

Constant Current 72W DALI+PUSH LED Driver Series**■ Features :**

- Constant Current 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-DCC90-DA series is a 90W 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-DCC90-DA operates from 100~240VAC and offers different current levels ranging between 1250mA and 3750mA. 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-DCC90-DA is equipped with push dimming and synchronization functions, so as to provide the optimal design flexibility for LED lighting system.

■ **Specification**

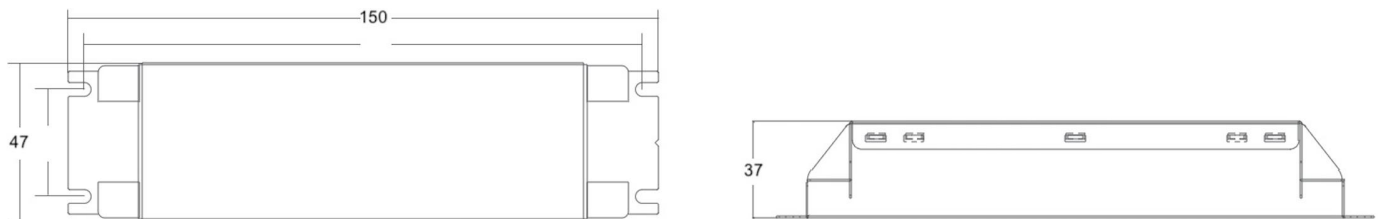
MODEL		GRT-DCC90-DA			
OUTPUT	CURRENT LEVEL	Current level selectable via DIP switch, please refer to "DIP SWITCH TABLE" section			
		3750mA	2500mA	1870mA	1250mA
	RATED POWER	90W			
	DC VOLTAGE RANGE	18 ~ 24V	27 ~ 40V	40 ~ 50V	55 ~ 85V
	OPEN CIRCUIT VOLTAGE (max.)	30V	45V	60V	96V
	CURRENT RIPPLE	5.0% max. @rated current			
	CURRENT TOLERANCE	±5%			
SETUP TIME	Note.3 Note.8	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	<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°C (Please refer to " OUTPUT LOAD vs TEMPERATURE" section)			
	MAX. CASE TEMP.	Tcase=+85°C			
	WORKING HUMIDITY	20 ~ 90% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH			
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)			
	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°C / 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°C)			
	DIMENSION	150*47*37mm (L*W*H)			
	PACKING	0.17Kg ; 72pcs/13.2Kg/1.04CUFT			

Notes:

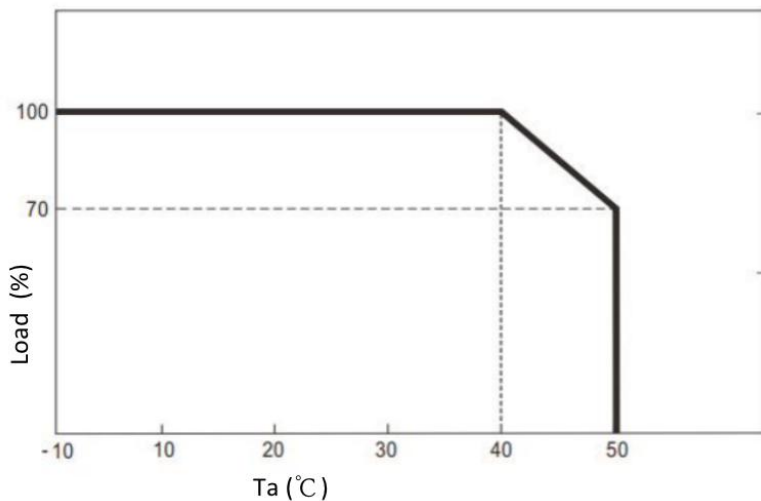
1. All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25°C of ambient temperature.
2. De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details.
3. Length of set up time is measured at first cold start. Turning ON/OFF 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.