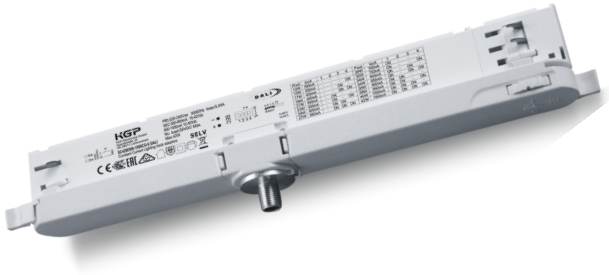
SC42W300-1050CG-6 DALI



Constant Current Dimmable Driver

Model:SC42W300-1050CG-6 DALI

Model	Output Current	Input Current	Input Power	Output Power Range	PF	Efficiency	Output Voltage	No load Voltage
SC42W300-1050CG-6 DALI	300mA	0.07A	15.4W	3.00-12.60W	0.85	82%	10-42V	55V
	350mA	0.08A	17.9W	3.50-14.70W	0.85	82%	10-42V	55V
	400mA	0.09A	20.5W	4.00-16.80W	0.85	82%	10-42V	55V
	450mA	0.10A	22.8W	4.50-18.90W	0.85	83%	10-42V	55V
	500mA	0.11A	25.3W	5.00-21.00W	0.85	83%	10-42V	55V
	550mA	0.12A	27.8W	5.50-23.10W	0.9	83%	10-42V	55V
	600mA	0.14A	30.4W	6.00-25.20W	0.92	83%	10-42V	55V
	650mA	0.15A	32.5W	6.50-27.30W	0.92	84%	10-42V	55V
	700mA	0.16A	35W	7.00-29.40W	0.92	84%	10-42V	55V
	750mA	0.17A	37.5W	7.50-31.50W	0.92	84%	10-42V	55V
	800mA	0.18A	40W	8.00-33.60W	0.92	84%	10-42V	55V
	850mA	0.18A	40W	8.50-34.00W	0.92	85%	10-40V	55V
	900mA	0.2A	42.4W	9.00-36.00W	0.92	85%	10-40V	55V
	950mA	0.2A	44.7W	9.50-38.00W	0.92	85%	10-40V	55V
	1000mA	0.23A	46.5W	10.00-40.00W	0.92	86%	10-40V	55V
	1050mA	0.25A	48.8W	10.50-42.00W	0.92	86%	10-40V	55V

*** Test result @230V, 50Hz, Full Load.**

1. Parameters

category	Item	Technical Norm
Features	Output Type	Constant Current
	Dimming Type	DALI 2
	Output Features	Isolation
	IP Grade	IP20
	Insulation Class	Class Ⅱ
Input	Rated Input Voltage	220-240VAC
	Range of Input Voltage	176-264VAC or 176-280VDC
	Frequency	50/60Hz
	Input Current	≤0.25A (230VAC，full load)
	Input Power	≤48.8W (230VAC，full load)
	Power Factor	≥0.92 (230VAC，full load)

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	THD	≤20% (230VAC，full load)
	No-load Power Consumption	≤0.5W @230VAC
	Inrush Current	≤18A/2.8us (230VAC，full load)
	Connected quantity of 16A Breaker	27pcs/type B ; 44pcs / type C @ 230Vac
Output	Output Voltage Range	10-42VDC@300-800mA
		10-40VDC@850-1050mA
	No Load Voltage	55VDC Max.
	Output Current	300mA -1050mA (Max. output)
	Max. Output Power	42W
	Efficiency	≥86% (230VAC，full load)
	Current Ripple	±3% （Imax-Imin）/（Imax+Imin）
	Current Accuracy	±5%
	Started Delay Time	≤0.5S (230VAC，full load)
Control Method	Secondary PUSH dimming	Secondary PUSH dimming (Max. lead wire length：20m,same port of DALI）
	DALI function	DALI dimming (Max. lead wire length： 300m ） logarithm or linear dimming curve selectable
	Dimming range	DALI dimming: 1%-100% ， Dim to off .
Protection	Short Circuit Protection	Auto Recovery
	Overload Protection	Auto Recovery
	No-load Protection	Auto Recovery
	Insulation voltage	3000V 5mA 60S between P-S
	Insulation resistance	>100M ohm @ 500VDC
	Leakage current	< 250μA, I/P to O/P or I/P to PE @230V input
Environment	Ta/Operation Temperature	-25….+35℃
	Ts/Storage Temperature	-40….+85℃
	Tc/Enclosure Temperature	85℃
		10%....90%RH
	Humidity	86-108KPa
Construction	Connection Method	Push-in Terminal
	Installation	Independent
	PRI Wire preparation	0.75-1.5□
	SEC Wire preparation	0.5-1.5□
	Dimension	265*42*31mm (L*W*H)
Standards	Certification	CE ENEC SAA
	Safety Standards	EN61347-1:2015,EN61347-2-13:2014/A1:2017, AS 61347.2.13:2018,S/NZS 61347.1:2016 Inc A1
	EMC Standards	EN55015:2013/A1:2015,EN61000-3-2:2014, EN61000-3-3:2013,EN61547:2009
	Performance	EN62384
	Surge	L-N/2KV
Others	RoHS	complied to 2011/65/EU
	Life Time	50000h @Ta/ Tc

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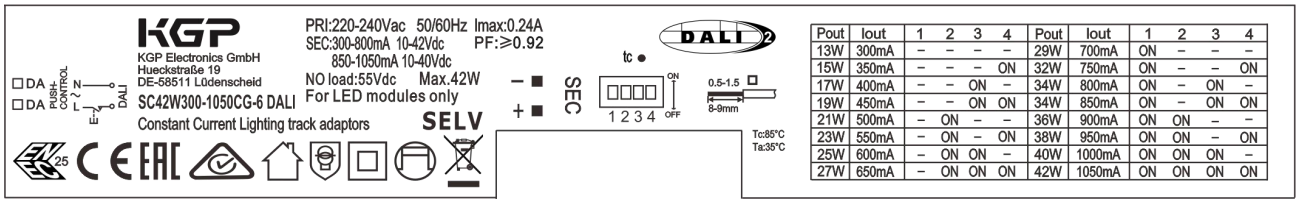
	Warranty	5years ， F.R. < 10000ppm

Remark: 1.All Parameters, if not specified, are measured at 230VAC/50Hz and 25℃ ambient temperature.
2.LED Driver is a component of the luminaires, Luminaires and wire layout will affect the EMC, please check the EMC with end products again.

2. Output Current Setting

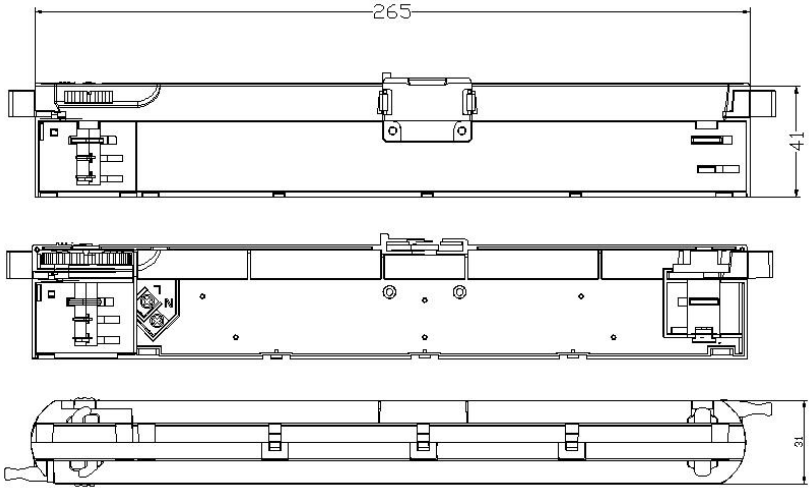
Output Current	1	2	3	4
300mA	-	-	-	-
350mA	-	-	-	ON
400mA	-	-	ON	-
450mA	-	-	ON	ON
500mA	-	ON	-	-
550mA	-	ON	-	ON
600mA	-	ON	ON	-
650mA	-	ON	ON	ON
700mA	ON	-	-	-
750mA	ON	-	-	ON
800mA	ON	-	ON	-
850mA	ON	-	ON	ON
900mA	ON	ON	-	-
950mA	ON	ON	-	ON
1000mA	ON	ON	ON	-
1050mA	ON	ON	ON	ON

3. Label



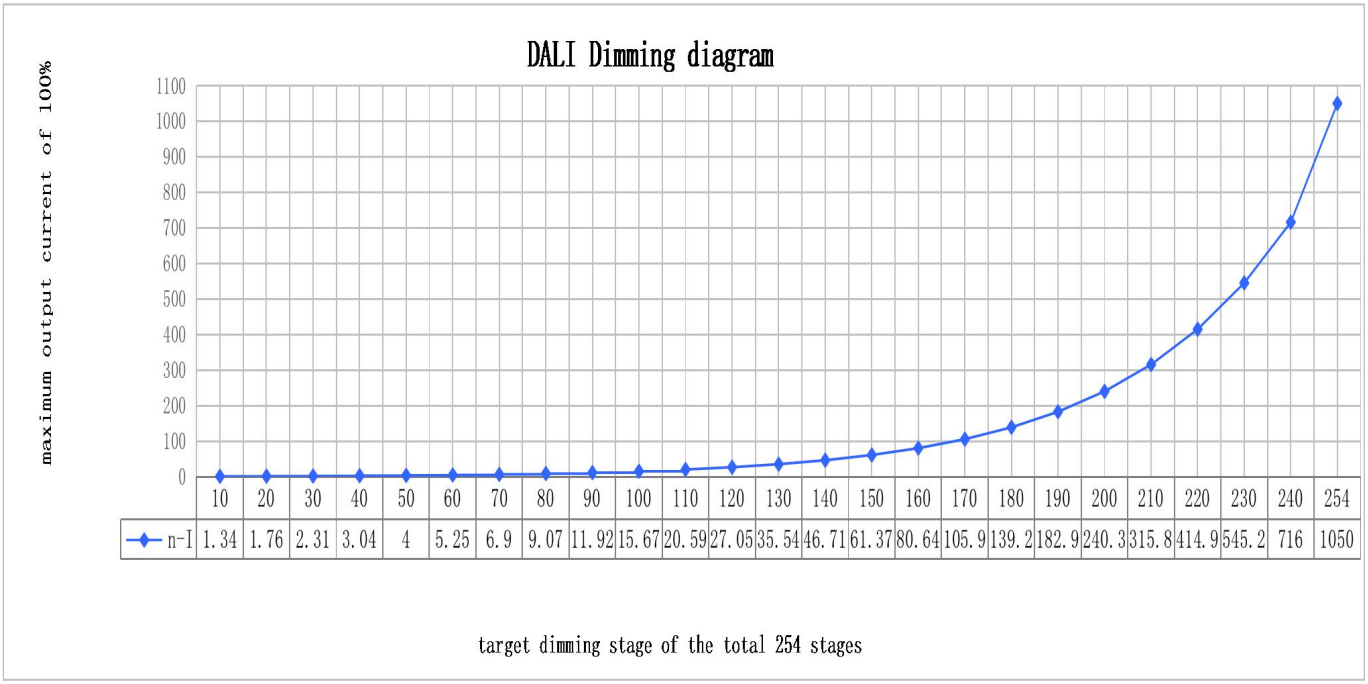
Pout	Iout	1	2	3	4	Pout	Iout	1	2	3	4
13W	300mA	–	–	–	–	29W	700mA	ON	–	–	–
15W	350mA	–	–	–	ON	32W	750mA	ON	–	–	ON
17W	400mA	–	–	ON	–	34W	800mA	ON	–	ON	–
19W	450mA	–	–	ON	ON	34W	850mA	ON	–	ON	ON
21W	500mA	–	ON	–	–	36W	900mA	ON	ON	–	–
23W	550mA	–	ON	–	ON	38W	950mA	ON	ON	–	ON
25W	600mA	–	ON	ON	–	40W	1000mA	ON	ON	ON	–
27W	650mA	–	ON	ON	ON	42W	1050mA	ON	ON	ON	ON

4. Dimension （Unit：mm）



5. DALI dimming curve

formula for DALI dimming.
X(n)=10^{[(n-1)/(253/3)]-1},
Here,n means the target dimming stage of the total 254 stages.
X(n) means the percent of the maximum output current



	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	254
n-I	1.34	1.76	2.31	3.04	4	5.25	6.9	9.07	11.92	15.67	20.59	27.05	35.54	46.71	61.37	80.64	105.9	139.2	182.9	240.3	315.8	414.9	545.2	716	1050

6. Packing information

Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
515*274*370	70	0.192	13.44	14.2

7. Wiring Diagram

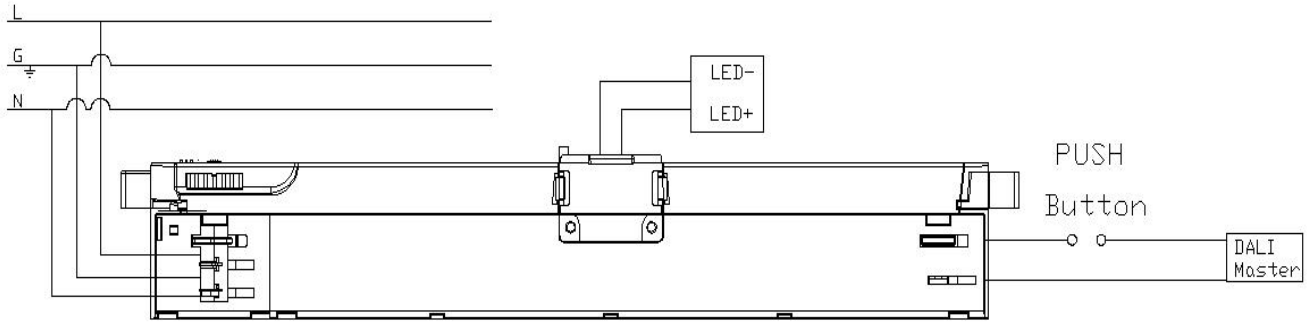


Fig. A:SC42W300-1050CG-6 DALI

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