LED Drivers with different phase-cut dimmers

LCBU 10W 12V BASIC phase-cut SR (89800289), 230V/50Hz

⚠ 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 W : 15 W ≤ 20 devices

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Values for dimmers at full load

Product name	Article number	Dimmer type [1]	LED Drivers per dimmer	Noise rating [2]	Flicker rating [3]	Other issues [4]
Amacher 03 5012 60- 600w	435 HAN	leading	1-30	4	1	
B-Ticino Magic SM9350S	SM9350S	leading	1-15	3	1	
Bull B6 GD100	G07D101	leading	1-24	3	2	Slight flicker at 760mA, eliminated with 2 converters.
Busch & Jaeger 2247 U 500w/VA	2247-500	leading	1-24	3	1	
Busch & Jaeger 6513U-102 40-420w/VA	6513 U-102	trailing	1-21	2	1	Poor dim depth
Busch-Jaeger 6523U	6512-0-0306	leading	1-5	3	1	
Busch-Jaeger 6524U	6512-0-0311	leading	1-5	2	1	
CHiNT NEW 7-C30510	121227E7	leading	1-24	3	1	
CLIPSAL 32E 450 UDM	32E450UDM	trailing	1-22	2	1	
CLIPSAL 32E 450CFLDM	32E450CFLDM	trailing	1-22	2	1	
CLIPSAL 32E 450LM	32E450LM	leading	1-22	3	2	Slight flicker at minimum
CLIPSAL 32E 450TM	32E450TM	trailing	1-22	2	1	
CLIPSAL 60TDM SaturnOneTouch	4061TD	trailing	1-16	2	1	

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CLIPSAL C Bus 2 L5508D1A	10871212	leading	1-10 x 8 channel	4	1	
Crabtree CRO-1w20 60-250w	CRO-1	leading	1-12	3	1	
D & C XHB 15w-150w		leading	1-7	3	1	Poor dim depth
DUEWI D16601160-300w	D1 66011	leading	1-30	4	1	
DUEWI ET1 53850 20-300w	ET153850	trailing	1-30	2	1	
Elko 40 315 VA (315LE)	1471444	trailing	1-15	2	1	
Elko 400 GL1	1471450	leading	1-20	3	1	
Feller 30583 40 - 500w	30583	leading	1-24	3	1	
Feller 40600-Rc-FMI 61 20-300VA	548 290 000	trailing	1-15	2	1	
Feller 40600-RC-FMI 61 20-600VA	548 270 000	trailing	1-30	2	1	
Feller 40600-RL-FMI-61 40-600 VA	548 260 000	leading	1-30	3	1	
FUJIYAMA 600w	FJ159	leading	1-30	3	2	Slight flicker at minimum, eliminated with 2 converters.
GET 60w-400w	08-07-17	leading	2-20	3	4	Flicker at 100 mA, eliminated with 2 converters.
GET Transformer 60-400VA	07-07-26	leading	1-20	3	1	

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JUNG 225 TDE Tronic Dimmer 20-525w	225 TDE	trailing	1-25	2	1	Poor dim depth
KLEIN K513/UX20325w	K513/UX	trailing	1-15	2	1	Poor dim depth
KOPP 80.33 40w-400w	059413051	leading	1-20	3	1	
KOPP 80.7820-275w	807813081	trailing	1-12	2	1	Flicker at maximum. Poor dim depth
Legrand ADW-ETL4	775903	trailing	1-20	2	1	
Legrand HPM 400L	21901B	leading	2-20	3	3	Low output power. Flicker at minimum, eliminated with 2 converters.
Legrand HPM 400T	21903B	trailing	1-20	2	1	
Legrand V8051	V8051	leading	1-30	3	1	
Lumic LM600	LM600	leading	2-30	3	3	Flicker at minimum, eliminated with 2 converters.
OPUS-852-095-20-315w ??	852-095	trailing	1-15	2	1	
Panasonic Max 300	WEG 57813	leading	1-15	3	1	
PEHA 433 HAB Tronic-Dimmer 20-315w	D 433 HAB O.A.	trailing	1-15	2	1	

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RICHMOND 10w-600w	MP600TE	trailing	1-30	2	2	Slight flicker at maximum, eliminated with 2 converters. Poor dim depth
SIEMENS 5TC8 28420.600w 20-525VA	5TC8284	trailing	1-24	2	1	
Simon 45E101	52120342	leading	1-24	3	1	
TCL L2.0 (Legrand)		leading	1-30	3	1	
Tridonic DALI-PCD 300 One4all	86458303	universal	1-15	2	1	
WICKES 60-400W	070619	leading	1-20	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 behaviour of specific lamps.

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Values for dimmers at minimum load

Product name	Article number	Dimmer type [1]	LED Drivers per dimmer	Noise rating [2]	Flicker rating [3]	Other issues [4]
Amacher 03 5012 60- 600w	435 HAN	leading	1-30		1	Poor dim depth
B-Ticino Magic SM9350S	SM9350S	leading	1-15		1	
Bull B6 GD100	G07D101	leading	2-24		4	Flicker at 220 mA, removed by double converters
Busch & Jaeger 2247 U 500w/VA	2247-500	leading	1-24		1	
Busch & Jaeger 6513U-102 40-420w/VA	6513 U-102	trailing	1-21		1	Minimal dimming function
Busch-Jaeger 6523U	6512-0-0306	leading	1-5		1	
Busch-Jaeger 6524U	6512-0-0311	leading	1-5		1	Minimal dimming function
CHiNT NEW 7-C30510	121227E7	leading	1-24		1	
CLIPSAL 32E 450 UDM	32E450UDM	trailing	1-22		1	Poor dim depth
CLIPSAL 32E 450CFLDM	32E450CFLDM	trailing	1-22		1	
CLIPSAL 32E 450LM	32E450LM	leading	1-22		2	Slight flicker at minimum
CLIPSAL 32E 450TM	32E450TM	trailing	1-22		1	

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CLIPSAL 60TDM SaturnOneTouch	4061TD	trailing	1-16		1	
CLIPSAL C Bus 2 L5508D1A	10871212	leading	1-10 x 8 channel		1	Not smooth dimming with 2 converters (straight drop from max to min)
Crabtree CRO-1w20 60-250w	CRO-1	leading	1-12		1	
D & C XHB 15w-150w		leading	1-7		1	Poor dim depth
DUEWI D16601160-300w	D1 66011	leading	1-30		1	
DUEWI ET1 53850 20-300w	ET153850	trailing	1-30		1	Poor dim depth
Elko 40 315 VA (315LE)	1471444	trailing	1-15		1	
Elko 400 GL1	1471450	leading	1-20		1	
Feller 30583 40 - 500w	30583	leading	1-24		1	
Feller 40600-Rc-FMI 61 20-300VA	548 290 000	trailing	1-15		1	
Feller 40600-RC-FMI 61 20-600VA	548 270 000	trailing	1-30		1	
Feller 40600-RL-FMI-61 40-600 VA	548 260 000	leading	1-30		1	
FUJIYAMA 600w	FJ159	leading	2-30		2	Flicker at 100mA, eliminated with 2 converters.
GET 60w-400w	08-07-17	leading	1-20		2	Slight flicker at minimum

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GET Transformer 60-400VA	07-07-26	leading	2-20		2	Flicker at 100mA, eliminated with 2 converters.
JUNG 225 TDE Tronic Dimmer 20-525w	225 TDE	trailing	1-25		1	Poor dim depth
KLEIN K513/UX20325w	K513/UX	trailing	1-15		1	Minimal dimming function
KOPP 80.33 40w-400w	059413051	leading	1-20		1	
KOPP 80.7820-275w	807813081	trailing	1-12		1	No operation
Legrand ADW-ETL4	775903	trailing	1-20		1	Minimal dimming function
Legrand HPM 400L	21901B	leading	2-20		1	Dimmer doesn't dim with a single converter, works with 2 or more.
Legrand HPM 400T	21903B	trailing	1-20		1	
Legrand V8051	V8051	leading	1-30		1	
Lumic LM600	LM600	leading	1-30		3	Flicker at minimum
OPUS-852-095-20-315w	852-095	trailing	1-15		1	Poor dim depth
Panasonic Max 300	WEG 57813	leading	1-15		1	
PEHA 433 HAB Tronic-Dimmer 20-315w	D 433 HAB O.A.	trailing	1-15		1	
RICHMOND 10w-600w	MP600TE	trailing	1-30		1	Poor dim depth

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SIEMENS 5TC8 28420.600w 20-525VA	5TC8284	trailing	1-24		1	
Simon 45E101	52120342	leading	1-24		1	
TCL L2.0 (Legrand)		leading	1-30		1	Flicker at 40 mA with 2 converters
Tridonic DALI-PCD 300 One4all	86458303	universal	1-15		1	
WICKES 60-400W	070619	leading	1-20		1	

Explanation:

1. Dimmer types: leading, trailing, universal
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