

# Acclaim III Recessed LED Luminaires ATEX and IECEx

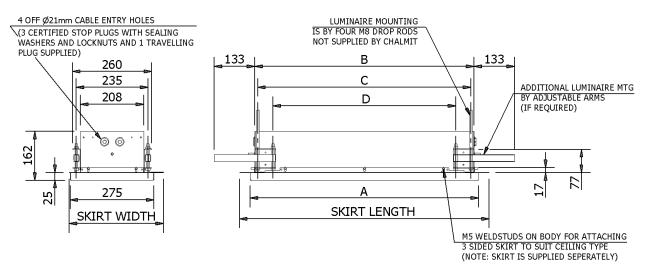
# INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS

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.

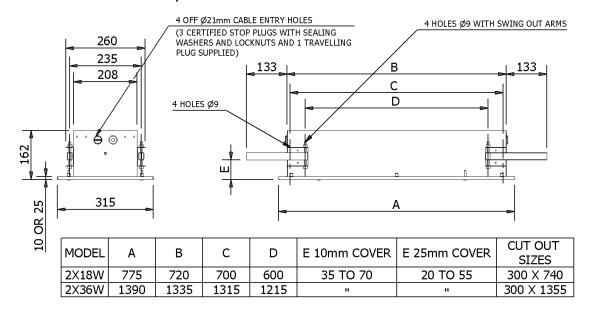


# STANDARD - M300 CEILING



MODEL	Α	В	С	D	SKIRT LENGTH	SKIRT WIDTH	CUT OUT SIZES
2X18W	750	720	700	600	820	309	800(L) X M300 TILE WIDTH
2X36W	1365	1335	1315	1215	1435	309	1415(L) X M300 TILE WIDTH

# /PC SOLID PLANK CEILING





0.0 Specification						
Type Of Protection	Ex eb mb op is q Increased safety, Encapsulation, optical radiation, powder filling.					
	(With isolating switch: Ex db eb mb op is q Flameproof is added)					
Protection Standards	(IEC) EN 60079-0, (IEC) EN 60079-1, (IEC) EN 60079-5, (IEC) EN 60079-7,					
	(IEC) EN 60079-18, (IEC) EN 60079-28, (IEC) EN 61241-1					
Area Classification	Zone 1 and Zone 2 areas to (IEC) EN 60079-10-1					
	Zone 21 and Zone 22 areas to (IEC) EN 60079-10-2					
Installation	(IEC) EN 60079-14					
Certificate	IEC certificate of conformity IECEx CML 16.0043X					
	EC type examination certificate CML 16ATEX3095X					
Equipment Coding	Ex eb mb op is q IIC T4 Gb or Ex db eb mb op is q IIC T4 Gb					
	Ex tb IIIC T95°C Db IP6X (-40 to +45°C Insulated, +55°C Uninsulated)					
ATEX Coding						
Ingress Protection	IP65 to EN 60529					
CE Mark	The CE marking of this product applies to "The Electrical Equipment (Safety) Regulations 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 EU Type Examination and compliance with the Essential Health and Safety Requirements.  M Poutney Technical Manager					

#### SPECIAL CONDITIONS FOR SAFE USE

- Connections to the terminals must not be made outside the range of -10°C to +80°C.
- Where used, all terminal screws, used and unused, shall be tightened down to between 1.2 Nm and 2Nm

#### 1.0 Introduction - Acclaim LED Model

This installation leaflet covers the range of ATEX and IECEx Acclaim recessed luminaire models with the Ex mb LED strips and the Ex q control gear. These luminaires are mainly used in harsh environments and are constructed using a painted steel body and polycarbonate diffuser. Refer to the current catalogue for information on product references. The luminaires are available in 02L (2ft) and 04L (4ft) sizes.

B15 SOLAS The luminaire can be installed to interface with fire resistant ceiling systems to maintain a B15 SOLAS fire rating; the integrity of the ceiling and insulation must be maintained using suitable insulation materials. The ceiling/fitting and insulation should be continuous (without any gaps), care must be taken to maintain this classification.

#### 1.1 Electrical Supplies

Lamps	02L - 2 x 600mm LED Strip	04L - 2 x 1200mm LED Strip		
Voltage range AC	110-130V or 220-254V			
Frequency range Hz	47-63Hz			
Power Watts 220-254V	30W	60W		
Current Amps 220-254V	0.16A	0.30A		
Power Watts 110-130V	30W	60W		
Current Amps 110-130V	0.28A	0.55A		

The safety limit for surface temperature (T rating) is +/-10% on the rated voltage. Equipment should not be operated continuously at more than +10/-10% of the rated voltage of the control gear.



**Power Factor >0.95** Power is constant over voltage range.

**Over voltage** 400V ac for 1 min and EN 61000-4-5 > 4kV

Through Wiring The through current rating is 16A. 4mm² terminals are standard (6mm² wiring can be

used in the terminals in accordance with the luminaire certificate).

Tamb Storage -40°C to +80°C

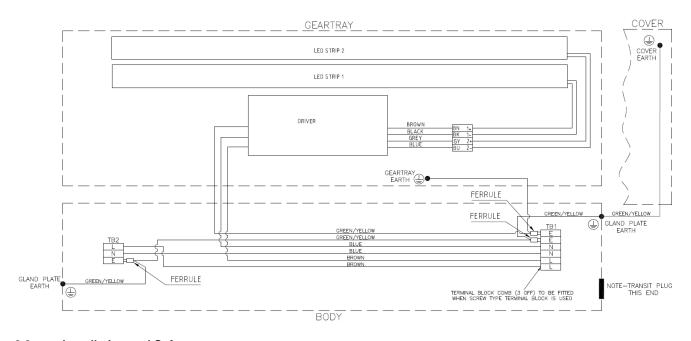
Storage Luminaires are to be stored in cool dry conditions preventing ingress of moisture and

condensation.

Fuse and MCB Ratings It is recommended that for selection of MCBs users should consult the MCB

manufacturer as this unit contains electronic control gear. MCB ratings can vary depending on the manufacturer and type and the size of the installation. The electronic control gear has nominal values of inrush current of 35A for 70µs on 230V and 70A for

70µs on 110V.



## 2.0 Installation and Safety

#### 2.1 General

These instructions should be read fully and carefully before attempting to install the luminaire. For details of servicing operations, opening etc. see section 3.0.

<u>Note:</u> This range is available in a number of similar but distinctly different versions. Care must be taken to use the correct instructions and spares, if in doubt contact sales or product support.

Copies of these instructions should be held in a safe place for future reference. It is the responsibility of the installer to ensure that the apparatus selected is fit for its intended purpose and that the installation, operation and maintenance of the apparatus complies with applicable regulations, standards or codes of practice. Installation should be carried out in accordance with (IEC) *EN 60079-14* or with a local hazardous area code of practice, whichever is appropriate. Risk of electrostatic discharge:

- · Clean diffuser only with damp cloth
- Avoid mounting near fast moving streams of air

Any specific installation instructions must be referred to. In the UK the requirements of the *Health and Safety at Work Act* must be met and electrical work associated with this product must be in accordance with the "Manual Handling Operations Regulations" and "Electricity at Works Regulations 1989". Disposal instructions should be complied with. The luminaires should be considered Class 1 to EN 60598 and effectively earthed. Certification details on the rating plate must be verified against the application requirements before installation. The information in this leaflet is correct at the time of publication. The company reserves the right to make specification changes as required without notice.



#### 2.1.1 Use in Combustible Dust Atmospheres

Where the equipment is used in combustible dust atmospheres reference must be made to the selection and installation standards in order that the equipment is used correctly. In particular this applies to the de-rating of surface temperature for use where dust clouds may be present. Dust layers should not be allowed to accumulate on the fitting surface and good housekeeping is required for safe operation. Dust in layers has the potential to form ignitable clouds and to burn at lower temperatures.

Refer to EN 60079-10-2 and EN60079-14 for additional details of selection, installation and maintenance.

#### 2.2 Tools

12mm, 3mm and 4mm flat blade screwdriver and large crosshead screwdriver. Allen Key for adjusting swing out arms. Suitable spanners for installing cable glands. Pliers, knife, wire strippers/cutters.

#### 2.4 Mounting

Luminaires should be installed where access for maintenance is practical and in accordance with lighting design information. Refer to the note in 2.1 concerning electrostatic charge.

When mounting of ceiling support channels, via side arms or adjustable side arms, they must be secured onto channels by fixing screws. When B15 fire rating is a requirement all conditions stated by the ceiling manufacturer and Chalmit must be met

As an insulated recessed unit the Tamb rating is 45°C as a non-insulated unit in a plain recess the Tamb rating is 55°C. Therefore the usual mounting in a metal ceiling with 75 mm of insulation at 45°C is acceptable. If the temperature in an installation is continuously at the limiting level the duration will be reduced and the self-testing will be delayed.

#### 2.5 Cabling and Cable Glands

The temperature conditions at the supply cable entry point are such that 70°C (ordinary PVC) cable can be used. Cable glands and sealing plugs must have ATEX component approval. The cable and gland assembly when installed must maintain a minimum IP54 rating.

Four entries are provided. Three entries are fitted with suitably approved blanking plugs, the fourth entry with a transit plug. M20 x 1.5 entries are standard, other sizes are available on request.

#### 2.6 Electrical Connections and Testing

If any work is to be done on any luminaire already connected to the electrical system, the luminaire must be isolated from the system.

Access for the cabling is via removal of front cover and lamp tray. The front cover is secured using 6/10 off M6 captive screws; care to be taken as there is no suspension with this only the earth connection. The lampholder tray is secured by M5 screws and keyhole slots, with chain suspension allowing the tray to swing down, giving access to terminal blocks. Luminaires are supplied suitable for looping and through wiring. Screw type or screw-less "cage clamp" terminals are fitted in the range of luminaires. Mains terminal blocks are marked L N Earth.

#### An earth terminal is fitted to the cover and must be reconnected prior to re-affixing the cover to the body.

The maximum amount of insulation allowed beyond the throat of the terminal is 1mm. The normal method of insulation testing is to connect Live and Neutral together and test between this point and Earth to prevent the risk of damage to the electronic control gear. However, if this is not possible luminaires can be tested with an insulation tester that complies with IEC 364 or BS 7671 with a maximum output current of 1mA and output voltage of 500V dc. (Units damaged by incorrect insulation testing can be detected).

Before completing the wiring, ensure that all the connections are correctly introduced into place before reassembling the luminaire.

#### 3.0 Servicing and Operation

Safe servicing behind the gear tray requires the mains supply to be isolated.

### 3.1 Opening and Closing

The front cover is secured using 6/10 off M6 captive screws; care to be taken to avoid damage, the cover will hang down via two nylon straps with clip release at each end attached to the gasket blade and the body chassis.

#### 3.3 Releasing the Reflector/Gear Tray

Loosen the four fixing screws retaining the reflector/gear tray far enough for it to slide over keyhole slots. The tray will hang on the retaining cords without stressing the wiring between body and tray. Replace in reverse order.

#### 3.4 Servicing Behind the Gear Tray

The release of the gear tray exposes live mains terminals. Any work behind the gear tray requires that the supply is isolated to avoid ignition risk and damage to components.

#### 3.5 Replacement of Driver

The driver contains no serviceable parts. Should it be found necessary to replace the driver, the following procedure should be adopted: Ensure that the luminaire is isolated from the mains supply.

Remove gear tray from body and swing down as previously explained. Disconnect the driver wires from the terminal blocks (note the connections) and remove the driver from the tray.

#### 3.6 Replacement of LED Strips

Remove gear tray from the body and swing down as previously explained. Identify the wires for the LED strip/s and disconnect from the terminal block. Remove screws and clips holding the strips in place. Replace strips using screws and clips and reconnect to terminal block. Check connections before re-energising.

#### 4.0 Routine Maintenance

Visual tests and checks should be carried out at intervals described by the appropriate regulations, EN 60079-17, and should include the following:



- Check for mechanical damage/corrosion.
- Check connections, fixings, glands and plugs.
- Check for undue accumulations of dust, dirt or moisture.
- Check for unauthorised modifications.

Periodic inspection of the enclosure seal should be carried out to ensure that the seal is sound. If the luminaire has been subject to abnormal conditions, for example, severe mechanical impact or chemical spillage, it must be de-energised until it has been inspected by an authorised and competent person.

#### 4.1 Cleaning

The body of the luminaire may be cleaned with a mild solution of household detergent and water, after cleaning the body should be washed and wiped with clean water. The diffuser should not be polished or wiped with a dry cloth as a risk of ignition due to electrostatic discharge may result. Cleaning of the diffuser with any chemical or hydrocarbon solvent based cleaner may result in severe damage.

#### 5.0 Disposal of Material

Disposal of the luminaire as waste should be carried out in accordance with national regulations. 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.

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



## **CHALMIT LIGHTING**

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



· · · · · · · · · · · · · · · · · · ·		U-Declaration of conformity							
		UE-Déclaration de conformité							
Tri stati	EU-Konformitätserklärung								
Manufacturer	Ch	almit Ado	trace	388 Hillington Road, Gla	snow G52 4RI Scotland LIK				
Product		Chalmit Address 388 Hillington Road, Glasgow. G52 4BL Scotland UK Acclaim III (LED) Emergency Luminaire.							
		IL 16ATEX3095X	by Euriman	<u>.                                    </u>					
EC - Type Examination Certificate  Notified Body		Baseefa 1180							
ATEX Coding		⟨Ex⟩       II 2 GD         ATEX Classification       Group II Category 2 GD							
ATEX County		(CX) 11 2 3 3		TTEX Glassification	Group in Gategory 2 GB				
Equipment Coding		Ex e mb q IIC T4 Gb or Ex d e mb q IIC T4 Gb Ex tb IIIC T95°C Db IP6X $-20^{\circ}$ C $\leq$ Ta $\leq$ +45 $^{\circ}$ C insulated (-20 $^{\circ}$ C $\leq$ Ta $\leq$ +55 $^{\circ}$ C uninsulated)							
Ingress Protec	tion IP6	66/67							
The technical b	pasis, with respect to equiva	lence of							
La base techni	que, en ce qui concerne l'éc	quivalence de							
Die technische	Grundlage hinsichtlich der	Normen							
Protection Star	ndards EN 60079-0, EN 60	079-1, EN 60079-5, EN	N 60079-7,	EN 60079-18, EN 61241-1					
Area Classifica	ation EN 60079-10-1 and EN	I 60079-10-2							
of compliance	with the EHSRs is valid as t	here are no changes whi	ich material	ly affect the state of technol	ogical progress of the product.				
en conformité	avec les EESS est valide p	uisqu'il n'y a aucun char	ngement qu	ui affecte matériellement l'é	tat de l'évolution technologique d				
produit.									
zur Erfüllung d	er GSGA ist gegeben, da ke	eine Änderungen erfolgt s	sind, die eir	en Einfluss auf den technis	chen Stand des Produkts haben.				
Terms of the d	irective:			Standard & Date Certified to	Standards Date Declared to				
Prescription de				Standard & date certifiée à	Normes date Déclaré				
	n der Richtlinie:		(	Standard & Datum Zertifizier					
	Equipment and prote	ective systems intended	-	EN 60079-0 : 2009	2012				
2014/34/EU	in potentially explosiv			EN 60079-1 : 2007	2014				
		tèmes de protection des		EN 60079-5 : 2007	2015				
2014/34/UE	'''	atmosphères potentie		EN 60079-7 : 2007	2015				
	explosibles.								
		Geräte und Schutzsysteme zur bestimmungs-			2015				
2014/34/EU	gemäßen Verwen	gemäßen Verwendung in explosionsfähigen			EN 60079-31 : 2014				
	Bereichen.	Bereichen.							
2014/30/EU	T		1 -						
2014/30/EU 2014/30/UE	Electromagnetic com			EN 55015 : 2013					
2014/30/UE 2014/30/EU	Compatibilité électro	ectromagnétique		EN 61547 : 2009					
2014/30/EU	Elektromagnetische	Verträglichkeit	E	EN 61000-3-2 : 2014					
2014/35/EU	Low voltage equipme	unt .		EN 60598-1 : 2015					
2014/35/UE				EN 60598-1 : 2015 EN 60529 : 1992					
2014/35/EU		ements électriques à bas voltage rspannungsgeräte / -systeme		EN 60529 : 1992 EN 60598-2-22 : 2014					
	Mederspannungsger	ate / -systeme		IN 00390-2-22 . 2014					
2012/19/EU	Waste of electrical a	nd electronic equipment		Shell Deluge DTS-01 : 1991					
2012/19/UE				Seismic EN 60068-3-3 : 199	3				
		Déchets d'équipements électriques et électroniques  Entsorgung der elektrischen und elektronischen							
2012/19/EU Geräte / System		onon una cicittoi		EC 60980-6 : 1993					
2011/65/EU	RoHS II Directive								
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complémentair	es: 4kV.								
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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			Technical Manager	2000	0
Nom et Date	om et Date Mark Poutney		Directeur technique MURA		e()
Name und Datum			Technischer Leiter		
Quality Assurance Notification by:		Baseefa Ltd.	Quality Management System Acreditation:		ISO 9001
Notification d'assurance qualité par:		1180	Certification du système de gestion de la qualité:		by/par/durch
Qualitätssicherungsnotifil	kation durch:		Qualitätsmanagementsystem Akkreditierung:		Loyd's Register
			Certificate No./Certificat N°/Zertifikat Nr.		LRQ 4005876