TruPhase™

Phase Dimming down to 0.1%

Compatible with forward and reverse phase dimmers

specialty lighting industries

Main Characteristics

- 1 Channel, constant current driver (20W max)
- Programmable operation window
- Low inrush current
- 0.1% Phase Dimming
- Dimming curves: Logarithmic/Linear
- Flicker free: IEEE PAR 1789-2015
- UL Class P
- Class 2

0.1% PHASE DIMMING - 2 WIRE

- Range of 150-1050mA, the current operates in continuous mode.
- Range of 0-250mA, the current operates in PWM Dimming mode & the PWM frequency 7.2khz

FLICKER FREE

Title 24 JA8 JA10

Application

- Residential
- Hospitality
- Retail
- Healthcare
- Commercial

Benefits

- Application-oriented operating window for maximum compatibility
- NFC programmable
- Exceptionally smooth fades

1mA Current Programmable Step

■ Dimmer Compatibility

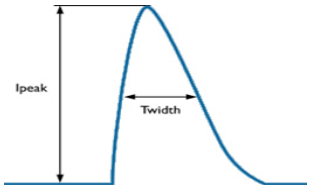
** Contact factory for updated specifications*

Manufacturer	Model	Type
LUTRON	DVCL-153P	Leading Edge (Forward Phase)
LUTRON	DVRF-6L	Leading Edge (Forward Phase)
LUTRON	STCL-153M	Leading Edge (Forward Phase)
LUTRON	PD-6WCL	Leading Edge (Forward Phase)
LUTRON	NCL-153P	Leading Edge (Forward Phase)
LUTRON	PD-5NE	Trailing Edge (Reverse Phase)
Panasonic	WT57572	Leading Edge (Forward Phase)
DNL	BDC300S	Leading Edge (Forward Phase)
DAIKO	DP-39672G	Trailing Edge (Reverse Phase)

■ Inrush Current

▪ Ipeak & Time

Input Voltage	Inrush Current Ipeak	Inrush Current Time, measured 50% of Ipeak
100 Vac	1.7A	30us
220 Vac	3.8A	35us
277 Vac	4.8A	35us



▪ Automatic Circuit Breakers

MCB Type	B10	B13	B16	B20	C10	C13	C16	C20
Number of LED Drivers @100Vac	16	20	25	31	26	33	41	51
Number of LED Drivers @220Vac	35	46	56	70	57	74	91	114
Number of LED Drivers @277Vac	43	56	69	86	70	91	112	140

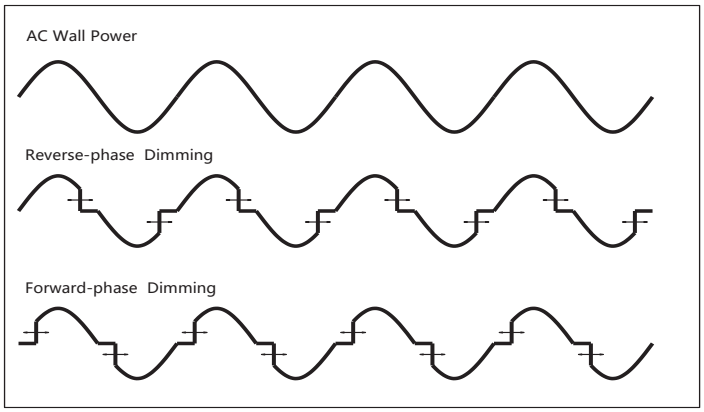
Specialty Lighting Industries, Inc
1306 Doris Ave., Ocean, NJ 07712, USA
Tel. 732.517.0800 | Fax 732.517.0971

■ Electrical Specifications

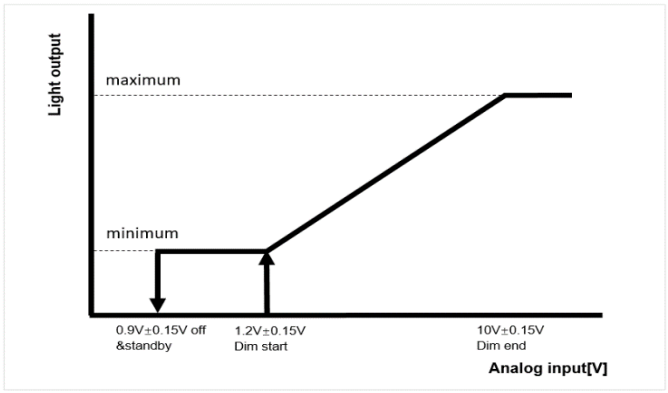
Input	Efficiency (230Vac)	84% (Typical)
	Voltage Range (Vac)	90~305
	Rated Input Voltage (Vac)	100~277
	Frequency Range (Hz)	50/60
	Power Factor	>0.9 at 100~277Vac 50/60Hz input, with 50%~100% load conditions
	THD	＜20% at 100~277Vac 50/60Hz input, with 50%~100% load conditions
	AC Current (Typical)	0.28A MAX. @100Vac, 0.12A MAX. @230Vac
	Inrush Current (Typical)	＜10A at 100~277Vac input 25℃ cold start at 100% condition
	Input Power (W)	28(MAX.)
	Standby Power (W)	＜0.5W @100Vac/50HZ, 230Vac/50HZ, 277Vac/60HZ
	Leakage Current (MAX.)	0.5mA MAX. @277Vac
Output	Output Voltage Range (VDC)	8~54
	Output Current Range (mA)	150~1050
	Rated Power (W)	20(MAX.)
	Output Channel Number	1CH
	Ripple Current (PK-PK)/AV	<10% at max. Iout (ripple=(pk-avg)/avg) Low frequency (<120 Hz) content <1%
	Current Tolerance	± 5% at output current range
	Line Regulation	± 1%
	Load Regulation	± 3%
	Startup Time	<500ms @ 100Vac/230Vac/277Vac
Dimming Port	Dimming Range (% of Iout)	0.1% ~ 100%, Optional dimming Curve:Logarithmic/Linear, dim to off
	Current Supplied by the Dim+ Signal Pin	600uA Max
	Isolation	The 0-10 V circuit is isolated from the AC input and meets basic insulation power supply. The 0-10 V circuit is isolated from the Output and meets basic insulation power supply.
	Input Voltage Range (Vin)	Phase-cut Dimming: only at 100-120VAC. 0-10V Dimming: 100-277VAC range
Protection	Over temperature protection	tc 100℃ +/-10%, the driver stop working
	Short Circuit	Output current of power supply equals set current
Environment	Operating Temperature	-25~+40℃ /Tc 85℃ Max
	Operating Humidity	20~95%RH, non-condensing
	Storage Temperature	-40~+85℃
	Storage Humidity	10~95%RH
	Vibration	10~500Hz, 5G 12min/cycle, period for 72min each along X、Y、Z axis
	Ingress Protection Rating	IP20
Safety&EMC	Safety Standard	UL8750,UL1310 Class 2, CAN/CSA-C22.2 No.223-M91,EN61347-1, EN61347-2-13
	EMC Emission	FCC Part 15 ClassB,EN55015, EN61000-3-2 , EN61000-3-3
	EMC Immunity	EN61000-4-3,4,6,8,11, ANSI C62.41.2（2.5KV）,EN61000-4-5(2.5KV),EN61000-4-2(air discharge 8KV)
Others	Lifetime	＞50000 hours @Tc =82 at 100% load conditions
	MTBF	500,000 hours, measured at full load, 25℃ ambient temperature SR-332 Issue 3
	Dimension (L x W x H mm)	109*41*27
	Weight	170g
Phase-cut dimming compatibility with both phase-cut (reverse-phase and forward-phase) and 0-10v dimmers. Phase-cut dimming always has priority over 0-10v dimming		

** Contact factory for updated specifications*

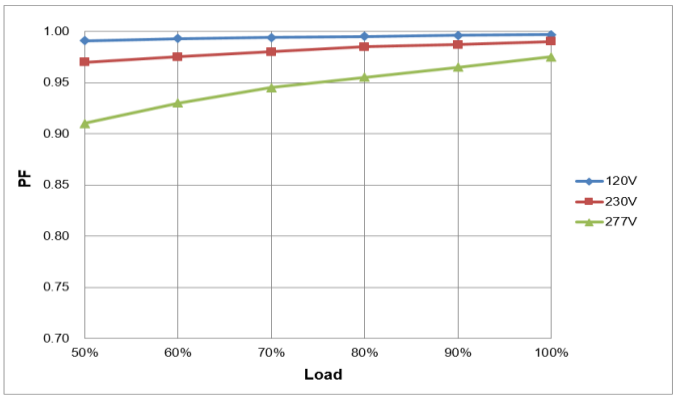
▪ **Phase-cut Dimming Curve**



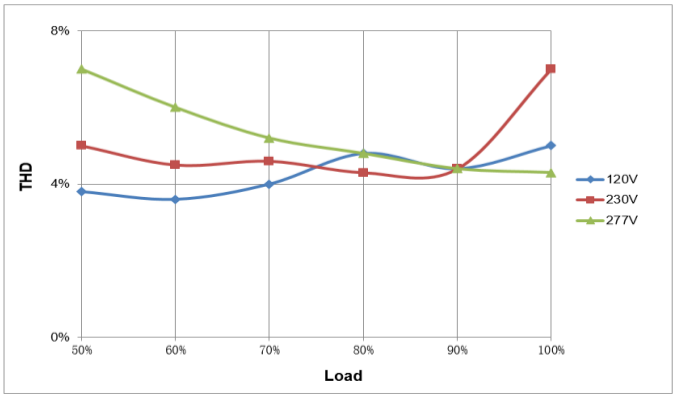
▪ **0-10V Dimming Curve**



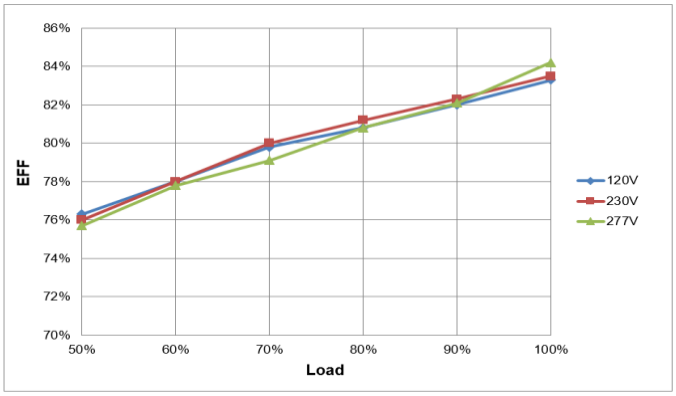
▪ **PF VS Load Curve**

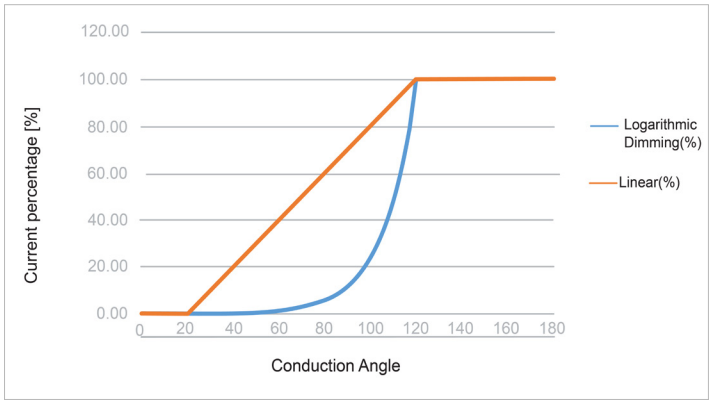


▪ **THD VS Load Curve**



▪ **Efficiency VS Load Curve**

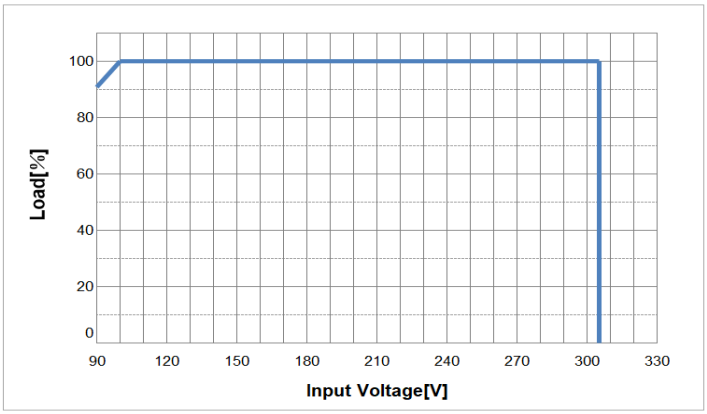




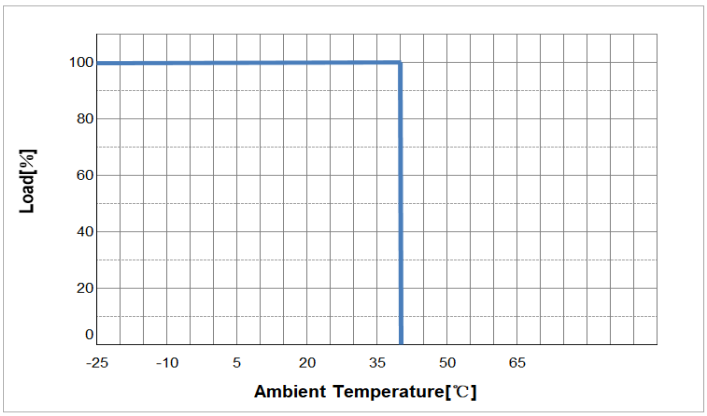
Specialty Lighting Industries, Inc
1306 Doris Ave., Ocean, NJ 07712, USA
Tel. 732.517.0800 | Fax 732.517.0971

■ Curve

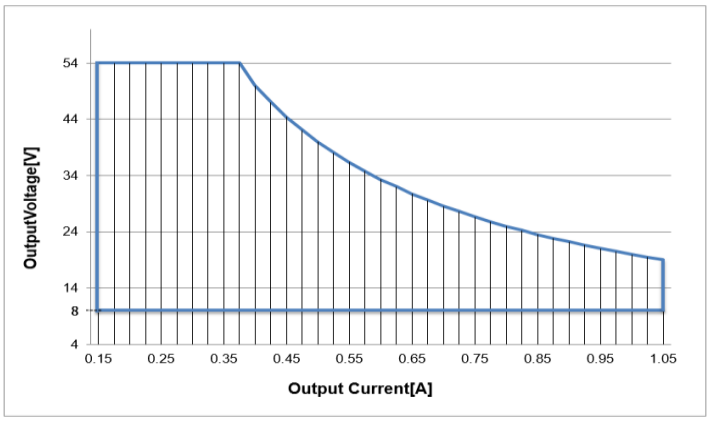
▪ Derating Curve



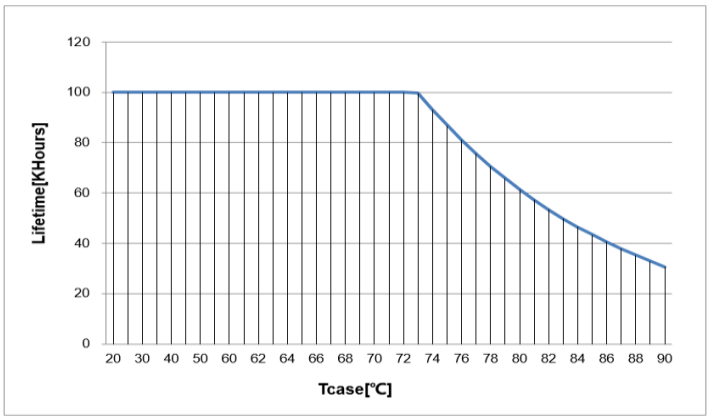
▪ Derating Curve



▪ V/I Curve



▪ Lifetime Vs Tc



0-10V