## Lighting Technology

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Data Sheet

## Light Fitting for Fluorescent Lamps Series ECOLUX 6600/6608

- for explosive gas atmospheres Zone 1 and Zone 2

- for areas with combustible dust Zone 21 and 22

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## **Lighting Technology**



#### Light Fitting for Fluorescent Lamps Series 6600/6608

- Explosion protection to GB3836.1,GB3836.3 and GB3836.9 Useable in Zone1 & Zone 2 and for areas with combustible dust Zone 21 and Zone 22
- For installation as
   Pendant light fitting
  - Pole-mounting light fitting
- Bulkhead light fitting
- With electronic ballast (1- or 2-channel)
- For two pin fluorescent lamps
- 1- or 2-lamp version: 18 W, 36 W or 58 W
- Enclosure in polyester resin, glass fibre reinforced and cover in polycarbonate, impact-resistant
- Quick fasteners

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The light fittings series 6600/6608 are useable for normal lighting, but also as group or centrally-supplied emergency light fitting.

# Zone1&2, Zone 21, Zone 22

#### Light Fittings for Fluorescent Lamps for Use in Zone1&2, Zone 21, Zone 22 Series ECOLUX 6600

/ersion Series 6600	Lamps						
Series 6600	Lamps		Electi	ronic ballast	Ordering code		Weight [kg]
	Series 6600 1 x 18/20 W		1-cha	nnel	6600/521-8000 -	· 0000	2,5
for use in Zone 2, Zone 21, Zone 22 2 x 18/20 W			1-cha 2-cha		6600/522-8 6600/522-9		2,5 2,9
1 x 36/40 W			1-channel		6600/541-8000 -	· 0000	4,6
	2 x 36/40 W		1-cha 2-cha		6600/542-8 6600/542-9		4,6 5,0
	1 x 58/65 W		1-cha	innel	6600/561-8000 -	· 0000	5,8
	2 x 58/65 W		1-cha 2-cha		6600/562-8□□□ - 6600/562-9□□□ -		5,8 6,2
Add. to ordering code	e						
Through wiring		Standard: Special:	without with 3 core with 5 core		6600/□□□-00 6600/□□-03 6600/□□-05		
Cable entries		Standard:	1 cable entry,		6600/□□-□□1		
		Special:	2 plugs M20 or M25 in moulded plastic or metal State with order		6600/000-009		
Switching off when opening lig	ht fitting	Standard: Special:		h 8080, 2-pole	 6600/□□-□□0 6600/□□-□□1		
Electronic ballast		Standard:	FBT		6600/222-222	 ]- 2	
		Special:	(For outdo 6442/	or use)	6600/000-0000-	1	
Terminals							
Version		Standard:	screw terminals 60 max. 4 mm <sup>2</sup>		6600/000-0000-	· 🗆 3	
		Special:			6600/000-0000-		
Number of	terminals	Standard: Special:	3 (L1, N, F		6600/000-0000- 6600/000-0000-		
Address- and monitoring modul	e	Standard: Special:	without STAHL INOTEC	6448/11-02 6448/12-05 6448/11-03	6600/222-2222 6600/222-2222 6600/222-2222 6600/222-2222	· 0001 · 0003	

Note: The light fittings are supplied without lamps and mounting accessories. These parts must be ordered separately!

#### Light Fittings for Fluorescent Lamps for Use in Zone 1&2, Zone 21, Zone 22 Series ECOLUX 6600

Technical data						
Version	With Standard ballasts (ECB)       With R. STAHL ballast (ECB)         2-channel       1- or 2-channel         Recommended for outdoor use					
Explosion protection	(a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c					
Test certificate for Zone 1&2 for Zone 21		CQST CNEx04.025 DMT 01 ATEX E 086X				
Marking	CE					
Lamps	Two pin-fluores 1 x 18 W, 2 x 1					
Rated voltage	AC: 198 V 2	254 V 50Hz		Option: 110 \ 50/60	10% 254 V + V - 10% 127 ) Hz 10% 250 V +	V + 15%,
Rated current	2 x 18/20 W	1 x 36/40 W 0,16 A	0,31 A	0,1 A	0 Hz 1 x 36/40 W 0,18 A 2 x 36/40 W 0,33 A	0,25 A
Power factor $\cos \phi$	$\cos \varphi = 0.97$ capacitive No additional compensation required					
Ambient temperature	- 20 °C + 50 °C (18 W / 36 W) - 20 °C + 50 °C (+ 45 °C *) (58 W)					
Efficiency of light	2 x 18/20 W	80%	80%	Wide beam 1 x 18/20 W 80% 2 x 18/20 W 74%	1 x 36/40 W 80% 2 x 36/40 W 74%	1 x 58/65 W 80% 2 x 58/65 W 74%
Material Enclosure Cover Gasket Quick fasteners Mounting parts	Polyester resin, glass fibre reinforced, colour white, similar RAL 9010 Polycarbonate; protective paint possible Polyurethane-gasket foamed into diffuser Polyamide, glass fibre reinforced, black/white Polyester resin, glass fibre reinforced, colour white, similar RAL 9010					
Class of protection	I (with internal	PE connectio	n terminal)			
Degree of protection	IP 66/IP 67 (EN	N 60 529)				
Cover fixing	Quick fastener	s to open with	screw-driver;	cover hinged	for access.	
Light guides Standard Special	Wide beam, inside of light fittings painted white. Colour: signal white RAL 9003; prismatic structure for anti-glare in the diffuser sides. Additional reflector (easily mounted), broad deep-beam, aluminium anodized and semi-polished.					
Connection Standard Special	Screw terminals Cable dia. range: $2 \times 4 \text{ mm}^2$ (flexible, single core) 3  pole (marking L1 + N+ PE) Tension clamp terminals Cable dia. range: max. $2 \times 2,5 \text{ mm}^2$ 5  pole (marking L1 + L2 + L3 + N+ PE) or Terminal block with screw terminals cable dia. range: max. $2 \times 6 \text{ mm}^2$ (single core); max. $2 \times 4 \text{ mm}^2$ (flexible) 3 -pole (terminal marking: L1 + N + PE) 5 -pole (terminal marking: L1 + L2 + L3 + N + PE)					

#### Light Fittings for Fluorescent Lamps for Use in Zone 1&2, Zone 21, Zone 22 Series ECOLUX 6600

Tashniasi data	(Continuation)				
Technical data Cable entries Standard: Special:	1 x compression gland 8161, M25 x 1,5; cable dia. range: 7 17 mm 2 x plugs 8290, M25 x 1,5 Entry parts in moulded plastic (8161/8290): M20 Metal glands: M20; M25; Metal cable gland earthing via metal adapter plates				
Switching off On opening the diffuser Faulty lamp	Optional when opening the fastening mechanism of one of the quick fasteners, voltage to ballast will be switched off all-pole; contacts are positively opening, reconnection when cover and quick fasteners are closed. If lamp is faulty, power supply of lamps is switched off automatically by electronic ballast; when using a 2-channel-ECG power is switched off only to the defective lamp.				
Luminous intensity distribution	BOODER BO	Solution of the second			
Version Accuracy class acc. to LitG	1-lamp, without reflector B21	1-lamp, with reflector B31			
Version Accuracy class acc. to LitG	2-lamp, without reflector B21	2-lamp, with reflector B31			
Installation note Looping through Through wiring	There are 2 M25 x 1,5 cable entries on looping through of connection cable (ent Fittings can be supplied with internal thr Entry and exit holes for connection cable A through-wiring kit can be fitted after m Terminals: See technical data Wiring cross-section: 2,5 mm <sup>2</sup> for max.	ry and exit on one side). ough-wiring. es are positioned on opposite sides. nanufacture (see accessories). top			
Mounting       2 x M8 inserts in enclosure         Special       Mounting grooves in housing to accommodate bracket fitting and certain for variable light installation.         Variable mounting distances of light fittings; see dimension drawings					

The right is reserved to make alterations to the data, dimensions, weights, design and delivery terms. The drawings are not binding.

#### Emergency Light Fittings for Fluorescent Lamps Zone 1&2, Zone 21 and Zone 22 Series ECOLUX 6608

Selection table				
Version	Lamp	Lamp control	Ordering code	Weight [kg]
ECOLUX 6608	2 x 18 W	2-channel	6608/522 -9 7-2 .	6,5
Zone 1&2, Zone 21, Zone 22	2 x 36 W	2-channel	6608/542 -9□□7-2□□	8,0
Add. to ordering code:				
Through wiring	Standard: Without Special: With 4-cores With 6-cores		6608/□□□ -00 -□4 -□6	
Cable entries:	Standard: M 25 x 1,5 1 cable lead-in 2 dummy plugs Special: M 20 or M 25 made of plastic or metal Plain text specif	ication	6608/===-=1 6608/===-=9	
Connection terminal				
Туре:	Standard: 4 mm² screw-typ Special: Caged tension t Screw terminals	erminal max. 2.5 mm²	6608/	
Number:	Standard: 4-pole (L1, L', N Special: 6-pole (L1, L2, L		6608/222 -222-224 6608/222 -2222-226	
Switching off				
When opening the lamp	Standard: Without Special: With 8080 switc	h, 2-pole	6608/	
	plied without fluorescent lam e ordered separately as acc			

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### Emergency Light Fittings for Fluorescent Lamps Zone 1&2, Zone 21 and Zone 22 Series ECOLUX 6608

#### Technical data

Design	2 x 18 / 20 W or alternatively 2 x 36 / 40 W, electronic ballast with integrated emergency light electronic hardware in a continuous circuit or switchable continuous circuit				
Explosion protection	<ul> <li>Il 2G</li> <li>EEx edm II T4</li> <li>EEx T80 °C</li> </ul>				
Test certificate	CQST Ex (applied for)				
Rated voltage	AC: 220 V – 10% 254 V + 6%; 50 Hz / 60 Hz				
Lamp fitting	2 x 18 / 20 W, 2 x 36 / 40 V	W			
Protection class	I (with internal PE terminal)				
Ambient temperature Standard operation Battery operation	– 20 °C + 50 °C – 5 °C + 50 °C charge – 20 °C + 50 °C dischar				
Connection facility	Connection terminals L1, I for 4 mm <sup>2</sup> fine-wire / single L' = charging phase, must	e-wire; 2 x 2.5 mm <sup>2</sup> fine-wire / single-wire			
Wiring	Lamps available with inter 4- or 6-core; Cross-sectional area 2.5 n				
Wire lead-ins Standard Special	Connection side: 1 M 25 x 1.5 screw connection and 1 M 25 x 1.5 dummy plug; Opposite side: 1 M 25 x 1.5 dummy plug M20 made of plastic or metal				
Material Housing Diffuser cover Sealing Quick-action fasteners Installation parts	Polyester resin, fibreglass reinforced, colour white, similar to RAL 9010 Polycarbonate, shock-resistant, aromatic-resistant lacquer possible Foam polyurethane sealing in the diffuser cover Polyamide, fibreglass reinforced				
Degree of protection	Polyester resin, fibreglass reinforced, white, similar to RAL 9010 IP 66 / IP 67				
Cover fasteners	Quick-action fasteners to be opened using a screwdriver; Diffuser cover can be swivelled by means of a hinge				
Light deflection Standard Special	Colour: Signal white RAL	aces of the lamps are lacquered white. 9003; lateral glare is limited by the lamp diffuser cover. nountable), narrow-angle / wide-angle shining, polished.			
Switching off When opening the diffuser cover In the case of a lamp defect	Optional When opening the closure mechanism on one of the quick-action fasteners, the voltage to the ballast is switched off at all poles; The contacts of the switching element are forced-opening contacts, switch-on again when lamp diffuser cover and quick-action fastener are closed. In the case of a lamp defect, the electronic ballast automatically switches the power supply of the defective lamp off.				
Lamp design	2-lamp	2-lamp			
	without a reflector	with a reflector			
Class in accordance with LitG	B21 B31				
Battery unit	In the lamp				
Design Capacity Operating voltage Changing the battery unit	NiCd battery, gas-tight 7 Ah 6 V Open the housing; After loosening two screws, the battery unit can be removed from the housing.				

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Technical data (continued)					
Emergency light electronics	Integrated in a housing together with the electronic ballast				
Designs		The emergency light electronics are designed for: Continuous circuit or continuous circuit with switchable emergency light blocking mechanism			
Radio noise suppression	In accordance with DIN EN 55 015				
Function test		Weekly verification of the emergency light function; Battery errors and lamp defects are pinpointed and indicated via the red LED.			
Emergency light lighting-duration test	Deactivation Activation o If the jumpe as the lamp at intervals The lamp is if the lamp i time, then the	Automatic emergency light lighting-duration test function integrated in the lamp; Deactivation of the function: Insert jumper between terminals 9 and 12 Activation of the function: Remove jumper between terminals 9 and 12 If the jumper on terminals 9 and 12 is removed, then the test function is activated as soon as the lamp is connected to the mains; a built-in timer function reruns the necessary tests at intervals of 3 months using the following test: The lamp is operated in emergency light mode over 2/3 of the nominal operation time; if the lamp is switched off via the low-discharge protection mechanism before the elapse of this time, then the battery unit is no longer suitable for utilisation in emergency light systems; this is indicated via the red LEDs.			
Function displays	integrated in	emitting diode and 1 gre n the reflector sheet me from the outside through	tal plate;	-	
Displays	LED	Display	Func	tion	
	Green	On	Char	ging current is flowing, everything ok	
		Blinking 1:1	Autor	matic lighting-duration test is running	
		Blinking 1:10	Auto	matic function test is running	
	Red	On		rgency light lighting-duration test not passed; ge of battery necessary	
		Blinking 1:1	Batte	ry discharged; not ready for operation	
		Blinking 1:10	Batte	ery defective	
Operating types	on the term of a remote	inals 1 and 2 of the eme	ergency light ele g is converted		
Continuous circuit (function) Continuous circuit with switchable emergency lighting (function)	from the ba In the case switches to The emerge by means o	of a possible power failt ttery, irrespective of the of a possible failure of t emergency lighting ope ency light is centrally sw	ure of the gene switch setting he power supp ration when the itched to "ready depending on	ly for the general lighting, the lamp only e remote switch F is switched on. y for operation" or "not ready for operation" the system operating times; the remote	
Battery charging		ulated constant-current h, thereafter changeove		rging.	
Low-discharge protection		When $U_{\text{batt}} = 1 \text{ V} / \text{cell } (3 \text{ V})$ ; the emergency light automatic mechanism switches off the lamp automatically (DIN VDE 0108)			
Emergency light operating duration	Battery cap	acity	Emergency li	ght operating duration	
	7 Ah		1,5 h / 3 h		
Switching voltage From mains to battery operation From battery to mains operation	For U < 0.6 x U <sub>N</sub> For U > 0.9 x U <sub>N</sub>				
Light power during emergency light operation	Emergency	light operating duration	Emergency light lighting power		
	1,5 h 3 h		18 / 20 W 90% 45%	36 / 40 W 45% 25%	

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#### Light Fittings for Fluorescent Lamps for Use in Zone 1&2, Zone 21, Zone 22 Series ECOLUX 6600/6608



#### Light Fittings for Fluorescent Lamps for Use in Zone 1&2, Zone 21, Zone 22 Series ECOLUX 6600/6608

Accessories and s	pare parts				
Designation	Illustration	Description		Ordering code	Weight [kg]
Fluorescent lamp	Soogep	Two pin ∅ 26 mm Colour of light: Universal-wh L 18 W/25 L 36 W/25 L 58 W/25	ite 1100 lm 2600 lm 4100 lm	461 722 0 461 721 0 461 720 0	0,10 0,20 0,25
Diffuser	S1049KOS	For light fitting	18/20 W 36/40 W 58/65 W	66 000 01 05 0 66 000 02 05 0 66 000 03 05 0	1,20 2,12 2,70
Switch	SUBBLO S	Switch	8080/1-3-L 20e	80 800 06 60 0	0,025
Ballast		FBT-218HTS QTIS-B 2 x 18 W	2-channel 1-channel	365 768 0 365 771 0	<b>1</b> ,60 0,35
	S1048KOS	FBT-236HTS QTIS-B 2 x 36 W	2-channel 1-channel	365 769 0 365 772 0	<b>1</b> ,60 0,35
		FBT-258HTS QTIS-B 2 x 58 W	2-channel 1-channel	365 770 0 365 773 0	<b>1</b> ,60 0,35
	S0849PRS	Corrosion-resistant for outdo 6442/721-2 6442/722-2 6442/723-2	or use 1 x 18 W, 1-channel 2 x 18 W, 1-channel 2 x 18 W, 2-channel	64 420 02 01 0 64 420 05 01 0 64 420 08 01 0	1,70 1,70 1,70
		6442/741-2 6442/742-2 6442/743-2	1 x 36 W, 1-channel 2 x 36 W, 1-channel 2 x 36 W, 2-channel	64 420 03 01 0 64 420 06 01 0 64 420 09 01 0	1,70 1,70 1,70
		6442/761-2 6442/762-2 6442/763-2	1 x 58 W, 1-channel 2 x 58 W, 1-channel 2 x 58 W, 2-channel	64 420 04 01 0 64 420 07 01 0 64 420 10 01 0	1,70 1,70 1,70
Nounting kit or through wiring	C.	For later installation into star	ndard-light fitting		
0 0	S0656P	DV3, tension clamp terminal: 3 x 2,5 mm <sup>2</sup> , max. 16 A terminal marking: L1 + N + PE	36 W/40 W	66 008 10 87 0 66 008 11 87 0 66 008 12 87 0	0,10 0,15 0,20
		DV5, tension clamp terminals 5 x 2,5 mm <sup>2</sup> , max. 16 A terminal marking:	s 18 W/20 W 36 W/40 W	66 008 07 87 0 66 008 08 87 0	0,15 0,25
		L1 + L2 + L3 + $N$ + PE DV3, screw terminals	58 W/65 W 18 W/20 W	66 008 09 87 0 66 008 04 87 0	0,30 0,20
		$3 \times 2,5 \text{ mm}^2$ , max. 16 A terminal marking: L1 + N + PE	36 W/40 W 58 W/65 W	66 008 05 87 0 66 008 06 87 0	0,20 0,25 0,30
		DV5, screw terminals 5 x 2,5 mm <sup>2</sup> , max. 16 A terminal marking:	18 W/20 W 36 W/40 W	66 008 01 87 0 66 008 02 87 0	0,25 0,35
		L1 + L2 + L3 + N + PE	58 W/65 W	66 008 03 87 0	0,40
Reflectors		For later installation, broad d For 1-lamp light fittings 1	leep-beam 8 W/20 W	60 309 03 58 0	0,08
	S0478PRS	3	6 W/40 W 8 W/65 W	60 309 04 58 0 60 309 06 58 0	0,18 0,22
		3	8 W/20 W 6 W/40 W 8 W/65 W	60 309 01 58 0 60 309 02 58 0 60 309 05 58 0	0,12 0,26 0,32
Adaptor plates	BOP BOP	when metal glands 1 are used 1 1	x M20 x 1,5 x M25 x 1,5 x NPT ½" x NPT ¾" y M20 x 1 5	60 008 15 55 0 60 008 16 55 0 60 008 17 55 0 60 008 18 55 0 60 008 18 55 0	0,07 0,07 0,07 0,07
	soc	2	x M20 x 1,5 x M25 x 1,5 x NPT ½"	60 008 19 55 0 60 008 20 55 0 60 008 21 55 0	0,06 0,06 0,06

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#### Light Fittings for Fluorescent Lamps for Use in Zone 1&2, Zone 21, Zone 22 Series ECOLUX 6600/6608

Accessories and spare	narts				
Designation	Illustration	Description		Ordering code	Weight
200.91.44011		2000.1911011			[kg]
Lampholder x		Lampholder for 2-pin lamps G13		385 613 0	0,05
Mounting rail	S1050KOS	For variable mounting distance	1 pair	66 008 01 75 0	0,32
Mounting clamp rail	S1051KOS	Clamp mounted to mounting rail for variable mounting distance	1 pair	66 008 02 75 0	0,10
Ring bolts M8		To mount directly into inserts	1 pair	60 008 03 90 0	0,11
Wall-mounting bracket	Contraction of the second seco	For pole-mounting fitting with conduit 1300 mm long, 42 m (With pipe clamp R1½")	nm dia.	463 749 0	4,0
Ceiling mounting bracket	S1052KOS	for ceiling mounting of light fitting	1 pair	66 008 03 75 0	0,28
Pipe clamp		With mounting rail for variable modistance; Material: stainless stee R 1¼" (Ø 42 mm) R 1½" (Ø 48 mm) R 2" (Ø 60 mm)		66 008 05 26 0 66 008 01 26 0 66 008 02 26 0	1,25 1,31 1,40
Mounting set "Grid cable rack"	STOATXXS	For grid cable racks, wire diamet with mounting rail for variable mo distance; Material: stainless stee	ounting	66 008 03 26 0	1,20
Ceiling and wall-mounting bracket		With mounting rail for variable modistance; Material: stainless stee light fitting adjustable in 15° steps	l		
	S1053KOS		1 pair	66 008 04 26 0	1,2
Cable entry	S1017PRS	in moulded plastic Thread Conductor dia. M20 x 1,5 6 13 mm M25 x 1,5 7 17 mm	Packing unit 1 piece 50 piece 1 piece 50 piece	81 610 77 01 0 81 610 25 03 0 81 610 78 01 0 81 610 26 03 0	0,012 0,600 0,017 0,850
Plugs	S1045KOS	in moulded plastic Thread M20 x 1,5 M25 x 1,5	Packing unit 1 piece 100 piece 1 piece 100 piece	82 900 08 59 0 82 900 45 59 0 82 900 09 59 0 82 900 46 59 0	0,006 0,600 0,006 0,600
Breathing gland	SOB51PRS	For installation in light fittings; in moulded plastic; without lockne Thread: M25 x 1,5	ut 1 piece 20 piece	81 620 01 02 0 81 620 02 02 0	0,010 0,200

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