



3-Phase Power Line Carrier Signal Coupler, C-Band (115-132kHz)

Features

- Qualified 3-phase coupler for certain Echelon i.LON™ SmartServer devices
- 277VAC mains connection (305VAC max)
- 2500VAC Safety isolation between AC mains and PLT+/- terminals
- Integrated phase coupling
- Convenient 35mm DIN rail mounting



Applications

The primary application of the PLC277 3-phase coupler is to couple signals between the 277VAC mains and the low voltage coupling circuit of a power line carrier device. The PLC277 supports signals in the 115-132kHz range (C-Band).

The PLC277 also makes a great diagnostic tool. Monitor power line carrier signals on an oscilloscope or spectrum analyzer. Attach the PLT+/- terminals to your test equipment to analyze noise sources, observe signal levels, and quickly diagnose communications/performance issues.

Only need 2 phases? No problem. Connect the number of phases you need for your application.

Built-in phase coupling between L1, L2, and L3 provides phase to phase coupling of power line carrier signals. Install a PLC277 to improve communications in your 2 or 3-phase system. Phase coupling provides a more reliable signal path between phases instead of relying on coupling through building wiring.

Simple Installation

Disconnect power, wire up the phases required for your application and the neutral wire (L1, L2, L3 and N terminals).

Connect the i.LON SmartServer PLT+/PLT- terminals to the corresponding terminals on the PLC277.

To use with another PLC device, connect the low voltage coupling interface to the PLT+/PLT- terminals. Make certain your device applies less than 30 volts AC, or 42 volts DC to the PLT+/PLT- terminals.

Reconnect power and test communications.

Specifications

Operating/Storage Temperature	-20C to 80C
Voltage from L1 to N, L2 to N, or L3 to N	0 to 305 Volts AC
Voltage on PLT+ to PLT- (Max)	30 Volts AC, 42 Volts DC
Humidity (operating)	10 to 90% @ 50C
Hi-Pot Test	2500V RMS
Terminal Blocks – Wire gauge	12AWG-24AWG
35mm DIN Rail Enclosure	3 Module (52mm by 89mm at base)
Compliance	RoHS, UL60950-1/CSA C22.2

Installation



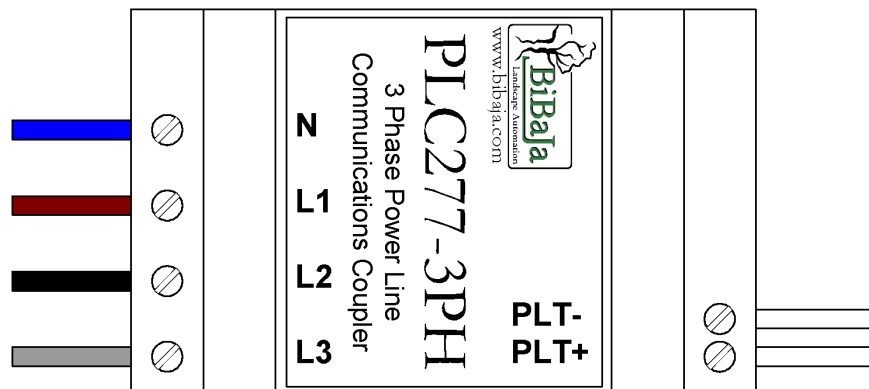
The PLC277 must be mounted inside a suitable, safety-agency approved enclosure in a restricted access area.

Unit must not be touched when power is on.

A readily accessible disconnect device shall be incorporated external to the equipment.

High-voltage wiring must be performed by a qualified service person.

The PLC277 is installed between the AC mains and a low voltage power line coupling circuit as follows:



Connect low voltage power line coupling circuit (30VAC/42VDC maximum) to PLT-/PLT+ terminals (Connections shown to the right above, wire color up to customer.)

Connect 1, 2, or 3 phase AC mains up to 305VAC maximum (Connections shown on left above. Voltage measured from L1 to N, L2 to N, or L3 to N). Choose wire colors based on the electrical wiring standards in your country.

Ordering Information

PLC277-3PHC	3-Phase power line carrier signal coupler, C-Band (115-132kHz)
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Order Online: <http://www.bibaja.com/cart/>

Mailing Address: Bibaja, LLC, 615 Trinkling Creek, Felton, CA 95018, USA

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