

# **GREAT POWER**

#### Power your innovation

### **Constant Current 20W 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

 $\cdot$  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-DCC20-DA series is a 25W 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-DCC20-DA operates from 100~240VAC and offers different current levels ranging between 350mA and 1050mA. 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-DCC20-DA is equipped with push dimming and synchronization functions, so as to provide the optimal design flexibility for LED lighting system.

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MODEL		GRT-DCC20-DA				
		Current level selectable via DIP switch, please refer to "DIP SWITCH TABLE" section				
OUTPUT	CURRENT LEVEL	830mA	500mA	400mA	250mA(c	
	RATED POWER	20W				
	DC VOLTAGE RANGE	18~24V	27 ~ 40V	40~ 50V	55 ~ 85\	V
	OPEN CIRCUIT VOLTAGE (max.)	30V	0V 45V 60V 96V			
	CURRENT RIPPLE	5.0% max. @rated current				
	CURRENT TOLERANCE	±5% 500ms / 230VAC				
	SETUP TIME Note.3 Note.8					
INPUT	VOLTAGE RANGE Note.2	100 ~ 240VAC (Please refer to "STATIC CHARACTERISTIC" section)				
	FREQUENCY RANGE	47~63Hz				
	POWER FACTOR (Typ.)	$\label{eq:PF} \begin{array}{l} PF \geqq 0.94/230 VAC, \ PF \geqq 0.91/277 VAC @ full \ load \\ (Please \ refer \ to \ "POWER \ FACTOR \ (PF) \ CHARACTERISTIC" \ section) \end{array}$				
	TOTAL HARMONIC DISTORTION	THD< 20%(@load≧50%/230VAC; @load≧75%/277VAC)				
	EFFICIENCY (Typ.) Note.4	(Please refer to "TOTAL HARMONIC DISTORTION(THD)" section) 86%				
	AC CURRENT (Typ.)	0.17A/230VAC 0.15A/277VAC				
	INRUSH CURRENT (Typ.)	COLD START 20A(twidth=260µs measured at 50% lpeak) 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	<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				
ewrowent	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°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		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				
	SAFETY STANDARDS	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				
		Compliance to BS EN/EN55015, BS EN/EN61000-3-2 Class C(@load ≥ 50%) ; BS EN/EN61000-3-3; GB17625.1,GB17743,				
	EMC EMISSION Note.6					
	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	105*68*23mm (L*W*H)				
	PACKING	0.17Kg; 72pcs/13.2Kg/1.04CUFT				

#### Notes:

1. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 uf & 47 uf parallel capacitor.

2. Direct connecting to LEDs is suggested, but is not suitable for using additional drivers.

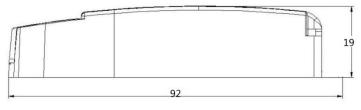
3. To fulfil requirements of the latest ErP regulation for lighting fixtures, this LED power supply can only be used behind a switch without permanently connected to the mains.

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4. The ambient temperature derating of 3.5"C/1000m with fanless models and of 5'C/1000m with fan models for operating altitude higher than 2000m(6500t).

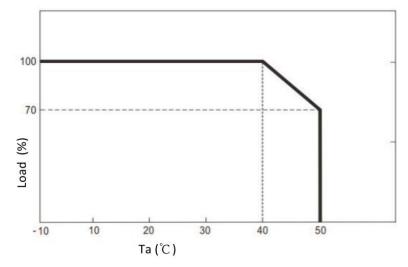
5. For any application note and IP water proof function installation caution, please refer our user manual before using.

## Dimension(mm)





# Derating Curve



## Disclaimer

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