

Reliability • User Friendly • Eco Design



EL-ngx The engine for light

Next GeNeRation



The growing demand on energy efficiency in lighting is leading a fast increase in the use of electronic ballasts. To support this Helvar introduces a user-friendly electronic ballast with green values to fulfil the need for high quality lighting.



Reliability

To keep running costs at a minimum, long lamp and ballast life time is a necessity in office, school and hospital environments.

Careful design of the circuit boards and intelligent choice of components give a solid basis for reliable ballast and lamp operation also in very challenging environments.

The wide operational temperature range is also designed to meet the challenging demands in applications like warehouses and parking halls.



User friendliness

Increasing production volumes in the luminaire market call for maximum cost efficiency in manufacturing. EL-ngn has less wires to connect and separate horizontal lamp terminals to speed up production and avoid mistakes in assembly.

The EL-ngn range has been designed to have only one case size. Smaller and lighter ballasts give benefits both in logistics and luminaire design.

Key benefits

- Long life time
- Low cost in operation
- Smaller environmental impact

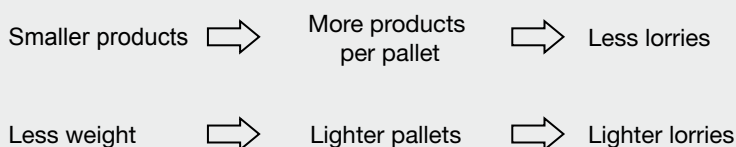
EEI=A2

Reduced Environmental Footprint

Energy savings are clear and measurable when using EL-ngn ballasts.

The range fulfils the requirements of energy efficiency index EEI=A2, the best rating for non-dimmable ballasts.

On top of our Eco-design principles we have been able to further reduce our ecological footprint. By using hot-dip galvanised steel in the ballast case, no chemical treatments are needed for the steel. The painting and use of related solvents have been removed and no oil is used in dry rolling of the ballast case. With a minimum number of components in use the ballast weight is also reduced.



Less CO₂

Technical specifications



| | |
|--------------------------------------|---------------------|
| Max.temperature at tc point | 75°C |
| Ambient temperature range | -20...+50°C |
| Storage temperature range | -40...+80°C |
| Maximum relative humidity | no condensation |
| Number of starts per lamp | > 50 000 |
| AC range | 190-264 VAC |
| DC range (starting voltage >190VDC) | 176-280 VDC |
| Over voltage duration | 320 VAC, 1h |
| Power factor, typical | 0.98 |
| Earth leakage current | < 0.4 mA |
| Maximum working voltage (Uout) | 350V |
| Lifetime (90% survival) | 50 000 h, at Tc max |
| Max length of ballast to lamp wiring | 2m |
| Ignition time, typical | ~1.0s |

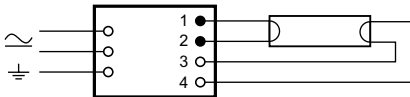
| | |
|--|----------------------|
| CE marked | |
| General and safety requirements | EN 61347-2-3 |
| Additional safety requirements for AC/DC supplied ballasts acc. To | EN 61347-2-3 Annex J |
| Performance requirements | EN 60929 |
| Lamp life acc. to | EN 60081 / EN 60901 |
| Mains current harmonics, acc. To | EN 61000-3-2 |
| Radio Frequency Interference, acc. To | EN 55015 |
| Immunity standard, acc. To | EN 61547 |
| Thermal protection class | EN 61347, B.6.2e |

The latest and more specific technical data is available from the product catalogue on our website.

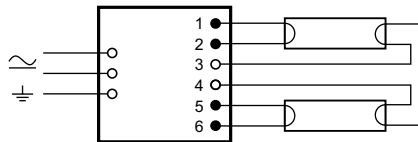
| Lamp type | W | No. of lamps | Ballast | Weight (g) | Circuit power (W) | Mains current (A) | Operating frequency (kHz) | Lamp power (W) |
|-----------|----|--------------|-----------|------------|-------------------|-------------------|---------------------------|----------------|
| | | | | | | | | |
| T8 | 18 | 1 | EL1x18ngn | 190 | 19 | 0.09-0.08 | 43 | 16 |
| | | 2 | EL2x18ngn | 200 | 37 | 0.16-0.15 | 46 | 16 |
| | | 4 | EL4x18ngn | 205 | 71 | 0.33-0.29 | 47 | 16 |
| | 36 | 1 | EL1x36ngn | 191 | 36 | 0.16-0.15 | 48 | 32 |
| | | 2 | EL2x36ngn | 205 | 70 | 0.32-0.29 | 45 | 32 |
| | 58 | 1 | EL1x58ngn | 193 | 55 | 0.26-0.23 | 47 | 50 |
| 2 | | EL2x58ngn | 218 | 108 | 0.50-0.45 | 48 | 50 | |

Connection diagrams

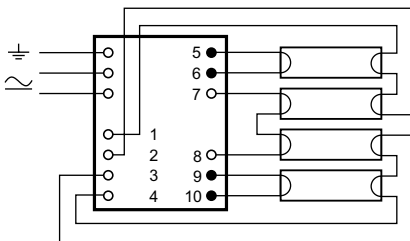
EL1x...ngn



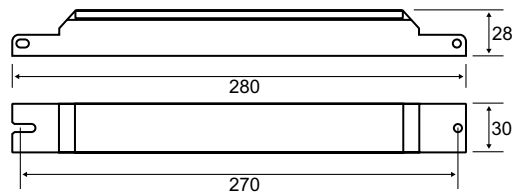
EL2x...ngn



EL4x...ngn



Dimensions



Due to our continuing program of product development, data is subject to change without notice.

Helvar

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|----|--------------------|
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