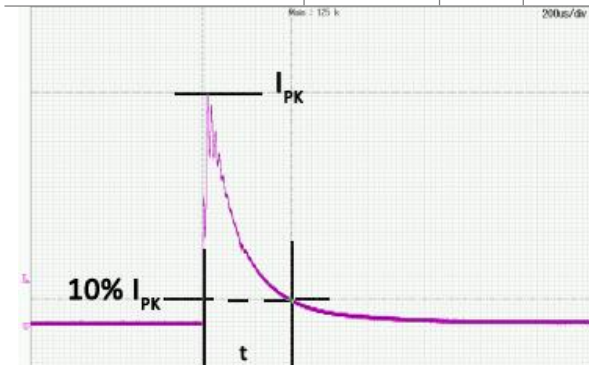


Specification:

Parameters	Symbols	Test Conditions / Comment	Min	Typ	Max	Units							
INPUT													
Input Voltage	V_{IN}	CVJ-A1-060SXXXU-VT	108		305	V_{AC}							
		CVJ-A1-060SXXXM-VT	108		382	V_{AC}							
Rated Input Voltage	$V_{INRATED}$	CVJ-A1-060SXXXU-VT	120		277	V_{AC}							
		CVJ-A1-060SXXXM-VT	120		347	V_{AC}							
Input Frequency	f_{line}		47	50/60	63	Hz							
Input Current	$I_{IN,120}$	Full Load, $V_{IN} = 120V_{AC}$			0.7	A							
		Full Load, $V_{IN} = 277V_{AC}$			0.3	A							
		Full Load, $V_{IN} = 347V_{AC}$			0.23	A							
Inrush Current	I_{INRUSH}	Cold Start, $V_{IN} = 347V_{AC}$			75	A							
Leakage Current	$I_{Leakage}$	$V_{IN} = 347V_{AC}$, 60Hz			0.75	mA							
Number of Drivers per MCB(Circuit Breaker)	MCB type	B10	C10	D10	B13	C13	D13	B16	C16	D16	B20	C20	D20
	120V _{AC}	7	11	13	9	14	17	12	18	20	15	22	26
	277V _{AC}	3	6	12	5	8	16	6	10	20	7	12	25
	347V _{AC}	3	6	12	4	7	15	5	9	19	7	12	24

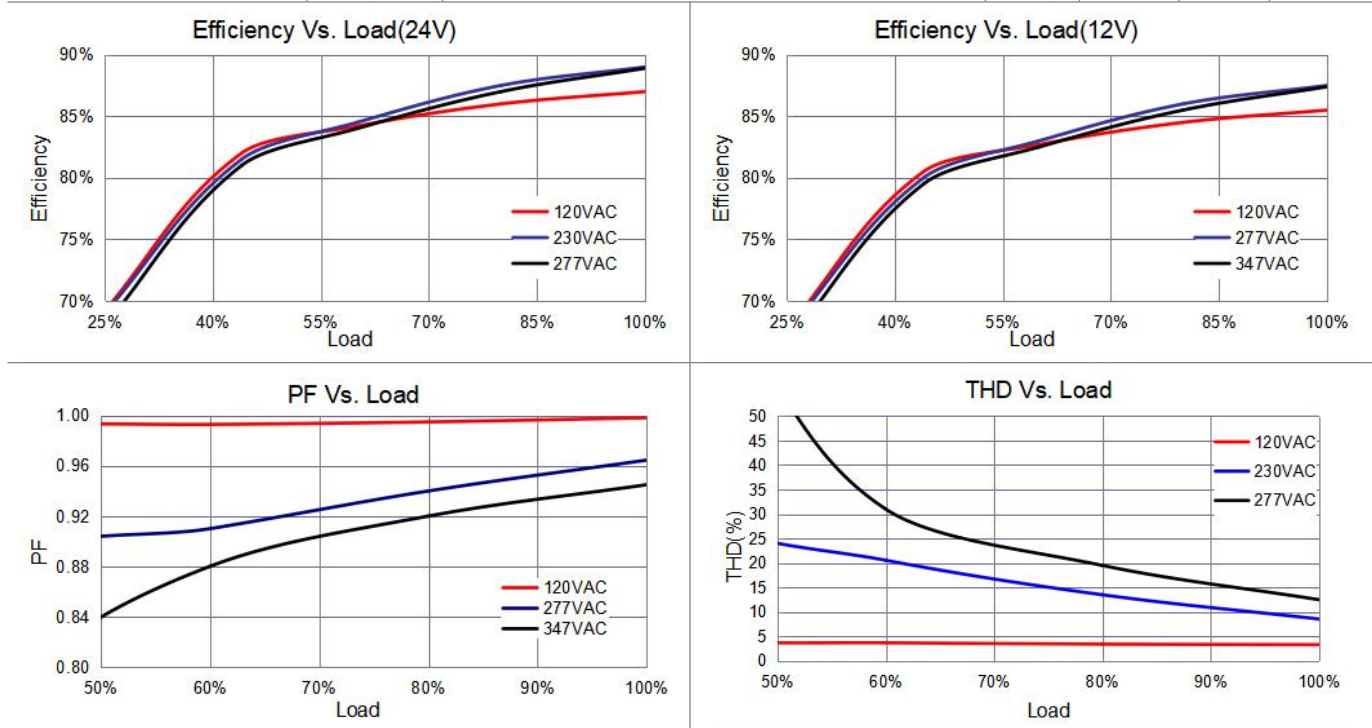


Input Voltage	Inrush Current	t(us)10%-10%
120VAC	27.4A	260
277VAC	61.8A	324
347VAC	74.0A	366

General Characteristics

Power Factor	PF	CVJ-A1-060SXXX-VT, 30~100% load, $V_{IN} = 120V_{AC}$	0.9		PF
		CVJ-A1-060SXXX-VT, 65~100% load, $V_{IN} = 277V_{AC}$	0.9		
		CVJ-A1-060SXXX-VT, 75~100% load, $V_{IN} = 347V_{AC}$	0.9		
Total Harmonic Distortion	THD	CVJ-A1-060SXXX-VT, 30~100% load, $V_{IN} = 120V_{AC}$		20	%
		CVJ-A1-060SXXX-VT, 65~100% load, $V_{IN} = 277V_{AC}$		20	
		CVJ-A1-060SXXX-VT, 75~100% load, $V_{IN} = 347V_{AC}$		20	
Efficiency	η	Full load, $V_{IN} = 120V_{AC}$, $V_{OUT} = 12V$, steady state	85	86	%
		Full load, $V_{IN} = 277V_{AC}$ (U type), $V_{IN} = 347V_{AC}$ (M type), $V_{OUT} = 12V$, Steady state	86	87	
		Full load, $V_{IN} = 120V_{AC}$, $V_{OUT} = 24V$, Steady state	85	86	
		Full load, $V_{IN} = 277V_{AC}$ (U type), $V_{IN} = 347V_{AC}$ (M type), $V_{OUT} = 24V$, Steady state	87	88	

		Full load, $V_{IN}=120V_{AC}$, $V_{OUT}=36V$, Steady state	86	87	
		Full load, $V_{IN}=277V_{AC}$ (U type), $V_{IN}=347V_{AC}$ (M type), $V_{OUT}=36V$, Steady state	88	89	
		Full load, $V_{IN}=120V_{AC}$, $V_{OUT}=48$, Steady state	86	87	
		Full load, $V_{IN}=277V_{AC}$ (U type), $V_{IN}=347V_{AC}$ (M type), $V_{OUT}=48V$, Steady state	88	89	
Turn On Delay Time	T_{on_delay}	Cold Start, No dimmer			0.5 S



OUTPUT

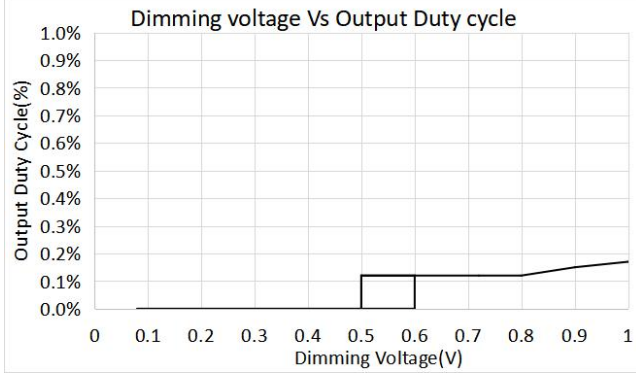
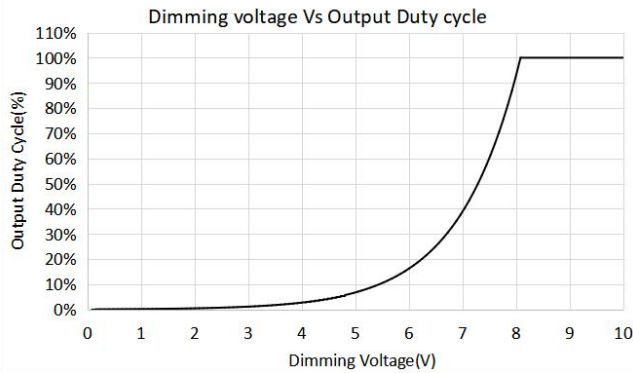
Output Voltage Tolerance	t_{OUT}	No Dimming		3	%
No Load Output Voltage Tolerance	t_{NO_LOAD}	No Load, No Dimming		1.5	%
Output Current	I_{OUT}	CVJ-A1-060S012X-VT	0	5000	mA
		CVJ-A1-060S024X-VT	0	2500	mA
		CVJ-A1-060S036X-VT	0	1667	mA
		CVJ-A1-060S048X-VT	0	1250	mA
Output Power	P_{OUT}			60	W
Line Regulation	$V_{OUT-LINE}$			1	%
Ripple Voltage	$V_{OUT-LINE}$	Full Load, (pk-to-pk)/Average		5	%
Output Voltage Overshoot	$V_{OVERSHOOT}$	Turning Power ON		10	%

0~10V or Resistor Dimming(Optional)

The 0~10V or resistor dimming can be used to dim the output voltage via a standard commercial wall dimmer (0~10VDC) or an external control voltage source (0~10VDC) or external resistor. The unit can be compatible with both sink and source current dimmers.

Dimming Curve	Linear. please see "Dimming curve".				
Absolute Maximum Voltage	V_{DIM}		0	50	V

on 0~10V Pin					
Source Current on 0~10V Dimming Pin	I_{DIM}			200	μA
Light On	V_{DIM-on}			0.6	V
Light Off	$V_{DIM-off}$			0.5	V
Dimming Voltage for Full Bright	$V_{DIM-MAX}$		8		V



Triac Dimming(Optional)

The unit is compatible With Leading-edge and Trailing-edge Dimmer.

Input Voltage	$V_{IN-TRIAC DIM}$			120		V_{AC}
Dim Output Voltage	$V_{OUT-TRIAC}$	PWM Output	0	-	100	% of V_{OUT}
Suggest Load Range	$P_{Suggest}$	$V_{IN} = 120 V_{AC}$	10		100	%

Auxiliary source (Optional)

Voltage range	V_{AUX}	Standard product	11.4	12	12.6	Vdc
Current range	I_{AUX}	$V_{AUX}=12V$			50	mA
Output Power	P_{AUX}				0.6	W
Voltage tolerance	t_{AUX}				8	%

Protection

Over Voltage Protection	V_{OVP}	CVJ-A1-060S012X-VT, Latch mode.	14		18	V
		CVJ-A1-060S024X-VT, Latch mode.	28		36	V
		CVJ-A1-060S036X-VT, Latch mode.	40		47	V
		CVJ-A1-060S048X-VT, Latch mode.	56		63	V
Over Current Protection	I_{OCP}	CVJ-A1-060S012X-VT, Hiccup mode.	5000		5600	mA
		CVJ-A1-060S024X-VT, Hiccup mode.	2500		2810	mA
		CVJ-A1-060S036X-VT, Hiccup mode.	1667		1900	mA
		CVJ-A1-060S048X-VT, Hiccup mode.	1250		1400	mA
Over Temperature Protection	T_{OTP}	If the case temperature exceeds OTP point, the output voltage of the driver is automatically reduced.	90	95	100	$^{\circ}C$

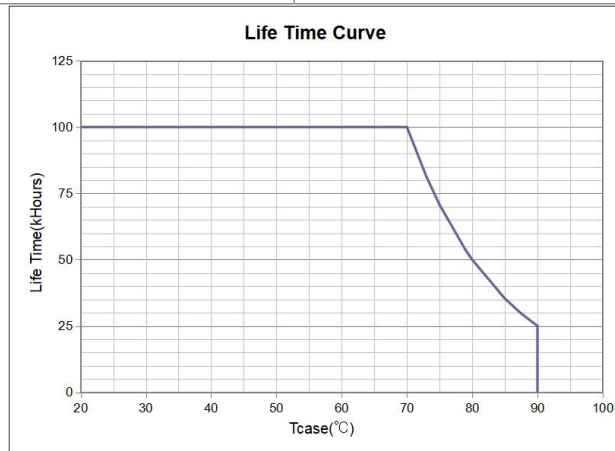
Over Power Protection	CC/CV mode.
Short Circuit Protection	The unit can recover automatically after fault conditions is removed.

Environment

Storage Temperature	$T_{Storage}$	Humidity: 5% RH to 95% RH	-40	-	+85	°C
Ambient Operating Temperature	T_a		-40	-	+55	°C
Max. Case Temperature	T_c	Hot spot on case			90	°C
Operating Relative Humidity	H_a	Non-Condensing	10		90	%
Acoustic Noise		Measured from 1 m w/o dimmer.			24	dBA
Cooling	Convection Cooling					
IP Rating	IP66					

Others

Life Time	T_{Life}	Full Load, 80°C case temperature,	50			kHrs
MTBF	T_{MTBF}	Full Load, 25°C ambient temperature	200			kHrs
Net Weight	W_{NET}			450		g
Warranty	5 Years Warranty at $T_c \leq 80^\circ\text{C}$					
Flicker	IEEE 1789 ($\geq 1\%$ dimming), Title 24					



Safety Compliance

CUL/UL	UL8750, CAN/CSA-C22.2 No. 250.13
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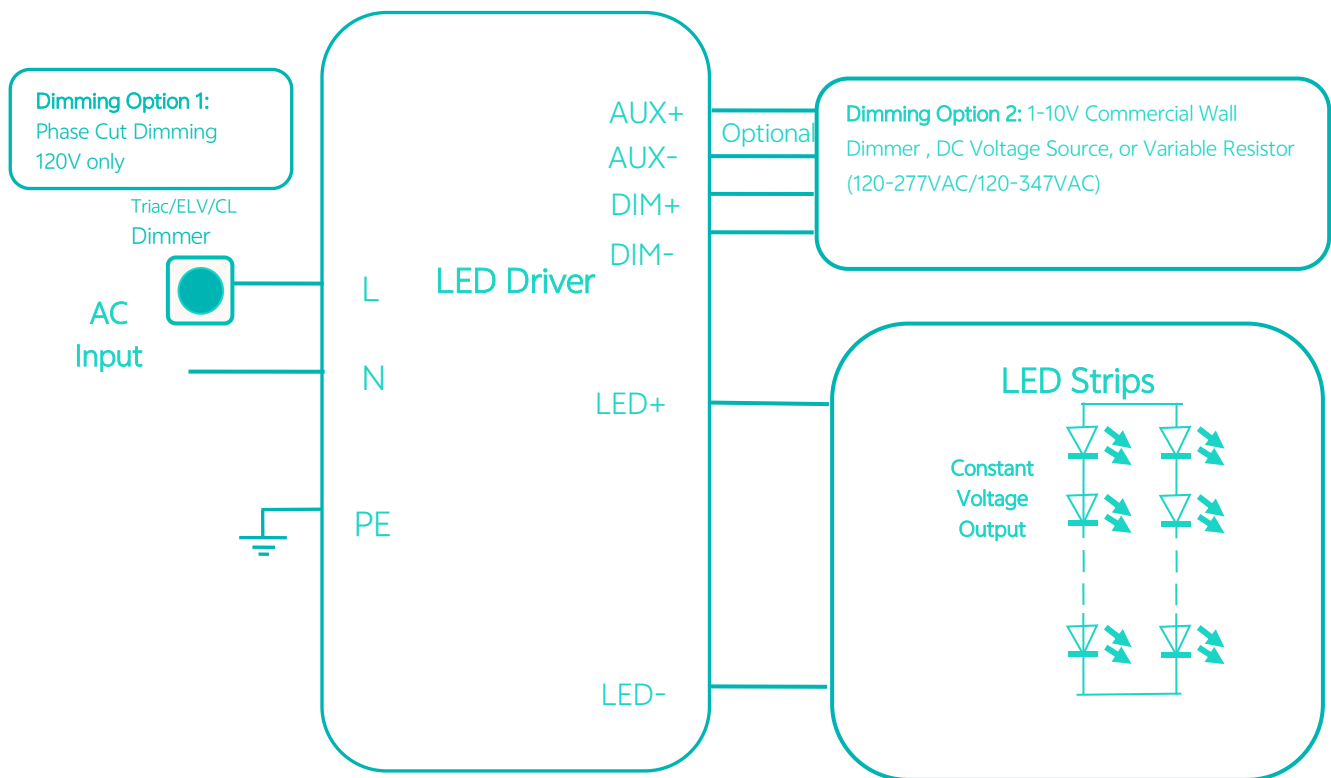
Electromagnetic Compliance

EMC Requirements	Standard	Conditions
EMI Emissions	FCC Title 47 Part 15B	Class B at 120VAC, Class A at 277VAC & 347VAC
Voltage Fluctuations and Flicker	IEC61000-3-3	

Immunity Compliance	IEC 61000-4-2	±8kV air Discharge, ±6kV Contact Discharge
	IEC 61000-4-5 or ANSI/IEEE C62.41-2002	± 4kV Common Mode(12 Ω), ± 2kV Differential Mode(2 Ω), 5 strikes/1minute interval (40 total strikes)
	ANSI/IEEE C62.41.1-2002	2.5kV Ring Wave, test at 30Ω 7 Strikes/1 minute interval, Common and Differential mode, 56 total strikes
	IEC 61000-4-11	>95% dip, .5 period; 30% dip, 25 periods; 95% reduction, 250 periods
	IEC 61000-4-4	± 2kV Direct couple to Line input, 5kHz repetition rate, 15mS duration, 300mS period. 7 coupling paths, 1 minute per path (14 total combinations)

Note: Unless otherwise specified, all the above parameters are measured at ambient temperature of 25°C and rated voltage.

Typical Application



Packaging

Driver quantity (pcs)	Layer	Weight (kg)	Outer dimensions of Carton L*W*H(mm)
TBD			330 X 305 X 210

Mechanical Drawing:

