

# Professional LED Mains Voltage range



Recommended dimmer compatibility list for Mains Voltage Lamps

## KEY

x-y	Excellent dimming with X-Y lamps, however external factors can negatively influence the deep dimming performance
x-y	Lamps are dimmable across full dimming range, but exhibit diminished flickering at a single distinct position in the range
	Unexpected performance behavior, not in line with good dimming perception
N.A.	Dimmer lamp combination not applicable
T.B.D.	Dimmer lamp combination not tested

This document is for information purposes and must be treated as recommendation. Philips attempted to provide best results, results are generated in lab conditions and might contain faults

Brand	Type	Type	Load	LED spot											
				Master LEDexpertcolor MV D 3.9-35W GU10 CRI97			Master LEDexpertcolor MV D 5.5-50W GU10 CRI97			Classic LEDspot MV DimTone 4.5-35W GU10			Classic LEDspot MV DimTone 5-50W GU10		
				Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing
Berker  INSTA	286710	[RC]	20 – 360 W-Turn	2-5 (max 18)	88%-7%		2-5 (max 9)	91%-5%		2-18	92%-7%		2-13	92%-6%	
Berker  INSTA	283010	[R]	60 – 400 W-Turn	2-5 (max 20)	93%-6%		2-3	95%-5%		2-18	93%-5%		2-15	94%-4%	
Bticino	L4407		60 – 250 W		N.A.	N.A.					N.A.	N.A.		N.A.	N.A.
Busch Jaeger  ABB	2200 U - 503	[R]	60 – 400 W-Turn	2-5 (max 20)	83%-17%		2-5 (max 14)	94%-17%		2-18	92%-6%		2-15	96%-5%	
Busch Jaeger  ABB	2247 U	[RL]	20 – 500 W-Turn	2-5 (max 20)	95%-3%		2-5 (max 14)	95%-3%		2-20	92%-3%		2-18	96%-3%	
Busch Jaeger  ABB	2250 U	[R]	60 – 600 W-Turn	2-5 (max 25)	93%-3%		2-5 (max 18)	96%-3%		2-20	91%-3%		2-20	97%-3%	
Busch Jaeger  ABB	6513 U - 102	[RC]	40 – 420 W-Turn	2-5 (max 21)	92%-4%		2-5 (max 15)	94%-6%		2-19	95%-6%		2-15	96%-6%	
Busch Jaeger  ABB	6523 U	[LED]	2 – 100 VA-LED-Turn	2-5 (max 25)	92%-4%		2-5 (max 18)	91%-3%		2-20	89%-3%		2-18	93%-3%	
Busch Jaeger  ABB	6526 U	[LED]	2 – 100 VA-LED-Push (2wire)	2-19	92%-3%					2-20	96%-4%		2-18	97%-6%	
ELKO   Schneider	SBD200LED (CCTEL10501)	[LED/RC]	4 – 200W(RC) 4 – 400W(RL)	2-5 (max 10)	89%-11%		2-5 (max 7)	90%-8%		2-18	91%-7%		2-15	97%-4%	
ELKO   Schneider	SBD315RC (315 GLE )	[RC]	315W	2-5 (max 16)	88%-3%		2-5 (max 11)	91%-3%		2-14	92%-3%				
ELKO   Schneider	SBD420RCRL (CCTEL13011)	[RLC]	420W	2-5 (max 21)	94%-3%		2-5 (max 15)	96%-3%		2-19	93%-3%				
Eltako	EVD6INPN-UC		400W 3-wire Push Module							2-18	98%-3%		2-15	98%-4%	< 16
Feller   Schneider	40200 (SBD200LED CCTCH10601)	[LED/RC]	4 – 200W(RC) 4 – 400W(RL)	2-5 (max 10)	89%-11%		2-5 (max 7)	90%-8%		2-18	91%-7%		2-15	97%-4%	
Feller   Schneider	40300 (SBD315)	[RLC]	300W	2-5 (max 16)	88%-3%		2-5 (max 11)	91%-3%							
Feller   Schneider	40420 (SBD420)	[RLC]	420W	2-5 (max 21)	94%-3%		2-5 (max 15)	96%-3%							
GIRA	1176-00/01	[RLC]	50 – 420W	2-19	91%-12%					2-19	96%-10%		2-15	95%-8%	
GIRA	2390 00/ 100	[LED]	7 – 100W -Push (3wire)	2-5 (max 25)	86%-24%		2-5 (max 18)	91%-25%		2-15	96%-6%		2-16	91%-4%	
Hager	EVN 011	[RC]	300VA	2-15	96%-10%					2-13	98%-3%	< 12	2-11	98%-5%	< 12
Hager	EVN 012	[RC]	300W	2-15	96%-9%					2-13	98%-4%	< 12	2-11	97%-5%	< 12
Hager	EVN 004	[RL]	500VA	2-19	96%-10%					2-20	98%-3%		2-18	97%-5%	
Jung	225 TDE	[RC]	20 – 525 W-Turn	2-5 (max 26)	91%-3%		2-5 (max 19)	93%-11%		2-20	92%-7%		2-16	93%-7%	
Jung	1271LEDDE	[LED]	3 – 100W -Push (3wire)	2-5 (max 25)	89%-3%		2-5 (max 18)	92%-3%		2-20	89%-11%		2-16	91%-3%	
Klik aan Klik uit	AWMD-250	[LED]	3 – 24W	3-6	72%-17%					2-5	88%-3%			N.A.	N.A.
Klik aan Klik uit	ACM 300		300W -3-wire Push LED Dimmer	2-15	89%-3%					2-13	90%-3%		2-11	91%-4%	
Legrand	774161	[RL]	40 – 400 W-Turn	5	95%-3%			N.A.	N.A.		N.A.	N.A.		N.A.	N.A.
Legrand	78401	[RLC]	40 – 500W	2-19	91%-1%					2-18	78%-3%	< 3	2-15	95%-3%	< 3
Legrand	67081	[RL]	40 – 400 W-Turn	3-5 (max 20)	93%-3%		2-5 (max 14)	96%-3%			N.A.	N.A.		N.A.	N.A.
Legrand	67082	[RL]	40 – 600 W-Turn	5	95%-5%		3-5 (max 14)	96%-3%			N.A.	N.A.		N.A.	N.A.
Legrand	67083	[RLC]	3 – 400W	3-4	86%-3%					2-3	90%-1%			N.A.	N.A.
Legrand	67084	[RLC]	8-300 VA -Push LED (3wire)	2-5 (max 15)	93%-3%		2-5 (max 10)	93%-3%		2-18	94%-4%			N.A.	N.A.
Legrand	67085 (078406)	[RLC]	8-300 VA -Push LED (3wire)	2-5 (max 15)	97%-3%		2-5 (max 10)	98%-3%			N.A.	N.A.	2-11	98%-3%	
Legrand	L4402N	[R]	60 – 500W	3-19	86%-11%					10-20	88%-4%		5-18	88%-7%	
Merten   Schneider	SBD200LED (MEG5134-0000)	[LED/RC]	4 – 200W(RC) 4-400W(RL)	2-5 (max 10)	89%-11%		2-5 (max 7)	90%-8%		2-18	91%-7%		2-15	97%-4%	
Merten   Schneider	SBD315RC (MEG5136-0000)	[RC]	315W	2-5 (max 16)	88%-3%		2-5 (max 11)	91%-3%		2-14	92%-3%				
Merten   Schneider	SBD420RCRL (MEG5138-0000)	[RLC]	20 – 420 VA	2-5 (max 21)	94%-3%		2-5 (max 15)	96%-3%		2-19	93%-3%				
MK - Electric	K1535	[R]	65 – 450 W-Turn	2-5 (max 23)	71%-3%		2-5 (max 16)	80%-4%		2-20	83%-4%		2-16	84%-5%	
MK - Electric	K1501 WHILV	[R]	60 – 500 W-Turn	2-5 (max 25)	77%-3%		2-5 (max 18)	87%-3%		2-20	88%-4%		2-16	89%-5%	
MK - Electric	K4501 WHILV	[RLC]	180W	2-11	84%-3%					2-10	90%-2%		2-9	90%-4%	
MK - Electric	K4500 WHILV	[RLC]	400W	2-16	86%-3%					2-14	89%-2%		2-15	89%-4%	
NIKO	310-0280X	[LED]	2 – 100 VA	2-5	96%-3%					2-4	97%-3%		2-4	99%-2%	
PEHA	431HAN	[RL]	6 – 120W [LED] 6 – 60W	2-6	80%-3%					2-5	90%-3%		2-4	88%-3%	
Philips	UID8670	[LED]	2 – 100 VA-LED-Push (3wire)	2-5 (max 25)	92%-4%		2-5 (max 18)	91%-3%		2-20	89%-3%		2-18	93%-3%	
RELCO	RPO977	[LED]	4-100W	2-5	96%-16%										
RELCO	RMO545	[LED]	4-100W	2-5	88%-3%										
Schneider	SBD315RC (SBD 315, SDD 315)	[RC]	315W	2-5 (max 16)	88%-3%		2-5 (max 11)	91%-3%		2-14	92%-3%				
Schneider	SBD315RC (ATD315/CCTO11533)	[RC]	315W	2-5 (max 16)	88%-3%		2-5 (max 11)	91%-3%		2-14	92%-3%				
Schneider	SBD200 (WDE 002299)		4 – 400VA-Turn Universal (2wire)	2-5 (max 10)	89%-11%		2-5 (max 7)	90%-8%		2-18	91%-7%		2-15	97%-4%	
Schneider	SBD315RC (SBD 315)	[RC]	315W	2-5 (max 16)	88%-3%		2-5 (max 11)	91%-3%		2-14	92%-3%		2-11	92%-3%	
VADSBO	ED 350	[RC]	50 – 350W	2-18	86%-10%					2-16	92%-6%		2-13	91%-8%	
VADSBO	DRS 315	[RC]	50 – 315W	2-16	92%-5%					8-14	95%-4%	< 15	3-11	93%-6%	< 12
VADSBO	DU 250	[RC]	20 – 250W	2-13	70%-3%					2-11	89%-3%	< 12	2-9	85%-3%	< 10
Varilight	HQ3W	[R]	60-400W	2-5 (max 20)	91%-3%		2-5 (max 14)	92%-3%		3-18	91%-3%		2-15	96%-3%	
Varilight	ICT401 M	[RC]	20-400W	2-19	75%-3%					2-18	95%-1%		2-15	93%-2%	
Vimar	20148	[RL]	500W	2-5 (max 25)	93%-3%	< 6	2-5 (max 18)	94%-3%	< 5	2-20	93%-4%	< 4	2-16	95%-4%	< 17
Vimar	14153	[R]		2-19	99%-3%					2-20	98%-3%		2-18	99%-3%	
Vimar	20160	[RC]		2-15	90%-3%					2-13	94%-1%	< 14	2-18	96%-3%	< 17
Vimar	20162	[RL]	40 – 300W	2-5 (max 15)	91%-3%	< 6	2-5 (max 10)	90%-3%	< 6	2-13	91%-3%	< 10	2-11	90%-4%	< 12
Philips Dynalite	DDLE801		(100W per channel)	2-5	79%-3%		2-5	90%-3%					5-16	92%-3%	
Philips Dynalite	DDTMI02 Module		(460 W per channel)	2-5 (max 20)	87%-3%		2-5 (max 16)	90%-3%					2-16	92%-3%	

- Note :  
 #1) Unexpected behaviour can occur outside the range of specified number of lamps. The mentioned numbers are tested. In some cases the dimmers can be loaded with more lamps than is specified in this document (most dimmers can be loaded with LED lamps to 20% of specified power; LED dimmers can be loaded to specified power)  
 #2) Occupancy sensors can act like dimmers, therefore Philips recommend to use dimmable lamps in combination with it.  
 #3) Glowing means: a switched off dimmer still having the possibility that a small light output is visible. This status can occur when a low quantity of lamps is connected.  
 #4) Yellow cells indication: Sometimes flickering is observed due to low dimmer loads, best visible at deep dimming  
 #4a) Yellow cells indication: Dimming performance: LED's have much lower load (wattage) than traditional light sources. (e.g. flickering where "active loads" can reduce your problems)  
 #4b) Yellow cells indication: Dimming range, minimum dim level will be >10%, and/or maximum level will be <80% light level  
 #5) Various dimmer suppliers offer "active loads" (e.g. Busch Jaeger Kompensator 6596) to optimize dimming performance in case of lamp-dimmer system issues. Using double pole switches will prevent glowing issues.  
 #7) This list is based on measurements in a lab environment with nominal voltage, a different voltage will result in a different dimming range. Therefore we indicated 3% as minimum light level as lab condition.  
 #8) Dimmer manufacturers may change the technical design of the dimmer without informing LED lamp suppliers. These changes can influence the performance of LED products. Philips cannot be held responsible for inaccuracies in the compatibility lists due to technical changes in dimmers  
 #9) In general Philips dimmable LED lamps can be dimmed with any type of dimmer (type R, RL, RC or RLC).

Disclaimer:  
 Philips will not accept claims for any damage caused by implementing the recommendations in this document.









# Professional LED Mains Voltage range

Recommended **dimmer** compatibility list for **Mains Voltage** Lamps



## KEY

x-y	Excellent dimming with X-Y lamps, however external factors can negatively influence the deep dimming performance
x-y	Lamps are dimmable across full dimming range, but exhibit diminished flickering at a single distinct position in the range
	Unexpected performance behavior, not in line with good dimming perception
N.A.	Dimmer lamp combination not applicable
T.B.D.	Dimmer lamp combination not tested

This document is for information purposes and must be treated as recommendation. Philips attempted to provide best results, results are generated in lab conditions and might contain faults

Brand	Type	Type	Load
Berker  INSTA	286710	[RC]	20 – 360 W-Turn
Berker  INSTA	283010	[R]	60 – 400 W-Turn
Bticino	L4407		60 – 250 W
Busch Jaeger  ABB	2200 U-503	[R]	60 – 400 W-Turn
Busch Jaeger  ABB	2247 U	[RL]	20 – 500 W-Turn
Busch Jaeger  ABB	2250 U	[R]	60 – 600 W-Turn
Busch Jaeger  ABB	6513 U-102	[RC]	40 – 420 W-Turn
Busch Jaeger  ABB	6523 U	[LED]	2 – 100 VA-LED-Turn
Busch Jaeger  ABB	6526 U	[LED]	2 – 100 VA-LED-Push (2wire)
ELKO  Schneider	SBD200LED (CCTEL10501)	[LED/RC]	4 – 200W(RC) 4 – 400W(RL)
ELKO  Schneider	SBD315RC (315 GLE )	[RC]	315W
ELKO  Schneider	SBD42ORCL (CCTEL13011)	[RLC]	420W
Eitako	EVD6INPN-UC		400W 3-wire Push Module
Feller  Schneider	40200 (SBD200LED CCTCH10601)	[LED/RC]	4 – 200W(RC) 4 – 400W(RL)
Feller  Schneider	40300 (SBD315)	[RLC]	300W
Feller  Schneider	40420 (SBD420)	[RLC]	420W
GIRA	1176-00/01	[RLC]	50 – 420W
GIRA	2390 00/ 100	[LED]	7 – 100W -Push (3wire)
Hager	EVN 011	[RC]	300VA
Hager	EVN 012	[RC]	300W
Hager	EVN 004	[RL]	500VA
Jung	225 TDE	[RC]	20 – 525 W-Turn
Jung	127ILEDE	[LED]	3 – 100W -Push (3wire)
Klik aan Klik uit	AWMD-250	[LED]	3 – 24W
Klik aan Klik uit	ACM 300		300W -3-wire Push LED Dimmer
Legrand	774161	[RL]	40 – 400 W-Turn
Legrand	78401	[RLC]	40 – 500W
Legrand	67081	[RL]	40 – 400 W-Turn
Legrand	67082	[RL]	40 – 600 W-Turn
Legrand	67083	[RLC]	3 – 400W
Legrand	67084	[RLC]	8-300 VA -Push LED (3wire)
Legrand	67085 (078406)	[RLC]	8-300 VA -Push LED (3wire)
Legrand	L4402N	[R]	60 – 500W
Merten  Schneider	SBD200LED (MEG5134-0000)	[LED/RC]	4 – 200W(RC) 4-400W(RL)
Merten  Schneider	SBD315RC (MEG5136-0000)	[RC]	315W
Merten  Schneider	SBD42ORCL (MEG5138-0000)	[RLC]	20 – 420 VA
MK-Electric	K1535	[R]	65 – 450 W-Turn
MK-Electric	K1501 WHILV	[R]	60 – 500 W-Turn
MK-Electric	K4501 WHILV	[RLC]	180W
MK-Electric	K4500 WHILV	[RLC]	400W
NIKO	310-02BOX	[LED]	2 – 100 VA
PEHA	431HAN	[RL]	6 – 120W [LED] 6 – 60W
Philips	UID8670	[LED]	2 – 100 VA-LED-Push (3wire)
RELCO	RP0977	[LED]	4-100W
RELCO	RM0545	[LED]	4-100W
Schneider	SBD315RC (SBD 315, SDD 315)	[RC]	315W
Schneider	SBD315RC (ATD315)(CCTO11533)	[RC]	315W
Schneider	SBD200 (WDE 002299)		4 – 400VA-Turn Universal (2wire)
Schneider	SBD315RC (SBD 315)	[RC]	315W
VADSBO	ED 350	[RC]	50 – 350W
VADSBO	DRS 315	[RC]	50 – 315W
VADSBO	DU 250	[RC]	20 – 250W
Varilight	HQ3W	[R]	60-400W
Varilight	ICT401 M	[RC]	20-400W
Vimar	20148	[RL]	500W
Vimar	14153	[R]	
Vimar	20160	[RC]	
Vimar	20162	[RL]	40 – 300W
Philips Dynalite	DDLE801		(100W per channel)
Philips Dynalite	DDTM102 Module		(460 W per channel)

LED spot											
MASTER VALUE LEDspot MV 5-50W GU10			Corepro LEDspot MV 4-35W GU10 Dim			Corepro LEDspot MV 5-50W GU10 Dim			Master LEDspot PAR Classic D 6-50W PAR20		
Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing
2-10	90% – 20%		2-8	94%–8%		2-8	92%–3%		1-10	91%–12%	
2-10	94% – 8%		2-8	87%–3%		2-8	93%–3%		1-5	93%–6%	
	N.A.	N.A.		N.A.	N.A.		N.A.	N.A.		N.A.	N.A.
2-10	94% – 16%	< 2	2-8	86%–4%		2-8	92%–3%		1-10	93%–6%	
2-10	92% – 3%		2-8	86%–3%		2-8	94%–3%		1-14	92%–3%	
2-10	92% – 3%		2-8	89%–3%		2-8	94%–3%		1-8	95%–3%	
2-10	96% – 20%		2-8	96%–4%		2-8	94%–3%		1-15	92%–12%	
2-10	92% – 3%		2-8	89%–3%		2-8	89%–3%		1-14	93%–3%	
2-20	89% – 29%		2-20	93%–3%		2-20	94%–3%		1-17	94%–10%	
2-10	88% – 20%			N.A.	N.A.	2-8	92%–3%		1-10	92%–14%	
2-10	88% – 3%		3-8	95%–3%		2-8	92%–3%		1-9	92%–4%	
	N.A.	N.A.		N.A.	N.A.	3-8	95%–3%		1-12	94%–7%	
			2-20	99%–3%		2-16	99%–3%		1-13	98%–7%	
2-10	88% – 20%			N.A.	N.A.	2-8	92%–3%		1-10	92%–14%	
			3-8	95%–3%		2-8	92%–3%		1-9	92%–4%	
				N.A.	N.A.	3-8	95%–3%		1-12	94%–7%	
2-20	94% – 27%		2-20	93%–3%		2-16	94%–3%		1-14	96%–17%	
2-10	92% – 8%		2-8	91%–3%					1-10	93%–3%	
2-14	98% – 13%	< 2	2-17	98%–5%		2-12	99%–3%		1-10	98%–8%	
2-14	98% – 13%	< 7	2-17	98%–5%		2-12	99%–3%		1-10	98%–13%	
2-20	98% – 13%	< 8	2-17	98%–5%		2-20	97%–3%		1-17	98%–14%	
2-10	92% – 24%		2-8	96%–8%		2-8	91%–3%		1-15	98%–13%	
2-10	92% – 36%		2-8	91%–3%		2-8	91%–3%		1-10	92%–3%	
2-6	81% – 28%	< 7	2-7	83%–7%	< 3	2-5	78%–3%		1-4	93%–19%	
			2-17	80%–3%		2-12	89%–3%		1-10	58%–3%	
3-10	92% – 8%	< 4		N.A.	N.A.	2-8	94%–3%		2-11	93%–6%	
2-19	93% – 13%		2-20	95%–3%		2-16	94%–3%		1-13	94%–7%	
3-10	96% – 16%			N.A.	N.A.	3-8	95%–3%		2-9	94%–5%	
	N.A.	N.A.		N.A.	N.A.	3-8	94%–3%		2-15	94%–5%	
	89% – 10%		2-20	84%–3%		2-16	81%–3%		1-3	94%–3%	
2-10	88% – 3%	< 5	2-8	96%–4%	< 3	2-8	93%–3%		1-11	93%–8%	
2-10	96% – 3%		2-8	99%–3%		2-8	95%–3%		1-9	97%–3%	
5-20	83% – 25%			N.A.	N.A.	3-20	78%–3%			N.A.	N.A.
2-10	88% – 20%			N.A.	N.A.	2-8	92%–3%		1-10	92%–14%	
2-10	88% – 3%		3-8	95%–3%		2-8	92%–3%		1-9	92%–4%	
	N.A.	N.A.		N.A.	N.A.	3-8	95%–3%		1-12	94%–7%	
2-10	80% – 14%			N.A.	N.A.	2-8	70%–3%		1-13	77%–7%	
2-10	86% – 14%		2-8	80%–3%		2-8	87%–3%		1-15	96%–30%	
2-10	85% – 13%		2-13	78%–3%		2-9	86%–3%		1-7	92%–5%	
2-15	85% – 13%		2-20	77%–3%		2-16	83%–3%		1-11	99%–29%	
2-5	97% – 23%		2-6	98%–3%		2-4	97%–3%		1-3	96%–4%	
2-6	85% – 29%		2-3	76%–3%		2-5	81%–3%		1-4	95%–3%	
2-10	92% – 3%		2-8	89%–3%		2-8	89%–3%		1-14	93%–3%	
			2-6	97%–9%		2-4	97%–6%		1-3	99%–15%	
			2-6	94%–3%		2-4	92%–3%		1-3	92%–8%	
2-10	88% – 3%		3-8	95%–3%		2-8	92%–3%		1-9	92%–4%	
2-10	88% – 3%		3-8	95%–3%		2-8	92%–3%		1-9	92%–4%	
2-10	88% – 20%			N.A.	N.A.	2-8	92%–3%		1-10	92%–14%	
2-10	88% – 3%		3-8	95%–3%		2-8	92%–3%		1-9	92%–4%	
2-15	88% – 27%		2-20	90%–7%		2-14	88%–4%		1-12	93%–14%	
2-15	93% – 17%	< 11		N.A.	N.A.	2-13	93%–3%		1-11	95%–10%	
2-12	83% – 8%	< 11	2-14	91%–3%		2-10	80%–3%	< 11	1-14	96%–17%	
2-10	92% – 6%		2-8	85%–3%		2-8	93%–3%		1-8	91%–5%	
			2-20	84%–3%		2-16	86%–3%		1-13	94%–5%	
3-10	92% – 8%	< 11	2-8	87%–3%	< 9	3-8	92%–3%	< 9	1-14	92%–4%	
2-20	98% – 3%		2-8	97%–3%		2-20	94%–3%		1-15	99%–3%	
2-14	92% – 8%	< 11	2-20	83%–3%	< 9	3-20	94%–3%	< 14	1-10	95%–3%	
2-10	88% – 8%	< 11	2-8	94%–4%	< 9	2-8	91%–3%	< 9	1-9	91%–7%	
2-20	88% – 8%		2-8	90%–3%		2-8	89%–3%		1-14	95%–3%	
2-20	97% – 4%		2-8	94%–3%		2-8	89%–3%		1-13	99%–3%	

- Note :
- #1) Unexpected behaviour can occur outside the range of specified number of lamps. The mentioned numbers are tested. In some cases the dimmers can be loaded with more lamps than is specified in this document (most dimmers can be loaded with LED lamps to 20% of specified power; LED dimmers can be loaded to specified power)
  - #2) Occupancy sensors can act like dimmers, therefore Philips recommend to use dimmable lamps in combination with it.
  - #3) Glowing means: a switched off dimmer still having the possibility that a small light output is visible. This status can occur when a low quantity of lamps is connected.
  - #4) Yellow cells indication: Sometimes flickering is observed due to low dimmer loads, best visible at deep dimming
  - #4a) Yellow cells indication: Dimming performance: LED's have much lower load (wattage) than traditional light sources. (e.g. flickering where "active loads" can reduce your problems)
  - #4b) Yellow cells indication: Dimming range, minimum dim level will be >10%, and/or maximum level will be <80% lightlevel
  - #5) Various dimmer suppliers offer "active loads" (e.g. Busch Jaeger Kompensator 6596) to optimize dimming performance in case of lamp-dimmer system issues. Using double pole switches will prevent glowing issues.
  - #7) This list is based on measurements in a lab environment with nominal voltage, a different voltage will result in a different dimming range. Therefore we indicated 3% as minimum lightlevel as labcondition.
  - #8) Dimmer manufacturers may change the technical design of the dimmer without informing LED lamp suppliers. These changes can influence the performance of LED products. Philips cannot be held responsible for inaccuracies in the compatibility lists due to technical changes in dimmers
  - #9) In general Philips dimmable LED lamps can be dimmed with any type of dimmer (type R, RL, RC or RLC).

Disclaimer: Philips will not accept claims for any damage caused by implementing the recommendations in this document.

[www.lighting.philips.com/main/products/masterled](http://www.lighting.philips.com/main/products/masterled)  
[www.lighting.philips.com/main/products/coreproledlamps](http://www.lighting.philips.com/main/products/coreproledlamps)



# Professional LED Mains Voltage range

Recommended **dimmer** compatibility list for **Mains Voltage** Lamps



## KEY

x-y	Excellent dimming with X-Y lamps, however external factors can negatively influence the deep dimming performance
x-y	Lamps are dimmable across full dimming range, but exhibit diminished flickering at a single distinct position in the range
	Unexpected performance behavior, not in line with good dimming perception
N.A.	Dimmer lamp combination not applicable
T.B.D.	Dimmer lamp combination not tested

This document is for information purposes and must be treated as recommendation. Philips attempted to provide best results, results are generated in lab conditions and might contain faults

				LED spot											
				Master LEDspot PAR Classic 9.5 - 75W PAR30S			Master LEDspot PAR Classic D 13-100W PAR38			CorePro LEDspot MV 5W-60W R50			CorePro LEDspot MV 4.3-60W R50		
Brand	Type	Type	Load	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing
Berker  INSTA	286710	[RC]	20 – 360 W-Turn	1-8	93%-12%		1-5	94%-13%		2-10	90%-20%		1-15	89%-20%	
Berker  INSTA	283010	[R]	60 – 400 W-Turn	1-8	96%-11%		1-5	96%-12%		2-10	94%-8%		1-4	94%-14%	
Bticino	L4407		60 – 250 W		N.A.	N.A.		N.A.	N.A.		N.A.	N.A.			
Busch Jaeger  ABB	2200 U-503	[R]	60 – 400 W-Turn	1-8	95%-11%		1-8	97%-57%		2-10	94%-16%	< 2	1-15	91%-12%	
Busch Jaeger  ABB	2247 U	[RL]	20 – 500 W-Turn	1-11	94%-3%		1-8	95%-3%		2-10	92%-3%		1-10	92%-16%	
Busch Jaeger  ABB	2250 U	[R]	60 – 600 W-Turn	1-13	96%-3%		1-9	96%-3%		2-10	92%-3%		2-20	96%-6%	
Busch Jaeger  ABB	6513 U-102	[RC]	40 – 420 W-Turn	1-9	93%-12%		1	93%-12%		2-10	96%-20%		1-15	94%-18%	
Busch Jaeger  ABB	6523 U	[LED]	2 – 100 VA-LED-Turn	1-11	95%-3%		1-15	96%-3%		2-10	92%-3%		1-20	90%-2%	
Busch Jaeger  ABB	6526 U	[LED]	2 – 100 VA-LED-Push (2wire)	1-11	95%-12%		1-8	93%-11%		1-16	95%-20%				
ELKO  Schneider	SBD200LED (CCTEL10501)	[LED/RC]	4 – 200W(RC) 4 – 400W(RL)	1-8	92%-18%		1-5	93%-15%		2-10	88%-20%		1-15	89%-23%	
ELKO  Schneider	SBD315RC (315 GLE)	[RC]	315W	1-7	94%-4%		1-5	94%-4%		2-10	88%-3%		1-15	89%-5%	
ELKO  Schneider	SBD420RCRL (CCTEL13011)	[RLC]	420W	1-9	96%-7%			N.A.	N.A.		N.A.	N.A.	1-15	93%-12%	
Eltako	EVD61NPN-UC		400W 3-wire Push Module	1-8	95%-7%		1-6	96%-8%		1-16	97%-12%	< 17			
Feller  Schneider	40200 (SBD200LED CCTCH10601)	[LED/RC]	4 – 200W(RC) 4 – 400W(RL)	1-8	92%-18%		1-5	93%-15%		2-10	88%-20%		1-15	89%-23%	
Feller  Schneider	40300 (SBD315)	[RLC]	300W	1-7	94%-4%		1-5	94%-4%					1-15	89%-5%	
Feller  Schneider	40420 (SBD420)	[RLC]	420W	1-9	96%-7%			N.A.	N.A.				1-15	93%-12%	
GIRA	1176-00/01	[RLC]	50 – 420W	1-9	88%-7%			N.A.	N.A.	1-16	94%-30%				
GIRA	2390 00/ 100	[LED]	7 – 100W -Push (3wire)	1-9	97%-3%		1-5	94%-4%		2-10	92%-8%		1-20	91%-12%	
Hager	EVN 011	[RC]	300VA	1-6	96%-6%		5	97%-9%		1-12	97%-14%	< 13			
Hager	EVN 012	[RC]	300W	1-6	96%-14%		5	97%-14%		1-12	96%-15%	< 13			
Hager	EVN 004	[RL]	500VA	1-11	97%-14%		8	97%-14%		1-16	97%-15%	< 3			
Jung	225 TDE	[RC]	20 – 525 W-Turn	1-11	93%-13%		1-8	92%-14%		2-10	92%-24%		1-20	89%-22%	
Jung	1271LEDDE	[LED]	3 – 100W -Push (3wire)	1-10	94%-3%		1-8	95%-3%		2-10	92%-36%		1-20	91%-34%	
Klik aan Klik uit	AWMD-250	[LED]	3 – 24W	1-3	89%-20%		1-2	92%-21%		1-5	79%-31%				
Klik aan Klik uit	ACM 300		300W 3-wire Push LED Dimmer	1-6	84%-3%		1-5	81%-3%		1-12	87%-14%				
Legrand	774161	[RL]	40 – 400 W-Turn	1-8	96%-6%		1-6	97%-7%		3-10	92%-8%	< 4		N.A.	N.A.
Legrand	78401	[RLC]	40 – 500W	5-8	93%-8%			N.A.	N.A.	1-16	95%-14%				
Legrand	67081	[RL]	40 – 400 W-Turn	1-6	96%-3%		1-5	98%-7%		3-10	96%-16%			N.A.	N.A.
Legrand	67082	[RL]	40 – 600 W-Turn	1-13	96%-3%			N.A.	N.A.		N.A.	N.A.		N.A.	N.A.
Legrand	67083	[RLC]	3 – 400W	1-2	89%-3%		1-6	92%-3%		2-16	90%-12%				
Legrand	67084	[RLC]	8-300 VA -Push LED (3wire)	1-8	94%-3%			N.A.	N.A.	2-10	88%-3%	< 5	1-15	92%-14%	
Legrand	67085 (078406)	[RLC]	8-300 VA -Push LED (3wire)	1-6	98%-3%			N.A.	N.A.	2-10	96%-3%		1-10	97%-3%	
Legrand	L4402N	[R]	60 – 500W		N.A.	N.A.	2-3	91%-15%		2-16	95%-20%				
Merten  Schneider	SBD200LED (MEG5134-0000)	[LED/RC]	4 – 200W(RC) 4-400W(RL)	1-8	92%-18%		1-5	93%-15%		2-10	88%-20%		1-15	89%-23%	
Merten  Schneider	SBD315RC (MEG5136-0000)	[RC]	315W	1-7	94%-4%		1-5	94%-4%		2-10	88%-3%		1-15	89%-5%	
Merten  Schneider	SBD420RCRL (MEG5138-0000)	[RLC]	20 – 420 VA	1-9	96%-7%			N.A.	N.A.		N.A.	N.A.	1-15	93%-12%	
MK-Electric	K1535	[R]	65 – 450 W-Turn	1-5	84%-5%		1-7	88%-10%		2-10	80%-14%		2-4	82%-19%	
MK-Electric	K1501 WHILV	[R]	60 – 500 W-Turn	1-7	84%-5%		1-8	93%-6%		2-10	86%-14%		1-20	88%-17%	
MK-Electric	K4501 WHILV	[RLC]	180W	1-9	93%-8%		1-3	92%-8%		1-9	90%-17%				
MK-Electric	K4500 WHILV	[RLC]	400W	1-11	93%-6%		1-6	91%-6%		1-16	89%-18%				
NIKO	310-0280X	[LED]	2 – 100 VA	1-2	86%-4%		1-2	94%-5%		1-4	86%-6%				
PEHA	431HAN	[RL]	6 – 120W [LED] 6 – 60W	1-3	86%-3%		1-2	91%-3%		1-5	89%-7%				
Philips	UID8670	[LED]	2 – 100 VA-LED-Push (3wire)	1-11	95%-3%		1-15	96%-3%		2-10	92%-3%				
RELCO	RPO977	[LED]	4-100W	1-2	89%-13%		1-2	99%-17%							
RELCO	RMO545	[LED]	4-100W	1-2	83%-8%		1-3	93%-9%							
Schneider	SBD315RC (SBD 315, SDD 315)	[RC]	315W	1-7	94%-4%		1-5	94%-4%		2-10	88%-3%		1-15	89%-5%	
Schneider	SBD315RC (ATD315)(CCTO11533)	[RC]	315W	1-7	94%-4%		1-5	94%-4%		2-10	88%-3%		1-15	89%-5%	
Schneider	SBD200 (WDE 002299)		4 – 400VA-Turn Universal (2wire)	1-8	92%-18%		1-5	93%-15%		2-10	88%-20%		1-15	89%-23%	
Schneider	SBD315RC (SBD 315)	[RC]	315W	1-7	94%-4%		1-5	94%-4%		2-10	88%-3%		1-15	89%-5%	
VADSBO	ED 350	[RC]	50 – 350W	1-7	82%-13%		1-5	90%-1%		1-14	88%-27%				
VADSBO	DRS 315	[RC]	50 – 315W	1-7	90%-10%		1-5	94%-11%		2-13	95%-19%	< 14			
VADSBO	DU 250	[RC]	20 – 250W	1-5	88%-15			N.A.	N.A.	1-10	85%-9%	< 11			
Varilight	HQ3W	[R]	60-400W	1-8	95%-4%		1-6	94%-5%		2-10	92%-6%		1-15	94%-13%	
Varilight	ICT401 M	[RC]	20-400W	1-8	89%-5%		1-6	93%-5%		1-16	89%-6%				
Vimar	20148	[RL]	500W	1-11	97%-3%		1-8	95%-5%		3-10	92%-8%	< 11	2-20	92%-16%	< 21
Vimar	14153	[R]		1-11	89%-3%		1-8	96%-3%		1-16	99%-6%				
Vimar	20160	[RC]		1-6	90%-3%		1-8	92%-3%		2-16	94%-11%	< 17			
Vimar	20162	[RL]	40 – 300W	1-6	96%-8%		1-5	35%-7%		2-10	88%-8%	< 11	1-10	90%-12%	< 11
Philips Dynalite	DDLE801		(100W per channel)	1-11	93%-3%		1-8	94%-3%					1-20	88%-9%	
Philips Dynalite	DDTMI02 Module		(460 W per channel)	1-9	96%-3%		1-7	93%-4%					1-20	90%-3%	

- Note :
- #1) Unexpected behaviour can occur outside the range of specified number of lamps. The mentioned numbers are tested. In some cases the dimmers can be loaded with more lamps than is specified in this document (most dimmers can be loaded with LED lamps to 20% of specified power; LED dimmers can be loaded to specified power)
  - #2) Occupancy sensors can act like dimmers, therefore Philips recommend to use dimmable lamps in combination with it.
  - #3) Glowing means: a switched off dimmer still having the possibility that a small light output is visible. This status can occur when a low quantity of lamps is connected.
  - #4) Yellow cells indication: Sometimes flickering is observed due to low dimmer loads, best visible at deep dimming
  - #4a) Yellow cells indication: Dimming performance: LED's have much lower load (wattage) than traditional light sources. (e.g. flickering where "active loads" can reduce your problems)
  - #4b) Yellow cells indication: Dimming range, minimum dim level will be >10%, and/or maximum level will be <80% lightlevel
  - #5) Various dimmer suppliers offer "active loads" (e.g. Busch Jaeger Kompensator 6596) to optimize dimming performance in case of lamp-dimmer system issues. Using double pole switches will prevent glowing issues.
  - #7) This list is based on measurements in a lab environment with nominal voltage, a different voltage will result in a different dimming range. Therefore we indicated 3% as minimum lightlevel as labcondition.
  - #8) Dimmermanufacturers may change the technical design of the dimmer without informing LED lamp suppliers. These changes can influence the performance of LED products. Philips cannot be held responsible for inaccuracies in the compatibility lists due to technical changes in dimmers
  - #9) In general Philips dimmable LED lamps can be dimmed with any type of dimmer (type R, RL, RC or RLC).

Disclaimer:  
Philips will not accept claims for any damage caused by implementing the recommendations in this document.

[www.lighting.philips.com/main/products/masterled](http://www.lighting.philips.com/main/products/masterled)  
[www.lighting.philips.com/main/products/coreproledlamps](http://www.lighting.philips.com/main/products/coreproledlamps)



# Professional LED Mains Voltage range

Recommended **dimmer** compatibility list for **Mains Voltage** Lamps



## KEY

x-y	Excellent dimming with X-Y lamps, however external factors can negatively influence the deep dimming performance
x-y	Lamps are dimmable across full dimming range, but exhibit diminished flickering at a single distinct position in the range
	Unexpected performance behavior, not in line with good dimming perception
N.A.	Dimmer lamp combination not applicable
T.B.D.	Dimmer lamp combination not tested

This document is for information purposes and must be treated as recommendation. Philips attempted to provide best results, results are generated in lab conditions and might contain faults

				LED spot											
				CorePro LEDspot MV -60W R63			CorePro LEDspot MV 4.5-60W R63			MASTER LEDbulbs clear 6W-40W DimTone			MASTER LEDbulb clear 8.5W-60W DimTone		
				NEW											
Brand	Type	Type	Load	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing
Berker  INSTA	286710	[RC]	20 – 360 W-Turn	2-15	97%-20%		1-5	79%-3%		1-3 (max 12)	87%-3%		1-3 (max 8)	98%-4%	
Berker  INSTA	283010	[R]	60 – 400 W-Turn				1-5	85%-14%		1-3 (max 13)	90%-3%		1-3 (max 9)	95%-3%	
Bticino	L4407		60 – 250 W								N.A.	N.A.		N.A.	N.A.
Busch Jaeger  ABB	2200 U-503	[R]	60 – 400 W-Turn	2-15	97%-36%	< 16	1-5	85%-6%		1-3 (max 13)	93%-3%		1-3 (max 9)	94%-5%	
Busch Jaeger  ABB	2247 U	[RL]	20 – 500 W-Turn	2-20	98%-3%		1-5	85%-3%		1-3 (max 13)	90%-3%		1-3 (max 9)	95%-3%	
Busch Jaeger  ABB	2250 U	[R]	60 – 600 W-Turn	2-20	98%-3%		1-5	85%-3%		1-3 (max 17)	92%-3%		1-3 (max 11)	95%-3%	
Busch Jaeger  ABB	6513 U-102	[RC]	40 – 420 W-Turn	2-15	98%-21%		1-2	83%-3%		1-3 (max 14)	94%-8%		1-3 (max 9)	96%-5%	
Busch Jaeger  ABB	6523 U	[LED]	2 – 100 VA-LED-Turn	2-20	95%-3%		1-5	77%-3%		1-3 (max 17)	86%-3%		1-3 (max 11)	89%-3%	
Busch Jaeger  ABB	6526 U	[LED]	2 – 100 VA-LED-Push (2wire)							1-3 (max 17)	91%-4%		1-3 (max 11)	88%-5%	
ELKO  Schneider	SBD200LED (CCTEL10501)	[LED/RC]	4 – 200W(RC) 4 – 400W(RL)	2-10	99%-26%		1-5	78%-3%		1-3 (max 6)	88%-3%		1-3 (max 4)	90%-4%	
ELKO  Schneider	SBD315RC (315 GLE )	[RC]	315W	2-10	97%-3%		1-5	77%-3%		1-3 (max 11)	93%-3%		1-3 (max 7)	92%-3%	
ELKO  Schneider	SBD420RCRL (CCTEL13011)	[RLC]	420W		N.A.	N.A.	3-5	85%-3%		1-3 (max 11)	89%-3%		1-3 (max 7)	95%-3%	
Eltako	EVD61NPN-UC		400W 3-wire Push Module												
Feller  Schneider	40200 (SBD200LED CCTCHI0601)	[LED/RC]	4 – 200W(RC) 4 – 400W(RL)	2-10	99%-26%		1-5	78%-3%		1-3 (max 6)	88%-3%		1-3 (max 4)	90%-4%	
Feller  Schneider	40300 (SBD315)	[RLC]	300W	2-10	97%-3%		1-5	77%-3%							
Feller  Schneider	40420 (SBD420)	[RLC]	420W		N.A.	N.A.	3-5	85%-3%							
GIRA	1176-00/01	[RLC]	50 – 420W							1-3 (max 14)	93%-5%		1-3 (max 9)	88%-5%	
GIRA	2390 00/ 100	[LED]	7 – 100W -Push (3wire)	2-19	95%-7%		1-5	79%-3%		1-3 (max 17)	86%-3%		1-3 (max 11)	91%-3%	
Hager	EVN 011	[RC]	300VA							1-3 (max 10)	98%-3%		1-3 (max 7)	93%-3%	
Hager	EVN 012	[RC]	300W							1-3 (max 10)	98%-3%		1-3 (max 7)	93%-3%	
Hager	EVN 004	[RL]	500VA							1-3 (max 17)	98%-3%		1-3 (max 11)	93%-3%	
Jung	225 TDE	[RC]	20 – 525 W-Turn	2-20	98%-25%			N.A.	N.A.	1-3 (max 18)	93%-3%		1-3 (max 12)	96%-5%	
Jung	1271LEDDE	[LED]	3 – 100W -Push (3wire)	2-20	96%-46%		1-5	80%-3%		1-3 (max 17)	87%-7%		1-3 (max 11)	91%-7%	
Klik aan Klik uit	AWMD-250	[LED]	3 – 24W							1-3 (max 4)	82%-4%		1-3 (max 2)	83%-5%	
Klik aan Klik uit	ACM 300		300W -3-wire Push LED Dimmer												
Legrand	774161	[RL]	40 – 400 W-Turn		N.A.	N.A.		N.A.	N.A.					N.A.	N.A.
Legrand	78401	[RLC]	40 – 500W	3-10	97%-15%					1-3 (max 17)	96%-3%		1-3 (max 11)	93%-3%	
Legrand	67081	[RL]	40 – 400 W-Turn								N.A.	N.A.		N.A.	N.A.
Legrand	67082	[RL]	40 – 600 W-Turn	3-20	97%-14%						N.A.	N.A.		N.A.	N.A.
Legrand	67083	[RLC]	3 – 400W								N.A.	N.A.	1-3 (max 9)	90%-3%	
Legrand	67084	[RLC]	8-300 VA -Push LED (3wire)	2-15	97%-3%		1-2	77%-3%		1-3 (max 10)	95%-3%		1-3 (max 7)	95%-3%	
Legrand	67085 (078406)	[RLC]	8-300 VA -Push LED (3wire)	2-11	99%-3%		1-5	93%-3%		1-3 (max 10)	88%-17%		1-3 (max 7)	95%-3%	
Legrand	L4402N	[R]	60 – 500W								N.A.	N.A.	1-3 (max 11)	83%-5%	
Merten  Schneider	SBD200LED (MEG5134-0000)	[LED/RC]	4 – 200W(RC) 4-400W(RL)	2-10	99%-26%		1-5	78%-3%		1-3 (max 6)	88%-3%		1-3 (max 4)	90%-4%	
Merten  Schneider	SBD315RC (MEG5136-0000)	[RC]	315W	2-10	97%-3%		1-5	77%-3%		1-3 (max 11)	93%-3%		1-3 (max 7)	92%-3%	
Merten  Schneider	SBD420RCRL (MEG5138-0000)	[RLC]	20 – 420 VA		N.A.	N.A.	3-5	85%-3%		1-3 (max 14)	89%-3%		1-3 (max 9)	95%-3%	
MK-Electric	K1535	[R]	65 – 450 W-Turn	2-17	87%-16%		2	62%-6%			N.A.	N.A.	1-3 (max 10)	80%-3%	
MK-Electric	K1501 WHILV	[R]	60 – 500 W-Turn	2-19	93%-16%		3-5	69%-3%		1-3 (max 17)	85%-3%		1-3 (max 11)	90%-3%	
MK-Electric	K4501 WHILV	[RLC]	180W							1-3 (max 6)	88%-3%		1-3 (max 4)	83%-3%	
MK-Electric	K4500 WHILV	[RLC]	400W							1-3 (max 13)	88%-3%		1-3 (max 9)	85%-3%	
NIKO	310-0280X	[LED]	2 – 100 VA							1-3 (max 17)	98%-4%		1-3 (max 11)	95%-5%	
PEHA	431HAN	[RL]	6 – 120W [LED] 6 – 60W							1-3 (max 10)	88%-4%		1-3 (max 7)	83%-5%	
Philips	UID8670	[LED]	2 – 100 VA-LED-Push (3wire)	2-20	95%-3%					1-3 (max 17)	86%-3%		1-3 (max 11)	89%-3%	
RELCO	RP0977	[LED]	4-100W				1-5	94%-4%							
RELCO	RM0545	[LED]	4-100W				1-5	74%-3%							
Schneider	SBD315RC (SBD 315, SDD 315)	[RC]	315W	2-10	97%-3%		1-5	77%-3%		1-3 (max 11)	93%-3%		1-3 (max 7)	92%-3%	
Schneider	SBD315RC (ATD315/CCTO11533)	[RC]	315W	2-10	97%-3%		1-5	77%-3%		1-3 (max 11)	93%-3%		1-3 (max 7)	92%-3%	
Schneider	SBD200 (WDE 002299)		4 – 400VA-Turn Universal (2wire)	2-10	99%-26%		1-5	78%-3%		1-3 (max 13)	88%-3%		1-3 (max 9)	90%-4%	
Schneider	SBD315RC (SBD 315)	[RC]	315W	2-10	97%-3%		1-5	77%-3%		1-3 (max 11)	93%-3%		1-3 (max 7)	90%-4%	
VADSBO	ED 350	[RC]	50 – 350W							1-3 (max 12)	91%-5%		1-3 (max 8)	85%-5%	
VADSBO	DRS 315	[RC]	50 – 315W								N.A.	N.A.	1-3 (max 7)	93%-3%	<2
VADSBO	DU 250	[RC]	20 – 250W							1-3 (max 8)	88%-3%	<4	1-3 (max 5)	83%-3%	<4
Varilight	HQ3W	[R]	60-400W	2-15	99%-4%		2	84%-3%		1-3 (max 13)	92%-3%		1-3 (max 9)	99%-3%	
Varilight	ICT401 M	[RC]	20-400W												
Vimar	20148	[RL]	500W	2-19	96%-13%	< 4	1-2	84%-3%			N.A.	N.A.		N.A.	N.A.
Vimar	14153	[R]								1-3	98%-3%		1-3	98%-3%	
Vimar	20160	[RC]									N.A.	N.A.	1-3	93%-3%	<4
Vimar	20162	[RL]	40 – 300W	2-11	97%-9%	< 5	1-3	77%-3%			N.A.	N.A.		N.A.	N.A.
Philips Dynalite	DDLE801		(100W per channel)	2-19	99%-3%		1-5	81%-3%		1-3	95%-3%		1-3	93%-3%	
Philips Dynalite	DDTM102 Module		(460 W per channel)	2-17	97%-3%		1-5	79%-3%		1-3	98%-3%		1-3	90%-3%	

- Note :
- #1) Unexpected behaviour can occur outside the range of specified number of lamps. The mentioned numbers are tested. In some cases the dimmers can be loaded with more lamps than is specified in this document (most dimmers can be loaded with LED lamps to 20% of specified power; LED dimmers can be loaded to specified power)
  - #2) Occupancy sensors can act like dimmers, therefore Philips recommend to use dimmable lamps in combination with it.
  - #3) Glowing means: a switched off dimmer still having the possibility that a small light output is visible. This status can occur when a low quantity of lamps is connected.
  - #4) Yellow cells indication: Sometimes flickering is observed due to low dimmer loads, best visible at deep dimming
  - #4a) Yellow cells indication: Dimming performance: LED's have much lower load (wattage) than traditional light sources. (e.g. flickering where "active loads" can reduce your problems)
  - #4b) Yellow cells indication: Dimming range, minimum dim level will be >10%, and/or maximum level will be <80% lightlevel
  - #5) Various dimmer suppliers offer "active loads" (e.g. Busch Jaeger Kompensator 6596) to optimize dimming performance in case of lamp-dimmer system issues. Using double pole switches will prevent glowing issues.
  - #7) This list is based on measurements in a lab environment with nominal voltage, a different voltage will result in a different dimming range. Therefore we indicated 3% as minimum lightlevel as labcondition.
  - #8) Dimmer manufacturers may change the technical design of the dimmer without informing LED lamp suppliers. These changes can influence the performance of LED products. Philips cannot be held responsible for inaccuracies in the compatibility lists due to technical changes in dimmers
  - #9) In general Philips dimmable LED lamps can be dimmed with any type of dimmer (type R, RL, RC or RLC).

Disclaimer:  
Philips will not accept claims for any damage caused by implementing the recommendations in this document.

[www.lighting.philips.com/main/products/masterled](http://www.lighting.philips.com/main/products/masterled)  
[www.lighting.philips.com/main/products/coreproledlamps](http://www.lighting.philips.com/main/products/coreproledlamps)





# Professional LED Mains Voltage range

Recommended **dimmer** compatibility list for **Mains Voltage** Lamps



## KEY

x-y	Excellent dimming with X-Y lamps, however external factors can negatively influence the deep dimming performance
x-y	Lamps are dimmable across full dimming range, but exhibit diminished flickering at a single distinct position in the range
	Unexpected performance behavior, not in line with good dimming perception
N.A.	Dimmer lamp combination not applicable
T.B.D.	Dimmer lamp combination not tested

This document is for information purposes and must be treated as recommendation. Philips attempted to provide best results, results are generated in lab conditions and might contain faults

Brand	Type	Type	Load	LED bulb											
				Master LEDbulb 6-40W frosted DimTone			Master ledbulb 8.5-60W frosted DimTone			MASTER LEDbulbs 11W-75W frosted CR180 DimTone			MASTER LEDbulbs 15W-100W frosted CR180 DimTone		
				Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing
Berker  INSTA	286710	[RC]	20 – 360 W-Turn	1-3	98%-8%		1-3	94%-7%		1-3	87%-10%		1-3	89%-9%	
Berker  INSTA	283010	[R]	60 – 400 W-Turn	1-3	98%-7%		1-3	96%-5%		1-3	93%-10%		1-3	91%-9%	
Bticino	L4407		60 – 250 W		N.A.	N.A.		N.A.	N.A.		N.A.	N.A.		N.A.	N.A.
Busch Jaeger  ABB	2200 U-503	[R]	60 – 400 W-Turn	1-3	97%-19%		1-3	94%-9%		1-3	93%-17%		1-3	91%-22%	
Busch Jaeger  ABB	2247 U	[RL]	20 – 500 W-Turn	1-3	99%-3%		1-3	95%-3%		1-3	93%-3%		1-3	93%-3%	
Busch Jaeger  ABB	2250 U	[R]	60 – 600 W-Turn	1-3	97%-3%		1-3	97%-3%		1-3	93%-3%		1-3	93%-3%	
Busch Jaeger  ABB	6513 U-102	[RC]	40 – 420 W-Turn	1-3	98%-7%		1-3	95%-6%		1-3	93%-10%		1-3	91%-10%	
Busch Jaeger  ABB	6523 U	[LED]	2 – 100 VA-LED-Turn	1-3	83%-3%		1-3	89%-3%		1-3	87%-3%		1-3	87%-3%	
Busch Jaeger  ABB	6526 U	[LED]	2 – 100 VA-LED-Push (2wire)	1-3	88%-10%		1-3	97%-6%		1-3	98%-10%		1-3	98%-11%	
ELKO  Schneider	SBD200LED (CCTEL10501)	[LED/RC]	4 – 200W(RC) 4 – 400W(RL)		N.A.	N.A.	2-3	93%-8%		1-3	90%-10%		1-3	89%-10%	
ELKO  Schneider	SBD315RC (315 GLE )	[RC]	315W	1-3	98%-3%		1-3	94%-2%		1-3	87%-3%		1-3	84%-3%	
ELKO  Schneider	SBD420RCRL (CCTEL13011)	[RLC]	420W		N.A.	N.A.		N.A.	N.A.	1-3	93%-7%		1-3	91%-4%	
Eltako	EVD6INPN-UC		400W 3-wire Push Module	1-3	98%-6%		1-3	99%-3%		1-3	97%-5%		1-3	97%-5%	
Feller  Schneider	40200 (SBD200LED CCTCH10601)	[LED/RC]	4 – 200W(RC) 4 – 400W(RL)		N.A.	N.A.	2-3	93%-8%		1-3	90%-10%		1-3	89%-10%	
Feller  Schneider	40300 (SBD315)	[RLC]	300W	1-3	98%-3%		1-3	94%-2%							
Feller  Schneider	40420 (SBD420)	[RLC]	420W		N.A.	N.A.		N.A.	N.A.						
GIRA	1176-00/01	[RLC]	50 – 420W	1-3	99%-19%			N.A.	N.A.	1-3	93%-24%		1-3	93%-24%	
GIRA	2390 00/ 100	[LED]	7 – 100W -Push (3wire)	1-3	97%-31%		1-3	95%-17%		1-3	90%-3%		1-3	87%-4%	
Hager	EVN 011	[RC]	300VA	1-3	98%-8%		1-3	99%-7%		1-3	97%-6%		1-3	97%-6%	
Hager	EVN 012	[RC]	300W	1-3	98%-12%		1-3	99%-6%		1-3	97%-6%		1-3	97%-6%	
Hager	EVN 004	[RL]	500VA	1-3	99%-13%		1-3	99%-6%		1-3	97%-6%		1-3	97%-6%	
Jung	225 TDE	[RC]	20 – 525 W-Turn	1-3	98%-9%		1-3	96%-8%		1-3	90%-10%		1-3	89%-9%	
Jung	1271LEDDE	[LED]	3 – 100W -Push (3wire)	1-3	97%-4%					1-3	87%-20%		1-3	89%-29%	
Klik aan Klik uit	AWMD-250	[LED]	3 – 24W		N.A.	N.A.	1-3	89%-8%			N.A.	N.A.		N.A.	N.A.
Klik aan Klik uit	ACM 300		300W 3-wire Push LED Dimmer	2-3	96%-8%		1-3	96%-4%			N.A.	N.A.		N.A.	N.A.
Legrand	774161	[RL]	40 – 400 W-Turn		N.A.	N.A.	2-3	96%-5%			N.A.	N.A.		N.A.	N.A.
Legrand	78401	[RLC]	40 – 500W	1-3	98%-7%		1-3	97%-4%		1-3	94%-7%		1-3	94%-7%	
Legrand	67081	[RL]	40 – 400 W-Turn		N.A.	N.A.	2-3	97%-5%			N.A.	N.A.		N.A.	N.A.
Legrand	67082	[RL]	40 – 600 W-Turn	3	98%-5%		2-3	97%-5%			N.A.	N.A.		N.A.	N.A.
Legrand	67083	[RLC]	3 – 400W		N.A.	N.A.	1-2	89%-3%			N.A.	N.A.		N.A.	N.A.
Legrand	67084	[RLC]	8-300 VA -Push LED (3wire)	2-3	99%-6%		1-3	98%-6%		1-3	93%-7%			N.A.	N.A.
Legrand	67085 (078406)	[RLC]	8-300 VA -Push LED (3wire)	1-3	99%-3%		1-3	96%-3%		1-3	93%-3%		1-3	91%-3%	
Legrand	L4402N	[R]	60 – 500W	2-3	97%-13%		2-3	89%-6%		1-3	86%-17%		1-3	86%-18%	
Merten  Schneider	SBD200LED (MEG5134-0000)	[LED/RC]	4 – 200W(RC) 4-400W(RL)		N.A.	N.A.	2-3	93%-8%		1-3	90%-10%		1-3	89%-10%	
Merten  Schneider	SBD315RC (MEG5136-0000)	[RC]	315W	1-3	98%-3%		1-3	94%-2%		1-3	87%-3%		1-3	84%-3%	
Merten  Schneider	SBD420RCRL (MEG5138-0000)	[RLC]	20 – 420 VA		N.A.	N.A.		N.A.	N.A.	1-3	93%-7%		1-3	91%-4%	
MK-Electric	K1535	[R]	65 – 450 W-Turn	1-3	99%-6%		1-3	84%-5%		1-3	80%-7%		1-3	82%-9%	
MK-Electric	K1501 WHILV	[R]	60 – 500 W-Turn	1-3	97%-6%		1-3	90%-5%		1-3	83%-7%			N.A.	N.A.
MK-Electric	K4501 WHILV	[RLC]	180W	1-3	96%-7%		1-3	90%-3%		1-3	85%-8%		1-3	85%-8%	
MK-Electric	K4500 WHILV	[RLC]	400W	1-3	95%-7%		1-3	90%-3%		1-3	90%-9%		1-3	90%-9%	
NIKO	310-0280X	[LED]	2 – 100 VA	1-3	98%-3%		1-2	99%-3%							
PEHA	431HAN	[RL]	6 – 120W [LED] 6 – 60W	1-3	98%-21%		1-3	92%-3%		1-3	87%-3%		1-3	87%-3%	
Philips	UID8670	[LED]	2 – 100 VA-LED-Push (3wire)	1-3	83%-3%		1-3	89%-3%		1-3	87%-3%		1-3	87%-3%	
RELCO	RP0977	[LED]	4-100W	1-3	96%-4%		1-2	99%-9%							
RELCO	RMO545	[LED]	4-100W	1-3	98%-8%		1-2	95%-4%							
Schneider	SBD315RC (SBD 315, SDD 315)	[RC]	315W	1-3	98%-3%		1-3	94%-2%		1-3	87%-3%		1-3	84%-3%	
Schneider	SBD315RC (ATD315/CCTO11533)	[RC]	315W	1-3	98%-3%		1-3	94%-2%		1-3	87%-3%		1-3	84%-3%	
Schneider	SBD200 (WDE 002299)		4 – 400VA-Turn Universal (2wire)		N.A.	N.A.	2-3	93%-8%		1-3	90%-10%		1-3	89%-10%	
Schneider	SBD315RC (SBD 315)	[RC]	315W	1-3	98%-3%		1-3	94%-2%		1-3	87%-3%		1-3	84%-3%	
VADSBO	ED 350	[RC]	50 – 350W	1-3	99%-25%		1-3	94%-8%		1-3	84%-23%		1-3	84%-23%	
VADSBO	DRS 315	[RC]	50 – 315W		N.A.	N.A.		N.A.	N.A.	1-3	96%-9%		1-3	96%-9%	
VADSBO	DU 250	[RC]	20 – 250W	1-3	96%-6%		1-3	90%-3%		1-3	87%-3%		1-3	87%-3%	
Varilight	HQ3W	[R]	60-400W	1-3	96%-4%		1-3	96%-3%		1-3	90%-3%		1-3	91%-4%	
Varilight	ICT401 M	[RC]	20-400W	1-3	97%-3%		1-3	88%-2%		1-3	89%-3%		1-3	89%-3%	
Vimar	20148	[RL]	500W	1-3	97%-5%	<3	1-3	96%-4%	<2	1-3	93%-7%		1-3	91%-7%	
Vimar	14153	[R]		2-3	98%-3%		1-3	95%-6%		1-3	98%-3%		1-3	98%-3%	
Vimar	20160	[RC]		2-3	95%-3%	<2	1-3	96%-3%	<2	1-3	92%-4%		1-3	92%-4%	
Vimar	20162	[RL]	40 – 300W	1-3	98%-7%	<3	1-3	95%-9%	<2	1-3	90%-7%		1-3	87%-4%	
Philips Dynalite	DDLE801		(100W per channel)	1-3	96%-3%		1-3	93%-3%		1-3	90%-3%		1-3	89%-4%	
Philips Dynalite	DDTMI02 Module		(460 W per channel)	1-3	98%-3%		1-3	95%-3%		1-3	90%-3%		1-3	89%-3%	

- Note :
- #1) Unexpected behaviour can occur outside the range of specified number of lamps. The mentioned numbers are tested. In some cases the dimmers can be loaded with more lamps than is specified in this document (most dimmers can be loaded with LED lamps to 20% of specified power; LED dimmers can be loaded to specified power)
  - #2) Occupancy sensors can act like dimmers, therefore Philips recommend to use dimmable lamps in combination with it.
  - #3) Glowing means: a switched off dimmer still having the possibility that a small light output is visible. This status can occur when a low quantity of lamps is connected.
  - #4) Yellow cells indication: Sometimes flickering is observed due to low dimmer loads, best visible at deep dimming
  - #4a) Yellow cells indication: Dimming performance: LED's have much lower load (wattage) than traditional lightsources. (e.g. flickering where "active loads" can reduce your problems)
  - #4b) Yellow cells indication: Dimming range, minimum dim level will be >10%, and/or maximum level will be <80% lightlevel
  - #5) Various dimmer suppliers offer "active loads" (e.g. Busch Jaeger Kompensator 6596) to optimize dimming performance in case of lamp-dimmer system issues. Using double pole switches will prevent glowing issues.
  - #7) This list is based on measurements in a lab environment with nominal voltage, a different voltage will result in a different dimming range. Therefore we indicated 3% as minimum lightlevel as labcondition.
  - #8) Dimmermanufacturers may change the technical design of the dimmer without informing LED lamp suppliers. These changes can influence the performance of LED products. Philips cannot be held responsible for inaccuracies in the compatibility lists due to technical changes in dimmers
  - #9) In general Philips dimmable LED lamps can be dimmed with any type of dimmer (type R, RL, RC or RLC).

Disclaimer:  
Philips will not accept claims for any damage caused by implementing the recommendations in this document.

[www.lighting.philips.com/main/products/masterled](http://www.lighting.philips.com/main/products/masterled)  
[www.lighting.philips.com/main/products/coreproledlamps](http://www.lighting.philips.com/main/products/coreproledlamps)



# Professional LED Mains Voltage range



Recommended **dimmer** compatibility list for **Mains Voltage** Lamps

## KEY

x-y	Excellent dimming with X-Y lamps, however external factors can negatively influence the deep dimming performance
x-y	Lamps are dimmable across full dimming range, but exhibit diminished flickering at a single distinct position in the range
	Unexpected performance behavior, not in line with good dimming perception
N.A.	Dimmer lamp combination not applicable
T.B.D.	Dimmer lamp combination not tested

This document is for information purposes and must be treated as recommendation. Philips attempted to provide best results, results are generated in lab conditions and might contain faults

				LED bulb											
				MASTER LEDbulbs 12W-75W frosted CR190 DimTone			MASTER LEDbulbs 15.5W-100W frosted CR190 DimTone			CorePro LEDbulb 6W-40W			CorePro LEDbulb 8.5W-60W		
				NEW			NEW								
Brand	Type	Type	Load	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing
Berker  INSTA	286710	[RC]	20 – 360 W-Turn	1-3	90% – 8%		1-3	96% – 9%		1-3	94%-3%		1-3	95%-3%	
Berker  INSTA	283010	[R]	60 – 400 W-Turn	1-3	92% – 6%		1-3	96% – 9%		1-3	96%-3%		1-3	92%-11%	
Bticino	L4407		60 – 250 W								N.A.	N.A.		N.A.	N.A.
Busch Jaeger  ABB	2200 U-503	[R]	60 – 400 W-Turn	1-3	93% – 10%		1-3	97% – 13%		1-3	98%-9%		1-3	94%-15%	
Busch Jaeger  ABB	2247 U	[RL]	20 – 500 W-Turn	1-3	93% – 3%		1-3	97% – 3%			N.A.	N.A.	1-3	95%-3%	
Busch Jaeger  ABB	2250 U	[R]	60 – 600 W-Turn	1-3	94% – 3%		1-3	99% – 3%		1-3	99%-3%		1-3	92%-3%	
Busch Jaeger  ABB	6513 U-102	[RC]	40 – 420 W-Turn	1-3	93% – 8%		1-3	95% – 9%			98%-5%			92%-4%	
Busch Jaeger  ABB	6523 U	[LED]	2 – 100 VA-LED-Turn	1-3	89% – 3%		1-3	92% – 3%		1-3	94%-3%		1-3	94%-3%	
Busch Jaeger  ABB	6526 U	[LED]	2 – 100 VA-LED-Push (2wire)							1-3	91%-13%		1-3	92%-19%	
ELKO   Schneider	SBD200LED (CCTEL10501)	[LED/RC]	4 – 200W(RC) 4 – 400W(RL)	1-3	88% – 9%		1-3	91% – 9%		3	91%-3%		1-3	91%-7%	
ELKO   Schneider	SBD315RC (315 GLE )	[RC]	315W	1-3	88% – 3%		1-3	89% – 3%		1-3	93%-3%		1-3	98%-3%	
ELKO   Schneider	SBD420RCRL (CCTEL13011)	[RLC]	420W	1-3	93% – 3%		1-3	92% – 5%		1-3	91%-3%		1-3	93%-3%	
Eltako	EVD6INPN-UC		400W 3-wire Push Module												
Feller   Schneider	40200 (SBD200LED CCTCH10601)	[LED/RC]	4 – 200W(RC) 4 – 400W(RL)	1-3	88% – 9%		1-3	91% – 9%		3	91%-3%		1-3	91%-7%	
Feller   Schneider	40300 (SBD315)	[RLC]	300W	1-3	88% – 3%		1-3	89% – 3%							
Feller   Schneider	40420 (SBD420)	[RLC]	420W	1-3	93% – 3%		1-3	92% – 5%							
GIRA	1176-00/01	[RLC]	50 – 420W							1-3	93%-15%		1-3	93%-13%	
GIRA	2390 00/ 100	[LED]	7 – 100W -Push (3wire)	1-3	89% – 3%		1-3	87% – 5%		1-3	94%-3%		1-3	99%-3%	
Hager	EVN 011	[RC]	300VA							1-3	97%-3%		1-3	97%-3%	
Hager	EVN 012	[RC]	300W							1-3	97%-3%		1-3	97%-3%	
Hager	EVN 004	[RL]	500VA							1-3	97%-3%		1-3	97%-3%	
Jung	225 TDE	[RC]	20 – 525 W-Turn	1-3	93% – 9%		1-3	95% – 9%		1-3	92%-8%		1-3	93%-7%	
Jung	1271LEDDE	[LED]	3 – 100W -Push (3wire)	1-3	89% – 3%		1-3	90% – 5%		1-3	95%-3%		1-3	93%-3%	
Klik aan Klik uit	AWMD-250	[LED]	3 – 24W							1-3	84%-12%		1-3	87%-20%	
Klik aan Klik uit	ACM 300		300W 3-wire Push LED Dimmer												
Legrand	774161	[RL]	40 – 400 W-Turn	1-3	94% – 4%		1-3	86% – 8%			N.A.	N.A.		N.A.	N.A.
Legrand	78401	[RLC]	40 – 500W							1-3	93%-3%		1-3	93%-3%	
Legrand	67081	[RL]	40 – 400 W-Turn								N.A.	N.A.		N.A.	N.A.
Legrand	67082	[RL]	40 – 600 W-Turn								N.A.	N.A.		N.A.	N.A.
Legrand	67083	[RLC]	3 – 400W								N.A.	N.A.		N.A.	N.A.
Legrand	67084	[RLC]	8-300 VA -Push LED (3wire)	1-3	93% – 3%		1-3	90% – 4%			98%-3%			92%-3%	
Legrand	67085 (078406)	[RLC]	8-300 VA -Push LED (3wire)	1-3	97% – 3%		1-3	98% – 3%			96%-3%			97%-3%	
Legrand	L4402N	[R]	60 – 500W								N.A.	N.A.	2-3	87%-11%	
Merten   Schneider	SBD200LED (MEG5134-0000)	[LED/RC]	4 – 200W(RC) 4-400W(RL)	1-3	88% – 9%		1-3	91% – 9%		3	91%-3%		1-3	91%-7%	
Merten   Schneider	SBD315RC (MEG5136-0000)	[RC]	315W	1-3	88% – 3%		1-3	89% – 3%		1-3	93%-3%		1-3	98%-3%	
Merten   Schneider	SBD420RCRL (MEG5138-0000)	[RLC]	20 – 420 VA	1-3	93% – 3%		1-3	92% – 5%		1-3	91%-3%		1-3	93%-3%	
MK-Electric	K1535	[R]	65 – 450 W-Turn	1-3	80% – 6%		1-3	82% – 8%		1-3	82%-3%		1-3	84%-6%	
MK-Electric	K1501 WHILV	[R]	60 – 500 W-Turn	1-3	84% – 3%		1-3	88% – 7%		1-3	89%-3%		1-3	92%-3%	
MK-Electric	K4501 WHILV	[RLC]	180W							1-3	87%-3%		1-3	88%-3%	
MK-Electric	K4500 WHILV	[RLC]	400W							1-3	87%-3%		1-3	87%-3%	
NIKO	310-0280X	[LED]	2 – 100 VA							1-3	96%-4%		1-3	96%-5%	
PEHA	431HAN	[RL]	6 – 120W [LED] 6 – 60W							1-3	85%-12%		1-3	89%-27%	
Philips	UID8670	[LED]	2 – 100 VA-LED-Push (3wire)							1-3	94%-3%		1-3	94%-3%	
RELCO	RP0977	[LED]	4-100W	1-3	97% – 3%		1-3	94% – 12%							
RELCO	RM0545	[LED]	4-100W	1-3	86% – 3%		1-3	84% – 6%							
Schneider	SBD315RC (SBD 315, SDD 315)	[RC]	315W	1-3	88% – 3%		1-3	89% – 3%		1-3	93%-3%		1-3	98%-3%	
Schneider	SBD315RC (ATD315/CCTO11533)	[RC]	315W	1-3	88% – 3%		1-3	89% – 3%		1-3	93%-3%		1-3	98%-3%	
Schneider	SBD200 (WDE 002299)		4 – 400VA-Turn Universal (2wire)	1-3	88% – 9%		1-3	91% – 9%		3	91%-3%		1-3	91%-7%	
Schneider	SBD315RC (SBD 315)	[RC]	315W	1-3	88% – 3%		1-3	89% – 3%		1-3	93%-3%		1-3	98%-3%	
VADSBO	ED 350	[RC]	50 – 350W							1-3	89%-16%		1-3	85%-11%	
VADSBO	DRS 315	[RC]	50 – 315W							1-3	92%-3%		1-3	92%-3%	
VADSBO	DU 250	[RC]	20 – 250W							1-3	87%-3%		1-3	83%-3%	
Varilight	HQ3W	[R]	60-400W	1-3	93% – 3%		1-3	96% – 5%		1-3	95%-3%		1-3	95%-3%	
Varilight	ICT401 M	[RC]	20-400W												
Vimar	20148	[RL]	500W	1-3	92% – 3%		1-3	96% – 7%	<4		N.A.	N.A.	1-3	94%-3%	
Vimar	14153	[R]								1-3	99%-3%		1-3	99%-3%	
Vimar	20160	[RC]									N.A.	N.A.	1-3	92%-3%	
Vimar	20162	[RL]	40 – 300W	1-3	88% – 3%		1-3	91% – 5%	<4	1-3	95%-5%		1-3	88%-3%	
Philips Dynalite	DDLE801		(100W per channel)	1-3	86% – 3%		1-3	91% – 4%	<4	1-3	92%-3%		1-3	95%-3%	
Philips Dynalite	DDTMI02 Module		(460 W per channel)	1-3	87% – 3%		1-3	92% – 3%	<4	1-3	93%-3%		1-3	93%-3%	

- Note :
- #1) Unexpected behaviour can occur outside the range of specified number of lamps. The mentioned numbers are tested. In some cases the dimmers can be loaded with more lamps than is specified in this document (most dimmers can be loaded with LED lamps to 20% of specified power; LED dimmers can be loaded to specified power)
  - #2) Occupancy sensors can act like dimmers, therefore Philips recommend to use dimmable lamps in combination with it.
  - #3) Glowing means: a switched off dimmer still having the possibility that a small light output is visible. This status can occur when a low quantity of lamps is connected.
  - #4) Yellow cells indication: Sometimes flickering is observed due to low dimmer loads, best visible at deep dimming
  - #4a) Yellow cells indication: Dimming performance: LED's have much lower load (wattage) than traditional light sources. (e.g. flickering where "active loads" can reduce your problems)
  - #4b) Yellow cells indication: Dimming range, minimum dim level will be >10%, and/or maximum level will be <80% light level
  - #5) Various dimmer suppliers offer "active loads" (e.g. Busch Jaeger Kompensator 6596) to optimize dimming performance in case of lamp-dimmer system issues. Using double pole switches will prevent glowing issues.
  - #7) This list is based on measurements in a lab environment with nominal voltage, a different voltage will result in a different dimming range. Therefore we indicated 3% as minimum light level as lab condition.
  - #8) Dimmer manufacturers may change the technical design of the dimmer without informing LED lamp suppliers. These changes can influence the performance of LED products. Philips cannot be held responsible for inaccuracies in the compatibility lists due to technical changes in dimmers
  - #9) In general Philips dimmable LED lamps can be dimmed with any type of dimmer (type R, RL, RC or RLC).

Disclaimer:  
Philips will not accept claims for any damage caused by implementing the recommendations in this document.

[www.lighting.philips.com/main/products/masterled](http://www.lighting.philips.com/main/products/masterled)  
[www.lighting.philips.com/main/products/coreproledlamps](http://www.lighting.philips.com/main/products/coreproledlamps)





# Professional LED Mains Voltage range

Recommended **dimmer** compatibility list for **Mains Voltage** Lamps



**KEY**

x-y	Excellent dimming with X-Y lamps, however external factors can negatively influence the deep dimming performance
x-y	Lamps are dimmable across full dimming range, but exhibit diminished flickering at a single distinct position in the range
	Unexpected performance behavior, not in line with good dimming perception
N.A.	Dimmer lamp combination not applicable
T.B.D.	Dimmer lamp combination not tested

*This document is for information purposes and must be treated as recommendation. Philips attempted to provide best results, results are generated in lab conditions and might contain faults*

				LED spot								
				CorePro LEDbulbs 11.5W-75W			CorePro LEDbulbs 13.5 - 100W A60			CorePro LEDbulbs 16W-100W		
				NEW								
Brand	Type	Type	Load	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing
Berker  INSTA	286710	[RC]	20 – 360 W-Turn	1-3	90% – 10%		1-3	94% – 9%		1-3	91%–9%	
Berker  INSTA	283010	[R]	60 – 400 W-Turn	1-3	94% – 12%		1-3	98% – 10%			N.A.	N.A.
Bticino	L4407		60 – 250 W		N.A.	N.A.					N.A.	N.A.
Busch Jaeger  ABB	2200 U-503	[R]	60 – 400 W-Turn	1-3	92% – 24%		1-3	98% – 15%		1-3	94%–25%	
Busch Jaeger  ABB	2247 U	[RL]	20 – 500 W-Turn	1-3	94% – 3%		1-3	96% – 3%		1-3	94%–3%	
Busch Jaeger  ABB	2250 U	[R]	60 – 600 W-Turn	1-3	96% – 3%		1-3	98% – 3%		1-3	94%–3%	
Busch Jaeger  ABB	6513 U-102	[RC]	40 – 420 W-Turn	1-3	92% – 10%		1-3	98% – 8%		1-3	93%–9%	
Busch Jaeger  ABB	6523 U	[LED]	2 – 100 VA-LED-Turn	1-3	82% – 3%		1-3	97% – 5%		1-3	90%–3%	
Busch Jaeger  ABB	6526 U	[LED]	2 – 100 VA-LED-Push (2wire)	1-3	88% – 23%					1-3	91%–25%	
ELKO  Schneider	SBD200LED (CCTEL10501)	[LED/RC]	4 – 200W(RC) 4 – 400W(RL)	1-3	88% – 13%		1-3	96% – 9%		1-3	90%–13%	
ELKO  Schneider	SBD315RC (315 GLE )	[RC]	315W	1-3	88% – 3%		1-3	97% – 3%		1-3	90%–3%	
ELKO  Schneider	SBD420RCRL (CCTEL13011)	[RLC]	420W	1-3	92% – 3%		1-3	99% – 4%		1-3	94%–3%	
Eltako	EVD61NPN-UC		400W 3-wire Push Module									
Feller  Schneider	40200 (SBD200LED CCTCHI0601)	[LED/RC]	4 – 200W(RC) 4 – 400W(RL)	1-3	88% – 13%		1-3	96% – 9%		1-3	90%–13%	
Feller  Schneider	40300 (SBD315)	[RLC]	300W				1-3	97% – 3%				
Feller  Schneider	40420 (SBD420)	[RLC]	420W				1-3	99% – 4%				
GIRA	1176-00/01	[RLC]	50 – 420W	1-3	92% – 20%					1-3	93%–19%	
GIRA	2390 00/ 100	[LED]	7 – 100W -Push (3wire)	1-3	90% – 3%		1-3	97% – 5%		1-3	91%–3%	
Hager	EVN 011	[RC]	300VA	1-3	97% – 3%					1-3	96%–4%	
Hager	EVN 012	[RC]	300W	1-3	95% – 3%					1-3	95%–4%	
Hager	EVN 004	[RL]	500VA	1-3	97% – 5%					1-3	98%–4%	
Jung	225 TDE	[RC]	20 – 525 W-Turn	1-3	90% – 10%		1-3	98% – 9%		1-3	91%–11%	
Jung	1271LEDDE	[LED]	3 – 100W -Push (3wire)	1-3	90% – 28%		1-3	98% – 4%		1-3	91%–26%	
Klik aan Klik uit	AWMD-250	[LED]	3 – 24W	1-3	83% – 25%					1-3	85%–23%	
Klik aan Klik uit	ACM 300		300W 3-wire Push LED Dimmer									
Legrand	774161	[RL]	40 – 400 W-Turn		N.A.	N.A.	1-3	98% – 8%			N.A.	N.A.
Legrand	78401	[RLC]	40 – 500W	1-3	92% – 5%					1-3	94%–5%	
Legrand	67081	[RL]	40 – 400 W-Turn		N.A.	N.A.					N.A.	N.A.
Legrand	67082	[RL]	40 – 600 W-Turn		N.A.	N.A.					N.A.	N.A.
Legrand	67083	[RLC]	3 – 400W		N.A.	N.A.					N.A.	N.A.
Legrand	67084	[RLC]	8-300 VA -Push LED (3wire)	1-3	92% – 5%		1-3	96% – 3%		1-3	92%–5%	
Legrand	67085 (078406)	[RLC]	8-300 VA -Push LED (3wire)	1-3	94% – 3%		1-3	99% – 3%		1-3	94%–3%	
Legrand	L4402N	[R]	60 – 500W	1-3	85% – 17%					1-3	85%–16%	
Merten  Schneider	SBD200LED (MEG5134-0000)	[LED/RC]	4 – 200W(RC) 4-400W(RL)	1-3	88% – 13%		1-3	96% – 9%		1-3	90%–13%	
Merten  Schneider	SBD315RC (MEG5136-0000)	[RC]	315W	1-3	88% – 3%		1-3	97% – 3%		1-3	90%–3%	
Merten  Schneider	SBD420RCRL (MEG5138-0000)	[RLC]	20 – 420 VA	1-3	92% – 3%		1-3	99% – 4%		1-3	94%–3%	
MK-Electric	K1535	[R]	65 – 450 W-Turn	1-3	82% – 10%		1-3	88% – 9%		1-3	83%–9%	
MK-Electric	K1501 WHILV	[R]	60 – 500 W-Turn	1-3	78% – 8%		1-3	93% – 6%		1-3	88%–8%	
MK-Electric	K4501 WHILV	[RLC]	180W	1-3	78% – 8%					1-3	88%–8%	
MK-Electric	K4500 WHILV	[RLC]	400W	1-3	78% – 8%					1-3	88%–8%	
NIKO	310-0280X	[LED]	2 – 100 VA	1-3	95% – 13%					1-3	95%–13%	
PEHA	43IHAN	[RL]	6 – 120W [LED] 6 – 60W	1-3	88% – 28%					1-3	88%–28%	
Philips	UID8670	[LED]	2 – 100 VA-LED-Push (3wire)	1-3	82% – 3%					1-3	90%–3%	
RELCO	RP0977	[LED]	4-100W				1-3	98% – 12%				
RELCO	RM0545	[LED]	4-100W				1-3	94% – 6%				
Schneider	SBD315RC (SBD 315, SDD 315)	[RC]	315W	1-3	88% – 3%		1-3	97% – 3%		1-3	90%–3%	
Schneider	SBD315RC (ATD315/CCTO11533)	[RC]	315W	1-3	88% – 3%		1-3	97% – 3%		1-3	90%–3%	
Schneider	SBD200 (WDE 002299)		4 – 400VA-Turn Universal (2wire)	1-3	88% – 13%		1-3	96% – 9%		1-3	90%–13%	
Schneider	SBD315RC (SBD 315)	[RC]	315W	1-3	88% – 3%		1-3	97% – 3%		1-3	90%–3%	
VADSBO	ED 350	[RC]	50 – 350W	1-3	85% – 17%					1-3	83%–15%	
VADSBO	DRS 315	[RC]	50 – 315W	1-3	90% – 7%					1-3	91%–6%	
VADSBO	DU 250	[RC]	20 – 250W	1-3	80% – 3%					1-3	80%–3%	
Varilight	HQ3W	[R]	60-400W	1-3	94% – 3%		1-3	94% – 4%		1-3	93%–3%	
Varilight	ICT401 M	[RC]	20-400W									
Vimar	20148	[RL]	500W	1-3	94% – 7%					1-3	94%–6%	
Vimar	14153	[R]		1-3	97% – 3%					1-3	98%–3%	
Vimar	20160	[RC]		1-3	90% – 3%		1-3	95% – 6%	<2	1-3	91%–3%	
Vimar	20162	[RL]	40 – 300W	1-3	88% – 3%		1-3	95% – 5%	<2	1-3	91%–3%	
Philips Dynalite	DDLE801		(100W per channel)	1-3	92% – 3%		1-3	95% – 3%		1-3	95%–3%	
Philips Dynalite	DDTMI02 Module		(460 W per channel)	1-3	92% – 3%		1-3	96% – 3%		1-3	96%–3%	

- Note :
- #1) Unexpected behaviour can occur outside the range of specified number of lamps. The mentioned numbers are tested. In some cases the dimmers can be loaded with more lamps than is specified in this document (most dimmers can be loaded with LED lamps to 20% of specified power; LED dimmers can be loaded to specified power)
  - #2) Occupancy sensors can act like dimmers, therefore Philips recommend to use dimmable lamps in combination with it.
  - #3) Glowing means: a switched off dimmer still having the possibility that a small light output is visible. This status can occur when a low quantity of lamps is connected.
  - #4) Yellow cells indication: Sometimes flickering is observed due to low dimmer loads, best visible at deep dimming
  - #4a) Yellow cells indication: Dimming performance: LED's have much lower load (wattage) than traditional light sources. (e.g. flickering where "active loads" can reduce your problems)
  - #4b) Yellow cells indication: Dimming range, minimum dim level will be >10%, and/or maximum level will be <80% lightlevel
  - #5) Various dimmer suppliers offer "active loads" (e.g. Busch Jaeger Kompensator 6596) to optimize dimming performance in case of lamp-dimmer system issues. Using double pole switches will prevent glowing issues.
  - #7) This list is based on measurements in a lab environment with nominal voltage, a different voltage will result in a different dimming range. Therefore we indicated 3% as minimum lightlevel as labcondition.
  - #8) Dimmermanufacturers may change the technical design of the dimmer without informing LED lamp suppliers. These changes can influence the performance of LED products. Philips cannot be held responsible for inaccuracies in the compatibility lists due to technical changes in dimmers
  - #9) In general Philips dimmable LED lamps can be dimmed with any type of dimmer (type R, RL, RC or RLC).

Disclaimer:  
Philips will not accept claims for any damage caused by implementing the recommendations in this document.

[www.lighting.philips.com/main/products/masterled](http://www.lighting.philips.com/main/products/masterled)  
[www.lighting.philips.com/main/products/coreproledlamps](http://www.lighting.philips.com/main/products/coreproledlamps)



# Professional LED Mains Voltage range

Recommended **dimmer** compatibility list for **Mains Voltage** Lamps



## KEY

x-y	Excellent dimming with X-Y lamps, however external factors can negatively influence the deep dimming performance
x-y	Lamps are dimmable across full dimming range, but exhibit diminished flickering at a single distinct position in the range
	Unexpected performance behavior, not in line with good dimming perception
N.A.	Dimmer lamp combination not applicable
T.B.D.	Dimmer lamp combination not tested

This document is for information purposes and must be treated as recommendation. Philips attempted to provide best results, results are generated in lab conditions and might contain faults

				LED Classic filament											
				Classic filament LED lamps 8 - 50W A60 gold / 5.5 - 40W ST64 CL 8 - 50W ST64 gold / 8 - 60W ST64 CL 8 - 60W G93 CL / 8 - 60W G120 gold			Classic filament LED Lamps D 7.5 - 48W A60 Gold / D 5.5 - 40W A60 CL D 8 - 60W A60 CL / DT 5.5 - 40W A60 CL DT 8 - 60W A60 CL / DT 8 - 60W ST6			Classic filament LED lamps ST64 clear dim 60W ST64 gold dim 50W ST64 gold dim 55W			Classic filament LED Lamps G93 clear 60W / G120 gold dim 50W		
				NEW											
Brand	Type	Type	Load	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing
Berker  INSTA	286710	[RC]	20 - 360 W-Turn	1-3	99% - 3%		1-3	98%-3%		1-3	93%-3%		1-3	93%-3%	
Berker  INSTA	283010	[R]	60 - 400 W-Turn	1-3	99% - 3%		2-3	97%-3%		1-3	94%-3%		1-3	94%-3%	
Bticino	L4407		60 - 250 W		N.A.	N.A.					N.A.	N.A.		N.A.	N.A.
Busch Jaeger  ABB	2200 U-503	[R]	60 - 400 W-Turn	1-3	99% - 3%		1-3	98%-8%		1-3	97%-3%		1-3	97%-3%	
Busch Jaeger  ABB	2247 U	[RL]	20 - 500 W-Turn	1-3	99% - 3%		1-3	98%-3%		1-3	94%-3%		1-3	94%-3%	
Busch Jaeger  ABB	2250 U	[R]	60 - 600 W-Turn	1-3	99% - 3%		1-3	97%-3%		1-3	96%-3%		1-3	96%-3%	
Busch Jaeger  ABB	6513 U-102	[RC]	40 - 420 W-Turn	1-3	99% - 3%		1-3	99%-3%		1-3	95%-3%		1-3	95%-3%	
Busch Jaeger  ABB	6523 U	[LED]	2 - 100 VA-LED-Turn	1-3	99% - 3%		1-3	97%-3%		1-3	91%-3%		1-3	91%-3%	
Busch Jaeger  ABB	6526 U	[LED]	2 - 100 VA-LED-Push (2wire)	1-3	97% - 3%		1-3	93%-3%		1-3	95%-3%		1-3	95%-3%	
ELKO   Schneider	SBD200LED (CCTEL10501)	[LED/RC]	4 - 200W(RC) 4 - 400W(RL)	2-3	99% - 3%		2-3	99%-3%		1-3	94%-6%		1-3	94%-6%	
ELKO   Schneider	SBD315RC (315 GLE)	[RC]	315W	2-3	99% - 3%		2-3	98%-3%		1-3	83%-3%		1-3	83%-3%	
ELKO   Schneider	SBD420RCRL (CCTEL13011)	[RLC]	420W		N.A.	N.A.		N.A.	N.A.	3	99%-3%		3	99%-3%	
Eltako	EVD6INPN-UC		400W 3-wire Push Module	1-3	97% - 3%		1-3	91%-3%		1-3	99%-3%		1-3	99%-3%	
Feller   Schneider	40200 (SBD200LED CCTCH10601)	[LED/RC]	4 - 200W(RC) 4 - 400W(RL)	2-3	99% - 3%		2-3	99%-3%		1-3	94%-6%		1-3	94%-6%	
Feller   Schneider	40300 (SBD315)	[RLC]	300W	2-3	99% - 3%		2-3	98%-3%							
Feller   Schneider	40420 (SBD420)	[RLC]	420W		N.A.	N.A.		N.A.	N.A.						
GIRA	1176-00/01	[RLC]	50 - 420W	1-3	97% - 3%		1-3	99%-3%		1-3	95%-11%		1-3	95%-11%	
GIRA	2390 00/ 100	[LED]	7 - 100W -Push (3wire)	1-3	99% - 3%					1-3	93%-3%		1-3	93%-3%	
Hager	EVN 011	[RC]	300VA	1-3	97% - 3%		1-3	92%-3%		1-3	96%-3%		1-3	96%-3%	
Hager	EVN 012	[RC]	300W	1-3	97% - 3%		1-3	92%-3%		1-3	98%-3%		1-3	98%-3%	
Hager	EVN 004	[RL]	500VA	1-3	97% - 3%		1-3	92%-3%		1-3	98%-4%		1-3	98%-4%	
Jung	225 TDE	[RC]	20 - 525 W-Turn	1-3	98% - 3%		1-3	98%-3%		1-3	93%-6%		1-3	93%-6%	
Jung	1271LEDDE	[LED]	3 - 100W -Push (3wire)	1-3	99% - 3%		1-3	97%-3%		1-3	95%-10%		1-3	95%-10%	
Klik aan Klik uit	AWMD-250	[LED]	3 - 24W	1-3	99% - 12%		1-3	86%-4%		1-3	86%-3%		1-3	86%-3%	
Klik aan Klik uit	ACM 300		300W -3-wire Push LED Dimmer		N.A.	N.A.	1-3	92%-3%		1-3	80%-3%		1-3	80%-3%	
Legrand	774161	[RL]	40 - 400 W-Turn		N.A.	N.A.	2-3	98%-3%			N.A.	N.A.		N.A.	N.A.
Legrand	78401	[RLC]	40 - 500W	1-3	97% - 3%		1-3	91%-3%		1-3	95%-3%		1-3	95%-3%	
Legrand	67081	[RL]	40 - 400 W-Turn					N.A.	N.A.		N.A.	N.A.		N.A.	N.A.
Legrand	67082	[RL]	40 - 600 W-Turn				2-3	97%-3%			N.A.	N.A.		N.A.	N.A.
Legrand	67083	[RLC]	3 - 400W	1	96% - 3%		1-3	90%-3%		1-2	87%-5%		1-2	87%-5%	
Legrand	67084	[RLC]	8-300 VA -Push LED (3wire)	1-3	99% - 3%		1-3	97%-3%		1-3	95%-3%		1-3	95%-3%	
Legrand	67085 (078406)	[RLC]	8-300 VA -Push LED (3wire)	1-3	99% - 3%		1-3	97%-3%		1-3	98%-3%		1-3	98%-3%	
Legrand	L4402N	[R]	60 - 500W		N.A.	N.A.	2-3	88%-3%		2-3	87%-5%		2-3	87%-5%	
Merten   Schneider	SBD200LED (MEG5134-0000)	[LED/RC]	4 - 200W(RC) 4-400W(RL)	2-3	99% - 3%		2-3	99%-3%		1-3	94%-6%		1-3	94%-6%	
Merten   Schneider	SBD315RC (MEG5136-0000)	[RC]	315W	2-3	99% - 3%		2-3	98%-3%		1-3	83%-3%		1-3	83%-3%	
Merten   Schneider	SBD420RCRL (MEG5138-0000)	[RLC]	20 - 420 VA		N.A.	N.A.		N.A.	N.A.	3	99%-3%		3	99%-3%	
MK-Electric	K1535	[R]	65 - 450 W-Turn	1-3	99% - 3%		2-3	93%-3%		1-3	84%-3%		1-3	84%-3%	
MK-Electric	K1501 WHILV	[R]	60 - 500 W-Turn		N.A.	N.A.	1-3	98%-3%		1-3	87%-3%		1-3	87%-3%	
MK-Electric	K4501 WHILV	[RLC]	180W		N.A.	N.A.	1-3	98%-3%		1-3	91%-9%		1-3	91%-9%	
MK-Electric	K4500 WHILV	[RLC]	400W		N.A.	N.A.	1-3	92%-3%		1-3	91%-9%		1-3	91%-9%	
NIKO	310-0280X	[LED]	2 - 100 VA	1-3	97% - 3%		1-3	91%-3%		1-3	97%-3%		1-3	97%-3%	
PEHA	431HAN	[RL]	6 - 120W [LED] 6 - 60W	1-3	97% - 3%		1-3	97%-3%		1-3	87%-3%		1-3	87%-3%	
Philips	UID8670	[LED]	2 - 100 VA-LED-Push (3wire)				1-3	97%-3%		1-3	91%-3%		1-3	91%-3%	
RELCO	RPO977	[LED]	4-100W	1-3	99% - 3%		1-3	98%-3%							
RELCO	RM0545	[LED]	4-100W	1-3	99% - 3%		1-3	92%-3%							
Schneider	SBD315RC (SBD 315, SDD 315)	[RC]	315W	2-3	99% - 3%		2-3	98%-3%		1-3	83%-3%		1-3	83%-3%	
Schneider	SBD315RC (ATD315/CCTO11533)	[RC]	315W	2-3	99% - 3%		2-3	98%-3%		1-3	83%-3%		1-3	83%-3%	
Schneider	SBD200 (WDE 002299)		4 - 400VA-Turn Universal (2wire)	2-3	99% - 3%		2-3	99%-3%		1-3	94%-6%		1-3	94%-6%	
Schneider	SBD315RC (SBD 315)	[RC]	315W	2-3	99% - 3%		2-3	98%-3%		1-3	83%-3%		1-3	83%-3%	
VADSBO	ED 350	[RC]	50 - 350W	1-3	97% - 3%		1-3	98%-3%		1-3	91%-9%		1-3	91%-9%	
VADSBO	DRS 315	[RC]	50 - 315W		N.A.	N.A.		N.A.	N.A.		N.A.	N.A.		N.A.	N.A.
VADSBO	DU 250	[RC]	20 - 250W	1-3	97% - 3%		1-3	84%-3%		1-3	87%-3%		1-3	87%-3%	
Varilight	HQ3W	[R]	60-400W	1-3	99% - 3%		2-3	97%-3%		1-3	93%-3%		1-3	93%-3%	
Varilight	ICT401 M	[RC]	20-400W	1-3	88% - 3%		1-3	75%-3%		1-3	87%-3%		1-3	87%-3%	
Vimar	20148	[RL]	500W		N.A.	N.A.	1-3	98%-3%		1-3	95%-3%	<2	1-3	95%-3%	<2
Vimar	14153	[R]			N.A.	N.A.	1-3	89%-3%		1-3	98%-3%		1-3	98%-3%	
Vimar	20160	[RC]		1-3	97% - 3%		1-3	91%-3%		1-3	92%-3%		1-3	92%-3%	
Vimar	20162	[RL]	40 - 300W	1-3	99% - 3%		1-3	98%-3%		1-3	97%-3%	<2	1-3	97%-3%	<2
Philips Dynalite	DDLE801		(100W per channel)	1-3	87% - 3%		3	91%-3%		1-3	89%-3%		1-3	89%-3%	
Philips Dynalite	DDTMI02 Module		(460 W per channel)	1-3	88% - 3%		1-3	90%-3%		1-3	91%-3%		1-3	91%-3%	

- Note :
- #1) Unexpected behaviour can occur outside the range of specified number of lamps. The mentioned numbers are tested. In some cases the dimmers can be loaded with more lamps than is specified in this document (most dimmers can be loaded with LED lamps to 20% of specified power; LED dimmers can be loaded to specified power)
  - #2) Occupancy sensors can act like dimmers, therefore Philips recommend to use dimmable lamps in combination with it.
  - #3) Glowing means: a switched off dimmer still having the possibility that a small light output is visible. This status can occur when a low quantity of lamps is connected.
  - #4) Yellow cells indication: Sometimes flickering is observed due to low dimmer loads, best visible at deep dimming
  - #4a) Yellow cells indication: Dimming performance: LED's have much lower load (wattage) than traditional lightsources. (e.g. flickering where "active loads" can reduce your problems)
  - #4b) Yellow cells indication: Dimming range, minimum dim level will be >10%, and/or maximum level will be <80% lightlevel
  - #5) Various dimmer suppliers offer "active loads" (e.g. Busch Jaeger Kompensator 6596) to optimize dimming performance in case of lamp-dimmer system issues. Using double pole switches will prevent glowing issues.
  - #7) This list is based on measurements in a lab environment with nominal voltage, a different voltage will result in a different dimming range. Therefore we indicated 3% as minimum lightlevel as labcondition.
  - #8) Dimmermanufacturers may change the technical design of the dimmer without informing LED lamp suppliers. These changes can influence the performance of LED products. Philips cannot be held responsible for inaccuracies in the compatibility lists due to technical changes in dimmers
  - #9) In general Philips dimmable LED lamps can be dimmed with any type of dimmer (type R, RL, RC or RLC).

Disclaimer:  
Philips will not accept claims for any damage caused by implementing the recommendations in this document.

[www.lighting.philips.com/main/products/masterled](http://www.lighting.philips.com/main/products/masterled)  
[www.lighting.philips.com/main/products/coreproledlamps](http://www.lighting.philips.com/main/products/coreproledlamps)



# Professional LED Mains Voltage range

Recommended **dimmer** compatibility list for **Mains Voltage** Lamps



**KEY**

x-y	Excellent dimming with X-Y lamps, however external factors can negatively influence the deep dimming performance
x-y	Lamps are dimmable across full dimming range, but exhibit diminished flickering at a single distinct position in the range
	Unexpected performance behavior, not in line with good dimming perception
N.A.	Dimmer lamp combination not applicable
T.B.D.	Dimmer lamp combination not tested

This document is for information purposes and must be treated as recommendation. Philips attempted to provide best results, results are generated in lab conditions and might contain faults

				LEDcandle/luster											
				Classic filament lamps 6.5 - 25W Giant G200 smoky 6.5 - 25W Giant A160 smoky 6.5 - 25W T65 smoky			Classic filament LED Lamps 40W E27 G200 GOLD DIM 40W E27 A160 GOLD DIM 40W E27 T65 GOLD DIM			Classic filament LED Lamps 5 - 30W Mushroom gold			Classic filament LED Lamps 5 - 40W Diamond Clear		
				NEW											
Brand	Type	Type	Load	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing
Berker  INSTA	286710	[RC]	20 - 360 W-Turn	1-3	91% - 6%		1-3	87%-15%		1-3	99% - 3%		1-3	99% - 3%	
Berker  INSTA	283010	[R]	60 - 400 W-Turn	1-3	93% - 4%		1-2	93%-7%		2-3	99% - 3%		2-3	99% - 3%	
Bticino	L4407		60 - 250 W							N.A.	N.A.		2-3	82% - 3%	
Busch Jaeger  ABB	2200 U-503	[R]	60 - 400 W-Turn	1-3	93% - 13%		1-3	97%-13%		1-3	99% - 7%		1-3	99% - 8%	
Busch Jaeger  ABB	2247 U	[RL]	20 - 500 W-Turn	1-3	92% - 3%		1-3	92%-3%		1-3	99% - 3%		2-3	99% - 3%	
Busch Jaeger  ABB	2250 U	[R]	60 - 600 W-Turn	1-3	93% - 3%		1-2	91%-12%		2-3	99% - 3%		2-3	99% - 3%	
Busch Jaeger  ABB	6513 U-102	[RC]	40 - 420 W-Turn	1-3	93% - 4%		1-3	92%-13%		1-3	99% - 3%		1-3	99% - 3%	
Busch Jaeger  ABB	6523 U	[LED]	2 - 100 VA-LED-Turn	1-3	90% - 8%		1-3	84%-16%		1-3	99% - 3%		1-3	99% - 3%	
Busch Jaeger  ABB	6526 U	[LED]	2 - 100 VA-LED-Push (2wire)							1-3	99% - 3%		1-3	99% - 3%	
ELKO  Schneider	SBD200LED (CCTEL10501)	[LED/RC]	4 - 200W(RC) 4 - 400W(RL)	1-3	92% - 6%		1-3	91%-16%		N.A.	N.A.		1-3	99% - 3%	
ELKO  Schneider	SBD315RC (315 GLE )	[RC]	315W	1-3	90% - 3%		1-3	91%-3%		2-3	99% - 3%		2-3	99% - 3%	
ELKO  Schneider	SBD420RCRL (CCTEL13011)	[RLC]	420W	2-3	95% - 5%		3	94%-17%		N.A.	N.A.		N.A.	N.A.	
Eltako	EVD6INPN-UC		400W 3-wire Push Module							1-3	98% - 3%		1-3	99% - 3%	
Feller  Schneider	40200 (SBD200LED CCTCH10601)	[LED/RC]	4 - 200W(RC) 4 - 400W(RL)	1-3	92% - 6%					N.A.	N.A.		1-3	99% - 3%	
Feller  Schneider	40300 (SBD315)	[RLC]	300W	1-3	90% - 3%					2-3	99% - 3%		2-3	99% - 3%	
Feller  Schneider	40420 (SBD420)	[RLC]	420W	2-3	95% - 5%					N.A.	N.A.		N.A.	N.A.	
GIRA	1176-00/01	[RLC]	50 - 420W							1-3	99% - 3%		1-3	99% - 3%	
GIRA	2390 00/ 100	[LED]	7 - 100W -Push (3wire)	1-3	89% - 3%		1-3	83%-4%		1-3	99% - 3%		1-3	99% - 3%	
Hager	EVN 011	[RC]	300VA							1-3	99% - 3%		1-3	99% - 3%	
Hager	EVN 012	[RC]	300W							1-3	99% - 3%		1-3	97% - 3%	
Hager	EVN 004	[RL]	500VA							1-3	99% - 3%		1-3	99% - 3%	
Jung	225 TDE	[RC]	20 - 525 W-Turn	1-3	92% - 7%		1-3	89%-17%		1-3	99% - 3%		1-3	99% - 3%	
Jung	1271LEDDE	[LED]	3 - 100W -Push (3wire)	1-3	88% - 3%		1-3	83%-4%		1-3	99% - 3%		1-3	99% - 3%	
Klik aan Klik uit	AWMD-250	[LED]	3 - 24W							N.A.	N.A.		1-3	99% - 4%	
Klik aan Klik uit	ACM 300		300W -3-wire Push LED Dimmer							2-3	98% - 3%		2-3	99% - 3%	
Legrand	774161	[RL]	40 - 400 W-Turn		N.A.	N.A.	3	95%-9%		N.A.	N.A.		2-3	92% - 3%	
Legrand	78401	[RLC]	40 - 500W							1-3	98% - 3%		1-3	97% - 3%	
Legrand	67081	[RL]	40 - 400 W-Turn												
Legrand	67082	[RL]	40 - 600 W-Turn												
Legrand	67083	[RLC]	3 - 400W							1-3	98% - 3%		1-3	97% - 3%	
Legrand	67084	[RLC]	8-300 VA -Push LED (3wire)	1-3	94% - 3%		2-3	92%-8%		1-3	98% - 4%		2-3	99% - 3%	
Legrand	67085 (078406)	[RLC]	8-300 VA -Push LED (3wire)	1-3	97% - 3%		1-3	93%-3%		1-3	98% - 3%		1-3	98% - 3%	
Legrand	L4402N	[R]	60 - 500W							2-3	98% - 3%		2-3	97% - 3%	
Merten  Schneider	SBD200LED (MEG5134-0000)	[LED/RC]	4 - 200W(RC) 4-400W(RL)	1-3	92% - 6%					N.A.	N.A.		1-3	99% - 3%	
Merten  Schneider	SBD315RC (MEG5136-0000)	[RC]	315W	1-3	90% - 3%					2-3	99% - 3%		2-3	99% - 3%	
Merten  Schneider	SBD420RCRL (MEG5138-0000)	[RLC]	20 - 420 VA	2-3	95% - 5%					N.A.	N.A.		N.A.	N.A.	
MK-Electric	K1535	[R]	65 - 450 W-Turn	2-3	81% - 5%		1	68%-12%		2-3	92% - 3%		2-3	92% - 3%	
MK-Electric	K1501 WHILV	[R]	60 - 500 W-Turn	2-3	87% - 3%		1-2	84%-8%		1 or 3	99% - 3%		1-3	99% - 3%	
MK-Electric	K4501 WHILV	[RLC]	180W							1-3	98% - 3%		1-3	99% - 3%	
MK-Electric	K4500 WHILV	[RLC]	400W							1-3	98% - 3%		1-3	98% - 3%	
NIKO	310-0280X	[LED]	2 - 100 VA							1-3	98% - 3%		1-3	98% - 3%	
PEHA	431HAN	[RL]	6 - 120W [LED] 6 - 60W							1-3	97% - 3%		1-3	98% - 3%	
Philips	UID8670	[LED]	2 - 100 VA-LED-Push (3wire)												
RELCO	RP0977	[LED]	4-100W	1-3	96% - 16%		1-3	91%-23%		1-3	99% - 3%		1-3	99% - 3%	
RELCO	RM0545	[LED]	4-100W	1-3	90% - 3%		1-3	87%-7%		1-3	99% - 3%		1-3	99% - 3%	
Schneider	SBD315RC (SBD 315, SDD 315)	[RC]	315W	1-3	90% - 3%					2-3	99% - 3%		2-3	99% - 3%	
Schneider	SBD315RC (ATD315/CCTO11533)	[RC]	315W	1-3	90% - 3%					2-3	99% - 3%		2-3	99% - 3%	
Schneider	SBD200 (WDE 002299)		4 - 400VA-Turn Universal (2wire)	1-3	92% - 6%					N.A.	N.A.		1-3	99% - 3%	
Schneider	SBD315RC (SBD 315)	[RC]	315W	1-3	90% - 3%					2-3	99% - 3%		2-3	99% - 3%	
VADSBO	ED 350	[RC]	50 - 350W							1-3	98% - 3%		1-3	97% - 3%	
VADSBO	DRS 315	[RC]	50 - 315W							3	98% - 3%		N.A.	N.A.	
VADSBO	DU 250	[RC]	20 - 250W							1-3	91% - 3%		1-3	91% - 3%	
Varilight	HQ3W	[R]	60-400W	2-3	92% - 3%		1-3	89%-5%		2-3	98% - 3%		2-3	92% - 3%	
Varilight	ICT401 M	[RC]	20-400W							2-3	87% - 3%		1-3	93% - 3%	
Vimar	20148	[RL]	500W	1 or 3	92% - 3%		1-3	94%-8%		1-3	99% - 3%	< 2	2-3	99% - 3%	< 2
Vimar	14153	[R]								3	98% - 3%		1-3	98% - 3%	
Vimar	20160	[RC]								1-3	99% - 3%		1-3	99% - 3%	
Vimar	20162	[RL]	40 - 300W	1-3	90% - 4%		1-3	93%-5%		1-3	99% - 3%	< 2	1-3	99% - 3%	
Philips Dynalite	DDLE801		(100W per channel)	1-3	88% - 3%		1-3	89%-3%		N.A.	N.A.		2-3	85% - 3%	
Philips Dynalite	DDTMI02 Module		(460 W per channel)	1-3	89% - 3%		1-3	86%-3%		1-3	86% - 3%		2-3	85% - 3%	

- Note :
- #1) Unexpected behaviour can occur outside the range of specified number of lamps. The mentioned numbers are tested. In some cases the dimmers can be loaded with more lamps than is specified in this document (most dimmers can be loaded with LED lamps to 20% of specified power; LED dimmers can be loaded to specified power)
  - #2) Occupancy sensors can act like dimmers, therefore Philips recommend to use dimmable lamps in combination with it.
  - #3) Glowing means: a switched off dimmer still having the possibility that a small light output is visible. This status can occur when a low quantity of lamps is connected.
  - #4) Yellow cells indication: Sometimes flickering is observed due to low dimmer loads, best visible at deep dimming
  - #4a) Yellow cells indication: Dimming performance: LED's have much lower load (wattage) than traditional light sources. (e.g. flickering where "active loads" can reduce your problems)
  - #4b) Yellow cells indication: Dimming range, minimum dim level will be >10%, and/or maximum level will be <80% lightlevel
  - #5) Various dimmer suppliers offer "active loads" (e.g. Busch Jaeger Kompensator 6596) to optimize dimming performance in case of lamp-dimmer system issues. Using double pole switches will prevent glowing issues.
  - #7) This list is based on measurements in a lab environment with nominal voltage, a different voltage will result in a different dimming range. Therefore we indicated 3% as minimum lightlevel as labcondition.
  - #8) Dimmermanufacturers may change the technical design of the dimmer without informing LED lamp suppliers. These changes can influence the performance of LED products. Philips cannot be held responsible for inaccuracies in the compatibility lists due to technical changes in dimmers
  - #9) In general Philips dimmable LED lamps can be dimmed with any type of dimmer (type R, RL, RC or RLC).

Disclaimer:  
Philips will not accept claims for any damage caused by implementing the recommendations in this document.

[www.lighting.philips.com/main/products/masterled](http://www.lighting.philips.com/main/products/masterled)  
[www.lighting.philips.com/main/products/coreproledlamps](http://www.lighting.philips.com/main/products/coreproledlamps)





# Professional LED Mains Voltage range

Recommended **dimmer** compatibility list for **Mains Voltage** Lamps



**KEY**

x-y	Excellent dimming with X-Y lamps, however external factors can negatively influence the deep dimming performance
x-y	Lamps are dimmable across full dimming range, but exhibit diminished flickering at a single distinct position in the range
	Unexpected performance behavior, not in line with good dimming perception
N.A.	Dimmer lamp combination not applicable
T.B.D.	Dimmer lamp combination not tested

*This document is for information purposes and must be treated as recommendation. Philips attempted to provide best results, results are generated in lab conditions and might contain faults*

				LEDcandle/luster											
				Classic filament LED lamps DimTone 5.5 - 40W A60 8.5 - 60W A60 8.5 - 60W ST64			Classic filament LED lamps 12 - 100W A67			MASTER LED candles and lusters DimTone 4-25W			MASTER LED candles and lusters DimTone 6-40W		
				NEW			NEW								
Brand	Type	Type	Load	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing
Berker  INSTA	286710	[RC]	20 - 360 W-Turn	1-3	87% - 3%		1-3	92% - 14%		2-18	96%-3%		2-12	93%-3%	
Berker  INSTA	283010	[R]	60 - 400 W-Turn	1-3	90% - 3%		1-3	98% - 14%		2-20	89%-3%		2-13	89%-3%	
Bticino	L4407		60 - 250 W		N.A.	N.A.					N.A.	N.A.		N.A.	N.A.
Busch Jaeger  ABB	2200 U-503	[R]	60 - 400 W-Turn	1-3	93% - 3%		1-3	97% - 7%		2-20	92%-3%		2-13	92%-3%	
Busch Jaeger  ABB	2247 U	[RL]	20 - 500 W-Turn	1-3	90% - 3%		1-3	98% - 3%		2-25	91%-3%		2-17	91%-3%	
Busch Jaeger  ABB	2250 U	[R]	60 - 600 W-Turn	1-3	92% - 3%		1-3	98% - 15%		2-30	88%-3%		2-20	93%-3%	
Busch Jaeger  ABB	6513 U-102	[RC]	40 - 420 W-Turn	1-3	94% - 8%		1-3	96% - 13%		2-21	94%-3%		2-14	91%-3%	
Busch Jaeger  ABB	6523 U	[LED]	2 - 100 VA-LED-Turn	1-3	86% - 3%		1-3	94% - 19%		2-20	84%-3%		2-17	83%-3%	
Busch Jaeger  ABB	6526 U	[LED]	2 - 100 VA-LED-Push (2wire)	1-3	91% - 4%					2-20	88%-7%	<4	2-17	88%-5%	<6
ELKO   Schneider	SBD200LED (CCTEL10501)	[LED/RC]	4 - 200W(RC) 4 - 400W(RL)	1-3	88% - 3%		1-3	90% - 15%		2-20	95%-3%		2-13	92%-3%	
ELKO   Schneider	SBD315RC (315 GLE )	[RC]	315W	1-3	93% - 3%		1-3	90% - 3%		2-15	88%-3%		2-11	87%-0%	
ELKO   Schneider	SBD420RCRL (CCTEL13011)	[RLC]	420W	1-3	89% - 3%		1-3	93% - 15%		2-20	91%-3%		2-14	90%-3%	
Eltako	EVD6INPN-UC		400W 3-wire Push Module												
Feller   Schneider	40200 (SBD200LED CCTCH10601)	[LED/RC]	4 - 200W(RC) 4 - 400W(RL)	1-3	88% - 3%		1-3	90% - 15%		2-20	95%-3%		2-13	92%-3%	
Feller   Schneider	40300 (SBD315)	[RLC]	300W	1-3	93% - 3%		1-3	90% - 3%							
Feller   Schneider	40420 (SBD420)	[RLC]	420W	1-3	89% - 3%		1-3	93% - 15%							
GIRA	1176-00/01	[RLC]	50 - 420W	1-3	93% - 5%					2-20	95%-7%	<7	2-14	95%-5%	<9
GIRA	2390 00/ 100	[LED]	7 - 100W -Push (3wire)	1-3	86% - 3%		1-3	97%5%		2-25	94%-3%		2-17	92%-3%	
Hager	EVN 011	[RC]	300VA	1-3	98% - 3%						95%-4%	<7	2-10	96%-3%	<10
Hager	EVN 012	[RC]	300W	1-3	98% - 3%						95%-4%	<7	2-10	95%-3%	<10
Hager	EVN 004	[RL]	500VA	1-3	98% - 3%						95%-7%	<7	2-17	96%-4%	<11
Jung	225 TDE	[RC]	20 - 525 W-Turn	1-3	93% - 3%		1-3	94% - 16%		2-26	89%-3%		2-18	89%-3%	
Jung	1271LEDDE	[LED]	3 - 100W -Push (3wire)	1-3	87% - 7%		1-3	97%3%		2-25	93%-4%		2-17	92%-3%	
Klik aan Klik uit	AWMD-250	[LED]	3 - 24W	1-3	82% - 4%						78%-7%	<6	2-4	77%-4%	<5
Klik aan Klik uit	ACM 300		300W 3-wire Push LED Dimmer												
Legrand	774161	[RL]	40 - 400 W-Turn			N.A.		N.A.	N.A.		N.A.	N.A.		N.A.	N.A.
Legrand	78401	[RLC]	40 - 500W	1-3	96% - 3%					2-20	95%-4%	<7	2-13	93%-4%	<9
Legrand	67081	[RL]	40 - 400 W-Turn		N.A.	N.A.					N.A.	N.A.		N.A.	N.A.
Legrand	67082	[RL]	40 - 600 W-Turn		N.A.	N.A.					N.A.	N.A.		N.A.	N.A.
Legrand	67083	[RLC]	3 - 400W		N.A.	N.A.					N.A.	N.A.		N.A.	N.A.
Legrand	67084	[RLC]	8-300 VA -Push LED (3wire)	1-3	95% - 3%		1-3	98% - 4%			N.A.	N.A.		N.A.	N.A.
Legrand	67085 (078406)	[RLC]	8-300 VA -Push LED (3wire)	1-3	88% - 17%		1-3	94% - 3%		2-15	94%-3%		2-10	91%-3%	
Legrand	L4402N	[R]	60 - 500W		N.A.	N.A.					79%-4%		8-17	79%-4%	
Merten   Schneider	SBD200LED (MEG5134-0000)	[LED/RC]	4 - 200W(RC) 4-400W(RL)	1-3	88% - 3%		1-3	90% - 15%		2-20	95%-3%		2-13	92%-3%	
Merten   Schneider	SBD315RC (MEG5136-0000)	[RC]	315W	1-3	93% - 3%		1-3	90% - 3%		2-15	88%-3%		2-11	87%-3%	
Merten   Schneider	SBD420RCRL (MEG5138-0000)	[RLC]	20 - 420 VA	1-3	89% - 3%		1-3	93% - 15%		2-20	91%-3%		2-14	90%-3%	
MK-Electric	K1535	[R]	65 - 450 W-Turn		N.A.	N.A.	1-3	84% - 16%		2-23	79%-3%		2-15	77%-3%	
MK-Electric	K1501 WHILV	[R]	60 - 500 W-Turn	1-3	85% - 3%		1-3	91% - 8%		2-25	88%-3%		2-17	87%-3%	
MK-Electric	K4501 WHILV	[RLC]	180W	1-3	88% - 3%						83%-3%		2-7	82%-3%	
MK-Electric	K4500 WHILV	[RLC]	400W	1-3	88% - 3%						83%-3%			N.A.	N.A.
NIKO	310-0280X	[LED]	2 - 100 VA	1-3	98% - 4%					2-5	96%-5%		2-3	96%-4%	
PEHA	431HAN	[RL]	6 - 120W [LED] 6 - 60W	1-3	88% - 4%						82%-7%		2-4	82%-5%	
Philips	UID8670	[LED]	2 - 100 VA-LED-Push (3wire)	1-3	86% - 3%					2-20	84%-3%		2-17	83%-3%	
RELCO	RPO977	[LED]	4-100W				1-3	99% - 23%							
RELCO	RMO545	[LED]	4-100W				1-3	83% - 6%							
Schneider	SBD315RC (SBD 315, SDD 315)	[RC]	315W	1-3	93% - 3%		1-3	90% - 3%		2-15	88%-3%		2-11	87%-3%	
Schneider	SBD315RC (ATD315(CCTO11533)	[RC]	315W	1-3	93% - 3%		1-3	90% - 3%		2-15	88%-3%		2-11	87%-3%	
Schneider	SBD200 (WDE 002299)		4 - 400VA-Turn Universal (2wire)	1-3	88% - 3%		1-3	90% - 15%		2-20	95%-3%		2-13	92%-3%	
Schneider	SBD315RC (SBD 315)	[RC]	315W	1-3	93% - 3%		1-3	90% - 3%		2-15	88%-3%		2-11	87%-3%	
VADSBO	ED 350	[RC]	50 - 350W	1-3	91% - 5%					2-18	88%-7%		2-12	84%-4%	
VADSBO	DRS 315	[RC]	50 - 315W		N.A.	N.A.				4-16	89%-4%		5-11	91%-4%	<12
VADSBO	DU 250	[RC]	20 - 250W	1-3	88% - 3%	<4				2-13	86%-3%		2-8	79%-3%	<8
Varilight	HQ3W	[R]	60-400W	1-3	92% - 3%		1-3	96% - 3%		2-20	91%-3%		2-13	90%-3%	
Varilight	ICT401 M	[RC]	20-400W												
Vimar	20148	[RL]	500W		N.A.	N.A.	1-3	97% - 8%		6-25	90%-3%	<6	4-17	92%-3%	<4
Vimar	14153	[R]		1-3	98% - 3%					2-20	99%-3%		2-17	96%-3%	<7
Vimar	20160	[RC]			N.A.	N.A.					89%-3%		2-10	89%-3%	<11
Vimar	20162	[RL]	40 - 300W		N.A.	N.A.	1-3	92% - 3%		6-15	92%-3%	<6	4-10	86%-3%	<4
Philips Dynalite	DDLE801		(100W per channel)	1-3	95% - 3%		1-2	96% - 3%		2-20	89%-3%		2-17	91%-3%	
Philips Dynalite	DDTMI02 Module		(460 W per channel)	1-3	98% - 3%		1-3	94% - 3%		2-20	92%-3%		2-15	91%-3%	

- Note :
- #1) Unexpected behaviour can occur outside the range of specified number of lamps. The mentioned numbers are tested. In some cases the dimmers can be loaded with more lamps than is specified in this document (most dimmers can be loaded with LED lamps to 20% of specified power; LED dimmers can be loaded to specified power)
  - #2) Occupancy sensors can act like dimmers, therefore Philips recommend to use dimmable lamps in combination with it.
  - #3) Glowing means: a switched off dimmer still having the possibility that a small light output is visible. This status can occur when a low quantity of lamps is connected.
  - #4) Yellow cells indication: Sometimes flickering is observed due to low dimmer loads, best visible at deep dimming
  - #4a) Yellow cells indication: Dimming performance: LED's have much lower load (wattage) than traditional light sources. (e.g. flickering where "active loads" can reduce your problems)
  - #4b) Yellow cells indication: Dimming range, minimum dim level will be >10%, and/or maximum level will be <80% lightlevel
  - #5) Various dimmer suppliers offer "active loads" (e.g. Busch Jaeger Kompensator 6596) to optimize dimming performance in case of lamp-dimmer system issues. Using double pole switches will prevent glowing issues.
  - #7) This list is based on measurements in a lab environment with nominal voltage, a different voltage will result in a different dimming range. Therefore we indicated 3% as minimum lightlevel as labcondition.
  - #8) Dimmermanufacturers may change the technical design of the dimmer without informing LED lamp suppliers. These changes can influence the performance of LED products. Philips cannot be held responsible for inaccuracies in the compatibility lists due to technical changes in dimmers
  - #9) In general Philips dimmable LED lamps can be dimmed with any type of dimmer (type R, RL, RC or RLC).

Disclaimer:  
Philips will not accept claims for any damage caused by implementing the recommendations in this document.

[www.lighting.philips.com/main/products/masterled](http://www.lighting.philips.com/main/products/masterled)  
[www.lighting.philips.com/main/products/coreproledlamps](http://www.lighting.philips.com/main/products/coreproledlamps)



# Professional LED Mains Voltage range

Recommended **dimmer** compatibility list for **Mains Voltage** Lamps



## KEY

x-y	Excellent dimming with X-Y lamps, however external factors can negatively influence the deep dimming performance
x-y	Lamps are dimmable across full dimming range, but exhibit diminished flickering at a single distinct position in the range
	Unexpected performance behavior, not in line with good dimming perception
N.A.	Dimmer lamp combination not applicable
T.B.D.	Dimmer lamp combination not tested

This document is for information purposes and must be treated as recommendation. Philips attempted to provide best results, results are generated in lab conditions and might contain faults

Brand	Type	Type	Load	LED spot								
				MASTER LED candles and lusters DimTone 6-40W			Classic filament LED lamps 5 - 32W B35 gold 5 - 32W P45 gold 5 - 32W E			Classic filament LED lamps D 2.7 - 25W D 5 - 40W D 5 - 35W		
				Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing
Berker  INSTA	286710	[RC]	20 - 360 W-Turn	2-12	90%-3%		2 - 10	94%- 3%		2 - 8	99% - 3%	
Berker  INSTA	283010	[R]	60 - 400 W-Turn				2 - 10	97%- 3%		2 - 8	99% - 3%	
Bticino	L4407		60 - 250 W		N.A.	N.A.					N.A.	N.A.
Busch Jaeger  ABB	2200 U-503	[R]	60 - 400 W-Turn				2 - 10	97%- 11%		2 - 8	99% - 12%	
Busch Jaeger  ABB	2247 U	[RL]	20 - 500 W-Turn				2 - 10	97%- 3%		2 - 8	99% - 3%	
Busch Jaeger  ABB	2250 U	[R]	60 - 600 W-Turn	2-15	92%-3%		2 - 10	95%- 3%		3 - 8	99% - 3%	
Busch Jaeger  ABB	6513 U-102	[RC]	40 - 420 W-Turn	2-14	91%-3%		3 - 10	97%- 3%		2 - 8	99% - 3%	
Busch Jaeger  ABB	6523 U	[LED]	2 - 100 VA-LED-Turn	2-15	88%-3%		2 - 10	97%- 3%		2 - 6	99% - 3%	
Busch Jaeger  ABB	6526 U	[LED]	2 - 100 VA-LED-Push (2wire)	2-17	99%-3%					2 - 20	97% - 3%	
ELKO  Schneider	SBD200LED (CCTEL10501)	[LED/RC]	4 - 200W(RC) 4 - 400W(RL)	2-13	90%-3%		5 - 10	96%- 3%		2 - 8	99% - 3%	
ELKO  Schneider	SBD315RC (315 GLE )	[RC]	315W	2-11	90%-3%		5 - 10	97%- 3%		3 - 8	99% - 3%	
ELKO  Schneider	SBD420RCRL (CCTEL13011)	[RLC]	420W					N.A.	N.A.	3 - 8	99% - 3%	
Eltako	EVD61NPN-UC		400W 3-wire Push Module	2-13	99%-3%					2 - 16	96% - 3%	
Feller  Schneider	40200 (SBD200LED CCTCHI0601)	[LED/RC]	4 - 200W(RC) 4 - 400W(RL)	2-13	90%-3%		5 - 10	96%- 3%		2 - 8	99% - 3%	
Feller  Schneider	40300 (SBD315)	[RLC]	300W	2-11	90%-3%		5 - 10	97%- 3%		3 - 8	99% - 3%	
Feller  Schneider	40420 (SBD420)	[RLC]	420W					N.A.	N.A.	3 - 8	99% - 3%	
GIRA	1176-00/01	[RLC]	50 - 420W	2-14	99%-4%					2 - 17	97% - 3%	
GIRA	2390 00/ 100	[LED]	7 - 100W -Push (3wire)				2 - 10	97%- 3%		2 - 8	99% - 19%	
Hager	EVN 011	[RC]	300VA	2-10	99%-3%					2 - 12	96% - 3%	
Hager	EVN 012	[RC]	300W	2-10	99%-3%					2 - 12	96% - 3%	
Hager	EVN 004	[RL]	500VA	2-10	99%-3%					2 - 20	96% - 3%	
Jung	225 TDE	[RC]	20 - 525 W-Turn	2-10	89%-3%		2 - 10	94%- 3%		2 - 8	99% - 3%	
Jung	1271LEDDE	[LED]	3 - 100W -Push (3wire)	2-15	90%-3%		2 - 10	95%- 3%		2 - 8	99% - 3%	
Klik aan Klik uit	AWMD-250	[LED]	3 - 24W	2-4	88%-3%					2 - 5	93% - 4%	
Klik aan Klik uit	ACM 300		300W -3-wire Push LED Dimmer	2-10	94%-3%					2 - 12	96% - 3%	
Legrand	774161	[RL]	40 - 400 W-Turn					N.A.	N.A.	3 - 8	99% - 3%	
Legrand	78401	[RLC]	40 - 500W	2-13	99%-3%					2 - 16	95% - 3%	
Legrand	67081	[RL]	40 - 400 W-Turn					N.A.	N.A.	3 - 8	99% - 3%	
Legrand	67082	[RL]	40 - 600 W-Turn							3 - 8	99% - 3%	
Legrand	67083	[RLC]	3 - 400W	2-5	87%-3%					2 - 16	95% - 3%	
Legrand	67084	[RLC]	8-300 VA -Push LED (3wire)				2 - 10	97%- 3%		2 - 8	99% - 3%	
Legrand	67085 (078406)	[RLC]	8-300 VA -Push LED (3wire)	2-10	95%-3%		2 - 10	94%- 3%		2 - 8	99% - 3%	
Legrand	L4402N	[R]	60 - 500W	3-17	90%-3%					3 - 20	95% - 3%	
Merten  Schneider	SBD200LED (MEG5134-0000)	[LED/RC]	4 - 200W(RC) 4-400W(RL)	2-13	90%-3%		5 - 10	96%- 3%		2 - 8	99% - 3%	
Merten  Schneider	SBD315RC (MEG5136-0000)	[RC]	315W	2-11	90%-3%		5 - 10	97%- 3%		3 - 8	99% - 3%	
Merten  Schneider	SBD420RCRL (MEG5138-0000)	[RLC]	20 - 420 VA					N.A.	N.A.	3 - 8	99% - 3%	
MK-Electric	K1535	[R]	65 - 450 W-Turn	2-15	80%-3%		2 - 10	97%- 3%		3 - 8	99% - 3%	
MK-Electric	K1501 WHILV	[R]	60 - 500 W-Turn	2-15	80%-3%		2 - 10	97%- 3%		3 - 8	99% - 3%	
MK-Electric	K4501 WHILV	[RLC]	180W	2-7	90%-3%					3 - 9	96% - 3%	
MK-Electric	K4500 WHILV	[RLC]	400W	2-13	84%-3%					8 - 16	96% - 3%	
NIKO	310-0280X	[LED]	2 - 100 VA	2-3	99%-3%					2 - 4	94% - 3%	
PEHA	43IHAN	[RL]	6 - 120W [LED] 6 - 60W	2-4	89%-3%					2 - 5	96% - 3%	
Philips	UID8670	[LED]	2 - 100 VA-LED-Push (3wire)	2-15	88%-3%					2 - 6	99% - 3%	
RELCO	RP0977	[LED]	4-100W	2-3	99%-4%		2 - 10	97%- 3%		2 - 4	96% - 3%	
RELCO	RM0545	[LED]	4-100W	2-3	96%-3%		2 - 10	97%- 3%			N.A.	N.A.
Schneider	SBD315RC (SBD 315, SDD 315)	[RC]	315W	2-11	90%-3%		5 - 10	97%- 3%		3 - 8	99% - 3%	
Schneider	SBD315RC (ATD315(CCTO11533)	[RC]	315W	2-11	90%-3%		5 - 10	97%- 3%		3 - 8	99% - 3%	
Schneider	SBD200 (WDE 002299)		4 - 400VA-Turn Universal (2wire)	2-13	90%-3%		5 - 10	96%- 3%		2 - 8	99% - 3%	
Schneider	SBD315RC (SBD 315)	[RC]	315W	2-11	90%-3%		5 - 10	97%- 3%		3 - 8	99% - 3%	
VADSBO	ED 350	[RC]	50 - 350W	2-12	90%-3%					2 - 14	95% - 3%	
VADSBO	DRS 315	[RC]	50 - 315W	3-11	80%-3%					3 - 13	95% - 3%	
VADSBO	DU 250	[RC]	20 - 250W	2-8	85%-3%					2 - 10	85% - 3%	
Varilight	HQ3W	[R]	60-400W	2-13	90%-3%		2 - 10	96%- 3%		3 - 8	99% - 3%	
Varilight	ICT401 M	[RC]	20-400W	2-13	88%-3%					3 - 16	90% - 3%	
Vimar	20148	[RL]	500W				2 - 10	97%- 3%		2 - 8	99% - 3%	<2
Vimar	14153	[R]		2-17	93%-3%					5 - 20	96% - 3%	
Vimar	20160	[RC]		2-17	96%-3%					2 - 20	96% - 3%	
Vimar	20162	[RL]	40 - 300W				2 - 10	97%- 3%		2 - 8	99% - 3%	<2
Philips Dynalite	DDLE801		(100W per channel)				2 - 10	97%- 3%		5 - 8	94% - 3%	
Philips Dynalite	DDTMI02 Module		(460 W per channel)				2 - 10	97%- 3%		2 - 8	95% - 3%	

- Note :
- #1) Unexpected behaviour can occur outside the range of specified number of lamps. The mentioned numbers are tested. In some cases the dimmers can be loaded with more lamps than is specified in this document (most dimmers can be loaded with LED lamps to 20% of specified power; LED dimmers can be loaded to specified power)
  - #2) Occupancy sensors can act like dimmers, therefore Philips recommend to use dimmable lamps in combination with it.
  - #3) Glowing means: a switched off dimmer still having the possibility that a small light output is visible. This status can occur when a low quantity of lamps is connected.
  - #4) Yellow cells indication: Sometimes flickering is observed due to low dimmer loads, best visible at deep dimming
  - #4a) Yellow cells indication: Dimming performance: LED's have much lower load (wattage) than traditional light sources. (e.g. flickering where "active loads" can reduce your problems)
  - #4b) Yellow cells indication: Dimming range, minimum dim level will be >10%, and/or maximum level will be <80% light level
  - #5) Various dimmer suppliers offer "active loads" (e.g. Busch Jaeger Kompensator 6596) to optimize dimming performance in case of lamp-dimmer system issues. Using double pole switches will prevent glowing issues.
  - #7) This list is based on measurements in a lab environment with nominal voltage, a different voltage will result in a different dimming range. Therefore we indicated 3% as minimum light level as lab condition.
  - #8) Dimmer manufacturers may change the technical design of the dimmer without informing LED lamp suppliers. These changes can influence the performance of LED products. Philips cannot be held responsible for inaccuracies in the compatibility lists due to technical changes in dimmers
  - #9) In general Philips dimmable LED lamps can be dimmed with any type of dimmer (type R, RL, RC or RLC).

Disclaimer:  
Philips will not accept claims for any damage caused by implementing the recommendations in this document.

[www.lighting.philips.com/main/products/masterled](http://www.lighting.philips.com/main/products/masterled)  
[www.lighting.philips.com/main/products/coreproledlamps](http://www.lighting.philips.com/main/products/coreproledlamps)



# Professional LED Mains Voltage range

Recommended **dimmer** compatibility list for **Mains Voltage** Lamps



## KEY

x-y	Excellent dimming with X-Y lamps, however external factors can negatively influence the deep dimming performance
x-y	Lamps are dimmable across full dimming range, but exhibit diminished flickering at a single distinct position in the range
	Unexpected performance behavior, not in line with good dimming perception
N.A.	Dimmer lamp combination not applicable
T.B.D.	Dimmer lamp combination not tested

This document is for information purposes and must be treated as recommendation. Philips attempted to provide best results, results are generated in lab conditions and might contain faults

				LED spot								
				CorePro LEDcapsule MV G9 2.5W - 25W			Corepro LEDlinear MV R7s 118mm D 14W - 100W			Corepro LEDlinear MV R7s 118mm D 14 - 120		
Brand	Type	Type	Load	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing
Berker   INSTA	286710	[RC]	20 - 360 W-Turn	3-20	96%-27%		1	89%-8%		1	94%-21%	
Berker   INSTA	283010	[R]	60 - 400 W-Turn	3-20	86%-23%		1	94%-3%		1	97%-16%	
Bticino	L4407		60 - 250 W		N.A.	N.A.					N.A.	N.A.
Busch Jaeger   ABB	2200 U-503	[R]	60 - 400 W-Turn	3-20	85%-33%		1	91%-23%		1	98%-27%	
Busch Jaeger   ABB	2247 U	[RL]	20 - 500 W-Turn	3-20	83%-9%		1	93%-3%		1	96%-3%	
Busch Jaeger   ABB	2250 U	[R]	60 - 600 W-Turn	3-20	87%-6%		1	96%-3%		1	95%-15%	
Busch Jaeger   ABB	6513 U-102	[RC]	40 - 420 W-Turn	3-20	98%-24%		1	93%-7%		1	97%-23%	
Busch Jaeger   ABB	6523 U	[LED]	2 - 100 VA-LED-Turn	3-20	92%-3%		1	88%-3%		1	92%-21%	
Busch Jaeger   ABB	6526 U	[LED]	2 - 100 VA-LED-Push (2wire)	3-20	97%-23%	<7				1	96%-15%	
ELKO   Schneider	SBD200LED (CCTEL10501)	[LED/RC]	4 - 200W(RC) 4 - 400W(RL)	3-20	96%-30%		1	88%-10%		1	94%-21%	
ELKO   Schneider	SBD315RC (315 GLE)	[RC]	315W	3-20	95%-9%		1	89%-3%		1	93%-4%	
ELKO   Schneider	SBD420RCRL (CCTEL13011)	[RLC]	420W		N.A.	N.A.	1	93%-3%			N.A.	N.A.
Eltako	EVD61NPN-UC		400W 3-wire Push Module	3-20	99%-15%					1-3	97%-7%	
Feller   Schneider	40200 (SBD200LED CCTCHI0601)	[LED/RC]	4 - 200W(RC) 4 - 400W(RL)	3-20	96%-30%		1	88%-10%				
Feller   Schneider	40300 (SBD315)	[RLC]	300W									
Feller   Schneider	40420 (SBD420)	[RLC]	420W									
GIRA	1176-00/01	[RLC]	50 - 420W	3-20	96%-39%	<12				1-3	93%-25%	
GIRA	2390 00/ 100	[LED]	7 - 100W -Push (3wire)	3-18	91%-15%		1	89%-4%		1	92%-10%	
Hager	EVN 011	[RC]	300VA	3-20	98%-18%	<14				1-3	95%-16%	
Hager	EVN 012	[RC]	300W	3-20	99%-28%	<14				1-3	97%-17%	
Hager	EVN 004	[RL]	500VA	3-20	99%-28%	<15				1-3	99%-18%	
Jung	225 TDE	[RC]	20 - 525 W-Turn	3-20	96%-33%		1	90%-10%		1	94%-23%	
Jung	1271LEDDE	[LED]	3 - 100W -Push (3wire)	3-20	94%-3%		1	90%-3%		1	93%-9%	
Klik aan Klik uit	AWMD-250	[LED]	3 - 24W	3-10	86%-3%	< 11					84%-30%	
Klik aan Klik uit	ACM 300		300W 3-wire Push LED Dimmer	3-20	33%-3%	< 10					92%-10%	
Legrand	774161	[RL]	40 - 400 W-Turn		N.A.	N.A.		N.A.	N.A.		N.A.	N.A.
Legrand	78401	[RLC]	40 - 500W	3-20	97%-3%	<13				1-3	97%-11%	
Legrand	67081	[RL]	40 - 400 W-Turn		N.A.	N.A.		N.A.	N.A.	1	93%-30%	
Legrand	67082	[RL]	40 - 600 W-Turn		N.A.	N.A.		N.A.	N.A.	1	92%-11%	
Legrand	67083	[RLC]	3 - 400W		N.A.	N.A.					88%-6%	
Legrand	67084	[RLC]	8-300 VA -Push LED (3wire)	3-20	97%-23%			N.A.	N.A.	1	96%-3%	
Legrand	67085 (078406)	[RLC]	8-300 VA -Push LED (3wire)	3-20	99%-4%			N.A.	N.A.	1	99%-3%	
Legrand	L4402N	[R]	60 - 500W		N.A.	N.A.				1	87%-22%	
Merten   Schneider	SBD200LED (MEG5134-0000)	[LED/RC]	4 - 200W(RC) 4-400W(RL)	3-20	96%-30%		1	88%-10%				
Merten   Schneider	SBD315RC (MEG5136-0000)	[RC]	315W	3-20	95%-9%		1	89%-3%				
Merten   Schneider	SBD420RCRL (MEG5138-0000)	[RLC]	20 - 420 VA				1	93%-3%				
MK-Electric	K1535	[R]	65 - 450 W-Turn	3-20	72%-19%		1	82%-10%		1	81%-15%	
MK-Electric	K1501 WHILV	[R]	60 - 500 W-Turn	3-10	82%-17%		1	88%-6%		1	89%-12%	
MK-Electric	K4501 WHILV	[RLC]	180W		N.A.	N.A.				1-3	90%-12%	
MK-Electric	K4500 WHILV	[RLC]	400W		N.A.	N.A.				1-3	90%-13%	
NIKO	310-0280X	[LED]	2 - 100 VA	3-9	98%-8%					1	98%-3%	
PEHA	43IHAN	[RL]	6 - 120W [LED] 6 - 60W	3-10	76%-4%					1-2	85%-4%	
Philips	UID8670	[LED]	2 - 100 VA-LED-Push (3wire)	3-20	92%-3%		1	88%-3%				
RELCO	RP0977	[LED]	4-100W							1	97%-27%	
RELCO	RM0545	[LED]	4-100W							1	89%-10%	
Schneider	SBD315RC (SBD 315, SDD 315)	[RC]	315W	3-20	95%-9%		1	89%-3%				
Schneider	SBD315RC (ATD315/CCTO11533)	[RC]	315W	3-20	95%-9%		1	89%-3%				
Schneider	SBD200 (WDE 002299)		4 - 400VA-Turn Universal (2wire)	3-20	96%-30%		1	88%-10%				
Schneider	SBD315RC (SBD 315)	[RC]	315W	3-20	95%-9%		1	89%-3%				
VADSBO	ED 350	[RC]	50 - 350W	5-20	93%-34%					1-3	99%-22%	
VADSBO	DRS 315	[RC]	50 - 315W		N.A.	N.A.					N.A.	N.A.
VADSBO	DU 250	[RC]	20 - 250W	3-20	92%-14%	<21				1-3	82%-5%	<2
Varilight	HQ3W	[R]	60-400W	3-20	85%-14%		1	93%-3%		1	95%-6%	
Varilight	ICT401 M	[RC]	20-400W	3-20	85%-14%	<11				1-3	85%-2%	
Vimar	20148	[RL]	500W		N.A.	N.A.	1	94%-4%		1	95%-12%	
Vimar	14153	[R]		3-20	98%-3%	<10				1-3	96%-3%	
Vimar	20160	[RC]			N.A.	N.A.				1-3	95%-6%	<2
Vimar	20162	[RL]	40 - 300W	3-20	96%-18%	<21	1	90%-5%		1	94%-15%	
Philips Dynalite	DDLE801		(100W per channel)	3-20	97%-3%		1	88%-3%		1	97%-3%	
Philips Dynalite	DDTMI02 Module		(460 W per channel)	3-20	97%-3%		1	91%-3%		1	99%-3%	

- Note :
- #1) Unexpected behaviour can occur outside the range of specified number of lamps. The mentioned numbers are tested. In some cases the dimmers can be loaded with more lamps than is specified in this document (most dimmers can be loaded with LED lamps to 20% of specified power; LED dimmers can be loaded to specified power)
  - #2) Occupancy sensors can act like dimmers, therefore Philips recommend to use dimmable lamps in combination with it.
  - #3) Glowing means: a switched off dimmer still having the possibility that a small light output is visible. This status can occur when a low quantity of lamps is connected.
  - #4) Yellow cells indication: Sometimes flickering is observed due to low dimmer loads, best visible at deep dimming
  - #4a) Yellow cells indication: Dimming performance: LED's have much lower load (wattage) than traditional lightsources. (e.g. flickering where "active loads" can reduce your problems)
  - #4b) Yellow cells indication: Dimming range, minimum dim level will be >10%, and/or maximum level will be <80% lightlevel
  - #5) Various dimmer suppliers offer "active loads" (e.g. Busch Jaeger Kompensator 6596) to optimize dimming performance in case of lamp-dimmer system issues. Using double pole switches will prevent glowing issues.
  - #7) This list is based on measurements in a lab environment with nominal voltage, a different voltage will result in a different dimming range. Therefore we indicated 3% as minimum lightlevel as labcondition.
  - #8) Dimmermanufacturers may change the technical design of the dimmer without informing LED lamp suppliers. These changes can influence the performance of LED products. Philips cannot be held responsible for inaccuracies in the compatibility lists due to technical changes in dimmers
  - #9) In general Philips dimmable LED lamps can be dimmed with any type of dimmer (type R, RL, RC or RLC).

Disclaimer:  
Philips will not accept claims for any damage caused by implementing the recommendations in this document.

[www.lighting.philips.com/main/products/masterled](http://www.lighting.philips.com/main/products/masterled)  
[www.lighting.philips.com/main/products/coreproledlamps](http://www.lighting.philips.com/main/products/coreproledlamps)







© Signify 2018. All rights reserved. Philips reserves the right to make changes in specifications and/or to discontinue any product at any time without notice or obligation and will not be liable for any consequences resulting from the use of this publication.

[www.philips.com/masterledlamps](http://www.philips.com/masterledlamps)

08/2018  
Data subject to change.