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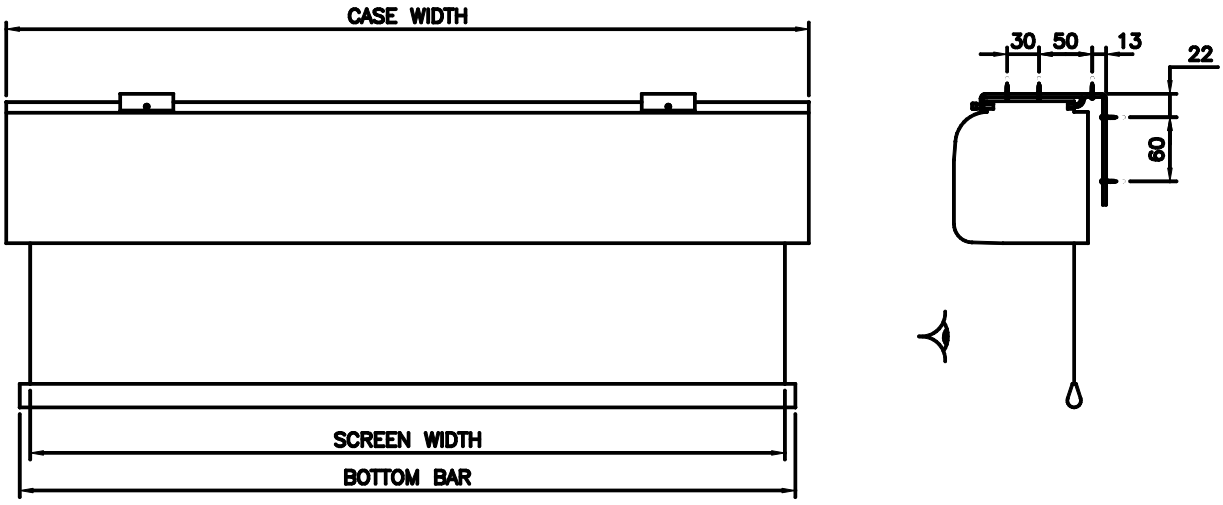
Operating and Installation instructions for Electric Roller Screen

Description of use:

This unit has been designed for use as an electrically operated roll down projection screen. The unit is designed for internal, dry environments.

The unit has been designed for use with Harkness Screens PVC projection materials and should not be fitted with other materials without approval from Harkness Screens. Use with other materials may invalidate the warranty.



Sketch of Roller Screen

Installation:

Before commencing installation, please read these instructions carefully.

Only competent personnel should carry out the installation.

During the installation, the main body of the roller screen must be lifted into position. Please be aware that the screen is heavy and two or more people may be required to lift the screen safely.

If the screen is to be installed at height, please use suitable access equipment – DO NOT work off ladders.

Prior to installing the roller screen, ensure the ceiling/wall is suitable for the loading induced by the weight of the screen. Take particular care if the construction is timber or stud partitioning. If in doubt, seek the advise of a structural engineer (Note! The maximum weight of an electric roller screen is 13 lbs per ft. (20 Kg per metre) width of screen).

The roller screen is supplied with fixing brackets that are suitable for fixing to either a ceiling or a vertical wall. Fixing screws or anchors are to be provided by the installer to suit the ceiling/wall construction.

Insert the clamp screws into the threaded holes on the front of the fixing brackets (if not already done).
The fixing brackets are mounted with the locating tab on the underside and the clamp screw facing the front. Take care to ensure that all the brackets are horizontal (both individually and to each other); any deviation may affect the operation of the roller screen.
The top of the roller screen case has full-length grooves, both front and rear. The rear of the roller screen case is identified by the flat surface. The roller screen is lifted up to the fixing brackets and is tilted slightly so that the rear groove can be pushed onto the locating tab on the fixing brackets. Rotate the roller case so that the front groove aligns with the clamp screw. It may be necessary to unscrew the clamp screws to allow the roller case to rotate to the correct position. Tighten the clamp screws into the front groove to lock the roller screen in position. DO NOT over-tighten the screws as this may damage the roller screen case. (SEE FIGURE. #2). Release the screen transport straps.

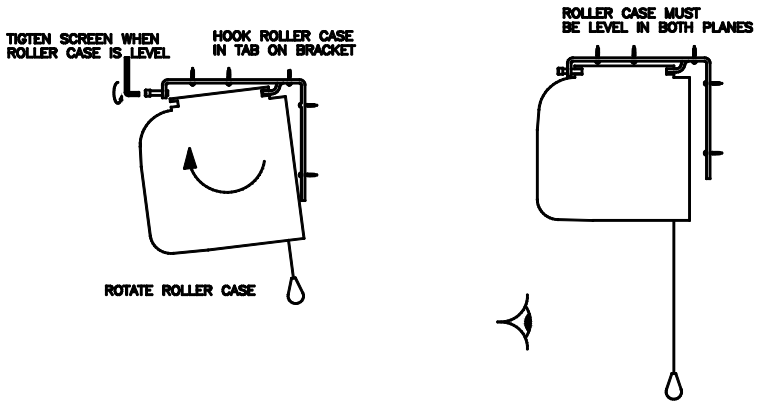


Figure #2

Only qualified personnel should carry out the electrical installation.

The roller screen is operated on single-phase mains voltage and MUST be protected by a suitable fused supply with an EARTH connection.
UK electrical requirement is 240v 50 Hz and 2 amps.
US electrical requirement is 110v 60 Hz and 5 amps.

There are four wires attached to the roller screen motor. The colour coding depends on UK or US versions of the roller screen.
The UK version is:- GREEN/YELLOW = earth - BLUE = common - BLACK and BROWN = up and down. (Note! Depending on the wrap of the screen on the roller, the black and brown wires may be reversed).
The US version is :- GREEN = ground - WHITE= common - RED and Black = up and down. (Note! Depending on the wrap of the screen on the roller, the red and black wires may be reversed).

The standard switch is a three-position rocker switch with centre position “off”.

See wiring diagram (FIGURE #3) for electrical connections.

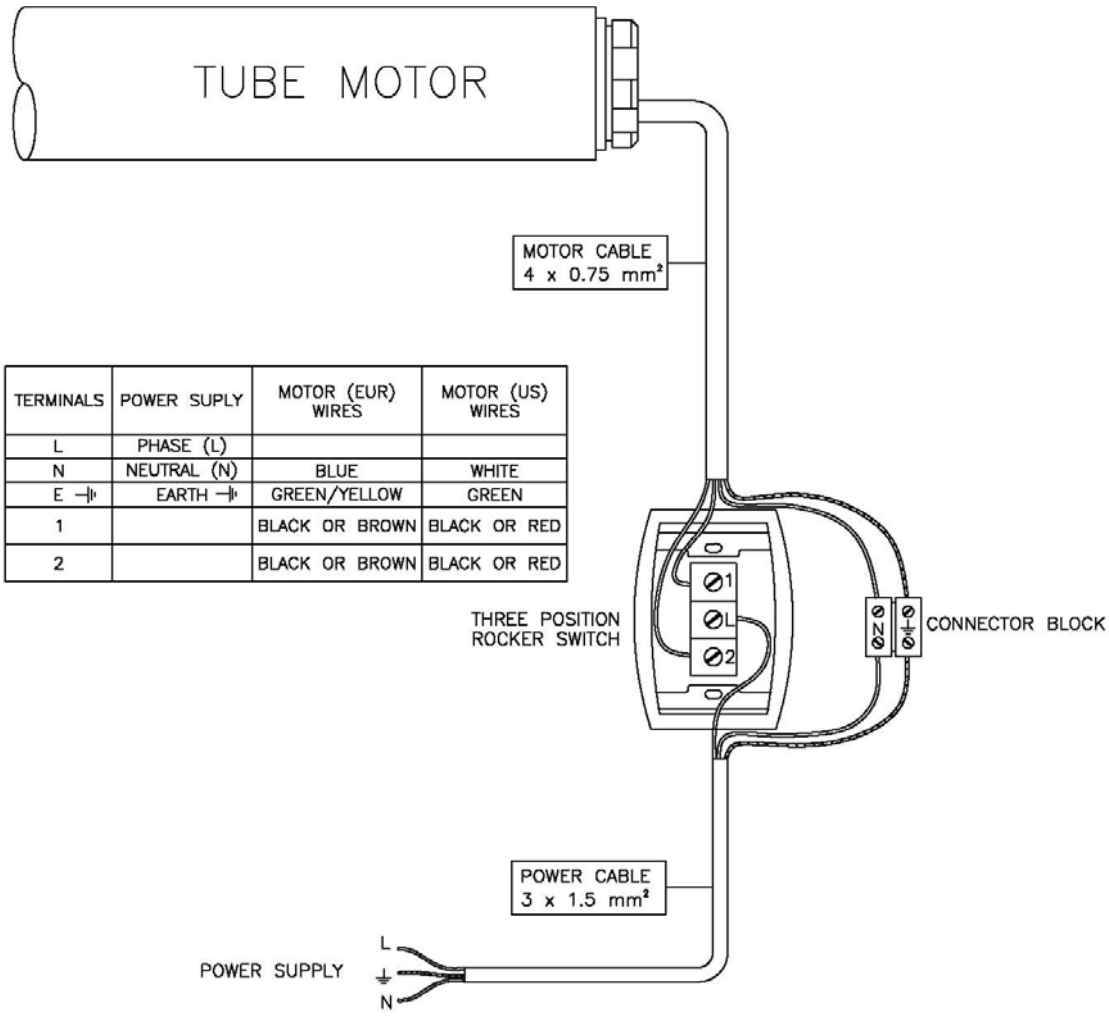


Figure # 3 Wiring Diagram

Each roller screen MUST BE CONNECTED TO A SEPARATE SWITCH.

The roller screen position is controlled via internal up and down limit switches. These limit switches are set in the factory for the size of the screen and should not require adjustment. If the travel of the roller screen is to be altered this can be achieved by adjusting the “Down” limit switch. The limit switches are located under the silver serial number label on the underside of the roller case. Removing this label reveals two holes and the adjusting screws are located behind these holes. The limit switches are adjusted by inserting a 4mm Allen key in the head of the adjuster and turning clock or counter clockwise as appropriate. Generally the rear limit controls the “ Down” limit, but this will need to be checked as the wrap of the screen can affect the direction of travel and hence reverse the “Up” and ”Down” limit switches. Adjust the limits very carefully and in very small amounts to ascertain that the limit and direction being adjusted is correct.

Operation:

The three-position rocker switch operates the roller screen. Depressing one end of the rocker switch causes the roller screen to descend. Keep the switch depressed until the roller screen reaches the desired limit. If the rocker switch is released whilst the roller screen is in motion will stop the movement of the screen. Depressing the other end of the rocker switch causes the roller screen to retract.