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W. H. BENNER ET AL  
MOUNTING ELEMENT FOR PHOTOELECTRIC  
CONTROL UNIT OR SIMILAR ARTICLE  
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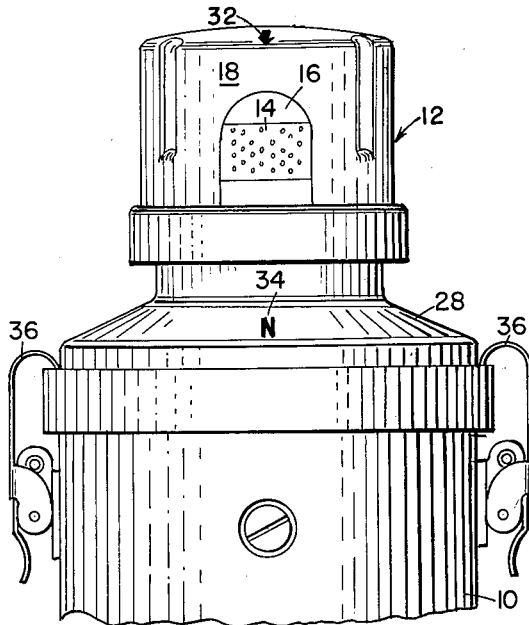


FIG. 1

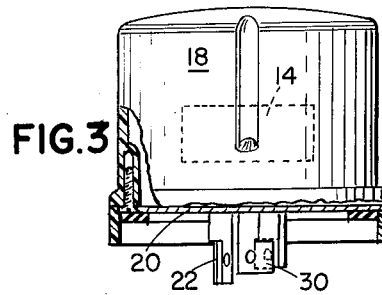


FIG. 3

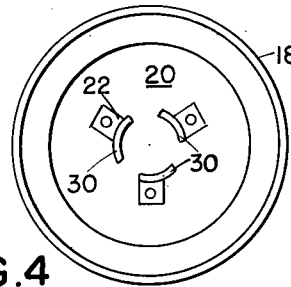


FIG. 4

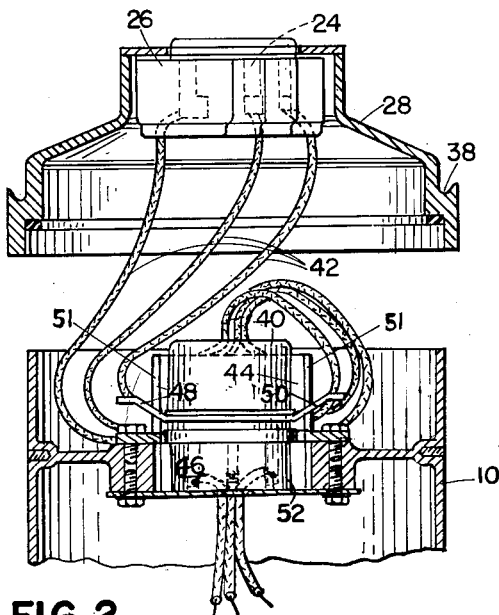


FIG. 2

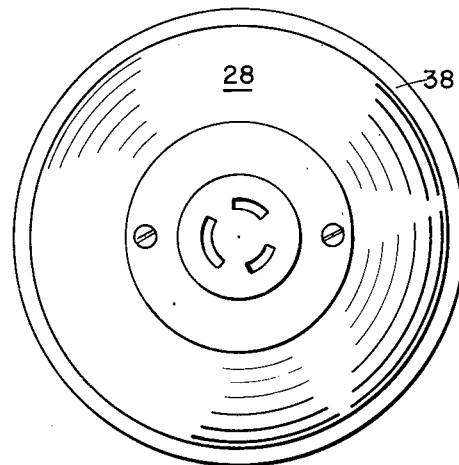


FIG. 5

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**MOUNTING ELEMENT FOR PHOTOELECTRIC CONTROL UNIT OR SIMILAR ARTICLE**

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2 Claims. (Cl. 250-239)

This invention relates to a mounting for photoelectric lighting control units and particularly to mountings for self-contained units adapted to be located directly upon a luminaire, such for example as a street lighting luminaire.

The use of photo-electric control units for turning lights off and on, for example street lights, depending upon the intensity of the surrounding general illumination, is well known. It is common practice to provide photo-electric control units for this purpose, these being usually mounted upon an adjustable bracket or supporting means attached to a light pole or to a cross arm supported thereby.

The present invention relates to the construction of a unit mounting which may be adjustably mounted directly upon the top of a luminaire housing or upon a base housing such for instance as described in United States patent to Garnick No. 2,709,224.

The invention for its general object has the provision of a mounting construction for a photo-electric control unit which may be readily applied to the luminaire or base housing and set in oriented position in which the control unit can be readily removed or replaced in proper position without disturbing the original adjustment.

Further objects and advantages of the invention will be apparent in the course of the description of one specific embodiment thereof, chosen to illustrate the invention.

In the accompanying drawings forming part of the specification:

FIGURE 1 is a side elevation of the base housing with the control mounting member or adapter thereon carrying the photo-electric control unit;

FIG. 2 is an exploded view of a vertical section showing the base housing and the adapter above the same;

FIG. 3 is a side elevation partly broken away showing the photo-electric control unit;

FIG. 4 is a bottom plan view of a unit shown in FIG. 3; and

FIG. 5 is a top plan view of the adapter.

Referring to the drawings in detail, 10 is a structure on which the unit is to be mounted which may be a base housing such as shown in Patent No. 2,709,224 or may be a part of the luminaire housing itself. 12 is a photo-electric control unit which comprises a suitable type of photo-electric cell 14 which is mounted behind the transparent window 16 in one side of a plastic housing 18. The photo-electric cell and other parts of the control unit are mounted in fixed position on a base plate 20 to which the plastic housing 18 is also attached in fixed position so that the cell is mounted in a definite position behind the transparent window 16. The control mechanism is electrically connected to terminals 22, preferably three in number, which are fixed to the base plate. These terminals are of such form that they may be engaged by a slight turning movement with terminals 24 mounted in an insulating block 26 in a fixed position in an adapter housing 28. The terminals 22 have lug portions 30 on their lower ends which interlock with the terminals 24 so as to hold the unit 12 in firmly locked and definite oriented position on the adapter. The plastic housing 18 may be conveniently marked with an arrow or the like 32, which indicates the center line of the window 16. The housing is provided with a depending flange or skirt, as shown, protecting the joint between the terminals 22 and 24 from the weather.

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The adapter housing 28 is mounted on the base housing 10 in such manner that it may be readily secured in desired oriented position thereon, to facilitate which the adapter preferably carries a mark N indicated at 34. Any suitable means may be provided for securing the adapter housing such as a pair of toggle hooks 36 mounted on the base housing and engaging in an annular groove 38 in the adapter housing. The adapter housing is secured in oriented position with the N mark facing north. As the unit 12 with its window 16 and cell 14 are always mounted in a definite position on the adapter housing when locked thereon, it will be seen that the unit 12 can be removed for repair or replacement and always returned to its proper oriented position without requiring change or re-adjustment of the adapter housing 28.

The adapter also includes a terminal plug 40 which is connected by means of wires 42 to the terminals 24. The plug 40 is provided with a plate 46 having ears 48, 50 by which it may be handled, the ears being so formed as to cooperate with formations in the hub 44 of the base housing, in predetermined relationship therewith. This may be accomplished by making the ears 48, 50 of different widths to fit formations 51 of corresponding size. The wires 42 are made of sufficient length to permit orientation of the adapter housing 28 to desired position with respect to the base housing, the annular groove 38 permitting engagement by the hooks 36 in any position. The surplus length of the wires may be coiled around the hub of the base housing. The adapter housing with its terminal block 26, wires 42 and plug 40 constitute a complete adapter unit which may be plugged into the receptacle block 52 of the base housing and carries the photo-electric control unit in orientated position. The photo-electric control unit can then be removed or replaced complete without disturbing any of the wiring and with proper orientation preserved.

While but one preferred embodiment of the invention has been illustrated and described in detail, it is to be understood that changes may be made therein and the invention embodied in other structures. It is not, therefore, the intention to limit the patent to the specific construction illustrated, but to cover the invention broadly in whatever form its principles may be utilized.

What we claim is:

1. A street lighting control unit for mounting on an outer casing enclosure having an open top and forming an element of a street lighting luminaire, comprising an adapter housing, means for attaching the adapter housing in oriented position on a luminaire in weather tight position over the open top of said outer casing enclosure, said adapter housing having an upwardly projecting neck portion, a terminal block and terminals therein fixed in said neck portion, a plug member for engagement with a receptacle in the luminaire, said plug member being attached to the terminal block of the adapter housing by means of wires of sufficient length to permit orientation of the adapter housing to a position on the luminaire for proper exposure of the photo-electric cell of the light control unit, a photo-electric control unit having a base provided with terminals for detachable engagement with terminals in said terminal block, said control unit having a weather tight housing with a transparent window fixed to said base and having a photo-electric cell therein exposed for illumination by light passing through said window from a predetermined direction, said photo-electric cell being mounted in a fixed position of orientation with respect to the base and terminals thereof, said control unit housing having a depending flange enclosing the upper end of said neck portion so as to protect the joint between the terminals in the base of the control unit and the terminals in the terminal block,

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whereby the complete photo-electric unit including the base, photo-electric cell and windowed housing may be oriented by adjustment of the adapter housing on the luminaire base housing and may be removed and replaced in position on the adapter housing without disturbing the orientation thereof or any other part of the luminaire assembly.

2. An adapter unit for the mounting on a luminaire base housing of a self-contained light control unit including a windowed housing and photo-electric cell and terminals mounted in fixed relative position, said adapter unit comprising an adapter housing in the form of a circular hollow body having a depending flange portion adapted to enclose and seat upon the upper end of the base housing and having an annular groove around the flange thereof, said body having an upwardly projecting neck portion of reduced diameter, said neck portion carrying a terminal block mounted in fixed position therein and carrying terminals for engagement in predeter-

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mined relationship by the terminals of the light control unit, said annular groove being adapted for engagement with securing means carried by the base housing, said adapter unit having a plug member for engagement with a receptacle in the base housing, said plug member being attached to the terminal block of the adapter housing by means of wires of sufficient length to permit orientation of the adapter housing to a position on the base housing for proper exposure of the photo-electric cell of the light control unit.

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