

# Product data sheet *Imagine*

## Imagine ESR Dimmer Rack

ESR14XXX ESR26XXX

The ESR racks are the core element in the Helvar rack mounted dimmer range. The racks are available, as standard, in 14 or 26 channel configurations with any combination of the following Imagine Modules:

- HES92020 Thyristor Dimmer (2 channel)
- HES92220 Transistor Dimmer (2 channel)
- HES92060 Sinewave Dimmer (1 channel)
- HES98020 Ballast Controller (2 channel)

The modules are installed in a specially designed stacker unit where they are tilted at an angle of 45 degrees. This greatly reduces the overall depth of the cabinet and ensures that the modules are properly cooled. In the Turbo cabinets there is also a fan and this, in conjunction with the air duct formed by the stacker, ensures that there is an equal flow of air through all the modules, thus doubling the permitted load of the dimmer units.

### Key Features

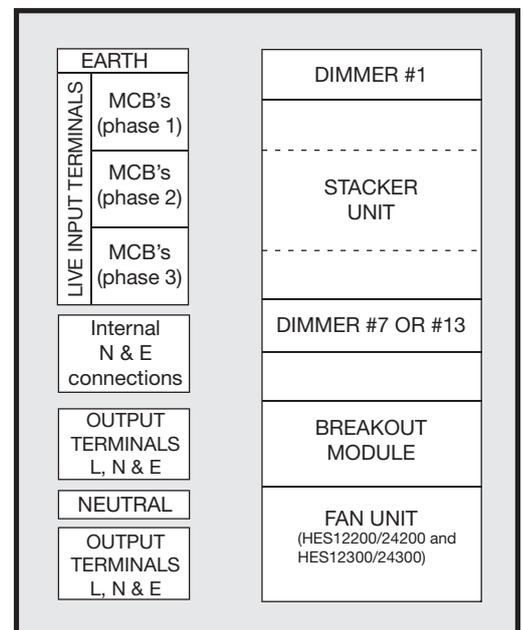
- Standard configurations providing a choice of 14 or 26 dimming outputs and method of cooling.
- Each output capable of handling 10 A with convection cooling or 20 A with forced air cooling (Module dependant. See module guide for further information).
- Breakout module included to allow for connection of S-DIM data bus and override functions from lighting router. Also allows easy system expansion.
- Dual MCB protection for each input circuit with triple output connections using cage-clamp screwless terminals.
- All internal connections pre-wired.

### Additional Functions

- Cable entry cut-outs are located on the top and bottom panels of the rack. The left and right side panels of the rack are removable to give greater access to the input and output terminals during installation.
- The DIN mounting rail is used for mounting the input terminals, MCB's and output terminals. The rail is mounted towards the left-hand side of the cabinet and mounted on metal saddle brackets which are secured to the back panel.



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### Technical Data

#### Electrical Input

Supply Type: 3-phase  
 Mains: 180 - 260 V AC, 45 - 65 Hz  
 (90 - 130 V AC to order)  
 Total Input Current: 120A - 520A  
 (Actual value depends upon type selected.)

#### Power Input Terminals

The power-input connectors are located on the DIN rail in the following order, starting at the top:

Earth terminal  
 Live Input (Phase 1) to MCB's  
 Live Input (Phase 2) to MCB's  
 Live Input (Phase 3) to MCB's  
 Neutral terminal MCB's

The three groups of MCB's have the following functions:  
 14 Channel Racks

Group 1: Dimmer Modules 1 and 2  
 Group 2: Dimmer Modules 3 and 4  
 Group 3: Dimmer Modules 5 and 7  
 Fan Unit (If fitted)

26 Channel Racks

Group 1: Dimmer Modules 1 and 4  
 Group 2: Dimmer Modules 5 and 8  
 Group 3: Dimmer Modules 9 and 13  
 Fan Unit (If fitted)

Each dimmer module MCB is a double-pole type, with one pole for each live input. Therefore if an overload occurs on one circuit of the pair, the MCB will isolate both circuits. One additional MCB's are included in the third group (depending upon the model) which supply the fan unit.

#### Output Terminals

The connections for each output circuit are located at the bottom of the DIN mounting rail. A triple terminal arrangement is provided giving a separate neutral and earth terminal for each live output.

Terminal Type: Cage-clamp screw-less terminals  
 Cable Size: 1.5 mm<sup>2</sup> - 4 mm<sup>2</sup> Solid, stranded or flexible  
 Stripping Length: 10 mm

#### Operating Conditions

Ambient Temperature: 0...+40° C  
 Relative Humidity: 90% max, non-condensing  
 Storage Temperature: -10°C...+70°C

#### Mechanical Data

Material: 16swg Mild Steel Zintec  
 Finish: Powder coat - Semi Gloss  
 Colour: Grey BS4800 00-A-05 Textured

#### Conformity & Standards

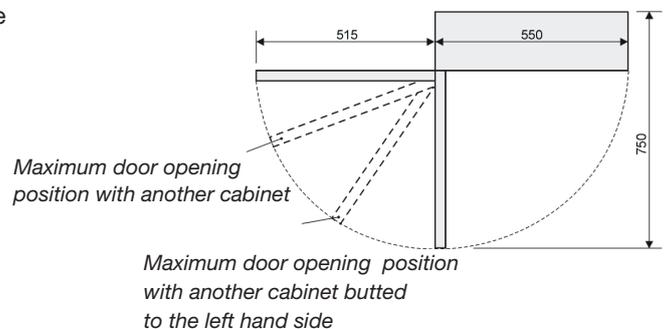
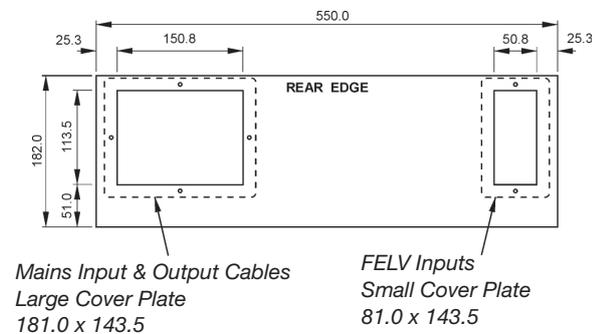
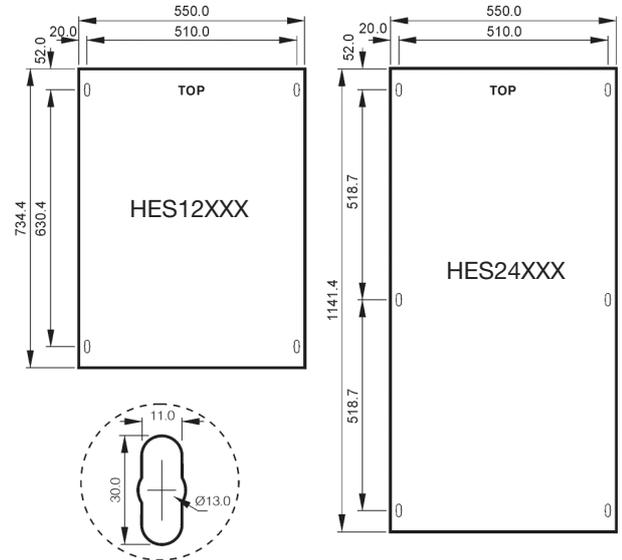
Emission: EN 50 081  
 Immunity: EN 50 082  
 RFI: EN 55 014

#### Safety

Safety: EN 60 950  
 IP Rating: 30  
 Isolation: 4 kV  
 UL File No: EN191962

### Dimensions

All dimensions in mm



Data subject to change without notice

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