included.

Order Code	Part #	Lamp Wattage	Lamp Type	Input Voltage	Mounting	Lead Exit
Micro Series						
188514	M2012CK-7EUN	20	M/C156	120	No Feet	Side
188882	M2012CK-7EUN-F	20	M/C156	120	Feet	Side
188574	M2212CK-7EUN	22	M/C175	120	No Feet	Side
188635	M3912CK-7EUN	39	M/C130	120	No Feet	Side
188776	M3912CK-7EUN-F	39	M/C130	120	Feet	Side
188756	M3912CK-7EUN-J	39	M/C130	120	Studs	Top
188578	MTm3912CK-7EUN-J	39Tm	M/C179	120	Studs	Top
Mini-Slim Series						
188246	M3912CK-6EUN-F	39	M/C130	120	Feet	Side
188164	M7012CK-6EUN-F	70	M/C98, M/C139, M/C143	120	Feet	Side
Mini-Square Series						
188901	M2012-27CK-6EU-F	20	M/C156	120-277	Feet	Side
1889031	M2012/27CK-6EUJT3	20	M/C156	120/277	Studs	Top
188895	M3912-27CK-6EU-F	39	M/C130	120-277	Feet	Side
188939	M7012-27CK-6EU-F	70	M/C98, M/C139, M/C143	120-277	Feet	Side
188940	M7012-27CK-6EUJ	70	M/C98, M/C139, M/C143	120-277	Studs	Top
Standard Series						
188611 ₁	M2012/27CK-5EUJT3	20	M/C156	120/277	Studs	Top
188156	M3912-27CK-5EU	39	M/C130	120-277	No Feet	Side
188157	M3912-27CK-5EU-F	39	M/C130	120-277	Feet	Side
188301	M3912-27CK-5EUJ	39	M/C130	120-277	Studs	Top
188629 ₁	M3912/27CK-5EUJT3	39	M/C130	120/277	Studs	Top
188612	M5012-27CK-5EU-F	50	M148 or M110	120-277	Feet	Side
188613 ₁	M5012/27CK-5EUJT3	50	M148 or M110	120/277	Studs	Top
188165	M7012-27CK-5EU	70	M/C98, M/C139, M/C143	120-277	No Feet	Side
188166	M7012-27CK-5EU-F	70	M/C98, M/C139, M/C143	120-277	Feet	Side
188167	M7012-27CK-5EUJ	70	M/C98, M/C139, M/C143	120-277	Studs	Top
188631 ₁	M7012/27CK-5EUJT3	70	M/C98, M/C139, M/C143	120/277	Studs	Top
188632 ₂	M7012/27CK-5EUJA3	70	M/C98, M/C139, M/C143	120/277	Studs	Top
188633 ₁	M10012/27CK-5EUJT3	100	M/C90, M/C140, C191	120/277	Studs	Top
188168	M10012-27CK-5EU	100	M/C90, M/C140, C191	120-277	No Feet	Side
188169	M10012-27CK-5EU-F	100	M/C90, M/C140, C191	120-277	Feet	Side
188302	M10012-27CK-5EUJ	100	M/C90, M/C140, C191	120-277	Studs	Top
188634 ₂	M10012/27CK-5EUJA3	100	M/C90, M/C140, C191	120/277	Studs	Top
188638.05 ₃	M15012-27CK-5EU-F	150	M/C102 and M/C142	120-277	Feet	Side
188639.05 ₃	M15012-27CK-5EUJ	150	M/C102 and M/C142	120-277	Studs	Top
188989.05 _{1,3}	M15012-27CK-5EUJT3	150	M/C102 and M/C142	120-277	Studs	Top

Footnotes:

- 1 - "JT3" models have 120V power source for operating the heater on self-heating thermal protectors allowing dual-rated input voltage fixtures.
- 2 - "JA3" models have same 120V power source as JT3 models, but also have an integrated auxiliary light control which drives a quartz restrike back-up lamp.
- 3 - Exceeds EISA 2007 requirements with 90% efficiency.



- Optimum Lamp Performance
- Rugged, compact and lightweight design
- Enhanced color and CRI uniformity
- Reduced lamp dropouts caused by voltage dips
- Quiet Operation

ELECTRONIC SIGN BALLASTS (INSTANT START - PARALLEL WIRED)

Catalog Number	Total Lamp Footage		Min Starting Temp	Input Volts	Max Input Watts (T12HO/T8HO)	Max Line Current (T12HO/T8HO)	Case Dimensions (inches)			Weight (lbs.)
							Length	Height	Width	
T12HO up to 8' long or T8HO up to 6' long: 120 - 277 Volts - 50/60 Hz										
ESB216-12	2' min.	T12HO: 16' max, 1-2 lamps	-20°F (-29°C)	120	134/125	1.12/1.04	10.58	1.78	3.24	4.2
	4' min.	T8HO: 12' max, 1-2 lamps		277	130/121	0.47/0.44				
ESB432-14	4' min.	T12HO: 32' max, 1-4 lamps	-20°F (-29°C)	120	280/257	2.34/2.14	13.19	2.67	3.24	7.4
	4' min.	T8HO: 24' max, 1-4 lamps		277	274/250	0.99/0.90				
ESB848-46	8' min.	T12HO: 48' max, 4-6 lamps	-20°F (-29°C)	120	420/380	3.50/3.17	15.56	2.67	3.24	9.7
	16' min.	T8HO: 36' max, 4-6 lamps		277	415/380	1.50/1.37				
T12HO up to 10' long or T8HO up to 8' long: 120 - 277 Volts - 50/60 Hz										
ESB1040-14	10' min.	T12HO: 40' max, 1-4 lamps	-20°F (-29°C)	120	341/321	2.85/2.69	15.56	2.67	3.24	9.7
	8' min.	T8HO: 32' max, 1-4 lamps		277	331/313	1.25/1.19				

*See specification sheets for details on multiple lamp applications

ELECTRONIC SIGN BALLASTS (RAPID START - SERIES WIRED)

Catalog Number	Total Lamp Footage		Start Temp	Input Volts	Input Watts (max) (T12HO/T8HO)	Max Line Current (T12HO/T8HO)	Case Dimensions (Inches)			Weight (lbs.)
							Case Length	Height	Width	
T12HO up to 8' long or T8HO up to 6' in length: 120 - 277Volts - 50/60 Hz										
ESR1232-240011	12' min.	T12HO: 32' max 2, 3, or 4 Lamps	-20°F (-29°C)	120	282/256	2.35/2.13	14.3	1.2	3.15	3.75
		T8HO: 24' max 2, 3, or 4 lamps		277	275/252	0.99/0.90				
ESR416-120011	4' min.	T12HO: 16' max 1 or 2 lamps	-20°F (-29°C)	120	142/129	1.18/1.07	11.75	1.2	1.7	2
		T8HO: 12' max 1 or 2 lamps		277	139/128	0.5/0.46				

LED CONSTANT VOLTAGE DRIVERS & CHAINS

Driver P/N	Voltage	Max Power (W)	Current (mA)	Input Voltage	Control/Notes
L12V20UNVJL	12	20	1.7	120-277	Fixed Output
L12V60UNVA	12	60	5	120-277	Fixed Output
L12V60UNVQ	12	60	5	120-277	Fixed Output / IP67
L24V100UNVA	24	96	4	120-277	Fixed Output
L24V100UNVQ	24	96	4	120-277	Fixed Output / IP67

Chain P/N	Color	Color Temp	Input Voltage	Lumens/Foot
LSA-25WH	White	6500K	12V	100
LSA-25WW	White	3500K	12V	95



- Universal's constant voltage drivers are ideal for your general lighting and sign illumination applications.
- Universal's LED chains are ideal for sign illumination and accent lighting applications.



	LAMP TYPE	QTY	Analog Dimming	Light Level Switching	DALI Digital Dimming Ballasts	Analog Dimming w/ Parallel Lamp	Light Level Switching w/ Parallel Lamp	
T8	F17T8	1	B132PUNVSV3-A	B232PUS50-A	B132PUNVDV3-A	B232PUSV3PLA (120-277V)	B232PUS50PLHA (120-277V)	
		2	B232PUNVSV3-A		B232PUNVDV3-A			
	F25T8	1	B132PUNVSV3-A	B232PUS50-A	B132PUNVDV3-A			
		2	B232PUNVSV3-A		B232PUNVDV3-A			
	F32T8	1	B132PUNVSV3-A	B232PUS50-A B232SR120S30 B232SR277S30	B132PUNVDV3-A		B232P3SV3PLA (347V)	B232PUS50PLA (120-277V)
		2	B232PUNVSV3-A		B232PUNVDV3-A			
3		B332SR120V5 B332SR277V5	B332SR120S30 B332SR277S30					
4		B432SR277V5						
T5 & T5HO	F14T5	1	B114PUNVSV3-D	B214PU115S50A	B114PUNVDV3-D	B228PUSV3PLA (120-277V) B228P3SV3PLA (347V)	B232PUS50PLA (120-277V)	
		2	B214PUNVSV3-D	B228PU95S50D & B214PU115S50A	B214PUNVDV3-D			
	F21T5	1	B128PUNVSV3-D	B214PU115S50A	B128PUNVDV3-D			
		2	B228PUNVSV3-D	B228PU95S50D & B228PU115S50D	B228PUNVDV3-D			
	F28T5	1	B128PUNVSV3-D	B214PU115S50A	B128PUNVDV3-D			
		2	B228PUNVSV3-D	B228PU95S50D & B228PU115S50D	B228PUNVDV3-D			
	F35T5	1	B135PUNVSV3-D		B135PUNVDV3-D			
		2		B228PU115S50D				
	F54T5HO	1			B254PUDV3PLD B254P3DV3PLD (347V)		B254PUSV3PLD	
		2						
CFL	CFQ/TR13W	1	C213UNVSV3ME		C226UNVDV3ME			
		2	C213UNVSV3ME		C226UNVDV3ME			
	CFQ/TR18W	1	C218UNVSV3ME		C226UNVDV3ME			
		2	C218UNVSV3ME		C226UNVDV3ME			
	CFQ/TR26W	1	C226UNVSV3ME		C226UNVDV3ME			
		2	C226UNVSV3ME		C226UNVDV3ME			
	CFR32W	1	C226UNVSV3ME		C226UNVDV3ME			
		2			C232PUNVDV3			
	CFM42W	1	C226UNVSV3ME		C226UNVDV3ME			
		2			C242PUNVDV3			
T5	FT40W/2G11	1			C140PUNVDV3			
		2			C240PUNVDV3			
	FT55W/2G11	1			B254PUDV3PLD B254P3DV3PLD (347V)			
		2						

- SuperDim Analog dimming ballasts operate with numerous industry standard compatible 0 to 10-volt controls. Most SuperDim ballasts feature universal input voltage and a dimming range down to 1% for T5 lamps and 3%.
- BallastAR light level switching ballasts operate with standard wall switches or relays to provide switching between 100% and 50% light levels or 100%/ 60%/ 30% light levels while keeping all lamps operating for full fixture illumination.
- DALI-Pro digital dimming ballasts are designed for use with industry standard DALI controls.
- VariPro ballasts combine fast starting and parallel lamp operation on a 0-10V Analog dimming ballast platform. Universal voltage (120-277V) and 347V models are available.
- LevelPro step-dimming ballasts provide fast starting & parallel lamp operation. Several models are available, providing various choices for input voltage and ballast factor, and all support a large selection of lamp applications.

- For more information on all of the dimming ballasts and controls, visit www.unvlt.com

- For warranty information visit www.unvlt.com/support

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