Constant Voltage 360W DALI+PUSH LED Driver Series

SELV (for DA2-Type only) (for DA-Type only)

■ Features :

· Constant Voltage mode output with multiple levels selectable by dip switch
· Emergency lighting application is available according to IEC61347-2-13
· Built-in active PFC function and class II design
· Standby power consumption <0.5W
· Functions: DALI interface(logarithm or linear dimming curve selectable), push dimming synchronization up to 10units
.3 years warranty

■ Applications :

·LED indoor lighting
·LED office lighting
·LED commercial lighting
·LED panel lighting
·Industrial lighting

■ Description :

GRT-DCV360-DA series is a 360W AC/DC constant current mode output LED driver featuring the multiple levels selectable by dip switch and the DALI interface with the compliance to IEC62386. GRT-DCV360-DA operates from 100~240VAC and offers different output voltage levels ranging between 12V and 48V. Thanks to the efficiency up to 86%, with the fanless design, the entire series is able to operate for -30'C ~+85'C case temperature under free air convection. In addition, GRT-DCV360-DA is equipped with push dimming and synchronization functions, so as to provide the optimal design flexibility for LED lighting system.

■ Specification

MODEL		GRT-DCV360-DA			
OUTPUT	DC VOLTAGE RANGE	Current level selectable via DIP switch, please refer to"DIP SWITCH TABLE" section			
		12V	24V	36V	48V
	RATED POWER	360W			
	CURRENT LEVEL	24A	15A	10A	7.5A
	CURRENT RIPPLE	5.0% max. @rated current			
	CURRENT TOLERANCE	±5%			
	SETUP note1& note8	500ms / 230VAC			
INPUT	VOLTAGE RANGE Note.2	100 ~ 240VAC (Please refer to "STATIC CHARACTERISTIC" section)			
	FREQUENCY RANGE	47 ~ 63Hz			
	POWER FACTOR (Typ.)	PF≧0.94/230VAC, PF≧0.91/277VAC@full load (Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)			
	TOTAL HARMONIC DISTORTION	THD< 20%(@load≧50%/230VAC; @load≧75%/277VAC) (Please refer to "TOTAL HARMONIC DISTORTION(THD)" section)			
	EFFICIENCY (Typ.) Note.4	86%			
	AC CURRENT (Typ.)	0.17A/230VAC 0.15A/277VAC			
	INRUSH CURRENT (Typ.)	COLD START 20A(twidth=260μs measured at 50% Ipeak) at 230VAC; Per NEMA 410			
	MAX. No. of PSUs on 16A	26 units (circuit breaker of type B) / 44 units (circuit breaker of type C) at 230VAC			
	LEAKAGE CURRENT	<0.5mA / 240VAC			
	STANDBY POWER CONSUMPTION Note.5	<0.5W			
PROTECTION	SHORT CIRCUIT	Constant current limiting, recovers automatically after fault condition is removed			
	OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down			
FUNCTION	DIMMING	Please refer to "DIMMING OPERATION" section			
	SYNCHRONIZATION	Please refer to "SYNCHRONIZATION OPERATION" section			
ENVIRONMENT	WORKING TEMP.	Tcase=-30 ~ +85℃ (Please refer to " OUTPUT LOAD vs TEMPERATURE" section)			
	MAX. CASE TEMP.	Tcase=+85℃			
	WORKING HUMIDITY	20 ~ 90% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-40 ~ +80℃, 10 ~ 95% RH			
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)			
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes			
SAFETY & EMC	SAFETY STANDARDS	UL8750(except for DA2-Type), CSA C22.2 NO.250.0-08, ENEC BS EN/EN61347-1, BS EN/EN61347-2-13, BS EN/EN62384 independent,GB19510.14,GB19510.1,BIS IS15885(except for DA2-Type), EAC TP TC 004 approved; According to			
	DALI STANDARDS	IEC62386-101, 102, 207,251			
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC ; I/P-DA:1.5KVAC ; O/P-DA:1.5KVAC			
	ISOLATION RESISTANCE	I/P-O/P:>100M Ohms / 500VDC / 25℃ / 70% RH			
	EMC EMISSION Note.6	Compliance to BS EN/EN55015, BS EN/EN61000-3-2 Class C(@load≧50%) ; BS EN/EN61000-3-3; GB17625.1,GB17743, EAC TP TC 020			
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN61547, light industry level(surge immunity Line-Line 2KV),			
OTHERS	MTBF	2661.8K hrs min. Telcordia SR-332 (Bellcore) ; 213.3K hrs min. MIL-HDBK-217F (25℃)			
	DIMENSION	180*90*46mm (L*W*H)			
	PACKING	0.17Kg ; 72pcs/13.2Kg/1.04CUFT			

Notes:

1. All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25"C of ambient temperature.
2. De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details.
3. Length of set up time is measured at first cold start. Turning ON/OFF the driver may lead to increase of the set up time.
4. Efficiency is measured at 500mA/50V output set by DIP switch.
5. Standby power consumption is measured at 230VAC.

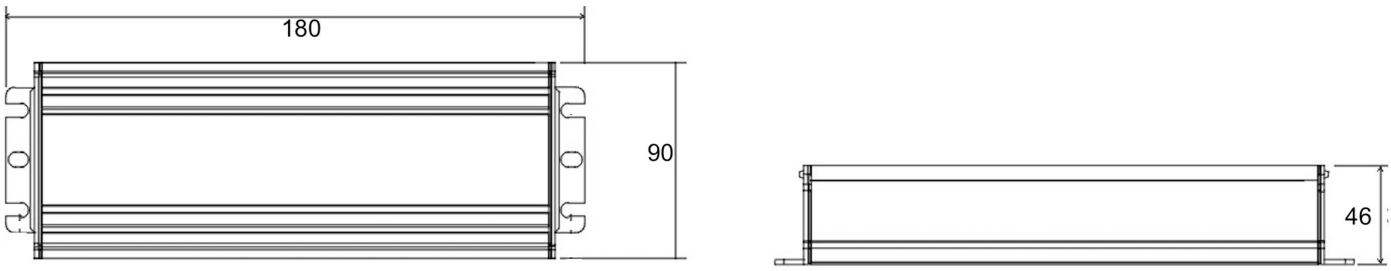
6. The driver is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.

7. The ambient temperature derating of 3.5C/1000m with fanless models and of 5'C/1000m with fan models for operating altitude higher than 2000m(6500ft).

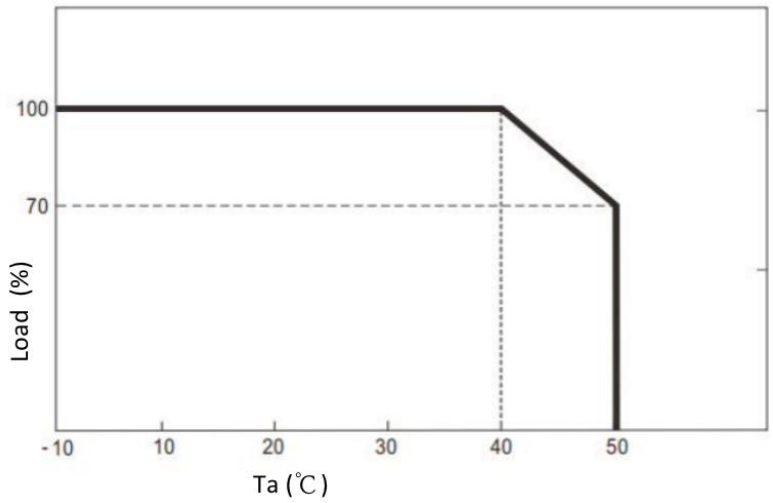
8. Based on IEC 62386-101/102 DALI power on timing and interruption regulations, the set up time needs to test with a DALI controller which can support for DALI power on function, otherwise the set up time will be higher than 0.5 second for DA2-type.

9. To fulfill requirements of the latest ErP regulation for lighting fixtures, this LED power supply can only be used behind a switch without permanently connected to the mains.

■ Dimension(mm)



■ Derating Curve



■ Disclaimer

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.