



## Approval Marks



**GMA-517709**



| Item                            |                     | Value         | Remark            |
|---------------------------------|---------------------|---------------|-------------------|
| Nominal voltage                 |                     | 220–240V      |                   |
| Nominal frequency               |                     | 50–60Hz       |                   |
| AC voltage range                |                     | 198–264V      |                   |
| DC voltage range (start)        |                     | NA            |                   |
| DC voltage range (operation)    |                     | NA            |                   |
| Nominal current                 |                     |               |                   |
| LNDC6W120LRP                    |                     | 25mA          |                   |
| LNDC6W150LRP                    |                     | 30mA          |                   |
| LNDC6W200LRP                    |                     | 40mA          |                   |
| LNDC6W250LRP                    |                     | 35mA          |                   |
| LNDC6W350LRP                    |                     | 45mA          |                   |
| Total Harmonic Distortion (THD) |                     | < 30%         | Full load @230VAC |
| Power factor                    |                     |               | Full load @230VAC |
| Input                           | LNDC6W120LRP        | 0.6-0.8C      |                   |
|                                 | LNDC6W150/250LRP    | 0.65-0.85C    |                   |
|                                 | LNDC6W200LRP        | 0.75-0.85C    |                   |
|                                 | LNDC6W350LRP        | 0.75-0.91C    |                   |
|                                 | Displacement factor |               | Full load @230VAC |
|                                 | LNDC6W120LRP        | 0.6-0.8C      |                   |
|                                 | LNDC6W150/250LRP    | 0.65-0.85C    |                   |
|                                 | LNDC6W200LRP        | 0.75-0.85C    |                   |
|                                 | LNDC6W350LRP        | 0.75-0.91C    |                   |
|                                 | Efficiency          | 77% (Typ.)    | Full load @230VAC |
| No-load power                   |                     | NA            |                   |
| Stand-by power                  |                     | <0.5W         |                   |
| Protection class                |                     | NA            |                   |
| Inrush current                  |                     | 3.5 A / 30 μs |                   |
| Max.units per circuit breaker   | Type B , 10A MCB    | 89            |                   |
|                                 | Type B , 16A MCB    | 142           |                   |
|                                 | Type C , 10A MCB    | 111           |                   |
|                                 | Type C , 16A MCB    | 178           |                   |
| Earth leakage current           |                     | NA            |                   |

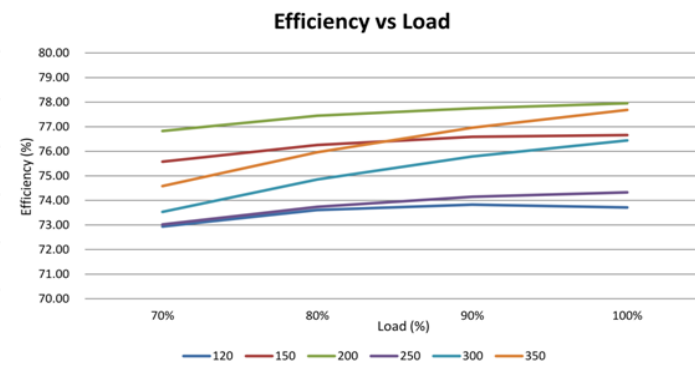
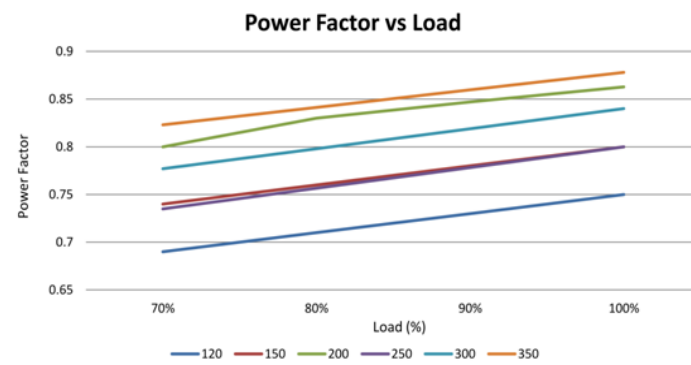
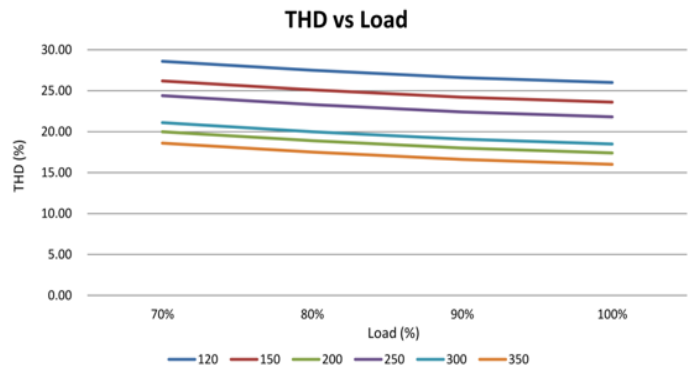
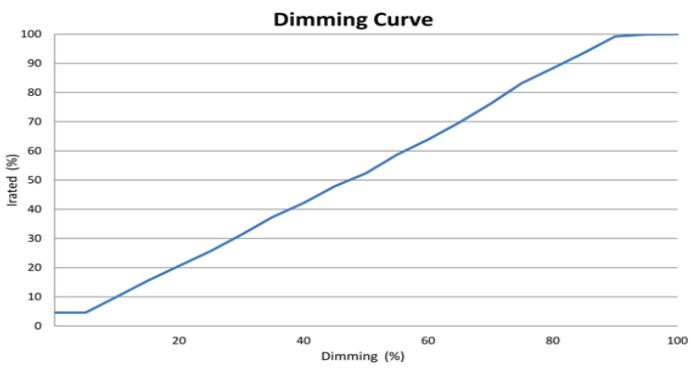
|             | Item                                     | Value                                                                                                              | Remark                                                                                                                  |
|-------------|------------------------------------------|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Output      | Nominal voltage range                    |                                                                                                                    |                                                                                                                         |
|             | LNDC6W120/150/200LRP                     | 15-30 Vdc                                                                                                          |                                                                                                                         |
|             | LNDC6W250/350LRP                         | 13-19 Vdc                                                                                                          |                                                                                                                         |
|             | Maximum voltage                          |                                                                                                                    |                                                                                                                         |
|             | LNDC6W120/150/200LRP                     | 40Vdc                                                                                                              |                                                                                                                         |
|             | LNDC6W250/350LRP                         | 30Vdc                                                                                                              |                                                                                                                         |
|             | Nominal current range                    |                                                                                                                    |                                                                                                                         |
|             | LNDC6W120LRP                             | 120mA                                                                                                              |                                                                                                                         |
|             | LNDC6W150LRP                             | 150mA                                                                                                              |                                                                                                                         |
|             | LNDC6W200LRP                             | 200mA                                                                                                              |                                                                                                                         |
|             | LNDC6W250LRP                             | 250mA                                                                                                              |                                                                                                                         |
|             | LNDC6W350LRP                             | 350mA                                                                                                              |                                                                                                                         |
|             | Current accuracy                         |                                                                                                                    |                                                                                                                         |
|             | LND6W350LRP                              | ± 5%                                                                                                               |                                                                                                                         |
|             | LND6W120/150/200/250LRP                  | ± 8%                                                                                                               |                                                                                                                         |
|             | Typical output LF current ripple         | ± 6%                                                                                                               | Low Frequency< 120Hz<br>Full load @230VAC                                                                               |
|             | Starting time                            | < 0.5 S                                                                                                            | Full load @230VAC                                                                                                       |
|             | Nominal power range                      |                                                                                                                    |                                                                                                                         |
|             | LNDC6W120LRP                             | 1.8-3.6W                                                                                                           |                                                                                                                         |
|             | LNDC6W150LRP                             | 2.3-4.5W                                                                                                           |                                                                                                                         |
|             | LNDC6W200LRP                             | 3.0-6.0W                                                                                                           |                                                                                                                         |
|             | LNDC6W250LRP                             | 3.3-4.7W                                                                                                           |                                                                                                                         |
|             | LNDC6W350LRP                             | 4.6-6.6W                                                                                                           |                                                                                                                         |
|             | Maximum power                            | 6W                                                                                                                 |                                                                                                                         |
| Dimming     | Dimming control                          | DALI/Touch Dim                                                                                                     |                                                                                                                         |
|             | Dimming technique                        | Amplitude                                                                                                          |                                                                                                                         |
|             | PWM frequency                            | NA                                                                                                                 |                                                                                                                         |
|             | Dimming range                            | 5-100%                                                                                                             |                                                                                                                         |
|             | Lowest dimming current                   | 1-8%                                                                                                               |                                                                                                                         |
|             | Galvanic isolation                       | Basic insulated to PRI and double insulated to SEC                                                                 |                                                                                                                         |
| Environment | Ambient temperature range t <sub>a</sub> | -20°C - +50°C                                                                                                      |                                                                                                                         |
|             | Maximum case temperature t <sub>c</sub>  | 70°C                                                                                                               |                                                                                                                         |
|             | Max. case temp. in fault condition       | 110°C                                                                                                              | When operating under fault conditions,<br>the temperature of the enclosure at any<br>location should not exceed 110 °C. |
|             | Storage temperature range                | -40°C - +85°C                                                                                                      |                                                                                                                         |
|             | Relative humidity                        | 10% - 95%                                                                                                          |                                                                                                                         |
|             | Surge transient protection               | 1 kV                                                                                                               | L/N                                                                                                                     |
|             | Environmental rating                     | Indoor                                                                                                             |                                                                                                                         |
|             | IP rating                                | IP20                                                                                                               |                                                                                                                         |
|             | Mains switching cycles                   | > 100,000                                                                                                          |                                                                                                                         |
|             | Expected lifetime                        | > 50,000 h, t <sub>c</sub> 70 °C @ t <sub>a</sub> 50 °C<br>> 100000 h, t <sub>c</sub> 60 °C @ t <sub>a</sub> 40 °C | 0.2 % / 1,000 h failure rate @ t <sub>c</sub> 70 °C<br>0.1 % / 1,000 h failure rate @ t <sub>c</sub> 60 °C              |
|             | Gross weight/Carton                      | 9.1 kg                                                                                                             |                                                                                                                         |
|             | Net weight/Carton                        | 8.2 kg                                                                                                             |                                                                                                                         |
| Packing     | Pcs/Carton                               | 96 PCS                                                                                                             |                                                                                                                         |
|             | Dimension/Carton                         | 395(L)*350(W)*215(H)mm                                                                                             |                                                                                                                         |
| Protections |                                          |                                                                                                                    |                                                                                                                         |
|             | Short-circuit Protection                 | Auto recovery                                                                                                      |                                                                                                                         |
|             | Open-circuit Protection                  | Auto recovery                                                                                                      |                                                                                                                         |
|             | Overload Protection                      | Auto recovery                                                                                                      |                                                                                                                         |

| Conformity & Standards           |                                                |       |
|----------------------------------|------------------------------------------------|-------|
| Safety standard:                 | EN 61347-1, EN 61347-2-13, EN 62493            |       |
| Performance:                     | EN 62384                                       |       |
| SAA standard:                    | AS/NZS 61347.1, AS/NZS IEC 61347.2.13          |       |
| CCC standard:                    | GB17625.1,GB/T17743,GB19510.1,GB19510.14       |       |
| EMC standard:                    | EN 55015, EN 61000-3-2, EN 61000-3-3, EN 61547 |       |
| DALI protocol standard:          | EN 62386-101, EN 62386-102, EN 62386-207       |       |
| Cable information                |                                                |       |
| <b>PRI</b> Connection            | L                                              | N     |
| Color                            | Brown                                          | Blue  |
| Wire type                        | 7022                                           | 7022  |
| Wire diameter                    | AWG18                                          | AWG18 |
| Wire length                      | 138mm                                          | 141mm |
| Stripping                        | 6mm                                            | 6mm   |
| Tolerance                        | ±5mm                                           | ±5mm  |
|                                  |                                                |       |
| <b>Sec</b> Connection            | +                                              | -     |
| Color                            | Red                                            | Black |
| Wire type                        | 3385                                           | 3385  |
| Wire diameter                    | AWG22                                          | AWG22 |
| Wire length                      | 140mm                                          | 141mm |
| Stripping                        | 6mm                                            | 6mm   |
| Tolerance                        | ±5mm                                           | ±5mm  |
|                                  |                                                |       |
| <b>DALI/Touch Dim</b> Connection | DA                                             | DA    |
| Color                            | Purple                                         | Gray  |
| Wire type                        | 7022                                           | 7022  |
| Wire diameter                    | AWG20                                          | AWG20 |
| Wire length                      | 131mm                                          | 134mm |
| Stripping                        | 10mm                                           | 10mm  |
| Tolerance                        | ±5mm                                           | ±5mm  |

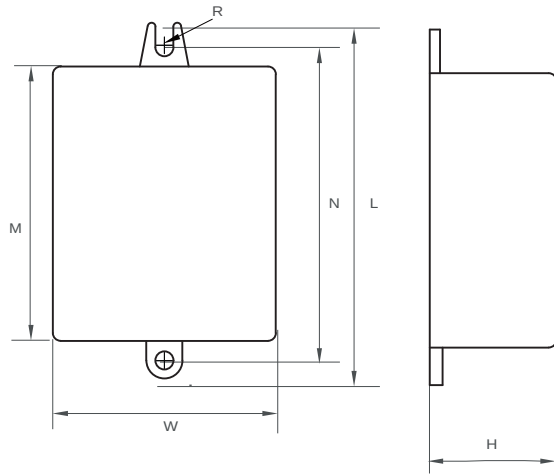
\*Subject to change without notice, HEP guarantees all products perform functionally well

\*If not mentioned, all the test conditions are based on full load at 230VAC input (for 220-240 VAC input).

# Electrical Values



## Physical Parameter



L : 69.3 mm    W: 43.5 mm

M: 53.5 mm    H: 24.6 mm

N: 61 mm    R: 1.75 mm

Tolerance : +/-1 mm , R : +/-0.5 mm

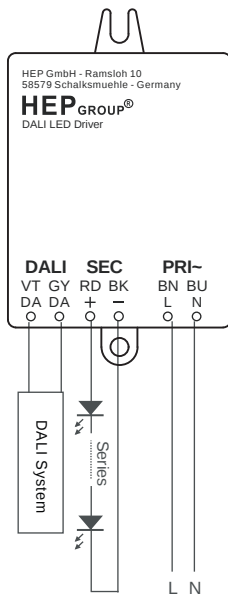
Housing Material : Polycarbonate/Potting

Soldering : Lead-Free, Comply With RoHS

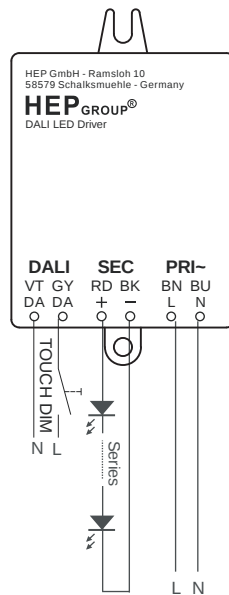
Label : Surface Print

## Wiring Diagram

### DALI



### TOUCH DIM



### \* Touch Dim

Short push (<0.6sec.)

Push to turn ON-OFF

Long push (>0.6sec.)

Dimming up or down

### Synchronization of Touch DIM

If a large number of driver with Touch Dim is operated in a system

there is a chance that an driver will operate out of synchronization with the others(= different dimming level setting or different switching state).

Synchronism can be restored as follows:

1.Step: Long push

all the lamps are switched on

2.Step: Short push

all the lamps are switched off

3.Step: Long push

all the lamps are switched on the minimum dimming setting of the drivers and continuously fade up to the desired dimming level, then release push bottom.

Max. lead length : 20 M

Max. parallel units : 15 pcs