



Philips Essential TL5 RetroSave

14W/28W

Product series description

Philips TL5 RetroSave is a retrofit solution that easily replaces the existing T8 standard lamps used on electromagnetic ballast resulting in an instant energy savings of up to 35%

Product Feature

- Easily replace existing T8 standard lamps on electromagnetic ballast
- Quality design and safe to use with special protector SPL025
- Highly efficient 3-band fluorescent coating
- Reduced Hg content with solid mercury technology
- Environment friendly: RoHS compliant
- Compact design enables easy fit into normal T8 luminaires

Product Benefit

- Up to 35% energy saving compared to T8 electromagnetic system, and maintains same light level
- Short pay back period of less than 1 year (12h/day)
- Low maintenance cost with longer life time of RetroSave batten and lamp
- High quality light with super 80 technology, good color rendering
- Improved system power factor up to 0.99
- Instant start

Applications

- Suitable to replace normal T8 lamps with electromagnetic gears for indoor applications
- Recommend to be used in industry, commercial areas, car park, subway, public buildings, general areas
- Best fit for industry and commercial battens

System

- The special protector SPL025 is required to replace the existing glow starter
- Can not be used T8 lamps on DC supply, emergency lighting system or rapid start system
- G13 pin designed with Horizontal or Vertical direction to fit different lamp holders in luminaire

TL5 RetroSave 14W

Data sheet				
Characteristic Name	Unit	Value	Value	Value
Basic Characteristic				
Product Cap			G13	
Lamp Bulb			T5	
lamp replaceability			Yes	
Name Extension			RTS (RetroSave)	
Lamp Life to 50%failures 12h cycle	h		15000	
Lamp Life to 50%failures 3h cycle	h		10000	
Batten Life to 90% survival	h		20000	
product early failure rate @1000h	%		0.5	
Light Technical Characteristics				
Color Code		830	840	865
Color Rendering Index	Ra	82	82	82
Color Designation (text)		Warm White	Cool White	Cool Daylight
Color Description (code+text)		830 Warm White	840 Cool White	865 Cool Daylight
Color Temperature	K	3000	4000	6500
Chromaticity Coordinate X	n.u.	440	380	313
Chromaticity Coordinate Y	n.u.	403	380	337
Luminous Flux Lamp EL 25C	lm	1260	1260	1200
Batten L.O.R			0.88	
Circuit lumen factor (with EM)			0.89	
Lumen Maintenance 2000h	%		94	
Lumen Maintenance 5000h	%		91	
Lumen Maintenance 10000h	%		89	
Electrical Characteristics				
Input Voltage (performance)	V		220-240	
Input Voltage (Operational)	V		190-250	
Input Current	A		0.075	
Input Frequency	Hz		50-60	
Input Power at 220V (include EM)	W		14.5	
Lamp power	W		12	
Power factor			0.85	
Ignition Time	S		0.1	
Total Harmonic Distortion (THD)			<55%	
Dimmable			No	
Environmental Characteristics				
Ta	°C		-10~50	
Mercury (Hg) Content	mg		3	
Product Dimensions				
Base Face to Base Face A (max)	mm		589.8	
Base Face to End of Opposite Pins B (Min)	mm		594.5	
Base Face to End of Opposite Pins B(Max)	mm		596.9	
Overall Length C (Max)	mm		604	
Overall Width W (Max)	mm		24.5	
Overall Height H (Max)	mm		33	
Ordering Characteristic				
Package type			CT	
Net Weight	Kg		0.17	
Product pcs per outer box			30	

TL5 RetroSave 14W

Ordering code				
Code For out of China			Vertical type	
12NC (Logistic code)		927996283007	927996284007	927996286507
Commercial code		TL5RTS14W830V	TL5RTS14W840V	TL5RTS14W865V
Product Description		TL-5 RetroSave-V 14W/830 1CT/30	TL-5 RetroSave-V 14W/840 1CT/30	TL-5 RetroSave-V 14W/865 1CT/30
EAN1 (Barcode on sleeve)		8727900901115	8727900901139	8727900901153
EAN3 (Barcode on outer box)		8727900901122	8727900901146	8727900901160
			Horizontal type	
12NC (Logistic code)		927996383007	927996384007	927996386507
Commercial code		TL5RTS14W830H	TL5RTS14W840H	TL5RTS14W865H
Product Description		TL-5 RetroSave-H 14W/830 1CT/30	TL-5 RetroSave-H 14W/840 1CT/30	TL-5 RetroSave-H 14W/865 1CT/30
EAN1 (Barcode on sleeve)		8727900901177	8727900901191	8727900901214
EAN3 (Barcode on outer box)		8727900901184	8727900901207	8727900901221
Code For China			Vertical type	
12NC (Logistic code)		927996283008	927996284008	927996286508
Commercial code		TL5RTS14W830V	TL5RTS14W840V	TL5RTS14W865V
Product Description		TL-5 RetroSave-V 14W/830 1CT/30	TL-5 RetroSave-V 14W/840 1CT/30	TL-5 RetroSave-V 14W/865 1CT/30
EAN1 (Barcode on sleeve)		6923410773231	6923410773255	6923410773279
EAN3 (Barcode on outer box)		6923410773248	6923410773262	6923410773286
			Horizontal type	
12NC (Logistic code)		927996383008	927996384008	927996386508
Commercial code		TL5RTS14W830H	TL5RTS14W840H	TL5RTS14W865H
Product Description		TL-5 RetroSave-H 14W/830 1CT/30	TL-5 RetroSave-H 14W/840 1CT/30	TL-5 RetroSave-H 14W/865 1CT/30
EAN1 (Barcode on sleeve)		6923410773293	6923410773316	6923410773330
EAN3 (Barcode on outer box)		6923410773309	6923410773323	6923410773347

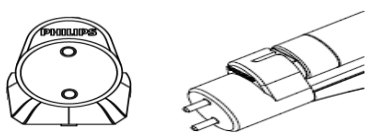
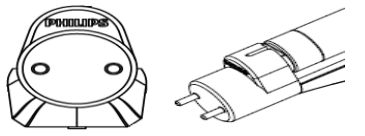


TL5 RetroSave 28W

Data sheet				
Characteristic Name	Unit	Value	Value	Value
Basic Characteristic				
Product Cap			G13	
Lamp Bulb			T5	
Lamp replaceability			Yes	
Name Extension			RTS (RetroSave)	
Lamp Life to 50%failures 12h cycle	h		15000	
Lamp Life to 50%failures 3h cycle	h		10000	
Batten Life to 90% survival	h		20000	
product early failure rate @1000h	%		0.5	
Light Technical Characteristics				
Color Code		830	840	865
Color Rendering Index	Ra	82	82	82
Color Designation (text)		Warm White	Cool White	Cool Daylight
Color Description (code+text)		830 Warm White	840 Cool White	865 Cool Daylight
Color Temperature	K	3000	4000	6500
Chromaticity Coordinate X	n.u.	440	380	313
Chromaticity Coordinate Y	n.u.	403	380	337
Luminous Flux Lamp EL 25C	lm	2600	2600	2600
Batten L.O.R			0.9	
Circuit lumen factor (with EM)			0.86	
Lumen Maintenance 2000h	%		94	
Lumen Maintenance 5000h	%		91	
Lumen Maintenance 10000h	%		89	
Electrical Characteristics				
Input Voltage (performance)	V		220-240	
Input Voltage (Operational)	V		190-250	
Input Current	A		0.13	
Input Frequency	Hz		50-60	
Input Power at 220V (include EM)	W		28	
Lamp power	W		23	
Power factor			0.99	
Ignition Time	S		0.1	
Total Harmonic Distortion (THD)			<10%	
Dimmable			No	
Environmental Characteristics				
Ta	°C		-10~50	
Mercury (Hg) Content	mg		3	
Product Dimensions				
Base Face to Base Face A (max)	mm		1199.4	
Base Face to End of Opposite Pins B (Min)	mm		1204.1	
Base Face to End of Opposite Pins B(Max)	mm		1206.5	
Overall Length C (Max)	mm		1213.6	
Overall Width W (Max)	mm		24.5	
Overall Height H (Max)	mm		33	
Ordering Characteristic				
Package type			CT	
Net Weight	Kg		0.3	
Product pcs per outer box			30	

TL5 RetroSave 28W

Ordering code				
Code For out of China			Vertical type	
12NC (Logistic code)		927996083007	927996084007	927996086507
Commercial code		TL5RTS28W830V	TL5RTS28W840V	TL5RTS28W865V
Product Description		TL-5 RetroSave-V 28W/830 1CT/30	TL-5 RetroSave-V 28W/840 1CT/30	TL-5 RetroSave-V 28W/865 1CT/30
EAN1 (Barcode on sleeve)		8727900886177	8727900886191	8727900886214
EAN3 (Barcode on outer box)		8727900886184	8727900886207	8727900886221
			Horizontal type	
12NC (Logistic code)		927996183007	927996184007	927996186507
Commercial code		TL5RTS28W830H	TL5RTS28W840H	TL5RTS28W865H
Product Description		TL-5 RetroSave-H 28W/830 1CT/30	TL-5 RetroSave-H 28W/840 1CT/30	TL-5 RetroSave-H 28W/865 1CT/30
EAN1 (Barcode on sleeve)		8727900886238	8727900886252	8727900886276
EAN3 (Barcode on outer box)		8727900886245	8727900886269	8727900886283
Code For China			Vertical type	
12NC (Logistic code)		927996083008	927996084008	927996086508
Commercial code		TL5RTS28W830V	TL5RTS28W840V	TL5RTS28W865V
Product Description		TL-5 RetroSave-V 28W/830 1CT/30	TL-5 RetroSave-V 28W/840 1CT/30	TL-5 RetroSave-V 28W/865 1CT/30
EAN1 (Barcode on sleeve)		6923410773071	6923410773095	6923410773118
EAN3 (Barcode on outer box)		6923410773088	6923410773101	6923410773125
			Horizontal type	
12NC (Logistic code)		927996183008	927996184008	927996186508
Commercial code		TL5RTS28W830H	TL5RTS28W840H	TL5RTS28W865H
Product Description		TL-5 RetroSave-H 28W/830 1CT/30	TL-5 RetroSave-H 28W/840 1CT/30	TL-5 RetroSave-H 28W/865 1CT/30
EAN1 (Barcode on sleeve)		6923410773132	6923410773156	6923410773170
EAN3 (Barcode on outer box)		6923410773149	6923410773163	6923410773187

What is the “V” and “H”?

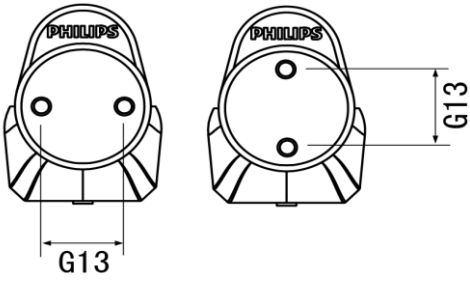
Description:	TL5 RetroSave-V	TL5 RetroSave-H
Pin Direction:	Vertical G13 pin	Horizontal G13 pin
Drawing:		
G13 holder in luminaire:		
Applications:	10% of the application cases, mainly in some recessed luminaire	90% of the application cases, All kinds of luminaires

Product Cap G13

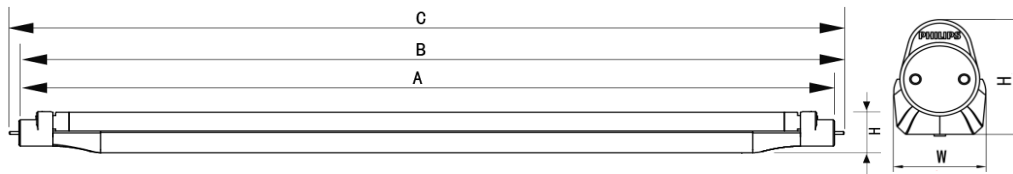
Lamp Picture (to be finalized)

Horizontal type

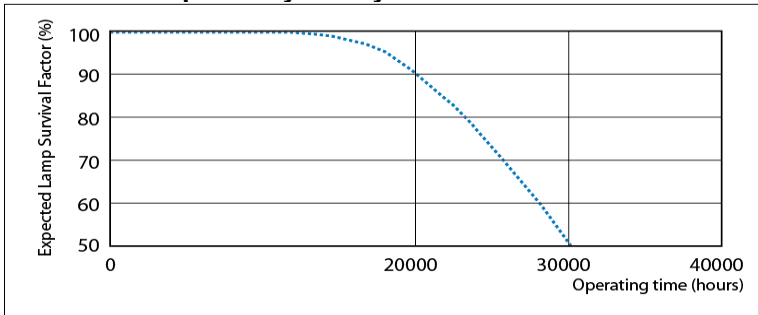
Vertical Type



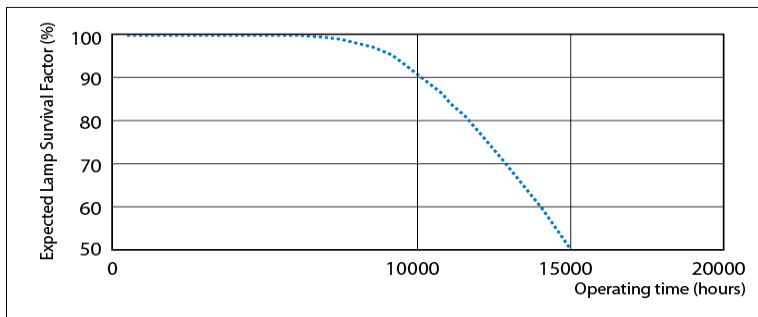
Lamp size



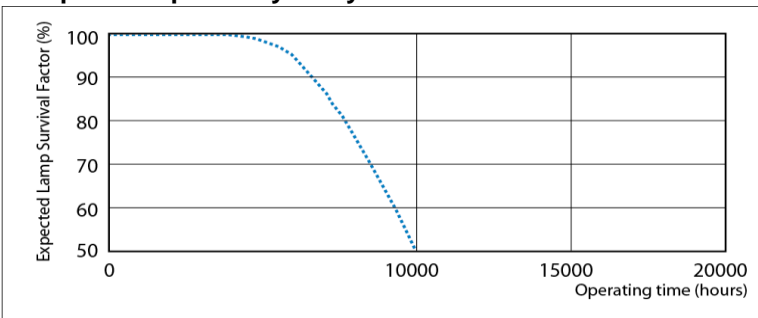
Batten Life Expectancy 12h cycle



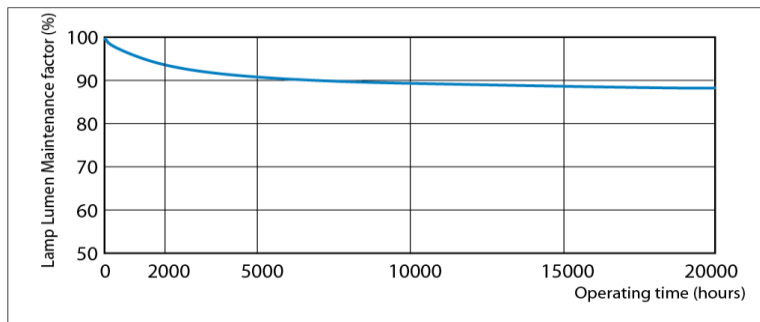
Lamp Life Expectancy 12h cycle



Lamp Life Expectancy 3h cycle

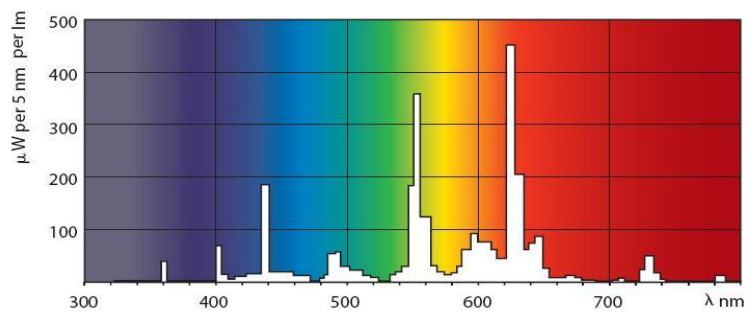


Lumen Maintenance

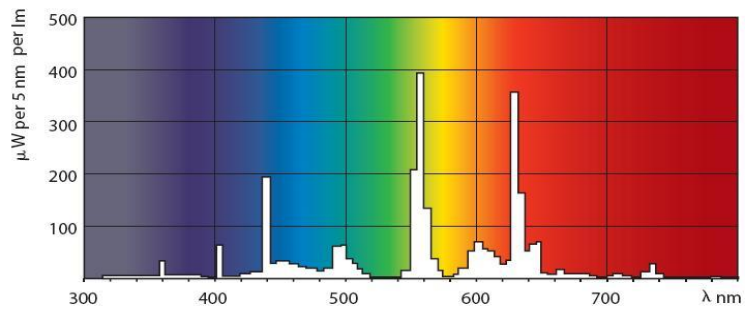


Spectral Power Distribution

830



840



865

