

### Approval



GMA-517710

| Item   |                                 | Value            | Remark                                  |
|--------|---------------------------------|------------------|-----------------------------------------|
| Input  | 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                 |                  |                                         |
|        | LNTC10W400LR                    | 55mA             |                                         |
|        | LNTC10W300LR                    | 60mA             |                                         |
|        | LNTC10W350/500LR                | 65mA             |                                         |
|        | Total Harmonic Distortion (THD) | < 20%            | Full load @230VAC                       |
|        | Power factor                    | 0.93C-0.97       | Min-load @240Vac and Full-load @220 Vac |
|        | Displacement factor             | 0.93C-0.97       | Min-load @240Vac and Full-load @220 Vac |
|        | Efficiency                      |                  |                                         |
|        | LNTC10W400LR                    | 76% (Typ.)       | Full load @230VAC                       |
|        | LNTC10W300LR                    | 78% (Typ.)       | Full load @230VAC                       |
|        | LNTC10W350/500LR                | 80% (Typ.)       | Full load @230VAC                       |
| Output | No-load power                   | NA               |                                         |
|        | Stand-by power                  | NA               |                                         |
|        | Protection class                | NA               |                                         |
|        | Inrush current                  | 10 A / 40 µs     |                                         |
|        | Max.units per circuit breaker   | Type B , 10A MCB | 62                                      |
|        |                                 | Type B , 16A MCB | 98                                      |
|        |                                 | Type C , 10A MCB | 77                                      |
|        |                                 | Type C , 16A MCB | 123                                     |
|        | Earth leakage current           | NA               |                                         |
|        | Nominal voltage range           |                  |                                         |
|        | LNTC10W300/350LR                | 16-29Vdc         |                                         |
|        | LNTC10W400/500LR                | 11-20Vdc         |                                         |

|             | Item                                     | Value         | Remark                                                                                                           |
|-------------|------------------------------------------|---------------|------------------------------------------------------------------------------------------------------------------|
| Output      | Maximum voltage                          |               |                                                                                                                  |
|             | LNTC10W300/350LR                         | 35Vdc         |                                                                                                                  |
|             | LNTC10W400/500LR                         | 26Vdc         |                                                                                                                  |
|             | Nominal current range                    |               |                                                                                                                  |
|             | LNTC10W300LR                             | 300mA         |                                                                                                                  |
|             | LNTC10W350LR                             | 350mA         |                                                                                                                  |
|             | LNTC10W400LR                             | 400mA         |                                                                                                                  |
|             | LNTC10W500LR                             | 500mA         |                                                                                                                  |
|             | Current accuracy                         |               | Full load @230VAC                                                                                                |
|             | LNTC10W300LR                             | ± 6%          |                                                                                                                  |
|             | LNTC10W350/400LR                         | ± 5%          |                                                                                                                  |
|             | LNTC500LR                                | ± 5%          |                                                                                                                  |
|             | Typical output LF current ripple         | ± 5%          | Low Frequency<120Hz<br>Full load @230VAC                                                                         |
|             | SVM                                      | ≤ 0.4         | Full load @230VAC                                                                                                |
|             | PstLM                                    | ≤ 1           | Full load @230VAC                                                                                                |
| Dimming     | Starting time                            | < 0.5 S       | Full load @230VAC                                                                                                |
|             | Nominal power range                      |               |                                                                                                                  |
|             | LNTC10W300LR                             | 4.8-8.7W      |                                                                                                                  |
|             | LNTC10W350LR                             | 5.6-10.1W     |                                                                                                                  |
|             | LNTC10W400LR                             | 4.4-8.0W      |                                                                                                                  |
|             | LNTC10W500LR                             | 5.5-10W       |                                                                                                                  |
|             | Maximum power                            | 10W           |                                                                                                                  |
| Dimming     | Dimming control                          | Trailing Edge |                                                                                                                  |
|             | Dimming technique                        | Amplitude     |                                                                                                                  |
|             | PWM frequency                            | NA            |                                                                                                                  |
|             | Dimming range                            | 10-100%       |                                                                                                                  |
|             | Lowest dimming current                   | NA            |                                                                                                                  |
|             | Galvanic isolation                       | NA            |                                                                                                                  |
| Environment | Ambient temperature range t <sub>a</sub> | -20°C - +50°C |                                                                                                                  |
|             | Maximum case temperature t <sub>c</sub>  |               |                                                                                                                  |
|             | LNTC10W300/350LR                         | 65°C          |                                                                                                                  |
|             | LNTC10W400/500LR                         | 70°C          |                                                                                                                  |
|             | Max. case temp. in fault condition       | 110°C         | When operating under fault conditions, the temperature of the enclosure at any location should not exceed 110 °C |
|             | Storage temperature range                | -25°C - +85°C |                                                                                                                  |
|             | Relative humidity                        | 10% - 85%     |                                                                                                                  |
|             | Surge transient protection               | 1 kV          | L/N                                                                                                              |
|             | Environmental rating                     | Indoor        |                                                                                                                  |
|             | IP rating                                | IP20          |                                                                                                                  |
|             | Mains switching cycles                   | > 100,000     |                                                                                                                  |
|             | Expected lifetime                        |               |                                                                                                                  |
|             | LNTC10W300/350LR                         | Full load     | > 50,000 h, t <sub>c</sub> 65 °C @ t <sub>a</sub> 50 °C 0.2 % / 1,000 h failure rate                             |
|             | LNTC10W400/500LR                         | Full load     | > 50,000 h, t <sub>c</sub> 70 °C @ t <sub>a</sub> 50 °C 0.2 % / 1,000 h failure rate                             |

|         | Item                | Value                  | Remark |
|---------|---------------------|------------------------|--------|
| Packing | Gross weight/Carton | 6.3 kg                 |        |
|         | Net weight/Carton   | 5.2 kg                 |        |
|         | 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                                       |
| EMC standard:    | EN 55015, EN 61000-3-2, EN 61000-3-3, EN 61547 |
| CCC standard:    | GB17625.1,GB/T17743,GB19510.1,GB19510.14       |
| SAA standard:    | AS/NZS 61347.1, AS/NZS IEC 61347.2.13          |

#### Cable information

|                       |       |       |
|-----------------------|-------|-------|
| <b>PRI</b> Connection | L     | N     |
| Color                 | Brown | Blue  |
| Wire type             | 7022  | 7022  |
| Wire diameter         | AWG18 | AWG18 |
| Wire length           | 138mm | 140mm |
| Stripping             | 6mm   | 6mm   |
| Tolerance             | ±5mm  | ±5mm  |

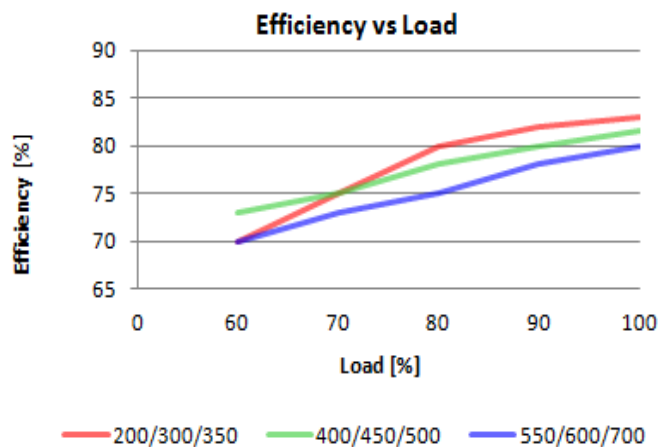
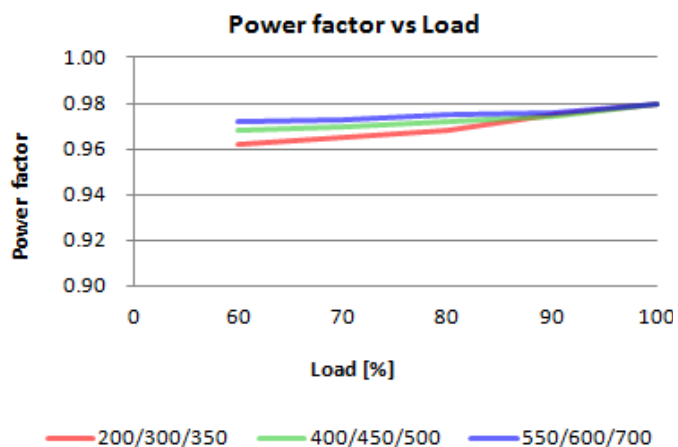
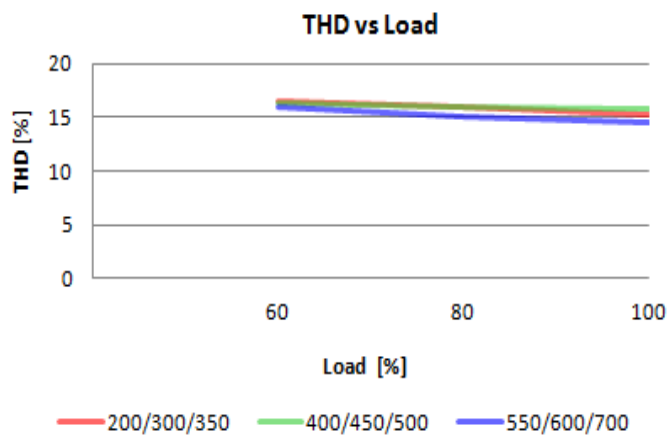
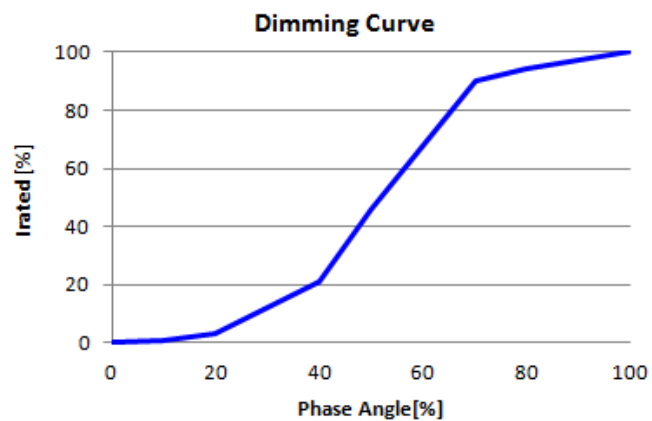
|                       |       |       |
|-----------------------|-------|-------|
| <b>Sec</b> Connection | +     | -     |
| Color                 | Red   | Black |
| Wire type             | 3385  | 3385  |
| Wire diameter         | AWG22 | AWG22 |
| Wire length           | 141mm | 141mm |
| Strip length          | 6mm   | 6mm   |
| Tolerance             | ±5mm  | ±5mm  |

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

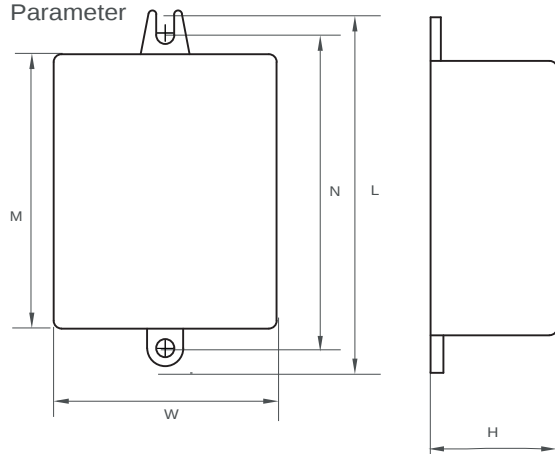
\*Subject to change without notice, HEP guarantees all products perform functionally well\*

#### Trailing Edge Dimmer list approved by HEP

| Manufacturer | Model                   | Q'ty of parallel connection | Min.load(W) |
|--------------|-------------------------|-----------------------------|-------------|
| CLIPSAL      | 32E450TM                | 10                          | 10W         |
| Berker       | 2874                    | 10                          | 20W         |
| Busch        | 6513U-102               | 10                          | 40W         |
| Busch        | 6519U                   | 10                          | 40W         |
| ETMAN        | 321P                    | 10                          | 25W         |
| Busch        | 6523 UR-103             | 10                          | 2W          |
| Busch        | 6523 U-102              | 7                           | 2W          |
| Niko         | 310-0190X               | 10                          | 5W          |
| JUNG         | LB-Management           | 7                           | 20W         |
| Merten       | SBD200LED(MEG5134-0000) | 7                           | 4W          |



## Physical Parameter



L : 69.3 mm    W: 43.5 mm  
M : 53.5 mm    H : 24.6 mm  
N : 61 mm

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

Housing Material : Polycarbonate  
Soldering : Lead-Free, Comply With RoHS  
Label : Surface Print

## Wiring Diagram

