

Product data sheet *Imagine*

HES92220 Transistor Dimmer

The Imagine HES92220 rack mounted dimmer contains two identical trailing edge transistor dimmers within a moulded case and is designed as an exchangeable module for fitting into ESR dimmer cabinets. The dimmer is for use with incandescent lamps and low voltage lamps via electronic transformers, if the transformer manufacturer approves use. With convection cooling the maximum load is 6 A per channel and increases to 20 A per channel when fan cooled. The dimmer is provided with a three-digit LED display, normally indicating the current output level as a percentage and four push buttons for manual operation and address setting.

Key Features

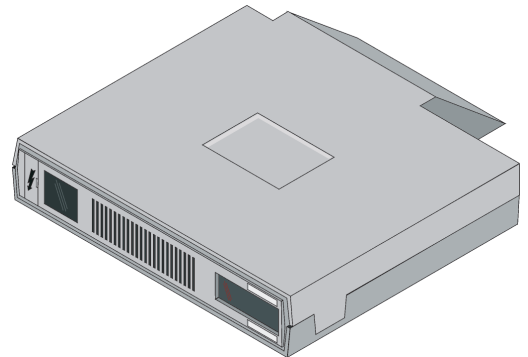
- Full dimmer status feedback via SDIM control bus permitting full system monitoring.
- Current and temperature monitoring with automatic load reduction in critical states and shut-off under extreme conditions.
- Override input for a switching contact to allow the channels to be set to a pre-programmed level inconjunction with lighting router only.

Installation Notes

- The dimmer module is specifically designed to be fitted into the ESR dimmer rack stacker unit.
- Analogue control output connection (if used) are via a connector on the right hand side of the module. Power connections are made using terminal screws under the terminal cover on the left-hand side of the front of the dimmer. All other connections are made at the rear of the dimmer unit via a plug-in connector.

Power Connection Table

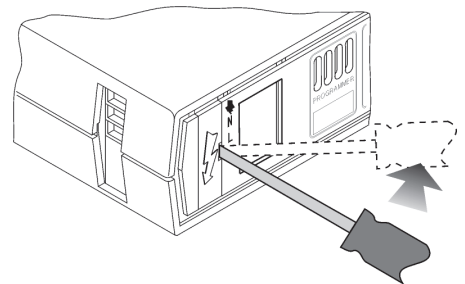
Dimmer module	Distribution Panel	Wire Colour
Terminal \perp	Earth	Yellow/Green
Terminal N.	Neutral	Blue
Terminal LA.	Ch 1 live feed from MCB.	Brown
Terminal LB.	Ch 2 live feed from MCB.	Brown
Terminal CHA.	Ch 1 Relay output terminal	Red
Terminal CHB.	Ch 2 Relay output terminal	Yellow



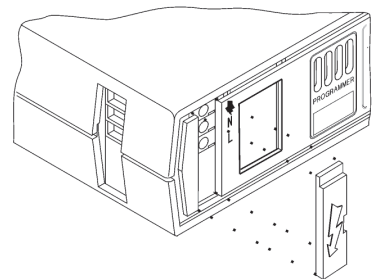
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Connections

- 1 Removing the power terminal cover.



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Technical Data

Electrical Input

Mains: 180 - 260 V AC, 45 - 65 Hz
(90 - 130 V AC to order)

Power Consumption: 6 W at zero output
40 W both dimmers loaded to 6 A
130 W both dimmers loaded to 20 A

Electrical Output

Maximum Output: Input voltage less 3 V at input frequency
Maximum Current: 6 A Each dimmer, convection cooled
12 A Paired dimmers, convection cooled
20 A Each dimmer, forced ventilation
40 A Paired dimmers, forced ventilation

Dimming Curve	HES92220
0	Non dimming (for switched loads)
1	Tungsten Linear
2	Tungsten Square
3	Tungsten 'S' Law
4	EX TX Limited Range with lamp warm
5	EX TX Limited Range
6	Tungsten Low Wattage
7	Custom
8	EL TX Limited Range + switched channel

Control Inputs/Outputs

Digital: RS485 S-DIM protocol (Level and fade time)
Analogue: 0...+10 V (Level)

Operating Conditions

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

Mechanical Data

Case: ABS polycarbonate blend two-part moulding,
130°C Vicat UL94-V0 (Halogen Free)
Net weight: 1.2 kg
Shipping weight: 1.3 kg

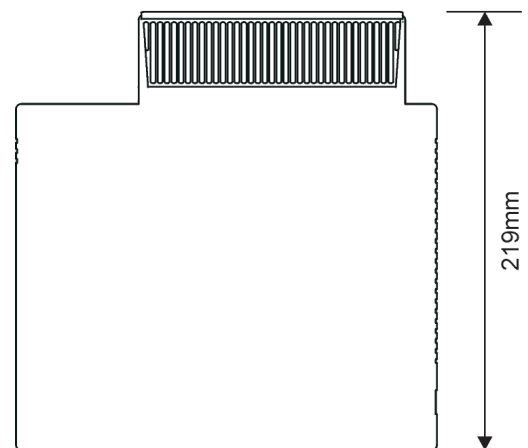
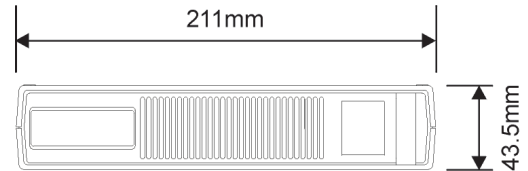
Conformity & Standards

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

Safety

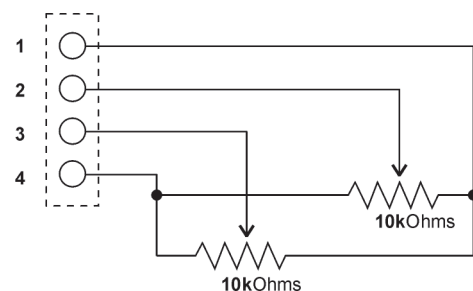
Safety: EN 60 950
IP Rating: 30
Isolation: 4 kV

Dimensions



Connections

Analogue Connections:



Helvar
www.helvar.com