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HAZ
AREA

LIGHTING

FOR HAZARDOUS AREAS

HADAR
LIGHTING



Engineering Solutions
Design to Manufacture

The Hadar Lighting Range

Designed and manufactured in the UK by A-Belco Hazardous Area, the portfolio of products comprises:

- Fluorescent
- Recessed
- Portable
- Bulkhead
- Wellglass
- Floodlight
- LED

Suitable for use in any environment where an explosive atmosphere may exist, the range of luminaires within the Hadar Lighting portfolio are certified to Zone 1, Ex e, Ex d, and Zone 2 Ex n.

Launched in 2005, a high degree of engineering expertise, project knowledge, experience and investment in the Hadar Lighting range is reflected through the high specification construction of the luminaires.

The innovative, modular and low maintenance designs incorporate the latest technologies, ensuring a comprehensive lighting product offering. The Ex e products feature the "End of Life" (EoL) protection circuit ballast according to DIN EN 61347-2-3 and IEC 60079-7 Ed.4.

Working alongside our network of UK and global distributors and partners in Australia, Singapore and Malaysia, USA and UAE, we offer competitive export bid packages for a wide range of projects. From design to manufacture, we excel in quality, price, delivery and after sales support.





LIGHTING RANGE

Zone 1

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Zone 2

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KEY FEATURES - Zone 1 Ex em Fluorescent Luminaire

- Simple installation.
- Straightforward maintenance.
- Pole mount option.
- Emergency version available.
- Rugged construction.
- Easily relamped with detachable lamp envelope.
- Mains isolation not required when relamping.
- Short gaskets for proven ingress protection.
- Mounting in any attitude.
- Features a reflector compatible with Unistrut channel support systems and accessories.
- Pole Mount available.
- Continuous monitoring of fluorescent lamps ensures safe end of life shutdown by electronic ballast in accordance with HSE safety notice 8/05.
- Overvoltage protection 320V for 1 minute.
- Electronic control gear for instant operation and reduced running costs.
- High frequency electronic ballast suitable for operation at lower temperatures.

Incorporates the new “End of Life” (EoL) protection circuit ballast - according to DIN EN 61347-2-3 and IEC 60079-7 Ed.4 Annex H

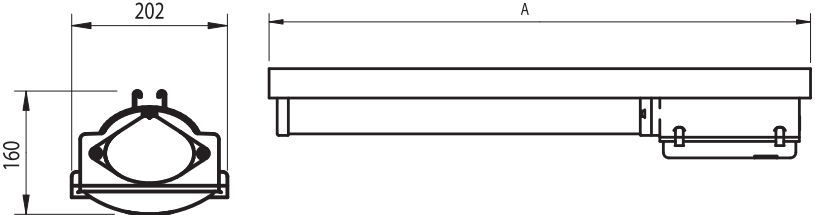


PROTECTION II 2GD Ex emb II T4/T5 IP66/67
Ex tD A21 T100°C

CERTIFICATION ATEX & IEC Ex CERTIFIED BY SIRA; ABS APPROVED FOR MARINE USE

	Certification	Ambient	Voltage Range	Certificate
HDL 100	II 2GD Ex emb II T4/T5 IP66/67	2 x 18W / 36W -30°C to +55°C T4 -30°C to +32°C T5 2 x 58W -30°C to +53°C T4 Emergency Range -15°C	110V to 254V	IEC Ex SIR 06.0026X SIRA 06 ATEX 3079X ABS 07-LD219463-PDA

DIMENSIONS



	A	Weight
2 x 18W	970mm	4kg
2 X 36W	1580mm	5.8kg
2 X 58W	1880mm	6.8kg

EMERGENCY VERSION

Standard emergency - one fluorescent lamp remains at a reduced output.
Can be operated maintained or non maintained.

SPECIFICATION

Enclosure	Polycarbonate
Lamp Envelope	Polycarbonate
Reflector	Aluminium Powder Coated
Gaskets	Silicone
External Fasteners	A4 Stainless Steel
T Rating	T4/T5 Gas and Dust
Surface Temp	100°C



ELECTRICAL SPECIFICATIONS

Lamp Options	Electrical Specification		
	Power consumption	Power factor	Power supply
2 x 18W	32W circuit watts at 240V - 0.14A (120V - 0.28A)	Better	220V - 254V, 47/63 Hz AC/DC
2 x 36W	62W circuit watts at 240V - 0.27A (120V - 0.54A)	Than	110V - 130V, 47/63 Hz AC/DC (2 x 18W/2 x 36W only)
2 x 58W	92W circuit watts at 240V - 0.40A (120V - 0.80A)	0.95	Emergency version as above - AC only

INSTALLATION

Terminals	Up to 6mm ² clamp terminals for live, live switched, neutral, earth and looping are provided. Internal and external earth as standard. Screw terminals upon request.
Cable Entries	2 x M20. Pole mount fittings supplied with 1 x M20 (other entries upon request).
Suspension	The aluminium reflector incorporates a channel which is compatible with Unistrut (or equivalent) fixings and accessories and allows the installer to select variable fixing centres. Technical Booklet with various mounting options available upon request.
Installation	Installation document AL10086 supplied.

ORDERING MATRIX

Field	Options
Product	HDL100
Version	S - Non Emergency
	E - Emergency
Fittings	L - Loop In / Loop Out
	P - Pole Mount
Voltage	H - High Voltage (220V - 254V)
	M - Medium Voltage (110V - 130V)
Cable Entries	0 - M20 entries
	5 - M25 entries
Lamp Options	218 - 2 x 18W
	236 - 2 x 36W
	258 - 2 x 58W

Notes
1) Final Product Code should be in the format: HDL100SPH0218
2) Bi-Pin as standard. Contact sales office for Single Pin.
3) For Photometric Data contact the sales office.
4) Brass earth continuity gland plates are available, contact sales office for more information.



KEY FEATURES - Zone 1 Ex em Recessed Luminaire

- Exposed 'T'/Concealed 'T' Modular ceiling type.
- Plasterboard Non-modular Ceiling type.
- Plank Ceiling type 300mm wide.
- Mild Steel painted as standard (Stainless steel also available).
- 2 x 18 W, 4 x 18W, 2 x 36W, 4 x 36W, 2 x 58W.
- Emergency version available.
- For 2 x 18W Compact Fluorescent Luminaire see - HDL 108.
- Ease of maintenance and installation.
- Wide range of lamp options.
- High frequency electronic control gear.
- Quick lamp start and flicker free operation control gear.
- High ambient areas.
- Can be installed in new or existing ceilings.
- Lightweight and robust construction.
- Cable entries can be positioned to suit customer requirements.
- Overvoltage protection 320V for 1 minute.
- Standard/Emergency gear trays interchangeable between luminaires.
- Continuous monitoring of fluorescent lamps ensures safe end of life shutdown. by electronic ballast in accordance with HSE safety notice 8/05.
- Optional mains isolation/battery isolation microswitch available.

Incorporates the new "End of Life" (EoL) protection circuit ballast - according to DIN EN 61347-2-3 and IEC 60079-7 Ed 4 Annex H

PROTECTION II 2GD Ex emb II T4/T5 IP64
Ex tD A21 T75°C

CERTIFICATION ATEX & IEC Ex CERTIFIED BY SIRA

	Certification	Ambient	Voltage Range	Certificate
HDL 102	II 2GD Ex emb II T4/T5 IP64	All ranges T4 -40°C to +55°C All ranges T5 -40°C to +40°C Emergency Range -15°C	110V - 254V	IEC Ex SIR 06.0027 SIRA 06 ATEX 3080

DIMENSIONS

DIMENSIONS FOR NON MODULAR RANGE OF RECESSIBLES
FOR MODULAR RANGE DIMENSIONS CONTACT THE SALES DEPT

	A	B	Weight
2 x 18W	700mm	299mm	10kg
2 x 36W	1310mm	299mm	16kg
2 x 58W	1610mm	299mm	18kg
4 x 18W	700mm	599mm	15kg
4 x 36W	1310mm	599mm	18kg

EMERGENCY VERSION

Emergency version as above - AC only.

SPECIFICATION

Enclosure	{ Steel Powder Coated or Stainless Steel Toughened Prismatic Glass Silicone A4 Stainless Steel
Diffuser Frame	
Diffuser	
Gasket	
External Fasteners	
T Rating	T4/T5 Gas and Dust
Surface Temp	75°C

ELECTRICAL SPECIFICATIONS

Lamp Options	Electrical Specification		
	Power consumption	Power factor	Power supply
2 x 18W T8	32W circuit watts at 240V - 0.14A (120V - 0.28A)	Better Than 0.95	220V - 254V, 47/63 Hz AC/DC 110V - 130V, 47/63 Hz AC/DC (18W/36W only) Emergency version as above - AC only
2 x 36W T8	62W circuit watts at 240V - 0.27A (120V - 0.28A)		
2 x 58W T8	92W circuit watts at 240V - 0.40A (120V - 0.80A)		
4 x 18W T8	64W circuit watts at 240V - 0.28A (120V - 0.56A)		
4 x 36W T8	124W circuit watts at 240V - 0.54A (120V - 1.08A)		

INSTALLATION

Terminals	Up to 6mm ² clamp terminals for live, live switched, neutral, earth and looping are provided. Internal and external earth as standard. Screw terminals upon request.
Cable Entries	To suit individual customer requirements.
Suspension	To suit individual customer requirements.
Installation	Installation document AL10089 supplied.

ORDERING MATRIX

Field	Options
Product	HDL102
Version	S - Non Emergency
	E - Emergency
Fittings	A - Exposed 'T'
	B - Concealed 'T'
	C - Non Modular
	D - Plank
Voltage	H - High Voltage (220V - 254V)
	M - Medium Voltage (110V - 130V)
Cable Entries	0 - M20 Entries
	5 - M25 Entries
Lamp Options	218 - 2 x 18W
	236 - 2 x 36W
	258 - 2 x 58W
	418 - 4 x 18W
	436 - 4 x 36W

Notes
1) Final Product Code should be in the format: HDL102SCH0218
2) Bi-Pin as standard. Contact sales office for single pin.
3) Mild Steel as standard, contact sales office for stainless steel.
4) For Photometric data contact the sales office.

KEY FEATURES - LED Helideck/Obstruction/Bulkhead Luminaire/Zone 1 Ex em

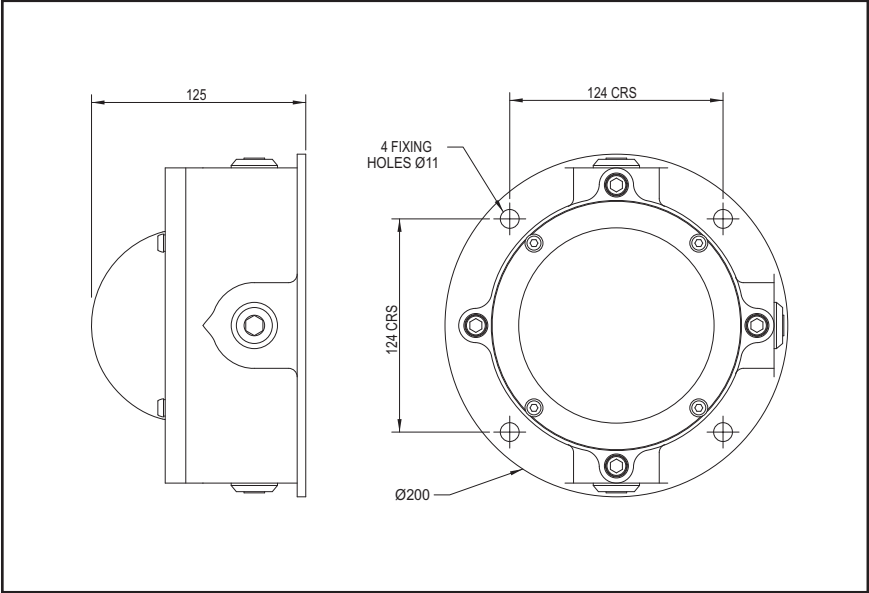
- Available in Green (Helidecks), Red (Obstruction) or White (general lighting).
- Customer can select constant light output or flashing upon installation.
- Conforms to ICAO annex 14 volume II and CAP437 for helideck perimeter lighting.
- LED technology will give a predicted working life of 10 years +.
- Utilises 6 off 1.2W LEDs.
- Low power consumption.
- Easy installation and low maintenance.
- Rugged construction - resistant to vibration.
- Instant light output.
- 360° coverage.
- Independently photometrically tested.
- All units supplied with 3 cable entries.
- IP66 and IP67.
- Optional wire guard available for extra protection.

PROTECTION II 2GD Ex emb II T4/T5/T6 IP66/67, Ex tD A21 T100°C

CERTIFICATION ATEX & IEC Ex PENDING BY SIRA

	Certification	Ambient	Voltage Range	Certificate
HDL103	II 2GD Ex emb II T4/T5/T6 IP66/67	All variants -30°C to +55°C	110V to 254V	ATEX and IEC Ex pending

DIMENSIONS



SPECIFICATION

Main Body	Marine Grade Aluminium
Clear Lens	Polycarbonate
Gaskets	Silicone/Rubber
External Fasteners	A4 Stainless Steel
T Rating	T4/T5/T6
Surface Temp	100°C
Weight	3.0kg

ELECTRICAL SPECIFICATIONS

Lamp Options	Electrical Specification		
	Power consumption	Power factor	Power supply
6 x 1.2W LED's	12W Max	N/A	110V-254V 47/63Hz AC/DC

INSTALLATION

Terminals	Up to 4mm 2 screwed terminals for live, neutral, earth and looping are provided. Internal and external earth as standard.
Cable Entries	3 x M20, one fitted with approved stopper plug, other entries available on request.
Suspension	Via 4 external mounting points.
Installation	Installation document AL10319 supplied.

ORDERING MATRIX

Field	Options
Product	HDL103
Version	G - Green LED's
	R - Red LED's
	W - White LED's
Fittings	0 - No wire guard
	1 - Wire guard fitted
Cable Entries	0 - M20
	5 - M25
Other Options	00 - Standard

Notes
1) Typical ordering reference HDL103G0000.
2) For Photometric Data contact the sales office.

KEY FEATURES - Zone 1 Ex em Portable • Temporary • Permanent • Linkable Luminaire

- 2 x 18W, 2 x 36W, 2 x 58W, 4 x 18W, 4 x 36W and 4 x 58W Compact Fluorescent Lamp.
- 2 x 18W, 2 x 36W, 2 x 58W T8 Fluorescent Lamp, Bi Pin or Single Pin.
- Wide Voltage range (24V to 254V).
- Can be supplied with direct cable entries or fitted with plugs / sockets to allow luminaires to be instantly linked in series (plug and play). Emergency versions available for T8 lamp variant.
- IP68 rated.
- Aluminium or polycarbonate end caps.
- Rugged construction.
- Easily relamped - uses standard compact fluorescent lamp / T8 lamp.
- Short gaskets for proven ingress protection.
- Mounting in any attitude.
- Features mounting points compatible with Unistrut support systems and accessories.
- Can be supplied with pre-fitted cable, plug and mounted socket (eg. ATX, Stahl, Ceag).
- Hanging / Carrying strap supplied as standard.
- Continuous monitoring of fluorescent lamps ensures safe end of life shutdown by electronic ballast in accordance with HSE safety notice 8/05 Overvoltage protection 320V for 1 minute (110V and 240V only).
- Electronic control gear for instant operation and reduced running costs.
- High frequency electronic ballast suitable for operation at lower temperatures.
- Portable versions are supplied with an anti static protective coating.
- Industrial variant available.
- Can be supplied with SY, HOFR or ships cable.
- Available with a variety of accessories, mounting stands, tripods.
- Replaceable, protective films available for use in paint shop applications.

Incorporates the new "End of Life" (EoL) protection circuit ballast - according to DIN EN 61347-2-3 and IEC 60079-7 Ed.4 Annex H



PROTECTION II 2GD Ex emb II T3/T4 IP66/67/68 (30 minutes at 3m depth)
EEx tD A21 T100°C

CERTIFICATION ATEX & IEC Ex CERTIFIED BY SIRA

	Certification	Ambient	Voltage Range	Certificate
HDL105	Cable Gland option II 2GD Ex emb II T3/T4 IP66/67/68 Plug and Socket option II 2GD Ex embd IIC T3/T4 IP66	4 x CFL -20°C to +35°C T3 2 x CFL -20°C to +44°C T3 2 x T8 -20°C to +53°C T4 Emergency Range -15°C to +53°C T4	24V - 28V AC/DC 42V - 54V AC/DC 110V - 130V AC/DC 220V - 254V AC/DC	IEC Ex SIR 07.0020 SIRA 07 ATEX 3032

EMERGENCY VERSION

Standard emergency - one fluorescent lamp remains at a reduced output
Can be operated maintained or non maintained (T8 110V or 240V ac variants only).

SPECIFICATION

End caps	Polycarbonate or Aluminium
Clear tube	Polycarbonate
Gasket	Silicone
External fasteners	A4 Stainless steel
T Rating	T3/T4 Gas and Dust
Surface Temperature	100°C



Magnetic fixing brackets allow ease of installation / removal to steel structures



Stand attachment allows vertical orientation, ideal for maintenance requirements

ELECTRICAL SPECIFICATIONS

Lamp Options	Electrical Specification		
	Typical power consumption	Power factor	Available power supplies
2 x 18W	32W	Better than 0.95	220V - 254V 47/63 Hz AC/DC (all variants) 110V - 130V 47/63 Hz AC/DC (18W & 36W only) 24V - 28V AC/DC (36W only) 42V - 54V AC/DC (36W only)
2 x 36W	62W		
2 x 55/58W	92W		
4 x 18W	64W		
4 x 36W	124W		
4 x 55W	184W		

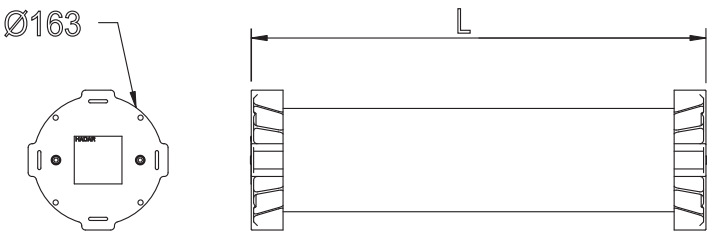
INSTALLATION

Terminals	Up to 4mm ² screwed terminals for live, live switched, neutral, earth and looping are provided. Internal earth as standard.
Suspension / Mounting	Each aluminium or polycarbonate end cap incorporates 4 channels which are compatible with Unistrut (or equivalent) fixings and accessories supplied with suitable suspension / carrying strap M6 clearance holes allow mounting plates to be attached to provide free standing luminaires. Tri pod, floor stands and other various accessories are available.
Installation	Installation document AL10171.

ORDERING MATRIX

Field	Options
Product	HDL105
Version	S - Standard E - Emergency
End Caps	A - Aluminium P - Polycarbonate
Voltage	H - High Voltage 220 - 254V M - Medium Voltage 110V - 130V L - Low Voltage 42V - 54V E - Extra Low Voltage 24V - 28V
Cable Entries	00 - Refer to Notes
Lamp Options	218 - 2 x 18W 236 - 2 x 36W 258 - 2 x 55/58W 418 - 4 x 18W 436 - 4 x 36W 458 - 4 x 55W
Lamp Type	C - Compact B - Bi Pin T8 S - Single Pin T8

DIMENSIONS

	
Lamp	Typical length mm
2 x 18W	399
2 x 36W	552
2 x 58W	676
4 x 18W	588
4 x 36W	782
4 x 58W	906
Notes	
1) Typical ordering reference: HDL105SAL00218C 2) For Photometric Data contact the sales office 3) Cable entries - over 5000 combinations (M20/M25 entries, plug, socket and cable variants). Contact the technical department.	

KEY FEATURES - Ex ed Transformer

- 316L stainless steel enclosure and skid.
- Feed through terminals.
- Input and output fuse holder.
- 400VA, 110V or 230V input, 24V or 48V output.
- Entry devices - 2 cable glands or input sockets / plugs.
- Output devices - 2 to 4 cable glands or output sockets / plugs.
- Comes mounted on a stainless steel skid.
- Related Lighting Product: HDL 105 Ex em Portable.

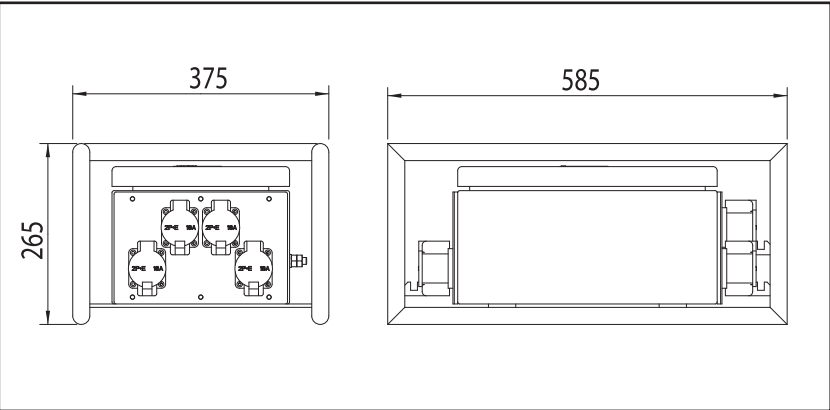


PROTECTION II 2GD Ex ed IIC T4 IP66

CERTIFICATION ATEX approved by SIRA

Table with 5 columns: Certification, Ambient, Voltage Range, and Certificate. It lists specifications for 350VA and 400VA models, ambient temperature ranges, input/output voltages, and the SIRA 07 ATEX 3277X certificate.

DIMENSIONS



SPECIFICATION

- Enclosure/Skid Gasket: A4 Stainless Steel, One Piece Polyurethane, Operating Temperature -80°C to 100°C
- Door Fixings: Hinged Removable Door with Captive Fastening Screws
- Earth Screws: M10 Internal and External Brass Earth Stud Assembly M6 Stud on the Door

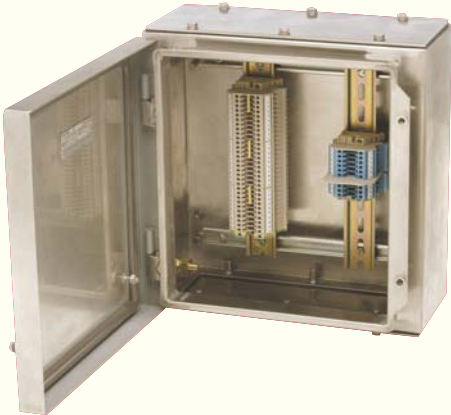
ORDERING MATRIX

Table with 2 columns: Field and Options. It details the configuration options for the product, including voltage (11V-110V, 23V-230V), frequency (5-50Hz, 6-60Hz), outlet options (4x16A, 2x16A), and inlet options (2xM20, 1xM20).

Table with 1 column: Notes. It contains two notes regarding the final product code format and contact information for non-standard variations.

KEY FEATURES - EEx e - CTB

- AISI 316L Stainless Steel.
- Used as increased safety and / or intrinsic safety enclosures in electrical systems. They can be supplied with or without terminals; with multiple boxes, modular terminals and drilled with holes according to customer specifications.
- CSTB – small terminal box with no gland plate option.
- Options include; Tag identification plates, Gland plates 1, 2, 3 and 4; Stopping plugs and Drain and breather valves.



PROTECTION CE Ex II 2GD EEx e II EEx ia IIC T6/T5 IP66

CERTIFICATION ATEX approved by SIRA

	Certification	Ambient	Certificate
Terminal Box	EEx e II T6 EEx e II T6 EEx e II T5 EEx ai IIC T6 EEx ai IIC T6 EEx ai IIC T5	-50°C to +40°C -50°C to +55°C -50°C to +55°C -50°C to +40°C -50°C to +55°C -50°C to +55°C	SIRA 03 ATEX 3386
Empty Box	EEx e II T6 EEx e II T6 EEx e II T5 EEx ai IIC T6 EEx ai IIC T6 EEx ai IIC T5	-50°C to +40°C -50°C to +55°C -50°C to +55°C -50°C to +40°C -50°C to +55°C -50°C to +55°C	SIRA 03 ATEX 3397U

DIMENSIONS

Part Number	Size mm		
	L	W	H
CSTB121208-SS	120	120	80
CSTB151509-SS	150	150	90
CSTB191910-SS	190	190	100
CTB221513	229	150	130
CTB262616	260	260	160
CTB262620	260	260	205
CTB303016	300	300	160
CTB303020	306	306	205
CTB382616	380	260	160
CTB382620	380	260	205
CTB453816	458	382	160
CTB453820	458	382	205
CTB484816	480	480	160
CTB484820	480	480	205
CTB503516	500	350	160
CTB503520	500	350	205
CTB624516	620	450	160
CTB624520	620	450	205
CTB745520	740	550	205
CTB765020	762	508	205
CTB866420	860	640	205
CTB916120	914	610	205
CTB987420	980	740	205

SPECIFICATION

- Material** Highly corrosion resistant 1.5/2.0mm stainless steel 316L or mild steel pregalvanised and painted RAL7015
1000 hours saltspray test
- Gasket** Surface treatment: ultrasonic degreased and passivated
One piece polyurethane gasket
Operating temperature -80°C to 100°C
- Door Fixings** Hinged removable door with captive fastening screws
- Box Mounting** 4 x external lugs, 11mm diameter holes
4 x direct fixing holes (M6) on rear of box (no lugs required)
Stud Assembly M6 Stud on the Door
- Internal Mounting** 4 x stand off 14mm dia. Pillars 25mm high tapped M6 for Din rail or mounting plate installations
- Earth Screws** M10 internal and external brass earth stud assembly with an M6 stud on the door

KEY FEATURES - Modular LED Luminaire/Floodlight/ZONE 1 Ex em

- Modular construction allows the modules to be interlinked with each other to provide greater light output.
- Can be used as a single unit - small floodlight or bulkhead or be linked together to replicate a large 250W/400W floodlight.
- Each module utilises 48 off 1.2W LEDs.
- Integrated power supply.
- Low power consumption.
- Rugged construction - resistant to vibration.
- Independently photometrically tested.
- All units supplied with 2 cable entries.
- IP66 and IP67.
- Optional wire guard available for extra protection.
- Infra red variants available.
- Wide, medium and narrow beam light output available.

In comparison to typical Ex d floodlights -

- 60% less weight.
- 50% less power consumption.
- One man installation.
- LED technology will give a predicted Lamp life of 10 years+.
- No light pollution.
- Instant restrike.
- No light degradation at low temperatures.
- Penetrating white light.
- Photocell option available.
- No flamepaths to maintain.
- Low cost of installation, operation and maintenance.

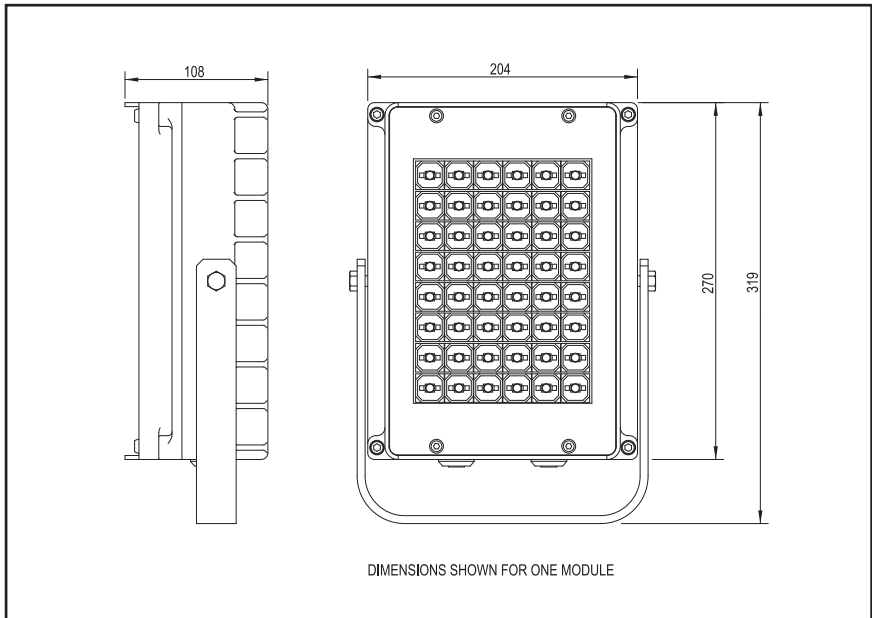


PROTECTION II 2GD Ex emb II T4/T5/T6 IP66/67, Ex tD A21 T100°C

CERTIFICATION ATEX & IEC Ex PENDING BY SIRA

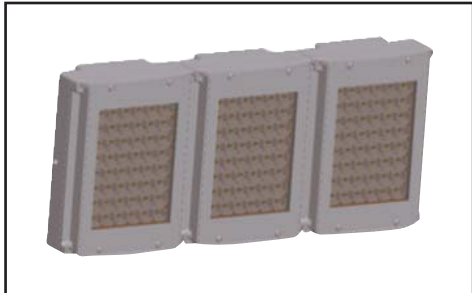
	Certification	Ambient	Voltage Range	Certificate
HDL106	II 2GD Ex emb II T4/T5/T6 IP66/67	-50°C to +55°C	110V to 254V	ATEX and IEC Ex pending

DIMENSIONS



SPECIFICATION

Main Body	Marine Grade Aluminium
Diffuser	Toughened Glass 5mm
Gaskets	Silicone
External Fasteners	A4 Stainless Steel
Stirrup Bracket	Steel Painted or 316 Stainless Steel
T Rating	T4/T5/T6
Surface Temp	100°C
Weight	6.0kg per module





ELECTRICAL SPECIFICATIONS

Lamp Options	Electrical Specification		
	Power consumption	Power factor	Power supply
48 x 1.2W LED's	80W Max	0.95	110V - 254V 47/63Hz AC/DC
96 x 1.2W LED's	160W Max		
144 x 1.2W LED's	240W Max		

INSTALLATION

Terminals	Up to 6mm 2 clamp terminals for live, neutral, earth and looping are provided. Internal and external earth as standard. Screw terminals upon request.
Cable Entries	2 x M20, one fitted with approved stopper plug, other entries available on request.
Suspension	Via stirrup bracket, other mounting accessories available.
Installation	Installation document AL10320 supplied.

ORDERING MATRIX


Field	Options
Product	HDL106
Version	1 - 48 LED's
	2 - 96 LED's
	3 - 144 LED's
Beam Pattern	W - Wide
	M - Medium
	N - Narrow
Fittings	0 - Painted steel external brackets
	1 - 316 SS external brackets
Cable Entries	0 - M20
	5 - M25
Other Options	00 - Standard

Notes
1) Typical ordering reference HDL1061W0000.
2) For Photometric Data contact the sales office.

KEY FEATURES - Zone 1 Ex em Bulkhead • Fire Exit • Recessed Luminaire

- 2 x 18W Compact fluorescent lamp for mains operation.
- Ideal for exit signs - wall or ceiling mounted.
- Visible Glass area 300mm x 150mm (standard size for fire exit signage).
- Mild Steel painted as standard (Stainless steel also available).
- Simple Installation.
- Straightforward maintenance.
- Recessed or surface mounting.
- For Standard Ex em Recessed Luminaire see data sheet HDL 102.
- Lightweight and robust construction.
- Mounting in any attitude.
- Low profile.
- Continuous monitoring of fluorescent lamps ensures safe end of life shutdown. by electronic ballast in accordance with HSE safety notice 8/05.
- Overvoltage protection 320V for 1 minute.
- Quick lamp start and flicker free operation control gear.
- Cable entries in any face or rear.
- Can be supplied with signage or facility for end user to fit own.
- Other warning signage can be used.

Incorporates the new "End of Life" (EoL) protection circuit ballast - according to DIN EN 61347-2-3 and IEC 60079-7 Ed.4 Annex H

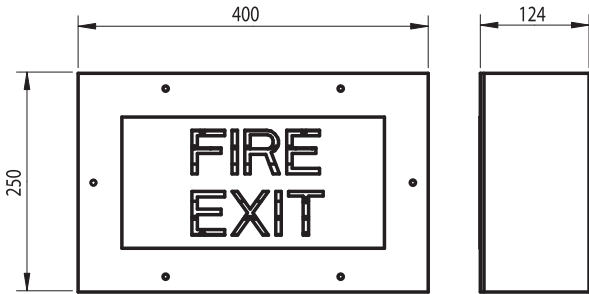


PROTECTION II 2GD Ex emb II T3/T4 IP64
Ex tD A21 T90°C

CERTIFICATION ATEX & IEC Ex CERTIFIED BY SIRA

	Certification	Ambient	Voltage Range	Certificate
HDL 108	II 2GD Ex emb II T3/T4 IP64	Standard Range -40°C to +55°C T3 -40°C to +35°C T4 Emergency range -15°C to +55°C T3 -15°C to +35°C T4	110V - 254V	IEC Ex SIR 06.0027 SIRA 06 ATEX 3080

DIMENSIONS



(Surface Mount Variant)

Lamp	Weight
2 x 18W Std	3kg
2 x 18W Emergency	3.5kg

EMERGENCY VERSION

Standard emergency - one fluorescent lamp remains at a reduced output. Can be operated maintained or non maintained.

FIRE EXIT SIGN

Visible glass area 300mm x 150mm (standard size for fire exit signage) Wall or ceiling mounted. Can be supplied with signage or facility for end user to fit own. Other warning signage can be used.

SPECIFICATION

Enclosure	{ Steel Powder Coated Or Stainless Steel Toughened Prismatic Glass Silicone A4 Stainless Steel T3/T4 Gas and Dust 90°C
Diffuser Frame	
Diffuser	
Gasket	
External Fasteners	
T Rating	
Surface Temp	

ELECTRICAL SPECIFICATIONS

Lamp Options	Electrical Specification		
	Power consumption	Power factor	Power supply
2 x 18W CFL STD	32W circuit watts at 240V - 0.14A (120V - 0.28A)	Better	220V - 254V, 47/63 Hz AC/DC
2 x 18W CFL EM	36W circuit watts at 240V - 0.15A (120V - 0.3A)	Than	110V - 130V, 47/63 Hz AC/DC
		0.95	Emergency version as above - AC only

INSTALLATION

Terminals	Up to 6mm ² clamp terminals for live, live switched, neutral, earth and looping are provided. Internal and external earth as standard. Screw terminals upon request
Cable Entries	To suit individual customer requirements
Suspension	Via internal mounting holes
Installation	Installation document AL10091 supplied

ORDERING MATRIX


Field	Options
Product	HDL108
Version	S - Non Emergency
	E - Emergency
Fittings	R - Recessed
	S - Surface Mount
Voltage	H - High Voltage (220V - 254V)
	M - Medium Voltage (110V - 130V)
Cable Entries	0 - M20 Entries
	5 - M25 Entries
Lamp Options	218 - 2 x 18W

Notes
1) Final Product Code should be in the format: HDL108SRH0218
2) Please specify any signage required at the point of ordering.
3) Mild steel as standard, contact the sales office for stainless steel.
4) For Photometric Data contact the sales office.

KEY FEATURES - Zone 1 Ex em Bulkhead / Fire Exit Luminaire - Plastic

- 2 x 18W Compact fluorescent lamp for mains operation or emergency option.
- Ideal for exit signs - wall or ceiling mounted.
- Simple Installation.
- Straightforward maintenance.
- Emergency version available.
- Various colour diffusers available - suitable for Helideck or obstruction type lighting.
- Lightweight and robust construction.
- Short gaskets for proven ingress protection.
- Mounting in any attitude.
- Features mounting points compatible with Unistrut support systems and accessories.
- Low Profile.
- Continuous monitoring of fluorescent lamps ensures safe end of life shutdown by electronic ballast in accordance with HSE safety notice 8/05.
- Overvoltage protection 320V for 1 minute.
- Quick lamp start and flicker free operation control gear.
- Supplied complete with lamps.
- Uses standard compact fluorescent lamps.
- Bulkhead fitting interchangeable with spares of Hadar Exe Fluorescent Luminaire.

Incorporates the new "End of Life" (EoL) protection circuit ballast - according to DIN EN 61347-2-3 and IEC 60079-7 Ed.4 Annex H

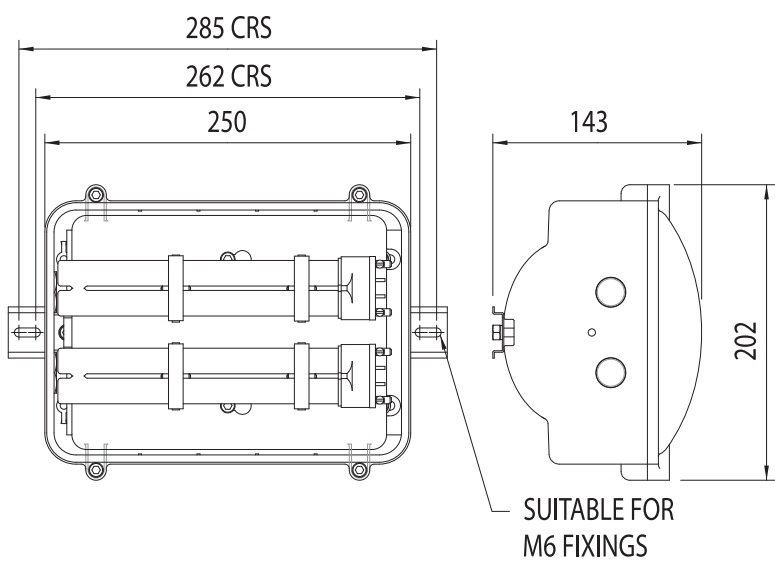


PROTECTION II 2GD Ex emb II T3 IP66/67
Ex tD A21 T100°C

CERTIFICATION ATEX & IEC Ex CERTIFIED BY SIRA

	Certification	Ambient	Voltage Range	Certificate
HDL 109	II 2GD Ex emb II T3 IP66/67	Standard Range -20°C to +40°C Emergency Range -15°C to +40°C	110V - 254V	IEC Ex SIR060026X SIRA 06 ATEX 3079X

DIMENSIONS



Lamp	Weight
2 x 18W	2.5kg
2 x 18W Emergency	3kg

EMERGENCY VERSION

Standard emergency - one fluorescent lamp remains at a reduced output.
Can be operated maintained or non maintained.

FIRE EXIT SIGN

Wall or ceiling mounted.
Can be supplied with signage or facility for end user to fit own.
Other warning signage can be used.

SPECIFICATION

Enclosure	Polycarbonate
Mounting Bracket	Aluminium or Steel Powder Coated
Gasket	Silicone
External Fasteners	A4 Stainless Steel
T Rating	T3 Gas and Dust
Surface Temp	100°C

ELECTRICAL SPECIFICATIONS

Lamp Options	Electrical Specification		
	Power consumption	Power factor	Power supply
2 x 18W CFL STD	32W circuit watts at 240V - 0.14A (120V - 0.28A)	Better	220V - 254V, 47/63 Hz AC/DC
2 x 18W CFL EM	36W circuit watts at 240V - 0.15A (120V - 0.3A)	Than	110V - 130V, 47/63 Hz AC/DC (2 x 18W/2 x 36W only)
		0.95	Emergency version as above - AC Only

INSTALLATION

Terminals	Up to 6mm² clamp terminals for live, live switched, neutral, earth and looping are provided. Internal and external earth as standard. Screw terminals upon request.
Cable Entries	2 x M20. Pole mount fittings supplied with 1 x M20 other entries available on request.
Suspension	Via bracket supplied or Unistrut reflector.
Installation	Installation document AL10090 supplied.

ORDERING MATRIX

Field	Options
Product	HDL109
Version	S - Non Emergency
	E - Emergency
Fittings	U - Loop In/Out (Unistrut)
	L - Loop In/Out (Bracket)
	P - Pole Mount
Voltage	H - High Voltage (220V - 254V)
	M - Medium Voltage (110V - 130V)
Cable Entries	0 - M20 Entries
	5 - M25 Entries
Lamp Options	218 - 2 x 18W

Notes
1) Final Product Code should be in the format: HDL109SUH0218
2) For Photometric Data contact the sales office.
3) Brass earth continuity gland plates are available, contact sales office for more information.

KEY FEATURES - Zone 1 Ex ed or Ex de Wellglass

- Simple installation.
- Straightforward maintenance.
- Integral control gear - easily removed.
- Wide choice of voltage and lamp options.
- Ex e terminal chamber.
- Internal flamepaths eliminating risk of corrosion and costly damage.
- Control gear and associated components housed in separate easily removed assembly.
- The unique innovative design allows luminaires to be easily converted.
- from Zone 1 to Zone 2 and vice versa.
- Lamp types and wattages can also be easily changed by new easily removed control gear assembly.
- Elliptical or tubular lamps.
- Zone 2 variants available.
- Optional external reflector - ideal for warehousing.

PROTECTION II 2GD Ex ed or de IIC T3 IP66/67
Ex tD A21 195°C

CERTIFICATION ATEX & IEC Ex CERTIFIED BY SIRA

Certification	Ambient	Voltage Range	Certificate
II 2GD Ex ed or de IIC T3 IP66/67	-20°C to +50°C	see table below	Certificate pending

DIMENSIONS

HDL134
HDL114
WITH EXTERNAL REFLECTOR

HDL134
HDL114

HDL133
HDL113

3 HOLES Ø13

Type	Description	Weight	Voltage
HDL 133	55W & 85W QL LAMPS	10kg	110V to 130V 220V to 240V 50/60Hz AC/DC
HDL 134	165W QL LAMPS	15kg	220V to 240V 50/60Hz AC/DC
HDL 113	50W to 150W SON, MBI, MBF, GLS	13kg	220V, 230V, 240V, 250V 50/60Hz
HDL 114	150W to 400W SON, MBI, MBF, GLS	18kg	220V, 230V, 240V, 250V 50/60Hz

SPECIFICATION

Main Body Marine Grade Aluminium
Lamp Glass Toughened Glass
External Fasteners A4 Stainless Steel
T Rating T3/T4/T5
Surface Temperature 195°C
External Reflector Aluminium



ELECTRICAL SPECIFICATIONS

Lamp Options	Electrical Specification		
	Lamp holder	Power factor	Power consumption
55W QL 85W QL 165W QL	N/A N/A N/A	0.95	60W 95W 182W
50W MBF 80W MBF 125W MBF 250W MBF 400W MBF 50W SON 70W SON 150W SON 250W SON 400W SON 70W MBI 100W MBI 150W MBI 250W MBI 400W MBI 500W (Max) GLS	E27 E27 E27 E40 E40 E27 E27 E40 E40 E40 E27 E27 E27 E40 E40 E40	0.85	55W 90W 140W 280W 440W 55W 80W 170W 275W 440W 80W 115W 170W 280W 440W 500W

ORDERING MATRIX

Field	Options
Product	HDL133S
	HDL134S
	HDL113S
	HDL114S
Voltage	11 - 110V
	22 - 220V
	23 - 230V
	24 - 240V
	25 - 250V
Frequency	5 - 50Hz
	6 - 60Hz
Cable Entries	00 - 2 x M20
	05 - 2 x M25
Lamp Options	55 - 55W
	85 - 85W
	165 - 165W
	50 - 50W
	70 - 70W
	80 - 80W
	100 - 100W
	125 - 125W
	150 - 150W
	250 - 250W
Options	400 - 400W
	Q - QL Lamp
	M - MBF Mercury
	H - MBI Metal Halide
	E - SON High Pressure Sodium
	G - GLS

INSTALLATION

Terminals	Up to 6mm² clamp terminals for live, live switched, neutral, earth and looping are provided. Internal and external earth as standard.
Cable Entries	2 x M20. Other entries available on request
Suspension	Via stirrup bracket supplied. See drawings opposite.
Installation	Installation document AL10173 supplied.

Notes
1) Final Product Code should be in the format: HDL113S24500400E
2) For Photometric Data contact the sales office.
3) External reflector item no. ALA90056.

CERTIFICATION

Type	Certification
HDL 133	Ex ed
HDL 134	Ex ed
HDL 113	Ex de
HDL 114	Ex de

KEY FEATURES - Zone 1 Ex de Floodlight

- 150W, 250W and 400W discharge lamps.
- 500W max tungsten halogen lamp.
- Simple installation.
- Straightforward maintenance.
- Integral control gear.
- wide choice of voltage options.
- Marine grade aluminium.
- Lightweight.
- Robust.
- Ex e junction box.
- Suitable for use with twin arc lamps.
- Wide beam reflector.

PROTECTION II 2G Ex de IIB T2/T3 IP56

CERTIFICATION ATEX & IEC Ex CERTIFIED BY SIRA

	Certification	Ambient	Voltage Range	Certificate
HDL 117	II 2G Ex de IIB T2/T3 IP56	150W -20°C to +40°C T3 250W -20°C to +40°C T3 400W -20°C to +40°C T3 (110V, 120V, 220V) 400W -20°C to +40°C T2 (230V / 240V) 500W -20°C to +40°C T2	110V to 240V	IEC Ex SIR 07.0023 SIRA 07 ATEX 1059

DIMENSIONS

Lamp	Weight
Discharge	20 kg
GLS / TH	15 kg

SPECIFICATION

Main Body	Marine Grade Aluminium
Lamp Glass	Toughened Soda Lime
External Fasteners	A4 Stainless Steel
T Rating	T2 and T3



ELECTRICAL SPECIFICATIONS

Lamp Options	Electrical Specification		
	Power consumption	Power factor	Power supply
150W	170W	0.85	110V, 120V, 220V, 230V 240V, 50/60 Hz
250W	280W		
400W	435W		
500W	500W		

INSTALLATION

Terminals	Exe terminal chamber with terminal block suitable for looping 6mm ² cable.
Cable Entries	2 x M20 (other entries available on request).
Suspension	Steel mounting bracket. See dimensions above for fixing.
Installation	Installation document AL10204 supplied.


ORDERING MATRIX

Field	Options
Product	HDL 117S
Voltage	11 – 110V
	12 – 120V
	22 – 220V
	23 – 230V
	24 – 240V
Frequency	5 – 50Hz
	6 – 60Hz
Cable Entries	0 – 2 x M20
	5 – 2 x M25
Lamp Options	150 - 150W
	250 – 250W
	400 – 400W
	500 – 500W
Options	H – MBI Metal Halide
	E – SON High Pressure Sodium
	T – Tungsten Halogen

Notes
1) Final Product Code should be in the format: HDL117S2450400E
2) For Photometric Data contact the sales office.

KEY FEATURES - Zone 2 EEx nA Fluorescent Luminaire / Emergency Fluorescent

- The Zone 2 EEx nA Fluorescent Luminaire is designed from a high specification of corrosion resistant glass reinforced polyester body and high impact polycarbonate diffuser to give the highest protection to ATEX standards for EEx nA applications.
- The luminaire features stainless steel diffuser retaining clips and zinc steel gear tray for rapid installation and easy maintenance.
- 18W, 36W, 58W Single or Twin.
- High specification.
- SIRA certified.
- Rapid installation.
- Ease of maintenance.
- Certified components.
- High Frequency Electronic Ballast.
- High Impact GRP Base.
- High Impact Polycarbonate Diffuser.
- Stainless Steel Diffuser Clips As Standard.
- Loop-in/Loop-Out as standard.
- Through wired versions available.
- Low Smoke Zero Halogen Option.
- IP65

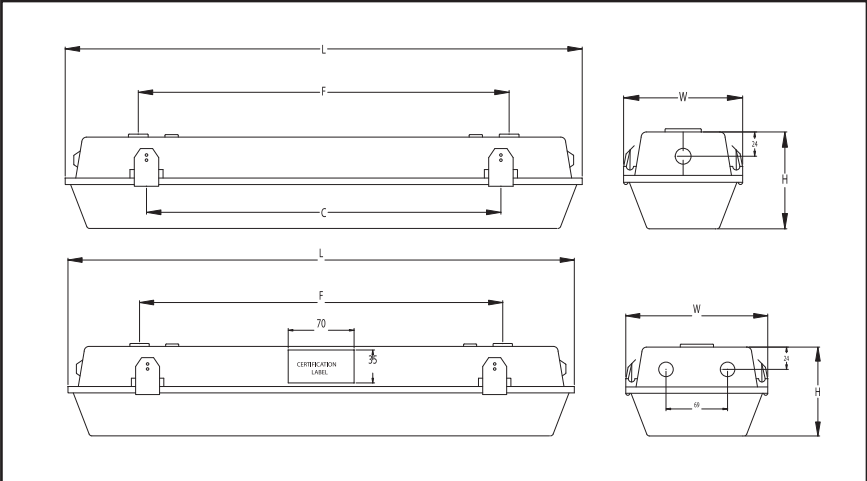


PROTECTION Ex II 3GD EEx nA II T3/T4 IP65 T140°C

CERTIFICATION ATEX CERTIFIED BY SIRA

	Certification	Ambient	Voltage Range	Certificate
HDL 220	Standard Ex II 3GD EEx nA II T3/T4 IP65 Emergency Ex II 3GD EEx nC T4 IP65	Standard Range 18W -20°C to +40°C T4 36W -20°C to +40°C T4 58W -20°C to +50°C T3 -20°C to +40°C T4 Emergency Range 18W -15°C to +40°C T4 36W -15°C to +40°C T4 58W -15°C to +40°C T4	220V - 240V	SIRA 03ATEX 4566X

DIMENSIONS



	L	W	H	F	C
1 x 18W Luminaires	702	116	114	500	480 x 2 clips per side
1 x 36W Luminaires	1312	116	114	800	400 x 4 clips per side
1 x 58W Luminaires	1612	116	114	1100	380 x 5 clips per side
2 x 18W Luminaires	702	186	114	500	Weight Contact Sales Office
2 x 36W Luminaires	1312	186	114	800	
2 x 58W Luminaires	1612	186	114	1100	

EMERGENCY VERSION

Twin Unit
3 Hour Battery duration

SPECIFICATION

Enclosure	Corrosion resistant
Diffuser	Glass reinforced polyester
Retaining Clips	High Impact Polycarbonate
Gear Tray	Stainless Steel
Control Gear	Zinc Steel Painted
T Rating	High Frequency Electronic
	T4 Gas and Dust
	58W also available in T3
Surface Temp	140°C

ELECTRICAL SPECIFICATIONS

Lamp Options	Electrical Specification		
	Power consumption	Power factor	Power supply
1 x 18W (600mm Luminaire)	20W	Better Than 0.95	220V - 240V, 47/63 Hz AC/DC Emergency version AC only
1 x 36W (1200mm Luminaire)	38W		
1 x 58W (1500mm Luminaire)	60W		
2 x 18W (600mm Luminaire)	39W (Emergency - 49W)		
2 x 36W (1200mm Luminaire)	73W (Emergency - 83W)		
2 x 58W (1500mm Luminaire)	113W (Emergency - 132W)		

INSTALLATION

Terminals	Suitable for up to 4.00mm² cable. 6.00mm² on request.
Cable Entries	20mm clearance holes.
Suspension	To suit individual customer requirements.
Options	Through Wiring available (Loop In/Loop Out as standard) Low smoke zero halogen available.

ORDERING MATRIX

Field	Options
Product	HDL220
Version	S - Non Emergency
	E - Emergency
Fittings	L - Loop In/Loop Out
	T - Through Wired
Lamp Options	118 - 1 x 18W
	136 - 1 x 36W
	158 - 1 x 58W
	218 - 2 x 18W
	236 - 2 x 36W
	258 - 2 x 58W

Notes
1) Final Product code should be in the format: HDL220SL118
2) For Photometric data contact the sales office.

KEY FEATURES - Zone 2 Ex nR Wellglass

- Simple installation.
- Straightforward maintenance.
- Integral control gear - easily removed.
- Wide choice of voltage and lamp options.
- Ex e terminal chamber.
- Internal flamepaths eliminating risk of corrosion and costly damage.
- Control gear and associated components housed in separate easily removed assembly.
- The unique innovative design allows luminaires to be easily converted.
- from Zone 1 to Zone 2 and vice versa.
- Lamp types and wattages can also be easily changed by new easily removed control gear assembly.
- Elliptical or tubular lamps.
- Zone 1 variants available.
- Optional external reflector - ideal for warehousing.



PROTECTION II 2GD Ex nR II T3 IP66/67

CERTIFICATION ATEX & IEC Ex CERTIFIED BY SIRA; ABS APPROVED FOR MARINE USE

Table with 5 columns: Certification, Ambient, Voltage Range, Certificate. Row 1: II 2GD Ex nR or de IIC T3 IP66/67, -20°C to +50°C, see table below, Certificate pending

DIMENSIONS

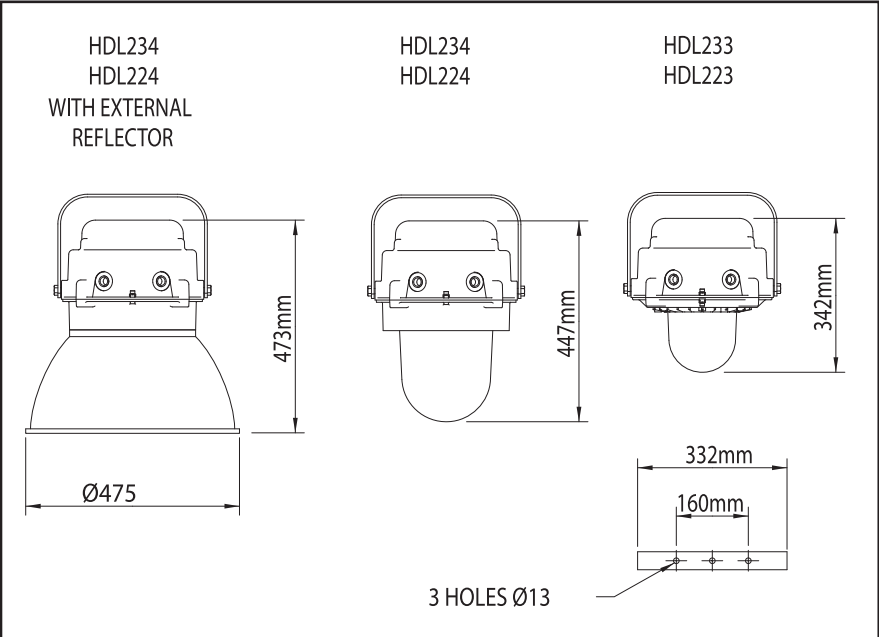


Table with 4 columns: Type, Description, Weight, Voltage. Rows include HDL 233 (55W & 85W QL LAMPS, 10kg), HDL 234 (165W QL LAMPS, 15kg), HDL 213 (50W to 150W SON, MBI, MBF, GLS, 13kg), HDL 214 (150W to 400W SON, MBI, MBF, GLS, 18kg)

SPECIFICATION

- Main Body: Marine Grade Aluminium
- Lamp Glass: Toughened Glass
- External Fasteners: A4 Stainless Steel
- T Rating: T3/T4/T5
- Surface Temperature: 195°C
- External Reflector: Aluminium



ELECTRICAL SPECIFICATIONS

Lamp Options	Electrical Specification		
	Lamp holder	Power factor	Power consumption
55W QL 85W QL 165W QL	N/A N/A N/A	0.95	60W 95W 182W
50W MBF 80W MBF 125W MBF 250W MBF 400W MBF 50W SON 70W SON 150W SON 250W SON 400W SON 70W MBI 100W MBI 150W MBI 250W MBI 400W MBI 500W (Max) GLS	E27 E27 E27 E40 E40 E27 E27 E40 E40 E40 E27 E27 E27 E40 E40 E40	0.85	55W 90W 140W 280W 440W 55W 80W 170W 275W 440W 80W 115W 170W 280W 440W 500W

ORDERING MATRIX

Field	Options
Product	HDL233S
	HDL234S
	HDL223S
	HDL224S
Voltage	11 - 110V
	22 - 220V
	23 - 230V
	24 - 240V
	25 - 250V
Frequency	5 - 50Hz
	6 - 60Hz
Cable Entries	00 - 2 x M20
	05 - 2 x M25
Lamp Options	55 - 55W
	85 - 85W
	165 - 165W
	50 - 50W
	70 - 70W
	80 - 80W
	100 - 100W
	125 - 125W
	150 - 150W
	250 - 250W
	400 - 400W
Options	Q - QL Lamp
	M - MBF Mercury
	H - MBI Metal Halide
	E - SON High Pressure Sodium
	G - GLS

INSTALLATION

Terminals	Up to 6mm² clamp terminals for live, live switched, neutral, earth and looping are provided. Internal and external earth as standard.
Cable Entries	2 x M20. Other entries available on request
Suspension	Via stirrup bracket supplied. See drawings opposite.
Installation	Installation document AL10173 supplied.

Notes
1) Final Product Code should be in the format: HDL223S24500400E
2) For Photometric Data contact the sales office.
3) External reflector item no. ALA90056.

KEY FEATURES - Zone 2 EEx nR Floodlight

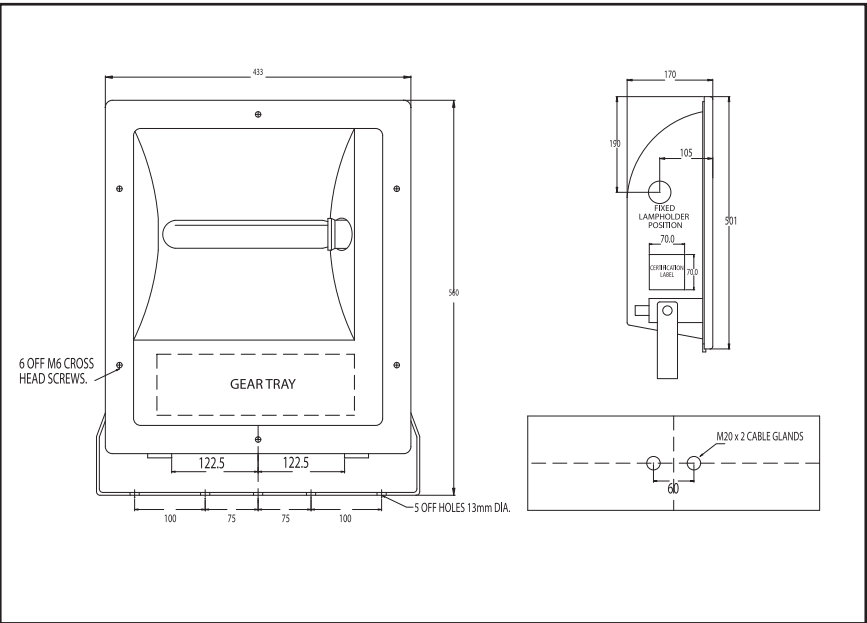
- The HDL 227 marine grade aluminium alloy floodlight with high performance photometrics is designed to withstand highly corrosive and Zone 2 hazardous area environments.
- The EEx nR restricted breathing floodlight is constructed from a compact and lightweight design and is available in 150W, 250W and 400W high pressure sodium or metal halide.
- 150W, 250W, 400W.
- High performance photometrics.
- Restricted breathing.
- SIRA certified.
- Lightweight design.
- High pressure sodium/metal halide.
- Marine Grade Alloy Body.
- Hinged Front Cover.
- Toughened Glass.
- Compact & Lightweight Design.
- Loop-in, Loop-out as standard.
- Stirrup Bracket, Galvanised Steel.
- Stainless Steel Cover & Bracket Screws.
- IP65.

PROTECTION Ex II 3GD EEx nR II T3/T2 IP65

CERTIFICATION ATEX CERTIFIED BY SIRA

	Certification	Ambient	Voltage Range	Certificate
HDL 227	Ex II 3GD EEx nR II T3/T2 IP65	-40°C to +56°C	220V - 240V	SIRA 03ATEX 4061

DIMENSIONS



SPECIFICATION

Body	Marine Grade Aluminium Alloy LM6
Front	Hinged Front Cover
Diffuser	Toughened Glass 4mm
Reflector	Symmetrical Dimpled
Control Gear	Anodised Polished Aluminium
Stirrup Bracket	Galvanised Steel
Cover	Stainless Steel
Bracket Screws	Stainless Steel

AMBIENTS / MOUNTING ATTITUDES

W	Attitude Point	PFC	NO PFC
150W T3	0°	-40°C to +40°C	-40°C to +56°C
	30°	-40°C to +38°C	-40°C to +56°C
	45°	-40°C to +37°C	-40°C to +56°C
	60°	-40°C to +35°C	-40°C to +56°C
	90°	-40°C to +31°C	-40°C to +45°C
250W T3	0°	-40°C to +40°C	-40°C to +56°C
	30°	-40°C to +38°C	-40°C to +56°C
	45°	-40°C to +37°C	-40°C to +56°C
	60°	-40°C to +35°C	-40°C to +56°C
	90°	-40°C to +31°C	-40°C to +45°C
400W T2	0°	-40°C to +35°C	-40°C to +35°C
	30°	-40°C to +35°C	-40°C to +35°C
	45°	-40°C to +30°C	-40°C to +35°C
	60°	-40°C to +25°C	-40°C to +25°C
	90°	-40°C to +25°C	-40°C to +25°C

ELECTRICAL SPECIFICATIONS

Lamp Options	Electrical Specification		
	Power consumption	Power factor	Power supply
150W	168W	Better Than 0.85	220V - 240V 50 Hz AC Other voltages and frequencies available upon request.
250W	280W		
400W	433W		

INSTALLATION

Terminals	Suitable for up to 4.00mm cable.
Cable Entries	2 x M20 (other cable entries available upon request).
Suspension	See dimensional diagram.

ORDERING MATRIX

Field	Options
Product	HDL227
Lamp Options	150W - 150W
	250W - 250W
	400W - 400W
Options	SON - High Pressure Sodium
	MBI - Metal Halide

Notes
1) Final Product Code should be in the format: HDL227400SON.
2) For Photometric and Weight Data contact the sales office.

A-Belco Hazardous Area

A-Belco Hazardous Area

A-Belco Hazardous Area is a specialist manufacturer of hazardous area products for the oil, gas, petro-chemical, pharmaceutical and marine industries worldwide. A division of the A-Belco Group, A-Belco Hazardous Area is an independent UK based manufacturer providing standard and bespoke offerings in the design and assembly of products for Zone Classification Areas 1, 2, 21 & 22, Gas and Dust.

The portfolio of products includes Junction Boxes, Control Panels, Control Stations, Lighting, Receptacles, Switches, Circuit Breakers, Cable Glands - all within Ex d, Ex e, Ex ia, Ex nA and Ex nR protection concepts. All products are built in conformance with the ATEX Directive to ensure complete safety. The equipment is independently certified by SIRA, CESI, GOST-R, GOST-K and AUS.

Junction Boxes

Manufactured from a range of materials including Aluminium Alloy, Stainless Steel and GRP the A-Belco range of explosion-proof Junction Boxes are suitable for use in Zone Classification Areas 1, 2, 21 & 22. The extensive range of enclosures can be used as Junction Boxes with or without terminals and to install electrical equipment such as switches, indicators, ammeters, voltmeters, section switches, remote control switches and transformers.

Drilled and threaded to individual customer requirements, optional upgrades include; internal mounting frames, air and drain valves, internal anti-condensate coating, tempered glass windows and IP kits. These robust boxes are suitable for use in any industrial processing plant where the presence of gas, vapours and flammable powders could potentially create an explosive atmosphere.

Cable Glands

Our innovative range of explosion-proof and weather-proof cable glands are used to provide a connection with electrical equipment that is housed within a flame-proof enclosure; providing a seal that will maintain the specific level of protection that is required.

Suitable for use in Zone 1, 2, 21 & 22 Hazardous Areas with all types of armoured cable, the cable glands provide a compound barrier seal around the cable conductors and an environmental seal around on the cable outer sheath. In addition the gas tight seal has been tested to prove compatible with Restricted Breathing equipment.

The cable glands allow mechanical cable retention and earth continuity via the cable armour termination. Manufactured in a range of sizes and configurations to suit individual requirements, the cable glands are available off-the-shelf at competitive prices within short lead times.

A-Belco Group

The A-Belco Group is a diverse group of companies offering electrical and mechanical engineering excellence to a wide range of industries and markets worldwide. Through an extensive range of skills and experience, the A-Belco Group has significant engineering and design capabilities to provide a complete and bespoke first class engineered solution from design to manufacture.

The Group incorporates A-Belco Hazardous Area, A-Belco Electrical Engineering, A-Belco Industrial Connectors and MEP Solutions. The extensive product portfolio includes switchgear, electrical distribution panels, electrical accessories and innovative modular building service solutions. Formerly Reyrolle Industrial Accessories and later BALS Engineering, the Group is an established supplier to the UK energy, rail and construction markets. With over 25 years experience in the energy sector, A-Belco excels in quality, price, delivery and after sales support.



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We reserve the right to amend technical data in accordance with continuous improvement of product specifications and standards.
Please refer to the website www.a-belco.co.uk/hazardous or contact the sales office for the latest literature revision.



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