

Accessories

Part Number	Description
315.4100	Threaded anchor
013.0008	Galvanized steel pipe elbow with upper threaded end only
315.3210	Galvanized steel pipe elbow with both threaded ends
013.0010	Set of two ryton rings to support the isolation transformer receptacle inside the steel pipe elbow
013.0001	Set of two metallic supports to support the isolation transformer receptacle (with grounding connector) inside the steel pipe elbow
303.6160	Threaded coupling to lock the secondary plug-socket connection on pipe elbow
011.0517	Special isolation transformer for series circuits 600 VA 6.6/4.2 A (CCR-SCR type)
011.0524	Special isolation transformer for series circuits 600 VA 6.6/2.2 A (CCR-sinusoidal wave type)
011.2501	Grounding connector, to ground the special isolation transformer secondary
315.3230	Mounting pole 500 mm long, 2" dia
315.3240	Mounting pole 1000 mm long, 2" dia
303.6130	Breakable coupling for poles up to 500 mm
303.6120	Breakable coupling for poles between 501 and 1000 mm
332.3270	Levelling and alignment device for standard light equipment or for flashing head on 2" dia pole

Renewal Parts

Part Number	Description
155.2556	Complete control box for OC62R-P-1-C and OC62R-P-1-N
155.2557	Complete control box for OC62R-S-1-C and OC62R-S-1-N
155.2562	Complete control box for OC62R-P-3-C and OC62R-P-3-N
155.2566	Complete control box for OC62R-S-3-C and OC62R-S-3-N
155.2570	Complete control box for OC62R-P-1-F
155.2572	Complete control box for OC62R-S-1-F
155.2564	Complete control box for OC62R-P-3-F
155.2568	Complete control box for OC62R-S-3-F
155.2200	Flashing head complete with lamp, graduated support and wiring
150.1051	Motherboard for parallel flashing light
150.1052	Motherboard for series flashing light
150.0911	Power supply card for parallel flashing light
150.1490	Power supply card for series flashing light
150.1298	Control card for 3-step flashing light
150.1318	Control card for 1-step flashing light
150.0909	HV card for parallel/series flashing light
150.0915	First capacitor card for 3-step flashing light
150.0916	Second capacitor card for 3-step flashing light
532.0220	30 µF capacitor for 1-step flashing light
150.3071	Relay card for 3-step flashing light with TA for lamp monitoring
100.0889	Detector TA for 1-step flashing light, for lamp monitoring
491.0110	Microswitch for control box
462.0279	Main switch for control box of parallel flashing light
487.0212	4A main switch fuse for parallel flashing light
462.0287	Main switch for control box of series flashing light
479.0238	Auxiliary relay for independent switching ON/OFF of the REIL system
481.0129	Base for auxiliary relay
323.2360	Cable lead, size 2 x 2.5 sqmm, 1.000 m long, with L-823 plug for control box of series flashing light
760.1910	HV1-734 lamp, QPAR-56
341.0750	Clip for lamp locking
325.0160	Lamp silicone gasket
150.1123	Insulated strip with ignitor and terminal strip
491.0111	Microswitch for lamp body
155.2210	Standard wiring with flexible pipe
155.2503	Breakable coupling for supporting structure
754.0002	Collar for box mounting, complete with nuts and washers
495.0105	Gemov type V275LA40
495.0124	Gemov type V68ZA10



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REIL

Runway End Identification Light

Compliances: ICAO Annex 14
NATO STANAG 3316



REIL

Applications

The REIL discharge-type flashing light equipment is used on threshold for additional conspicuity or where other approach lighting aids cannot be provided. Two lights only are used in this case, symmetrically mounted on side of the threshold. They flash contemporarily at the rate of two cycles per second. In case of one of the two lamps fails the entire system is switched-off automatically. The equipment is available to be powered by parallel or series circuits.

Features

LIGHT DESCRIPTION: each light fixture consists of a flashing head and a control box, mounted on the same supporting structure. If required, the flashing head can be separately mounted on independent mounting pole with breakable coupling. Maximum distance allowable between head and box: 50 m. The REIL may provide one High Level brightness step only or three brightness steps: High, Medium and Low Levels.

CONTROL BOX: the power supply of each REIL light is provided by a stainless steel control box, protection degree IP67, containing a removable supporting frame on which all electric and electronic components are mounted.

The control box of a 3-step flashing light basically includes:

- a safety microswitch, which cuts off the power supply when the control box door is open, to prevent contacts with live parts;
- the terminal strip for the power supply and control cables;
- the main switch mounted on the same profile of the terminal strip;
- the motherboard;
- the withdrawable power supply card, which provides the rectified power supply and all the auxiliary voltages;
- the withdrawable control card, which controls the charging voltage of the capacitors, the ignitor operation and the proper flashing synchronisation;

How to Order

To the basic part number add the power supply, the required brightness levels, the mounting assembly and the wiring length.

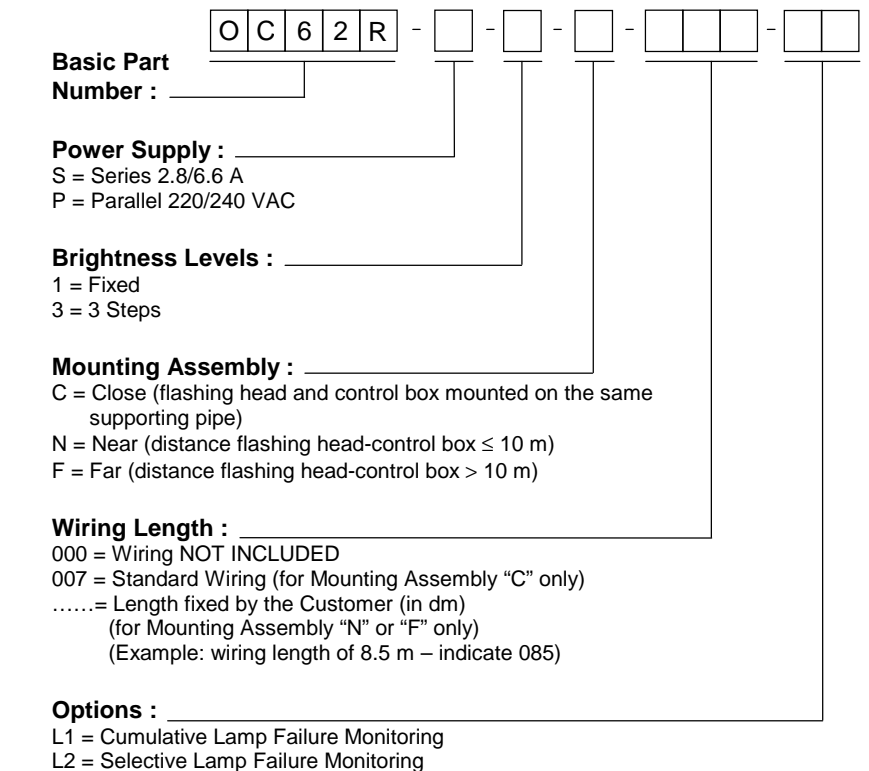
If required, any option can be added.

Order separately the following:

- pipe elbows (threaded anchor is included);
- special isolation transformer and primary connector kit (in case of power supply "S");
- mounting pole with breakable coupling or frangible pole for flashing head (in case of mounting "N" or "F").

EXAMPLE:

OC62R-P-3-C-007 is a 3-step REIL provided for parallel power supply, with flashing head and control box mounted on the same supporting structure.



the circuit includes a pilot switch to make the control box MASTER or SLAVE, six dip-switches to program the light flashing sequence and other six dip-switches to set the flashing cycle. This card is also equipped with a five position rotary switch (REM – OFF – Low – Medium - High) to locally select the brightness level;

- the withdrawable HV card, which provides the charge of the capacitors and the proper voltage for the ignitor;
- two removable capacitor cards, each equipped with fifteen 1µF capacitors which are wired so the lamp may provide the required three brightness steps;
- the relay card, which permits to select the proper capacitor battery according to the brightness level fixed by the remote/local control.

The three withdrawable cards are plugged with multiple connectors with safety mechanical interlock, to avoid wrong connections in case of improper insertion.

Inside the control box of a 1-step flashing light the relay card is not mounted and the two capacitor cards are replaced by a 30 µF capacitor only.

The control box is provided with glands for cable entry.

In case of series power supply, the box is supplied complete with a cable lead, rubber insulated and neoprene sheathed, size 2 x 2.5 sq.mm, 1.000 m long, with FAA L-823 plug.

If required the remote lamp monitoring, two different solutions are available:

- cumulative back indication to inform that at least one lamp of the complete flashing system is not flashing;
- single back indication to inform exactly which lamp of the flashing system is not working.

ISOLATION TRANSFORMER: a special isolation transformer is available to connect the control box to the series circuit. The transformer is rated 600 VA, 6.6A/4.2A or 6.6A/2.2A (for CCR-SCR type or CCR-sinusoidal wave type respectively), designed by following the criteria fixed by FAA Specs AC 150/5345-47 for the standard series isolation transformers. It is moulded into a heavy layer of insulating synthetic

compound and is complete with two primary cable leads, 0.600 m long, with FAA L-823 plug and socket for series circuit connection, and a secondary cable lead, 1.200 m long, with FAA L-823 socket for box connection.

SUPPORTING STRUCTURE: it consists of two supporting pipes with upper cap and breakable coupling in the lower side; the box, provided with two flanges in the rear side, is fixed to each pipe by means of two collars and the flashing head is fixed through a special flange to one of the two pipes by means of two collars.

FLASHING HEAD BODY: the body of the flashing head consists of an aluminium casting, with stainless steel clips, securing the PAR-56 lamp with silicone gasket. It contains a safety microswitch, which cuts off the power supply if the lamp is not properly in place. The ignitor and the terminal strip, fixed on an insulated support, are mounted on the rearside of the lamp, by using one of the lamp screw terminal.

GRADUATED SUPPORT: it consists of a cast aluminium piece, complete with graduated scales to check horizontal and vertical aiming. The body is hinged to the support for vertical aiming and locked to it by means of two screws; the support can rotate on the special flange for horizontal aiming and is fixed to it by means of three screws.

LAMP: the lamp is a flashing xenon lamp, QPAR-56 bulb, type HV1-734, 1000 hour rated life at two flashes per seconds.

WIRING: the standard connection between the control box and the flashing head consists of:

- a HV wire, size 1x 0.93 sq.mm, insulated for 3000 V operation;
- four wires, size 1 x 1.5 sq.mm, insulated for 750 V operation;
- a grounding wire, size 1 x 6 sq.mm. All wires are 1.35 m long; for mechanical protection they are contained in a flexible plastic pipe, 0.750 m long. Longer and different wires as necessary are supplied on request.

GROUNDING: a suitable screw is provided.

INSTALLATION: each light equipment is usually installed on a suitable concrete block, into which two threaded anchors and two pipe elbows are cemented. Use the threaded anchors to screw the breakable couplings of the supporting structure and the pipe elbows for passing the power supply and control cables, and the grounding wire. In the system only one light must be MASTER; all the others must be SLAVE. The master light can be anyone.

CONTROL CABLE: for the correct flash sequence, all the control boxes of the system must be linked together through 2 wires, minimum size 1.5 sqmm (RESET cable). For the remote selection of the three brightness steps, 4 wires, minimum size 1.5 sqmm, are required from the remote control to the lights.

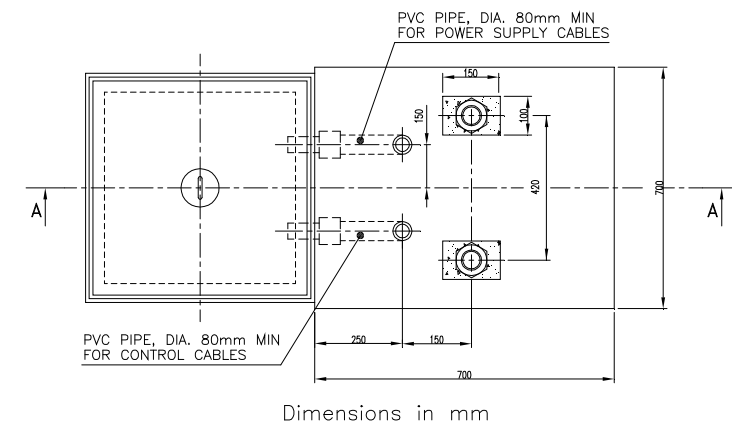
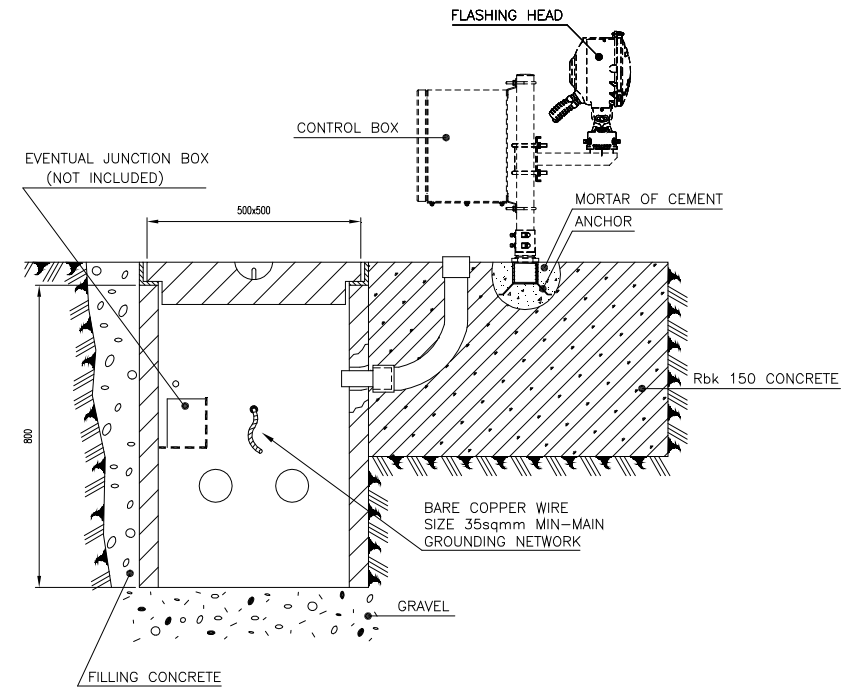
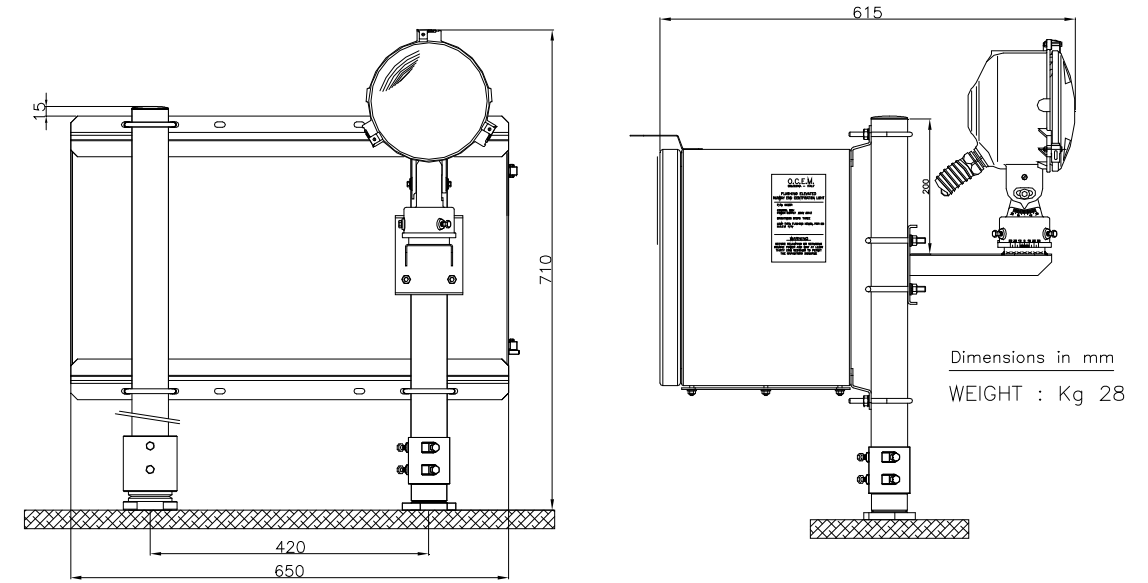
In case of lamp failure monitoring, the number of wires towards the remote control has to be increased as follows:

- 2 additional wires only, minimum size 1.5 sqmm, for cumulative signalling;
- 3 additional wires only, minimum size 1.5 sqmm, for independent signalling.

NOTE

To limit the effect of external overvoltages, in correspondence of the power supply and the control/monitoring cable entrance the box mounts suitable gemovs, respectively type V275LA40 and V68ZA10.

Outline Drawings



IMPORTANT : THE ANCHORS MUST BE CAST SO TO ASSURE A VERTICAL MOUNTING OF THE SUPPORTING PIPES.

Instruction Manuals: UT-MT-422 for 3-Step Parallel Flashing Light
 UT-MT-426 for 3-Step Series Flashing Light
 UT-MT-420 for 1-Step Parallel Flashing Light
 UT-MT-424 for 1-Step Series Flashing Light

Shipping Weight 28 Kg
 Shipping Volume 0.23 cu.m

The unit is shipped completely assembled, the flashing head and the control box mounted on the supporting structure, except the breakable coupling and the lamp which are delivered separately for safety purpose.