

Explosion Proof Visual Signal - 5, 10 or 20 Joule Series FL60



www.stahl.de



- > 5, 10 or 20 Joule xenon strobe
- > Lens available in seven different colours
- > IP66 rated as standard
- > Aluminium enclosure with stainless steel fasteners
- > Flash rate 1 per second
- > Lens guard and mounting bracket supplied as standard
- > Telephone initiate option available



13914E00

H3

Yodalex range
Visual signal designed for use in hazardous or harsh environments.

Zone	ATEX						Zone	Class I (NEC 505) (NEC 506)						Division	Class I		Class II		Class III		
	0	1	2	20	21	22		0	1	2	20	21	22		1	2	1	2	1	2	
For use in		x	x		x	x	For use in		x	x		x	x	For use in	x	x	x	x	x	x	x

Explosion Protection

Marking

IECEX Gas explosion protection	IIB version:	Ex d IIB T4 (Ta -35°C to +60°C)
	IIB+H ₂ version:	Ex d IIB+H ₂ T4 (Ta -20°C to +60°C)
Dust explosion protection	IIB version:	Ex tD A21 IP66 T135°C (Ta -35°C to +60°C)
	IIB+H ₂ version:	Ex tD A21 IP66 T135°C (Ta -35°C to +60°C)
Europe (ATEX) Europe (ATEX)	IIB version:	⊕ II 2 GD Ex d IIB T4 (T6 on request)
	IIB+H ₂ version:	⊕ II 2 GD Ex d IIB+H ₂ T4 (T6 on request)

Certificates

IECEX	IIB version:	IECEX BAS 05.0086 X
	IIB+H ₂ version:	IECEX BAS 05.0087X
Europe (ATEX)	IIB version:	Baseefa 02ATEX0212X
	IIB+H ₂ version:	Baseefa 02ATEX0222X
Other approvals	Canada (CUL), Russia (GOST-R), USA (UL), Brazil (INMETRO)	

WebCode FL60B

Explosion Proof Visual Signal - 5, 10 or 20 Joule Series FL60



Selection Table

Version	Group	Flash energy	Rated operational voltage	Lens colour	Order number	Art. no.	Weight kg
FL60 Strobe, ATEX certification, standard devices	IIB + H ₂	5 Joule	24 V DC	amber	FL60/C/D50/A/EU	205129	5.080
				red	FL60/C/D50/R/EU	205133	5.080
			115 V AC	amber	FL60/C/L50/A/EU	212366	5.080
				red	FL60/C/L50/R/EU	205145	5.080
			230 V AC	amber	FL60/C/N50/A/EU	205150	5.080
				red	FL60/C/N50/R/EU	205153	5.080
FL60 Strobe, UL certification, standard devices	IIB + H ₂	5 Joule	24 V DC	amber	FL60/B/D50/A/UL	205156	5.080
				red	FL60/B/D50/R/UL	205160	5.080
			115 V AC	amber	FL60/B/L50/A/UL	205163	5.080
				red	FL60/B/L50/R/UL	205165	5.080
			230 V AC	amber	FL60/B/N50/A/UL	212367	5.080
				red	FL60/B/N50/R/UL	211406	5.000
FL60 Strobe, IECEX certification, standard devices	IIB + H ₂	5 Joule	24 V DC	amber	FL60/C/D50/A/IN	212368	5.080
				red	FL60/C/D50/R/IN	205139	5.080
			115 V AC	amber	FL60/C/L50/A/IN	212369	5.080
				red	FL60/C/L50/R/IN	212370	5.080
			230 V AC	amber	FL60/C/N50/A/IN	212371	5.080
				red	FL60/C/N50/R/IN	211551	5.080
FL60 Strobe, GOST R certification, standard devices	IIB + H ₂	5 Joule	24 V DC	amber	FL60/C/D50/A/RU	206976	5.080
				red	FL60/C/D50/R/RU	212381	5.080
			115 V AC	amber	FL60/C/L50/A/RU	212382	5.080
				red	FL60/C/L50/R/RU	212383	5.080
			230 V AC	amber	FL60/C/N50/A/RU	212384	5.080
				red	FL60/C/N50/R/RU	212385	5.080
Note	Variations in gas group, flash energy, voltage and lens colour are available, please use the table below to order						

Explosion Proof Visual Signal - 5, 10 or 20 Joule

Series FL60



Selection Table

Version	Variations	Order Number
FL60 Strobe, devices acc. to specification	Type code: please fill in fields	FL60 / / / / / / / /
Gas group		
EU, IN and RU units	IIB	B
	IIB + H2	C
UL units	C, D gas groups	C
	B gas groups	B
Rated operational voltage		
24 V DC		D
48 V DC		F
115 V AC		L
230 V AC		N
Flash energy		
5 Joule		50
10 Joule		100
20 Joule		200
Lens colour		
amber		A
red		R
green		G
opal		O
blue		B
clear		C
yellow		Y
Certification		
ATEX		EU
UL		UL
IECEX		IN
GOST-R		RU
Additions		
activation AC voltages only	telephone initiate	TI

H3

Technical Data

Electrical data

Rated operational voltage	24 or 48 V DC, 115 or 230 V AC			
24 V DC	5 J	IECEX, ATEX, UL, GOST	220 mA	
	10 J	IECEX, ATEX, GOST	500 mA	
	20 J	IECEX, ATEX, GOST	1,1 A	
48 V DC	5 J	IECEX, ATEX, UL, GOST	135 mA	
	10 J	IECEX, ATEX, GOST	300 mA	
	20 J	IECEX, ATEX, GOST	560 mA	
115 V AC	5 J	IECEX, ATEX, UL, GOST	90 mA	
	10 J	IECEX, ATEX, GOST	105 mA	
	20 J	IECEX, ATEX, GOST	260 mA	
230 V AC	5 J	IECEX, ATEX, GOST	45 mA	
	10 J	IECEX, ATEX, GOST	53 mA	
	20 J	IECEX, ATEX, UL, GOST	170 mA	

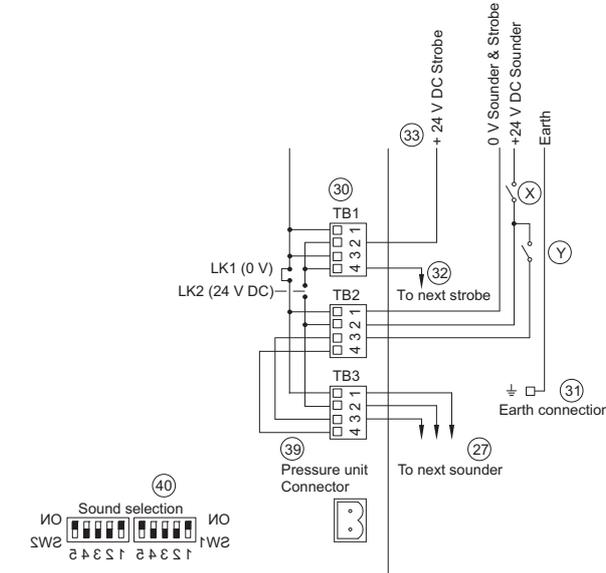
Explosion Proof Visual Signal - 5, 10 or 20 Joule Series FL60



Technical Data

Schematic

Standard DC alarm connection and sound signal selection



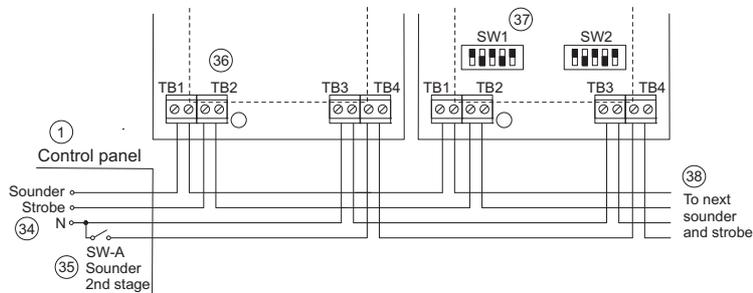
14809E00

NOTE:

Two stage alarm by third core.
Strobe shown with common 0 V.
Line monitoring by reversal.
Select alarm stage 1 on SW1.
Select alarm stage 2 on SW2.

The two stage control always operates as follows:
The first stage sounds by supplying volts to a unit via control switch 'X'. This switch remains on and the second stage signal is controlled by switching volts to the third terminal via switch 'Y'.

AC alarm connection and sound signal selection



14810E00

Legend

- 1 = External power supply, provided by user
- 27 = Connections to additional sounder/horn
- 30 = Terminal blocks for incoming and outgoing wiring
- 31 = Internal earth terminal
- 32 = Connections to additional strobe/beacon
- 33 = Control voltage for strobe/beacon (connection to TB1), common voltage for both strobe/beacon and sounder/horn (connection to TB2), control voltage for sounder/horn (connection to TB2)
- 34 = Live voltage for sounder/horn (connection to TB1), live voltage for strobe/beacon (connection to TB2), common neutral for both strobe/beacon and sounder/horn (connection to TB3)
- 35 = Switch for second stage alarm
- 36 = Terminal blocks for incoming and outgoing wiring
- 37 = Dual in line sound selection switches, situated on reverse
- 38 = Connections to additional sounder/horn and strobe beacon
- 39 = Connecting socket used for pressure unit, situated on reverse of the PCB
- 40 = Dual in line sound selection switches, situated on reverse of PCB

Luminous Characteristics

Flash rate	1/s
Flash energy	5, 10 or 20 J
Lens colour	amber, red, green, opal, blue, clear, yellow

Explosion Proof Visual Signal - 5, 10 or 20 Joule Series FL60



Technical Data

Ambient conditions

Ambient temperature	version			
IIB	Europe	T4	- 35 ... + 60 °C	
		T6	- 35 ... + 40 °C	
IIB + H ₂	Europe	T4	- 20 ... + 60 °C	
		T6	- 20 ... + 40 °C	

Mechanical data

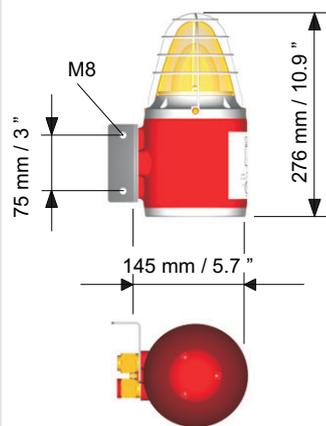
Material	
Enclosure	aluminium, seawater resistant
Globe	polycarbonate
Assembly parts	stainless steel
Degree of protection	IP66, 4X
Cable entries	2 cable entries, equipped with stopping plug (1x) and dust cap (1x) UL devices: equipped with M20 / 1/2 " adapters (2x)

Accessories and Spare Parts

Designation	Illustration	Description	Group	Order number	Art. no.	WebCode
Cable gland		Compound Barrier Cable Glands Ex d and Ex e for all Types of Unarmoured Cables	IIB + H ₂ and IIC	8163 / 2-20- PXSS2K-M20	138888	8163J
		Compound Barrier Cable Glands Ex d and Ex e for all Types of Armoured Cables	IIB + H ₂ and IIC	8163 / 2-20- PX2K-M20	138875	8163I
		Cable Glands Ex d and Ex e for Unarmoured Cables	IIB	8163 / 2-20- A2F-M20	138772	8163A
		Triton CDS Cable Glands Ex d and Ex e for all Types of Armoured Cables	IIB	8163 / 2-20- T3CDS-M20	138902	8163K

Note Approvals of cable entries have to be observed.

Dimensional Drawings (All Dimensions in mm / inches) - Subject to Alterations



13978E00

We reserve the right to make alterations to the technical data, dimensions, weights, designs and products available without notice. The illustrations cannot be considered binding.

H3