

# XLF

- Zones 1, 2, 21, 22
- Obstruction warnings
- Stroboscopic lights
- Single or double fixtures
- Low wind resistance



*Polycarbonate  
Fresnel  
lens*

*Fixture without  
Fresnel lens*

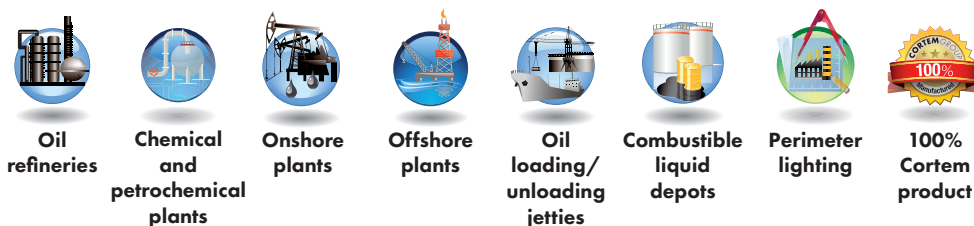
*Painted  
aluminium  
body*



## XLF series XENON obstruction lighting fixtures

XLF series Xenon obstruction lighting fixtures are ideal for chimneys, towers, smokestacks, bell towers, buildings, cranes, bridges, radio/television masts, cable car and power line pylons, wind turbines, radar and telecommunication antennas and specifically for use in the petrochemical and oil industries. Their small size, light weight, ease of installation and robustness mean that XLF series lights do not deteriorate over time especially with exposure in salty environments. They are also resistant to the wind and the deposit of industrial dusts thanks to the low profile and aerodynamic properties of the body.

### Application sectors:



### CERTIFICATION DATA

|                                   |  |   |  |  |
|-----------------------------------|--|---|--|--|
| <b>Classification:</b>            | Group II   | Category 2GD  |  |  |
| <b>Installazione:</b> EN 60079.14 | zone 1 - zone 2 (Gas)  | zone 21 - zone 22 (Dust)  |  |  |
| <b>Marking:</b>                   | CE 0722 Ex II 2GD Ex d IIC T5 Gb; Ex tb IIIC Db IP66   |   |  |  |
| <b>Certification:</b>             | ATEX CESI 03 ATEX 046  |   |  |  |
|                                   | IEC Ex IECEX CES 12.0020   | All IEC Ex certification data can be downloaded at <a href="http://www.cortemgroup.com">www.cortemgroup.com</a> |  |  |
| <b>Standards:</b>                 | CENELEC EN 60079-0: 2009, EN 60079-1: 2007, EN 60079-7: 2007, EN 60079-31: 2009, EN 60598-1:2008+A11:2009, EN 60598-2-1:1989 and EUROPEAN DIRECTIVE 2014/34/UE<br>European Directive 2004/108 Electromagnetic compatibility<br>European Directive 2012/19/UE, 2002/96/CE, 2003/108/CE WEEE<br>European Directive 2011/65/UE RoHS |   |  |  |
| <b>Class temperature:</b>         | 100°C (T5)   |   |  |  |
| <b>Ambient temperature:</b>       | -20°C +55°C  | Special -50°C +40°C   |  |  |
| <b>Degree of protection:</b>      | IP66   |   |  |  |



## XLF series XENON obstruction lighting fixtures



ORIGINAL PRODUCT

### MECHANICAL FEATURES

|                              |  |
|------------------------------|--|
| <b>Body:</b>                 | Low copper content aluminium alloy   |
| <b>Globe:</b>                | Shock and temperature resistant borosilicate glass sealed with aluminium shade ring  |
| <b>Fresnel lens:</b>         | Transparent polycarbonate, shock and UV resistant  |
| <b>Gaskets:</b>              | Silicone acid/hydrocarbon resistant  |
| <b>Mounting:</b>             | See "XLF-1-2 series dimensional drawings"  |
| <b>Bolts and screws:</b>     | Stainless steel  |
| <b>Entries:</b>              | 4 x 3/4" NPT threaded entries.   |
| <b>Coating:</b>              | Polyester coating Ral 7035 (light grey)  |
| <b>Corrosion Resistance:</b> | The STANDARD of the aluminium alloy used by Cortem has passed the tests required by standards EN60068-2-30 (hot/humid cycles) and EN60068-2-11 (salt mist tests) |

### ELECTRICAL FEATURES

|                         |  |
|-------------------------|--|
| <b>Lamp holder:</b>     | E27 ceramic  |
| <b>Lamp:</b>            | Stroboscopic (about 30 flash/min.) 6J or 16J Xenon with electronic module<br>(for further information see "EC SERIES ELECTRONIC MODULE CHARACTERISTICS")   |
| <b>Rated voltage:</b>   | 24 VAC/DC, 110 VAC, 230 VAC  |
| <b>Rated frequency:</b> | 50/60 Hz   |
| <b>Connection:</b>      | Direct to lamp holder L, N, Pe. Max section 4mm <sup>2</sup><br>The double lighting fixtures (XLF-....2) comes supplied wired and sealed up to the junction box, the connection is made to the terminal board inside the terminal box L, N, Pe. Max section 4mm <sup>2</sup> |
| <b>Power factor:</b>    | 0.96   |
| <b>Wiring:</b>          | Silicone rubber cables with glass braid protection against high temperatures   |

### ACCESSORIES AVAILABLE / SPECIAL REQUESTS

Cable gland: NEVB2NB for armoured cable or NAVB2NB for non-armoured cable


Model for conduit or pendant mounting (code: XLFS-1V1101)

Special markings in  $\text{Ex}$  II 2GD Ex de IIC T5 Gb; Ex tb IIIC T.. Db IP66 . (code: XLFE-1V1101)

Ex or IP66 protected control panel with electronic modules

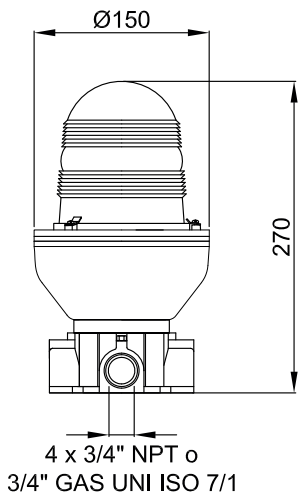
GAS UNI ISO 7/1 thread

## XLF series selection chart

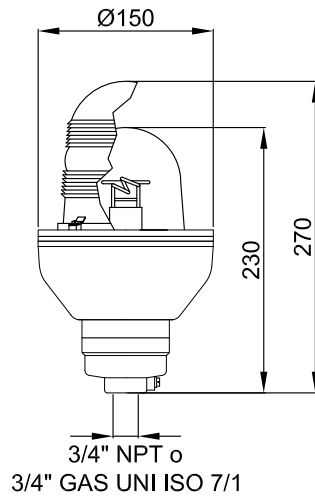
| Code       | Lamp | Colour     | Lamp power xenon | Power supply | Weight Kg | <br>mm |
|------------|------|------------|------------------|--------------|-----------|---|
| XLF-10241  | 1    | NO FRESNEL | 6 Joule          | 24V Ac Dc    | 2,15      | 160x150x330   |
| XLF-10242  | 2    | NO FRESNEL | 6 Joule          | 24V Ac Dc    | 5,00      | 440x175x425   |
| XLF-11101  | 1    | NO FRESNEL | 6 Joule          | 110V Ac      | 2,15      | 160x150x330   |
| XLF-11102  | 2    | NO FRESNEL | 6 Joule          | 110V Ac      | 5,00      | 440x175x425   |
| XLF-12301  | 1    | NO FRESNEL | 6 Joule          | 230V Ac      | 2,15      | 160x150x330   |
| XLF-12302  | 2    | NO FRESNEL | 6 Joule          | 230V Ac      | 5,00      | 440x175x425   |
| XLF-1R0241 | 1    | RED        | 6 Joule          | 24V Ac Dc    | 2,40      | 160x150x330   |
| XLF-1R0242 | 2    | RED        | 6 Joule          | 24V Ac Dc    | 5,00      | 440x175x425   |
| XLF-1R1101 | 1    | RED        | 6 Joule          | 110V Ac      | 2,40      | 160x150x330   |
| XLF-1R1102 | 2    | RED        | 6 Joule          | 110V Ac      | 5,00      | 440x175x425   |
| XLF-1R2301 | 1    | RED        | 6 Joule          | 230V Ac      | 2,40      | 160x150x330   |
| XLF-1R2302 | 2    | RED        | 6 Joule          | 230V Ac      | 5,00      | 440x175x425   |
|            |      |            |                  |              |           |   |
| XLF-20241  | 1    | NO FRESNEL | 16 Joule         | 24V Ac Dc    | 2,15      | 160x150x330   |
| XLF-20242  | 2    | NO FRESNEL | 16 Joule         | 24V Ac Dc    | 5,00      | 440x175x425   |
| XLF-21101  | 1    | NO FRESNEL | 16 Joule         | 110V Ac      | 2,15      | 160x150x330   |
| XLF-21102  | 2    | NO FRESNEL | 16 Joule         | 110V Ac      | 5,00      | 440x175x425   |
| XLF-22301  | 1    | NO FRESNEL | 16 Joule         | 230V Ac      | 2,15      | 160x150x330   |
| XLF-22302  | 2    | NO FRESNEL | 16 Joule         | 230V Ac      | 5,00      | 440x175x425   |
| XLF-2R0241 | 1    | RED        | 16 Joule         | 24V Ac Dc    | 2,40      | 160x150x330   |
| XLF-2R0242 | 2    | RED        | 16 Joule         | 24V Ac Dc    | 5,00      | 440x175x425   |
| XLF-2R1101 | 1    | RED        | 16 Joule         | 110V Ac      | 2,40      | 160x150x330   |
| XLF-2R1102 | 2    | RED        | 16 Joule         | 110V Ac      | 5,00      | 440x175x425   |
| XLF-2R2301 | 1    | RED        | 16 Joule         | 230V Ac      | 2,40      | 160x150x330   |
| XLF-2R2302 | 2    | RED        | 16 Joule         | 230V Ac      | 5,00      | 440x175x425   |

# XLF series dimensional drawings

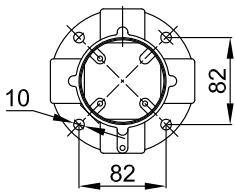
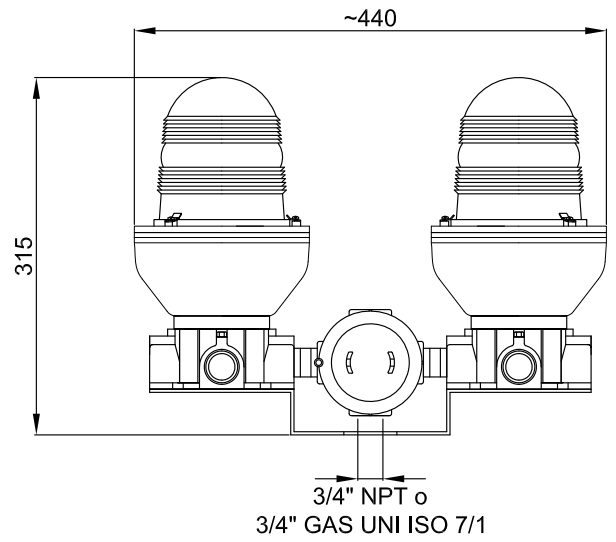
**XLF-...**  
Structure mounting



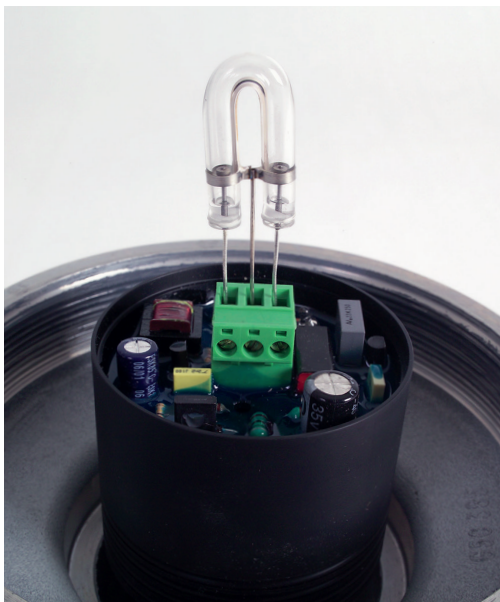
**XLFS-...**  
Conduit or pendant mounting



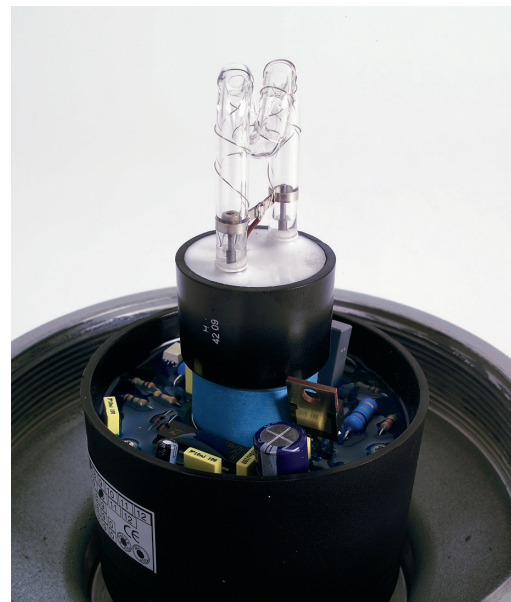
**XLF-...2**  
Double obstruction  
lighting fixture



Dimensions in mm



Close up of 6J Xenon lamp



Close up of 16J Xenon lamp

**DON'T FORGET TO ORDER THE ACCESSORIES**

Example: Type of lighting fixture +  
XLF-1R1101

Cable gland  
NEVB2NB

+ other ...see key



## Accessories and spare parts available on request XLF series

| ILLUSTRATION  | DESCRIPTION                                  | MODEL    | FEATURES   | CODE              | KEY   |
|---|--|----------|--|-------------------|---|
|    | Globe with shade ring                        |          | Borosilicate glass globe<br>Aluminium ring shade ring                                    | G50-0389FCM       |    |
|    | Polycarbonate Fresnel lens                   |          | Red  | SR-1300           |    |
|    | O-ring                                       |          | Material: silicone   | OR-4512SH70S      |    |
|    | Ceramic lamp holder                          | E27      | 250V 4A  | PORT E-27/X       |    |
|   | Structure mounting                           |          | 4 x 3/4" entries   | G-0214            |    |
|  | Pendant mounting                             |          | 1 x 3/4" entry   | G-0213            |    |
|  | Stroboscopic light with integrated module    | 6 Joule  | 24V ac/dc  | EC-06/624V        |    |
|   |  | 16 Joule |  | EC-06/24V         |   |
|   |  | 6 Joule  | 110-230V ac/dc   | EC-06/6           |   |
|   |  | 16 Joule | 230V ac  | EC-06             |   |
|   |  | 16 Joule | 110V ac  | EC-06/110V        |   |
|  | Protective cage only for XLF without Fresnel |          | Material: Electro-polished stainless steel   | G50-0417          |   |
|  | Cable gland                                  |          | For models and codes, visit <a href="http://www.cortemgroup.com">www.cortemgroup.com</a> | NAV2NB<br>NEVB2NB |   |

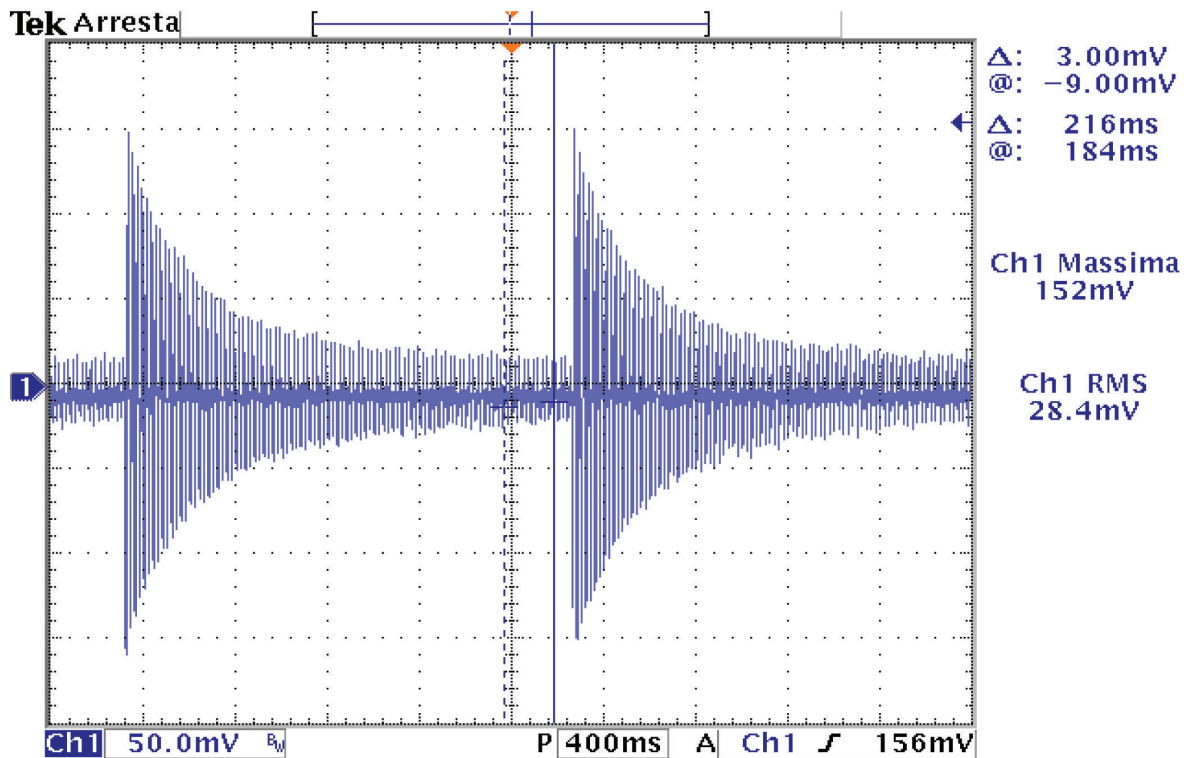
## Features of EC series electronic modules for XLF

| CODE              | DESCRIPTION                          | GRAPH | VOLTAGE         |
|-------------------|--------------------------------------|-------|-----------------|
| <b>EC-06/110V</b> | Stroboscopic light 110V 16J          | 1     | 110 V ac/dc     |
| <b>EC-06</b>      | Stroboscopic light 230V ac 16J       | 2     | 230 V ac/dc     |
| <b>EC-06/6</b>    | Stroboscopic light 110-230V ac/dc 6J | 3 - 4 | 110-255 V ac/dc |
| <b>EC-06/624V</b> | Stroboscopic light 24V ac/dc 6J      | 5     | 24 V ac/dc      |

The waveforms have been designed to measure each module's exact consumption.

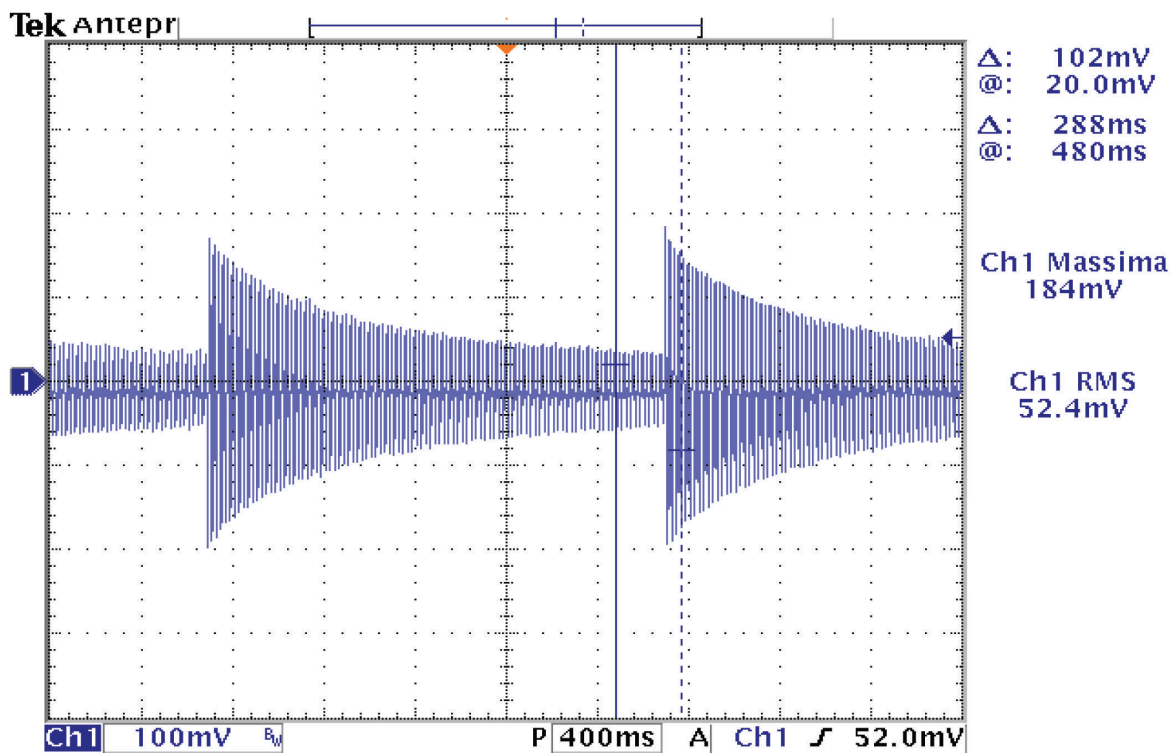
Tests have been carried out using a resistance of 1 Ohm connected in series with the power supply so as to make the voltage conversion immediate.

**GRAPH 1 - 110 Vac**

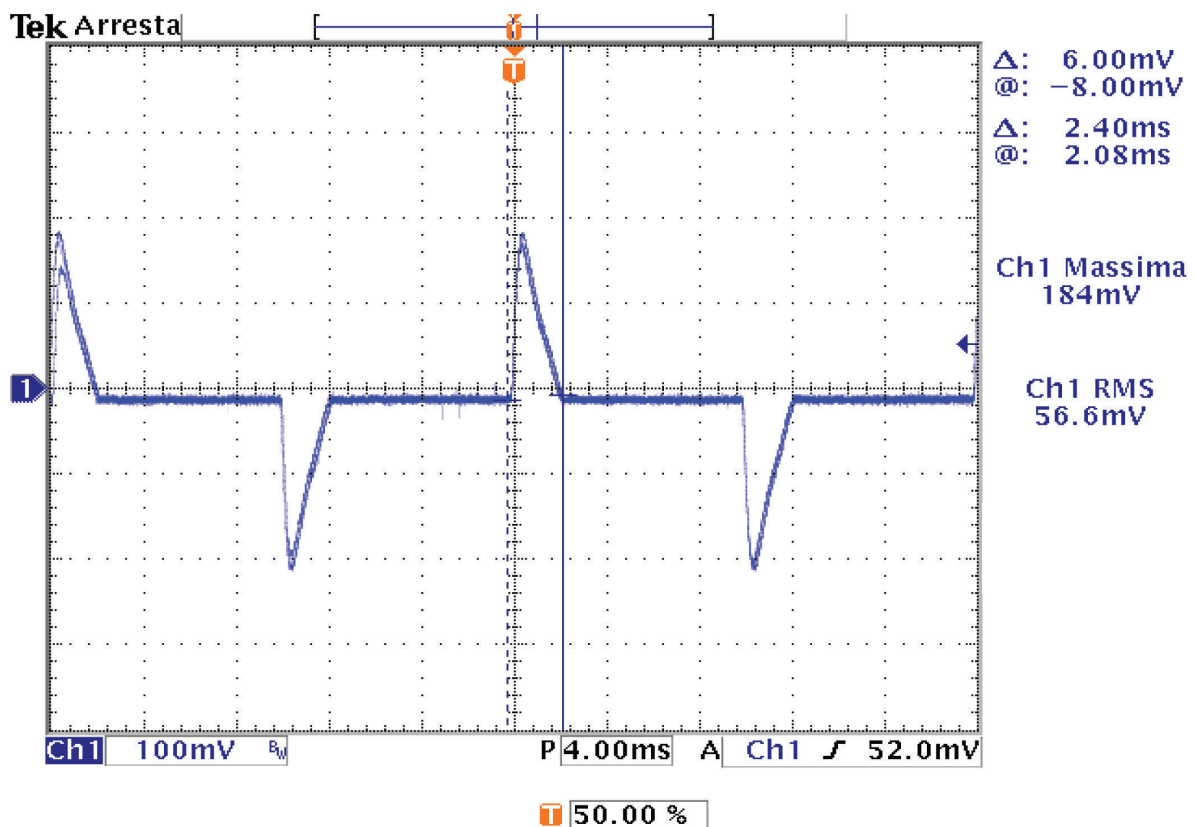


# Features of EC series electronic modules for XLF

GRAPH 2 - 230 Vac

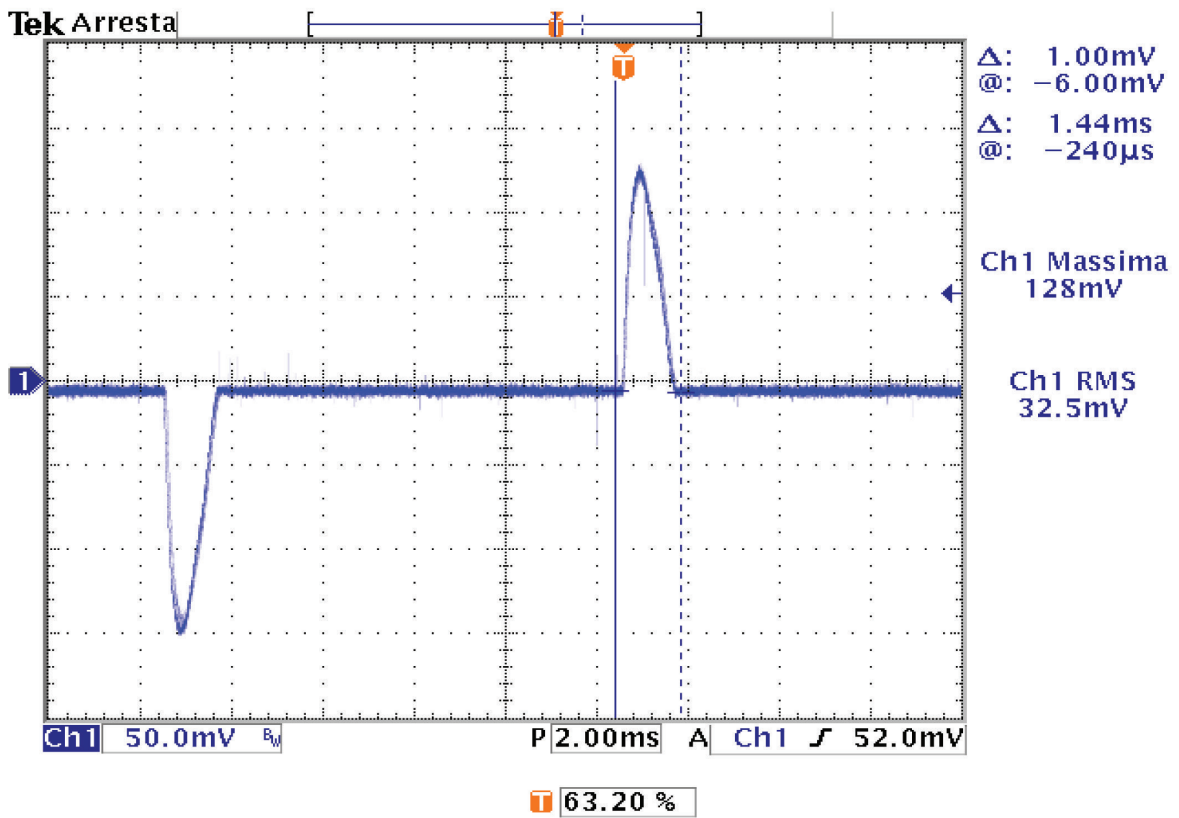


GRAPH 3 - 110 Vac

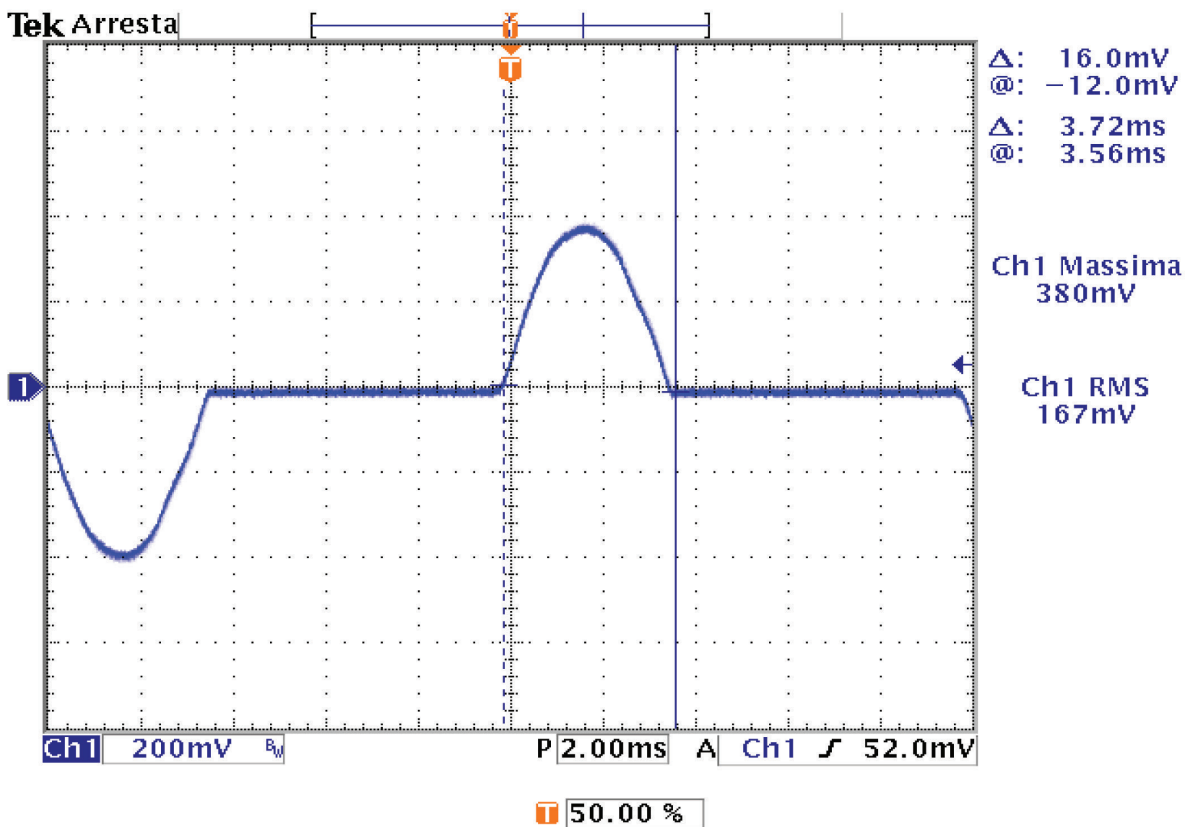




GRAPH 4 - 255 Vac



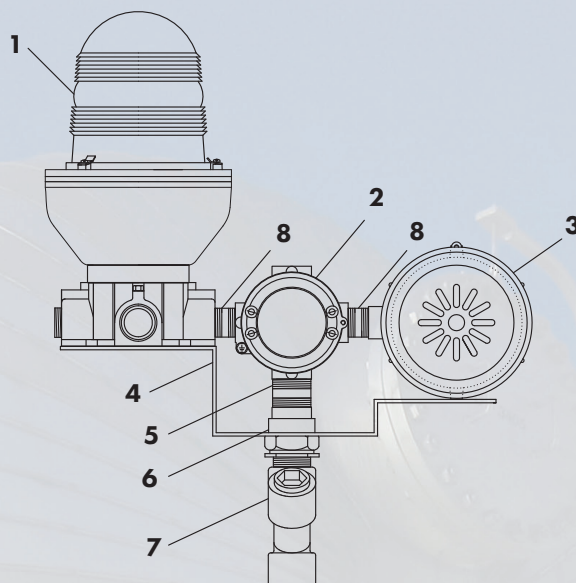
GRAPH 5 - 24 Vac



## Installation and mounting methods XLF series

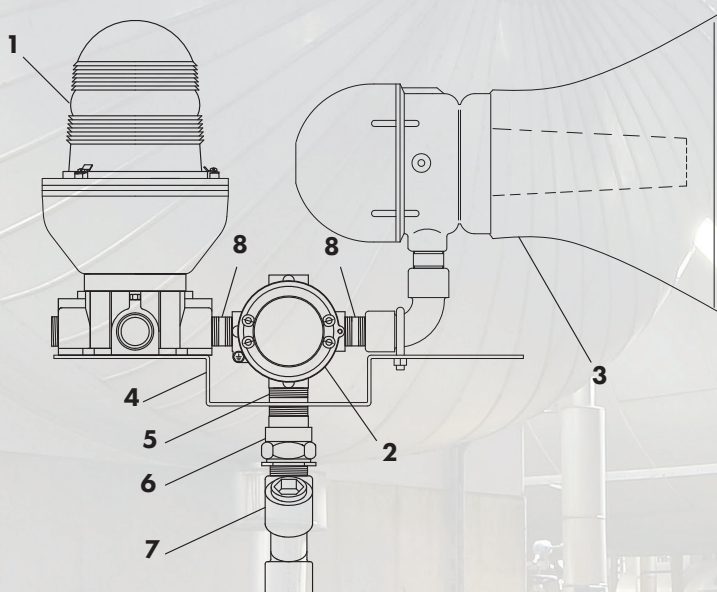
### Example of XLF obstruction lighting fixture and ETS series siren installation

| n | Description                      | Code            |
|---|----------------------------------|-----------------|
| 1 | Obstruction lighting fixture     | XLF-2R2301      |
| 2 | Junction box                     | ST-26.1V        |
| 3 | Rotating electromechanical siren | ETS60/109DB230V |
| 4 | Mounting plate                   |                 |
| 5 | Nipple                           | NP2G            |
| 6 | 3-piece union                    | RMF2G           |
| 7 | Sealing fittings                 | EYS2            |
| 8 | Sealed nipple                    | NPSF2           |



### Example of XLF obstruction lighting fixture and ETH series siren installation

| n | Descrizione                  | Code            |
|---|------------------------------|-----------------|
| 1 | Obstruction lighting fixture | XLF-2R2301      |
| 2 | Junction box                 | ST-26.1V        |
| 3 | Siren                        | ETS60/109DB230V |
| 4 | Mounting plate               |                 |
| 5 | Nipple                       | NP2G            |
| 6 | 3-piece union                | RMF2G           |
| 7 | Sealing fittings             | EYS2            |
| 8 | Sealed nipple                | NPSF2           |



### Features of EC series electronic modules.. for XLF

- **EC-05** Double XLF power supply circuit in which a 16J stroboscopic lamp is the main light and the other lamp is a spare.  
Power supply: 230VAC  
Stroboscopic power: 16 J
- **EC-10** Power supply unit for EC-... with 230 VAC power supply.  
This unit has both automatic and manual controls as well as a test button.
- **EC-13** Fixed synchroniser that turns on all the stroboscopic lamps wired with a 230 VAC power supply at the same time.