



pendant light fittings

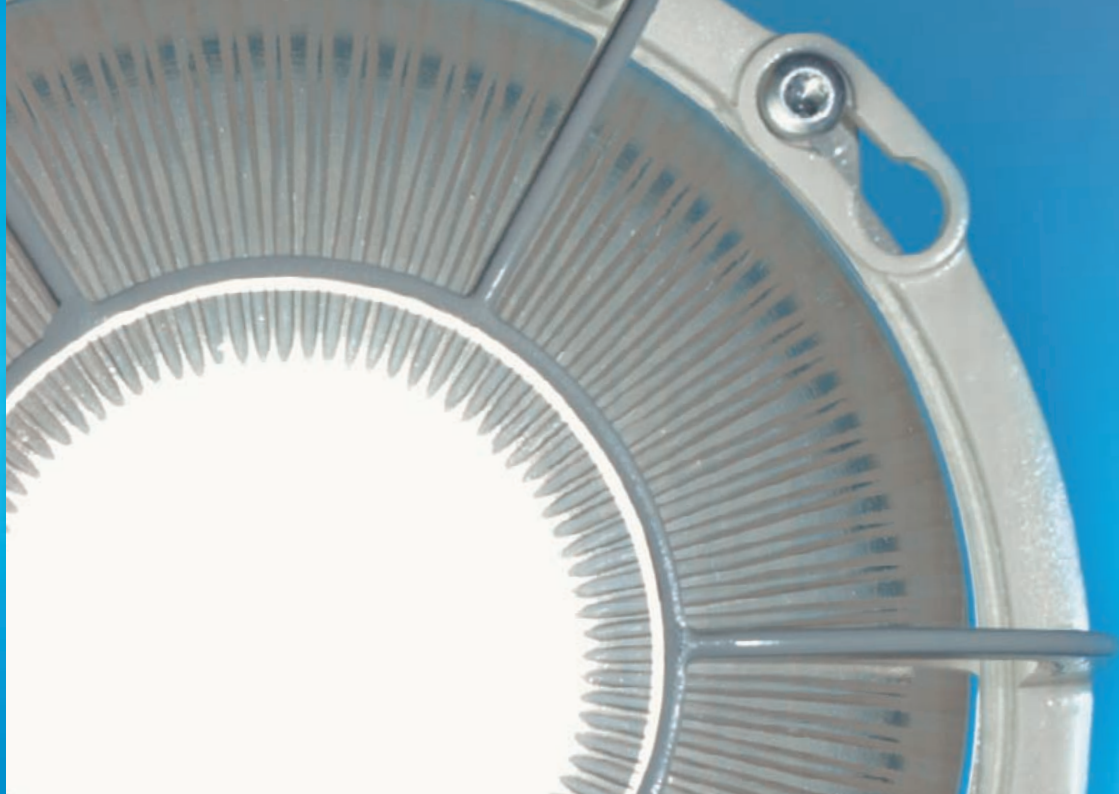




contents

From drilling platforms through to chemical installations, from grain silos through to pharmaceutical, environmental and foodstuff-engineering facilities – R. STAHL is a partner that you can rely on. With the wide range of floodlights, pendant light fittings, compact lights, hand lamps as well as complex emergency lighting systems, every area of your plant is safely illuminated. In addition to standard solutions, R. STAHL is your partner for individual complete solutions in the explosion protected lighting system sector and for comprehensive service. Need vast quantities of light? Then the pendant light fittings from R. STAHL for Zone 2 and Zone 1 are the perfect choice for you.

Pendant light fitting series 6470/6480 _ Zone 2, Zone 21, Zone 22, Division 2	4
Pendant light fitting series 6050 _ Zone 1, Zone 21	8
Uncompromising _ 100% tested	10
Certified _ worldwide approvals	12
Technical data	14



pendant light fitting

zone 2, zone 21, zone 22, division 2

A wealth of light for Zone 2. This task is accomplished both safely and extremely cost-effectively with the new and meticulously thought out 6470/6480 series of pendant light fittings from R. STAHL. In order to fulfil our promise of ›light without end‹, these light fittings have been put into standardised serial production. The pendant light fittings are available in three sizes. Size 1 allows light sources of up to 150 W to be used, size 2 up to 250 W and size 3 up to 600 W. The entire 6470/6480 series of light fittings meets the IEC and NEC guidelines and can thus be used worldwide in Zone 2, Zone 21 and Zone 22 as well as in Division 2 and both onshore and offshore. Diverse mounting options make these compact, lightweight pendant light fittings from R. STAHL extremely flexible. Connecting and maintaining the light fittings requires no effort and is literally a matter of child's play. And in order to fulfil almost every wish, we also offer several optional accessories, such as an aluminium wire guard or two different external reflectors made of fibre-glass reinforced polyester.



series 6470/6480

Description

- > for gas discharge lamps up to 600 W
- > pendant light fittings in a restricted breathing version featuring diverse mounting options
- > glass cover made of impact-resistant, temperature change-resistant borosilicate glass
- > housing material made of seawater-resistant aluminium
- > external reflector and wire guard available

Use

- > for general lighting systems with a higher suspended mounting in outdoor installation or production halls
- > Suitable for low ambient temperatures –40 °C to +55 °C (depending on lamp type)
- > international approvals ATEX, IEC Ex, GL (für 6470) and UL

Light technology

- > very high light efficiency
- > rotationally symmetrical light distribution (narrow and broad-beamed)
- > long lamp service life
- > lamps are alternatively fitted with mercury blended lamps, high-pressure mercury vapour or sodium lamps

Level of protection

- > IP 66 according to EN 60529
- > Type 3, 4, 4X

EN, IEC

- ⊕ II 3 G, EEx nR T*
- ⊕ II 2 D, IP 66 T_{0max}*
- ⊕ II 3 D, IP 66 T_{0max}*

NEC

- Class I Div. 2, Groups A, B, C, D
- Class I Zone 2
- Class II Div. 2, Groups A, B, C, D, F
- Class III

* depending on lamp capacity T3/T4



pendant light fitting

flexible, maintenance-friendly, economical



With the 6470/6480 series of pendant light fittings, you can rest assured that your work will be as efficient as humanly possible. The numerous different mounting options featured in this series of light fittings ensure a suspension method precisely tailored to your specific needs without any improvisations. Installation is exceedingly efficient and easy. The generously-sized terminal compartment is opened by a hinge, the cables can be quickly mounted and the light fitting is easily closed again. When the glass cover is opened to screw in one of the many different lamps, the cover, along with the wire guard, can be hung on a chain. This frees up both your hands. Of course, there are even more accessories as well as numerous small mounting components available for the 6470/6480 series of pendant light fittings from R. STAHL.



series 6470/6480

7

Mounting options

- > direct ceiling installation
- > suspension-mounting using ring bolts
- > ceiling or wall installation with an adjustable stainless steel mounting bracket
- > mast-mounting 25° or straight
- > suspension-mounting using conduit

Installation

- > uncomplicated and efficient
- > large, well-arranged terminal compartment
- > quick apparatus replacement
- > easy opening and closing using a hinge
- > quick lamp replacement
- > glass cover and wire guard hang on a chain
- > extremely maintenance-friendly

Lamp types

- > all-purpose lamps
- > halogen incandescent lamps
- > mercury blended lamps
- > halogen high-pressure iodide lamps
- > high-pressure sodium lamps, single and dual burner
- > mercury vapour lamps
- > induction lamps

Accessories

- > can be subsequently retrofitted
- > external reflector made of fibre-glass reinforced polyester
- > wire guard made of seawater-resistant aluminium
- > hand-held testing device for restricted breathing



pendant light fitting

zone 1, zone 21



Even in Zone 1, it will be bright as day. The 6050 series of pendant light fittings from R. STAHL has also been put into standardised serial production in order to provide you with vast quantities of light. Approved according to IEC for Zone 1 and Zone 21, they can be used worldwide both onshore and offshore. They are installed using eyelets or the swivelling mounting bracket. The external terminal box considerably facilitates and expedites installation. This modern 6050 series of pendant light fittings from R. STAHL is virtually maintenance-free. An extremely long service life can be achieved using the corresponding lamps, for example, the induction lamps or the high-pressure sodium lamps equipped with dual burner technology. This light fitting is particularly suitable for poorly accessible, safety-related areas. If, however, the lamp must be replaced, an optional switch can be installed for safety purposes in order to open the glass. Additional accessories, such as a stainless steel wire guard and a highly-reflective aluminium reflector are also available for this series of light fittings.



series 6050

- 1** adjustable stainless steel mounting bracket for wall mounting
- 2** ceiling installation with single point mounting
- 3** ceiling installation with two eyelets
- 4** easily accessible connection box
- 5** secure option for holding the glass cover during maintenance work

Description

- > for mercury blended and gas discharge lamps up to 400 W
- > pendant light fittings housed in a flameproof housing with Exe connection boxes
- > seawater corrosion-resistant housing made of aluminium alloys, optional powder coated
- > glass cover made of impact-resistant, temperature change-resistant pressed glass
- > stainless steel wire guard
- > optional compensation in an add-on housing

Use

- > for general lighting systems with a higher suspension-mounting in outdoor installations or production halls
- > suitable for low ambient temperatures
 - 25 °C to +55 °C (6050/3)
 - 40 °C to +55 °C (6050/1)
- > international approvals for ATEX, IEC Ex and GOST-R

Light technology

- > rotationally symmetrical light distribution (narrow und broad-beamed)
- > high light efficiency
- > long lamp service life
- > lamps are alternatively fitted with mercury blended lamps, high-pressure mercury vapour or sodium lamps as well as compact lamps and halogen incandescent lamps

Level of protection

- > IP 65/66 according to EN 60529

EN, IEC	6050	II 2 G, EEx de IIC T*
		II 2 D, IP 66 T _{0max} *
* temperature class or maximum surface temperature varies depending on lamp capacity		

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Inventar Nummer
210051



**CLIMA
TEMPERATUR
SYSTEME**

CTS



CLIMA
TEMPERATUR
SYSTEME

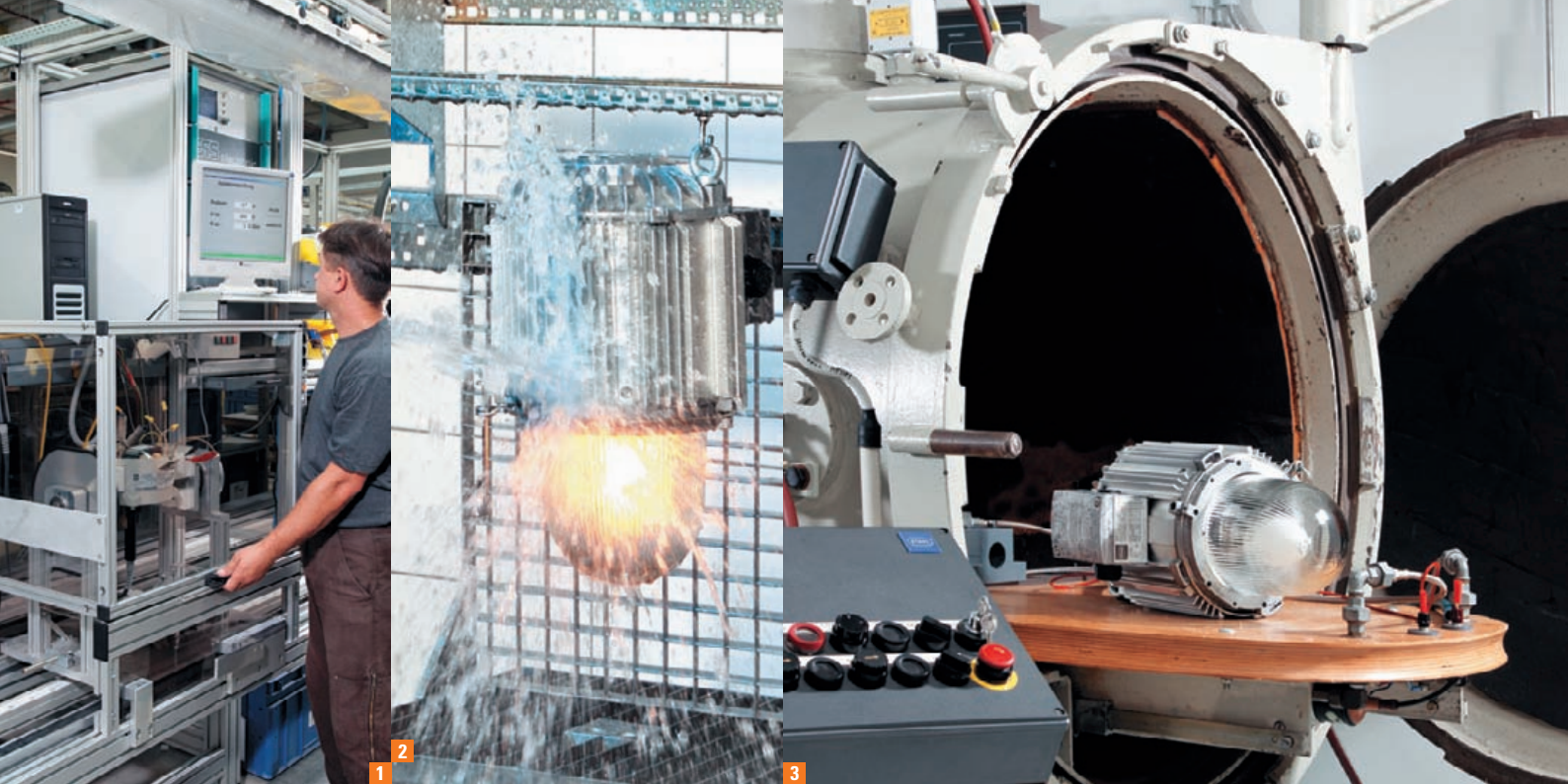
CTS

39.9 °C

88888

1 2 3 4 E P S





uncompromising

100% tested

- 1** Function testing with the 6470 series of pendant light fittings
- 2** Moisture and type of protection test with the 6050 series of pendant light fittings
- 3** Explosion pressure test with the 6050 series of pendant light fittings

R. STAHL places a high priority on the importance of developing new components, systems and processes in the lighting sector. Therefore, all important tests are conducted directly in our laboratories that have been recognised by independent testing authorities. The R. STAHL quality management ensures the high product level throughout the entire development and production phase. The light fittings undergo functional checks, hardness and safety tests according to the latest directives and standards.

Testing procedures

- > our own testing laboratory
- > our own calibration laboratory
- > modern verifying and testing equipment
- > recognised by the leading international testing authorities
- > factory acceptance tests for national and international projects
- > ongoing quality inspections
- > routine testing conducted by regularly trained personnel

CE



UL



ATEX



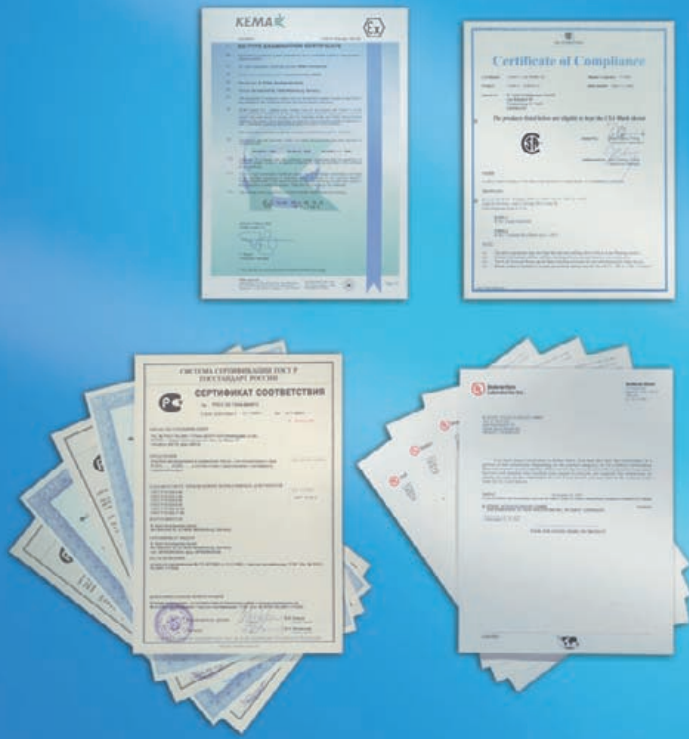
PTB



IEC Ex

Dust-Ex





certified

worldwide approvals

13

R. STAHL is one of the world's leading manufacturers of explosion protected components and systems. We provide our customers with tailored, technologically pioneering solutions, including all the related advisory and customer services. In addition, the R. STAHL specialists collaborate together with national and international committees and have actively invested their many years of experience in helping to design and further develop improved safety regulations across the globe. This is precisely why we can also design, plan, configure and manufacture products within the lighting sector in exact accordance with local regulations and requirements for every market in the world. International certifications, approvals and patents underscore our competence and allow products from R. STAHL to be used all over the world.

- > over 3000 certificates for explosion protection worldwide
- > more than 70 patents
- > member in numerous international standardisation committees, technical committees and work groups
- > worldwide presence
- > factory acceptance tests for national and international projects

technical data for pendant light fittings 6470/6480

Explosion protection

gas explosion protection
dust explosion protection

6470  II 3 G EEx nR II T
 II 2 D IP 66 T_{0max}
 II 3 D IP 66 T_{0max}

6480 Class I, Zone 2, Group IIC T
Class I, Div. 2, Groups ABCD T
Class II, Div. 2, Groups FG T
Class III

Certifications

gas explosion protection
dust explosion protection

6470 PTB 05 ATEX 2045 (Zones 2, 22)
PTB 05 ATEX 2043 (Zone 21)

6480 cUL/UL
File No. E 258154

other approvals
marking
rated operational voltage U_e

IEC Ex, GL

CE 0102

6470 230 V, AC ±10%, 50 Hz,
others available upon request
observe specifications on the rating plate

6480 120 V, 60 Hz
Quad (120, 208, 240, 277) V, 60 Hz
Tri (120, 277, 347) V, 60 Hz
others available upon request

power factor
protection class
connection options

cos φ ≤ 0,9 (compensated)

I (PE connection)

L1+N for 4 mm² single-wire and 6 mm² single-wire via the internal terminal block

Material

housing material
glass cover
cover seal
glass seal
mounting bracket
external reflector
wire guard

seawater-resistant aluminium
temperature change-resistant borosilicate glass
silicone rubber
silicone rubber
stainless steel
fibre-glass reinforced polyester
seawater-resistant aluminium

housing lock
installation

M8 fastening screw (stainless steel)
wall and ceiling installation,
installation using mast adapter,
suspended using eyelets,
mounting brackets or conduit

level of protection
ambient temperature

IP 66 / Typ 3, 4, 4X
-20 °C ... +40 °C all variants
-30 °C ... +55 °C for sodium and high-pressure halogen-iodide lamps
-50 °C ... +55 °C for halogen incandescent lamps,
all-purpose lamps and mercury blended lamps
can easily be mounted later using M6 screws

wire guard and external reflector

Cable entries

standard
special cable gland

Specially certified cable entries must be used (according to directive 95/9/EG)
→ high risk of mechanical damage – with minimum ingress protection 66.
The number of cable entries depends on the type of installation.
M25 x 1,5
M20 x 1,5, others on request

threaded sockets for mast adapter light fittings

1 1/4" BSP, 1 1/2" BSP, 3/4" NPT, 1" NPT



a detailed data sheet can be downloaded at:
www.stahl.de/en/downloads/data-sheets.html

technical data for pendant light fittings 6050

Explosion protection

gas explosion protection
dust explosion protection

II 2 G EEx de IIC T (Zone 1)
II 2 D IP 66 T_{0max} (Zone 21)

Certifications

gas explosion protection
dust explosion protection

PTB 03 ATEX 1096 (Zone 1)
PTB 03 ATEX 1096 (Zone 21)

other approvals
marking
rated operating voltage U_e
power factor
protection class
connection options

IEC Ex, GL
CE 0102
220 V/230 V/240 V/250 V, AC ± 6%, 50 Hz, others on request
cos φ ≤ 0,9 (compensated)
I (internal + external PE-/PA connection)
L1+N+PE for 2,5 mm² single and fine-stranded wire

Material

housing material
glass cover
cover seal
internal reflector
external reflector
wire guard

housing lock
application position
installation

level of protection
ambient temperature
wire guard and external reflector

light metal
temperature resistant pressed glass
neoprene
highly-polished aluminium
pure aluminium
steel wire (stainless steel)

M4 fastening screw, torx screw heads
suspended or ± 40° slewing angle
using 2 x M8/2 x M10 thread wire inserts in the light fitting cover
alternative: using additional mounting brackets (stainless steel);
adjustable in 10° increments
IP 66
-40 °C ... +40 °C/+50 °C for size 1
-25 °C ... +40 °C/+50 °C for size 3
can easily be mounted later using M6 screws

Cable entries

standard
special cable gland

2 x M25 x 1,5 → 1 x cable gland Ø 7 mm... 17 mm, 1 x stopping plug
2 x M20 x 1,5 → 1 x cable gland Ø 6 mm... 13 mm, 1 x stopping plug
2 x NPT 3/4" threaded holes
2 x NPT 1" threaded holes

switching off the light fitting

2-pole, when opening the glass cover (option)



a detailed data sheet can be downloaded at:
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