

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



- > 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

H3



13914E00

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

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

Explosion Protection

Marking

IECEx

Gas explosion protection

IIB version: Ex d IIB T4 (Ta -35°C to +60°C)

IIB+H₂ version: Ex d IIB+H₂ 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+H₂ version: Ex tD A21 IP66 T135°C (Ta -35°C to +60°C)

Europe (ATEX)

Europe (ATEX)

IIB version: Ex II 2 GD Ex d IIB T4 (T6 on request)

IIB+H₂ version: Ex II 2 GD Ex d IIB+H₂ T4 (T6 on request)

Certificates

IECEx

IIB version: IECEx BAS 05.0086 X

IIB+H₂ version: IECEx BAS 05.0087X

Europe (ATEX)

IIB version: Baseefa 02ATEX0212X

IIB+H₂ version: Baseefa 02ATEX0222X

Other approvals

Canada (CUL), Russia (GOST-R), USA (UL), Brazil (INMETRO)

WebCode FL60B

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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						

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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 telephone initiate	TI
	AC voltages only	

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Technical Data

Electrical data

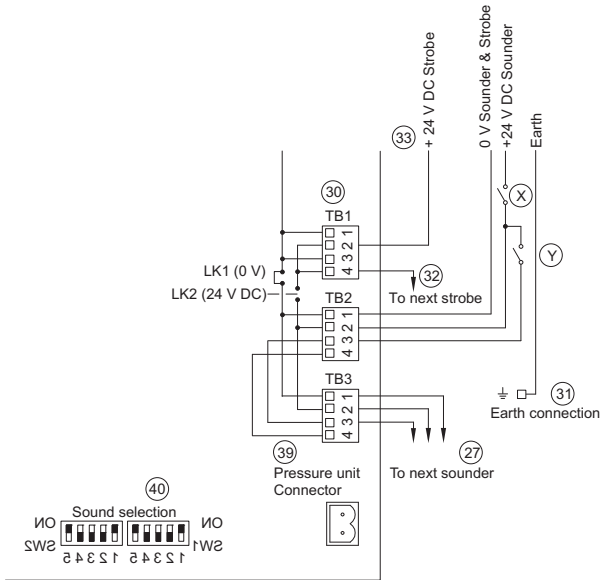
Rated operational voltage	24 or 48 V DC, 115 or 230 V AC			
Current consumption	24 V DC	5 J	IECEX, ATEX, UL, GOST	220 mA
		10 J	IECEX, ATEX, GOST	500 mA
		20 J	IECEX, ATEX, GOST	1,1 A
	48 V DC	5 J	IECEX, ATEX, UL, GOST	135 mA
		10 J	IECEX, ATEX, GOST	300 mA
		20 J	IECEX, ATEX, GOST	560 mA
	115 V AC	5 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



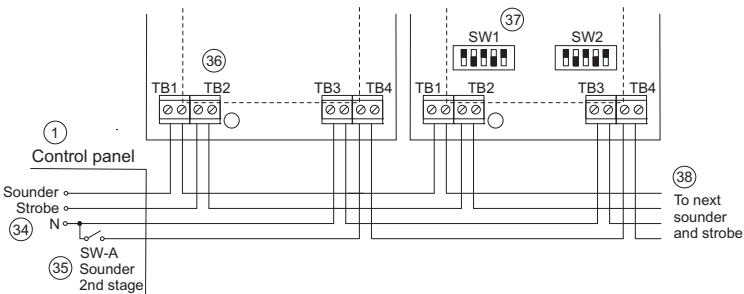
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NOTE:

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



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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

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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

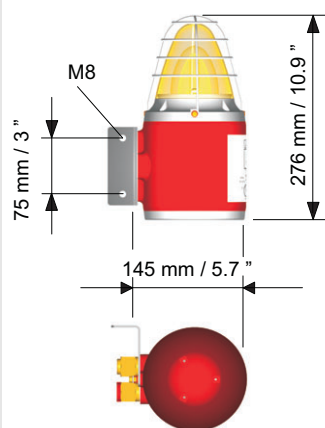
Material	
Enclosure	aluminium, seawater resistant
Globe	polycarbonate
Assembly parts	stainless steel
Degree of protection	IP66, 4X
Cable entries	2 cable entries, equipped with stopping plug (1x) and dust cap (1x) UL devices: equipped with M20 / 1/2 " adapters (2x)

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



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.