

## Features

- MEAN WELL Patent Application Number: 202330347779.4
- **Interchangeable AC plugs (I-Type)**
- **Global certificates in multi-fields**  
(ITE 62368-1, Medical 60601-1, Household 60335-1, Industrial 61558-1/-2-16)
- 80~264Vac Universal AC input
- **Ultra slim(30mm)**
- No load power consumption < 0.075W
- Energy efficiency Level **VI**
- Class II power (no earth pin)
- Protections: Short circuit / Overload / Over voltage
- Pass LPS
- Extremely low leakage current **<100uA**
- **-30°C ~ +70°C** wide range working temperature
- Various DC plug quick adapter accessory available  
(Plug kit sold sperately, please refer to : [https://www.meanwell.com/upload/pdf/DC\\_plug.pdf](https://www.meanwell.com/upload/pdf/DC_plug.pdf))
- 3 years warranty

## Description

NGE45 is a highly reliable, 45W wall-mounted style single-output green adaptor series, which is compact and convenient for carry. This product is equipped with 7 types of interchangeable AC plug (European, USA, U.K., Australian, China, Korea and India type) that makes it very suitable for travel use. NGE45 is a Class II power unit (no FG), accepting the input range from 80VAC to 264VAC that it can satisfy the demands for various types of electrical devices.

With the working efficiency up to 91% and the extremely low no-load power consumption below 0.075W, NGE45 is compliant with the latest USA energy regulation EISA 2007/DoE, Canada NRCAN, Australia and New Zealand MEPS, Korea KMEPS, EU ErP and CoC version5. The supreme feature allows the adaptor to save the energy when it is under either the operating mode or the standby mode. The entire series is approved for ITE, medical, household and industrial appliance safety regulations; moreover, it adopts the 94V-0 flame retardant plastic case that it can effectively prevent users from electric hazard.

## Model Encoding

**NGE 45 I 12 -P1J**

- DC plug type { P1J : Plug for standard model, 2.1  $\phi$   $\times$  5.5  $\phi$   $\times$  11mm, C+ tuning fork type  
Other options available by customer requested (see Page 6~7)
- Output voltage (5V/9V/12V/15V/18V/24V/48V)
- AC Plug { I : AC Pin fixed; Universal version with interchangeable plugs  
E : AC Pin fixed; EU version with non-interchangeable plug  
U : Foldable AC Pin; US version with non-interchangeable plug
- Rated wattage
- Series name

| SPECIFICATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | NGE45○05-P1J                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | NGE45○09-P1J        |               | NGE45○12-P1J                             |                                     | NGE45○15-P1J                                                                 |           | NGE45○18-P1J |  | NGE45○24-P1J |  | NGE45○48-P1J |  |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | ○ = I, U, E                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                     |               |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
| OUTPUT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                     |               |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
| DC VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | Note.2                      | 5V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 9V                  | 12V           | 15V                                      | 18V                                 | 24V                                                                          | 48V       |              |  |              |  |              |  |
| RATED CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                             | 5.63A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 4.5A                | 3.75A         | 3A                                       | 2.5A                                | 1.88A                                                                        | 0.94A     |              |  |              |  |              |  |
| CURRENT RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                             | 0 ~ 5.63A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0 ~ 4.5A            | 0 ~ 3.75A     | 0 ~ 3A                                   | 0 ~ 2.5A                            | 0 ~ 1.88A                                                                    | 0 ~ 0.94A |              |  |              |  |              |  |
| RATED POWER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |                             | 28.1W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 40.5W               | 45W           | 45W                                      | 45W                                 | 45.1W                                                                        | 45.1W     |              |  |              |  |              |  |
| RIPPLE & NOISE (max.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | Note.3                      | 100mVp-p                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 100mVp-p            | 120mVp-p      | 150mVp-p                                 | 180mVp-p                            | 240mVp-p                                                                     | 240mVp-p  |              |  |              |  |              |  |
| VOLTAGE TOLERANCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  | Note.4                      | ±5.0%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | ±5.0%               | ±3.0%         | ±3.0%                                    | ±3.0%                               | ±2.0%                                                                        | ±2.0%     |              |  |              |  |              |  |
| LINE REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | Note.5                      | ±1.0%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | ±1.0%               | ±1.0%         | ±1.0%                                    | ±1.0%                               | ±1.0%                                                                        | ±1.0%     |              |  |              |  |              |  |
| LOAD REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | Note.6                      | ±5.0%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | ±5.0%               | ±3.0%         | ±3.0%                                    | ±3.0%                               | ±2.0%                                                                        | ±2.0%     |              |  |              |  |              |  |
| SETUP, RISE, HOLD UP TIME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                             | 1500ms, 50ms, 30ms / 230VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                     |               | 3000ms, 50ms, 10ms / 115VAC at full load |                                     |                                                                              |           |              |  |              |  |              |  |
| INPUT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                     |               |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
| VOLTAGE RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Note.7                      | 80 ~ 264VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                     | 113 ~ 370VDC  |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
| FREQUENCY RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                             | 47 ~ 63Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                     |               |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
| EFFICIENCY (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                             | 84%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 89%                 | 90%           | 90%                                      | 90%                                 | 90%                                                                          | 91%       |              |  |              |  |              |  |
| AC CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                             | 1A / 115VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                     | 0.6A / 230VAC |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
| INRUSH CURRENT (max.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                             | COLD START 35A / 115VAC 70A / 230VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                     |               |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
| LEAKAGE CURRENT (max.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                             | Touch current < 100uA (rms) @264VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                     |               |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
| PROTECTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                     |               |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
| OVERLOAD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                             | 110% ~ 150% rated output power                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                     |               |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                             | Protection type : 5~24V Hiccup mode, recovers automatically after fault condition is removed.<br>48V Shut down and latch off o/p voltage, re-power on to recover.                                                                                                                                                                                                                                                                                                                                                                                                  |                     |               |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
| OVER VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                             | 110% ~ 140% rated output voltage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                     |               |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                             | Protection type : Clamp by zener diode                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                     |               |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
| ENVIRONMENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                     |               |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
| WORKING TEMP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                             | -30 ~ +70℃ (Refer to "Derating Curve")                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                     |               |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
| WORKING HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |                             | 20% ~ 90% RH non-condensing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                     |               |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
| STORAGE TEMP., HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |                             | -20 ~ +85℃, 10 ~ 95% RH non-condensing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                     |               |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
| TEMP. COEFFICIENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                             | ±0.03% / °C (0 ~ 45℃)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                     |               |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
| VIBRATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                             | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                     |               |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
| SAFETY & EMC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | Note.8                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                     |               |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
| SAFETY STANDARDS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |                             | CB IEC62368-1, IEC60601-1/-1-11, IEC61558-1/-2-16, IEC60335-1;<br>UL UL62368-1, CSA C22.2 NO. 62368-1, ANSI/AAMI ES60601-1/-1-11(3.2 Version), CAN/CSA-C22.2 NO.60601-1/-1-11;<br>ANSI/AAMI ES60601-1-11, CAN/CSA-C22.2 NO.60601-1-11(for U Type only)<br>DEKRA BS EN/EN62368-1, BS EN/EN60601-1/-1-11, BS EN/EN61558-1/-2-16, BS EN/EN60335-1;<br>PSE J62368-1; BSMI CNS15598-1;<br>RCM AS/NZS 61558-1/-2-16; EAC TPTC004;<br>CCC GB4943.1 approved.<br>KC KC62368-1;<br>BIS IS13252(part1):2010/IEC60950-1:2005.<br>(Please refer to next page for more details) |                     |               |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
| WITHSTAND VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                             | I/P-O/P:4000VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                     |               |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
| ISOLATION RESISTANCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                             | I/P-O/P:100M Ohms / 500VDC / 25℃ / 70% RH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                     |               |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
| EMC EMISSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | Parameter                   | Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                     |               |                                          |                                     | Test Level / Note                                                            |           |              |  |              |  |              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | Conducted emission          | BS EN/EN55032(CISPR32)/EN55011 , FCC Part15 , CNS15936, GB/T 9254.1-2021, KC C9832                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                     |               |                                          |                                     | Class B                                                                      |           |              |  |              |  |              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | Radiated emission           | BS EN/EN55032(CISPR32)/EN55011 , FCC Part15 , CNS15936, GB/T 9254.1-2021, KC C9832                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                     |               |                                          |                                     | Class B                                                                      |           |              |  |              |  |              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | Harmonic current            | BS EN/EN61000-3-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     |               |                                          |                                     | Class A                                                                      |           |              |  |              |  |              |  |
| EMC IMMUNITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | Parameter                   | Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                     |               |                                          |                                     | Test Level /Note                                                             |           |              |  |              |  |              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | ESD                         | BS EN/EN61000-4-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     |               |                                          |                                     | Level 4, 15KV air; Level 4,8KV contact                                       |           |              |  |              |  |              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | RF field susceptibility     | BS EN/EN61000-4-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     |               |                                          |                                     | Level 2, 3V/m                                                                |           |              |  |              |  |              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | EFT bursts                  | BS EN/EN61000-4-4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     |               |                                          |                                     | Level 3, 2KV                                                                 |           |              |  |              |  |              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | Surge susceptibility        | BS EN/EN61000-4-5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     |               |                                          |                                     | Level 3, 1KV/L-N                                                             |           |              |  |              |  |              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | Conducted susceptibility    | BS EN/EN61000-4-6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     |               |                                          |                                     | Level 2, 3V                                                                  |           |              |  |              |  |              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | Magnetic field immunity     | BS EN/EN61000-4-8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     |               |                                          |                                     | Level 2, 3A/m                                                                |           |              |  |              |  |              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | Voltage dips , interruption | BS EN/EN61000-4-11                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                     |               |                                          |                                     | >95% dip 0. 5 periods, 30% dip 25 periods,<br>>95% interruptions 250 periods |           |              |  |              |  |              |  |
| OTHERS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                     |               |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
| MTBF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                             | 749.9 Khrs min.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | MIL-HDBK-217F (25℃) |               | 6361.6 Khrs min.                         | Telcordia TR/SR-332(Bellcore) (25℃) |                                                                              |           |              |  |              |  |              |  |
| DIMENSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                             | 62*30*65mm (L*W*H)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                     |               |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
| PACKING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | MAIN BODY                   | 196g; 60pcs/ 13.4Kg / 0.94CUFT for NGE45Ixx/Uxx-P1J                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                     |               |                                          |                                     | 211g; 45pcs/ 11.4Kg / 1.06CUFT for NGE45Exx-P1J                              |           |              |  |              |  |              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | AC PLUGS                    | Refer to Page 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                     |               |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
| DC OUTPUT CONNECTOR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                     |               |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
| PLUG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                             | See page 6~7 ; Other type available by customer requested                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                     |               |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
| CABLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                             | See page 6~7 ; Other type available by customer requested                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                     |               |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
| NOTE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                     |               |                                          |                                     |                                                                              |           |              |  |              |  |              |  |
| 1.All parameters are specified at 230VAC input, rated load, 25℃ 70% RH ambient.<br>2.DC voltage: The output voltage set at point measure by plug terminal & 50% load.<br>3.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1 μ F & 47 μ F capacitor.<br>4.Tolerance: includes set up tolerance, line regulation, load regulation.<br>5.Line regulation is measured from low line to high line at rated load.<br>6.Load regulation is measured from 0% to 100% rated load<br>7.Derating may be needed under low input voltage. Please check the derating curve for more details.<br>8.The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."<br>(as available on <a href="https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf">https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf</a> )<br>9.Design meet US DoE Level VII (from Docket number EERE-2020-BT-STD-0006).<br>※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a> |  |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                     |               |                                          |                                     |                                                                              |           |              |  |              |  |              |  |

■ Interchangeable AC Plug Specifically for NGE12/18/30/45/65/90 (I-Type)

|             |                                                                                                                          |                                                                                         |                                                                                         |                                                                                         |                                                                                         |                                                                                         |                                                                                         |                                                                                                                    |                                                                                                                     |
|-------------|--------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Order NO.   | NGE45Ixx-P1J<br>(Universal Version)<br> |                                                                                         |                                                                                         |                                                                                         |                                                                                         |                                                                                         |                                                                                         | NGE45Exx-P1J<br>(EU Version)<br> | NGE45Uxx-P1J<br>(US Version)<br> |
| AC plug     | Interchangeable Type<br>(Unfoldable; AC Pin fixed)                                                                       |                                                                                         |                                                                                         |                                                                                         |                                                                                         |                                                                                         |                                                                                         | Non-Interchangeable Type                                                                                           |                                                                                                                     |
|             | EU<br>                                  | US<br> | UK<br> | AU<br> | CN<br> | KR<br> | IN<br> | Unfoldable AC Pin                                                                                                  | Foldable AC Pin                                                                                                     |
| Certificate |                                        |                                                                                         |                                                                                         |                                                                                         |                                                                                         |                                                                                         |                                                                                         |                                 |                                 |

■ AC Plugs Accessory (Sold Separately)

| MW's order NO. | Per Unit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Per Bag                          | Per Carton                                     |        |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|------------------------------------------------|--------|
|                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Q'Ty                             | Q'Ty                                           | G.W.   |
| AC PLUG-EU4    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 30 pcs                           | 300 pcs<br>(10 bags)                           | 5.4Kg  |
| AC PLUG-US4    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 30 pcs                           | 300 pcs<br>(10 bags)                           | 4.7Kg  |
| AC PLUG-UK4    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 30 pcs                           | 300 pcs<br>(10 bags)                           | 7.1Kg  |
| AC PLUG-AU4    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 30 pcs                           | 300 pcs<br>(10 bags)                           | 5.2Kg  |
| AC PLUG-CN4    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 30 pcs                           | 300 pcs<br>(10 bags)                           | 4.8Kg  |
| AC PLUG-KR4    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 30 pcs                           | 300 pcs<br>(10 bags)                           | 6.3Kg  |
| AC PLUG-IN4    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 30 pcs                           | 300 pcs<br>(10 bags)                           | 7.7Kg  |
| AC PLUG-MIX4   |     <br>(Per Set)                                                                                                                                                                         | 30 pcs<br>(5 Types*6 mixed bags) | 300 pcs<br>(5 Types*6 mixed bags)<br>(10 bags) | 5.45Kg |
| AC PLUG-MIX5   |       <br>(Per Set) | 35 pcs<br>(7 Types*5 mixed bags) | 315 pcs<br>(7 Types*5 mixed bags)<br>(9 bags)  | 6.13Kg |

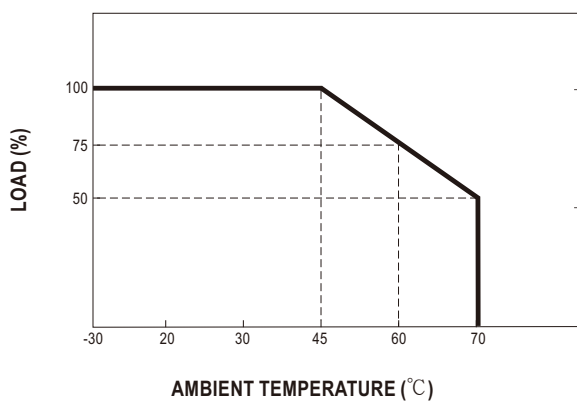
### ■ Interchangeable AC Plug Installation Steps (Convertible with I Type only)

| Step1                                                                                                                     | Step2                                                                              |
|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
|                                          |  |
| <p>Slide in AC converter along the guided rail between the metal prongs until it is locked in (with a “click” sound).</p> | <p>Check if the new plug type is stable and correct before use.</p>                |

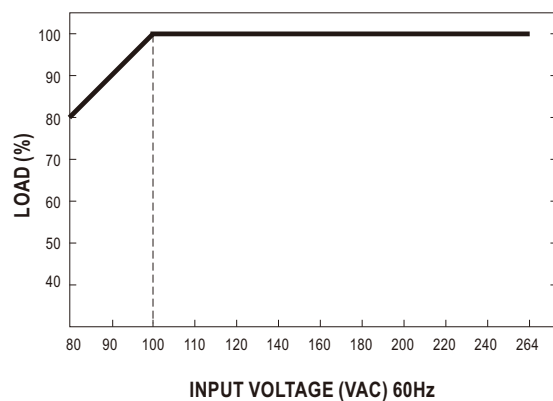
#### Note:

1. NGE45I main body unit and AC inlet plug should be ordered separately.
2. NGE45I needs to be used along with one of the AC inlet plug (EU,US,UK,AU,CN,KR,IN).

### ■ Derating Curve



### ■ Static Characteristics



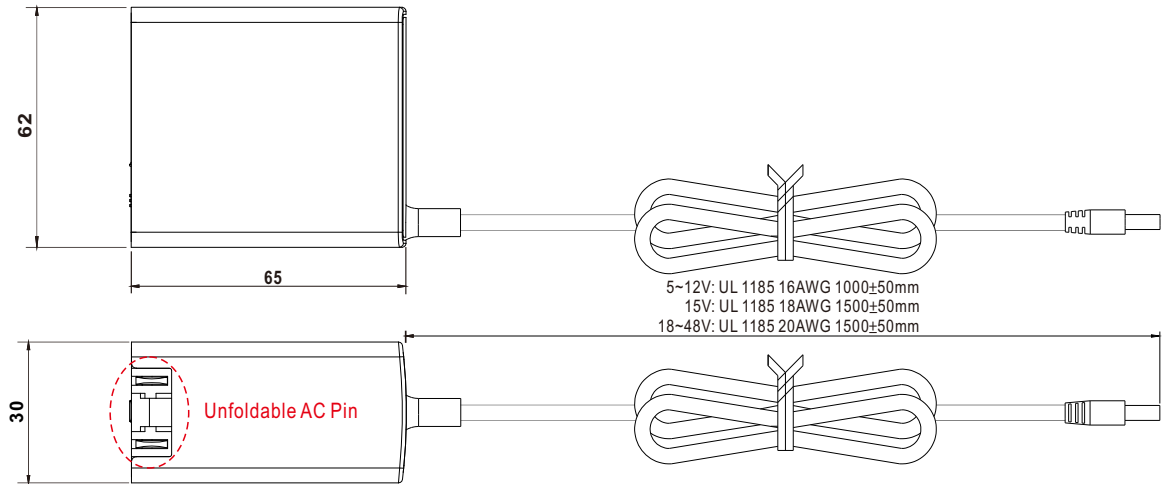
## ■ Mechanical Specification

(Unit: mm , tolerance  $\pm 1$ mm)

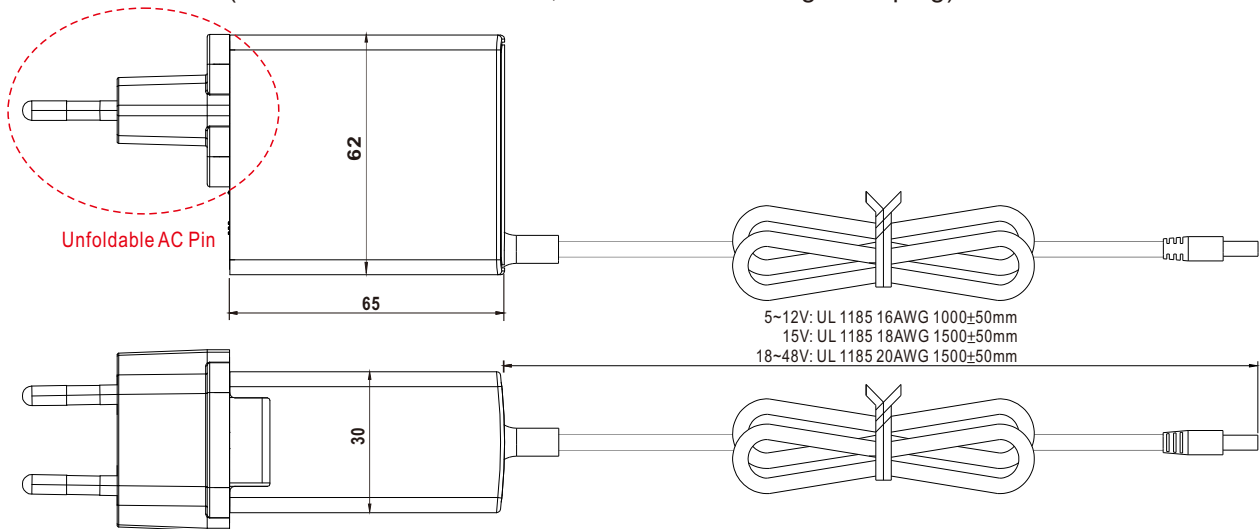
Case No. NGE65

### ※ Cable connection

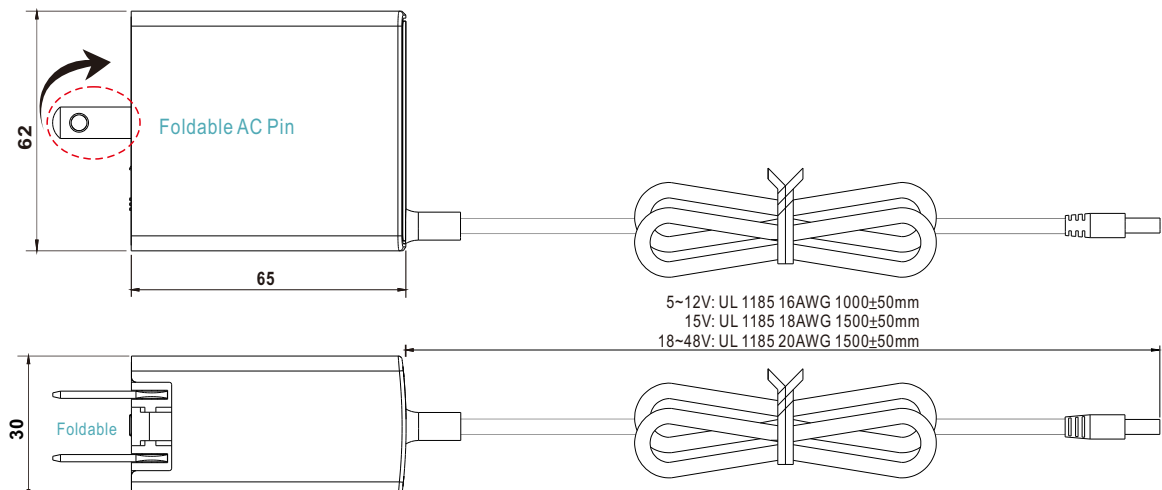
NGE45lxx-P1J (Universal Version - AC Pin fixed; With interchangeable plugs) :



NGE45Exx-P1J (EU Version - AC Pin fixed; With non-interchangeable plug) :



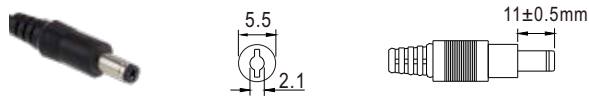
NGE45Uxx-P1J (US Version - Foldable AC Pin; With non-interchangeable plug) :



### ■ DC Output Plug

◎ Standard plug: P1J

Unit:mm

| P1J                                                                               | Pin Assignment                                                                                     |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
|  |                 |
|                                                                                   | Outside  Inside |

◎ DC plug changeable through:

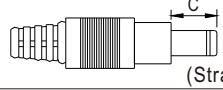
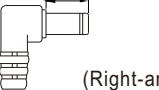
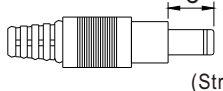
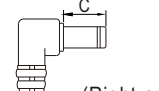
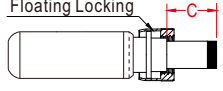
- (1) Customization of the standard part with an optional DC plug according to the table (MOQ applicable)
- (2) Quick adapter accessory (sold separately without MOQ)

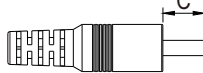
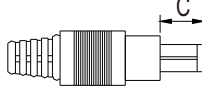
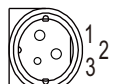
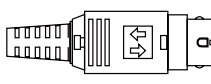
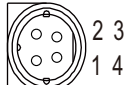
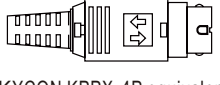
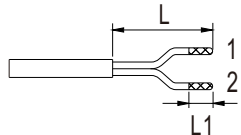
Please refer to below table and online selection guide : [https://www.meanwell.com/upload/pdf/DC\\_plug.pdf](https://www.meanwell.com/upload/pdf/DC_plug.pdf)

Example quick adapter accessory:



◎ Optional DC plug: (Available in customized cable or quick adapter)

| Tuning Fork Style                                                                   |                                                                                                                           | Type No.   | A<br>OD | B<br>ID | C<br>L | Quick Adapter<br>Accessory               |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|------------|---------|---------|--------|------------------------------------------|
|  | <br>(Straight)                         | P1I        | 5.5     | 2.1     | 9.5    | Available<br>(Current rating: 7.5A max.) |
|                                                                                     |                                                                                                                           | P1L        | 5.5     | 2.5     | 9.5    |                                          |
|                                                                                     |                                                                                                                           | P1M        | 5.5     | 2.5     | 11.0   |                                          |
|                                                                                     | <br>(Right-angled)                     | P1IR       | 5.5     | 2.1     | 9.5    |                                          |
|                                                                                     |                                                                                                                           | P1JR       | 5.5     | 2.1     | 11.0   |                                          |
|                                                                                     |                                                                                                                           | P1LR       | 5.5     | 2.5     | 9.5    |                                          |
|                                                                                     |                                                                                                                           | P1MR       | 5.5     | 2.5     | 11.0   |                                          |
| Barrel Style                                                                        |                                                                                                                           | Type No.   | A<br>OD | B<br>ID | C<br>L | None                                     |
|  | <br>(Straight)                         | P2I        | 5.5     | 2.1     | 9.5    |                                          |
|                                                                                     |                                                                                                                           | P2J        | 5.5     | 2.1     | 11.0   |                                          |
|                                                                                     |                                                                                                                           | P2L        | 5.5     | 2.5     | 9.5    |                                          |
|                                                                                     | <br>(Right-angled)                     | P2M        | 5.5     | 2.5     | 11.0   |                                          |
|                                                                                     |                                                                                                                           | P2IR       | 5.5     | 2.1     | 9.5    |                                          |
|                                                                                     |                                                                                                                           | P2JR       | 5.5     | 2.1     | 11.0   |                                          |
|                                                                                     |                                                                                                                           | P2LR       | 5.5     | 2.5     | 9.5    |                                          |
|                                                                                     |                                                                                                                           | P2MR       | 5.5     | 2.5     | 11.0   |                                          |
| Lock Style                                                                          |                                                                                                                           | Type No.   | A<br>OD | B<br>ID | C<br>L | None                                     |
|  | <br>SWITCHCRAFT original or equivalent | P2S(S761K) | 5.53    | 2.03    | 12.06  |                                          |
|                                                                                     |                                                                                                                           | P2K(761K)  | 5.53    | 2.54    | 12.06  |                                          |
|                                                                                     |                                                                                                                           | P2C(S760K) | 5.53    | 2.03    | 9.52   |                                          |
|                                                                                     |                                                                                                                           | P2D(760K)  | 5.53    | 2.54    | 9.52   |                                          |

| Min. Pin Style                                                                                                                                                                                                                                                                                | Type No.    | A               | B      | C    | Quick Adapter<br>Accessory             |                                          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------|--------|------|----------------------------------------|------------------------------------------|
|                                                                                                                                                                                                                                                                                               |             | OD              | ID     | L    |                                        |                                          |
| <br><br><br>EIAJ equivalent                | P3A         | 2.35            | 0.7    | 11.0 | Available<br>(Current rating: 5A max.) |                                          |
|                                                                                                                                                                                                                                                                                               | P3B         | 4.0             | 1.7    | 11.0 |                                        |                                          |
|                                                                                                                                                                                                                                                                                               | P3C         | 4.75            | 1.7    | 11.0 |                                        |                                          |
| Center Pin Style                                                                                                                                                                                                                                                                              | Type No.    | A               | B      | C    | D                                      | Available<br>(Current rating: 7.5A max.) |
| <br><br><br>EIAJ equivalent                | P4A         | 5.5             | 3.4    | 11.0 | 1.0                                    |                                          |
|                                                                                                                                                                                                                                                                                               | P4B         | 6.5             | 4.4    | 11.0 | 1.4                                    |                                          |
|                                                                                                                                                                                                                                                                                               | P4C         | 7.4             | 5.1    | 11.0 | 0.6                                    |                                          |
|                                                                                                                                                                                                                                                                                               |             |                 |        |      |                                        |                                          |
| Min. DIN 3 Pin with Lock (male)                                                                                                                                                                                                                                                               | Type No.    | Pin Assignment  |        |      |                                        | Available<br>(Current rating: 7.5A max.) |
| <br><br><br>KYCON KPPX-3P equivalent       | R6B         | PIN No.         | Output |      |                                        |                                          |
|                                                                                                                                                                                                                                                                                               |             | 1               | +Vo    |      |                                        |                                          |
|                                                                                                                                                                                                                                                                                               |             | 2               | -Vo    |      |                                        |                                          |
|                                                                                                                                                                                                                                                                                               |             | 3               | +Vo    |      |                                        |                                          |
| Min. DIN 4 Pin with Lock (male)                                                                                                                                                                                                                                                               | Type No.    | Pin Assignment  |        |      |                                        | Available<br>(Current rating: 7.5A max.) |
| <br><br><br>KYCON KPPX-4P equivalent | R7B         | PIN No.         | Output |      |                                        |                                          |
|                                                                                                                                                                                                                                                                                               |             | 1               | +Vo    |      |                                        |                                          |
|                                                                                                                                                                                                                                                                                               |             | 2               | -Vo    |      |                                        |                                          |
|                                                                                                                                                                                                                                                                                               |             | 3               | -Vo    |      |                                        |                                          |
|                                                                                                                                                                                                                                                                                               |             | 4               | +Vo    |      |                                        |                                          |
| Stripped and tinned leads                                                                                                                                                                                                                                                                     | Type No.    | Pin Assignment  |        |      |                                        | None                                     |
| <br><br>Length of Land L1 by request<br>(MW's standard length, L: <u>25</u> mm, L1: <u>10</u> mm)                       | by customer | PIN No.         | Output |      |                                        |                                          |
|                                                                                                                                                                                                                                                                                               |             | 1<br>( Ribbed ) | +Vo    |      |                                        |                                          |
|                                                                                                                                                                                                                                                                                               |             | 2<br>( Letter ) | -Vo    |      |                                        |                                          |

## ■ Installation Manual

Please refer to : <http://www.meanwell.com/manual.html>