



Coupler for bridging LONWORKS™ and X10 power line carrier signals from AC mains onto 24VAC power line or twisted pair

Features

- 1.5kV isolation between mains and 24VAC
- DIN rail or screw mounting
- Screw terminals for 22-12AWG wire
- Surge protection on both connections
- Power line carrier range from 100-400kHz

Applications

The PLC240 provides a communication link from the AC mains to devices on 24VAC irrigation power, 12VAC landscape lighting power, low voltage DC networks, and un-powered twisted pair.

For the SiteController, the PLC240 provides a way to extend communications over twisted pair between buildings to command remote IVC24 4-zone two-wire devices. Using existing twisted pair infrastructure, a SiteController, PLC240s, and IVC24-04 devices can serve an entire corporate office park's irrigation needs.

For irrigation and landscape lighting systems using the i.Lon100 or similar devices and the IVC24-04, you will need the PLC240 to bridge communications around the 24VAC transformer that powers the IVC24-04 devices. For the SiteController, if the IVC24-04 device is connected directly to the SiteController's two-wire port, the PLC240 is not required.

For long distance communication over twisted pair, connect the low voltage coupling interface to your PLC device and the 80-240VAC side to a twisted pair network. Terminate both ends with 110ohms. Our customers have used the PLC240 to communicate over 7 kilometers of wire.

For 3-phase installations, see our PLC277 3-phase coupler product.



Simple Installation

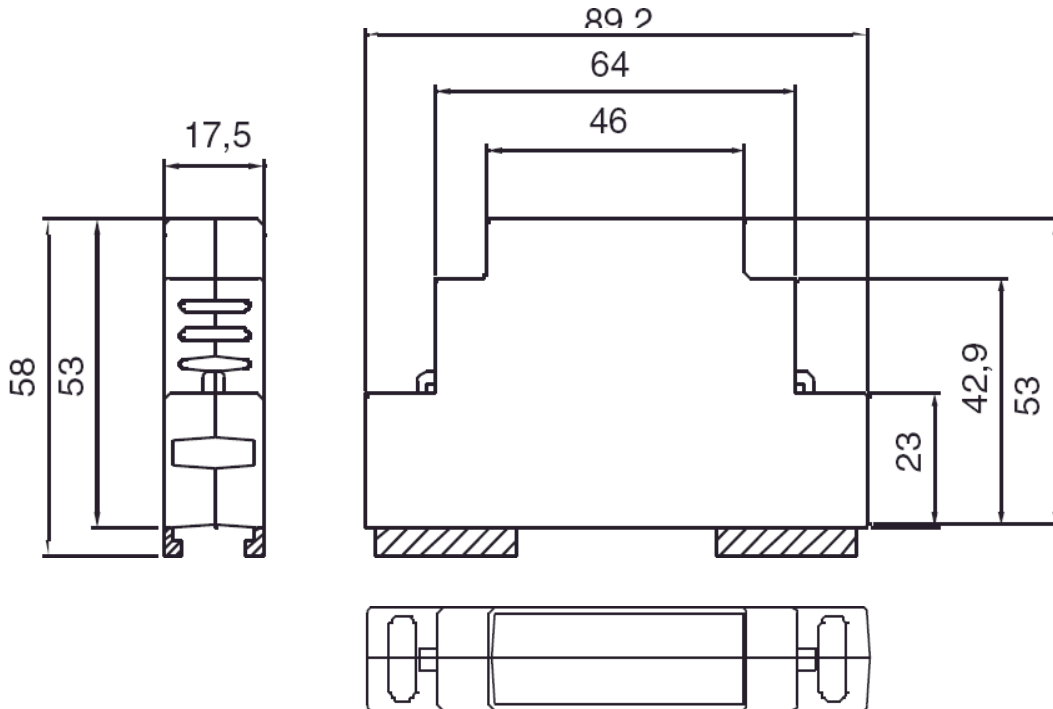
Installation is simple for coupling from the AC mains to a low voltage network. Using a standard AC line cord, attach the bare ends into the PLC240's 240VAC screw terminals, and plug the cord into the wall. Screw terminals accepts 22 to 12 American Wire Gauge (AWG) wires.

DIN rail mounting makes installation a snap. Clip the PLC240 onto a DIN rail, connect the wires, and you're done.

Direct wall mounting using wood screws is possible by pulling the black DIN rail clips out one click and using two screws to mount the PLC240 onto a wall in your communications closet or garage.

Specifications

Operating Temperature	-20C to 70C
80-240VAC Terminal Voltage Range	0 to 240VAC
24VAC Terminal Voltage Range	0 to 35VAC (24VAC Typical)
	0 to 50VDC
Storage Temperature	-50C to 100C
HiPot Isolation Test	1500VAC
Percentage Coupling with 50ohm load at 132kHz	93%
Wire Gauge	12-22AWG
Dimensions (WxLxH)	17.5mm x 89.2mm x 58mm



Installation

Connect twisted pair, low voltage DC, or AC network to the terminals marked “L N 24VAC”. Connect outdoor twisted pair, DC or AC mains to the terminals labeled “80-240VAC L N”. Polarity does not matter.



Ordering Information

PLC240	Worldwide version for coupling signals from AC mains to low voltage networks
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