Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364

EPPH-IB

Isolation Barrier for Explosion Proof Phone - 90-132V or 180-240V

Product ID: 144336

Please see last page for supporting documentation for this product(certificates, CAD files & drawings, IES files, wiring diagrams, etc).



Larson Electronics LLC manufactures a wide variety of products, including custom built to spec designs. The pictures displayed for this unit are a general representation of form factor for the product line and may not accurately represent this exact configuration in every detail due to custom builds and changes between similar products in our standard catalog. The specifics for this configuration are listed in the specification table and supporting documentation (CAD files, Dimensional Drawing, Name Plate Diagram, Wiring Diagram, etc.). This means that specific details (receptacles, plugs, wires, connections, mounting brackets, external finishes, etc.) may not be accurately represented in images vs specifications. Please review specifications and do not order based solely on images.

EPPH-IB Intrinsically Safe Telephone – C1D1, C2 and C3D2 – 110VAC/220VAC

Device Type: Isolation Barrier Unit (Non-classified)
Telephone Network Interface: BELL Pub.61100 Compatible (2-Wire) and 4-Wire Options
AC Power Input: 90-132V or 180-240V
Frequency: 47-63 Hz
Current: 0.5 Amps
ISI Voltage: 8V (Maximum)
ISI Resistance: 66 Ohms (Maximum)
ISI Current Limited: 136 mA (Maximum)
Ringer Pitch Adjust: 1 kHz - 8 kHz (Nominal)
Indicators: IS Loop Current (IS LOOP, GRN), IS Lock Detect (IS LOCK, GRN), Telephone Line Loop Current (TELCO, YEL), Hook (HOOK, YEL)
Wiring Construction: Twisted Pair
Wiring Type: Shielded
Wiring Conductor Size: 24 AWG
Wiring Loop Resistance: 275 Ohms
Wiring Capacitance: 0.316 uF
Operating Temp Range: -40°C to +60°C
Relative Humidity: 95% (Non-Condensing)
Dimensions: 13.16” x 9.39” x 7.46”
Body Material: Glass-Reinforced Polyester
Mounting Holes: 4 (0.280-inch Diameter)
Weight: 8.5 Lbs

Quick Summary

Class I, Groups A, B, C, D (Approved)
Class II, Groups E, F, G (Approved)
Class III (Approved)
Type 3R (Rainproof)
Resistant to Chemicals

Special Orders - Special Requirements

Contact us for special requirements
Toll Free: 1-800-369-6671
Intl: 1-903-270-1187
Fax: 1-903-498-3364
E-mail: sales@larsonelectronics.com

The Larson Electronics Isolation Barrier is designed to support explosion

proof phones with the following NEC ratings: Class I, Groups A, B, C, D; Class II, Groups E, F, G and Class III. This unit features 90-132V and 180-240V @ 47-63 Hz AC power input options. During installation the component is to be placed in a non-hazardous location up to one mile from the explosion proof phone. The isolation barrier may be used to meet intrinsically-safe requirements and regulations by limiting energy levels entering the hazardous area. It is constructed of glass-reinforced polyester with Type 3R (rainproof) ratings.

Features: The Isolation Barrier supports 90-132V and 180-240V @ 47-63 Hz AC power input options. While the Intrinsically Safe Interface (ISI) features a maximum voltage of eight volts, 66 ohms resistance and 136 mA current limited. The unit is compatible with 2-wire (BELL Pub.61100) and 4-wire telephone network interfaces. This component is to be installed in a non-hazardous area of the location up to one mile from the explosion proof communication device. The Isolation Barrier interior comes with a power switch selector, a ring pitch adjustment, and four troubleshooting LEDs. Externally, the component consists of two modular subassemblies, the front panel and the rear enclosure assembly, for easy installation and wiring.

Operators may adjust the pitch of the ring between 1 kHz and 8 kHz. This device operates in temperatures ranging between -40°C and 60°C with 95 percent (non-condensing) relative humidity. The Isolation Barrier supports a glass-reinforced polyester body, which is Type 3R rated, making it highly resistant to rain, weather and chemicals. There are four indicators on the unit that notifies operators about a wiring short in the IS phone and if the TELCO line has an open. In the event of an intermittent wiring short in the IS phone, the notification lights will flash. The Isolation Barrier features twisted pair (shielded) wiring with a wiring conductor size of 24 AWG. This component's wiring loop resistance is 275 ohms with a wiring capacitance of 0.316 uF.

Installation: The unit must be wired in accordance with Pub. 42004-380, Control Drawing 73242, to ensure intrinsic safety. Telephone system wire must be connected to the Isolation Barrier Unit only and not directly to the IS communication device. Shielded cables must be used when multiple IS telephone wires are routed together to prevent cross-talk. The shield must be grounded to an IS ground and connected only at the Isolation Barrier. There are four mounting holes (0.280-inch diameter) on this unit.

At Larson Electronics, we do more than meet your lighting needs. We also provide replacement, retrofit, and upgrade parts as well as industrial grade power accessories. Our craftsmen can custom build any lighting system and/or accessories to fit the unique demands of your operation. A commitment to honesty, quality, and dependability has made Larson Electronics a leader in the lighting and electronics business since 1973. Contact us today at 800-369-6671 or message sales@larsonelectronics.com for more information about our custom options tailored to meet your specific industry needs.

Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364

Frequently Asked Questions (FAQ)

Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364

EPPH-IB

Product ID: 144336

Export Control Classification Number (ECCN): EAR99

Options:

EPPH-IB-Voltage

Example: EPPH-IB-120V

Voltage	
-120V	-120V
-240V	-240V

Links (Click on the below items to view):

- **Operations Manual**
- **HigResPic1**
- **ISO 9001 Certification**
- **Business Certificate**
- **Shipping Time Map**