



GE Lighting



Electronic Ballasts for Starcoat™ T5 Linear Fluorescent Lamps

The perfect match for reliability and performance

GE T5 ELECTRONIC BALLASTS

GE Lighting features its new energy efficient electronic ballasts ideally suited to operate the GE range of Starcoat™ T5 fluorescent lamps providing an optimum combination of performance and energy saving. From 14W to 80W, GE covers the full T5 range for nondimming applications. No more concerns about compatibility and reliability; GE's system approach delivers peace of mind.

Full System Compatibility

All valid lamp and ballast combinations are tested and ENEC approved. Starcoat™ T5 lamps operating on GE T5 ballasts will meet market needs for long life and reliable performance.

Full Range

Thanks to the multiwatt design of the GE Ballast, just 12 ballasts are enough to create 21 lamp and ballast combinations from 14W to 80W. The multiwatt design reduces the number of ballast types needed, enabling more flexibility in luminaire design and manufacturing. Single and twin ballasts are available for all High Efficiency lamps: 14W, 21W, 28W and 35W can be coupled with the same ballast. Triple and Quad 14W solutions are also possible with a single ultra slim ballast. The full range of High Output ballasts includes two exciting models, the 3x24W and the 2x80W one. Both the 18W T8 and the 24W T5 lamp can be fitted into a 600x600mm luminaire. Switching from 4x18W T8 to 3x24W T5 will result in 15% more light at nearly the same energy consumption. Moreover, this allows the luminaire designer to make slim profile fittings with one less lamp at a lower cost. The 2x80W ballast is the answer to the growing demand for higher lumen packages with fluorescent lighting.

The dual output ballasts give the freedom to design a single luminaire for two different lamps of the same length. Two models are available: the 1x14-24-35-49W and the 1x21-28-39-54 W. The built-in microprocessor enables the ballast to automatically recognize and operate the lamp type connected.

Soft Start with Energy Control

The advanced preheat technology ensures long lamp life, practically unlimited on-off switching and reduced end darkening. Irrespective of actual lamp operating hours, the ballast always provides the correct amount of preheat energy.

Energy Saving

Switching to Starcoat™ T5 lamps and dedicated GE Ballasts from T8 triphosphor lamps and T8 standard electronic gear can result in approximately 20% energy saving. The key elements of this saving are:

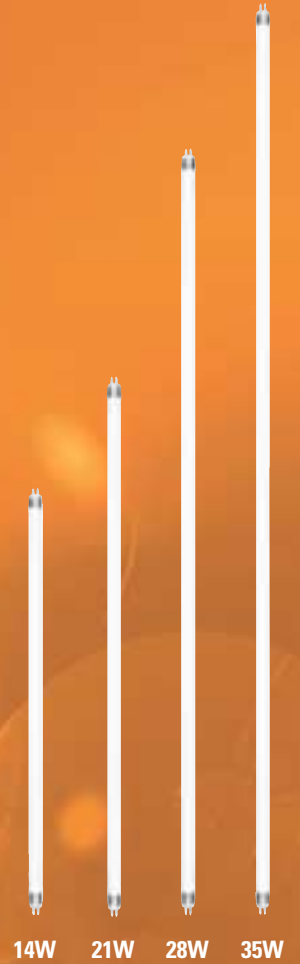
- low system loss; A2 Energy Efficiency Index
- lamps are optimised to 35 °C ambient temperature providing higher luminous efficacy
- T5 cross-section enabling more efficient optical chamber and luminaire design.



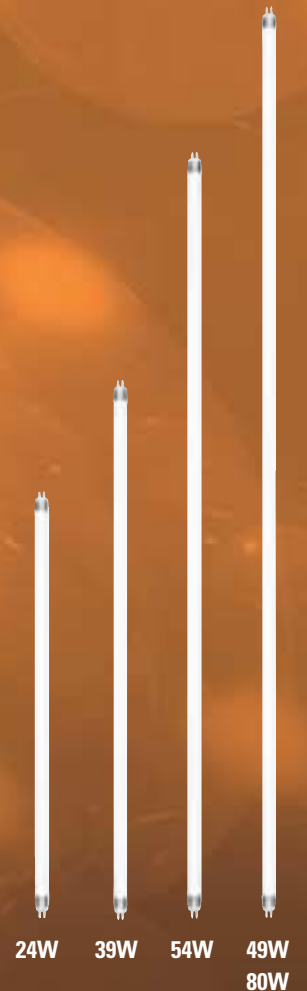
Reliability

GE Lighting offers a 5-year guarantee for the ballasts if used with Starcoat™ T5 lamps under specified conditions. This attractive offer is enabled by a careful component selection and rigorous quality control procedures. For guarantee details, please see the separate Guarantee Conditions document.

High Efficiency Range



High Output Range



Application Areas

Providing excellent quality of light and major energy saving compared to T8 systems, the GE T5 electronic ballasts with Starcoat™ T5 lamps can be used in a wide range of applications:

- Shopping centres
- Supermarkets
- Hotels
- Offices
- Hospitals
- Schools
- Airports
- Industrial sites

General Information

Number of lamps	Lamp Watts	Supply Volt	Product Description	EEI Class	Pack Qty	Product Code
1	14/21/28/35	220-240	BLS/E/1x14-21-28-35W/T5	A2	20	13232
1	14/24/35/49	220-240	BLS/E/1x14-24-35-49W/T5	A2	20	13240
1	21/28/39/54	220-240	BLS/E/1x21-28-39-54W/T5	A2	20	13241
1	80	220-240	BLS/E/1x80W/T5	A2	20	16863
2	14/21/28/35	220-240	BLS/E/2x14-21-28-35W/T5	A2	20	13234
2	24	220-240	BLS/E/2x24W/T5	A2	20	16864
2	39	220-240	BLS/E/2x39W/T5	A2	20	16865
2	49	220-240	BLS/E/2x49W/T5	A2	20	13242
2	54	220-240	BLS/E/2x54W/T5	A2	20	13243
2	80	220-240	BLS/E/2x80W/T5	A2	20	16866
3	24	220-240	BLS/E/3x24W/T5	A2	20	16867
3/4	14	220-240	BLS/E/3-4x14W/T5	A2	20	13237

Technical Data

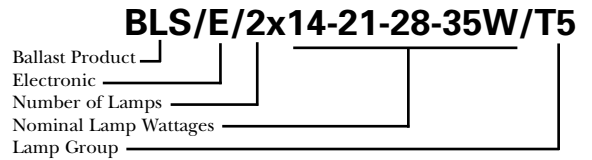
Product Description	Nr of Lamps	Type	Total Lumens		System Power		System Efficacy		Input Current A	Power Factor	Ambient Temperature °C	Max Tc °C
			W	lm	W	lm/W						
BLS/E/1x14-21-28-35W/T5	1	14	1350	17	79	0.08	> 0.98	-15...+50	70			
	1	21	2100	24	88	0.11	> 0.98	-15...+50	70			
	1	28	2900	32	91	0.15	> 0.98	-15...+50	70			
	1	35	3650	40	91	0.18	> 0.98	-15...+50	70			
BLS/E/1x14-24-35-49W/T5	1	14	1350	18	75	0.09	> 0.95	-20...+60	80			
	1	24	2000	26	77	0.10	> 0.97	-20...+60	80			
	1	35	3650	39	94	0.19	> 0.98	-20...+60	80			
	1	49	4900	54	91	0.25	> 0.98	-20...+60	80			
BLS/E/1x21-28-39-54W/T5	1	21	2100	25	84	0.11	> 0.99	-20...+50	80			
	1	28	2900	34	85	0.15	> 0.99	-20...+50	80			
	1	39	3500	41	85	0.17	> 0.99	-20...+50	80			
	1	54	5000	60	83	0.26	> 0.99	-20...+50	80			
BLS/E/1x80W/T5	1	80	7000	88	80	0.38	> 0.99	-15...+50	75			
BLS/E/2x14-21-28-35W/T5	2	14	2700	32	84	0.15	> 0.99	-15...+50	70			
	2	21	4200	47	89	0.21	> 0.99	-15...+50	70			
	2	28	5800	62	94	0.27	> 0.99	-15...+50	70			
	2	35	7300	77	95	0.34	> 0.99	-15...+50	70			
BLS/E/2x24W/T5	2	24	4000	50	80	0.22	> 0.99	-15...+50	70			
BLS/E/2x39W/T5	2	39	7000	86	81	0.37	> 0.99	-20...+50	75			
BLS/E/2x49W/T5	2	49	9800	106	92	0.46	> 0.99	-20...+50	75			
BLS/E/2x54W/T5	2	54	10000	118	85	0.52	> 0.99	-20...+50	75			
BLS/E/2x80W/T5	2	80	14000	175	80	0.70	> 0.99	-20...+50	85			
BLS/E/3x24W/T5	3	24	6000	76	79	0.33	> 0.99	-15...+50	70			
BLS/E/3-4x14W/T5	3	14	4050	47	86	0.21	> 0.97	-15...+50	70			
	4	14	5400	62	87	0.27	> 0.97	-15...+50	70			

Allowed mains voltage: 198...264 V
 Mains frequency: 50/60 Hz
 Earth leakage current < 0.5 mA
 Preheat time: < 2 sec

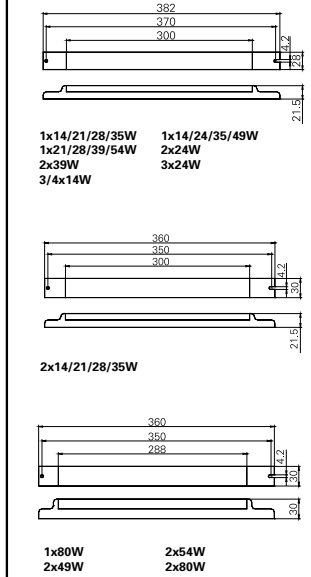
All available ballasts are approved by VDE and comply with the relevant parts of the following standards: EN 60929, EN 61347-1, EN 61347-2-3, EN 61000-3-2, EN 61547, EN 55015

Ballast Identification

This diagram explains the way to break down our description so that you know at a glance the basic information about a particular model.



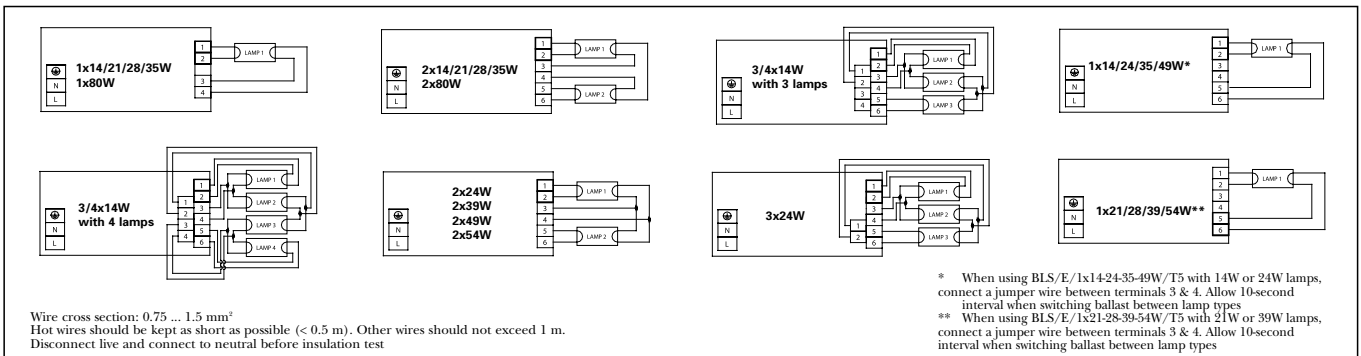
Dimensions



Ballast Selector for Starcoat™ T5 Lamps

GE Starcoat™ T5 Lamp				GE Electronic T5 Ballast											
Product Watts Description	Pack Qty	Product Code by Colour					with 1 lamp		with 2 lamps		with 3 lamps		with 4 lamps		
		/827	/830	/835	/840	/865	Product Description	Prod. Code	Product Description	Prod. Code	Product Description	Prod. Code	Product Description	Prod. Code	
High Efficiency															
14	F14W/T5	30	90230	90239	90246	90247	90244	BLS/E/1x14-21-28-35W/T5	13232	BLS/E/2x14-21-28-35W/T5	13234	BLS/E/3-4x14W/T5	13237	BLS/E/3-4x14W/T5	13237
		40	39965	39964	39961	39973	90222	BLS/E/1x14-24-35-49W/T5	13240	BLS/E/2x14-21-28-35W/T5	13234				
21	F21W/T5	30	90245	90248	90249	90250	90251	BLS/E/1x14-21-28-35W/T5	13232	BLS/E/2x14-21-28-35W/T5	13234				
		40	39975	39976	39977	39978	39979	BLS/E/1x21-28-39-54W/T5	13241						
28	F28W/T5	30	90252	90253	90254	90255	90256	BLS/E/1x14-21-28-35W/T5	13232	BLS/E/2x14-21-28-35W/T5	13234				
		40	39980	39982	39983	39984	39985	BLS/E/1x21-28-39-54W/T5	13241						
35	F35W/T5	30	90257	90258	90259	90260	90261	BLS/E/1x14-21-28-35W/T5	13232	BLS/E/2x14-21-28-35W/T5	13234				
		40	39986	39989	39990	39991	39992	BLS/E/1x14-24-35-49W/T5	13240						
High Output															
24	F24W/T5	30	90262	90263	90264	90265	90266	BLS/E/1x14-24-35-49W/T5	13240	BLS/E/2x24W/T5	16864	BLS/E/3x24W/T5	16867		
		40	39994	39998	90196	90197	90198								
39	F39W/T5	30	90267	90268	90269	90270	90271	BLS/E/1x21-28-39-54W/T5	13241	BLS/E/2x39W/T5	16865				
		40	90200	90201	90202	90203	90204								
49	F49W/T5	30	90277	90278	90279	90280	90281	BLS/E/1x14-24-35-49W/T5	13240	BLS/E/2x49W/T5	13242				
		40	90220	90219	90221	90223	90224								
54	F54W/T5	30	90272	90273	90274	90275	90276	BLS/E/1x21-28-39-54W/T5	13241	BLS/E/2x54W/T5	13243				
		40	90205	90232	90206	90209	90211								
80	F80W/T5	30	90282	90283	90284	90285	90286	BLS/E/1x80W/T5	16863	BLS/E/2x80W/T5	16866				
		40	90225	90226	90227	90228	90229								

Circuit diagrams



Wire cross section: 0.75 ... 1.5 mm²
 Hot wires should be kept as short as possible (< 0.5 m). Other wires should not exceed 1 m.
 Disconnect live and connect to neutral before insulation test

Please visit us on the web at www.GELighting.com

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