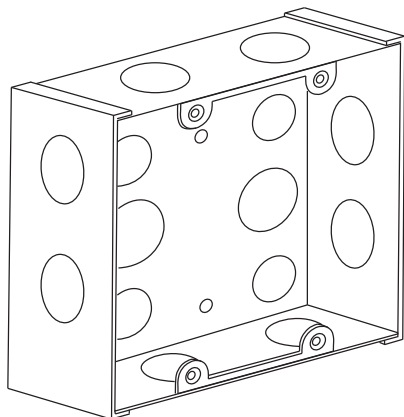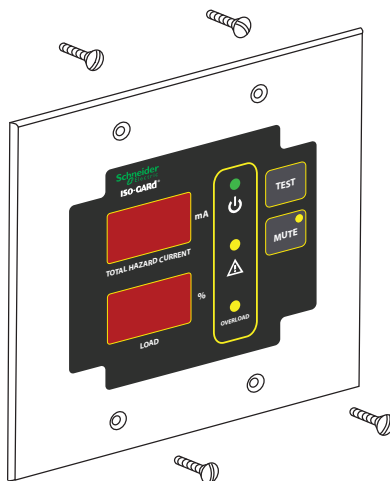# Schneider Electric

medilec

Iso-Gard® Remote Display Unit for the Line Isolation Monitor (LIM)

MLHG6RD-AU

147/2 Wall Box

ISO·GARd®
Line Isolation Monitor

Setup Guide

The Remote Display Unit, MLHG6RD-AU, communicates with the LIM over an RS-485 network. Up to two (2) Remote Display Units (remote) can be connected to a single LIM.

Each Remote Display Unit must have a unique address on the network and electrical termination is required.

This Setup Guide describes installation and setup (setting or changing the unit address). For more information, refer to the *Isogard Line Isolation & Overload Monitor Installation and Reference Guide* for the MLHG6 / MLHG6-AU.

⚠ **WARNING**

ELECTRIC SHOCK HAZARD
• Disconnect all power before servicing.
• Reference AS/NZS 3003 for Installation Standard.
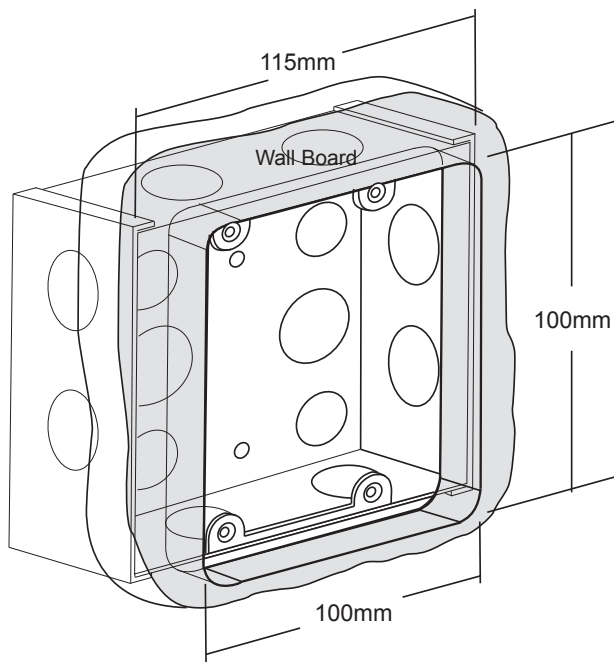
Important!
The network cable is attached to terminals inside the main LIM enclosure. Therefore, the cable insulation must be rated to withstand the highest line voltage present inside the enclosure.

Installation

Catalogue Number	Component or Accessory Name	Included with LIM	Ordered separately
MLHG6RD-AU	Remote Display Unit (suiits the Line Isolation Monitor,LIM) with front plate, MLHG6RD-AU mounting kit and 120Ω resistor	No	Yes
147/2	Clipsal 2 Gang (Duplex) Wall Box	No	Yes
2A1PIS24 / 2A2PIS24	Clipsal Professional Series Low Capacitance Screened Instrumentation Cable for balanced pair operation (RS422/RS485)	No	Yes

The Remote Display Unit must be installed in a 147/2 Wall Box (not provided). Make sure the the wall box is recessed behind the wall surface so that the front plate of the remote unit fits firmly against the wall with no visible gaps.

Cut a 100mm x 100mm hole in the wall board so that the sides of the wall box extend beyond the cut out area by about 7mm on each side. This will ensure that the remote unit is held firmly in place by the supplied mounting screws.
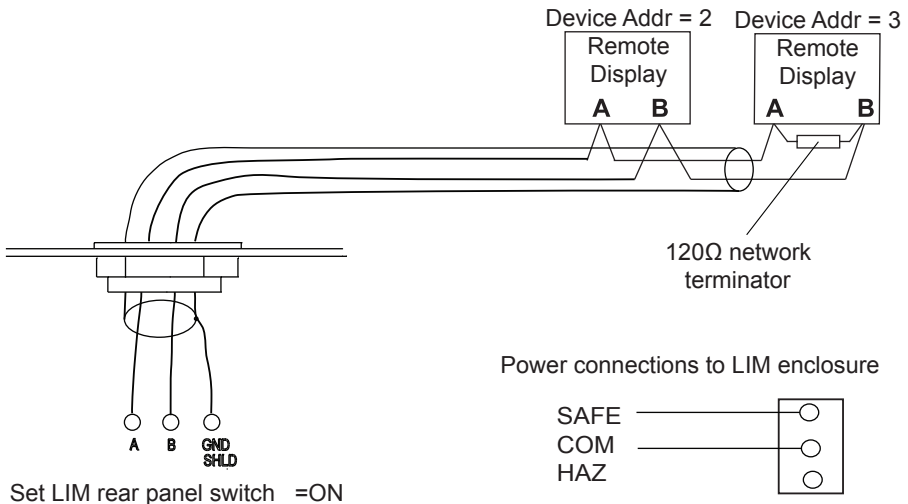

147/2 Duplex Wall Box

Wiring

Use low-capacitance screened instrumentation cable for the network (catalogue no. 2A1PIS24, or similar). Keep network cables segregated from mains power conductors.

The display unit has A and B connections, 12V power and ground fixed with screw terminals.

The network cable shield (GND SHLD) is connected at the LIM end but not at the remote unit.

Network termination is important. The LIM has a switch on the back panel that provides termination when the RS-485 network is used. A 120Ω resistor is connected across the terminals of the last device on the network.

Device Addr = 2
Device Addr = 3
Remote Display **A B**
Remote Display **A B**
120Ω network terminator

Power connections to LIM enclosure

SAFE
COM
HAZ

A   B   GND SHLD

Set LIM rear panel switch = ON

Unique Communications Address

Up to two (2) MLHG6RD-AU remotes may be connected to a single LIM. Each remote must be assigned a unique bus address for proper operation as below:

• The connected LIM will be assigned address 1.

• A single connected Remote Display Unit will be assigned address 2. This is the factory default.

• An additionally connected Remote Display Unit must be assigned address 3.

The procedure for changing the address of a Remote Display Unit is provided on the next page.

Changing the Address of an MLHG6RD-AU

Follow these steps to change the communications address of the unit.

1. Hold the TEST and MUTE buttons simultaneously for at
    least four (4) seconds. "SP" will display on both screens.

2. Push the TEST button until "Ad" is displayed in the
    top screen, and two numbers (factory default "02") are
    displayed in the bottom screen. This number is the
    communication address of the MLHG6RD-AU remote.

3. Press the MUTE button. Press the TEST button until the
    desired address is displayed on the screen. Press the
    MUTE button to confirm this value.

4. Press the TEST button. "Ar" will display on the top screen,
    and two numbers (factory default "01") will display on
    the bottom screen. This is the address of the connected LIM,
    MLHG6- AU. In most applications, this value will not need to
    be changed. If so, skip to step 5. Otherwise, do the following:

    Press the MUTE button. Press the TEST button until the desired
    MLHG6-AU address appears, and press MUTE again to
    confirm this value.

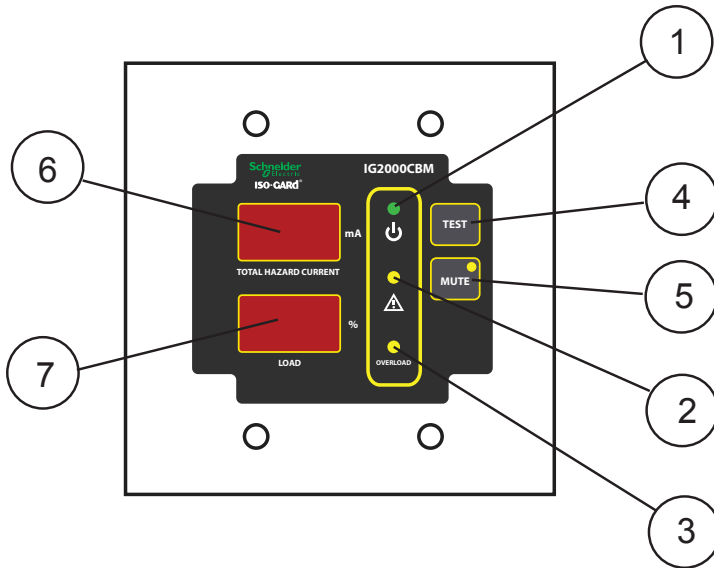5. Cycle power to the MLHG6RD-AU to finish.
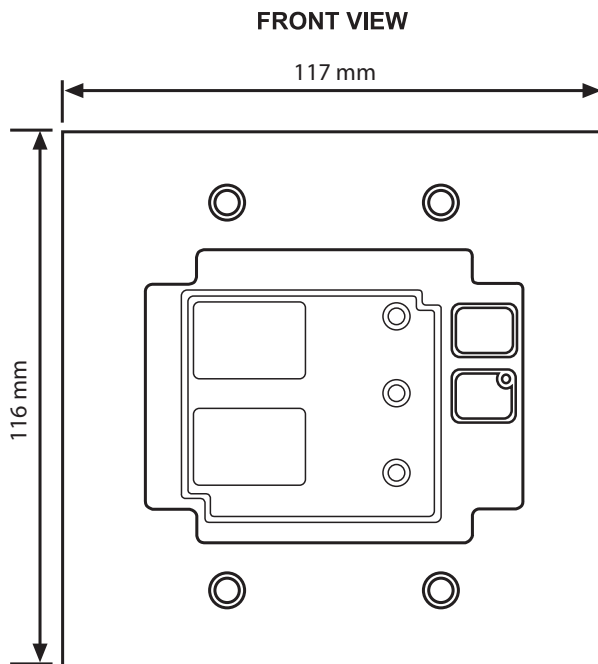

Display Unit Features

Figure Number	Display Unit Feature
1	Green "SAFE" LED. Illuminates when the connected LIM is in the normal condition.
2	Yellow "HAZARD" LED. Illuminates when the connected LIM, MLHG6-AU is in the alarm condition.
3	Yellow "OVERLOAD" LED. Illuminates when the connected LIM, MLHG6-AU's transformer overload alarm is active.
4	TEST button. Initiates a self-test of the connected LIM.
5	MUTE button with amber LED. Mutes the audible alarm when in the alarm condition. The amber LED indicates that the audible alarm has been muted.
6	THC Digital Display. Shows the Total Hazard Current in real time.
7	Overload Digital Display. Shows the transformer overload percentage in real time.

Technical Data	
Operating voltage	12V d.c. or 12V a.c.
Max. current	100mA
Operation class	Continuous operation
Ambient temperature	
when operating	0º C to +50ºC
when stored	-25º C to +70º C
Connection	Screw terminal block
Conductor size/length	RS-485 twisted, shielded pair: 0.2 to 3.3mm² / max. 30m
Tightening torque	0.5 to 0.8 N-m
Mounting	In wall, use 147/2 wall box
Weight	150g

FRONT VIEW

117 mm

116 mm

Two-Year Warranty

The Iso-Gard Remote Display Unit is covered by a two-year warranty against manufacturing defects.

Warranty Statement

The benefits conferred herein are in addition to, and in no way shall be deemed to derogate; either expressly or by implication, any or all other rights and remedies in respect to the Schneider Electric product, which the consumer has in the location where the product is sold.

The warrantor is Schneider Electric.

This Schneider Electric product is guaranteed against faulty workmanship and materials for a period of two (2) years from the date of installation.

Schneider Electric reserves the right, at its discretion, to either repair free of parts and labour charges, replace or offer refund in respect to any article found to be faulty due to materials, parts or workmanship.

This warranty is expressly subject to the Schneider Electric product being installed, wired, tested, operated and used in accordance with the manufacturer's instructions. Any alterations or modifications made to the product without permission of Clipsal or Schneider Electric might void the warranty.

Schneider Electric shall meet all costs of a claim. However, should the product that is the subject of the claim be found to be in good working order, all such costs shall be met by the claimant.

When making a claim, the consumer shall forward the Schneider Electric product to the nearest Clipsal or Schneider Electric office. Provide adequate particulars of the defect within 28 days of the fault occurring. The product should be returned securely packed, complete with details of the date and place of purchase, description of load, and circumstances of malfunction.

For all warranty enquiries, contact your local Schneider Electric sales representative.

Technical and Sales Support

For assistance with technical problems, contact your nearest Schneider Electric sales representative.

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Product Information

To access product information online, go to: http://www.clipsal.com/cis   select Technical and then Medilec.

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