

[B to B : Professional LED]

Panasonic GU5.3 12V Halogen LED Non-Dimmer Transformer Compatibility

Recommended Transformer List

→ Please check Important remarks below

| | |
|--|--|
| | :No Flicker 1~5 lamp |
| | :No flicker with X-Y lamp(X,Y:number of lamps) |
| | :No Compatibility |
| | :Configuration not tested |

25-03-2015



| No. | Company | Model # | | | | |
|-----|-------------------|--------------------------|---|------------------------------|--------------------------------------|-------------------------------|
| | | | LDR12V4L27MG5 LDR12V4L27WG5 LDR12V4W40MG5 LDR12V4W40WG5 (4W type) | LDR12V6L27WG5EP (6W type) | NEW LDR12V6L27WG52EP (6W type) | LDR12V10L27WG5EP (8W type) |
| 1 | ABB | ETR 50-230/12KF | x | x | x | 1 |
| 2 | | ETR 70-230/12KF | x | x | x | 1-2 |
| 3 | | ETR 105-230/12KF | x | x | x | 1-2 |
| 4 | ALS | TRE-105 | x | x | x | - |
| 5 | Art. | 125/105SA | - | - | 1-3 | - |
| 6 | GENERAL LIGHTING | 1200-0 | - | - | - | - |
| 7 | GIRA | 0366 00 | 1-2 | 1-2 | 1-2 | - |
| 8 | | 0367 00 SNT40 | 1-2 | 1 | 1 | 1 |
| 8 | | 0375 00 /101 | - | - | 3-4 | 1-4 |
| 9 | JUNG | SNT 40 | 1-2 | 1 | 1 | - |
| 10 | | SNT 70 Q | 1-3 | 1-2 | 2 | - |
| 11 | | SNT 105 F | 1-5 | 1-3 | 1-2 | - |
| 12 | MOLTO LUCE | T 105 | x | x | - | 1-2 |
| 13 | NATIONAL ELECTRIC | | - | - | - | 1-2 |
| 14 | nobile | EN-60D | 1-3 | 1 | 1 | 2 |
| 15 | | EN-110D | 1-5 | 1-3 | 1-3 | - |
| 16 | | EN-150D | 1-5 | 1-4 | 1-4 | - |
| 17 | | EN-200D | x | x | 1-4 | - |
| 18 | | EN 250D | x | x | x | - |
| 19 | OSRAM | ET-A 60/220-240 | x | x | 1 | 1 |
| | | ET-PARROT 70W/220-240 I | x | x | 1-2 | 1-2 |
| | | ET-PARROT 105W/220-240 I | x | x | 1-3 | 1-2 |
| 20 | | ET-PARROT 150W/220-240 I | - | - | x | - |
| | | ET-REDBACK 60VA/230-240 | - | - | 1 | - |
| 23 | | HTL 105/230-240 | 3-5 | 3 | 2-3 | 1-2 |
| 24 | HTL 225/230-240 | x | x | x | - | |
| 25 | HTM 70/230-240 | 1 | x | 1-2 | 1-2 | |
| 26 | HTM 105/230-240 | 1-5 | 1-3 | 1-3 | 1-2 | |
| 27 | HTM 150/230-240 | x | x | x | 1-3 | |
| 28 | HTN 75/230-240 | x | x | 1-2 | 1-2 | |
| 29 | Philips | ET-E 60/220-240 | 2-3 | 2 | 1 | 1 |
| 30 | | Primaline70 230-240 | x | x | 1-2 | 2 |
| 31 | | Primaline150 230-240 | 1-5 | 1-4 | 1-4 | 1-3 |
| 32 | PROTEC | PTEL E 35 | 1 | 1 | 1 | x |
| 33 | | PTEL R 60 | 2-3 | 1 | 1 | 1 |
| 34 | | PTEL 70K | 1-3 | 1-2 | 1-2 | - |
| 35 | | PTEL 110 | 1-5 | 1-3 | 1-3 | 2 |
| 36 | | PTEL SK 110 | x | x | 1-3 | - |
| 37 | Relco | RN1604 | x | x | 1-3 | x |
| 38 | | RN1650 | 2-3 | 1-2 | 2 | 2 |
| 39 | VOSSLOH SCHWABE | EST35/12.650 | 1 | 1 | x | 1 |
| 40 | | EST60/12.388 | x | x | 1 | x |
| 41 | | EST60/12.633 | x | x | x | 1 |
| 42 | | EST60/12.635 | x | x | 1 | 1 |
| 43 | | EST70/12.380 | x | x | 1-2 | 1 |
| 44 | | EST105/12.381 | x | x | 1-3 | 1-2 |
| 45 | | EST105/12.644 | x | x | 1-3 | 1-2 |
| 46 | EST150/12.622 | x | x | 1-4 | 1-3 | |

- In specific range, there is possibility that flicker happen.
- Please reference the Transformer manufacturer's instructions for installation.
- The recommended list is based upon testing conducted by the manufacturer in a lab simulated environment, and the results can vary in certain field applications due to a number of factors.
- This experimental results only checked with 230V.
In case of input voltage is very high, there is some possibility the result may change.
- This list is not guarantee performance and safety. Please check in actual situation.
- Load Range(W) is based on incandescent lamp wattage, that quantity of incandescent lamp should become the same quantity of LED lamp when replaced.

[B to B : Professional LED]

Panasonic GU5.3 35W equivalent Halogen LED Dimmer Compatibility Recommended Dimmer and Transformer List

→ Please check Important remarks below

- X-Y Lx percentage of dimming range
- 10-100% Dimmable range is from 10%~100%
- 30-100% Dimmable range is from 30%~100%
- 40-100% Dimmable range is from 40%~100%
- Not recommend. The majority of configurations show undesirable dimming behavior
- Configuration not tested
- Lamp is not designed for use with this dimmer type
- Name New added since previous version



| Recommended Dimmer & Transformer List | | | | | | | | Transformer | | | | | | | | | | | | | |
|--|-------------|-----------|------|--------------|------------------|-------------|-----------|----------------|---------|----------------|---------|-----------------|-------------|----------------|-------------|----------------|---------------|----------------|-------------|---------------|--|
| LDR12V6L27MG5D LDR12V6L27WG5D LDR12V6L30MG5D LDR12V6L30WG5D | | | | | | | | Relco | Relco | Osram | Nobile | VOSSLOH SCHWABE | PROTEC | | | | | | | | |
| Manufacturer | Type | Load | W/VA | DownTrans | Trailing/Leading | Adjust vol. | Lamps | Dimmable range | Lamps | Dimmable range | Lamps | Dimmable range | Lamps | Dimmable range | Lamps | Dimmable range | Lamps | Dimmable range | | | |
| Dimmer | ALTEMBURGER | 50.13.010 | RL | 60-1300W /VA | Magnetic | Leading | Min./Max. | 1 2 5 | 20-100% | 1 2 5 | | | 1 2 5 | | 1 2 5 | | 1 2 5 | | 1 2 5 | | |
| | | 50.13.110 | R.C | 15-700W /VA | Electronic | Trailing | Min./Max. | 1 2 5 | | 1 2 5 | 20-100% | 10-100% | 1 2 5 | 20-100% | 1 2 5 | 20-100% | 1-2 3 5 | 10-100% | 30-100% | 1 2 5 | |
| | | 50.13.111 | R.C | 1400W /VA | Electronic | Trailing | Min./Max. | 1 2 5 | | 1 2 5 | | 20-100% | | 20-100% | 1 2 5 | 20-100% | 1-2 3 5 | 10-100% | 30-100% | 1 2 3-5 | |
| | | 50.13.210 | R.L | 60-2000W /VA | Magnetic | Leading | Min./Max. | 1 2 5 | 30-100% | 1 2 5 | | | | 2 5 | | 2 5 | | 2 5 | | 2 5 | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | 80.13.064 | R.C | 1400W /VA | Electronic | Trailing | Min./Max. | 1 2 5 | | 1 2 5 | 20-100% | | 1 2 5 | | 1 2 5 | | 1 2 5 | | 1 2 5 | | |

| Recommended Dimmer & Transformer List | | | | | | | | Transformer | | | | | | | | | | | | |
|--|---|---------------------------|-------|---------------|---------------------------------------|-------------|-------|----------------|-------|----------------|---------|-----------------|---------|----------------|-------------|----------------|-------------|----------------|-------------|-------------|
| LDR12V6L27MG5D LDR12V6L27WG5D LDR12V6L30MG5D LDR12V6L30WG5D | | | | | | | | TRIDONIC ATCO | Relco | Osram | Nobile | VOSSLOH SCHWABE | PROTEC | | | | | | | |
| Manufacturer | Type | Load | W/VA | DownTrans | Trailing/Leading | Adjust vol. | Lamps | Dimmable range | Lamps | Dimmable range | Lamps | Dimmable range | Lamps | Dimmable range | Lamps | Dimmable range | Lamps | Dimmable range | | |
| Dimmer | BUSCH-JAEGER (Busch-Memory-Semiconductor) | 6565U | - | 2 x 40-315 | Electronic | Trailing | - | 1 2 5 | | 1 2 5 | 40-100% | 30-100% | 25-100% | 1 2 5 | 30-100% | 1 2 5 | | 1 2 5 | | |
| | | BUSCH-JAEGER 6591U-101 | - | 1.83A, 60-420 | Electronic /Magnetic | Trailing | - | 1 2 5 | | 1 2 5 | | 10-100% | | 1 2 5 | 15-80% | 1 2 5 | | 1 2 5 | | |
| | | BUSCH-JAEGER 6513U-102 | - | 40-420 | Electronic | Trailing | - | 1 2 5 | | 1 2 5 | 35-100% | 25-100% | 25-100% | 1 2 5 | 30-100% | 30-100% | 1 2 5 | | 1 2 5 | |
| | | BUSCH-JAEGER 6513-102 | - | 40-420 | Electronic | Trailing | - | 1 2 5 | | 1 2 5 | 25-100% | 25-100% | 25-100% | 1 2 5 | 30-100% | 30-100% | 1 2 5 | | 1 2 5 | |
| | | JUNG 1252 UDE | R.L.C | 50-260 | Electronic /Magnetic /All | Trailing | - | 1 2 5 | | 1 2 5 | 25-100% | 25-100% | 25-100% | 1 2 5 | 30-100% | 30-100% | 1 2 5 | | 1 2 5 | |
| | | JUNG 225 TDE | R.C | 20-525 | Electronic (Magnetic: No operation) | Trailing | - | 1 2 5 | | 1 2 5 | 20-100% | 25-100% | 25-100% | 1 2 5 | 30-100% | 30-100% | 1 2 5 | | 1 2 5 | |
| | | GIRA 0307 00/102 | R.C | 20-525 | Electronic (Electronic: No operation) | Trailing | - | 1 2 5 | | 1 2 5 | 20-100% | 25-100% | 25-100% | 1 2 5 | 30-100% | 30-100% | 1 2 5 | | 1 2 5 | |
| | | Berker 286710 | R.C | 20-360 | Electronic (Magnetic: No operation) | Trailing | - | 1 2 5 | | 1 2 5 | 20-100% | 20-100% | 20-100% | 1 2 5 | 25-100% | 25-100% | 1 2 5 | | 1 2 5 | |
| | | KOPP 80.33 | R.L | 40-400 | Magnetic (Electronic: No operation) | Leading | - | 1 2 5 | | 1 2 5 | | | | 1 2 5 | | | 1 2 5 | | 1 2 5 | |
| | | BUSCH-JAEGER 2250U | - | 60-600 | - | Leading | - | 1 2 5 | | 1 2 5 | | | | 1 2 5 | | | 1 2 5 | | 1 2 5 | |
| | | GIRA 0300 00 | R | 60-400 | No (Down Trans: No operation) | Leading | - | 1 2 5 | | 1 2 5 | | | | 1 2 5 | | | 1 2 5 | | 1 2 5 | |
| | | GIRA 2262 00 | R.L | 60-400 | Magnetic (Electronic: No operation) | Leading | - | 1 2 5 | | 1 2 5 | | | | 1 2 5 | | | 1 2 5 | | 1 2 5 | |
| | | Berker 2873 | R.L | 20-500 | Magnetic (Electronic: No operation) | Leading | - | 1 2 5 | | 1 2 5 | | | | 1 2 5 | | | 1 2 5 | | 1 2 5 | |
| | | TCL L2.0 | R.L | 630 | - | Leading | - | 1 2 5 | | 1 2 5 | | | | 1 2 5 | | | 1 2 5 | | 1 2 5 | |
| | | Panasonic WMS549 | R.L | 40-400 | - | Leading | - | 1 2 5 | | 1 2 5 | | | | 1 2 5 | | | 1 2 5 | | 1 2 5 | |
| | | Lonon NB12TG | R.L | 630 | - | Leading | - | 1 2 5 | | 1 2 5 | | | | 1 2 5 | | | 1 2 5 | | 1 2 5 | |
| | | PEHA 433 | R.C | 20-315 | - | Trailing | - | 1 2 5 | | 1 2 5 | 15-100% | 15-100% | 10-100% | 1 2 5 | | | 1 2 5 | | 35-100% | |
| | | Varilight JQP401W | - | 10-400 | - | Trailing | - | 1 2 5 | | 1 2 5 | | 10-100% | | 1 2 5 | 20-100% | 10-100% | 10-100% | 1 2 5 | | 1 2 5 |
| | | MK 52471SL | - | 60-500 | - | Leading | - | 1 2 5 | | 1 2 5 | | 10-100% | | 1 2 5 | 10-100% | | 1 2 5 | | 1 2 5 | |
| | | Hamilton LK400/2 | - | 40-400 | Low voltage is OK | Leading | - | 1 2 5 | | 1 2 5 | | 10-100% | | 1 2 5 | 10-100% | 15-100% | 15-100% | 1 2 5 | | 1 2 5 |
| | | Click MD9042 | - | 60-400 | - | Leading | - | 1 2 5 | | 1 2 5 | | 10-100% | | 1 2 5 | 10-100% | 30-100% | 10-100% | 1 2 5 | | 1 2 5 |
| | | Aurora AU-DSP400X | - | 60-400 | - | Leading | - | 1 2 5 | | 1 2 5 | | 20-100% | 15-100% | 10-100% | 1 2 5 | 15-100% | 10-100% | 1 2 5 | | 1 2 5 |
| | | Schneider Electric GU8012 | - | 60-400 | Only use Leading type | Leading | - | 1 2 5 | | 1 2 5 | | 20-100% | 10-100% | 10-100% | 1 2 5 | 20-100% | 10-100% | 1 2 5 | | 1 2 5 |

- Please Note**
- In specific range, there is possibility that flicker happen.
 - Please reference the dimmer and Transformer manufacturer's instructions for installation.
 - The recommended list is based upon testing conducted by the manufacturer in a lab simulated environment, and the results can vary in certain field applications due to a number of factors.
 - This experimental results only checked with 230V.
 - In case of input voltage is very high, there is some possibility the result may change.
 - The absence of a dimmer from this chart does not necessarily imply incompatibility.
 - This list is not guarantee performance and safety. Please check in actual situation.
 - The lamp may be flashing once when turning on, if the dimmer is already at position zero.
 - In general, Leading dimmer is used with Magnetic transformer.
 - Trailing dimmer is used with Electronic transformer.
 - Please note that in case of dimming, and depending on the dimmer type, the LED can generate more or less buzzing noise, which is not abnormal.
 - Please don't use these lamps with Universal type dimmers. Lamps may be broken or turn off suddenly.
 - Load Range(W) is based on incandescent lamp wattage, that quantity of incandescent lamp should become the same quantity of LED lamp when replaced.

[B to B : Professional LED]

Panasonic GU5.3 45W equivalent Halogen LED Dimmer Compatibility

Recommended Dimmer and Transformer List

→ Please check Important remarks below

X-Y Lx percentage of dimming range
 10-100% Dimmable range is from 10%-100%
 30-100% Dimmable range is from 30%-100%
 40-100% Dimmable range is from 40%-100%
 Not recommend. The majority of configurations show undesirable dimming behavior
 Configuration not tested
 Lamp is not designed for use with this dimmer type
 Name New added since previous version



| Recommended Dimmer & Transformer List | | | | | | | | | | | | | | | |
|--|--------------|-----------|-----------|--------------|------------|------------------|----------------|-----------------------|----------------|-----------------------|---------|-----------------------|---|-----------------------|---|
| LDR12V10L27MG5D LDR12V10L27WG5D LDR12V10W40MG5D LDR12V10W40WG5D | | | | | | | Transformer | | | | | | | | |
| Manufacturer | | | | | | | TRIDONIC ATCO | Relco | Osram | Nobile | PROTEC | | | | |
| Type | | | | | | | TMDD 105 A601W | ICE 105 PFS TH | HTM105/230-240 | EN-60D | PTEL110 | | | | |
| Load | | | | | | | L | C | R.L.C | C | C | | | | |
| Dimmer | Manufacturer | Type | Load | W/VA | DownTrans | Trailing/Leading | Adjust. vol. | Lamps. Dimmable range | | Lamps. Dimmable range | | Lamps. Dimmable range | | Lamps. Dimmable range | |
| | | | | | | | | 1 | 2 | 5 | 1 | 2 | 5 | 1 | 2 |
| Dimmer | ALTENBURGER | 50.13.010 | R.L | 60-1300W /VA | Magnetic | Leading | Min./Max. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | | 50.13.110 | R.C | 700W /VA | Electronic | Trailing | Min./Max. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 50.13.111 | R.C | 1400W /VA | Electronic | Trailing | Min./Max. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | 50.13.210 | R.L | 2000W /VA | Magnetic | Leading | Min./Max. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |

| Recommended Dimmer & Transformer List | | | | | | | | | | | | | | | |
|--|---|-------------|-----------------------|------------------------------------|-----------|------------------|----------------|-----------------------|----------------|-----------------------|---------|-----------------------|---|-----------------------|---|
| LDR12V10L27MG5D LDR12V10L27WG5D LDR12V10W40MG5D LDR12V10W40WG5D | | | | | | | Transformer | | | | | | | | |
| Manufacturer | | | | | | | TRIDONIC ATCO | Relco | Osram | Nobile | PROTEC | | | | |
| Type | | | | | | | TMDD 105 A601W | ICE 105 PFS TH | HTM105/230-240 | EN-60D | PTEL110 | | | | |
| Load | | | | | | | L | C | R.L.C | C | C | | | | |
| Dimmer | Manufacturer | Type | Load | W/VA | DownTrans | Trailing/Leading | Adjust. vol. | Lamps. Dimmable range | | Lamps. Dimmable range | | Lamps. Dimmable range | | Lamps. Dimmable range | |
| | | | | | | | | 1 | 2 | 5 | 1 | 2 | 5 | 1 | 2 |
| Dimmer | BUSCH-JAEGER (Busch-Memory-Semiconductor) | 6565U | 2 x 40-315 | Electronic | Trailing | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | BUSCH-JAEGER | 6591U-101 | 1.83A, 60-420 | Electronic /Magnetic | Trailing | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | BUSCH-JAEGER | 6513U-102 | 40-420 | Electronic | Trailing | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | BUSCH-JAEGER | 6513-102 | 40-420 | Electronic | Trailing | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | JUNG | 1252 UDE | R.L.C 50-260 | Electronic /Magnetic /All | Trailing | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | JUNG | 225 TDE | R.C 20-525 | Electronic (Magnetic No operation) | Trailing | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | GIRA | 0307 00/102 | R.C 20-525 | Electronic (Magnetic No operation) | Trailing | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | Berker | 286710 | R.C 20-360 | Electronic (Magnetic No operation) | Trailing | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | KOPP | 80.33 | R.L 40-400 | Magnetic (Electronic No operation) | Leading | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | BUSCH-JAEGER | 2250U | 60-600 | - | Leading | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | GIRA | 0300 00 | R 60-400 | No (Down Trans: No operation) | Leading | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | GIRA | 2262 00 | R.L 60-400 | Magnetic (Electronic No operation) | Leading | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | Berker | 2873 | R.L 20-500 | Magnetic (Electronic No operation) | Leading | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | TCL | L2.0 | R.L 630 | - | Leading | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| Panasonic | WMS549 | R.L 40-400 | - | Leading | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | |
| Lonon | NB12TG | R.L 630 | - | Leading | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | |
| PEHA | 433 | R.C 20-315 | - | Trailing | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | |
| Varilight | JQP401W | 10-400 | - | Trailing | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | |
| MK | 52471SL | 60-500 | Only use Leading type | Leading | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | |
| Hamilton | LK400/2 | 40-400 | Low voltage is OK | Leading | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | |
| Click | MD9042 | 60-400 | - | Leading | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | |
| Aurora | AU-DSP400X | 60-400 | - | Leading | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | |
| Schneider Electric | GU6012 | 60-400 | Only use Leading type | Leading | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | |

Please Note

- In specific range, there is possibility that flicker happen.
- Please reference the dimmer and Transformer manufacturer's instructions for installation.
- The recommended list is based upon testing conducted by the manufacturer in a lab simulated environment, and the results can vary in certain field applications due to a number of factors.
- This experimental results only checked with 230V.
- In case of input voltage is very high, there is some possibility the result may change.
- The absence of a dimmer from this chart does not necessarily imply incompatibility.
- This list is not guarantee performance and safety. Please check in actual situation.
- The lamp may be flashing once when turning on, if the dimmer is already at position zero.
- In general, Leading dimmer is used with Magnetic transformer.
- Trailing dimmer is used with Electronic transformer.
- Please note that in case of dimming, and depending on the dimmer type, the LED can generate more or less buzzing noise, which is not abnormal.
- Please don't use these lamps with Universal type dimmers. Lamps may be broken or turn off suddenly.
- Load Range(W) is based on incandescent lamp wattage, that quantity of incandescent lamp should become the same quantity of LED lamp when replaced.

[B to B : Professional LED]







Panasonic 230V LED Dimmer Compatibility – recommended dimmer list

→ Please check Important remarks below

| | |
|------------|---|
| x-y | Dimmable, with x to y lamps |
| Green | Dimming range is from 10%-100% or 20%-100% |
| Yellow | Dimming range is from 30%-100% |
| Pink | Dimming range is from 40%-100% |
| Red | Not recommend. The majority of configurations show undesirable dimming behavior |
| Grey | Configuration not tested |
| Light Blue | Lamp is not designed for use with this dimmer type |
| Name | New added since previous version |

Panasonic

21-01-2015

| Panasonic | | | | LED Candle | LED Candle | LED Candle/PinzPong | LED Clear | LED Reflector | LED Reflector |
|---------------|----------------|---------------|------------|---|---|--|---|---|---|
| Panasonic | | | | LDAHV4L27CE14D | LDAHV5L27CE14DE | LDAHV5L27CGE14DE LDGHV5L27CGE14DE | LDAHV8L27CGDE* | LDRHV7L27MG10D LDRHV7L27WG10D | LDRHV7L27MG10D* LDRHV7L27WG10D LDRHV7W40MG10D LDRHV7W40WG10D (2013 Refresh model) |
| Panasonic | | | |  |  |  |  |  |  |
| Brand | Model | Load Range(W) | Edge Type | E14 | E14 | E14 | E27 | GU10 | GU10 |
| Altenburger | 50.13.110 | 15-700 | Trailing | 1-46 | 1-28 | 1-23 | 1-14 | 1-14 | 1-14 |
| Altenburger | 50.13.111 | 15-1400 | Trailing | 1-46 | 1-56 | 1-46 | 1-28 | 1-28 | 1-28 |
| Altenburger | 50.13.010 | 60-1300 | Leading | 1-43 | | 1-43 | 1-26 | 1-26 | |
| Altenburger | 50.13.210 | 60-2000 | Leading | 1-30 | | 1-30 | 1-5 | 1-30 | |
| Berker | 286710 | 20-360 | Trailing | | 1-14 | 1-12 | 1-7 | 1-7 | 1-7 |
| Berker | 2873 | 20-500 | Leading | | | 1-12 | 1-6 | 1-10 | |
| CLIPSAL | 32V500 Series | 500VA | Leading | | | 1-2 | | | |
| GIRA | 0300.00/101 | 60-400 | Leading | 1-5 | | | 1-3 | 1-5 | |
| GIRA | 0302.00/101 | 60-600 | Leading | | | 1-3 | | 1-3 | |
| GIRA | 0305.00/104 | 50-420 | Universal | | | | | | |
| GIRA | 0307.00/102 | 20-525 | Trailing | 1-35 | 1-21 | 1-17 | | 1-10 | 1-10 |
| GIRA | 1176.00/103 | 50-420 | Universal | | | | | | |
| GIRA | 2262.00/101 | 20-500 | Leading | 1-13 | | | 1-8 | 1-10 | |
| BUSCH JAEGER | 2250U | 60-600 | Leading | | | | 1-8 | 1-8 | |
| BUSCH JAEGER | 6513-102 | 40-420 | Trailing | 1-28 | | | 1-14 | 1-8 | |
| BUSCH JAEGER | 6513U-102 | 40-420 | Trailing | | | | 1-14 | 1-8 | |
| BUSCH JAEGER | 6523U | 2-100 | Leading | | | | 1-11 | 1-12 | |
| BUSCH JAEGER | 6524U | 2-100 | LED Dimmer | | | | 1-15 | 1-12 | |
| BUSCH JAEGER | 6565U | 80-315 | Trailing | 1-21 | | 1-10 | | | |
| BUSCH JAEGER | 6591U-101 | 60-420 | Universal | | | | 1-6 | | |
| JUNG | 225 TDE | 20-525 | Trailing | 1-35 | 1-21 | 1-17 | 1-10 | 1-10 | 1-10 |
| JUNG | 1252 UDE | 50-260 | Trailing | 1-17 | | 1-9 | 1-5 | 1-5 | |
| KOPP | 80.33 | 40-400 | Leading | 1-10 | | 1-10 | 1-8 | 1-8 | |
| KOPP | 8077.0208.0 | 20-275 | Trailing | | | | | 1-5 | |
| Lonon | NB12TG | 630 | Leading | | | 1 | 1 | | |
| Panasonic | WMS549 | 40-400 | Leading | | | 1-2 | 1-2 | 1-2 | |
| PEHA | 431 | 6-120 | LED Dimmer | | | 1-14 | 1-12 | | |
| PEHA | 433 | 20-315 | Trailing | | 1-12 | 1-10 | 1-6 | | 1-6 |
| PEHA | 435 | 60-600 | Leading | | | 1-20 | 1-12 | | |
| TCL (Legrand) | L2.0 | 630 | Leading | 1-2 | | 1-2 | | 1-2 | |
| Wickes | Harrow HA1.2QB | 60-400 | Leading | | | | 1-3 | 1-3 | |
| Varilight | JQP401W | 10-400 | Trailing | | | 1-13 | 1-8 | | 1-8 |
| MK | 52471SL | 60-500 | Leading | | | | | | |
| Hamilton | LK400/2 | 40-400 | Leading | | | 1-10 | 1-8 | | |
| Click | MD9042 | 60-400 | Leading | | | 1-4 | 1-4 | | |
| Aurora | AU-DSP400X | 60-400 | Leading | | | 1-3 | 1-3 | | |

Please Note

- In specific range, there is possibility that flicker happen.
- Please reference the dimmer manufacturer's instructions for installation.
- The recommended list is based upon testing conducted by the manufacturer in a lab simulated environment, and the results can vary in certain field applications due to a number of factors.
- This experimental results only checked with 230V and one lamp operation.
- In case of input voltage is very high, there is some possibility the result may change.
- The absence of a dimmer from this chart does not necessarily imply incompatibility.
- This list is not guarantee performance and safety. Please check in actual situation.
- The lamp may be flashing once when turning on, if the dimmer is already at position zero.
- The lamp may become lightly bright, if the Semiconductor Switch is off.
- Please note that in case of dimming, and depending on the dimmer type, the LED can generate more or less buzzing noise, which is not abnormal.
- Please don't use these lamps with Universal type dimmers. Lamps may be broken or turn off suddenly.
- Load Range(W) is based on incandescent lamp wattage, that quantity of incandescent lamp should become the same quantity of LED lamp when replaced.

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[B to C : Home Consumer LED]

Panasonic GU5.3 12V Halogen LED Non-Dimmer Transformer Compatibility

Recommended Transformer List

→ Please check Important remarks below

| | |
|--|--|
| | :No Flicker 1~5 lamp |
| | :No flicker with X-Y lamp(X,Y:number of lamps) |
| | :No Compatibility |
| | :Configuration not tested |

25-03-2015



| No. | Company | Model # | | | | |
|-----|-------------------|--------------------------|------------------------------|------------------------------|--------------------------------------|-------------------------------|
| | | | LDR12V4L27WG5EP (4W type) | LDR12V6L27WG5EP (6W type) | NEW LDR12V6L27WG52EP (6W type) | LDR12V10L27WG5EP (8W type) |
| 1 | ABB | ETR 50-230/12KF | x | x | x | 1 |
| 2 | | ETR 70-230/12KF | x | x | x | 1-2 |
| 3 | | ETR 105-230/12KF | x | x | x | 1-2 |
| 4 | ALS | TRE-105 | x | x | x | - |
| 5 | Art. | 125/105SA | - | - | 1-3 | - |
| 6 | GENERAL LIGHTING | 1200-0 | - | - | - | - |
| 7 | GIRA | 0366 00 | 1-2 | 1-2 | 1-2 | - |
| 8 | | 0367 00 SNT40 | 1-2 | 1 | 1 | 1 |
| 8 | | 0375 00 /101 | - | - | 3-4 | 1-4 |
| 9 | JUNG | SNT 40 | 1-2 | 1 | 1 | - |
| 10 | | SNT 70 Q | 1-3 | 1-2 | 2 | - |
| 11 | | SNT 105 F | 1-5 | 1-3 | 1-2 | - |
| 12 | MOLTO LUCE | T 105 | x | x | - | 1-2 |
| 13 | NATIONAL ELECTRIC | | - | - | - | 1-2 |
| 14 | nobile | EN-60D | 1-3 | 1 | 1 | 2 |
| 15 | | EN-110D | 1-5 | 1-3 | 1-3 | - |
| 16 | | EN-150D | 1-5 | 1-4 | 1-4 | - |
| 17 | | EN-200D | x | x | 1-4 | - |
| 18 | | EN 250D | x | x | x | - |
| 19 | OSRAM | ET-A 60/220-240 | x | x | 1 | 1 |
| | | ET-PARROT 70W/220-240 I | x | x | 1-2 | 1-2 |
| | | ET-PARROT 105W/220-240 I | x | x | 1-3 | 1-2 |
| 20 | | ET-PARROT 150W/220-240 I | - | - | x | - |
| | | ET-REDBACK 60VA/230-240 | - | - | 1 | - |
| 23 | | HTL 105/230-240 | 3-5 | 3 | 2-3 | 1-2 |
| 24 | HTL 225/230-240 | x | x | x | - | |
| 25 | HTM 70/230-240 | 1 | x | 1-2 | 1-2 | |
| 26 | HTM 105/230-240 | 1-5 | 1-3 | 1-3 | 1-2 | |
| 27 | HTM 150/230-240 | x | x | x | 1-3 | |
| 28 | HTN 75/230-240 | x | x | 1-2 | 1-2 | |
| 29 | Philips | ET-E 60/220-240 | 2-3 | 2 | 1 | 1 |
| 30 | | Primaline70 230-240 | x | x | 1-2 | 2 |
| 31 | | Primaline150 230-240 | 1-5 | 1-4 | 1-4 | 1-3 |
| 32 | PROTEC | PTEL E 35 | 1 | 1 | 1 | x |
| 33 | | PTEL R 60 | 2-3 | 1 | 1 | 1 |
| 34 | | PTEL 70K | 1-3 | 1-2 | 1-2 | - |
| 35 | | PTEL 110 | 1-5 | 1-3 | 1-3 | 2 |
| 36 | | PTEL SK 110 | x | x | 1-3 | - |
| 37 | Relco | RN1604 | x | x | 1-3 | x |
| 38 | | RN1650 | 2-3 | 1-2 | 2 | 2 |
| 39 | VOSSLOH SCHWABE | EST35/12.650 | 1 | 1 | x | 1 |
| 40 | | EST60/12.388 | x | x | 1 | x |
| 41 | | EST60/12.633 | x | x | x | 1 |
| 42 | | EST60/12.635 | x | x | 1 | 1 |
| 43 | | EST70/12.380 | x | x | 1-2 | 1 |
| 44 | | EST105/12.381 | x | x | 1-3 | 1-2 |
| 45 | | EST105/12.644 | x | x | 1-3 | 1-2 |
| 46 | EST150/12.622 | x | x | 1-4 | 1-3 | |

- In specific range, there is possibility that flicker happen.
- Please reference the Transformer manufacturer's instructions for installation.
- The recommended list is based upon testing conducted by the manufacturer in a lab simulated environment, and the results can vary in certain field applications due to a number of factors.
- This experimental results only checked with 230V.
- In case of input voltage is very high, there is some possibility the result may change.
- This list is not guarantee performance and safety. Please check in actual situation.
- Load Range(W) is based on incandescent lamp wattage, that quantity of incandescent lamp should become the same quantity of LED lamp when replaced.

[B to C : Home Consumer LED]



Panasonic 230V LED Dimmer Compatibility – recommended dimmer list

→ Please check Important remarks below

| | |
|---------|--|
| x~y | Dimmable, with x to y lamps |
| 10~100% | Dimming range is from 10%~100% or 20%~100% |
| 30~100% | Dimmable range is from 30%~100% |
| 40~100% | Dimmable range is from 40%~100% |
| | Not recommend.The majority of configurations show undesirable dimming behavior |
| | Configuration not tested |
| | Lamp is not designed for use with this dimmer type |
| Name | New added since previous version |

Panasonic

21-01-2015

| Panasonic | | | | LED Candle/PingPong | LED Reflector |
|--------------|----------------|---------------|------------|---|--|
| | | | | LDAHV5L27CGE14DEP LDGHV5L27CGE14DEP | LDRHV7L27WG10DEP (2013 Refresh model) |
| | | | |  |  |
| Brand | Model | Load Range(W) | Edge Type | E14 | GU10 |
| Altenburger | 50.13.110 | 15-700 | Trailing | 1-23 | 1-14 |
| Altenburger | 50.13.111 | 15-1400 | Trailing | 1-46 | 1-28 |
| Altenburger | 50.13.010 | 60-1300 | Leading | 1-43 | |
| Altenburger | 50.13.210 | 60-2000 | Leading | 1-30 | |
| Berker | 286710 | 20-360 | Trailing | 1-12 | 1-7 |
| Berker | 2873 | 20-500 | Leading | 1-12 | |
| CLIPSAL | 32V500 Series | 500VA | Leading | 1-2 | |
| GIRA | 0300 00/101 | 60-400 | Leading | | |
| GIRA | 0302 00/101 | 60-600 | Leading | 1-3 | |
| GIRA | 0305 00/104 | 50-420 | Universal | | |
| GIRA | 0307 00/102 | 20-525 | Trailing | 1-17 | 1-10 |
| GIRA | 1176 00/103 | 50-420 | Universal | | |
| GIRA | 2262 00/101 | 20-500 | Leading | 1-13 | |
| BUSCH JAEGER | 2250U | 60-600 | Leading | 1-8 | |
| BUSCH JAEGER | 6513-102 | 40-420 | Trailing | 1-14 | |
| BUSCH JAEGER | 6513U-102 | 40-420 | Trailing | 1-14 | |
| BUSCH JAEGER | 6523U | 2-100 | Leading | 1-11 | |
| BUSCH JAEGER | 6524U | 2-100 | LED Dimmer | 1-15 | |
| BUSCH JAEGER | 6565U | 80-315 | Trailing | 1-10 | |
| BUSCH JAEGER | 6591U-101 | 60-420 | Universal | | |
| JUNG | 225 TDE | 20-525 | Trailing | 1-17 | 1-10 |
| JUNG | 1252 UDE | 50-260 | Trailing | 1-9 | |
| KOPP | 80.33 | 40-400 | Leading | 1-10 | |
| KOPP | 8077.0208.0 | 20-275 | Trailing | | |
| Lonon | NB12TG | 630 | Leading | 1 | |
| Panasonic | WMS549 | 40-400 | Leading | 1-2 | |
| PEHA | 431 | 6-120 | LED Dimmer | 1-14 | |
| PEHA | 433 | 20-315 | Trailing | 1-10 | 1-6 |
| PEHA | 435 | 60-600 | Leading | 1-20 | |
| TCL(Legrand) | L2.0 | 630 | Leading | 1-2 | |
| Wickes | Harrow HA1 2QB | 60-400 | Leading | | |
| Varilight | JQP401W | 10-400 | Trailing | 1-13 | 1-8 |
| MK | 52471SL | 60-500 | Leading | | |
| Hamilton | LK400/2 | 40-400 | Leading | 1-10 | |
| Click | MD9042 | 60-400 | Leading | 1-4 | |
| Aurora | AU-DSP400X | 60-400 | Leading | 1-3 | |

Please Note

- In specific range, there is possibility that flicker happen.
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- This experimental results only checked with 230V and one lamp operation.
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- The absence of a dimmer from this chart does not necessarily imply incompatibility.
- This list is not guarantee performance and safty. Please check in actual situation.
- The lamp may be flashing once when turning on, if the dimmer is already at position zero.
- The lamp may become lightly bright, if the Semiconductor Switch is off.
- Please note that In case of dimming, and depending on the dimmer type, the LED can generate more or less buzzing noise, which is not abnormal.
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- Load Range(W) is based on incandescent lamp wattage, that quantity of incandescent lamp should become the same quantity of LED lamp when replaced.

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