

5601312 - SICOM C.C. 22W 225-600mA DALI PUSH SC

- The driver has 10 current levels settable with dip-switches
- Support central emergency application (dimming normal in DC input)
- Support DALI and Push Dimming mode


TECHNICAL DATA:

Model	5601312	
Output parameters	Regulation method	Constant Current
	Rated output current	0,225-0,60A
	Rated output voltage	6-42V
	Rated output power	22,8W Max
	Output current adjustment	DIP Switch with (10 levels)
	Output current ripple LF	±2%
	Output current accuracy	±2%
	Linear regulation	±1%
	Load regulation	±1%
	No load output voltage	50 V
Flicker-free (typical)	Modulation depth=0,363% (1.980kHz), Pst LM=0,006, SVM=0,010, (The above parameters are obtained from testing the panel lights)	
Input parameters	Rated input voltage	200-240VAC - 200-240VDC
	Rated input voltage	180-264VAC - 180-264VDC
	Input voltage shock	<380V AC, 1h
	input current	<0,18A (AC input)
	Input frequency	0/50/60Hz
	Input power factor	>0,95 (230V AC & Full load)
	Input THD	<10% (230V AC & Full load)
	Efficiency (typical)	86% (230AC & Full load)
	In-rush current	6.5A peak, 192µs duration (50% Ipeak), see the description below for details
	Start/Switchover/Turn off	<0,6s(AC start), <0,6s(DC start), <0,3s(AC/DC switchover), <0.5s(Turn off)
	Switching cycles	>50,000 switching cycles
	Power consumption	Full load(Pmax):22,8W, No Load(Pno):N/A, On stand-by(Psb):<0,5W, Network stand-by(Pnet):N/A
Safety	Withstand voltage	I/P-O/P(LED):3750V AC, O/P(LED)-O/P(DIM):500V AC, I/P-O/P(DIM):500V AC, I/P-DALI: 500V AC
	Mains surge capability	L-N:2KV
	Leakage current	<0,7mA (230V AC & Full load)
	Isolation resistance	I/P-O/P:100MΩ/500Vdc/25°C/70% RH
Control Interface	DALI dimming port	Voltage range: 9,5-22,5V, typical 16V, interface current consumption: 1,8mA
	PUSH dimming port	Voltage range: 180-264V 47/63Hz
	Dimming range	1%-100%
	Dimming drive mode	AM (amplitude modulation)
Emergency support	Central emergency system	Supported (dimming normal in DC input)
	Self-contained emergency	Supported
Environment & Lifetime	Operating temperature	Ta=-20...+50°C
	Case temperature	Tc=90°C
	Operating humidity	5-85% RH, not condensed
	Storage temp/humidity	-40...+80°C, 5-85% RH, not condensed
	IP grade	IP20
	MTBF	500,000H, MIL-HDBK-217F(25°C)
	Life-time	Nominal life-time up to 100,000 h, see the description below for details
	Vibration resistant	10-500Hz, 5G 12min/1cycle, period for 72min each along X,Y,Z axes
	Acoustic Noise	<25dB(30cm, Full load)
Environment protection	RoHS	
Certifications and standards	Certified	EMC, CE
	Safety	EN61347-1, EN61347-2-13, EN62384
	EMC	EN55015, EN61000-3-2, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547
	EL	Compatible IEC 61347-2-13 Annex J, compatible with EN 60598-2-22 and EN 50172



SURGE:

Model	Ipeak	Twidth	Condition	Relative number of MCB														
				B10	B13	B16	B20	B25	C10	C13	C16	C20	C25	D10	D13	D16	D20	D25
5601312	6.5A	192us	AC 230V, Full load Cold start, Ta ≤30°C MCB is not installed side by side	65pcs	65pcs	80pcs	100pcs	124pcs	59pcs	77pcs	94pcs	118pcs	147pcs	59pcs	77pcs	94pcs	118pcs	147pcs

Remarks:

Calculation uses typical values from ABB series S200 as a reference.

Functions:

Output short-circuit behaviour

In case of a short-circuit at the LED output, the LED output is switched off.

After restart of the LED driver, the output will be activated again.

The restart can either be done via mains reset or via interface (DALI, PUSH-DIM).

Output no-load operation

The LED driver will not be damaged in no-load operation.

The output will be deactivated and is therefore free of voltage.

If a LED load is connected, the device has to be restarted before the output will be activated again.

The restart can either be done via mains reset or via interface (DALI, PUSH-DIM).

Output overload protection

If the output voltage range is exceeded the LED driver turns off the LED output.

After restart of the LED driver the output will be activated again.

The restart can either be done via mains reset or via interface (DALI, PUSH-DIM).

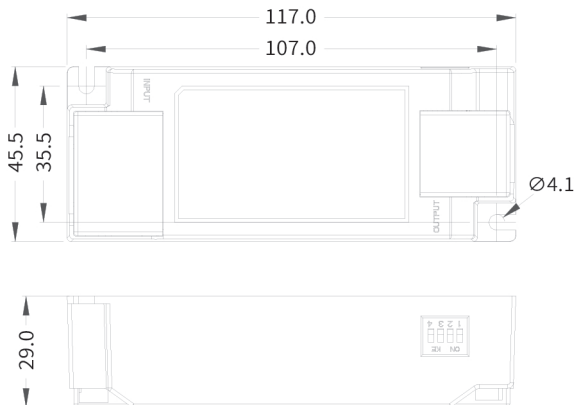
Output hot plug-in

For protection LED if plug the LED into the output of the powered driver, the LED will not on, the device has to be restarted.

The restart can either be done via mains reset or via interface (DALI, PUSH-DIM).

MECHANICAL DIMENSIONS

Unit: mm



Weight: 105 g

Installation note:

Hot plug-in is not supported due to residual output voltage of > 0 V

Max length of output wires is 2 m (ideally 5-10 cm distance)

Max torque at the clamping screw: 0.5Nm / M4

Replace LED module:

1. Mains off
2. Remove LED module
3. Wait for 5 seconds
4. Connect LED module again

DIP-switch & output current

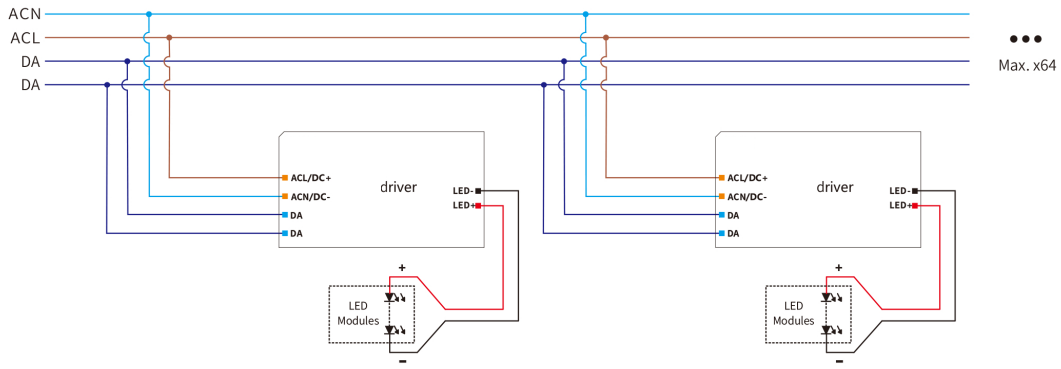
Prated	Irated	output voltage	1	2	3	4
9.45W	225mA	42VDC	--	ON	ON	ON
10.50W	250mA	42VDC	ON	--	ON	ON
11.55W	275mA	42VDC	--	--	ON	ON
12.60W	300mA	42VDC	--	ON	--	ON
14.70W	350mA	42VDC	--	--	--	ON
16.80W	400mA	42VDC	ON	ON	ON	--
18.90W	450mA	42VDC	--	--	ON	--
21.00W	500mA	42VDC	--	ON	--	--
23.10W	550mA	42VDC	ON	--	--	--
22.80W	600mA	★ 38VDC	--	--	--	--

Remarks:

1 ★ It means that this item is the factory default current

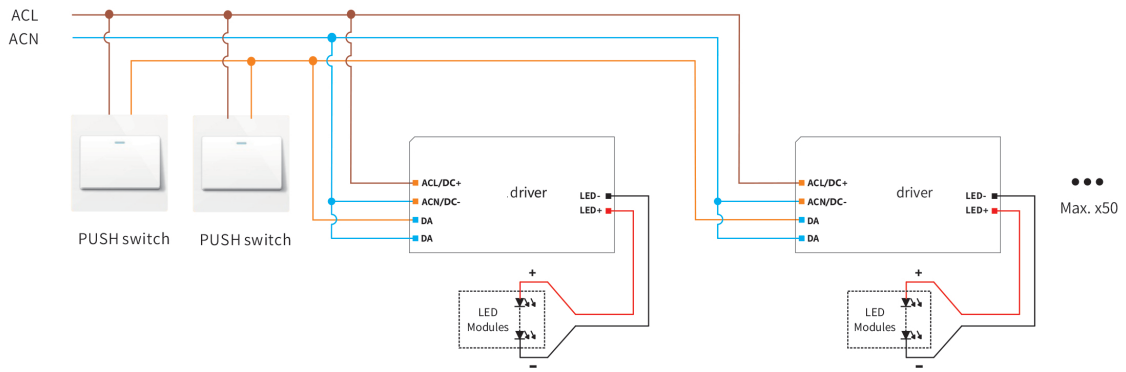
2 -- It means that this channel is OFF

DALI dimming application (the driver will automatically switch to the DALI control mode)



Remarks:
 Standard DALI control line voltage range : 9,5V to 22,5V, type 16V
 The two DALI control lines polarity-reversible
 Max 64 DALI drivers per DALI control line
 The maximum distance length of the DALI control line is 300m at 2X1,50mm²
 The configuration parameters of the driver can be set through the DALI configuration tool or DALI application controller during installation, such as setting device address, group address, power-on level, bus-failure level, scene level, fade time, dimming curve, etc.

PUSH dimming application (the driver will automatically switch to PUSH dimming mode)



Remarks:
 Max 50 drivers per PUSH control line
 Turn on or turn off: short press push switch for 0.2-1s
 Dimming: long press push switch for 1-5s
 Power on status: after power on, the light state will be the same as the lighting on state

Multiple lights synchronize control operation:
 Long press the PUSH switch 15s, all lights output to the brightest state