Constant Current 120W DALI+PUSH LED Driver Series





■ Features :

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- · 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-DCC120-DA series is a 120W 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-DCC120-DA operates from 100~240VAC and offers different current levels ranging between 350mA and 750mA. 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-DCC120-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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Specification

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MODEL		GRT-DCC120-DA
OUTPUT	CURRENT LEVEL	Current level selectable via DIP switch, please refer to"DIP SWITCH TABLE" section
		350mA 500mA 750mA
	RATED POWER	120W
	DC VOLTAGE RANGE	36 ~ 340∨ 36 ~ 240∨ 36~ 160V
	OPEN CIRCUIT VOLTAGE (max.)	380V 380V 380V
	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.)	$\label{eq:PF} \begin{array}{l} PF \geqq 0.94/230 VAC, \ PF \geqq 0.91/277 VAC @ full \ load \\ (Please \ refer \ to \ "POWER \ FACTOR \ (PF) \ CHARACTERISTIC" \ section) \end{array}$
	TOTAL HARMONIC DISTORTION	THD< 20%(@load≧50%/230VAC; @load≧75%/277VAC) (Please refer to "TOTAL HARMONIC DISTORTION(THD)" section)
	EFFICIENCY (Typ.) Note.4	
	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	<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
enarconnent	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	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,
	EMC IMMUNITY	EAC TP TC 020 Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN61547, light industry level(surge immunity Line-Line 2KV),
	MTBF	2661.8K hrs min. Telcordia SR-332 (Bellcore) ; 213.3K hrs min. MIL-HDBK-217F (25°C)
OTHERS	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.

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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).

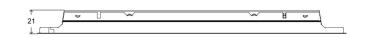
8. Based on IEC 62386-101/102 DALI power on timing and interruption regulations, the set up time needs to test with a DALI controller which

can support for DALI power on function, otherwise the set up time will be higher than 0.5 second for DA2-type.

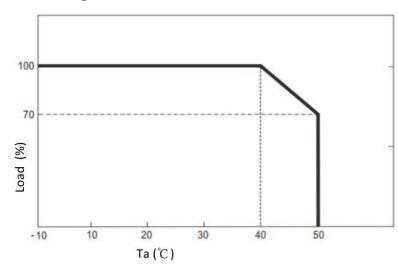
9. To fulfill requirements of the latest ErP regulation for lighting fixtures, this LED power supply can only be used behind a switch without permanently connected to the mains.

Dimension(mm)





Derating Curve



Disclaimer

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