

Manufacturer	Product ID	Type	Min-Max Load	HV-75/90 400 Lm	HV-75/90 400 Lm + Dimming Cable	All HV-IC Luminaires
ABB Busch Jaeger	6513	RC	40-420VA	✗ Blinks	✓ 40-100%	✓ 40-100%
Berker	2830 10	R	60-400 W	✗	✓ 10-100%	✓ 20-100%
Berker	2867 10	RC	20-360 W	✗	✓ 10-100%	✓ 40-100%
Berker	2873	RL	20-500 W	✗ 40-90%	✓ 0-100%	✓ 20-100%
Busch Jaeger	6523U	RL	2-100 W	✓ 10-100%	✓ 0-100%	✓ 0-100%
Busch Jaeger	2247U	RL	20-250 W	✓ 20-100%	✓ 0-100%	✓ 0-100%
Elko	315GLE	RC	40-315VA	✓ 40-80%	✗ Blinks at 100%	✓ 40-80%
Elko	400GLI	RL	40-400VA	✓ 40-80%	✓ 20-100%	✓ 20-100%
Eltako	EUD61NPN-UC	RLC	0-400 W	✓ 0-100%	✓ 0-100%	✓ 20-100%
Feller	40600.RL	RL	40-600 W	✗ 20-80%	✓ 0-100%	✓ 20-100%
Feller	40300.RC	RC	20-300 W	✓ 10-100%	✗	✓ 40-100%
Feller	40420.RLC	RLC	40-420 W	✗	✗	✗
Gira	1184-00	R	60-400 W	✗	✓ 10-100%	✓ 20-100%
Gira	1182-00	RC	20-360 W	✗	✓ 10-100%	✓ 40-100%
Gira	2262-00	RL	20-500 W	✗ 40-90%	✓ 0-100%	✓ 20-100%
Ipas	HD300	RC	10-300 W	✓ 40-80%	✓ 20-100%	✓ 40-100%
Ipas	KED-400	RL	35-400VA	✗ Blinks at 30%	✓ 30-100%	✓ 30-100%
Jung	244 EX	R	60-400 W	✗	✓ 10-100%	✓ 20-100%
Jung	243 EX	RC	20-360 W	✗	✓ 10-100%	✓ 40-100%
Jung	225 NV DE	RL	20-500 W	✗ 40-90%	✓ 0-100%	✓ 20-100%
Legrand	078406	RLC	8-300 W	✓ 10-100%	✓ 10-100%	✓ 10-100%
Legrand	067085	RLC	8-300 W	✓ 10-100%	✓ 10-100%	✓ 10-100%
Niko	310-0190X	RLC	5-325 W	✗ 20-80%	✓ 10-100%	✓ 20-100%
Niko	330-00700	RLC	5-350 W	✗ 20-80%	✓ 10-100%	✓ 30-100%
Norwegian	KED400	R	35-400 W	✓ 10-100%	✓ 10-100%	✓ 10-100%
Norwegian	KED600	R	35-600 W	✓ 10-100%	✓ 10-100%	✓ 10-100%
Peha	433 HAB	RC	20-315 W	✗ 40-90%	✓ 10-100%	✗
Peha	434 0A	R	60-400 W	✗ 60-80%	✓ 10-100%	✗
Peha	492 AB	RC	60-525 W	✗	✗	✗
Peha	492 AN	RL	60-600 W	✗	✗	✗
Schneider (Merten)	MTN5131	R	40-400 W	✗ 20-80%	✓ 0-100%	✓ 20-100%
Schneider (Merten)	MTN5133	RL	40-600 W	✗ 20-80%	✓ 0-100%	✓ 20-100%
Schneider (Merten)	MTN5136	RC	20-315 W	✗	✗	✓ 40-100%
Schneider (Merten)	MTN5138	RLC	20-420 W	✗	✗	✗
Schneider (Merten)	MTN5139	RLC	20-600 W	✗ 20-80%	✗	✓ 30-100%
Schneider (Merten)	MTN577099	RLC	25-420 W	✗	✗	✗
Schneider (Merten)	MTN577899	RC	20-315 W	✗	✓ 20-100%	✓ 40-100%
Schneider (Merten)	MEG5170	RLC	10-200 W	✗	✗ 40-80%	✗ 40-80%

✓ = OK ✗ = Not recommended

Important Note

All dimmers are tested with a load of either One or Ten luminaires. Dimmers should always be selected or set in accordance with the type of luminaire and the minimum load. The dimmers with a green tag have provided satisfactory dimming results in our testing procedures. However, the testing results should only be considered as a guideline for the selection of the appropriate dimmer. Manufacturers may change dimmer specifications which could affect the dimming performance in combination with our luminaires. In addition, issues may occur at locations with a poor or unstable electricity net. Therefore, Illuxtron assumes no liability or responsibility for the determination of the proper dimmer equipment necessary to meet your requirements.

Stroboscopic Effects

Nearly all lighting systems produce flicker, defined as the rapid fluctuation of light output in a cyclical manner. For many conventional lighting technologies (e.g., incandescent, fluorescent, and high intensity discharge [HID] lamps), flicker is a consequence of 50 Hz alternating current (AC) power line frequencies. Alternating polarity at these frequencies can result in flicker at twice the power line frequency (e.g., 100 Hz), if electronic ballast circuitry (an LED driver) is not employed.

Direct visual perception of flicker is negligible at frequencies of 100 Hz or higher. However, indirect perception of flicker is possible through stroboscopic effects at frequencies of 100–120 Hz. A stroboscopic effect is an optical phenomenon that causes moving objects to appear stationary when viewed in discrete series of short or instantaneous samples as distinct from a continuous view.

The variety of methods by which light-emitting diodes (LEDs) can be driven means that various flicker frequencies and percent flicker values could be possible in lighting systems using these sources. High Voltage (HV), 230V AC driven LED luminaires may produce flicker, or a stroboscopic effect. Low voltage driven LED luminaires (Illuxtron LV-series) with a low ripple (<3%) eliminate the risk of flicker or stroboscopic effects. Illuxtron is continuously improving its HV luminaires in an attempt to minimize flickering and stroboscopic effects. The HV-IC versions (with 600 Lm light output or higher) have an IC (Integrated Circuit) module which rectifies the 230 VAC mains voltage and feeds it to an AC direct driver without the need for smoothing. The lower-cost alternative, the HV 400 Lm output versions come without IC module and are not recommended for use in living areas or work spaces.

Illuxtron assumes no liability or responsibility for stroboscopic effects that may occur in connection with the use of HV(-IC) LED luminaires.

Note: the stroboscopic effect of AC powered LED luminaires is not to be confused with other potential causes of flickering lights such as power arcing, abnormal loads being created by nearby construction work or factories, an inrush current required upon startup of other electrical appliances or a faulty dimmer.