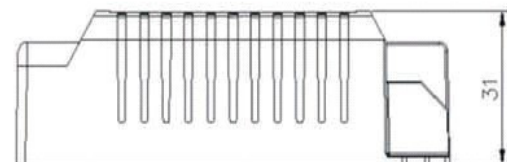
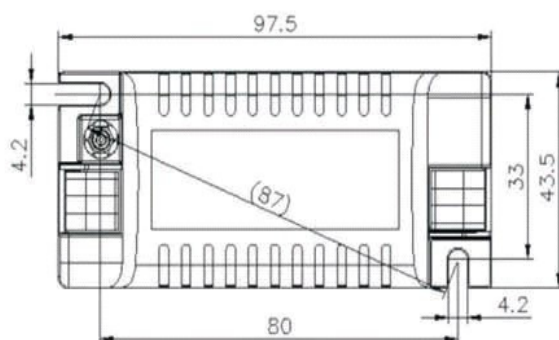




HID BALLAST 20W Model: HM1020, 1x20w



Failure & abnormal LED indicator



Product highlights:

- *Steady lamp performance by mains fluctuation and lamp tolerance.
- *Constant lamp power output and stable lamp colour temperature.
- *Abnormal protection against empty load, overheat, lamp end of life, lamp operation voltage too high or too low, restart on removing of obstacles and power reset.
- *Suitable for CDM, CMH, and HCL.
- *Pulse interval ignition.
- *Over 90% lumen factor during the lamp life.
- *Comprehensive energy saving by 35%.
- *High power factor; EEF = A1.
- *50,000 service hours at Tc max.

Failure & abnormal diagnose and indication.

The MCU is programmed with diagnosis on failure and abnormal operation. The MCU monitors the fixture and can send error signals to a LED on the ballast. The signal is carried through an optical fibre to a Lens on the enclosure of the fixture. The signal is displayed as a number of red flashes which indicates different errors.



Insert the fiber optic into the LED indication slot, then it carries the error signals to a Lens on the outside of fixture.

The error signals are indicated in 10 second intervals and 1 second between each flash.

Failure & abnormal error codes

No. of flashes	Error type	Error description	Action
•	no failure	starting lamp	no action
•-•	over-heat	ballast gets too hot	analyze reason
•-•-•	lamp failure	Ignition timed out	analyze reason
•-•-•-•	lamp failure	lamp End of life	change lamp
•-•-•-•-•	lamp failure	lamp voltage is too low	change lamp
•-•-•-•-•-•	lamp failure	lamp voltage is too high	change lamp
•-•-•-•-•-•-•	ballast failure	ballast doesn't work	change ballast

Apart from the error signals, the LED also displays a single steady signal when the fixture tries to ignite the light source.

Technical parameters:

Input voltage	220—240VAC
Input current	0.11A
Lamp power	22W (max)
Supply frequency	50/60Hz
Power factor	>0.95
Lamp output frequency	230Hz
Ta	- 20℃ ~ + 55℃
Tc	85℃
Ignition voltage	1.5 Kv.
Output wire length	3 M (max)
Dimension (length*width*height)	97.5x43.5x31mm
U-OUT	300V

Approvals and standards:

This ballast is tested and approved according to EN61347-2-12, EN61347-1, EN55015, EN61547, EN61000-3-2, EN61000-3-3.