

# PHILIPS

## Public lighting

### TrueForce LED Urban

# Minor change or major business?

Real professionals count on  
**Philips TrueForce LED Urban** – a cost effective  
LED lamp alternative for urban lighting



**REAL  
PROs  
REAL  
QUALITY**

## This is the **TrueForce LED Urban**

- ✓ Easy replacement with direct mains operation (220–240V) or operation on system with magnetic ballasts without ignitor
- ✓ Small size and low weight, therefore suitable for vertical and horizontal burning positions (horizontal in closed luminaire)
- ✓ Highly efficient with up to 143 lm/W
- ✓ New micro lens concept, replacing clear and frosted versions for improved light uniformity
- ✓ 50,000-hour service life and 5-year warranty\*
- ✓ High protection with IP65 - waterproof, ideal for outdoor lighting
- ✓ Alternative for 80/125W/200 HPL, 50/70 W SON, in the colour temperatures 3000 Kelvin and 4000 Kelvin

## You'll be amazed by the **TrueForce LED Urban**

- ✓ Certified quality with reduced energy consumption of up to 80% compared to conventional system.
- ✓ Its soft, white and CRI 80 light creates a safer, more pleasant atmosphere in outdoor environment
- ✓ Philips TrueForce LED Urban pays off with energy savings higher than the price of the lamp in just two years.
- ✓ Gets noticed thanks to passive heat management and a 6kV surge protector.
- ✓ Extremely long-lasting with a service life three times longer than that of conventional lamps.
- ✓ Instant 100% brightness without start-up delay or flickering.
- ✓ No toxic substances and 100% mercury-free
- ✓ Meets highest quality standards with up to a 5-year warranty.\*

**Now  
available in  
new lumen  
output levels  
and improved  
Ra 80**



### Conventional HID    TrueForce LED Urban

HPL 80W  
SON 50W  
HPL 125W  
SON 70W  
HPL 125W  
SON 70W  
HPL 200W  
SON 100W

LED 21W E27  
LED 21W E27  
LED 28W E27  
LED 28W E27  
LED 42W E27  
LED 42W E27  
LED 42W E40  
LED 42W E40



\* For warranty conditions, visit [www.lighting.philips.com/main/support/support/warranty](http://www.lighting.philips.com/main/support/support/warranty)

## Small start or big savings?

LED lamps are up to 75 % more efficient than sodium lamps and save energy and costs while providing a consistently high quality of light. The table below shows energy savings per Watt in relation to time spent in use and energy costs.

LED compared with a conventional HPL system	TrueForce Urban 21W		TrueForce Urban 28W		TrueForce Urban 42W E27		TrueForce Urban 42W E40	
Lamp wattage	80 W	21 W	125 W	28 W	125 W	42 W	200 W	42 W
Ballast power loss	10 W	0 W	14 W	0 W	14 W	0 W	20 W	0 W
System output	90 W	21 W	139 W	28 W	139 W	42 W	220 W	42 W
Savings per year		69 W		111 W		97 W		178 W

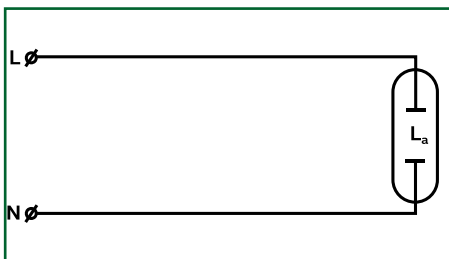
Energy savings from replacing a conventional HPL lamp with a TrueForce Urban lamp, per year.																
Lighting time per year	21 W				28 W				42 W E27				42 W E40			
	0.15 ct*	0.17 ct*	0.19 ct*	0.21 ct*	0.15 ct*	0.17 ct*	0.19 ct*	0.21 ct*	0.15 ct*	0.17 ct*	0.19 ct*	0.21 ct*	0.15 ct*	0.17 ct*	0.19 ct*	0.21 ct*
1,000	€ 10.35	€ 11.73	€ 13.11	€ 14.49	€ 16.65	€ 18.87	€ 21.09	€ 23.31	€ 14.55	€ 16.49	€ 18.43	€ 20.37	€ 26.70	€ 30.26	€ 33.82	€ 37.38
1,500	€ 15.53	€ 17.60	€ 19.67	€ 21.74	€ 24.98	€ 28.31	€ 31.64	€ 34.97	€ 21.83	€ 24.74	€ 27.65	€ 30.56	€ 40.05	€ 45.39	€ 50.73	€ 56.07
2,000	€ 20.70	€ 23.46	€ 26.22	€ 28.98	€ 33.30	€ 37.74	€ 42.18	€ 46.62	€ 29.10	€ 32.98	€ 36.86	€ 40.74	€ 53.40	€ 60.52	€ 67.64	€ 74.76
5,000	€ 51.75	€ 58.65	€ 65.55	€ 72.45	€ 83.25	€ 94.35	€ 105.45	€ 116.55	€ 72.75	€ 82.45	€ 92.15	€ 101.85	€ 133.50	€ 151.30	€ 169.10	€ 186.90

\*Electricity price/kWh per year

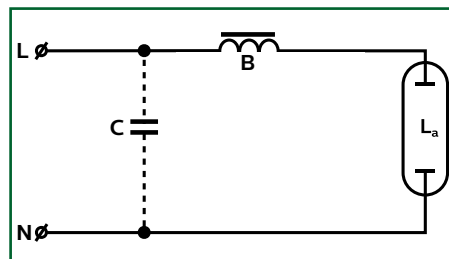
## Easy installation in existing conventional luminaires, either on Direct Mains or with existing conventional electromagnetic ballast (EM) without ignitor.

TrueForce Urban enables easy upgrade to LED lighting. It can be operated on Direct Mains (220-240V) or with existing conventional electromagnetic ballast (igniter must be removed from the system). If capacitor is kept in the system, PF (power factor) might be lower.

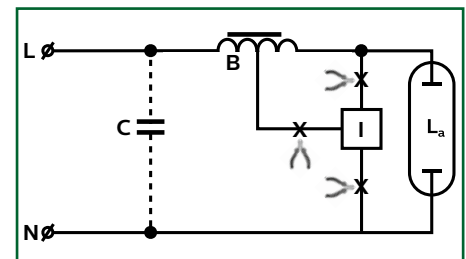
Circuit diagram for Direct Mains connection




Circuit diagram for HPL/mercury-vapor lamp



Circuit diagram for SON/high-pressure sodium



## Specifications

Product name	Traditional (W)	LED (W)	CCT (K)	CRI	Voltage (Vac)	"Input current" (mA)	Lifetime (hrs.)	Dim-mable	Lumen output		Dimensions (H x W)	Pack (pcs)	EOC 871869
28-21W E27 830	80 (HPL 80W, SON 50W)	21	3000	80	220-240	95	50,000	no	2850	A**	178 x 75	6	963814600
30-21W E27 840		21	4000	80	220-240	95	50,000	no	3000	A**	178 x 75	6	963816000
38-28W E27 830		28	3000	80	220-240	125	50,000	no	3800	A**	178 x 75	6	963818400
40-28W E27 840	125 (HPL 125W, SON 70W)	28	4000	80	220-240	125	50,000	no	4000	A**	178 x 75	6	963820700
57-42W E27 830		42	3000	80	220-240	186	50,000	no	5700	A**	178 x 84	6	963822100
60-42W E27 840		42	4000	80	220-240	186	50,000	no	6000	A**	178 x 84	6	963824500
57-42W E40 830	200 (HPL 200W, SON 100W)	42	3000	80	220-240	186	50,000	no	5700	A**	191 x 84	6	963826900
60-42W E40 840		42	4000	80	220-240	186	50,000	no	6000	A**	191 x 84	6	963828300

