

TYPE 95 401

The flashing set meets the following regulations:

ICAO Annex 14, Volume I, 3rd edition 1999

(Photometric requirements and operation conditions)

FAA Specification AC 150/5345-51 (Resistance against environmental effects)



Basic Information

The **flashing set** basic configuration includes 21 flashing signal devices positioned in the centreline of the landing approach runway, and two pairs of flashing signal devices located on the threshold crossbar outside ends.

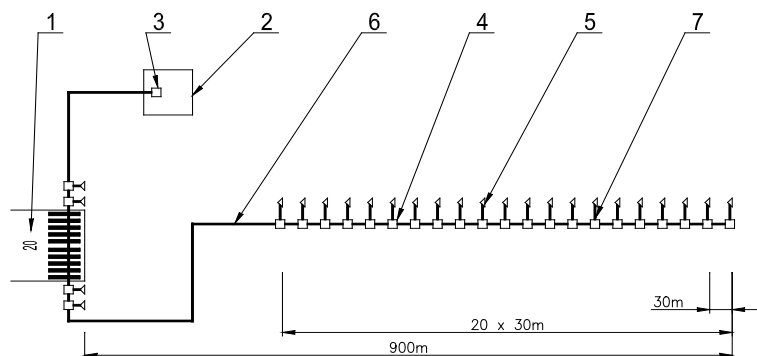
The **set configuration** may be reduced while maintaining all its functions e.g. just to 1 pair of flashing signal devices on the threshold crossbar outside ends.

The **flashing signal device** consists of the EFSR reflector aboveground optical section furnished with a xenon discharge lamp, and the EFSC control box, which supplies the discharge lamp by means of a parallel five-core cable system, synchronizes and monitors flash generation. For ensuring all the signal devices in the set function properly, the EFSF supply source is used, which is either local using the airport transformer station, or remotely switched on, continually evaluates the set's operation, and provides this kind of information either locally, or remotely, for subsequent processing.

Metallic parts of the flashing signal device are made from stainless materials, the EFSR reflector surface and the EFSC control box cover are protected by powder coating in the "aerial yellow" tint. The flashing signal device design makes it resistant against static and dynamic effects of the ambient environment it is exposed to during the operation.

Set technical Diagram

- 1 – VPD
- 2 – Transformer station
- 3 – EFSF supply source
- 4 – EFSC control box
- 5 – EFSR reflector
- 6 – Parallel supply system
- 7 – Reflector supply system



Use

The flashing set is used in airports. During deteriorated **visibility**, it provides the pilot the visual contact with the take-off and landing runways currently used through a luminous point moving through the luminous approach set in cycles.

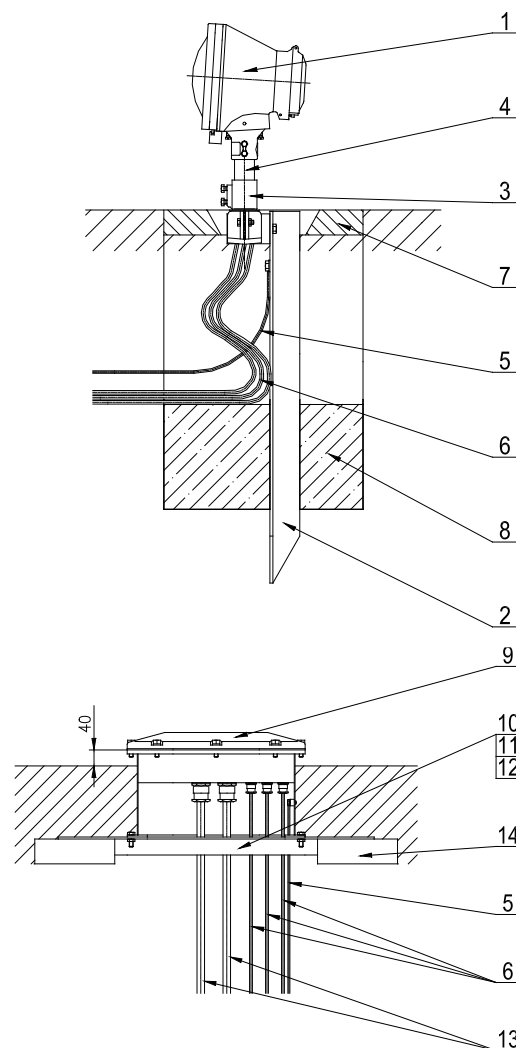
Installation

The EFSR supply source is hung via clamps on the wall in the transformer station.

Installation example:

- 1 – EFSR reflector
- 2 – Tilting needle
- 3 – Breakable coupling
- 4 – Tube
- 5 – Grounding conductor
- 6 – Reflector supply system
- 7 – Concrete (asphalt) protective circle
- 8 – Concrete for anchoring the needle
- 9 – EFSC control box
- 10 – Support
- 11 – Screw
- 12 – Nut
- 13 – Parallel supply system
- 14 – Brick

The EFSR reflector may be installed directly into the ground on a tilting needle, or fixed to the cover. The EFSC control box is placed close to the signal device into a trench for the parallel supply system cabling so that the bottom side of its cover is at least 4 cm above the ground.



Photometric Data

EFSC control box
EFSF supply source



Basic Technical Data

Mechanical parameters:

Dimensions (WxLxH):

- EFSR reflector 215x270x225 mm
- EFSC control box 450x260x340 mm
- EFSF supply source 650x380x455 mm

Mass:

- EFSR reflector 4 kg
- EFSC control box 27 kg
- EFSF supply source 33 kg

Electrical parameters:

Supply voltage:

- EFSR reflector +2 kV to PEN conductor
- EFSC control box 3x400 V / 50 Hz
- EFSF supply source 3x400 V / 50 Hz

Input:

- EFSR reflector 120 W
- EFSC control box 120 W
- EFSF supply source Max. 4 kW

Insulation resistance:

- EFSR reflector Min. 2 M Ω
- EFSC control box Min. 2 M Ω (up to 250 V), min. 20 M Ω
- EFSF supply source Min. 2 M Ω

Protection level:

- EFSR reflector IP54
- EFSC control box IP67
- EFSF supply source IP21

Luminous source used: FT34/HP xenon discharge lamp

Other parameters:

Operation temperature:

- EFSR reflector -55°C up to +55°C
- EFSC control box -55°C up to +55°C
- EFSF supply source -10°C up to +40°C

Set's configuration options: 0 up to 21 centreline signal devices,
0 up to 2 pairs of threshold devices

Contact

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