

# Consumer 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	[R L ]	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	SBD420RCRL (CCTEL13011)	[RLC ]	420W
Eltako	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	1271LEDE	[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	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	SBD420RCRL (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	310-0280X	[LED]	2 – 100 VA
PEHA	431HAN	[RL ]	6 – 120W [LED] 6 – 60W
Philips	UID8670	[LED]	2 – 100 VA-LED - Push (3wire)
RELCO	RPO977	[LED]	4 – 100W
RELCO	RM0545	[LED]	4 – 100W
Schneider	SBD315RC (SBD 315, SDD 315, ATD315, CCT011533)	[RC ]	315W
Schneider	SBD200 (WDE 002299)		4 – 400VA - Turn Universal (2wire)
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

ABROSA SL263 RD 068 9W 27K N HV IP44 ABROSA SL263 RD 068 9W 27K N HV IP44 3P ABROSA SL263 RD 068 9W 27K W HV IP44 ABROSA SL263 RD 068 9W 27K W HV IP44 3P			DIVE SL261 RD 070 5W 27K C HV IP65L DIVE SL261 RD 070 5W 27K C HV IP65L 3P DIVE SL261 RD 070 5W 27K N HV IP65L DIVE SL261 RD 070 5W 27K N HV IP65L 3p DIVE SL261 RD 070 5W 27K W HV IP65L DIVE SL261 RD 070 5W 27K W HV IP65L 3p			SPARKLE SL261 RD 070 5W 27K N HV L SPARKLE SL261 RD 070 5W 27K N HV L 3p SPARKLE SL261 RD 070 5W 27K W HV L SPARKLE SL261 RD 070 5W 27K W HV L 3p		
Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing
1-5	95%-23%		1-5	92%-24%		1-5	92%-24%	
1-5	95%-25%		1-5	93%-20%		1-5	93%-20%	
	73%-60%	1-5		N.A.	N.A.		N.A.	N.A.
1-5	96%-39%		1-5	92%-30%		1-5	92%-30%	
1-5	98%-2%		1-5	93%-1%		1-5	93%-1%	
1-5	98%-5%		2-5	97%-1%		2-5	97%-1%	
1-5	96%-20%		1-5	96%-23%		1-5	96%-23%	
1-5	96%-11%		1-5	87%-4%	1-5	1-5	87%-4%	1-5
1-5	98%-18%		1-5	94%-22%	1-5	1-5	94%-22%	1-5
1-5	97%-23%		1-5	91%-24%		1-5	91%-24%	
1-5	98%-11%		1-5	93%-11%		1-5	93%-11%	
3-5	98%-11%		1-5	91%-11%		1-5	91%-11%	
1-5	98%-10%		1-5	98%-9%	1-3	1-5	98%-9%	1-3
1-5	97%-23%		1-5	91%-24%		1-5	91%-24%	
1-5	98%-11%		1-5	93%-11%		1-5	93%-11%	
3-5	98%-11%		1-5	91%-11%		1-5	91%-11%	
1-5	99%-30%	<2	1-5	95%-31%	1-5	1-5	95%-31%	1-5
1-5	99%-12%		1-5	89%-11%	1-5	1-5	89%-11%	1-5
1-5	99%-22%	<2	1-5	98%-23%	1-5	1-5	98%-23%	1-5
1-5	99%-22%	<2	1-5	98%-23%	1-5	1-5	98%-23%	1-5
1-5	98%-22%	<2	1-5	98%-24%	1-5	1-5	98%-24%	1-5
1-5	94%-22%		1-5	92%-24%		1-5	92%-24%	
1-5	99%-12%		1-5	93%-10%	1-5	1-5	93%-10%	1-5
1-3	94%-36%		1-5	82%-31%	1-5	1-5	82%-31%	1-5
1-5	97%-14%		2-5	88%-12%	1-5	2-5	88%-12%	1-5
2-5	97%-19%		3-5	95%-18%	1-5	3-5	95%-18%	1-5
1-5	99%-14%	<2	1-5	96%-0%	1-5	1-5	96%-0%	1-5
1-2	97%-8%		1-5	89%-30%	1-5	1-5	89%-30%	1-5
1-5	97%-11%	<2	1-5	89%-8%	1-5	1-5	89%-8%	1-5
1-5	97%-3%		1-5	98%-1%	<4	1-5	98%-1%	<4
1-5	95%-26%		2-5	84%-27%		2-5	84%-27%	
1-5	97%-23%		1-5	91%-24%		1-5	91%-24%	
1-5	98%-11%		1-5	93%-11%		1-5	93%-11%	
3-5	98%-11%		1-5	91%-11%		1-5	91%-11%	
2-5	94%-23%		1-5	81%-17%		1-5	81%-17%	
1-5	96%-15%		1-5	84%-14%		1-5	84%-14%	
1-5	95%-15%		1-5	87%-15%		1-5	87%-15%	
1-5	95%-15%		1-5	87%-15%		1-5	87%-15%	
1-5	99%-5%		1-4	95%-3%		1-4	95%-3%	
1-3	96%-11%		1-5	86%-11%		1-5	86%-11%	
1-5	96%-11%		1-5	87%-4%	1-5	1-5	87%-4%	1-5
1-5	97%-7%		1-5	97%-6%		1-5	97%-6%	
1-5	97%-14%		1-5	85%-13%		1-5	85%-13%	
1-5	98%-11%		1-5	93%-11%		1-5	93%-11%	
1-5	97%-23%		1-5	91%-24%		1-5	91%-24%	
1-5	95%-27%		1-5	88%-31%		1-5	88%-31%	
2-5	99%-17%		2-5	91%-20%		2-5	91%-20%	
1-5	93%-7%	1-5	1-5	85%-9%	1-5	1-5	85%-9%	1-5
1-5	95%-24%		1-5	95%-18%		1-5	95%-18%	
1-5	95%-3%		1-5	86%-1%	1-5	1-5	86%-1%	1-5
1-5	98%-15%	1-5	1-5	93%-15%	1-5	1-5	93%-15%	1-5
1-5	99%-4%		1-5	98%-0%	1-5	1-5	98%-0%	1-5
1-5	99%-9%	<3	1-5	92%-8%	1-5	1-5	92%-8%	1-5
1-5	96%-11%	1-5	1-5	89%-13%	1-5	1-5	89%-13%	1-5

- Note :**
- #1) Dimmers are tested with the number of LED light sources mentioned in the column "Dimming performance". A number of LED light sources outside the listed range may result in less optimal behavior. Although not specifically tested, some dimmers can be loaded with more light sources than specified in this document.
  - #1a) Most (non-LED dedicated) dimmers can be loaded with LED light sources up to 20% of dimmer specified maximum power. Example: Dimmer 400W -> 20% = 80W, which means that e.g. up to 16 pcs 5W LED light sources can be connected
  - #1b) LED dimmers can be loaded up to the specified maximum dimmer power (Wattage).
  - #2) Always study the packaging of LED light sources if these can be used in combination with occupancy/motion sensors.
  - #3) Glowing means: when connected to a dimmer in its off-state, a LED light source may still emit a small, yet visible amount of light. This may e.g. occur if a low quantity of LED light sources is connected.
  - #4) "Dimming range" color indications and criteria (all percentages relate to the LED light source full power):
    - Green cell: minimum dimming level is below 10% and maximum level at least 80%.
    - Yellow cell: minimum dimming level is between 10% and 20% (inclusive) and/or maximum level is below 80%.
    - Red cell: minimum dimming level is above 20%.
    - Grey cell: the dimmer - LED light source combination is not applicable.
    - White cell: no data available.
  - #5) Various dimmer suppliers offer "active loads" to optimize dimming performance in case of light source-dimmer system issues. (e.g. Busch Jaeger Compensator 6596).
  - #6) This list is based on measurements performed in a lab environment at nominal mains voltage, different mains voltages may result in a different dimming range.
  - #7) Dimmer manufacturers may change the technical design of their dimmer without informing Philips / Signify. Such changes may affect the performance when used in combination with LED light sources.
  - #8) In general Philips dimmable LED light sources can be dimmed with any type of dimmer (type R, RL, RC or RLC).
  - #9) Mixed loads may give unexpected dimming behavior or even result in defects, for which Philips / Signify can not be held responsible.
  - #10) LED light source are dimmable across the indicated dimming range, but may exhibit minor flickering at distinct dim settings.
  - #11) The information contained here is believed to be accurate at the time it was published, but is provided "AS IS".

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



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**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
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N.A.	Dimmer lamp combination not applicable
T.B.D.	Dimmer lamp combination not tested

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Brand		Type	Type	Load	DIVE SL261 RD 070 5.5W 27K C HV IP65R / DIVE SL261 RD 070 5.5W 27K N HV IP65R 3P DIVE SL261 RD 070 5.5W 27K N HV IP65R / DIVE SL261 RD 070 5.5W 27K N HV IP65R 3p DIVE SL261 RD 070 5.5W 27K W HV IP65R / DIVE SL261 RD 070 5.5W 27K W HV IP65R 3p DIVE SL261 RD 070 5.5W 40K N HV IP65R / DIVE SL261 RD 070 5.5W 40K W HV IP65R			SPARKLE SL261 RD 070 5.5W 27K N HV R / SPARKLE SL261 RD 070 5.5W 27K N HV R 3p SPARKLE SL261 RD 070 5.5W 27K W HV R / SPARKLE SL261 RD 070 5.5W 27K W HV R 3p SPARKLE SL261 RD 070 5.5W 40K N HV R / SPARKLE SL261 RD 070 5.5W 40K W HV R		
					Dimming Performance	Dimming Range	Glowing	Dimming Performance	Dimming Range	Glowing
Berker  INSTA	286710	[RC ]		20 – 360 W - Turn	1-5	94%-24%		1-5	94%-24%	
Berker  INSTA	283010	[R ]		60 – 400 W - Turn	1-5	95%-20%		1-5	95%-20%	
Bticino	L4407	[ ]		60 – 250 W		N.A.	N.A.		N.A.	N.A.
Busch Jaeger  ABB	2200 U - 503	[R ]		60 – 400 W - Turn	1-5	94%-30%		1-5	94%-30%	
Busch Jaeger  ABB	2247 U	[R L ]		20 – 500 W - Turn	1-5	95%-0%		1-5	95%-0%	
Busch Jaeger  ABB	2250 U	[R ]		60 – 600 W - Turn	2-5	96%-1%		2-5	96%-1%	
Busch Jaeger  ABB	6513 U - 102	[RC ]		40 – 420 W - Turn	1-5	95%-21%		1-5	95%-21%	
Busch Jaeger  ABB	6523 U	[LED]		2 – 100 VA-LED - Turn	1-5	90%-4%	1-5	1-5	90%-4%	1-5
Busch Jaeger  ABB	6526 U	[LED]		2 – 100 VA-LED - Push (2wire)	1-5	95%-19%	1-5	1-5	95%-19%	1-5
ELKO  Schneider	SBD200LED (CCTEL10501)	[LED/RC]		4 – 200W(RC) 4 – 400W(RL)	1-5	90%-24%		1-5	90%-24%	
ELKO  Schneider	SBD315RC (315 GLE )	[RC ]		315W	1-5	93%-10%		1-5	93%-10%	
ELKO  Schneider	SBD420RCRL (CCTEL13011)	[RLC ]		420W	1-5	93%-20%		1-5	93%-20%	
Eltako	EVD6INPN-UC			400W 3-wire Push Module	1-5	99%-10%	1-5	1-5	99%-10%	1-5
Feller  Schneider	40200 (SBD200LED CCTCH10601)	[LED/RC]		4 – 200W(RC) 4 – 400W(RL)	1-5	90%-24%		1-5	90%-24%	
Feller  Schneider	40300 (SBD315)	[RLC ]		300W	1-5	93%-10%		1-5	93%-10%	
Feller  Schneider	40420 (SBD420)	[RLC ]		420W	1-5	93%-20%		1-5	93%-20%	
GIRA	1176-00/01	[RLC ]		50 – 420W	1-5	96%-31%	1-5	1-5	96%-31%	1-5
GIRA	2390 00/ 100	[LED]		7 – 100W - Push (3wire)	1-5	92%-12%	1-5	1-5	92%-12%	1-5
Hager	EVN 011	[RC ]		300VA	1-5	99%-23%	1-5	1-5	99%-23%	1-5
Hager	EVN 012	[RC ]		300W	1-5	99%-23%	1-5	1-5	99%-23%	1-5
Hager	EVN 004	[RL ]		500VA	1-5	97%-23%	1-5	1-5	97%-23%	1-5
Jung	225 TDE	[RC ]		20 – 525 W - Turn	1-5	92%-23%		1-5	92%-23%	
Jung	1271LEDE	[LED]		3 – 100W - Push (3wire)	1-5	93%-11%	1-5	1-5	93%-11%	1-5
Klik aan Klik uit	AWMD-250	[LED]		3 – 24W	1-5	86%-35%	1-5	1-5	86%-35%	1-5
Klik aan Klik uit	ACM 300			300W - 3-wire Push LED Dimmer	1-5	92%-30%	1-5	1-5	92%-30%	1-5
Legrand	774161	[RL ]		40 – 400 W - Turn		N.A.	1-5		N.A.	1-5
Legrand	78401	[RLC ]		40 – 500W	1-5	92%-0%	1-5	1-5	92%-0%	1-5
Legrand	67083	[RLC ]		3 – 400W	1-3	89%-20%	1-5	1-3	89%-20%	1-5
Legrand	67084	[RLC ]		8 – 300 VA - Push LED (3wire)	1-5	90%-10%	1-5	1-5	90%-10%	1-5
Legrand	67085 (078406)	[RLC ]		8 – 300 VA - Push LED (3wire)	1-5	99%-0%	<4	1-5	99%-0%	<4
Legrand	L4402N	[R ]		60 – 500W	2-5	86%-28%		2-5	86%-28%	
Merten  Schneider	SBD200LED (MEG5134-0000)	[LED/RC]		4 – 200W(RC) 4 – 400W(RL)	1-5	90%-24%		1-5	90%-24%	
Merten  Schneider	SBD315RC (MEG5136-0000)	[RC ]		315W	1-5	93%-10%		1-5	93%-10%	
Merten  Schneider	SBD420RCRL (MEG5138-0000)	[RLC ]		20 – 420 VA	1-5	93%-20%		1-5	93%-20%	
MK - Electric	K1535	[R ]		65 – 450 W - Turn	2-5	82%-17%		2-5	82%-17%	
MK - Electric	K1501 WHILV	[R ]		60 – 500 W - Turn	1-5	87%-14%		1-5	87%-14%	
MK - Electric	K4501 WHILV	[RLC ]		180W	1-5	86%-15%		1-5	86%-15%	
MK - Electric	K4500 WHILV	[RLC ]		400W	1-5	87%-15%		1-5	87%-15%	
NIKO	310-0280X	[LED]		2 – 100 VA	1-4	99%-4%		1-4	99%-4%	
PEHA	431HAN	[RL ]		6 – 120W [LED] 6 – 60W	1-5	87%-11%		1-5	87%-11%	
Philips	UID8670	[LED]		2 – 100 VA-LED - Push (3wire)	1-5	90%-4%	1-5	1-5	90%-4%	1-5
RELCO	RPO977	[LED]		4 – 100W	1-5	96%-6%		1-5	96%-6%	
RELCO	RM0545	[LED]		4 – 100W	1-5	87%-13%		1-5	87%-13%	
Schneider	SBD315RC (SBD 315, SDD 315, ATD315, CCT011533)	[RC ]		315W	1-5	93%-10%		1-5	93%-10%	
Schneider	SBD200 (WDE 002299)			4 – 400VA - Turn Universal (2wire)	1-5	90%-24%		1-5	90%-24%	
VADSBO	ED 350	[RC ]		50 – 350W	1-5	87%-31%		1-5	87%-31%	
VADSBO	DRS 315	[RC ]		50 – 315W	1-5	94%-20%	1-5	1-5	94%-20%	1-5
VADSBO	DU 250	[RC ]		20 – 250W	1-5	87%-9%	1-5	1-5	87%-9%	1-5
Varilight	HQ3W	[R ]		60 – 400W	1-5	95%-18%		1-5	95%-18%	
Varilight	ICT401 M	[RC ]		20 – 400W	1-5	85%-2%	1-5	1-5	85%-2%	1-5
Vimar	20148	[RL ]		500W	2-5	96%-15%	1-5	2-5	96%-15%	1-5
Vimar	14153	[R ]			2-5	99%-0%	1-5	2-5	99%-0%	1-5
Vimar	20160	[RC ]			1-5	93%-8%	1-5	1-5	93%-8%	1-5
Vimar	20162	[RL ]		40 – 300W	1-5	92%-12%	1-5	1-5	92%-12%	1-5

- Note :**
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  - #1a) Most (non-LED dedicated) dimmers can be loaded with LED light sources up to 20% of dimmer specified maximum power. Example: Dimmer 400W -> 20% = 80W, which means that e.g. up to 16 pcs 5W LED light sources can be connected
  - #1b) LED dimmers can be loaded up to the specified maximum dimmer power (Wattage).
  - #2) Always study the packaging of LED light sources if these can be used in combination with occupancy/motion sensors.
  - #3) Glowing means: when connected to a dimmer in its off-state, a LED light source may still emit a small, yet visible amount of light. This may e.g. occur if a low quantity of LED light sources is connected.
  - #4) "Dimming range" color indications and criteria (all percentages relate to the LED light source full power):
    - Green cell: minimum dimming level is below 10% and maximum level at least 80%.
    - Yellow cell: minimum dimming level is between 10% and 20% (inclusive) and/or maximum level is below 80%.
    - Red cell: minimum dimming level is above 20%.
    - Grey cell: the dimmer - LED light source combination is not applicable.
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Data subject to change.