

## LED Drivers with different phase-cut dimmers

### **⚠ CAUTION!**

The maximum number of LED Drivers per dimmer is defined by the power of the LED Driver and the dimmer:

- \_ The total power of all connected LED Drivers must not exceed 50 % of the power of the dimmer.

#### **Example:**

- \_ Power of dimmer: 600 W → 50 % power: 300 W
- \_ Power of LED Driver: 15 W
- \_ Maximum number of LED Drivers:  $300 \text{ W} : 15 \text{ W} \leq 20$  devices

## LED Drivers with different phase-cut dimmers

## LCBI 10W 180mA PHASE-CUT / 1-10V LP (87500282) – Values for dimmers at full load

| Product name            | Article number | Dimmer type <sup>1</sup> | LED Drivers per dimmer | Noise rating <sup>2</sup> | Flicker rating <sup>3</sup> | Other issues <sup>4</sup>   |
|-------------------------|----------------|--------------------------|------------------------|---------------------------|-----------------------------|---|
| TCL K9051 630W          | K9051          | leading                  | 1-21                   | 3                         | 1                           |   |
| Schneider 500W          | EV51RD400      | leading                  | 1-16                   | 3                         | 1                           |   |
| Panasonic 400           | WFH549         | leading                  | 1-13                   | 3                         | 1                           |   |
| CLIPSAL 32E 450TM       | 32E450TM       | trailing                 | 1-15                   | 2                         | 1                           |   |
| Elko 40 315 VA (315LE)  | 1471444        | trailing                 | 1-10                   | 2                         | 1                           |   |
| E-LITE 500W             | U116           | trailing                 | 1-16                   | 2                         | 1                           |   |
| ShiTongSongBen 100      |                | leading                  | 1-3                    | 3                         | 1                           |   |
| CLIPSAL 32E 450 UDM     | 32E450UDM      | universal                | 1-15                   | 3                         | 1                           |   |
| Siemens 40-500W         |                | leading                  | 1-16                   | 3                         | 1                           |   |
| KaoYi 40-250W           | KA-DSP250PZ    | leading                  | 1-8                    | 4                         | 4                           | Min. load flicker   |
| Lutron 40-1200W         | GRX-3102-AU    | leading                  | 1-40                   | 3                         | 1                           |   |
| ATIA 20-300W            | 3GIB703        | trailing                 | 1-10                   | 2                         | 1                           |   |
| CLIPSAL CBus 2 L5508D1A | 10871212       | leading                  | 8 x 10 channel         | 3                         | 2                           | Min. load flicker, can set the dimmer by software to solve this problem |

## LED Drivers with different phase-cut dimmers

|                              |             |           |                |   |   |                      |
|------------------------------|-------------|-----------|----------------|---|---|----------------------|
| CLIPSAL CBus 2 L5504D1A      |             | universal | 4 x 10 channel | 3 | 1 |                      |
| D & C XHB 15w-150w           |             | leading   | 1-5            | 3 | 2 | Dimming depth > 38 % |
| Legrand HPM 400L 10-400W     | cat400L     | leading   | 1-13           | 3 | 1 |                      |
| Legrand 25-500               | ADW-LS5     | leading   | 1-16           | 4 | 4 | Min. load flicker    |
| CHNT 500W                    | NEW6-L30510 | leading   | 1-16           | 3 | 1 |                      |
| Clipsal 40-600               | E3031HD     | leading   | 1-20           | 3 | 1 |                      |
| Simon 45E101 500W            | 45E101      | trailing  | 1-16           | 3 | 1 |                      |
| Tridonic DALI PCD 300One4all | 86458303    | universal | 1-20           | 2 | 1 |                      |
| E-LITE 500W                  | SED-200A    | trailing  | 1-16           | 2 | 1 |                      |
| Schneider 400W               | C460        | leading   | 1-13           | 3 | 1 |                      |

### Explanation:

1. Dimmer types: leading, trailing, universal
2. Noise evaluation: 1 (very little noise) → 4 (strong noise).  
Noise evaluation was only carried out for full load. Values for minimum load are less critical. For reference refer to full load.
3. Flicker evaluation: 1 (no flicker) → 4 (strong flicker)
4. Other issues: description of the issue.  
ZSL-UP is an additional circuit that can improve the dimming behavior of specific lamps.

## LED Drivers with different phase-cut dimmers

## LCBI 10W 180mA PHASE-CUT / 1-10V LP (87500282) – Values for dimmers at minimum load

| Product name           | Article no. | Dimmer type <sup>1</sup> | LED Drivers per dimmer | Noise rating <sup>2</sup> | Flicker rating <sup>3</sup> | Other issues <sup>4</sup> |
|------------------------|-------------|--------------------------|------------------------|---------------------------|-----------------------------|---------------------------|
| TCL K9051 630W         | K9051       | leading                  | 1-42                   | 3                         | 1                           |                           |
| Schneider 500W         | EV51RD400   | leading                  | 1-32                   | 3                         | 1                           |                           |
| Panasonic 400          | WFH549      | leading                  | 1-26                   | 3                         | 3                           | Flicker at 190mA          |
| CLIPSAL 32E 450TM      | 32E450TM    | trailing                 | 1-30                   | 2                         | 1                           |                           |
| Elko 40 315 VA (315LE) | 1471444     | trailing                 | 1-20                   | 2                         | 1                           |                           |
| E-LITE 500W            | U116        | trailing                 | 1-32                   | 2                         | 1                           |                           |
| ShiTongSongBen 100     |             | leading                  | 1-6                    | 3                         | 1                           |                           |
| CLIPSAL 32E 450 UDM    | 32E450UDM   | universal                | 1-30                   | 3                         | 1                           |                           |
| Siemens 40-500W        |             | leading                  | 1-32                   | 3                         | 1                           |                           |
| KaoYi 40-250W          | KA-DSP250PZ | leading                  | 1-16                   | 3                         | 1                           |                           |
| Lutron 40-1200W        | GRX-3102-AU | leading                  | 1-80                   | 4                         | 4                           | Min. load flicker         |
| ATIA 20-300W           | 3GIB703     | trailing                 | 1-20                   | 2                         | 1                           |                           |

## LED Drivers with different phase-cut dimmers

|                              |             |           |                |   |   |   |
|------------------------------|-------------|-----------|----------------|---|---|---|
| CLIPSAL CBus 2 L5508D1A      | 10871212    | leading   | 8 x 10 channel | 3 | 2 | Min. load flicker, can set the dimmer by software to solve this problem |
| CLIPSAL CBus 2 L5504D1A      |             | universal | 4 x 10 channel | 3 | 1 |   |
| D & C XHB 15w-150w           |             | leading   | 1-10           | 3 | 1 | Dimming Range 50 ~ 100 %  |
| Legrand HPM 400L 10-400W     | cat400L     | leading   | 1-26           | 3 | 1 |   |
| Legrand 25-500               | ADW-LS5     | leading   | 1-32           | 4 | 4 | Min. load flicker   |
| CHNT 500W                    | NEW6-L30510 | leading   | 1-32           | 3 | 3 | Flicker at 70mA   |
| Clipsal 40-600               | E3031HD     | leading   | 1-40           | 3 | 1 |   |
| Simon 45E101 500W            | 45E101      | trailing  | 1-32           | 3 | 1 |   |
| Tridonic DALI PCD 300One4all | 86458303    | universal |                | 3 | 1 |   |
| Schneider 400W               | C460        | leading   | 1-26           | 3 | 1 |   |
| Schneider                    | K31RD400    | leading   |                | 4 | 2 |   |

### Explanation:

1. Dimmer types: leading, trailing, universal
2. Noise evaluation: 1 (very little noise) → 4 (strong noise).  
Noise evaluation was only carried out for full load. Values for minimum load are less critical. For reference refer to full load.
3. Flicker evaluation: 1 (no flicker) → 4 (strong flicker)
4. Other issues: description of the issue.  
ZSL-UP is an additional circuit that can improve the dimming behavior of specific lamps.

## LED Drivers with different phase-cut dimmers

## LCBI 10W 350mA PHASE-CUT / 1-10V LP (87500283) – Values for dimmers at full load

| Product name            | Article no. | Dimmer type <sup>1</sup> | LED Drivers per dimmer | Noise rating <sup>2</sup> | Flicker rating <sup>3</sup> | Other issues <sup>4</sup>   |
|-------------------------|-------------|--------------------------|------------------------|---------------------------|-----------------------------|---|
| TCL K9051 630W          | K9051       | leading                  | 1-21                   | 3                         | 1                           |   |
| Schneider 500W          | EV51RD400   | leading                  | 1-16                   | 3                         | 4                           | Min. load flicker   |
| Panasonic 400           | WFH549      | leading                  | 1-13                   | 3                         | 1                           |   |
| CLIPSAL 32E 450TM       | 32E450TM    | trailing                 | 1-15                   | 2                         | 1                           |   |
| Elko 40 315 VA (315LE)  | 1471444     | trailing                 | 1-10                   | 2                         | 1                           |   |
| E-LITE 500W             | U116        | trailing                 | 1-16                   | 2                         | 1                           |   |
| ShiTongSongBen 100      |             | leading                  | 1-3                    | 3                         | 1                           |   |
| CLIPSAL 32E 450 UDM     | 32E450UDM   | universal                | 1-15                   | 2                         | 1                           |   |
| Siemens 40-500W         |             | leading                  | 1-16                   | 3                         | 4                           | Min. load flicker   |
| KaoYi 40-250W           | KA-DSP250PZ | leading                  | 1-8                    | 3                         | 1                           |   |
| Lutron 40-1200W         | GRX-3102-AU | leading                  | 1-40                   | 3                         | 1                           |   |
| ATIA 20-300W            | 3GIB703     | trailing                 | 1-10                   | 2                         | 1                           |   |
| CLIPSAL CBus 2 L5508D1A | 10871212    | leading                  | 8 x 10 channel         | 3                         | 2                           | Min. load flicker, can set the dimmer by software to solve this problem |
| CLIPSAL CBus 2 L5504D1A |             | universal                | 4 x 10 channel         | 3                         | 1                           |   |

## LED Drivers with different phase-cut dimmers

|                                 |             |           |      |   |   |                   |
|---------------------------------|-------------|-----------|------|---|---|-------------------|
| D & C XHB 15w-150w              |             | leading   | 1-5  | 3 | 2 | Min. load flicker |
| Legrand HPM 400L<br>10-400W     | cat400L     | leading   | 1-13 | 3 | 1 |                   |
| Legrand 25-500                  | ADW-LS5     | leading   | 1-16 | 3 | 4 | Min. load flicker |
| CHNT 500W                       | NEW6-L30510 | leading   | 1-16 | 3 | 4 | Min. load flicker |
| Clipsal 40-600                  | E3031HD     | leading   | 1-20 | 3 | 4 | Min. load flicker |
| Simon 45E101 500W               | 45E101      | trailing  | 1-16 | 3 | 1 |                   |
| Tridonic DALI PCD<br>300One4all | 86458303    | universal | 1-15 | 2 | 1 |                   |

### Explanation:

1. Dimmer types: leading, trailing, universal
2. Noise evaluation: 1 (very little noise) → 4 (strong noise).  
Noise evaluation was only carried out for full load. Values for minimum load are less critical. For reference refer to full load.
3. Flicker evaluation: 1 (no flicker) → 4 (strong flicker)
4. Other issues: description of the issue.  
ZSL-UP is an additional circuit that can improve the dimming behavior of specific lamps.

## LED Drivers with different phase-cut dimmers

## LCBI 10W 350mA PHASE-CUT / 1-10V LP (87500283) – Values for dimmers at minimum load

| Product name            | Article no. | Dimmer type <sup>1</sup> | LED Drivers per dimmer | Noise rating <sup>2</sup> | Flicker rating <sup>3</sup> | Other issues <sup>4</sup>   |
|-------------------------|-------------|--------------------------|------------------------|---------------------------|-----------------------------|---|
| TCL K9051 630W          | K9051       | leading                  | 1-42                   | 3                         | 1                           |   |
| Schneider 500W          | EV51RD400   | leading                  | 1-32                   | 3                         | 4                           | Min. load flicker   |
| Panasonic 400           | WFH549      | leading                  | 1-26                   | 3                         | 1                           |   |
| CLIPSAL 32E 450TM       | 32E450TM    | trailing                 | 1-30                   | 2                         | 1                           |   |
| Elko 40 315 VA (315LE)  | 1471444     | trailing                 | 1-20                   | 2                         | 1                           |   |
| E-LITE 500W             | U116        | trailing                 | 1-32                   | 2                         | 1                           |   |
| ShiTongSongBen 100      |             | leading                  | 1-6                    | 3                         | 1                           |   |
| CLIPSAL 32E 450 UDM     | 32E450UDM   | universal                | 1-30                   | 2                         | 1                           |   |
| Siemens 40-500W         |             | leading                  | 1-32                   | 3                         | 4                           | Min. load flicker   |
| KaoYi 40-250W           | KA-DSP250PZ | leading                  | 1-16                   | 3                         | 1                           |   |
| Lutron 40-1200W         | GRX-3102-AU | leading                  | 1-80                   | 3                         | 1                           |   |
| ATIA 20-300W            | 3GIB703     | trailing                 | 1-20                   | 2                         | 1                           |   |
| CLIPSAL CBus 2 L5508D1A | 10871212    | leading                  | 8 x 10 channel         | 3                         | 2                           | Min. load flicker, can set the dimmer by software to solve this problem |
| CLIPSAL CBus 2 L5504D1A |             | universal                | 4 x 10 channel         | 3                         | 2                           | Min. load flicker, can set the dimmer by software to solve this problem |



## LED Drivers with different phase-cut dimmers

|                                 |             |           |      |   |   |                   |
|---------------------------------|-------------|-----------|------|---|---|-------------------|
| D & C XHB 15w-150w              |             | leading   | 1-10 | 3 | 1 |                   |
| Legrand HPM 400L<br>10-400W     | cat400L     | leading   | 1-26 | 3 | 1 |                   |
| Legrand 25-500                  | ADW-LS5     | leading   | 1-32 | 3 | 4 | Min. load flicker |
| CHNT 500W                       | NEW6-L30510 | leading   | 1-32 | 3 | 4 | Min. load flicker |
| Clipsal 40-600                  | E3031HD     | leading   | 1-40 | 3 | 4 | Min. load flicker |
| Simon 45E101 500W               | 45E101      | trailing  | 1-32 | 3 | 1 |                   |
| Tridonic DALI PCD<br>300One4all | 86458303    | universal | 1-15 | 2 | 1 |                   |

### Explanation:

1. Dimmer types: leading, trailing, universal
2. Noise evaluation: 1 (very little noise) → 4 (strong noise).  
Noise evaluation was only carried out for full load. Values for minimum load are less critical. For reference refer to full load.
3. Flicker evaluation: 1 (no flicker) → 4 (strong flicker)
4. Other issues: description of the issue.  
ZSL-UP is an additional circuit that can improve the dimming behavior of specific lamps.

## LED Drivers with different phase-cut dimmers

**LCBI 10W 500mA PHASE-CUT / 1-10V LP (87500284) – Values for dimmers at full load**

| Product name            | Article no. | Dimmer type <sup>1</sup> | LED Drivers per dimmer | Noise rating <sup>2</sup> | Flicker rating <sup>3</sup> | Other issues <sup>4</sup>   |
|-------------------------|-------------|--------------------------|------------------------|---------------------------|-----------------------------|---|
| TCL K9051 630W          | K9051       | leading                  | 1-21                   | 3                         | 1                           |   |
| Schneider 500W          | EV51RD400   | leading                  | 1-16                   | 3                         | 1                           |   |
| Panasonic 400           | WFH549      | leading                  | 1-13                   | 3                         | 1                           |   |
| CLIPSAL 32E 450TM       | 32E450TM    | trailing                 | 1-15                   | 2                         | 1                           |   |
| Elko 40 315 VA (315LE)  | 1471444     | trailing                 | 1-10                   | 2                         | 1                           |   |
| E-LITE 500W             | U116        | trailing                 | 1-16                   | 2                         | 1                           |   |
| ShiTongSongBen 100      |             | leading                  | 1-3                    | 3                         | 1                           |   |
| CLIPSAL 32E 450 UDM     | 32E450UDM   | universal                | 1-15                   | 2                         | 1                           |   |
| Siemens 40-500W         |             | leading                  | 1-16                   | 3                         | 1                           |   |
| KaoYi 40-250W           | KA-DSP250PZ | leading                  | 1-8                    | 3                         | 1                           |   |
| Lutron 40-1200W         | GRX-3102-AU | leading                  | 1-40                   | 3                         | 1                           |   |
| ATIA 20-300W            | 3GIB703     | trailing                 | 1-10                   | 2                         | 1                           |   |
| CLIPSAL CBus 2 L5508D1A | 10871212    | leading                  | 8 x 10 channel         | 3                         | 2                           | Min. load flicker, can set the dimmer by software to solve this problem |

## LED Drivers with different phase-cut dimmers

|                                 |             |           |                   |   |   |                          |
|---------------------------------|-------------|-----------|-------------------|---|---|--------------------------|
| CLIPSAL CBus 2<br>L5504D1A      |             | universal | 4 x 10<br>channel | 3 | 1 |                          |
| D & C XHB<br>15w-150w           |             | leading   | 1-5               | 3 | 2 | Dimming Depth 50 ~ 100 % |
| Legrand HPM<br>400L 10-400W     | cat400L     | leading   | 1-13              | 3 | 1 |                          |
| Legrand 25-500                  | ADW-LS5     | leading   | 1-16              | 3 | 1 |                          |
| CHNT 500W                       | NEW6-L30510 | leading   | 1-16              | 3 | 1 |                          |
| Clipsal 40-600                  | E3031HD     | leading   | 1-20              | 3 | 1 |                          |
| Simon 45E101<br>500W            | 45E101      | trailing  | 1-16              | 3 | 1 |                          |
| Tridonic DALI<br>PCD 300One4all | 86458303    | universal | 1-20              | 2 | 1 |                          |

### Explanation:

1. Dimmer types: leading, trailing, universal
2. Noise evaluation: 1 (very little noise) → 4 (strong noise).  
Noise evaluation was only carried out for full load. Values for minimum load are less critical. For reference refer to full load.
3. Flicker evaluation: 1 (no flicker) → 4 (strong flicker)
4. Other issues: description of the issue.  
ZSL-UP is an additional circuit that can improve the dimming behavior of specific lamps.

## LED Drivers with different phase-cut dimmers

## LCBI 10W 500mA PHASE-CUT / 1-10V LP (87500284) – Values for dimmers at minimum load

| Product name            | Article no. | Dimmer type <sup>1</sup> | LED Drivers per dimmer | Noise rating <sup>2</sup> | Flicker rating <sup>3</sup> | Other issues <sup>4</sup>   |
|-------------------------|-------------|--------------------------|------------------------|---------------------------|-----------------------------|---|
| TCL K9051 630W          | K9051       | leading                  | 1-42                   | 3                         | 1                           |   |
| Schneider 500W          | EV51RD400   | leading                  | 1-32                   | 3                         | 2                           |   |
| Panasonic 400           | WFH549      | leading                  | 1-26                   | 3                         | 2                           |   |
| CLIPSAL 32E 450TM       | 32E450TM    | trailing                 | 1-30                   | 3                         | 4                           | Min. load flicker   |
| Elko 40 315 VA (315LE)  | 1471444     | trailing                 | 1-20                   | 2                         | 1                           |   |
| E-LITE 500W             | U116        | trailing                 | 1-32                   | 2                         | 1                           |   |
| ShiTongSongBen 100      |             | leading                  | 1-6                    | 3                         | 1                           |   |
| CLIPSAL 32E 450 UDM     | 32E450UDM   | universal                | 1-30                   | 2                         | 2                           | Dimming Depth 50 ~ 100 %  |
| Siemens 40-500W         |             | leading                  | 1-32                   | 3                         | 1                           |   |
| KaoYi 40-250W           | KA-DSP250PZ | leading                  | 1-16                   | 3                         | 1                           |   |
| Lutron 40-1200W         | GRX-3102-AU | leading                  | 1-80                   | 3                         | 1                           |   |
| ATIA 20-300W            | 3GIB703     | trailing                 | 1-20                   | 2                         | 1                           |   |
| CLIPSAL CBus 2 L5508D1A | 10871212    | leading                  | 8 x 10 channel         | 3                         | 2                           | Min. load flicker, can set the dimmer by software to solve this problem |

## LED Drivers with different phase-cut dimmers

|                                 |             |           |                   |   |   |                             |
|---------------------------------|-------------|-----------|-------------------|---|---|-----------------------------|
| CLIPSAL CBus 2<br>L5504D1A      |             | universal | 4 x 10<br>channel | 3 | 2 | Min. load flicker           |
| D & C XHB 15w-150w              |             | leading   | 1-10              | 3 | 1 | Dimming Depth 50 ~<br>100 % |
| Legrand HPM 400L<br>10-400W     | cat400L     | leading   | 1-26              | 3 | 1 |                             |
| Legrand 25-500                  | ADW-LS5     | leading   | 1-32              | 3 | 1 |                             |
| CHNT 500W                       | NEW6-L30510 | leading   | 1-32              | 3 | 1 |                             |
| Clipsal 40-600                  | E3031HD     | leading   | 1-40              | 3 | 1 |                             |
| Simon 45E101 500W               | 45E101      | trailing  | 1-32              | 3 | 1 |                             |
| Tridonic DALI PCD<br>300One4all | 86458303    | universal | 1-20              | 2 | 1 |                             |

### Explanation:

1. Dimmer types: leading, trailing, universal
2. Noise evaluation: 1 (very little noise) → 4 (strong noise).  
Noise evaluation was only carried out for full load. Values for minimum load are less critical. For reference refer to full load.
3. Flicker evaluation: 1 (no flicker) → 4 (strong flicker)
4. Other issues: description of the issue.  
ZSL-UP is an additional circuit that can improve the dimming behavior of specific lamps.