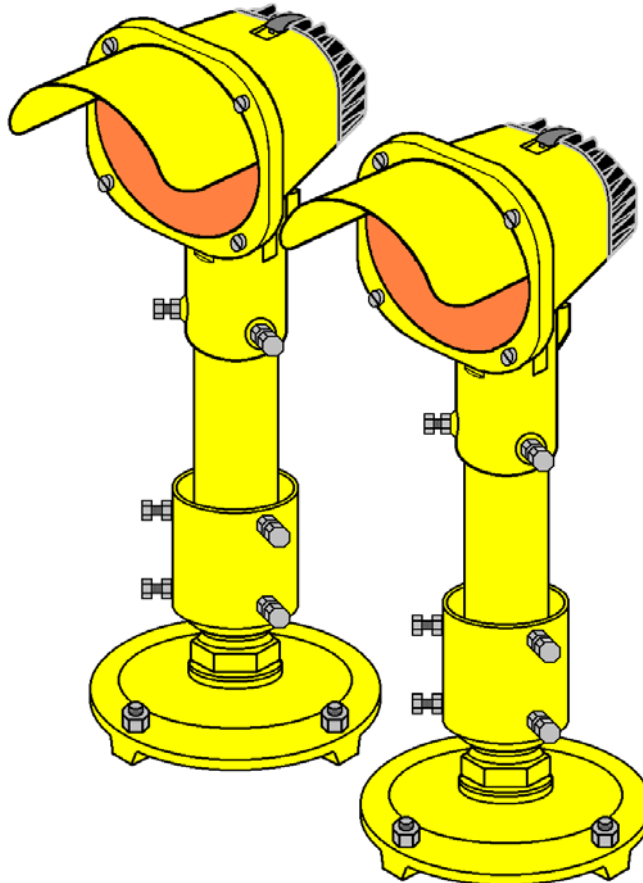


**INSTALLATION DOCUMENTATION
for EL-RGL**

DOC 2305.E



THORN

Airfield Lighting

www.thornairfield.com

THORN EUROPHANE
156 bd Haussmann
75379 Paris
Cedex 08
FRANCE
Tel : +33 (0) 1 49 53 62 62
Fax : +33 (0) 1 49 53 62 89

thornairfield@thom.fr

Thorn DNT Airfield Lighting
7-9 Newcastle Road
Bayswater Victoria 3153
AUSTRALIA
Tel : +61 (0) 3 97 20 32 33
Fax : +61 (0) 3 97 20 82 33

enquiries@thornairfield.com

THORN LIGHTING
3 King George Close
Eastern Avenue West
Romford, Essex RM7 7PP
UNITED KINGDOM
Tel : +44 (0) 1708 776 289
Fax : +44 (0) 1708 742 322

airfield@thornlight.com

THORN CLK Airfield lighting
19/F Jardine Engineering House
260 King's Road
North point – HONG KONG
Tel : +852 (0) 2988 4128
Fax : +852 (0) 2988 4139

adminhk@thornclkaf.com.hk

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1 Introduction

This document lists the different steps to follow in order to successfully install an system of elevated fittings **EL-RGL**.

You will find in this document two main paragraphs:

"General Information and Requirements": This chapter gives general description and use of the fitting covered by this document.

"Installation of the Fitting" : This chapter describes how to install the equipment covered by this document.

1.1 Use restriction notice and warranty

1.1.1 Use of the Document

This documentation is the property of

THORN Airfield Lighting
156 bd. Haussmann
75379 Paris Cedex 08
France

This documentation or any parts of this documentation may not be reproduced, stored in a retrieval system or transmitted in any form or by any means (mechanical, photocopying, recording, electronic,...) without THORN's prior consent.

1.1.2 Warranty

THORN Airfield Lighting guarantees that the performance of the elevated lights described in this document, when sold by THORN Airfield Lighting or its licensed representatives, meets the requirements of ICAO Annex 14 volume 1 and FAA specifications.

Any defect in design, material or workmanship, which may occur during proper and normal use over a period covered by the warranty stipulate in the contract, will be replaced by THORN Airfield Lighting free of charge, ex works.

Operational failure resulting from lamp burnt out, improper installation and damage due to airport maintenance equipment is not considered a result of proper use and is beyond the scope of the warranty.

The above constitutes the limits of THORN Airfield Lighting 's liabilities concerning the equipment covered by this document.

1.2 Safety instructions

WARNING: Prior to the commencement of work all electrical services MUST be isolated from the supply and connected to earth. Full details of the work involved must be given to the Authorise Person responsible for the electrical engineering services at the airport with regard to the duration of the work, etc.. It is recommended that prior to starting any cutting work the nature and location of services such as cable ducts, etc... should be identified. It is a prerequisite of this type of installation that the work should be carried out by trained and experienced personnel.

1.3 Reference documents

This paper refers to following documents:

- THORN Commercial Documentation General Brochure Doc 1001.E,
- THORN EL-RGL Commercial Documentation Doc 1305.E,
- THORN EL-AT Installation Documentation Doc 2101.E,
- THORN Installation Documentation for Ground Fixations of Elevated Light Fittings Doc 2401.E,
- THORN FL45-500 Installation Documentation Doc 2509.E,
- Last Edition of ICAO Annex 14,
- Last Edition of FAA Advisory Circular AC.

1.4 Tools required

1.4.1 Standard tools

- Box spanners 7, 13 and 16 mm or 17 mm
- Open end spanners 10, 13 and 50
- Allen keys no.3
- Screwdrivers
- Crimping tool
- One brush or cloth
- Methylated alcohol

1.4.2 Specific tools

- THORN Levelling tool

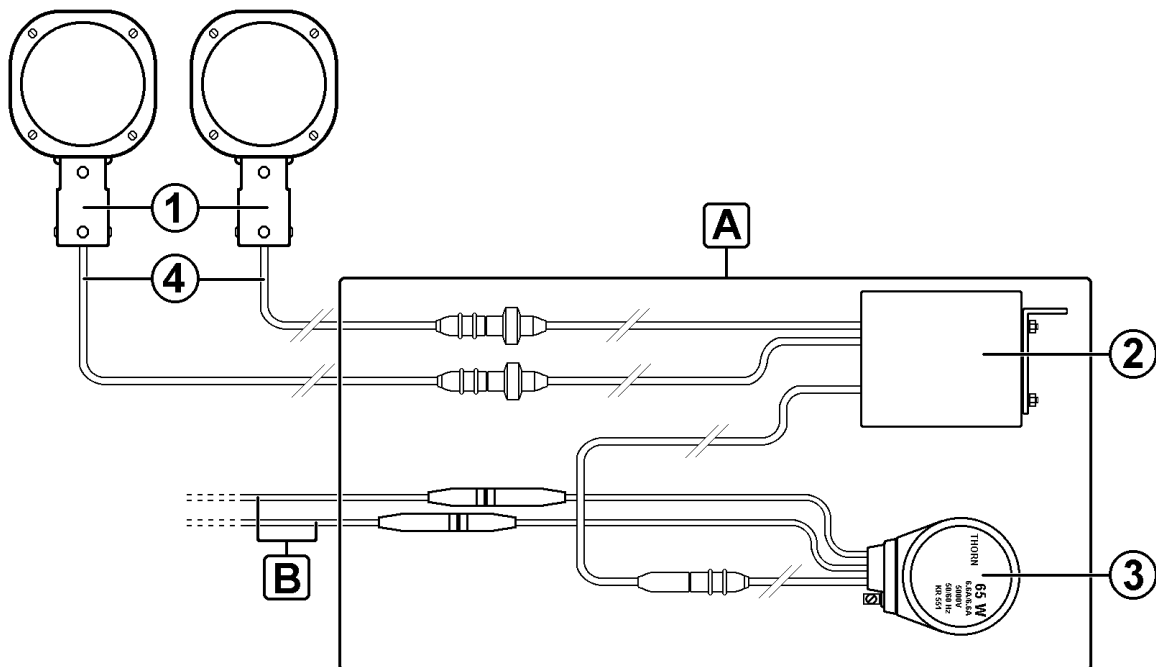
2 General information

2.1 Description of the system

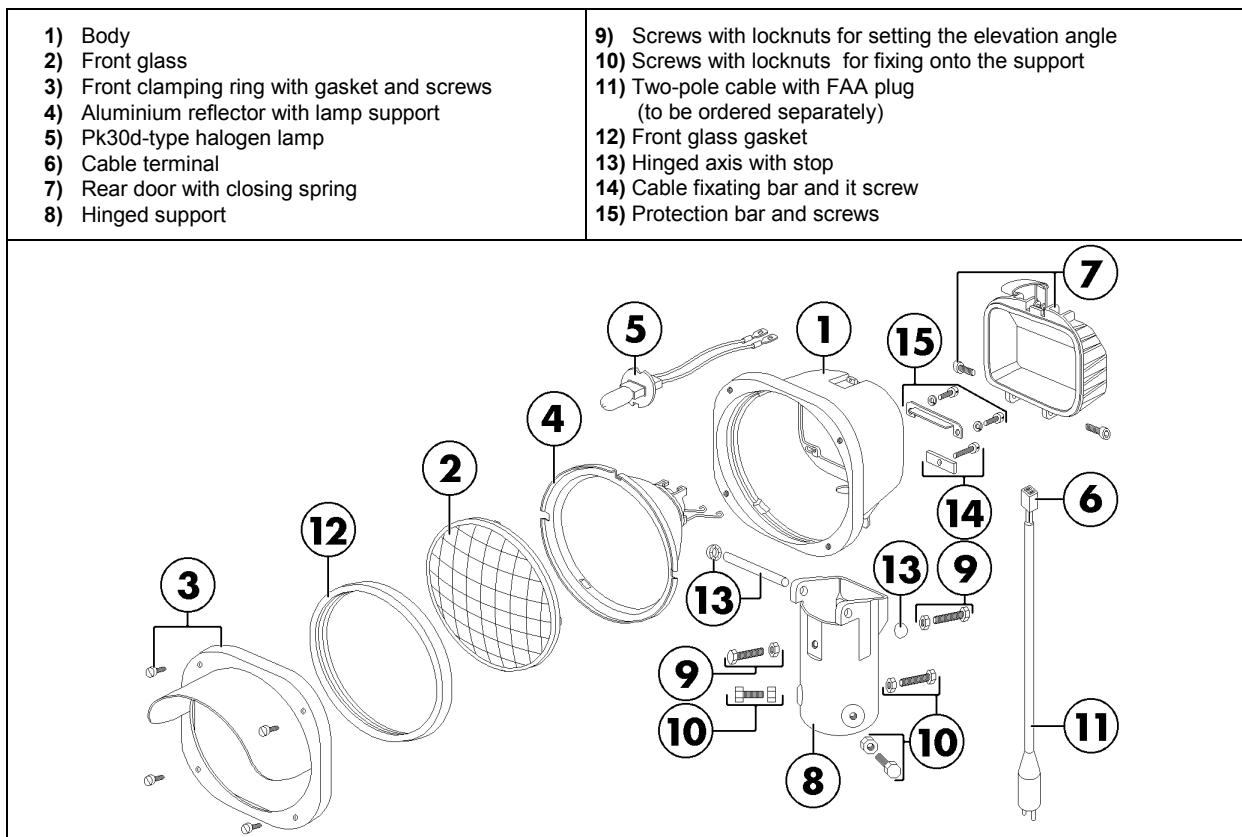
The EL-RGL System of Blinking lights comprise the following components :

- 1) Two Elevated **EL-ATG** fitting, each fitting is equipped with a 45 Watts lamp and mounted on standard supports : Tripod Stands, Conduit Elbows, Base Plate, Frangible Collar, Frangible Coupling, 60 mm Tube (See DOC 1401.F).
- 2) One FL45-500 Control Box (See DOC 1509.E).
- 3) One 65 VA Isolating Transformer (See DOC 1501.E).
- 4) Two Secondary Cables (See DOC 1511.E).

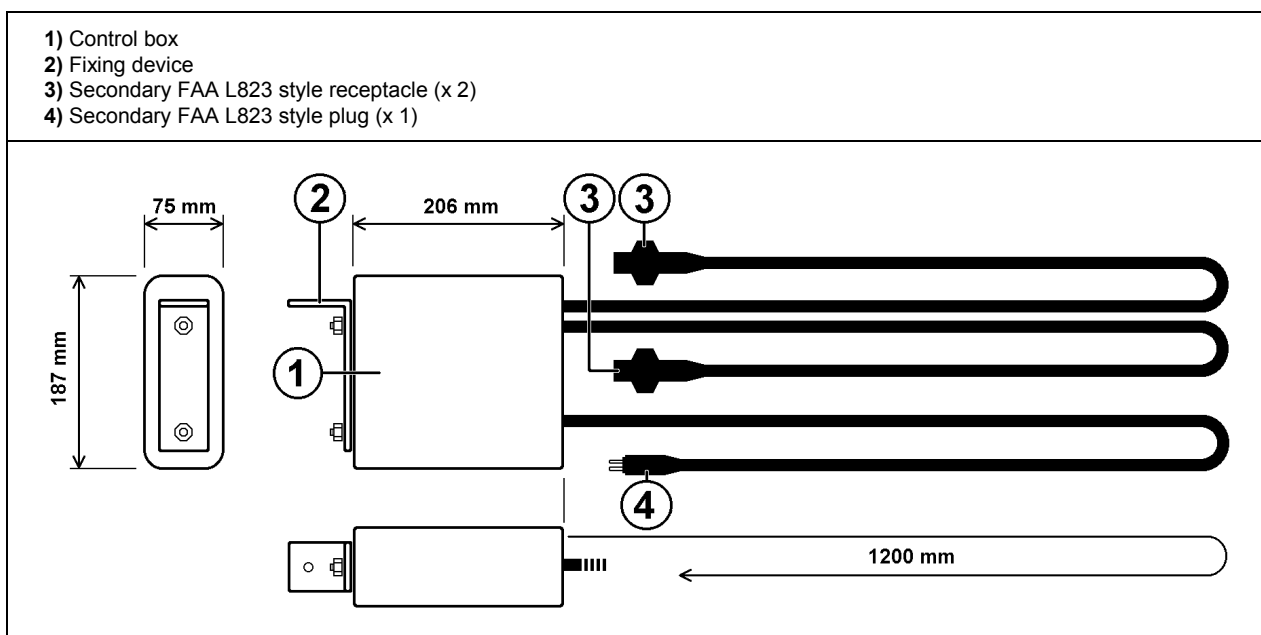
Note : **A** = Manhole or Deep Base, **B** = Primary Circuit



2.2 Design of the EL-ATG fitting



2.3 Design of the FL45-500 control box



2.4 Delivery of the fittings

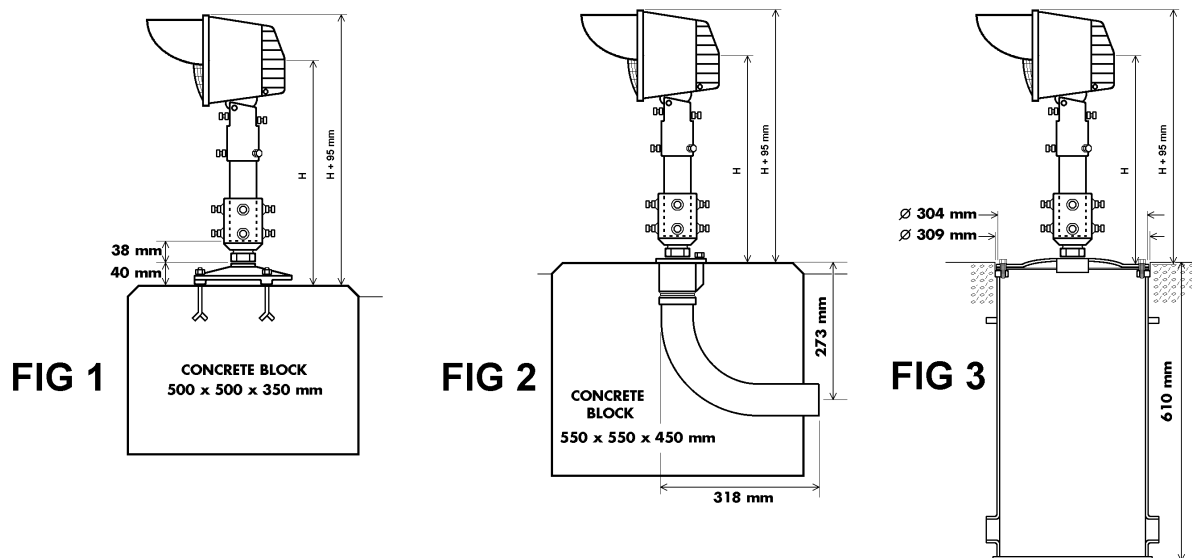
Each subassemblies of the EL-RGL system is individually packed in a durable cardboard box, labelled with its reference mane and code. On request one set of fitting documents (= commercial brochure, installation manual, maintenance manual and spare parts list) is delivered with the system.

Each fitting EL-ATG fitting is delivered equipped (or not) with one connector without lamp. The Pk30d lamp must be mounted on site in the fitting before its installation on the field.

3 Typical Installation

3.1 Ground fixing

- Ground level mounting with Frangible Collar on a Tripod Stand (**Fig 1**).
- Ground level mounting with Frangible Collar on Conduit Elbow (**Fig 2**).
- Ground level mounting with Frangible Collar on FAA Deep Can and Base Plate (**Fig 3**).



4 Installation

4.1 Preparing the electrical cabling

Whatever is the type of supports used to hold the two **EL-ATG** fittings (tripod stand, elbow tube or base plate, the secondary cables dedicated for the power supply of the fittings must be pass through the supports previously to the installation of the fittings on them.

Two types of EL-ATG exist :

- 1) EL-ATG delivered equipped with already equipped with FAA secondary connector.
In this case, the end secondary cable (FAA secondary receptacle) dedicated to supply the fitting must go out enough of the support to permit an easy connection on it of the FAA secondary plug of the fitting.
- 2) EL-ATG delivered without connector but with a connection kit.
In this case, the end secondary cable dedicated to supply the fitting must go out the support on at least **50 cm**.

4.2 Installation of the FL45-500 control box

For the installation of the FL45-500, please see the "Installation Documentation" for control box for runway guard lights FL45-500 Doc 2509.E

4.3 Installation of the devices dedicated to supports the EL-ATG fittings

For the installation of devices dedicated to support the EL-ATG fittings, please see the "Installation Documentation" for ground fixations of elevated light fittings Doc 2401.E

4.4 Installation of the EL-ATG fittings on their supports

For the installation of the two EL-ATG fittings on their supports, please see the "Installation Documentation" for EL-AT range fitting Doc 2101.E

COMMENTS

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