

8W DALI + PUSH Dimming power supply



Features

- For luminaires of protection Class II, SELV, Built-in
- Input Voltage: 220-240V
- Protections: SCP/OLP/OVP/OTP
- Power Factor: 0.95(Typ.)
- Efficiency: 84%(Typ.)
- Support DALI-2, Push Dimming
- Dimming depth: 1%
- Suitable for emergency lighting acc. to EN 50172
- EoFi=15%
- DALI maintainance(Part 251,252,253)
- 5 years warranty

Applications

- LED panel, LED down light
- LED spot light

■ Approve

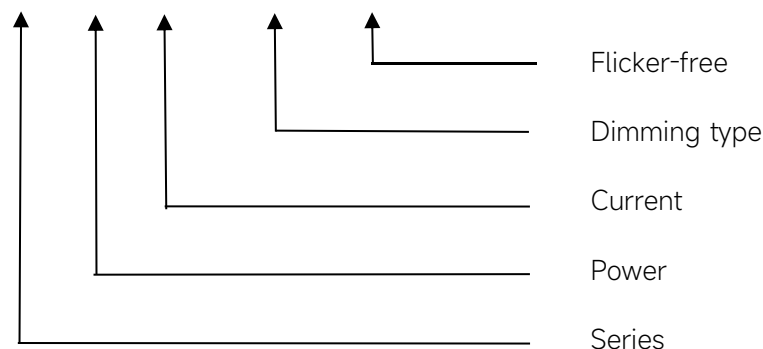


◆ Description

FLS-8-700 DALI-2 LN ADV S is a 8W constant current LED driver with 150 to 700mA output current and a forward voltage range from 6 to 42Vdc. The output current is adjustable by NFC. With it's dimensions from 115 x 25 x 19mm. It is easy to integrate in LED Panel, down light and spot light products. To ensure trouble-free operation, protection is provided against output short circuit, over load, over voltage and over temperature.

◆ Model code

FLS-8-700 DALI-2 LN ADV S



◆ Specification

Output	Constant Current (mA)	150-190mA	191-200mA	...	501-700mA
	Voltage Range(VDC)	6-42VDC	6-40VDC	...	6-12VDC
	Unload voltage Max.(VDC)	60VDC			
	Current Accuracy	±5%			
	Output LF current ripple(≤120Hz)	±5%			
	SVM	≤0.4@Full Load,230Vac			
	P _{st}	≤1@Full Load,230Vac			
	Efficiency(Typ.)	84%@200mA,230Vac			
	EOFI	15%			
Input	Rated input voltage(V)	220-240V			
	Range of input voltage(VAC)	198-264VAC			
	Maximum voltage	300VAC@1 h maximum,unit might not operate in this abnormal condition			
	Range of input voltage(VDC)	176-280VDC			
	Frequency(Hz)	0/50/60 Hz			
	Displacement Factor	≥0.5@Full load, 230Vac			
	Power Factor	0.95@Full load, 230Vac			
	Input Current max	0.065A max.			
	Start-up time	< 0.8S			
	Switch over time(AC/DC mode)	< 0.5S			
	Standby Power	≤0.5W, @230Vac			
	THD (Typ.)	< 10%@Full load,230Vac			
Dimming	Dimming	YES			
	Dimming mode	DALI-2 (IEC 62386-101,102,207,251,252,253) &Push Dimming (Corridor Function)			
	Dimming depth	1‰			
	Dimming current range	1‰~100%			
	Dimming method	1‰-1%@PWM dimming, 1%-100% @AM dimming			
Protection	Over Load Protection	103-120% YES/Auto Resume			
	Over Voltage Protection	60VDC YES/Auto Resume			
	Short circuit Protection	YES/Auto Resume			
	Over Temperature Protection	YES/Auto Resume			
capability	Surge capability (L-N)	1KV			
	Surge capability (L/N-Ground)	NA			
Withstand voltage	Input-Output	3750V/ 5mA/ 60S			
	Input-DALI	1500V/ 5mA/ 60S			
	DALI-Output	1500V/ 5mA/ 60S			

Environment	Operating Temperature	-20°C~+45°C
	Humidity	20%-90%RH
	Tc	75°C
	Storage Temperature	-40°C~+75°C
	Life time	> 50000h,@TC=70°C
	Noise	≤25dB(A)@20cm
Surface	Dimension	115 x 25 x 19 mm
	material	PC
Standards	Safety	GB19510. 1, GB19510. 14;IEC61347- 1, IEC61347-2- 13;AS/NZS 61347- 1, AS/NZS 61347-2- 13;AS 61347.2.13;EN62384;
	EMC	GB/T17743, GB17625. 1;EN55015, EN61000-3-2, EN61000-3-3, EN61547;EN55015, EN61000-3-2, EN61000-3-3, EN61547,EN 62493;EN61000-4-5;EN61000-4-2,3,4,5,6,8,11, EN61547
	Energy Efficiency	Erp2.0 EU 2019/2020
	RoHS	RoHS (2011/65/EU) (EU)2015/863
DALI performance	EN 62386-101 (DALI-2) EN 62386-102 (DALI-2) EN 62386-207 (DALI-2,including part251,252,253)	
Note	1.All parameters not specially mentioned are measured at 230VAC input , full load and 25°C of ambient temperature. 2.Ripple & Noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uF & 47 uF parallel capacitor. 3.DALI protocol comprises 16 groups and 64 addresses.Up to 32 drivers can perform the PUSH dimming at the same time when utilizing one push button. 4.The DC input for this product is only used for emergency lighting and applies to functional and safety requirements, EMC is not considered.	

◆ Parameter

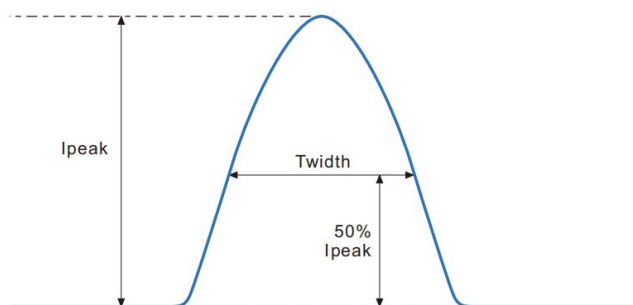
Number	Output			
	Current (mA)	Voltage (VDC)	Voltage No load (VDC)	Power (W)
1	150-190mA	6-42VDC	60VDC	8W
2	191-200mA	6-40VDC		8W
3	201-222mA	6-36VDC		8W
4	223-250mA	6-32VDC		8W
5	251-285mA	6-28VDC		8W
6	286-333mA	6-24VDC		8W
7	334-400mA	6-20VDC		8W
8	401-500mA	6-16VDC		8W
9	501-700mA	6-12VDC		8.4W

Notes:

1.The Factory default current is 150mA.

◆ Inrush Current

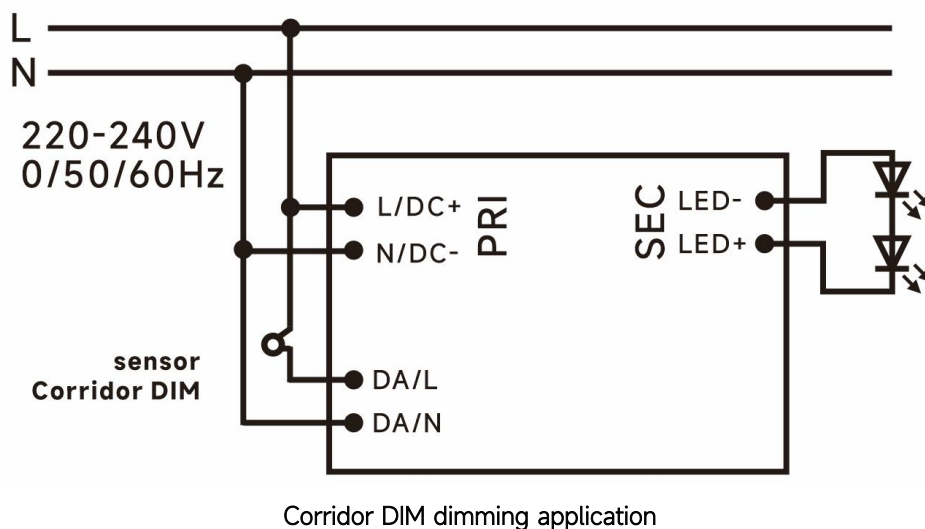
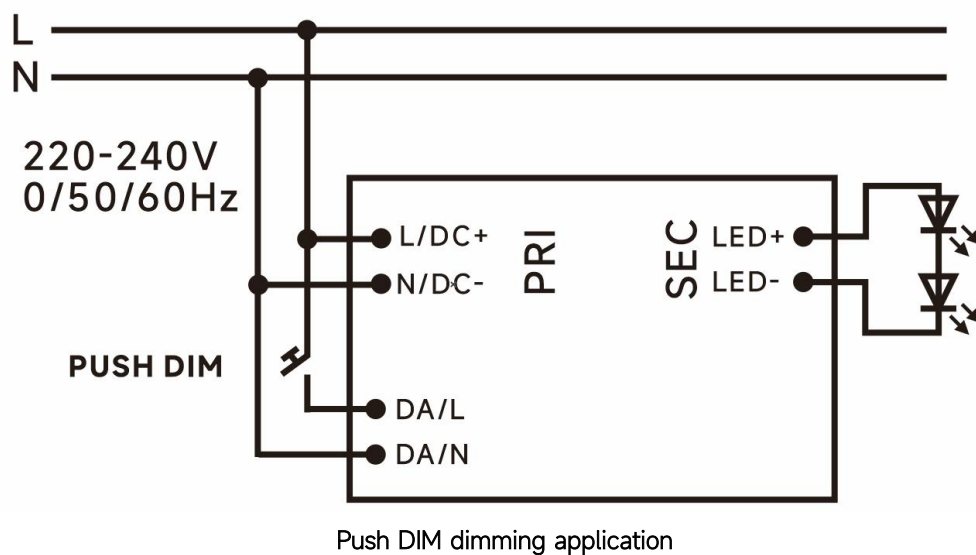
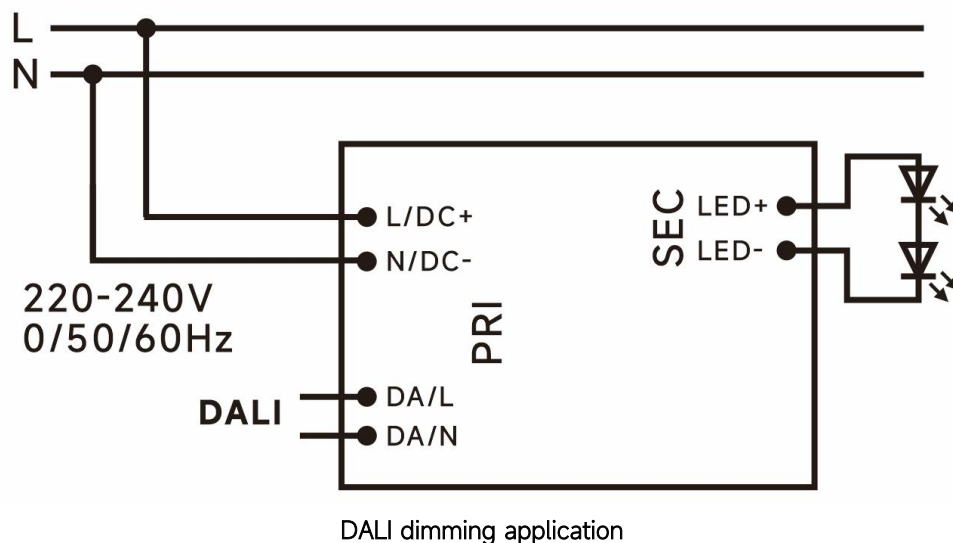
I _{peak}	T _{width}	B10	B16	B20	C10	C16	C20
2.31A	24μs	123pcs	196pcs	246pcs	123pcs	196pcs	246pcs



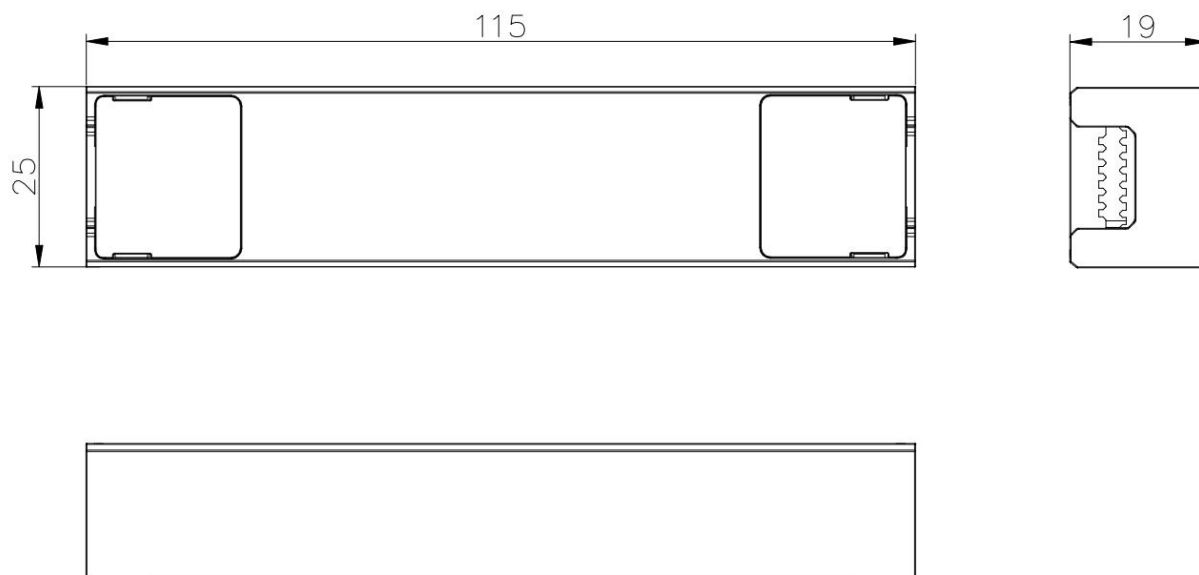
Remarks:

- 1.The number of drives mounted under different MCBs in the table is the maximum value. Please do not exceed this number during installation.
- 2.Different brands and models of miniature circuit breakers, the number of drives mounted will be slightly different.

◆ Wiring diagram



◆ **2D diagram**



◆ Wiring & Connections

Specification item		Value (Unit)
Input	Input wire cross-section	0.5...1.5 mm ² (With side caps: 0.75...1.5 mm ²)
	Input wire gauge.	16...20 AWG (With side caps: 16...22 AWG)
	Input wire strip length	7...9mm
Output	Output wire cross-section	0.5...1.5 mm ²
	Output wire gauge.	16...20 AWG
	Output wire strip length	7...9mm

◆ Recommended wire

Small side cap of small hole	Wire type
0.5mm ²	H03VVH2-F 2 core&3 core H03VV-F 2 core&3 core
0.75mm ²	H03VVH2-F 2 core&3 core H03VV-F 2 core&3 core H05VV-F 2 core
1.0mm ²	H05VVH2-F 2 core
1.5mm ²	CCC 08(RV-90)

Small side cap of big hole	Wire type
0.75mm ²	H05VV-F 2 core&3 core&4 core
1.0mm ²	H05VV-F 2 core&3core
1.5mm ²	H05VV-F 2 core&3core

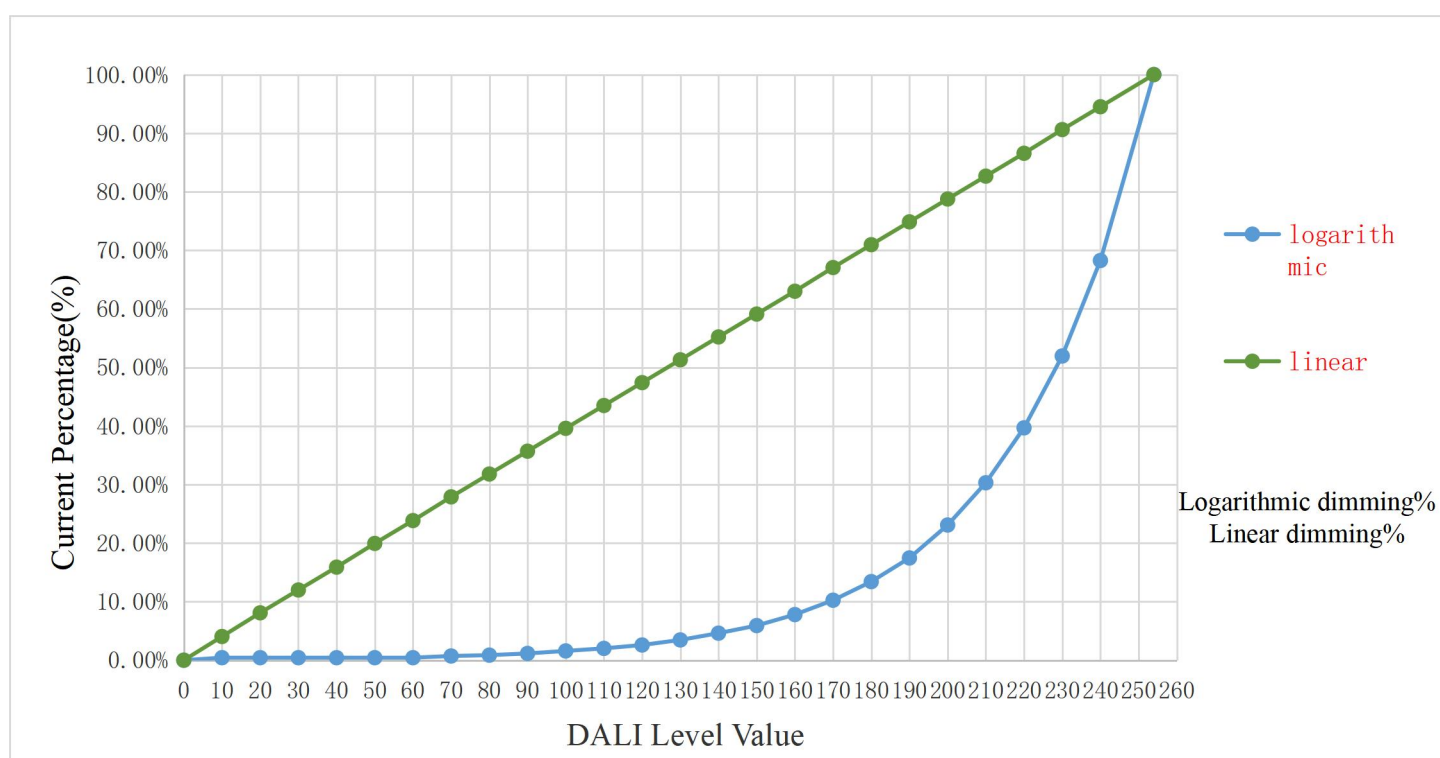
Big side cap	Wire type
0.5mm ²	H03VVH2-F 2 core&3 core H03VV-F 2 core&3 core
0.75mm ²	H03VVH2-F 2 core&3 core H03VV-F 2 core&3 core H05VV-F 2 core&3 core&4 core
1.0mm ²	H05VVH2-F 2 core&3 core
1.5mm ²	CCC 08(RV-90) H05VV-F 2 core&3core

Note: Solid wire is risky to use on an angled terminal. Stranded wire is recommended for this kind of use.

◆ Packaging

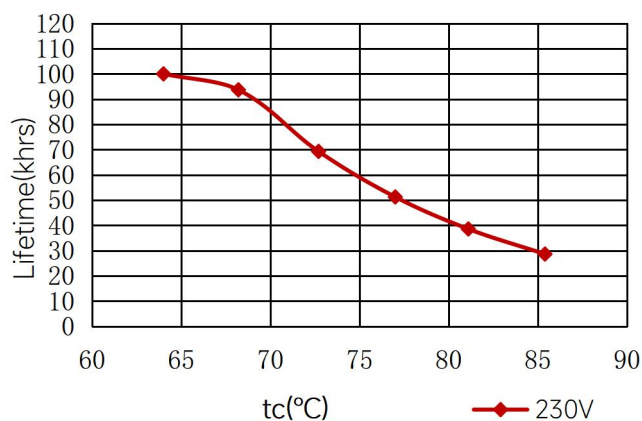
Model	Product Dimensions(mm)	weight/piece (Kg)	Outer carton dimension(mm)	Quantity/carton	Net weight/carton(Kg)	Gross weight/carton(Kg)
FLS-8-700 DALI-2 LN ADV S	115x25x19	0.045	370x255x210	155	6.975	7.42

◆ Dimming Curve

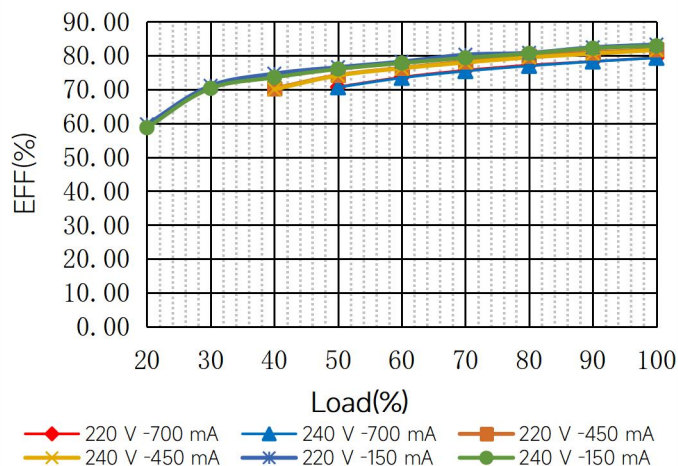


◆ Curve for FLS-8-700 DALI-2 LN ADV S, $I_o=150/450/700\text{mA}$

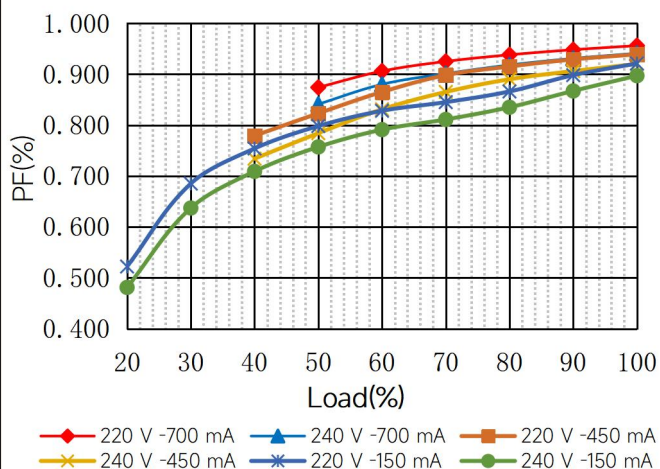
Lifetime vs. Temperature Curve



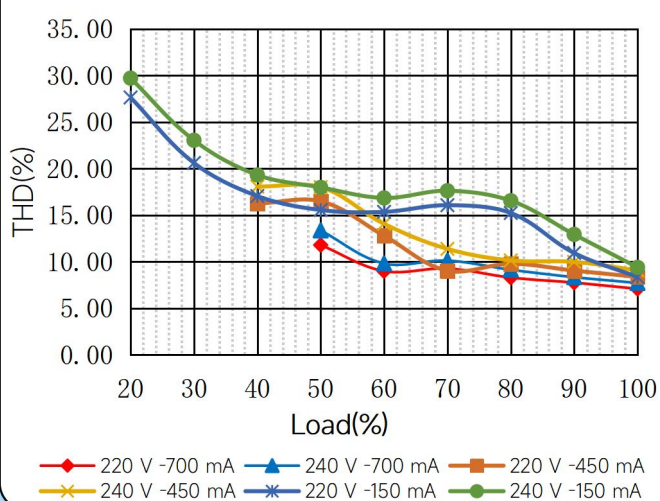
Efficiency vs. Load



Power Factor Characteristics



THD vs. Load



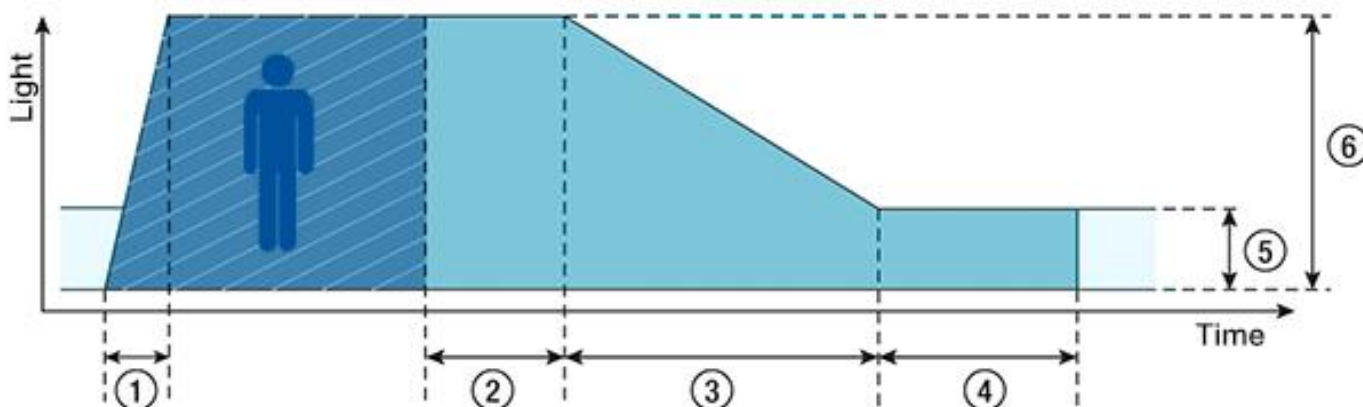
◆ Push dimming operation

Action	Action duration	Function
Short push	<0.5s	Turn on/off
Short push twice	<0.5s	LED on: Save current brightness level LED off: Delete saved level and turn on at 100% brightness
Short push five times	<3s	Quit Corridor mode
Long push	0.5-14s	Dimming up or down
Long push	15s-2mins	Sync all LEDs to be 100% brightness
Long push	>2mins	Enter Corridor mode - LED keep 100% brightness for 2mins. Then brightness will turn to be 10% within 32s if no action during 2mins 100% brightness.

Note:

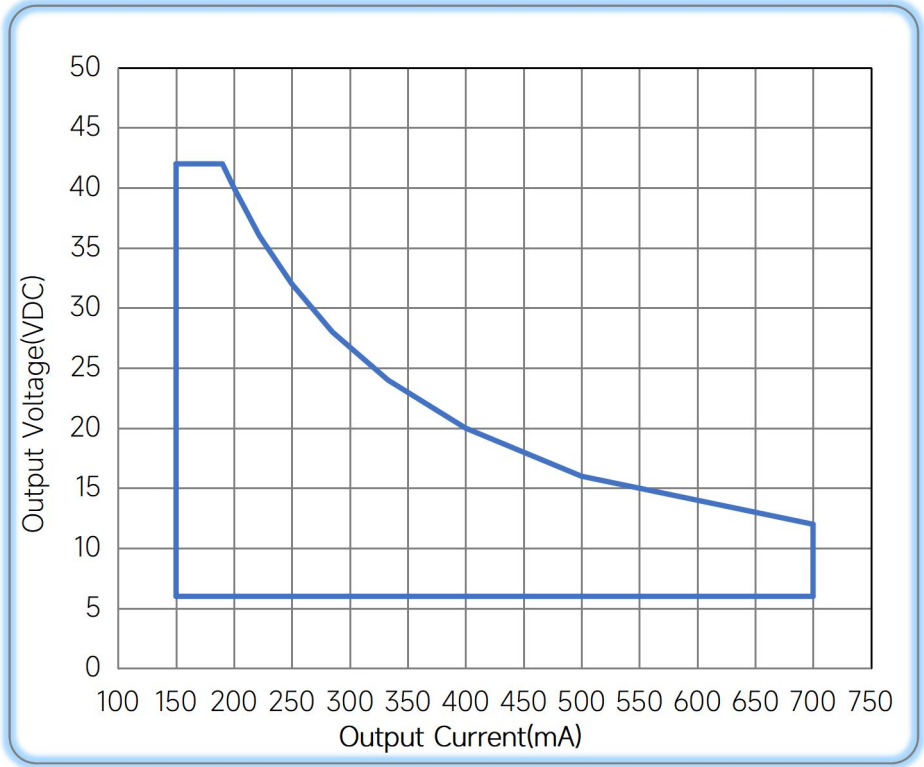
- 1.The factory default brightness is at 100%.
- 2.Up to 30 drivers can perform the PUSH dimming at the same time when utilizing one common push button
- 3.The maximum length of the cable from the push button to the last driver is 200 meters.

◆ Corridor mode



- ◆ ① **Fade-in time(0.5s)**: the time that starts as soon as the presence of a person is detected. During the fade-in time the luminous intensity is faded up to the presence value.
- ◆ ② **Run-on time(120s)**: the time that starts as soon as the presence of a person is no longer detected. If the presence of a person is detected again during the run-on time the run-on time is restarted from zero. If no presence is detected during the run-on time the fade time is started as soon as the run-on time expires.
- ◆ ③ **Fade time(32s)**: the time during which the luminous intensity is faded from the presence value to the absence value.
- ◆ ④ **Switch-off delay (level=10%.Non-configurable)**: the time during which the absence value is held before the lighting is switched off. Depending on the profile selected the switch-off delay may have different values or may not be defined.
- ◆ ⑤ **Absence value(default: 10 %)**: the luminous intensity when there is no person present.
- ◆ ⑥ **Presence value (default: 100 %)**: the luminous intensity when persons are present.

◆ Operating window



— Operating Window 100% — Minimum dimming current

◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2025/12/18
Output LF current	±3%	±5%	B	2026/04/07

Remark:The final interpretation of the contents of the specification belongs to Eaglerise Electric & Electronic (China) Co., Ltd.

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