

3F Linda Inox 1x.. T8 HF ATEX

 II 3D T85°C IP65

Product Technical Sheet
18, 36 and 58W single-lamp versions



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Application field

Classification

Electrical construction destined to the use in environments with presence of potentially explosive atmosphere for the presence of combustible **dust**.

Fitting of Group II category 3

The fitting of this category is destined to the use in zones where the presence of explosive atmospheres caused by air and dust mixtures occurs **rarely and for short periods** only.

Superficial maximum temperature

85°C.

Protection level

The fitting of Group II and category 3 guarantees the protection level requested during the **ordinary operation**.

Installation in Zone 22

The installation of these fittings can be effected only in Zone 22, according to the classification given in EN 50281-1-2 regulation (Choice, installation and maintenance of electrical constructions protected by cases, for explosive atmospheres for the presence of combustible dust), as requested by Legislative Decree 12 June 2003, n. 233 (receipt of 99/92/EC Directive on safety and health of workers exposed to the risk of explosive atmospheres).

Notes

Do not open live fitting.
Do not open in presence of atmosphere of explosive dust.
Clean only with wet cloth.

Maintenance

Installation, maintenance and inspection must be carried out only by people trained to operate in zone 22.
Effect periodic inspections to verify that there is no creation of accumulation of combustible dust on the fitting.
Inspection interval must be defined by the user depending on the conditions of the environment where the fitting is mounted.

Structural characteristics

Housing

Realized in self-extinguishing V2 polycarbonate, injection moulded in RAL 7035 grey colour.

Gasket

The injected sealing gasket is ecological and long life.

Gear-tray

Realized in hot-galvanised steel and obtained by means of continuous profiling process.
Painted with white polyester and snap-lock fixed to the housing by means of steel rapid devices.
Hinged opening.

Diffuser

Diffuser in self-extinguishing V2 polycarbonate, photo-engraved interior, UV stabilised, injection moulded with smooth outer surface, tamper-proof opening.

Diffuser closing

By means of snug fit snap-lock clips in stainless steel.
Vandal-proof closing: a screwdriver is necessary for the opening.

Luminaire fixing

Rapid fixing brackets in stainless steel supplied as standard for ceiling and suspended installation.

Protection degree

IP65, totally protected to the dust.

Accessories

Parabolic flow recuperators in aluminium for Wide, Medium, Concentrated and Asymmetric lighting distribution to optimize illumination depending on type of application.

Brackets and hooks for wall-mounting, in stainless steel.

Wire-guards.

Electrical characteristics

The luminaire is in class I as regards protection against indirect contacts.

Wiring having the following main characteristics:

Ballast

Electronic high frequency ballast 230V 50/60Hz with lamp warm start, automatic disconnection of defective or exhausted lamps.

Energy efficiency index EEI = A2.

Terminal block

3 poles connecting terminal block with maximum connecting capacity of $2 \times 2.5 \text{ mm}^2$ (with real connection depending on type and formation of the cable used) and built-in isolating ceramic fuse with arc eliminator powder 5x20 mm, breaking power 1500 A.

Power factor correction

Power factor > 0.95.

Wiring

Solid cable of section 0.5 mm^2 heat resistant HT 90°. Inside the housing there are cable-clips realized expressly in plastic material which reduce the probability of cuts or abrasions of cables' external sheath due to rough handlings and accidental vibrations in course of installation or maintenance.

Line entry

By means of cable-gland M20x1.5 in compliance with ATEX Directive.

Conformity and marks

Here below there are marks and conformities to Directives and Regulations in force.



CE marking: conformity with the essential requisites expressed by the European Directives:

BT - Low Voltage - n° **2006 / 95 / EEC**.

EMC - Electromagnetic Compatibility - n° **2004 / 108 / EC**.

ATEX - Fittings for potentially explosive atmospheres - n° **94/9/EC**.

Conformity

Proper construction of the luminaire in compliance with European and Italian standard

CEI EN 50281-1-1, CEI EN 60598-1 (CEI 34-21) **and international standard IEC 598-1.**

More specific standard references as per declaration of conformity on page 9

Guarantee on photometric data

3F Filippi guarantees photometric data sheets of its own fittings according to the latest European and international standards and recommendations, thanks to the support of a modern photometric laboratory in line with official European laboratories.

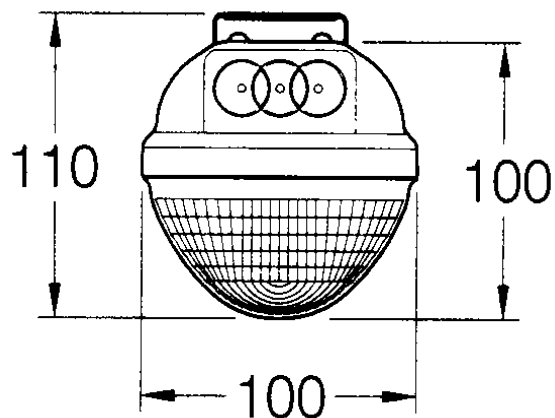
3F Filippi is UNI EN ISO 9001 certified for lighting engineering design too.

This commitment has been recognised and certified by the CSQ also for **the entire phase of lighting engineering design**, thus allowing operation under a Quality Assurance system that also covers interior lighting design in accordance with good engineering practice.

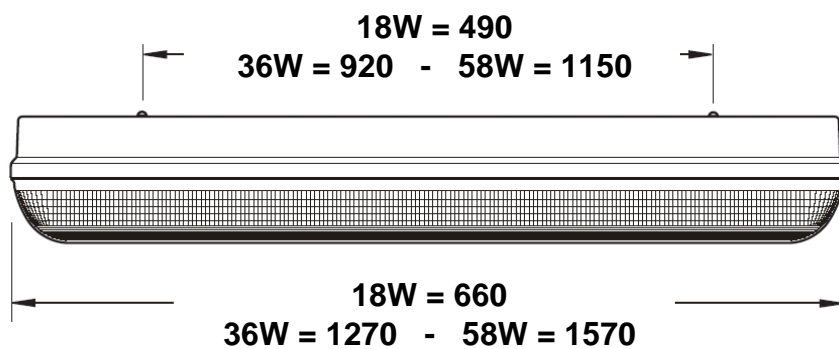
Dimensional characteristics

Here below there are the dimensions of the luminaire.

Cross-section



Longitudinal view



3F Linda fitting installed in a corner or niche, requires only 20 mm between housing and wall thanks to the patented clips which allows opening and closing in minimum rooms.

Photometric characteristics

Here below there are the photometric characteristics.

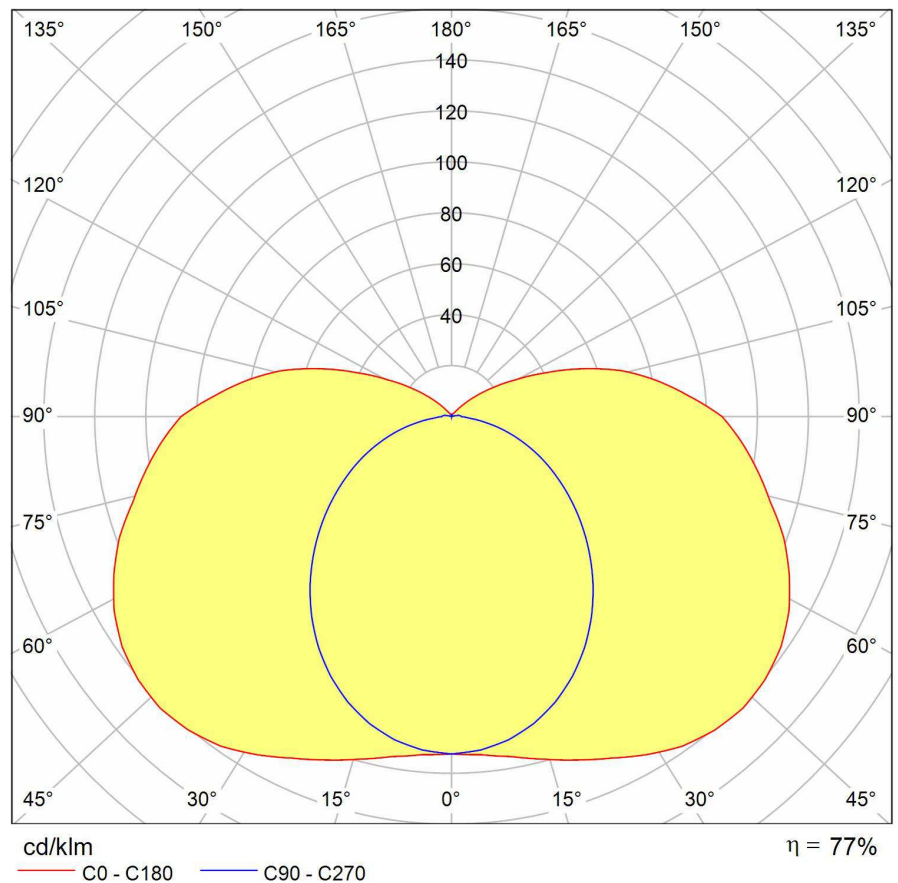
There are also aluminium parabolic flow recuperators available, to optimize photometric distribution depending on the specific application resulting in an increase of illuminance on work surfaces.

Lighting efficiency

76.5% (18W and 58W versions); 78.0% (36W version).

Distribution

Direct diffused with symmetric radiation.



Installation distances

$$Dt = 1.80 \times hu$$

$$DI = 1.20 \times hu$$

Dt = barycentric transverse distance between fittings.

DI = barycentric longitudinal distance between fittings.

hu = working height between working-plane and fitting.

Declaration of Conformity

(Drawn up according to UNI CEI EN 45014 - Guide ISO/IEC 22)

Declaration Number:

1087/2011

Supplier:

3F Filippi

Supplier's address:

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Product:

3F Linda HF ATEX 3D T85° series
3F Linda HF EP ATEX 3D T85° series
3F Linda ENP ATEX 3D T85° series

**The above mentioned products are in compliance
with the following normative documents:**

Standard N°:	Title:	Edition/Date
EN 60598-1 (CEI 34-21)	Luminaires Part 1: General requirements and tests	9 th Edit./2009
EN 60598-2-1 (CEI 34-23)	Luminaires Part 2: Particular requirements Fix luminaires for general use	2 nd Edit./1997
EN 60598-2-22 (CEI 34-22) for Emergency versions	Luminaires Part 2: Particular requirements Section 22: Luminaires for emergency lighting	3 rd Edit./1999
CEI EN 60079-0 (CEI 31-70)	Explosive Atmosphere Part 0: Fittings - General requirements	2010-04
CEI EN 60079-10-2 (CEI 31-88)	Explosive Atmosphere – Part 10-2: environments classification Explosive atmosphere for the presence of combustible dust	2010-01
CEI EN 60079-31 (CEI 31-89)	Explosive Atmosphere – Part 31: lighting fittings with protection made by means of "t" cases destined to be used in presence of combustible dust	2010-11
2006/95/EC (and following changes)	Low Voltage Directive (replaces 73/23/EEC and following amendments)	12/12/2006
2004/108/EC (and following changes)	Electromagnetic Compatibility Directive	15/12/2004
94/9/EC	ATEX Directive – Absorption: D.P.R. n. 126 of 23/03/1998	23/03/1994

Last two digits of the year of EC marking: **11**

Additional information:

1. The product has been designed, manufactured and verified within a Quality Assurance System in accordance to UNI EN ISO 9001 standard (Cert. CSQ 9130.3FFI).
2. The conformity with the requisites prescribed by the mentioned Directives is attested by the affixture of CE mark on every single product.

Pian di Macina – Pianoro, 02/03/2011

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(3F Filippi, The Sole Manager-Romano Bonazzi)