

QUICK REFERENCE GUIDE

ELECTRONIC BALLASTS (continued)					
Category	Primary Lamp Type	No. of Lamps	Input Volts	Catalog Number	Description
T8 Program Start High Efficiency	F32T8	1	120-277V	KTEB-132-UV-PS-N-P	F17/25/32 T8, Standard Output
				KTEB-232-UV-PS-N-P	F17/25/32 T8, Standard Output
		2	120-277V	KTEB-232-UV-PS-L-P	F17/25/32 T8, Reduced Output
				KTEB-232-UV-PS-H-P	F17/25/32 T8, High Output
		3	120-277V	KTEB-332-UV-PS-N-P	F17/25/32 T8, Standard Output
				KTEB-332-UV-PS-L-P	F17/25/32 T8, Reduced Output
		4	120-277V	KTEB-332-UV-PS-H-P	F17/25/32 T8, High Output
				KTEB-432-UV-PS-N-P	F17/25/32 T8, Standard Output
KTEB-432-UV-PS-L-P	F17/25/32 T8, Reduced Output				
T8 Instant Start Standard	F32T8	2	120V	KTEB-232-1-IS-N	F17/25/32 T8
	F59T8	2	120-277V	KTEB-259-UV-IS-N	F96T8
	F96T8H0	2	120-277V	KTEB-286H0-UV-IS-N	F96T8H0
T8 Residential	F32T8	1	120V	KTEB-132-1-TP-EMI	F17/25/32 T8, Normal Power Factor
		2	120V	KTEB-232RIS-1-TP-SL	F17/25/32 T8, Normal Power Factor
		4	120V	KTEB-432RIS-1-TP-SL	F17/25/32 T8, Normal Power Factor
T5H0 Program Start	F24T5H0	2	120-277V	KTEB-224H0-UV-PS-SL	F24T5H0, 90°C Rated, 9" Case
	F39T5H0	2	120-277V	KTEB-239H0-UV-PS-SL	F39T5H0, 90°C Rated, 9" Case
	F54T5H0	2	120-277V	KTEB-254H0-UV-PS-SL	F54T5H0, 90°C Rated, 9" Case
				KTEB-254H0-UV-PS	F54T5H0, 90°C Rated, 16" Case
	4	120-277V	KTEB-454H0-UV-PS	F54T5H0, 90°C Rated, 16" Case	
T5	F8T5	1	120V	KTEB-108-1-TP-FC	F8T5 for Undercabinet
	F13T5	2	120V	KTEB-213-1-TP-SL-MB	F13T5 for Undercabinet with Mounting Bracket
	F14T5	1	120V	KTEB-114-1-TP-FC	F13/14T5 for Undercabinet
	F28T5	2	120-277V	KTEB-228HE-UV-PS-SL	F14/21/28 T5 Program Start, 9" Case
				KTEB-228HE-UV-PS	F14/21/28 T5 Program Start, 90°C Rated
F35T5	1	120V	KTEB-135HE-1-TP	F35T5HE Electronic Ballast	
Commercial Grade CFL	13W CFL	1 or 2	120-277V	KTEB-213-UV-PS-DW	13W 4-Pin CFL, Program Start, 90°C Rated
				KTEB-213-UV-RS-DW	13W 4-Pin CFL, Rapid Start
				KTEB-213-UV-RS-DW-KIT	13W 4-Pin CFL, Kit Includes Wires and Stud Plate
	18W CFL	1 or 2	120-277V	KTEB-218-UV-PS-DW	18W 4-Pin CFL, Program Start, 90°C Rated
				KTEB-218-UV-RS-DW	18W 4-Pin CFL, Rapid Start
				KTEB-218-UV-RS-DW-KIT	18W 4-Pin CFL, Kit Includes Wires and Stud Plate
	26W CFL	1 or 2	120-277V	KTEB-226-UV-PS-DW	26W, 1x 32W or 40W 4-Pin CFL, Program Start, 90°C Rated
				KTEB-226-UV-RS-DW	26W, 1x 32W or 40W 4-Pin CFL, Rapid Start
				KTEB-226-UV-RS-DW-KIT	26W, 1x 32W or 40W 4-Pin CFL, Kit Includes Wires and Stud Plate
	42W CFL	1 or 2	120-277V	KTEB-242-UV-PS-DW	32W or 42W 4-Pin CFL, Program Start, 90°C Rated
				KTEB-242-UV-RS-DW	32W or 42W 4-Pin CFL, Rapid Start
				KTEB-242-UV-RS-DW-KIT	32W or 42W 4-Pin CFL, Kit Includes Wires and Stud Plate
Residential Grade CFL	13W CFL	1	120V	KTEB-113-1-TP-xx*	13W 4-Pin CFL
		2	120V	KTEB-213-1-TP-xx*	13W 4-Pin CFL
	18W CFL	1	120V	KTEB-118-1-TP-xx*	18W 4-Pin CFL
		2	120V	KTEB-218-1-TP-xx*	18W 4-Pin CFL
	26W CFL	1	120V	KTEB-126-1-TP-xx*	26W 4-Pin CFL
		2	120V	KTEB-226-1-TP-xx*	26W 4-Pin CFL
	42W CFL	1	120V	KTEB-142T-1-TP-xx*	42W 4-Pin CFL
2-Pin CFL Magnetic	13W 2-Pin	1	120V	CC1322MTP	13W-22W, 2-Pin CFL
	9W 2-Pin	1	120V	CC579TP	5W, 7W, & 9W, 2-Pin CFL
Circline	FC22T9	1	120V	KTEB-1C22-1-TP-WS	22W, 3.5" Case, with Sockets
	FC32T9 & FC40T9	1	120V	KTEB-140-1-TP-EMI-WS	32W or 40W, with Sockets
	FC22T9 & FC32T9	2	120V	KTEB-2C72-1-TP-WS	22W & 32W or 32 & 40W, with Sockets
	FC32T9 & FC40T9	2	120V	KTEB-2C72-1-TP-WS	22W & 32W or 32 & 40W, with Sockets
Circline Magnetic	FC8T9	1	120V	SS22WSTP	22W Circline, Small Case, Self-Start

*"xx" in the part number denotes several case styles available

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FLUORESCENT BALLASTS

CIRCLINE



ELECTRICAL SPECIFICATIONS

No. of Lamps	Input Power	Catalog Number	Input Volts	Starting Method	Line Current	Min. Power Factor	Max. THD	Ballast Factor	Min. Start Temperature	Max. Case Temperature	Case Style
FC6T9 (20W)											
1	21W	SS22WSTP*	120V	Preheat	0.35A	0.50	20%	0.79	0°C/32°F	90°C/194°F	C7
FC8T9 (22W)											
1	21W	KTEB-1C22-1-TP-WS	120V	Rapid	0.33A	0.50	150%	0.90	-18°C/0°F	75°C/167°F	S1
	19W	SS22WSTP*	120V	Preheat	0.29A	0.50	15%	0.79	0°C/32°F	90°C/194°F	C7
FC12T9 (32W)											
1	29W	KTEB-140-1-TP-EMI-WS	120V	Rapid	0.42A	0.57	150%	0.92	-18°C/0°F	75°C/167°F	L7
	37W	KTEB-1C3032-1-TP-WS	120V	Rapid	0.55A	0.50	150%	1.00	-18°C/0°F	75°C/167°F	S1
FC8T9 & FC12T9											
2	48W	KTEB-2C54PS-1-TP-WS	120V	Program	0.68A	0.50	130%	0.85	-18°C/0°F	75°C/167°F	L1
	40W	KTEB-2C72-1-TP-WS	120V	Rapid	0.60A	0.50	150%	0.76	-18°C/0°F	75°C/167°F	L1
FC16T9 (40W)											
1	43W	KTEB-1382D-1-TP-WS	120V	Rapid	0.63A	0.50	130%	0.95	-18°C/0°F	75°C/167°F	S1
	38W	KTEB-140-1-TP-EMI-WS	120V	Rapid	0.53A	0.58	150%	0.95	-18°C/0°F	75°C/167°F	L7
	42W	KTEB-226-UV-RS-DW KTEB-226-UV-RS-DW-KIT	120-277V	Rapid	0.36-0.16A	0.97	10%	1.00	-18°C/0°F	75°C/167°F	W1
FC12T9 & FC16T9											
2	50W	KTEB-2C72-1-TP-WS	120V	Rapid	0.75A	0.50	150%	0.70	-18°C/0°F	75°C/167°F	L1
FC9T5 (22W)											
1	22W	KTEB-126-1-TP	120V	Rapid	0.34A	0.50	150%	1.00	-18°C/0°F	75°C/167°F	S1
		KTEB-126-1-TP-LC	120V	Rapid	0.34A	0.50	150%	1.00	-18°C/0°F	75°C/167°F	L2
	27W	KTEB-224HO-UV-PS-SL	120-277V	Program	0.23-0.10A	0.98	10%	1.02	-18°C/0°F	90°C/194°F	L30
	33W	KTEB-239HO-UV-PS-SL	120-277V	Program	0.28-0.13A	0.95	12%	1.31	-18°C/0°F	90°C/194°F	L30
	31W	KTEB-242-UV-PS-DW	120-277V	Program	0.27-0.13A	0.93	15%	1.20	-18°C/0°F	90°C/194°F	W2
2	52W	KTEB-224HO-UV-PS-SL	120-277V	Program	0.44-0.19A	0.98	10%	1.00	-18°C/0°F	90°C/194°F	L30
	63W	KTEB-239HO-UV-PS-SL	120-277V	Program	0.53-0.23A	0.98	10%	1.25	-18°C/0°F	90°C/194°F	L30
	59W	KTEB-242-UV-PS-DW	120-277V	Program	0.49-0.22A	0.97	10%	1.10	-18°C/0°F	90°C/194°F	W2
FCL-30 (30W)											
1	32W	KTEB-1C3032-1-TP-WS	120V	Rapid	0.50A	0.50	150%	0.95	-18°C/0°F	75°C/167°F	L1
FC12T5 (40W)											
1	41W	KTEB-1382D-1-TP-WS	120V	Rapid	0.62A	0.50	150%	0.95	-18°C/0°F	75°C/167°F	S1
	40W	KTEB-224HO-UV-PS-SL	120-277V	Program	0.34-0.15A	0.98	10%	0.84	-18°C/0°F	90°C/194°F	L30
	45W	KTEB-242-UV-PS-DW	120-277V	Program	0.37-0.17A	0.96	10%	1.00	-18°C/0°F	90°C/194°F	W2
2	82W	KTEB-242-UV-PS-DW	120-277V	Program	0.69-0.30A	0.97	10%	0.95	-18°C/0°F	90°C/194°F	W2
FC9T5 & FC12T5											
2	68W	KTEB-239HO-UV-PS-SL	120-277V	Program	0.57-0.25A	0.98	10%	0.96	-18°C/0°F	90°C/194°F	L30
	67W	KTEB-242-UV-PS-DW	120-277V	Program	0.55-0.25A	0.98	10%	0.90	-18°C/0°F	90°C/194°F	W2

*electromagnetic ballast

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REFERENCES

OBSOLETE PRODUCT GUIDE

CATALOG NUMBER OF OBSOLETE ITEM	REPLACED WITH	KEY DIFFERENCES
113ATP	No Replacement	N/A
120TP	KTEB-120-1-TP-EMI	Electronic, Same Mounting and Wiring
122TPWS	KTEB-1C22-1-TP-WS	Electronic, Smaller Footprint
140TP	KTEB-140-1-TP-EMI	Electronic, Same Mounting and Wiring
140TPWS	KTEB-140-1-TP-EMI-WS	Electronic, Same Mounting and Wiring
154TPWS	KTEB-2C72-1-TP-WS	Electronic, Same Mounting and Wiring
172TPWS	KTEB-2C72-1-TP-WS	Electronic, Same Mounting and Wiring
213TPES	No Replacement	N/A
220TP	KTEB-220-1-TP-EMI	Electronic, Same Mounting and Wiring
234TPH	KTEB-240-1-TP-PIC	Electronic, Same Mounting and Wiring
240TPES	No Replacement	N/A
296TPH	KTEB-275-1-TP-PIC-SL	Electronic, 120V, 9" Case
240TPH277	KTEB-240-UV-TP-PIC	Electronic 120-277V, Same Mounting
240TPH	KTEB-240-1-TP-PIC	Electronic, Same Mounting and Wiring
240TPLW	KTEB-240-1-TP-PIC	Electronic, Same Mounting and Wiring
296HOTPH277	KTEB-2110-UV-TP-PIC	Electronic 120-277V, Same Mounting
296HOTPH	KTEB-2110-UV-TP-PIC	Electronic 120-277V, Same Mounting
296TPH277	KTEB-275-UV-TP-PIC	Electronic 120-277V, Same Mounting
IL-xx* Series	No Replacement	N/A
KTEB-132LBF-UV-TP-PIC	No Replacement	N/A
KTEB-1C22-1-TP-WS-LC	KTEB-1C22-1-TP-WS	New Unit has a Smaller Case
KTEB-1C3032-1-TP-WS-LC	KTEB-140-1-TP-EMI-WS	New Unit Operates More Lamp Combinations
KTEB-213-UV-TP-PSD	KTEB-213-UV-PS-DW	None
KTEB-218-UV-TP-PSD	KTEB-218-UV-PS-DW	None
KTEB-226-UV-TP-PSD	KTEB-226-UV-PS-DW	None
KTEB-232LBF-1-TP-PIC-SL	KTEB-232-1-IS-N	None
KTEB-232LBF-UV-TP-PIC	KTEB-232-UV-IS-N-P	New Unit has Improved Energy Efficiency
KTEB-232LBF-UV-TP-PIC-SL	KTEB-232-UV-IS-N-P	New Unit has Improved Energy Efficiency
KTEB-232RIS-1-TP	KTEB-232RIS-1-TP-SL	New Model is Slightly Narrower
KTEB-260-1-TP-PIC	KTEB-275-1-TP-PIC-SL	New Unit Operates a Wider Range of Lamps
KTEB-332LBF-1-TP-PIC	KTEB-332-UV-IS-N-P	New Unit has Improved Energy Efficiency
KTEB-332LBF-UV-TP-PIC	KTEB-332-UV-IS-N-P	New Unit has Improved Energy Efficiency
KTEB-432LBF-1-TP	KTEB-432-UV-IS-N-P	None
KTEB-432LBF-UV-TP-PIC	KTEB-432-UV-IS-N-P	New Unit has Improved Energy Efficiency
KTLD-30-UV-0A80-VDIM-SC	25W & 36W LED Drivers	Larger Wattage Range
KTLD-32-1-0A80-FDIM	36W LED Drivers	Larger Wattage Range
KTLD-60-UV-1214V/A	KTLD-60-UV-12V	None
KTSB-0412-12-1-TP	No Replacement	N/A
KTSB-0620-24-1-TP	No Replacement	N/A
KTSB-1224-24-1-TP	No Replacement	N/A
KTSB-1240-46-1-TP	No Replacement	N/A
KTSB-2040-24-1-TP	No Replacement	N/A
KTSB-2448-46-1-TP	No Replacement	N/A
RL40P	KTEB-140-1-TP-EMI	Electronic, Same Mounting and Wiring
RSL40P	KTEB-140-1-TP-EMI	Electronic, Same Mounting and Wiring
TR20P	KTEB-120-1-TP-EMI	Electronic, Same Mounting and Wiring
KTEB-132-UV-IS-N-P	KTEB-232-UV-IS-N-P	Cap Leads for 1 Lamp Application
KTEB-132-UV-IS-L-P	KTEB-232-UV-IS-L-P	Cap Leads for 1 Lamp Application
KTEB-132-UV-IS-H-P	KTEB-232-UV-IS-H-P	Cap Leads for 1 Lamp Application
KTEB-454HO-UV-PS-SL	KTEB-454HO-UV-PS	Different Case Size
KTEB-428HE-UV-PS	No Replacement	N/A

* "xx" denotes several case styles available.

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