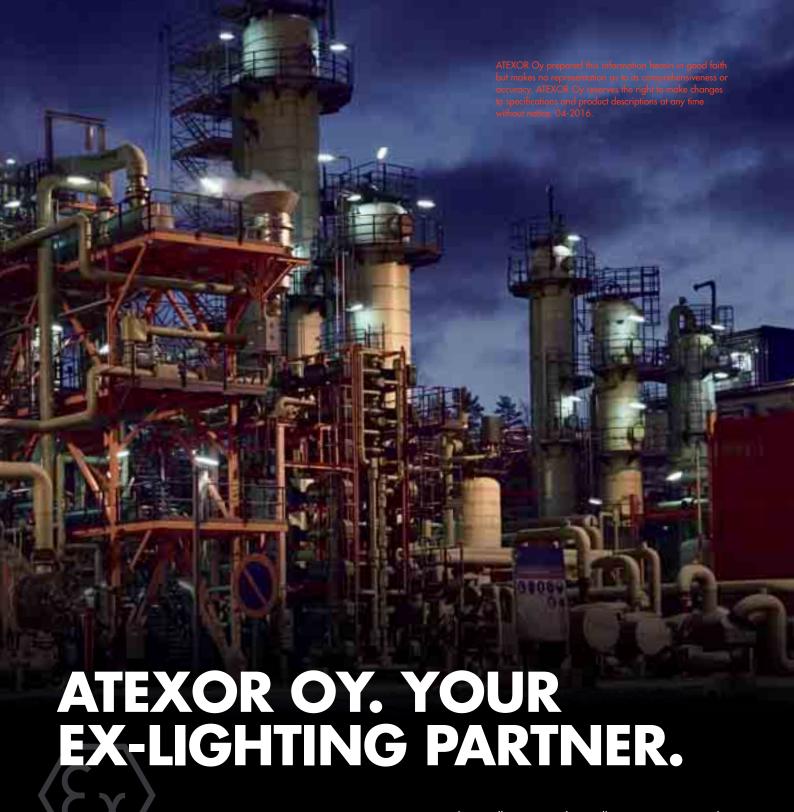




INDUSTRIAL HANDLAMPS





Atexor designs and manufactures portable EX-lighting and power distribution systems. We are known for reliable deliveries, high quality and ability to solve customers' challenges in demanding time schedules. Our customers are working worldwide in the Oil & Gas industry, both Offshore and Onshore. We make deliveries to petrochemical industries, oil refineries, drill ships, FPSO's, and alike. We also have a wide range of customers in other industries as well as public and government sectors such as fire-fighting, transportation and military. SLAM® and MICA® products are designed for long-term use and are readily serviceable. This is why Atexor can offer its products with such confidence.

Testing is key to all Atexor products. All components, materials, battery technologies and LEDs are tested for longevity and performance. Tests are carried out in three stages, in sourcing, in R&D and lastly for the finalized products. In addition to ATEX and IECEx certified products, Atexor offers products with GOST, DNV and other relevant certifications. Atexor plays an active role in international committees developing standards for equipment used in explosion hazardous areas.

Our offices are located in Espoo, St.Petersburg and Seinäjoki. Our R&D and production team is located in Seinäjoki. The company was established in 1983, and we are team of 40 people. Atexor Oy is part of Finnish Teknopower Group, a family owned corporation of 400 people and 70M€ annual revenue.

GOING BEYOND EX-CERTIFICATION

ATEX/IECEx -certification is just the beginning at Atexor. With an ISO 9001:2008 quality system and ATEX certified production, every feature, function and solution is the result of world-class design and engineering proven through end-to-end testing. Atexor products are more than just basic Ex-lights.

SafeEye®

Raw LED light is blinding and painful.
SafeEye® is a diffuser solution that makes
SLAM® LED work lights safer and more
pleasant to work with. SafeEye® protects
eyes and makes the LED light output smooth
by spreading the beam without significantly
reducing lumens.

PHOTOBIOLOGICAL SAFETY

At a high enough intensity, all light sources have the potential to be harmful to both the skin and the eyes through ultraviolet, "Blue Hazard Light" and/or infrared emissions. As most white LEDs are made using blue emitting LED die and therefore emit a portion of their total output as blue light –photobiological testing is needed. With Atexor you can trust that our LEDs are tested for Photobiologial Safety. (More information: Directive 2006/25/EC – artificial optical radiation).

OPTICAL RADIATION INHERENTLY SAFE - "OP IS"

LEDs last longer, use less energy, and put out a tremendous amount of light. In fact, so much that they can be dangerous. Their output is comparable to a laser – extremely intense and concentrated, being able to ignite small particles in the air passing through the beam of light. Optical safety is important in Explosion Hazardous areas – strong optical radiation may trigger an explosion.

Industrial standard IEC/EN 60079-28 was created to define "op is" – optical radiation at an inherently safe level. The easiest way to implement "op is" is just to reduce the power of the LED light source. But there is a disadvantage: reduced light output of work lights. Another method is to diffuse the LED light, change the beam from a concentrated energy source to one that is spread out over a larger area. All SLAM® LED lights are "op is" rated, yet they give maximum light output. LED products for EX-areas by Atexor are typically marked "op is" as a proof of optical irradiation of safety.

EM FUNCTION



Working in Explosion Hazardous areas is challenging even with good EX-work light. If a power failure shuts off the lighting – the workplace immediately becomes dangerous. Atexor designed our battery backup solution specifically to address this risk. Portable SLAM® EX-light with backup battery ensures safe exit in case of emergency. Both SLAM® and MICA® series offer Ex lights with EM Function.



110V/230V SLAM® Cable Reel



SLAM® Transformer Input:110/230V, Output: 12/24/42V

LAM® Hornet 12/24/42V

SLAM® Hornet 12



SLAM® Hornet 12/24/42V

SLAM® Hor



PRE-DESIGNED SLAM® SETS.

SIMPLE TO ORDER AND USE ALL SAFETY
 ELEMENTS IN ONE PACKAGE FULLY CERTIFIED
 FOR TEMPORARY INSTALLATIONS IN EX-AREAS
 EASILY MODIFY TO SUIT DIFFERENT TYPES OF
 HAZARDOUS AREAS

Good lighting is a prerequisite for safe and effective working. We have pre-designated four different portable lighting SLAM® Sets for working in confined hazardous areas: low-voltage, proper explosion-protection, proper fixings and an emergency backup function. Standard cable length is 20 meters. Working in a confined space has never been safer. These sets can be taken into use straight from the box. Modifications are easy with our competent personnel.

SLAM® Linear Tank Set

THE TANK SET INCLUDES:

- ONE PORTABLE 24VAC EX-TRANSFORMER
 (4 SOCKETS)
 ONE PORTABLE EXIT LED LIGHT
- THREE 2LED LINEAR WORK LIGHTS EIGHT EX BRACKETS AND STRAPS



The SLAM® Linear Tank Set comprises all critical elements that are needed for safe work in confined hazardous areas: low-voltage, proper EX-protection and an emergency backup. 24V voltage is provided by a portable EX-transformer. Light comes

from SLAM® Hornet 2LED Linear EX-work lights and one portable SLAM® EXIT Light unit, supporting safe exit in case of a power failure. Standard cable length is 20 meters, and the set includes magnetic brackets and straps.

SLAM® Link-Up Tank Set

THE TANK SET INCLUDES:

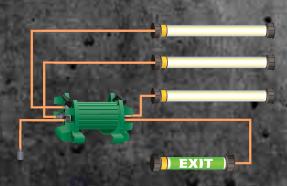
- ONE PORTABLE 42VAC EX-TRANSFORMER (2 SOCKETS) ONE PORTABLE EXIT LIGHT
- FOUR 2LED LINEAR WORK LIGHTS
- TEN EX BRACKETS AND STRAPS



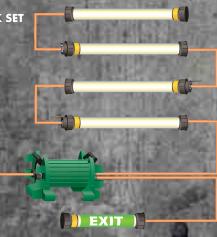
In large operations, the distance between the hazardous area and the transformer can be significant. Built-in EX-socket outlets allow linking the lighting units in a series to cover long distances. By default, the low-voltage is 42V. Four SLAM®

2LED Linear and one SLAM® EXIT 1LED lights supply the adequate lighting and safety. Standard cable length is 20 meters. Magnetic brackets and straps are included.

SLAM LINEAR TANK SET



SLAM LINK-UP TANK SET







SLAM® Em Tank Set



THE TANK SET INCLUDES:

- ONE PORTABLE 24VAC EX-TRANSFORMER (2 SOCKETS) • ONE PORTABLE EXIT LIGHT
- THREE PORTABLE LED WORK LIGHTS WITH

EM-FUNCTION • EIGHT EX BRACKETS AND STRAPS



Space-age SLAM® Set that comprises of all the basic yet critical elements that are needed for safe work in confined hazardous areas and with 100% battery backup. 24V voltage is provided by a portable SLAM® Trans400 EX-transformer. Light comes

from linkable 24V 1LED EM Lights and one portable SLAM® EXIT unit, guaranteeing full safety in case of a power failure. Standard cable length is 20 meters and set includes magnet brackets and straps.

SLAM® Star Tank Set

THE TANK SET INCLUDES:

- ONE PORTABLE 24VAC EX-TRANSFORMER (4 SOCKETS) • ONE PORTABLE EXIT LIGHT
- THREE PORTABLE EX-FLOODLIGHTS
- TWO EX BRACKETS AND STRAPS



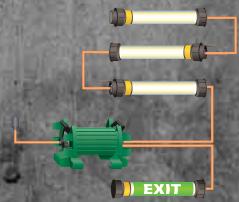
SLAM® Set with extreme light output and portable EXIT light with battery backup Includes all elements that are needed for safe work in explosion hazardous areas: low-voltage, proper EX-protection and an emergency backup. 24V voltage is

provided by a portable SLAM® Trans400 EX-transformer. Light comes from three SLAM® Star EX-floodlights, and safe exit is ensured with SLAM® EXIT 1LED.

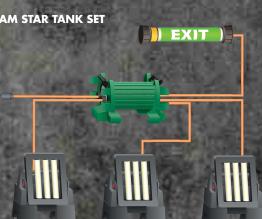
APPLICABLE EX-CERTIFIED CABLE REELS AND EXTENSION CABLES AVAILABLE SEPARATELY (see pg. 23)

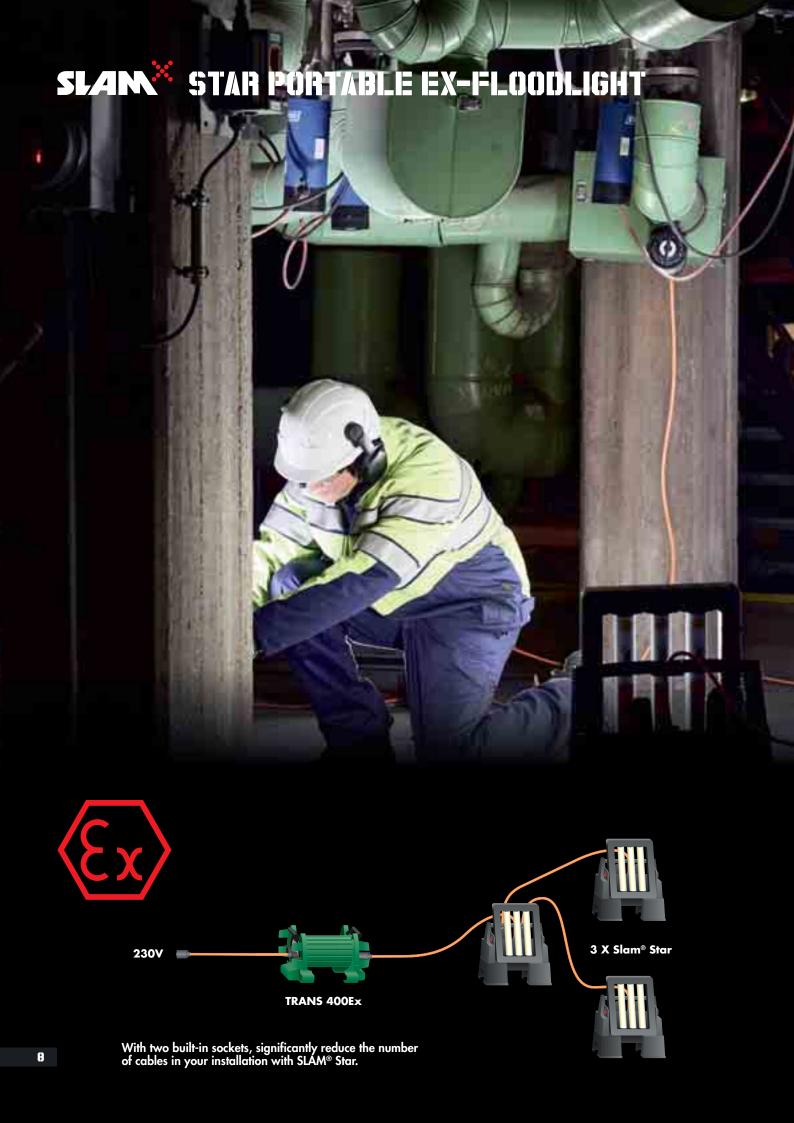






SLAM STAR TANK SET











SLAM® Star

• ATEX & IECEX CERTIFICATION FOR ZONES 1 & 2 • INGRESS PROTECTION IP66 AND TEMP CLASS T4 • SUPPLY VOLTAGES: 24V/42V (TRANSFORMER) AND 110VAC/230VAC (MAINS) • LONG-LIFE, POWERFUL LEDS (50 000 HOURS) • 5,400 LUMENS OF CLEAN WHITE LIGHT (4000K) • CERTIFIED AS PORTABLE EXDEVICE. SAFE TO MOVE, EVEN WHILE POWERED • FULLY ANTISTATIC



Extreme light output and 100% portability with SLAM® Star EX-Floodlight. The ultra bright LED lights produce over 5,400 tested lumens yet generate very little heat.

SERVICE FRIENDLY CONSTRUCTION

The SLAM® Star is certified as portable EX-device and is safe to move around without having to disconnect the power supply. The light module features a 25° step-less adjustment to help you aim the light in the direction you need. With a full-plastic construction there is no risk of sparks. All materials are anti-static, and a clever double-shell construction makes it even safer. It can be ordered with the amount of sockets you need. Choosing the right number (zero, one or two sockets)

makes the product work for your individual purposes. It enables flexible use and significantly reduces the number of cables by linking multiple SLAM Star units together or to other SLAM Ex lights. Combining SLAM Star with other relevant products makes it possible to create a lighting system that is ideal for you.

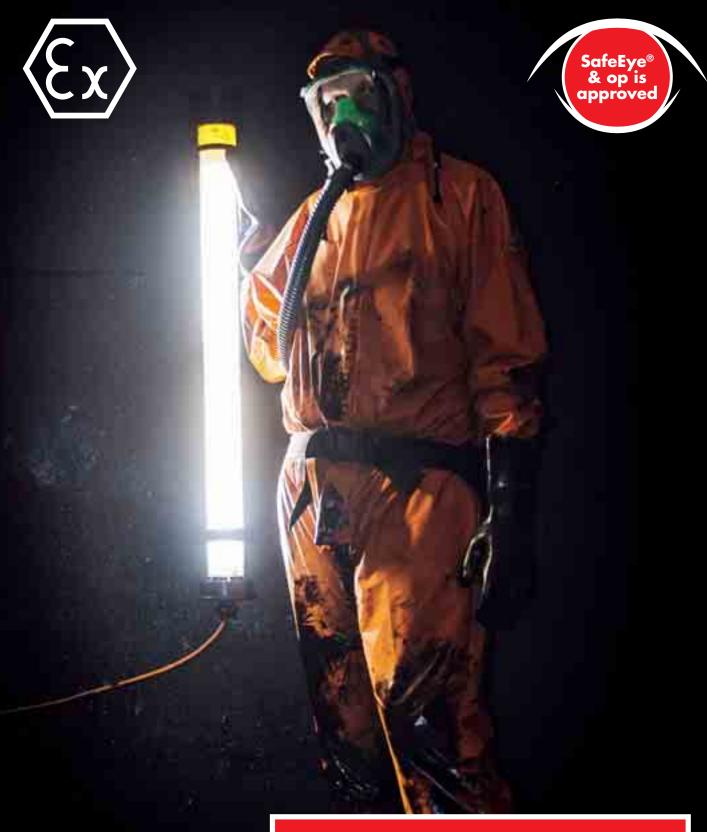
The Star features a new design (patent pending) that enables quick and easy repairs if a cable or socket gets damaged. With SLAM® Star, there is no complicated dismantling required, speeding up maintenance. This solution further improves on the already very low maintenance of the Star, despite harsh operating conditions.

EACH LED UNIT IS CONTROLLED BY INDEPENDENT ELECTRONICS. IF ONE FAILS, OTHER TWO STAY LIT!



SLANX

HORNET LEDS



COST SAVINGS & EXTREME PERFORMANCE WITH LED-TECHNOLOGY.









SLAM® Hornet 1LED, SLAM® Hornet 2LED, **SLAM® Hornet Linear 2LED**

- EX-CERTIFIED FOR ZONES 1 AND 21
- IMPROVED TEMPERATURE CLASS T4 LINKABLE IN SERIES • ATEXOR SAFEEYE® LED TECHNOLOGY INSIDE • SELECT FROM A WIDE RANGE OF SPECIALLY DESIGNED FIXINGS
- EXTREMELY DURABLE CONSTRUCTION
- EASILY REPLACEABLE ANTI-STATIC FILM
- OPTICAL IRRADIANCE MINIMIZED



LEDs are the light source of today, and SLAM® Hornet LED work lights truly reflect their unquestionable benefits compared with more conventional light sources such as halogen and incandescent bulbs: energy efficiency, longer lifetime, superior mechanical performance and reduced service costs. And

thanks to SafeEye®, LED work lights produce a smooth, non-irritating light. Using Hornet LEDs in hazardous areas allow also an improved T-class of T4 making, it possible to enter various areas with T4 requirement for example in petrochemical refineries.

VARIABLES

SLAM® LIGHTS COME WITH TWO OPTIONS FOR SUPPLYING POWER



Single male connection on end of power cable to power supply.



Has an EX-approved socket on the other end of the light. This allows linking in EXhazardous area.



	180°	360°	180°
		Di	M
TECHNICAL DATA	HORNET 1LED	HORNET 2LED	HORNET LINEAR 2LED
Code	CSH1LED	CSH2LED	CSHL2LED
Certification	II 2 G Ex emb op is IIC T4 Gb II 2 D Ex tb op is IIIC T90°C Db IP66	II 2 G Ex emb op is IIC T4 Gb II 2 D Ex tb op is IIIC T90°C Db IP66	II 2 G Ex emb op is IIC T4 Gb II 2 D Ex tb op is IIIC T90°C Db IP66
Ingress protection	IP66 (with Stahl socket IP 54)	IP66 (with Stahl socket IP 54)	IP66 (with Stahl socket IP 54)
Operating temperature	-20 to +40 °C	-20 to +40 °C	-20 to +40 °C
Supply voltage	24VAC/DC, 42VAC/DC, 110VAC/DC, 230VAC	24VAC/DC, 42VAC/DC, 110VAC/DC, 230VAC	24VAC/DC, 42VAC/DC, 110VAC/DC, 230VAC
Frequency	0 Hz (DC), 50 Hz, 60 Hz	0 Hz (DC), 50 Hz, 60 Hz	0 Hz (DC), 50 Hz, 60 Hz
Dimensions	535 x 115 mm (A-cable in) 575 x 115 mm (C-cable in, socket out)	865 x 115 mm	1020 x 115 mm
Weight	1.8 kg	3.1 kg	3.4 kg
Variables	A-cable in, C-cable in, socket out	A-cable in, C-cable in, socket out	A-cable in, C-cable in, socket out



SLAN HORNET EM & EXIT ILED



REVOLUTIONIZING WORK SAFETY WITH BATTERY BACKUP

The SLAM® HORNET EM 1LED is the safe lighting solution you've been looking for. Each unit has a backup battery to power a new dual-purpose EM function, completely changing portable lighting for hazardous spaces. The advanced electronics allow the EM function to generate strong light when the main power supply is lost. The EM function provides an additional safety feature by flashing at 15-second intervals to alert workers of the power outage. Thanks to SafeEye®, these LED work lights produce a smooth, non-irritating light. In addition to the standard EM model, you can choose the HORNET EXIT 1LED to mark designated exit routes. Build your own lighting set with battery backup or get a pre-designed set that includes everything you need.









SLAM® Hornet EM & Exit 1LED

 EX-CERTIFIED FOR ZONES 1 AND 21
 STRONG LUMENS WITH SAFEEYE ® PROTECTION • T4 TEMPERATURE CLASS • PORTABLE, MOVE WHILE CONNECTED • EXTREMELY ROBUST CONSTRUCTION

 RECHARGEABLE BACKUP BATTERY UNIT TUBE COVERED WITH EASILY REPLACEABLE ANTI-STATIC FILM • OPTICAL IRRADIANCE CONSIDERED

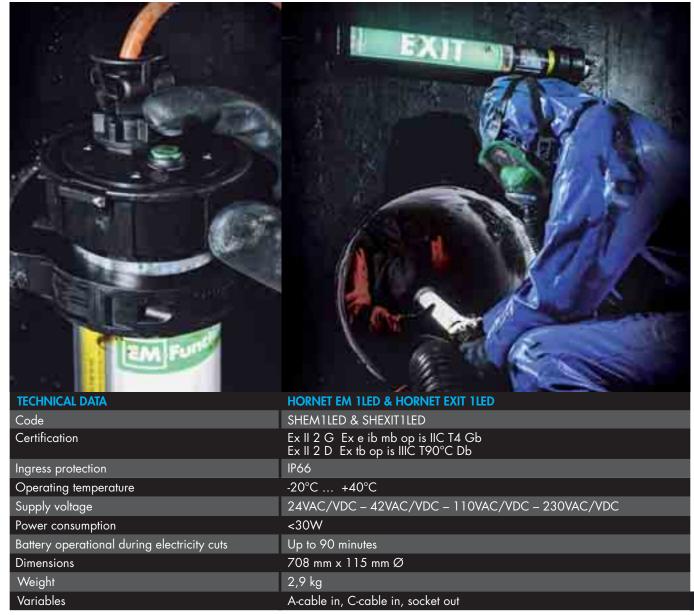
BUILT-IN EX-SOCKETS ENABLE LINKING IN EX-AREA







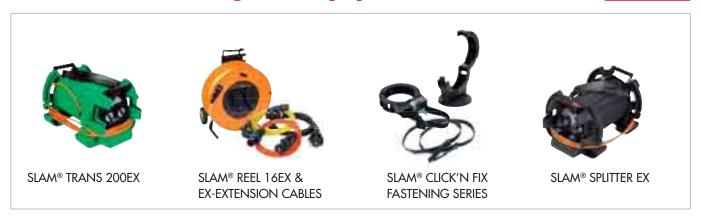
SLAM® Hornet EM 1LED offer you all the unbeatable Atexor features in one package, including dual purpose EM Function, powerful LED light with SafeEye® and the most rugged construction on the market.



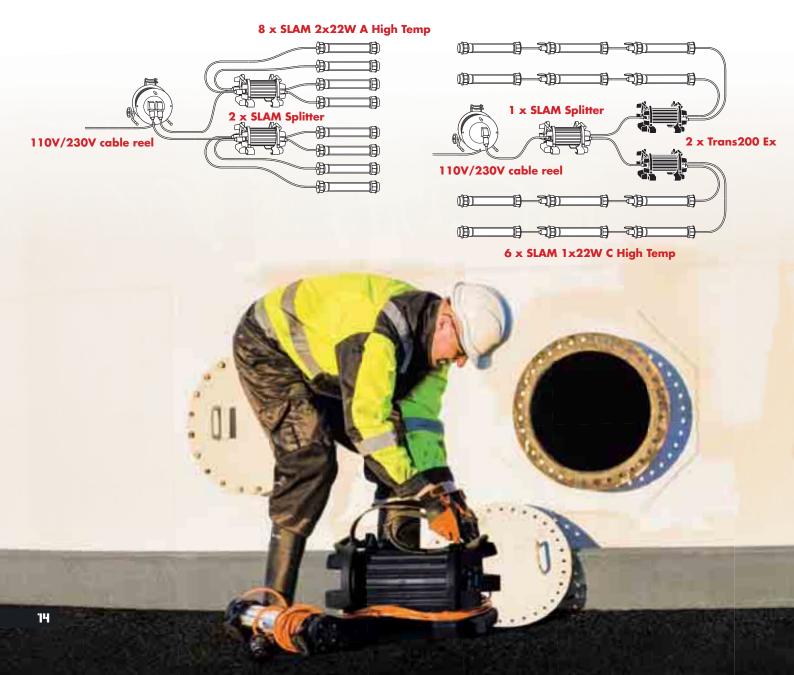


Other SLAM® High Temp products

High Temp



This illustration is just one example of the countless possible configurations with SLAM® High Temp equipment.













Rugged, compact and easy to use, the SLAM® HORNET 2X22W HIGH TEMP is an ATEX-certified 24/110/230V work light specially designed for demanding temperatures, providing smooth, 360° lighting.

With an easy-to-service construction and replaceable antistatic film, these lights are easy to maintain.

SLAM® Hornet 1x22W High Temp

• EX-CERTIFIED FOR ZONES 1 AND 21 • PORTABLE, MOVE WHILE CONNECTED • BUILT-IN EX-SOCKETS ENABLE LINKING IN EX-AREA • UP TO +55°C OPERATING TEMPERATURE • EASY-TO-REPLACE PROTECTIVE FILM • LIGHTWEIGHT AND DURABLE CONSTRUCTION • WIDE RANGE OF SPECIALLY DESIGNED SLAM® CLICK'N FIX FIXINGS



Blazing sun outside can keep oil tanks or mud pits extremely hot inside. Even in such working conditions, you need temporary lighting you can count on. A lightweight among heavyweights, the SLAM® HORNET 1X22W is the ideal choice

when size matters. Compact, durable and easy to handle, the HORNET 1X22W comes with 24V Safety Voltage, making it safe to use inside confined spaces.

	TECHNICAL DATA	HORNET 2X22W HIGH TEMP	HORNET 1X22W HIGH TEMP
	Code	SH222A110HT & SH222A230HT	SH122C24HT
	Certification	Ex II 2 GD Ex e mb IIC T4 Gb Ex tb IIIC T 90 °C Db	Ex II 2 GD Ex e mb IIC T4 Gb Ex tb IIIC T 90 °C Db
	Ingress protection	IP66	IP 66
1	Operating temperature	0°C +55°C	0°C +55°C
	Supply voltage	230V 110V 24V	24VAC +/- 6%, 50/60Hz
ı	Power	44W	22W
	Dimensions	860 mm x 115 mm Ø	576 mm x 115 mm Ø
	Weight	2,85kg	1,65kg
	Variables	A-cable in	C-cable in socket out



SLAN HORNET: LONG



THE BEST PORTABLE LIGHTING FOR ALL VAST HAZARDOUS AREAS









SLAM® Hornet 2x36W, Hornet Linear 2x36W

 EX-CERTIFIED FOR ZONES 1 AND 21
 LIGHTWEIGHT AND DURABLE CONSTRUCTION • FLUERESCENT LEADLAMP • BUILT-IN EX-SOCKETS ENABLE SLAM® HORNETS TO BE LINKED INSIDE OF EX-AREA • WIDE RANGE OF SPECIALLY DESIGNED SLAM® CLICK'N FIX FIXINGS • LIGHT TUBE COVERED WITH EASILY REPLACEABLE ANTI-STATIC FILM



A tested portable lighting solution for vast hazardous spaces, the SLAM® Hornet long luminaries can be easily linked together, providing 180 $^{\circ}$ or 360 $^{\circ}$ lighting as needed. Replaceable anti-static film helps keep lights clean. An EX-certified socket on the light allows you to move and alter the lighting installation

without having to switch off the power. Hornet long tubes can be ordered with any major EX-socket built-in. The Hornet long tube has an easy-to-service construction. The Hornet Linear is ideal for situations where 360 degree lighting is not necessary i.e. for wall or ceiling fixed solutions.







TECHNICAL DATA	HORNET 2X36W	HORNET LINEAR 2X36W
Code	CSH236	CSHL236
Certification	II 2 G Ex emb IIC T3 Gb II 2 D Ex tb IIIC T90°C Db IP 66	II 2 G Ex emb IIC T3 Gb II 2 D Ex tb IIIC T90°C Db IP 66
Ingress protection	IP66	IP66
Operating temperature	-20 to +40°C	-20 to +40°C
Supply voltage	24VAC/VDC, 42VAC/VDC, 110VAC/VDC, 230VAC/VDC	24VAC/VDC, 42VAC/VDC, 110VAC/VDC, 230VAC/VDC
Power	72 W	72 W
Dimensions	865 x 115 mm	1020 x 115 mm
Weight	2.7 kg	3.0 kg
Variables	A-cable in, C-cable in, socket out	A-cable in, C-cable in, socket out











SLAM® Trans 200Ex, SLAM® Trans 400Ex

- EX-CERTIFIED FOR ZONES 1 AND 21
- FULLY PORTABLE TRANSFORMER WITH COMPLETE EX-CERTIFICATION ERGONOMIC HANDLES AND SHOULDER STRAP CERTIFIED AS PORTABLE -SAFE TO MOVE EVEN WHILE IN USE ELASTIC AND SOFT ENCLOSURE BOUNCES WHEN HIT AVAILABLE WITH 2 OR 4 SOCKET OUTLETS



For temporary lighting in confined spaces, a portable transformer that can take in 110–230V and supply safe current to hazardous areas is critical.

The first and only EX-certified portable transformer on the market. SLAM® Trans can easily be carried by handles or shoulder strap. You can safely move the transformer from one place to another without having to power down. SLAM® transformers can be ordered with any standard EX-socket

built-in. SLAM® ATEX transformers are fully compatible with other SLAM® EX-devices. Both input and output ports of SLAM® Trans are secured with fuses.

This is the only EX-certified transformer on the market with a soft shell instead a steel or hard plastic frame. This makes it extremely durable and long-lasting – and a bouncing effect is guaranteed when dropped from a decent height!





TECHNICAL DATA	TRANS 200EX	TRANS 400EX
Code	CSTR200EX	CSTR400EX
Certification (equipment certificate)	II 2 G Ex e mb IIC T4 Gb II 2 D Ex t IIIC T70°C	II 2 G Ex e mb IIC T4 Gb II 2 D Ex t IIIC T70°C Db
Ingress protection	IP66	IP66
Operating temperature	-20 to +50 °C	-20 to +40 °C
Supply voltages	230VAC	110VAC – 230VAC
Output voltages	12VAC – 24VAC – 48VAC	12VAC – 24VAC – 48VAC
Output current	max. 16A	max. 16 A
Power	200 VA	400 VA
Dimensions	532 x 356 x 313 mm	532 x 356 x 313 mm
Weight	17 kg (with 10 m cable)	19 kg (with 10 m cable)
Surface materials	Dissipative elastomer and aluminium	Dissipative elastomer and aluminium
Variables	Ex socket outlets 2 or 4 pcs (types upon request) Supply cable type and length upon request Plua upon request	Ex socket outlets 2 or 4 pcs (types upon request) Supply cable type and length upon request Plua upon request

SLAN PORTABLE EX-SPLITTERS $\langle E_{x} \rangle$ **EXTREME PORTABILITY** FOR EXTREME CONDITIONS.









SLAM® Splitter Ex

 110 OR 230V MAINS VERSIONS • FOR ZONES 1 AND 2 • EXTREMELY ROBUST CONSTRUCTION • 2 OR 4 CEAG SOCKETS

OPERATING TEMPERATURE -20°C...+40°C



The SLAM SPLITTER EX is ready to work for you, no matter how complex the lighting installation or how hazardous the area may be. The entire product is EX-certified with one certification, greatly simplifying paperwork and proof of safety. The certification also confirms the exceptional portability of the SLAM SPLITTER EX – you can move the splitter even while connected.

SLAM® Splitter Ex High Temp

12, 24 & 24VAC SAFETY VOLTAGES AND
110 OR 230V MAINS VERSIONS • FOR
ZONES 1 AND 2 • EXTREMELY ROBUST
CONSTRUCTION • 2 OR 4 ATX SOCKETS
• SLAM HIGH TEMP SERIES, UP TO +55°C

ed the first had been

High Temp

transporting. With a confirmed operating temperature up to $+55\,^{\circ}\text{C}$, the high temperature version of SLAM SPLITTER EX can sweat it out easily.

With a wide range of supported voltages, the splitter can be used in any configuration, before or after transformers. The standard 10 meter input, also custom-orderable to any length, is easily wrapped around the splitter for convenient



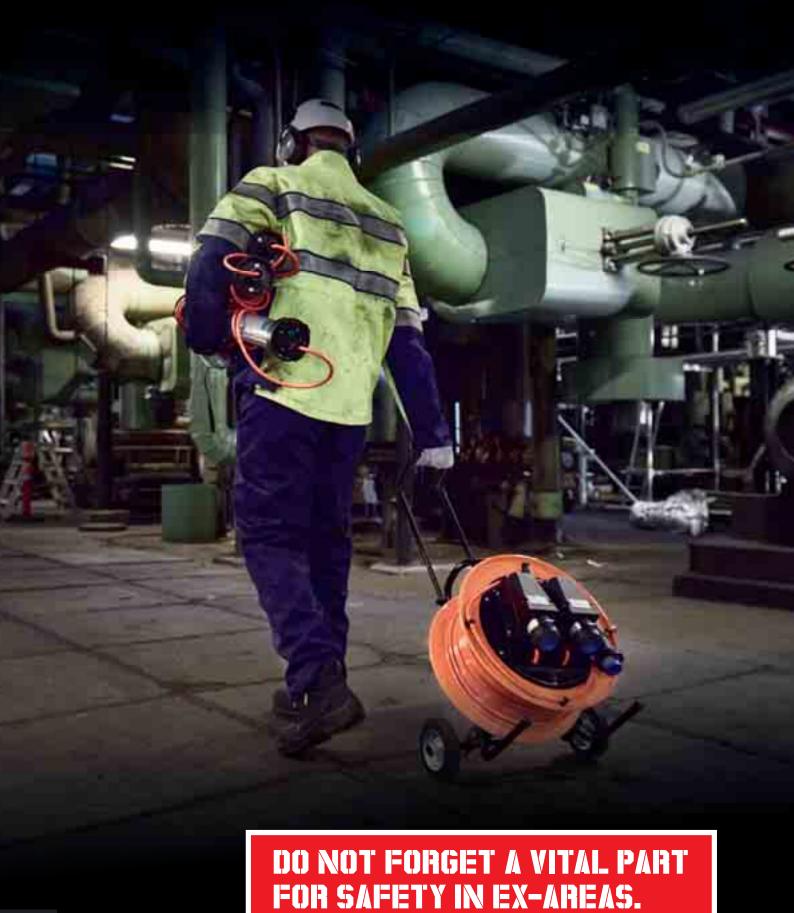


High Temp

TECHNICAL DATA	SPLITTER EX	SPLITTER EX HIGH TEMP
Code	SS16EX4CCEA	SS16EX4C
Certification (equipment certificate)	Ex II 2 G Ex e d IIC T4 Gb Ex II 2 D Ex tb IIIC T80°C Db	Ex II 2 G Ex e d IIC T4 Gb Ex II 2 D Ex tb IIIC T80°C Db
Ingress protection	IP66	IP66
Operating temperature	-20 to +40 °C	-20 to +55 °C
Supply voltages	110V or 230V	12V, 24V, 42V, 110V or 230V
Supply current typical	Max. 16 A	Max. 16 A
Maximum load	230V (3680W), 110V (1760W)	230V (3680W), 110V (1760W), 42V (672W) 24V (384W), 12V (192W)
Dimensions	532 x 356 x 313 mm 532 x 356 x 313 mm	532 x 356 x 313 mm 532 x 356 x 313 mm
Weight	10.5 kg (without cable/sockets/plug)	10.5 kg (without cable/sockets/plug)
Surface materials	Dissipative elastomer and aluminium	Dissipative elastomer and aluminium
Variables:	CEAG Ex socket outlets. Supply cable type	ATX Ex socket outlets. Supply cable type and

and length upon request. Plug upon request. I length upon request. Plug upon request.

SLAM EX CERTIFIED EXTENSION CABLES AND CABLE REELS











SLAM® Extension Cables and SLAM® Cable Reels

- EX-CERTIFIED FOR ZONES 1 AND 21
- COMPLETELY ATEX-CERTIFIED IDEAL ELEMENTS FOR SETTING UP TEMPORARY SLAM-LIGHTING SYSTEMS REEL EQUIPPED WITH PROPER ANTI-STATIC WHEELS PART OF SYSTEM ATEX-CERTIFICATION OF SLAM TANK SETS

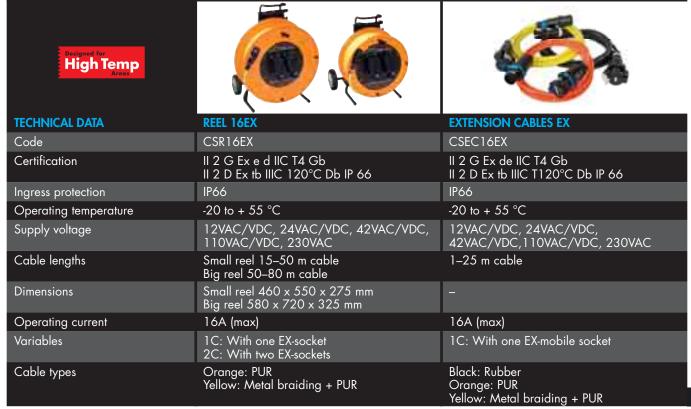


A comprehensive SLAM® solution is available when you need a movable electrical distribution system to EX-hazardous job sites. Thanks to SLAM® cables and cable reels, you can bring the electrical distribution close with one safe and fully certified package. Suitable for all supply voltages and all major EX-sockets available.

The SLAM® Cable Reel 16EX gives you a long distance power source in hazardous job sites with 1 or 2 sockets and

maximum 150m output cable. It ensures electrical distribution in an easily portable and safe way.

The EX-certified SLAM® Extension Cable is ideal for complete temporary SLAM® lighting system. The extension cables may be a maximum of 25 m long and equipped with any conforming EX-certified plugs and mobile sockets (such as CEAG, ATX, Stahl or Marechal).



TO MAKE YOUR LIGHTING SOLUTION COMPLETE



ACCESSORIES





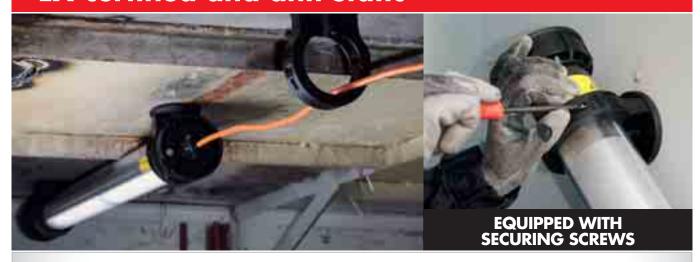






SLAM® Click'n Fix Series **EX-certified and anti-static**

High Temp



- EX-CERTIFIED
 EASY AND FAST FIXING SYSTEM
 DIFFERENT OPTIONS FOR FASTENING
- ALL CLICK'N FIX BRACKETS COME WITH SECURING SCREWS

SLAM Click 'n Fix is the easiest fixing system for portable lighting. No lighting system is complete without anti-static brackets to ensure every part of it is safe. You can find SLAM- brackets that suit most surfaces, even or un-even. All the brackets are durable and easy to use. Every Click'n Fix comes with a securing screw for improved safety.

SLAM® MAGNETIC BRACKET

Strong and fully anti-static magnetic fixing that does not require separate bonding wires! Also good for cable control, get rid of those cables lying on the floor. In The SLAM Magnetic bracket comes in two different versions. A bracket that fixes solidly to the magnet and a floating bracket for uneven surfaces such as corrugated iron.

SLAM® MAGNETIC **BRACKET LOOSE**

For a strong, secure fit in challenging spaces with slanted or curved surfaces, choose the loose magnetic bracket option.





Extra bonding wire needed.



No bonding needed.













SLAM® SINGLE BRACKET

Imagine a situation where you need to attach the work light onto a surface where no magnet or other part can attach. With SLAM Single Bracket you have an option of screwing the bracket firmly onto the surface and attach the work light there. This is an ideal solution for example for wood and brick walls.



SLAM® SCAFFOLD BRACKET

This EX-certified anti-static bracket is specially designed to attach to scaffolding pipes, ideally suited for industrial settings such as painting work. The bracket includes a pipe contact part with sharp teeth and a tightening strap to ensure fast mounting.



SLAM® UNISTRUT BRACKET

In specific industries where Unistrut® -tracks are used, the SLAM Unistrut Bracket is the perfect solution. The bracket is equipped with Unistrut -part to enable proper fixing safely and without headache.





SLAM® Protective film







SLAN ACCESSORIES











SLAM® S-HOOK BRACKET

For pipes and scaffolds it may sometimes be advisable to attach with an S-Hook. SLAM® S-Hook Bracket unites them all: work light, the fixing bracket and S-Hooksystem. This is without a doubt the perfect solution in areas where you want to make the installation with convenience and without wasting time.

SLAM® S-HOOK KIT

Approved to EX-area use SLAM® S-Hooks. Two hooks in one kit. Verified to EX-area use.

SLAM® HANGING STRAPS

You can count on adjustable hanging straps anywhere you go. They are flexible, literally do not contain any stressing weight and may be adjusted (tightened) in line with your work site requirements such as pipes, masts and supports of various sizes. They are also easier to demount compared to conventional cable ties.







All SLAM® work lights come with a protective film over the light housing. When the lights get dirty, the protective film can be removed and replaced with a new sheet. 10 pcs in one set. Available to all SLAM® lights.





MICA® IL-800

ZONES (0) (1) (21)

• DNV TYPE APPROVAL CERTIFIED • THREE HIGH-POWER LEDs • TEMPERATURE CLASSIFICATION T4

 UP TO 200 LUMENS GUARANTEED OVER LED LIFETIME
 OPTIONAL EMERGENCY FUNCTION (EM) AND BLINK MODE (BK)
 ROBUST IP67 HOUSING

SINGLE SWITCH CONTROL FOR TWO POWER
 MODES • ZONE 0 & ZONE 1 VERSIONS



MICA® IL-800 ZONE 0 and ZONE 1 are all-purpose high quality handlamps specially designed for use in explosion hazardous areas and in the harshest conditions. Thanks to the ergonomic dual-mode switch, the user can choose between long operating time and extreme light output. Robust, antistatic construction with tempered 5mm lens, this lamp will not let you down when it is most needed. The MICA® IL-800 floats if dropped in water.

The advanced electronics prevent deep discharge of the battery and indicate low battery charge. Both Zone 0 and Zone 1 models are available with the The Atexor emergency function (EM) and blinking mode (BK). When the IL-800 hand lamp with EM-function is in charger, it can detect a power outage and turn on automatically. When the remaining battery power is getting low, the beam stars to blink at 15 second intervals.

MICA® IL-80

ZONES (1) (21)

ROBUST IP-67 HOUSING • DNV TYPE
 APPROVAL CERTIFIED • 80 LUMENS LED • UP
 TO 21 HOURS OF OPERATING TIME • SINGLE
 SWITCH CONTROL FOR TWO POWER MODES

SAFE LIGHT!
OP IS IN
CONTROL

29

The MICA® IL-80 ATEX LED, like the IL-800 models, benefits users with a combination of smart design and robust materials. It has an incredible 21-hour operating time.

The IP67 shock resistant casing is manufactured entirely from anti-static plastic. The waterproof IL-80 hand lamp floats if dropped to water. The lens is five millimetres thick and

specially toughened, additionally a reflector helps concentrate the light beam over long distances.

Advanced electronics prevent deep discharge of the battery and indicate low battery charge. The MICA® ILC4 charger recharges the MICA® IL-80 ATEX LED even in + 40°C.

TECHNICAL DATA	IL-800	IL-80
Certification	IL-800 ZONE 0: II 1 G Ex ia IIC T4 Ga II 2 D Ex tb IIIC T100°C IP67 Db IL-800 ZONE 1: II 2G Ex ib IIC T4 Ga II 2D Ex tb IIIC 100°C IP67 Db	II 2 G Ex e ib op is IIC T4 Gb II 2 D Ex tb IIIC T135°C Db
Area of classification: Gas	IL-800 ZONE 0: 0, 1 and 2 IL-800 ZONE 1: 1 and 2	Zones 1 and 2
Area of classification: Dust	IL-800 ZONE 0 and IL-800 ZONE 1: Zones 21 and 22	Zones 21 and 22
IP rating	IP67	IP67
Light source	3x Ultra-bright LEDs	MICA L200Ex LED
Battery	6V NiMH	6V NiMH
Operating time	Full power 6 hrs, Low power 12 hrs	FFull power 10 hrs 30 min, Low power 21 hrs
Operating temperature	20 to +40 °C	-20 to +40 °C
Weight	1.1 kg	1.1 kg





ZONES





MICA® ML-808

- HIGH-POWER CREE LED TWO-MODE BEAM,
 25 AND 100 LUMENS OPERATING TIME UP TO
 15 HOURS RECHARGE IN LESS THAN 3 HOURS
- LED-BAR INDICATOR FOR BATTERY CAPACITY
- OPTIONAL EMERGENCY FUNCTION (EM)
 OPTIONAL BLINKING FUNCTION (BK)



The MICA® ML-808 is the latest in high-powered ATEX hand lamps. It is a step up from the well-known MICA® ML-800. The new ML-808 is stored and recharged in the same MICA® MLC charging dock as previous MICA® ML-series lights. Two power modes allows the user to obtain the best combination of light power and usage time.

The lamp is equipped with an environmentally friendly NiMH battery offering continuous operating time up to 15 hours. Advanced electronics in the ML-808 protect the battery from deep discharges and warn the user of low battery charge by flashing the light beam when there is only 20 minutes of operating time left. The shock resistant IP-65 casing is manufactured entirely of anti-static plastic and aluminium. The lens is three millimetres thick and specially toughened. MICA® ML-808 is supplied with a strong belt clip and wrist strap.

Intelligent chargers for MICA® lamps



TECHNICAL DATA	ML-808	
Certification	II 2 G Ex ib op is IIC T4 Gb II 2 D Ex ib op is IIIC T135°C Db	
Area of classification: Gas	Zones 1 and 2	
Area or classification: Dust	Zones 21 and 22	
IP rating	IP65	
Light source	Ultra-bright LED	
Battery	6V NIMH	
Operating time	Full power 4 hrs 30 min Low power 15 hrs	
Operating temperature	- 20 to +40 °C	415
Dimensions/Weight	120 x 64 x 55mm/400g	ALC: NO.

SAFETY GUIDE

HOW TO IMPROVE WORK SAFETY IN HAZARDOUS AREAS?

SELECT EQUIPMENT CLEARLY CERTIFIED AS PORTABLE

- Portable EX-equipment is designed for temporary use in hazardous areas.
- EX-certificate of such unit should clearly state the word "Portable".
- Fixed EX-lights and EX-hand lamps do not meet the same criteria as portable EX-lights.

All SLAM products are designed and certified for portable use.





ONE EQUIPMENT CERTIFICATE PER PRODUCT

- One complete certificate for the whole unit is required.
- Standard: IEC/EN 60079-0 part 13
- Assembling a unit of separate EX-components does not meet safety requirements.

SECURE EQUIPOTENTIAL BONDING IN EX-AREAS

- The outer metallic parts in hazardous areas must be bonded.
- Metallic tools may have a different charging level than the surrounding space.
- Failure of equipotential bonding may lead to sparks and a fatal accident.

SLAM products and accessories meet the requirements set for equipotential bonding in hazardous areas.



USE ANTISTATIC MATERIALS IN HAZARDOUS AREAS

- Plastic parts taken to hazardous areas must be anti-static.
- Protective plastic films and bags against dirt must be anti-static.
- Non-anti-static materials in hazardous areas may lead to spark and a fatal accident.

SLAM products certified for hazardous areas are anti-static. Bonding wires are not needed.





5 ESTABLISH TEMPORARY EMERGENCY LIGHTING

- Temporary exit-routes (manholes, stairways) must be designated in EX-areas.
- Portable EX-emergency work lights are to be used in such lighting units.
- Such units provide safe exit during power failures.

SLAM Hornet Emergency is an optimum portable solution for illuminating critical exit points in hazardous areas.

GET RID OF CABLES ON THE FLOOR

- Cables on the floor increase the risk of injury.
- Increase safety by securing cables to the floor or the wall.

The SLAM product range provides you plenty of options to reduce and control the amount of cables on job sites.



SAFE NON-IRRITATING LIGHT

- Raw LED-light is painful and blinding.
- Diffused light makes LED work lights safer and more pleasant to use.

SLAM SafeEye protects eyes and makes the LED light output smoother by spreading the beam without significantly reducing lumens.

SELECTION OF EQUIPMENT

STEPS FOR SAFE CHOICES

INTENDED PURPOSE OF EQUIPMENT

- When the equipment needs to be portable, the certificate should state this in the description of equipment.
- If not mentioned it is likely that the unit is not tested or accepted for portable use.
- Portable EX-luminaire and non-portable EX-luminaire have different requirements.





CLASSIFICATION OF EX-AREA

- Compare the equipment certificate with the area classification.
- Examples:
 - Equipment category 2 = Zone 1 and 2
 - EPL marking Gb = Zone 1 and 2

Make sure that the equipment CATEGORY is suitable for the particular EX-area classification.

SUBSTANCE EXPLOSION GROUP

- Compare the equipment certification to the explosion group of the substance that is creating the danger of explosion.
- Examples:

Hydrogen **Ú** Explosion group IIC Ethylene **Ú** Explosion group IIB Naphtha **Ú** Explosion group IIA

Make sure that the equipment EXPLOSION GROUP

is suitable for the particular EX-area classification.



TEMPERATURE RATING OF EQUIPMENT

- Compare the equipment certification to the highest acceptable temperature of substances that contribute to the danger of explosion.
- Examples:
 - Hydrogen **Ú** Ignition temp 560 °C = T1
 - Ethylene **Ú** Ignition temp 425 °C = T1
 - Diesel **Ú** Ignition temp 230 °C = T3
 - Diethyl ether **Ú** Ignition temp 195 °C = T4

Make sure the equipment's HIGHEST TEMPERATURE POINT is suitable for the particular EX-area classification.



-40°C

5 AMBIENT TEMPERATURE

- Notice the ambient temperature of the application of use.
- Notice also other criteria e.g. heavy mechanical stress and effect of chemicals.

The EX-certificate is valid between ambient temperatures of -20 °C to +40°C if not otherwise mentioned in the certificate.





WE AT ATEXOR ARE HERE TO HELP YOU WITH ANY NEEDS CONCERNING OUR PRODUCTS OR SERVICES. IF YOU NEED GUIDANCE IN CHOOSING THE RIGHT SOLUTIONS TO SUIT YOUR NEEDS AND WORKING CONDITIONS, PLEASE CONTACT US.

ATEXOR OY • P.O.BOX 42 • FIN-00381 HELSINKI, FINLAND
 TEL. +358 20 734 3250 • FAX. +358 20 734 3298

www.atexor.com