



The HRN range is supplied as a conversion kit for integral use within a luminaire. If required, it can be provided within a suitable remote enclosure where space inside the fitting is limited.

- Suitable for Most Compact Fluorescent Lamps
- Deep Discharge Protection
- Four Pole Changeover Relay
- Fifth Pole Relay for Ballast Protection
- High Temperature NiCd Batteries
- Compact Module Dimensions
- Can be Provided in Various Remote Enclosures
- Operates One Lamp Within Multi Lamp Circuits

A 3 hour emergency lighting conversion kit which operates with high temperature NiCd batteries. The unit is designed to suit a wide range of fluorescent lamps. The HRN is supplied in three separate formats to maximise the ballast lumen factor (BLF) achieved in emergency. Please see lamp compatibility chart to select the correct module for the emergency conversion of your lamp and the BLF that will be achieved.

Please see separate datasheets for Remote Enclosure details.

There are 3 main versions available -

### Order Codes

- HRN/3-K** For the conversion of compact fluorescent lamps from 4W to 36W. Supplied as module, battery and LED kit.
- HRN/4-K** For the conversion of compact fluorescent lamps from 4W to 58W. Supplied as module, battery and LED kit.
- HRN/5-K** For the conversion of compact fluorescent lamps from 4W to 70W. Supplied as module, battery and LED kit.

### Technical Details:

|                           | HRN/3                 | HRN/4           | HRN/5         |
|---------------------------|-----------------------|-----------------|---------------|
| Mains Supply              | 230-240V AC 50/60 Hz  |                 |               |
| Power Rating              | 22mA $\lambda = 0.88$ |                 |               |
| Emergency Duration        | 3 hours               |                 |               |
| Battery Type              | 3.6V 4.5Ah NiCd       | 4.8V 4.5Ah NiCd | 6V 4.5Ah NiCd |
| Charge Current            | 200mA                 |                 |               |
| Cut-Off Voltage           | 3.0V                  | 4.0V            | 5.0V          |
| Discharge Current         | 1.05 Amp              |                 |               |
| Tc Point and Temperature  | 70 °C Case Side       |                 |               |
| Module Dimensions (LxWxH) | 165mm x 45mm x 29mm   |                 |               |
| Battery Dimensions (LxØ)  | 220mm x 37mm          | 280mm x 37mm    | 340mm x 37mm  |
| Overall Kit Weight        | 0.73Kg                | 0.83Kg          | 1.0Kg         |



# Lamp Compatibility BLF %



Recommended  
Choice    
Alternative  
Choice ??

|    |        | HRN/3 | HRN/4 | HRN/5 | HRN/T5/3/14 | HRN/T5/4/14+24 | HRN/T5/4/21+22 | HRN/T5/6/28+54 | HRN/T5/6/35+49 | PRA/4 | PRA/6/55 | LLS/6 |
|----|--------|-------|-------|-------|-------------|----------------|----------------|----------------|----------------|-------|----------|-------|
| 4  | T5     | 28    | 33    | 39    |             |                |                |                |                |       |          |       |
| 5  | TC-EL  | 25    | 29    | 35    |             |                |                |                |                |       |          |       |
| 7  | TC-EL  | 20    | 24    | 28    |             |                |                |                |                |       |          |       |
| 8  | T5     | 18    | 21    | 25    |             |                |                |                |                |       |          |       |
| 9  | TC-EL  | 19    | 22    | 26    |             |                |                |                |                |       |          |       |
| 10 | TC-DEL | 15    | 18    | 21    |             |                |                |                |                |       |          |       |
| 11 | TC-EL  | 18    | 21    | 26    |             |                |                |                |                |       |          |       |
| 13 | TC-DEL | 16    | 18    | 22    |             |                |                |                |                |       |          |       |
| 14 | T5     |       |       |       | 15          | 21             |                |                |                |       |          | 34    |
| 14 | PL-R   |       |       |       |             |                |                |                |                |       |          | 34    |
| 16 | TC-DD  | 13    | 15    | 18    |             |                |                |                |                |       |          |       |
| 17 | PL-R   |       |       |       |             |                |                |                |                |       |          | 28    |
| 18 | TC-L   | 12    | 14    | 16    |             |                |                |                |                | 3     | 5        |       |
| 18 | TC-F   | 12    | 14    | 16    |             |                |                |                |                | 3     | 5        | 23    |
| 18 | TC-DEL | 12    | 14    | 17    |             |                |                |                |                | 4     | 9        |       |
| 18 | TC-TEL | 13    | 15    | 18    |             |                |                |                |                | 3     | 9        |       |
| 18 | T8     | 12    | 14    | 14    |             |                |                |                |                |       |          |       |
| 21 | T5     |       |       |       |             |                | 15             |                |                |       |          | 23    |
| 22 | T5-CIR |       |       |       |             |                | 15             |                |                |       |          | 19    |
| 24 | T5     |       |       |       | 15          |                |                |                |                |       |          | 20    |
| 24 | TC-L   | 11    | 12    | 15    |             |                |                |                |                | 3     | 7        | 18    |
| 24 | TC-F   | 11    | 12    | 15    |             |                |                |                |                | 3     | 7        | 18    |
| 26 | TC-DEL | 10    | 12    | 14    |             |                |                |                |                | 2     | 8        | 15    |
| 26 | TC-TEL | 6     | 11    | 13    |             |                |                |                |                | 3     | 9        | 14    |
| 28 | T5     |       |       |       |             |                | 20             |                |                |       |          | 17    |
| 28 | TC-DD  | 10    | 11    | 13    |             |                |                |                |                | 3     | 10       | 15    |
| 32 | TC-TEL |       |       |       |             |                |                |                |                | 3     | 7        | 11    |
| 34 | TC-L   | 8     | 9     | 11    |             |                |                |                |                |       | 5        | 12    |
| 35 | T5     |       |       |       |             |                |                | 17             |                |       |          | 14    |
| 36 | TC-L   | 8     | 9     | 11    |             |                |                |                |                |       | 5        | 12    |
| 36 | T8     | 8     | 9     | 11    |             |                |                |                |                |       |          | 12    |
| 36 | TC-F   | 8     | 9     | 11    |             |                |                |                |                |       | 6        | 12    |
| 38 | TC-DD  |       | 8     | 10    |             |                |                |                |                |       | 6        | 11    |
| 39 | T5     |       |       |       |             |                |                |                |                |       |          | 12    |
| 40 | T5-CIR |       |       |       |             |                |                |                |                |       | 8        | 9     |
| 40 | TC-L   |       | 9     | 11    |             |                |                |                |                |       |          | 11    |
| 42 | TC-TEL |       |       |       |             |                |                |                |                |       | 9        | 9     |
| 49 | T5     |       |       |       |             |                |                | 13             |                |       |          | 10    |
| 54 | T5     |       |       |       |             |                | 12             |                |                |       |          | 9     |
| 55 | T5-CIR |       |       |       |             |                |                |                |                |       | 6        | 7     |
| 55 | TC-L   |       |       |       |             |                |                |                |                |       |          | 7     |
| 55 | TC-DD  |       |       |       |             |                |                |                |                |       | 3        | 8     |
| 57 | TC-TEL |       |       |       |             |                |                |                |                |       |          | 6     |
| 58 | T8     |       | 7     | 8     |             |                |                |                |                |       |          | 7     |
| 70 | T8     |       |       | 7     |             |                |                |                |                |       |          | 6     |
| 80 | T5     |       |       |       |             |                |                |                |                |       |          | 6     |
| 80 | TC-L   |       |       |       |             |                |                |                |                |       |          | 5     |