austdac PTY LTD ®

Title

I.S. LED LIGHT

TYPE LLS2

USER MANUAL

Document Number

40-422-12

Issue

02

REVISION CONTROL

02	MSHA Note Added, address and logo change	2017.04.27	CW	CW	PC
01	Original	2016.01.05	MC	MC	PC
Issue	Details	Date	Written	Designed	Approved

Austdac Pty Ltd

Unit 1 / 42 Carrington Road
Castle Hill NSW 2154
Australia

PO Box 6486
Baulkham Hills Business Centre
NSW 2153
Australia

Phone: + 61 2 8851 5000
Fax: + 61 2 8851 5001
Website: www.austdac.com.au

455 Lowries Run Rd,
Pittsburgh, PA 15237
USA

Phone: +1 888 254 9155
Fax: +1 412 635 0179

TABLE OF CONTENTS

TABLES

FIGURES

1 GENERAL DESCRIPTION

The Austdac Type LLS2 I.S. LED Light is an explosion-protected light that is to be powered by a separately certified Ex ia 12V power supply. The LLS2 is primarily for area lighting. It is expected to be "daisy chained" in strings of up to four LLS2s. Each light requires a minimum of 700mA and a four light string would typically use a 3A power supply.

In addition the LLS2 has a Yellow and Red Indicator that is to be powered from the same power supply and switched on as required.

Figure 1: I.S.Led Light with mounting details

2 WARNINGS AND PRECAUTIONS

WARNING

- DC Voltages up to 13V may be present within the LLS2.
- Light emitted by the LLS2 may cause damage to sight and should not be directly looked at.

PRECAUTIONS

- Only qualified personnel shall install, maintain and service the LLS2.

2.1 USER ACCESS

There are no user serviceable parts within the LLS2. The user should not attempt to service the LLS2.

3 STORAGE, INSTALLATION, MAINTAINANCE AND REPAIR REQUIREMENTS

The LLS2 should only be installed, operated and maintained by qualified personnel. Ensure that all instructions and warnings are observed.

3.1.1 Storage

The specified operating temperature must be maintained during storage.

The LLS2 should be stored in a covered area.

3.1.2 Installation

Prior to installation the LLS2 should be inspected for the following;

- Any external damage to the enclosure.
- Any damage, score marks or foreign debris to the connectors.

Unused connectors must be fitted with the supplied blanking cap.

The LLS2 can be mounted using the integral magnets. The cable should be secured within 500mm of the LLS2 to ensure the connector is not subject to the weight of the cable.

When mounted on moving or vibrating structures, it is recommended that the LLS2 be mounted using the two 12mm mounting holes.

When the light is used in a IIB Ga installation, the light should be positioned so that electrostatic charging of the lens is minimised.

3.1.3 Maintenance

The LLS2 does not require periodical maintenance.

3.1.4 Repair

The LLS2 is not to be repaired by the user. Damaged units are to be returned to Austdac for repairs.

4 CONNECTIONS

4.1 LLS2 POWER INPUT

The LLS2 includes two connectors which are wired in parallel. Cables and internal wiring are shown in Table 1.

Typical system connection details can be found in document 40-420-19.

It is important to ensure that the power supply polarity is correct.

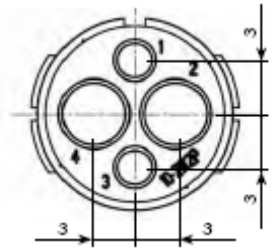

Table 1 : Connector Details

Connector Pin	Cable Wire Colour	Description
1	Yellow	Yellow Indicator
2	White	White Area Lighting
3	Red	Red Indicator
4	Black	0V

5 OPERATING INSTRUCTIONS

5.1 INSPECT

Periodical inspection of the LLS2 is required to check for damage to the enclosure, connectors and cables.

5.2 POWER UP

Periodical inspection of the LLS2 is required to confirm the correct operation of the LLS2.

If a LED or indicator is inoperative, remove the unit from service.

6 CERTIFICATION

The I.S. LED Light type LLS2 has been assessed and tested to:

IEC 60079-0:2011, 6th Edition

IEC 60079-11:2011, 6th Edition

6.1 IECEx

Certificate No:	IECEx TSA 15.0028X
Marking:	Ex ia I Ma
	Ex ia IIB T3 Ga
Port Parameters:	Refer to Certificate
Conditions of Use:	Refer to Certificate

7 SPECIFICATIONS

Name ..... I.S. LED Light

Type LLS2

Temperature range ..... -20ºC to +40ºC

Size ..... 360mm (W) x 100mm (H) x 42mm (D)

Mounting Centres 340mm

Mass 1.1kg

IP Rating IP65

Mounting Plate Material ..... 304 stainless steel

Enclosure Material ..... Flame Retardant, Electrically Conductive Polycarbonate

Supply Voltage ..... 12VDC nominal

Supply Voltage Range ..... 10 – 12.5VDC

Supply Current ..... 700mA max

Light Output ..... 95 Lumens per Watt

Central Intensity ..... 286 cd

Luminance ..... 71 lx (at 2m)

Colour Temperature ..... Cool White, 5000 - 8300K

Beam Angle ..... 85 degrees