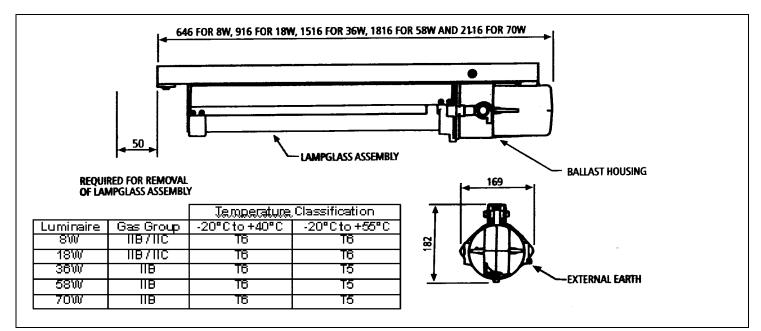


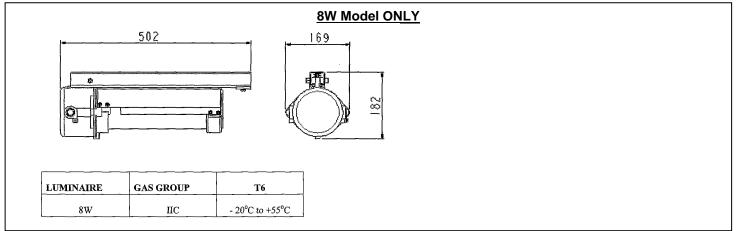
# INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS

# **LOMOND - Fluorescent Luminaires** ATEX

Important: Please read these instructions carefully before installing or maintaining this equipment. Good electrical practices should be followed at all times and this data should be used as a guide only.









Type Of Protection	Ex d (flameproof)					
Protection Standards	EN 60079-0, EN 60079-1, EN 50281-1-1					
Area Classification	Zone 1 and Zone 2 areas to EN 60079-10-1					
	Zone 21 and Zone 22 areas to EN 60079-10-2					
Installation	EN 60079-14					
Certificate	EC type examination certificate Sira05ATEX1299X					
Equipment Coding	Ex de IIB T5 / T6 T**°C (Tamb see Table 1)					
ATEX Coding	ⓑ Ⅱ 2GD T100°C or T85°C					
Ingress Protection	IP66 to EN 60529					
CE Mark	The CE marking of this product applies to "The Electrical Equipment (Safety) Regulations					
<i>cc</i>	2006", "The Electromagnetic Compatibility Regulations 2004", the "Waste Electrical and					
	Electronic Equipment Regulations 2006" and the "Equipment and Protective Systems intended					
••	for use in Explosive Atmospheres Regulations 1996". [This legislation is the equivalent in UK law of EU directives 2014/35/EU, 2014/30/EU, 2012/19/EU and 2014/34/EU respectively].					
	The Equipment is declared to meet the provisions of the ATEX directive (2014/34/EU) by reason of the EC Type Examination and compliance with the Essential Health and Safety Requirements. M Poutney Technical Manager					

### SPECIAL CONDITIONS FOR SAFE USE

The Lomond and Lomond E ranges of luminaires shall only be installed in areas where there is a low risk of impact.

#### **IMPORTANT**

- 1. Read this leaflet carefully before commencing to install the luminaire and retain it for future reference.
- 2. Check the rating label to ensure that the luminaire is suitable for the supply provided.
- 3. The luminaire must be installed in accordance with the recognised code of practice e.g. EN60079-14.
- 4. High voltage insulation testing may be carried out, but the test voltage must not exceed 500V DC. WARNING: Any faults to earth within the luminaires may result in permanent damage to the electronic control unit. This possibility can be avoided by shorting the live and neutral cables together and applying the test voltage between this connection and earth.
- 5. The luminaire MUST be earthed
- 6. The operating temperature range for the luminaire is shown on the rating label. The luminaire should not be used outside these temperatures.
- 7. If the luminaire is to be installed in areas of high vibration, please consult the manufacturer.
- 8. Under **NO** circumstances should a luminaire be opened, even when isolated, when an explosive gas or dust environment is present.
- 9. Do not use excessive force on plastic components.
- 10. The luminaires are designed and constructed to EN60598.
- 11. Prices and design are subject to alteration without notice. All products are sold subject to our conditions of sale, copies of which are available on request. We reserve the right to change characteristics of our products. All data is for guidance only.

#### **GENERAL INSTALLATION NOTES.**

- 1. Do not attempt installation until you are familiar with all warnings, precautions and procedures within this instruction sheet.
- 2. Refer to the wiring diagrams for correct installation.
- 3. Do not over tighten fasteners into plastic parts.
- 4. Ensure that the mains cable connectors are correctly secured to the terminal block(s). Only one conductor should be fitted to each terminal block. All terminal screws should be fully tightened whether a conductor is fitted or not.
- 5. Blanking plugs and cable glands must be of the correct type and must be fitted to the manufacturer's specification to ensure that the seals prevent the ingress of moisture or dust and so maintain the luminaire's IP rating.

#### **GENERAL MAINTENANCE NOTES.**

- 1. **IMPORTANT.** Isolate the luminaire from both switched and unswitched mains supplies before carrying out any maintenance work.
- 2. Lamps must be changed at the intervals recommended by the lamp manufacturer.
- 3. It is essential that all luminaires together with their associated cables, glands, etc. which make up the installation are maintained in such a manner as to ensure the integrity of the protection to which it is designed.



- 4. The frequency of inspection must be determined by the user, but should be regular enough to ensure that the luminaire installation continues to operate in the designed manner. The more onerous the operating conditions, the more frequent the inspections should be. It is recommended that the interval between inspections should not exceed two years.
- 5. Plastic components may be cleaned with water containing a small amount of detergent, followed by a clean water wash. Surplus water can be wiped off plastic components, but they should not be wiped or polished with a dry cloth to avoid a build up of static electricity.
- 6. **IMPORTANT.** All components that are replaced must be in accordance with the manufacturer's specification. Failure to use such components invalidates the certification, approval and warranty of the luminaire and may make it dangerous. NO modification should be made to the luminaire without the knowledge and approval of the manufacturer. If in doubt, refer to the manufacturer.

Table 1		
Model	Length (feet)	Certification Code
8W	1	ExdIIBT6 Ta -20°C to +55°C or ExdIICT6 Ta -20°C to +55°C
18W	2	ExdIIBT6 Ta -20°C to +55°C or ExdIICT6 Ta -20°C to +55°C
36W	4	Ex d IIB T6 Ta -20°C to +53°C or Ex d IIB T5 Ta -20°C to +55°C
58W	5	ExdIIBT6 Ta -20°C to +49°C or ExdIIBT5 Ta -20°C to +55°C
70W	6	Ex d IIB T6 Ta -20°C to +44°C or Ex d IIB T5 Ta -20°C to +55°C

#### TECHNICAL DATA

Only T8 lamps should be used except for the 8W model, which uses a T5 lamp. Total circuit watts: 1x8W=9W, 1x18W = 19W, 1x36W=37W, 1x58W=55W, 1x70W=68W 2x8W=18W, 2x18W= 41W, 2x36W=71W, 2x58W=110W, 2x70W=132W

Maximum inrush current at switch on is 20A (8W), 30A (18W), 40A (36W), 45A (58W) and 50A (70W) for < 1ms Power factor correction is better than 0.95

The luminaire is made from aluminium (body), glass (lens), stainless steel (reflector) and galvanised steel (mounting channel). The user must ensure that these materials are suitable for the atmosphere the luminaire will be installed in.

#### SPECIAL NOTES

Please consult the manufacturer if the luminaire is to be used in high vibration areas.

The luminaire is only suitable for use in areas with low impact risk.

NO ATTEMPT must be made to remove the reflector from the lampglass assembly.

The glass assembly should be kept clean.

The terminal block is suitable for cables from 0.5mm<sup>2</sup> to 4mm<sup>2</sup>. An external and internal earth is provided.

#### INSTALLATION AND MAINTENANCE NOTES SPECIFIC TO THIS PRODUCT.

The lampglass assembly must be removed prior to mounting the luminaire. This achieved by removing the spring nut/square washer at the end of the channel, releasing the two screws connecting the assembly to the ballast housing and unclipping the suspension cable. The mounting channel should be secured in any orientation using a minimum of two fixing points. The luminaire should then be reassembled with lamps fitted, as described below. Fit the spring nut/ square washer in the undercut in the lampglass end casting to prevent movement due to vibration.

Two M20 cable entry points are provided for fitting approved flameproof cable entry devises, with or without the use of approved flameproof thread adaptors. Care should be taken to ensure sealing of the glands is adequate to maintain the IP66/67 integrity.

#### LAMPING AND RELAMPING

- 1. Remove the lampglass assembly as described above. The lampglass should be jacked out as the screws are progressively slackened, if not jar the ballast housing slightly to free it. Allow the lampglass to hang on the suspension cord.
- 2. Disconnect the plug and socket connection to the geartray. Slacken the geartray securing screw to allow the geartray to be withdrawn.
- 3. The lamps can be fitted by locating their pins in the lampholders and rotating them through 90°. The geartray assembly can then be installed in the lampglass assembly by reversing the above process.
- 4. Apply a smear of non-setting grease to the flamepath on the lampglass assembly before fitting it to the ballast housing. These two parts should be aligned carefully and the bolts should tighten without difficulty. If not, attempt to improve the alignment.
- Secure the assembly by alternately tightening the securing screws. Some resistance may be encountered because of air locking of the enclosure. The assembly is completed when the lampglass assembly is fully home and compressing the sealing ring.

#### **GENERAL CARE**

Flamepaths should be cleaned using a non-metallic scraper and/or suitable non-corrosive cleaning fluids.

Parts which are cracked, damaged or worn must be replaced with the correct parts supplied by the manufacturer.



#### HEALTH AND SAFETY AT WORK etc. ACT 1974

In the United Kingdom all equipment must be installed, operated and disposed of (as required) within the legislative requirements of the Health and Safety at Work etc. Act 1974. Leaflet No. HSS L1 refers to the Company's obligation and is available on request.

It is the responsibility of the user to select, install, operate and maintain the equipment in accordance with the relevant legislation and appropriate codes of practice.

#### **Disposal of Material**

Any disposal must satisfy the requirements of the <u>WEEE directive [2012/19/EU]</u> and therefore must not be treated as commercial waste. The unit is mainly made from incombustible materials. The control gear contains plastic, resin and electronic components. All electrical components may give off noxious fumes if incinerated.

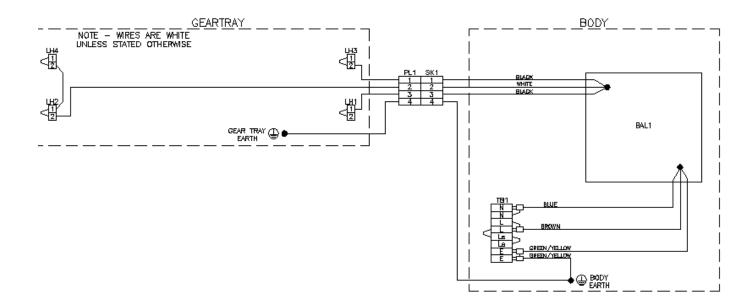


To comply with the Waste Electrical and Electronic Equipment directive 2012/19/EU the apparatus cannot be classified as commercial waste and as such must be disposed of or recycled in such a manner as to reduce the environmental impact.

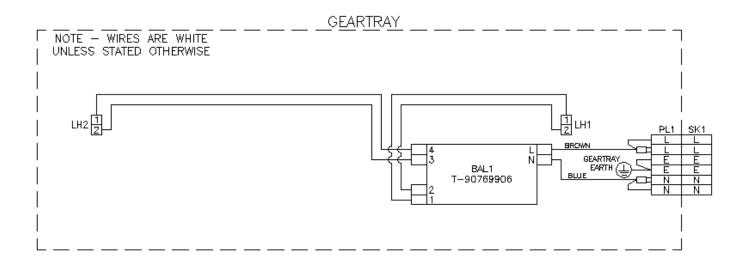


# **TYPICAL WIRING DIAGRAMS**

## 2 x 18/36/58 WATT



# 1 x 8 WATT





## Chalmit Lighting is a leading supplier of Hazardous Area lighting products

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			Registered No: Registered Office:	669157 Cannon Place 78 Cannon Street London EC4N 6AF UK	

For technical support, please contact: techsupport@chalmit.com

Note: Chalmit Lighting reserves the right to amend characteristics of our products and all data is for guidance only.

and the second	EU-Declaration of conformity							
1. A	UE-Déclaration de conformité							
್ಷ ನ್	EU-Konformitätserklärung							
Manufacturer	Chalmit	Address 3	388 Hillingto	n Road, G	lasgow. G5	2 4BL Sco	tland UK	
Product	Lomond Luminaire		0	,	Ū			
EC - Type Exar	nination Certificate	Sira05ATEX1299X						
Notified Body		Sira 0518						
ATEX Coding		II 2 GD ATEX Classification Group II Category 2 GD						
Equipment Coding		Ex d IIB T6 or T5 or (IIC T6) T100°C or T85°						
Ingress protecti		IP66/67						
	asis, with respect to	equivalence of						
	que, en ce qui concer							
	Grundlage hinsichtlic							
		EN 60079-1, EN 50281-1-1						
Area Classificat	tion EN 60079-10-1a	nd EN 60079-10-2						
of compliance v	vith the EHSRs is val	id as there are no changes w	vhich mater	ally affect	the state of	f technolog	ical progress of the product.	
en conformité a	avec les EESS est v	alide puisqu'il n'v a aucun c	hangement	qui affect	e matérielle	ement l'éta	t de l'évolution technologique du	
produit.			0	•			0.1	
zur Erfüllung de	er GSGA ist gegeben	, da keine Änderungen erfold	at sind, die e	einen Einfl	uss auf der	technisch	en Stand des Produkts haben.	
	00							
Terms of the di	rective:			Standar	d & Date Ce	ertified to	Standards Date Declared to	
Prescription de	la directive:			Standar	d & date ce	rtifiée à	Normes date Déclaré	
Bestimmungen			Standare Zertifizie		Datum	Standards Datum erklärt		
2014/34/EU	Equipment and protective systems intended for use in			9-0: 2004		2012		
201 00 0 20	potentially explosive atmospheres.							
				EN 60079-1: 2004			2014	
2014/34/UE		stèmes de protection destinés à être nères potentiellement explosibles.		EN 5028	31-1-1: 1999	9		
2014/34/EU		Geräte und Schutzsysteme zur bestimmungs-						
	gemäßen Verwend	dung in explosionsfähigen Be	ereichen.					
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2014/30/EU	Electromagnetic co			EN 55015 : 2013				
2014/30/UE	Compatibilité élect			EN 61547 : 2009				
2014/30/EU	Elektromagnetisch	Verträglichkeit		EN 6100	0-3-2 : 201	4		
2014/35/EU	Low voltage equip	je equipment		EN 60598-1 : 2015				
2014/35/UE	Équipements élect	lectriques à bas voltage		EN 60529 : 1992				
2014/35/EU	Niederspannungsg	pannungsgeräte / -systeme			8-2-5 : 201	5		
2012/19/EU	Waste of electrical	and electronic equipment						
2012/19/UE		ements électriques et électroniques						
2012/19/EU		Entsorgung der elektrischen und elektronischen Geräte						
	/ Systeme							
2011/65/EU	RoHS II Directive							

On behalf of the Chalmit, I declare that, on the date the equipment accompanied by this declaration is placed on the market, the equipment conforms to all technical and regulatory requirements of the above listed directives.

En tant que représentant du fabricant Chalmit, je déclare qu'à la date où les équipements accompagnant cette déclaration sont mis sur le marché, ceux-ci sont conformes à toutes les dispositions réglementaires et techniques des directives énumérées ci-dessus.

Hiermit bestätige ich, im Namen von Chalmit, dass am Tag der Lieferung des Produkts/der Produkte zusammen mit dieser Erklärung das Gerät/die Geräte alle technischen und regulativen Anforderungen der oben aufgeführten Direktiven erfüllt.

Name and Date Nom et Date Name und Datum	Mark Poutney	20/04/2016	Technical Manager Directeur technique Technischer Leiter	M_2+8=Q-
Quality Assurance Notification by: Notification d'assurance qualité par: Qualitätssicherungsnotifikation durch:		Baseefa Ltd. 1180	Quality Management System Acreditation: Système de Management Qualité Accréditation: Qualitätsmanagementsystem Akkreditierung:	ISO 9001
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