

Local Product Controller Twist (LPC Twist)

The LPC Twist provides two-way communication between luminaires and the TLACS main controller and is used to individually control and monitor luminaires. Specifically designed for 100-480 VAC electrical installations, it must be installed in all luminaires equipped with a 5- or 7-pin twist lock socket (ANSI C136.41).

The LPC Twist communicates over power line (PL) using a proven and reliable protocol, thus greatly reducing installation, deployment, and operating costs.



Features

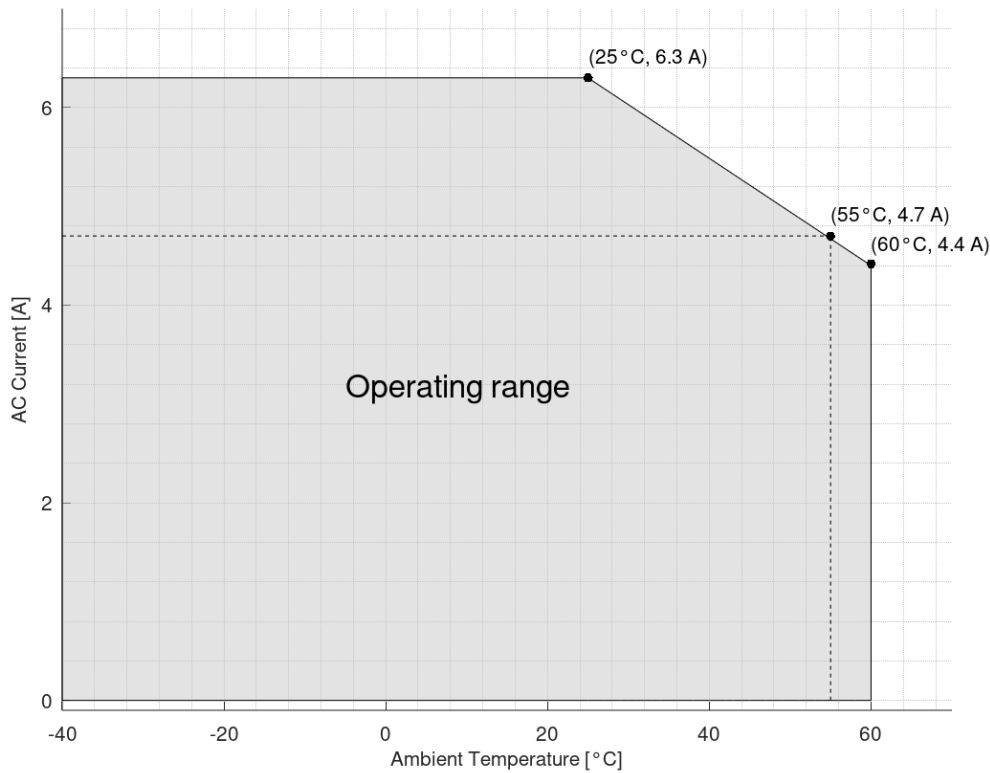
- Wide input range from 100 to 480 VAC
- **New:** 277 VAC neutral loss detection for driver protection (PL10 model only)
- Two-way power line communication (without additional control wiring)
- Embedded power line filter and dynamic repeater provides the optimum level of communication robustness
- Individual luminaire monitoring and controlling.
- Voltage, current, power factor, power consumption, status, and alarm reporting
- Light loss compensation per luminaire burn hours.
- Configurable fail-safe mode (on/off/dim)
- Luminaire alternations support to average luminaire usage
- Control type: 0-10 V dimming, ON-OFF relay, and DALI
- Optional built-in GPS to ease system commissioning and localization
- Built-in internal photocell for autonomous or fail-safe operation

Specifications

Electrical

Item		Description
Input voltage (nominal)		100 to 480 VAC (min 90 VAC, max 530 VAC) with 277 V neutral-loss immunity
Frequency (nominal)		50-60 Hz
Consumption		Peak. 4.5 W Typical 3 W
Load rating	100-347 VAC	UL 916 Steady state current: 4.7 A @ 131°F (55°C) Peak current: 450 A Pulse width @10%: 1.15 ms Cycles: 15000
	480 VAC	UL-tested and approved Steady state current: 2.5 A @ 131°F (55°C) Peak current: 654 A Pulse width @10%: 0.908 ms Cycles: 25000

Load Current vs Temperature Recommended Derating Curve



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Specifications subject to change without notice – LPC-Twist-DTS-001-EN –3.7 March 2022



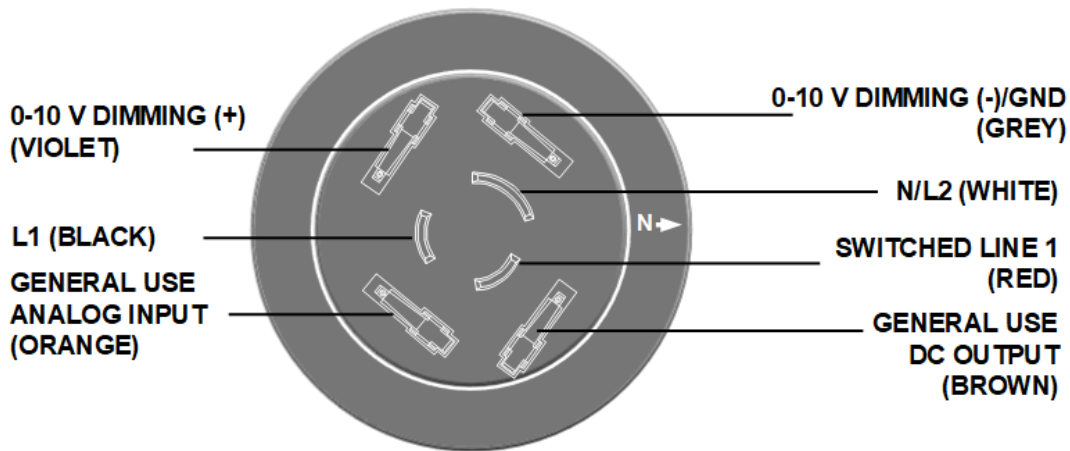
Feature Specifications

Item	Description	
Photocell	Typical turn on	1.5 fc (16 lux)
	Maximum turn-off	6 fc (65 lux)
Analog input	0-30 VDC	
DC output voltage	12 V (24 V available on request), 50 mA max	
GPS (offered as an option)	Accuracy: Typical ± 6 ft (2 meters) Maximum ± 16 ft (5 meters)	

Luminaire Interface

Item	Description
Analog interface	0-10 V dimming, maximum sink/source current: 10 mA
Digital interface	Embedded DALI supply max 10 mA typical
Max number of luminaire drivers (typical)	5 drivers (2 mA per driver max)
Connector	Standard ANSI C136.41 with 7 pins

Wiring Diagram



Source: ANSI C136.41-2013



Environmental Conditions

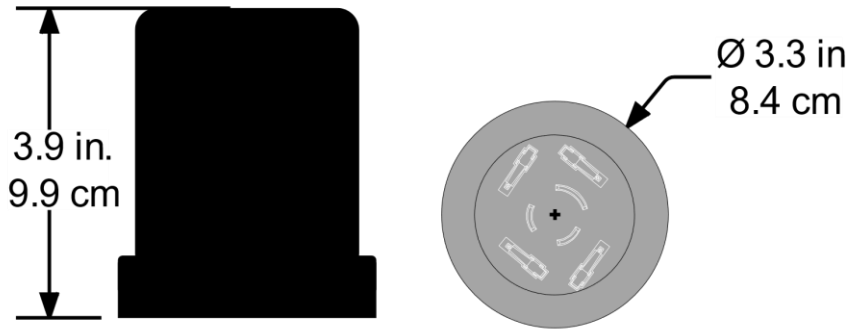
Item	Unit	Min	Max
Operating temperature	°C	-40	60 *
	°F	-40	140
Storage temperature	°C	-40	85
	°F	-40	185
IP Rating	IP 66, when mated to a mounted receptacle.		

*According to derating curve.

Standards

Item	Description
Safety standards	UL 916

Mechanical Dimensions



Product Ordering Information



Segment name (left to right)	Segment value	Description
Model	LPCT	Local Product Controller Twist
Communication interface	PL	Power line communication
Input voltage range	9	100-480 VAC input voltage
	10	277 VAC with neutral loss protection
Channel	1	Channel (1 relay, filtered)
Luminaire interface	A	0-10 V luminaire interface
	D	DALI luminaire interface
Feature	0	Luminaire control/monitoring 2% accuracy meter
	1	Luminaire control/monitoring 0.05% accuracy meter
Built-in GPS	0	Has no GPS
	1	Built-in GPS

- P/N for LPC Extended Warranty 5 additional years: LPCT-EXT-W5

For more information, please contact us at info@nyx-hemera.com

