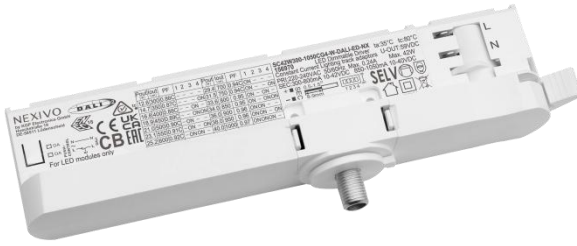


Constant Current Dimmable Driver

Model: SC42W300-1050CG4-W-DALI-ED-NX

SC42W300-1050CG4-B-DALI-ED-NX

SC42W300-1050CG4-G-DALI-ED-NX



Model	Item Code	Output current	Input current	Input power	Output power range	PF	Efficiency	Output voltage	No load voltage
SC42W300-1050CG4-W-DALI-ED-NX SC42W300-1050CG4-B-DALI-ED-NX SC42W300-1050CG4-G-DALI-ED-NX	156970	300mA	0.07A	14.70W	3.00-12.60W	0.86	85.8%	10-42V	59V Max.
		350mA	0.08A	17.00W	3.50-14.70W	0.87	86.5%		
		400mA	0.09A	19.30W	4.00-16.80W	0.88	87.0%		
		450mA	0.13A	21.60W	4.50-18.90W	0.89	87.5%		
		500mA	0.15A	23.90W	5.00-21.00W	0.90	87.8%		
		550mA	0.16A	26.30W	5.50-23.10W	0.91	88.0%		
	156980	600mA	0.17A	28.60W	6.00-25.20W	0.92	88.0%	10-40V	
		650mA	0.18A	31.00W	6.50-27.30W	0.93	88.0%		
		700mA	0.19A	33.40W	7.00-29.40W	0.94	88.0%		
	156990	750mA	0.20A	35.80W	7.50-31.50W	0.94	88.0%		
		800mA	0.20A	38.20W	8.00-33.60W	0.95	88.0%		
		850mA	0.21A	38.60W	8.50-34.00W	0.95	88.0%		
		900mA	0.22A	40.90W	9.00-36.00W	0.96	88.0%		
		950mA	0.23A	43.20W	9.50-38.00W	0.96	88.0%		
		1000mA	0.24A	45.50W	10.00-40.00W	0.97	88.0%		
	1050mA	0.24A	47.70W	10.50-42.00W	0.97	88.0%			

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

1. Parameters

Category	Item	Technical Norm
Features	Output Type	Constant Current
	Dimming Type	Amplitude (DALI-2)
	Output Features	Isolation
	IP Grade	IP20

	Insulation Class	Class II
Input	Rated Input Voltage	220-240VAC
	Range of Input Voltage	198-264VAC
	Range of DC Input Voltage	180-280VDC
	Frequency	50/60Hz
	Overvoltage protection	2h@380VAC, 48h@320VAC
	Input Current	≤0.24A
	Input Power	≤47.70W
	Power Factor	≥0.97 (230VAC, full load)
	THD	≤8% (230VAC, full load)
	Standby Power Consumption	≤0.45W Dim to off, 230VAC
	Inrush Current	≤9.5A/2.8us (230VAC, full load)
	Connected quantity of 10A Breaker	21pcs/type A ;33pcs/type B ; 53pcs/type C
	Connected quantity of 13A Breaker	26pcs/type A ;42pcs/type B ; 68pcs/type C
Output	Connected quantity of 16A Breaker	33pcs/type A;53pcs/type B ; 84pcs/type C
	Connected quantity of 20A Breaker	41pcs/type A;66pcs/type B ; 105pcs/type C
	Output Voltage Range	10-42VDC@300-800mA 10-40VDC@850-1050mA
	No Load Voltage	59VDC Max.
	Output Current	300mA -1050mA (Max. output), Factory set current of 300mA
	Max. Output Power	42W
	Efficiency	≥88% (230VAC, full load)
	Output LF current ripple (< 120 Hz)	±3% (Imax-Imin) / (Imax+Imin)
	Current Accuracy	±5%
	PSTLM	≤1
	SVM	≤0.4
Control Method	Starting Delay Time	≤0.8S (230VAC, full load, by DALI system)
	Secondary PUSH dimming	Secondary PUSH dimming (Max. lead wire length: 20m, same port of DALI)
	PUSH-button	Max parallel connections qty for Push-dim 15
	DALI function	DALI dimming (Max. lead wire length: 300m) logarithm or linear dimming curve selectable
Protection	Dimming range	DALI dimming: 1%-100%
	Short Circuit Protection	Auto Recovery
	Overload Protection	Auto Recovery (not be hot swap)
	No-load Protection	Auto Recovery
	Insulation voltage	3000V 5mA 60S between P-S
	Insulation resistance	>100M ohm @ 500VDC
Environment	Leakage current	< 250μA, I/P to O/P @230V input
	Ta/Operation Temperature	-25....+35℃
	Ts/Storage Temperature	-25....+80℃
	Tc/Enclosure Temperature	80℃
	Humidity	10%.... 90%RH

	Atmosphere	86-108KPa
Construction	Connection Method	Push-in Terminal
	Installation	Independent
	SEC Wire preparation	0.5-1.5□
	SEC Wire preparation	0-0.8±0.05m (The EMC test results were achieved at approximately 0.8 meters) (the length required by the standard). If there are any data differences, please test according to the length required by the standard)
	Dimension	178*31.1*42.2mm (L*W*H)
Standards	Certification	CE/ENEC/RCM/UKCA/EAC/CB
	Safety Standards	EN61347-1:2015/A1:2021; EN61347-2-13:2014/A1:2017; EN62384:2006/A1:2009; AS 61347.2.13:2018; AS/NZS61347.1:2016; BS EN61347-1:2015/A1:2021; BS EN61347-2-13:2014/A1:2017; IEC 61347-1:2015+A1:2017; IEC 61347-2-13:2014+A1:2016;
	EMC Standards	AS/NZS CISPR 15:2011; AS CISPR 15:2017 ; BS EN IEC 55015:2019+A11:2020; EN 61547:2009; BS EN IEC 61000-3-2:2019; BS EN 61000-3-3:2013+A1:2019;
	DALI performance	EN 62386-101 (DALI-2) EN 62386-102 (DALI-2) EN 62386-207 (DALI-2, including part 251, 252, 253)
	Performance	EN62384
	Surge	L/N-Ground:2kV; L-N:1kV
Others	RoHS	complied to 2011/65/EU
	Life Time	50000h Tc=80℃
		75000h Tc=75℃
		100000h Tc=70℃
	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.
- 3.During the PUSH DIM test, the number of parallel connections must be less than 15PCS.

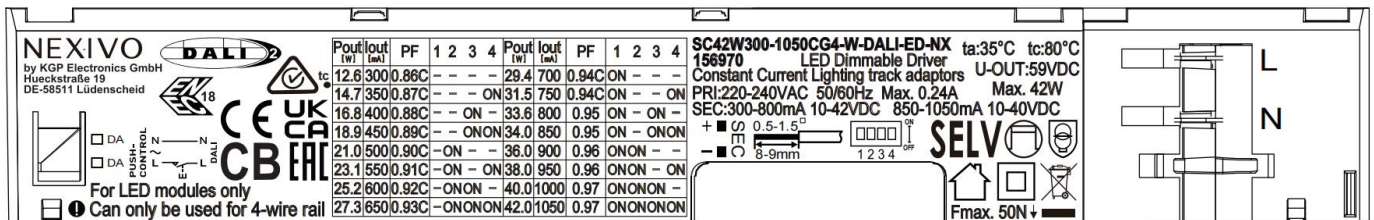
Distance	15m	30m	50m
Cable selection	0.5mm ²	0.75mm ²	1.0mm ²

2. Output current setting

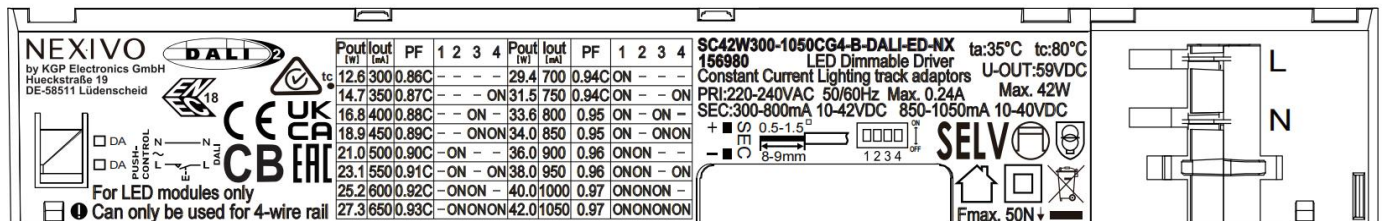
Output Current	1	2	3	4
300mA	-	-	-	-
350mA	-	-	-	ON
400mA	-	-	ON	-
450mA	-	-	ON	ON
500mA	-	ON	-	-
550mA	-	ON	-	ON
600mA	-	ON	ON	-
650mA	-	ON	ON	ON
700mA	ON	-	-	-
750mA	ON	-	-	ON
800mA	ON	-	ON	-
850mA	ON	-	ON	ON
900mA	ON	ON	-	-
950mA	ON	ON	-	ON
1000mA	ON	ON	ON	-
1050mA	ON	ON	ON	ON

3. Label

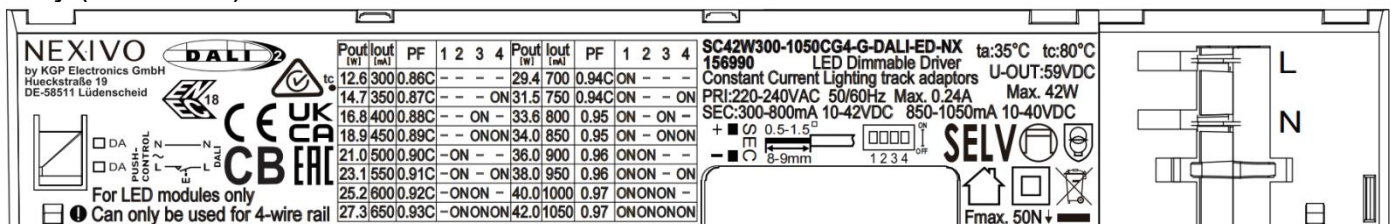
White (RAL 9016)



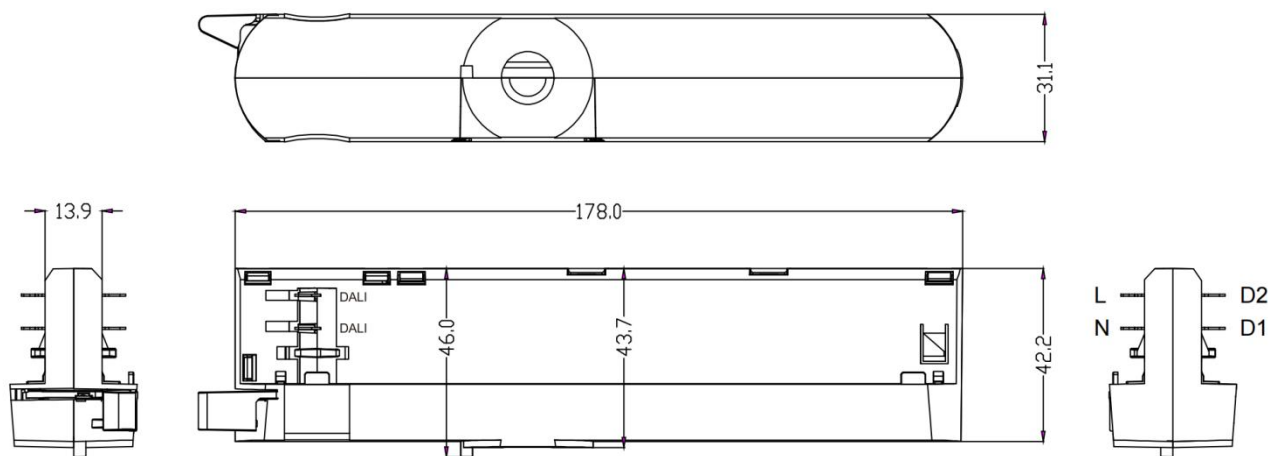
Black (RAL 9004)



Grey (RAL 7035)



4. Dimension (Unit: mm)



5. Wiring Diagram

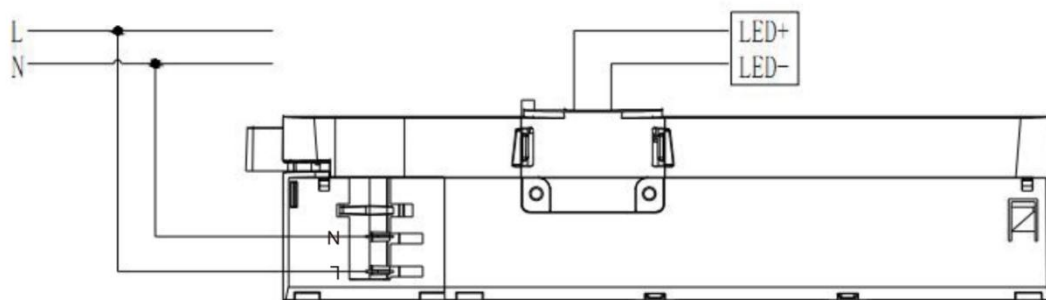


Fig.A: Push Dimming

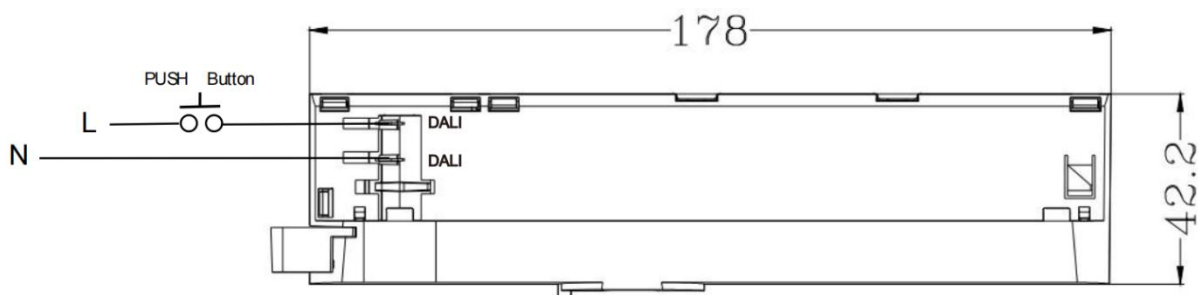
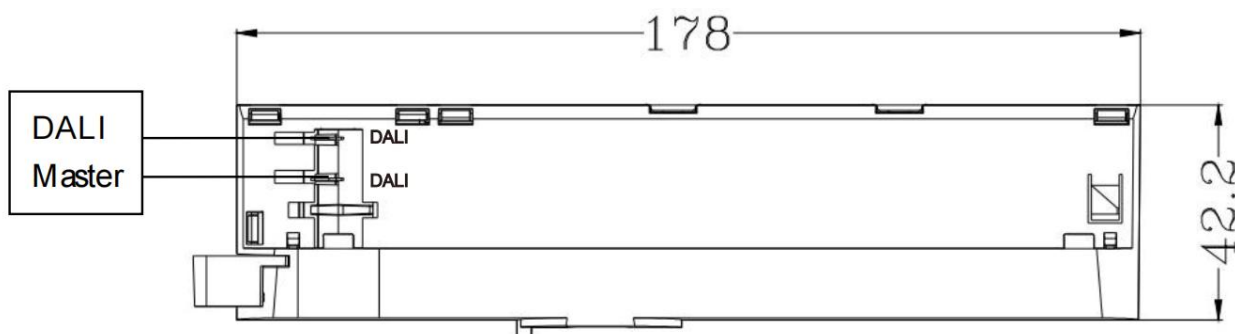
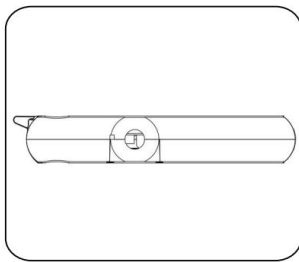


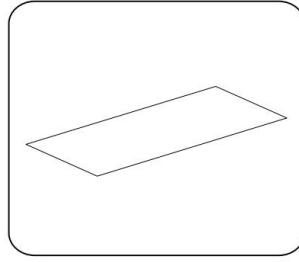
Fig.B: DALI Dimming



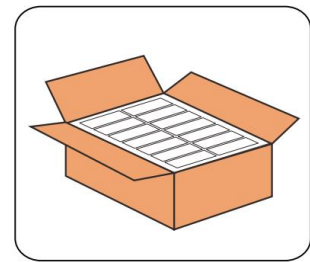
6. Packing information



Product



paper partitions linerboard
/Plastic paper



50 per small box

Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
395*295*125	50	0.126	6.30	7.04

7. Ordering Data

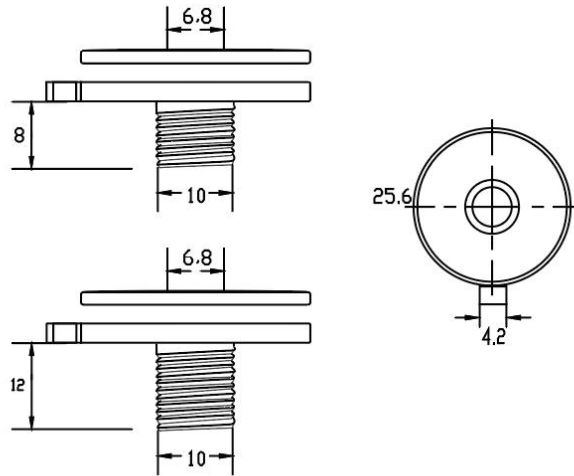
Model No	Item code
SC42W300-1050CG4-W-DALI-ED-NX	156970
SC42W300-1050CG4-B-DALI-ED-NX	156980
SC42W300-1050CG4-G-DALI-ED-NX	156990

8. Lamp Screw Type

- Optional threaded sleeve for luminaire mounting
- Suitable for M10x1x8 threaded nut
- Additional mounting equipment, e.g. M10x1x12
- aluminium, black, white
- further on request

Ordering data

Type	Colour	Article number	Qty/ctn	weight/pcs
M10X1X8	White	2011011	500	5.1g
	Black	2011010	500	5.1g
	Gery	2011012	500	5.1g
M10X1X12	White	2011017	500	5.7g
	Black	2011016	500	5.7g
	Gery	2011018	500	5.7g

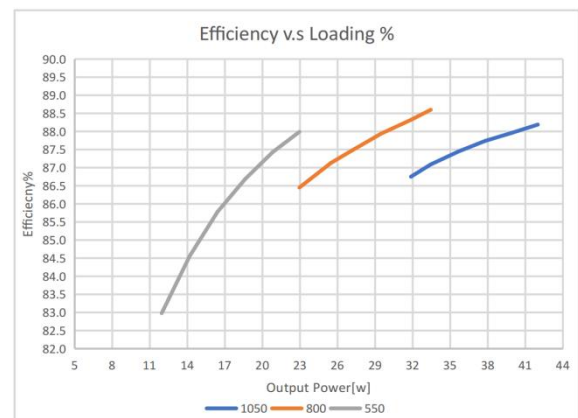


9. Electrical values

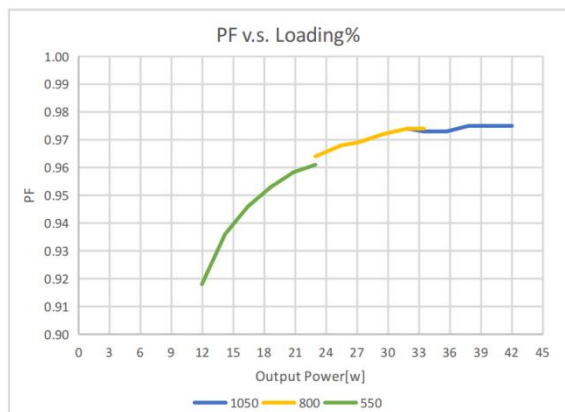
1. Operating power windows



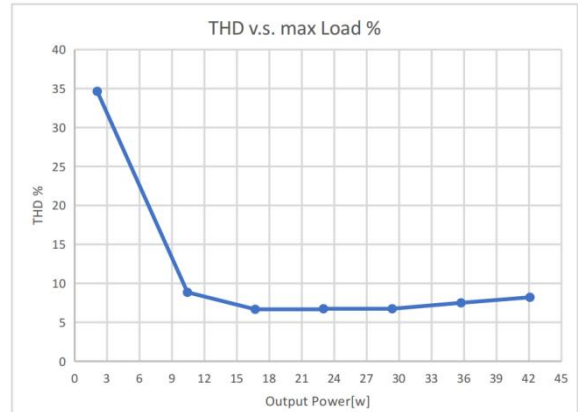
2. Efficiency v.s. Load



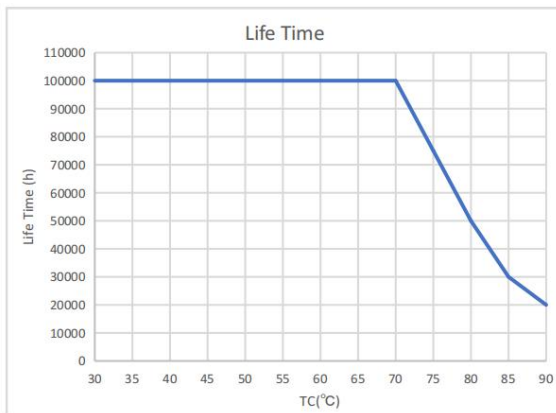
3. PF v.s. Load



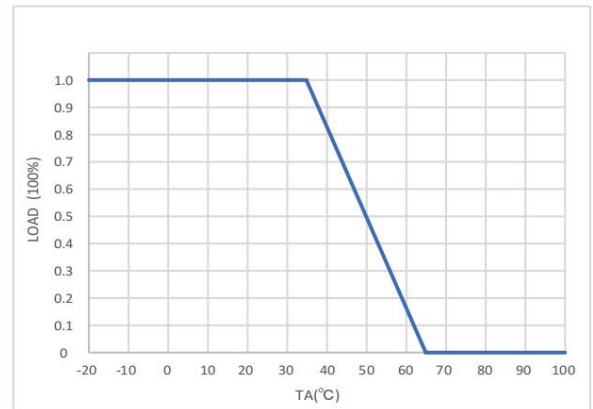
4. THD v.s. Load



5. Life time



6. Derating



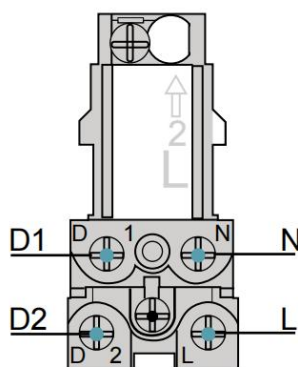
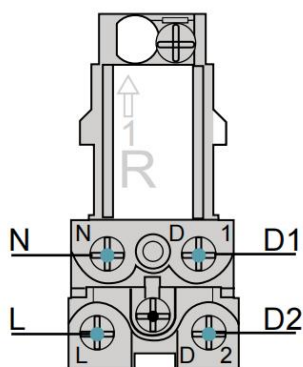
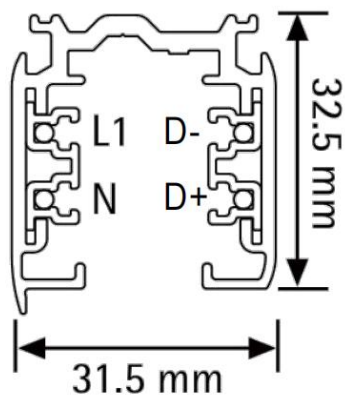
10. Suitable for following tracks (Can only be used for 4-wire rail)

Serial number	Brand	Track model	System
1	Global	XTS4 &XTSF 4	3P
2	Stucchi	9000xX Series	3P
3	Eutrac	2510x	3P
4	Unipro	T32B	3P
5	Ivela	7501	3P
6	ERCO	1079301000	3P

Remark:

1. The model name is XTSC6 and XTSCF6 tracks, and its brand is Global.
2. The model name used is the 9000XX track, and its brand is Stucchi. The “XX” in the model name represents: it represents a different color.
3. The model name is 2510x tracks, and its brand is Eutrac. The “x” in the model name represents: it represents a different color (x=1 white; x=2 black; x=3 silver, x=8 grey).
4. The model name is T32B tracks, and its brand is Unipro.
5. The model name is 7501 tracks, and its brand is Ivela.
6. The model name is 1079301000 tracks, and its brand is ERCO.

11. Phase track light rail specification:



12. Lighting track adapter and rail system installation diagram:



The adaptor shall be given that the use is limited to the track system specified.

13. Wiring instructions

- All connections must be kept as short as possible to ensure good EMI behaviour
- Mains leads should be kept apart from LED Driver and other leads (ideally 5 – 10 cm distance)
- Advice the maximum length of output wires is 3 m
- Secondary switching is not permitted (Except for constant voltage)
- Incorrect wiring can damage LED modules.
- The wiring must be protected against short circuits to earth (sharp edged metals parts, metal cable clips, louver, etc.)

14. Push Dim :

14.1 On / off:

Short push (120ms-600ms) on the switch

Stepless dimming: long push (> 0.6sec) on the switch

14.2 Power-on memory function

When the LED driver is powered on, it will restore the memory before the LED driver is powered off. (brightness remembers the brightness after the last dimming is stable, and the brightness during dimming is not memorized)

14.3 Light on/off

If the light is on, the light will be off after a short press. If the light is off, the light will be on after a short press. The time range of short press is 120-600ms.

14.4 PUSH Dimming

Press and hold the push switch for a long time, the light will enter the dimming state, if the previous time is dimming, it will automatically turn to dimming the next time. After releasing the reset button, the dimming stops and the current illuminance is maintained. The dimming range is 1%-100%. The default is to dim when the power is first long-press. If the brightness of the power-on is the maximum brightness, the first long-press is to dim. (Long press 0.6-3s to start dimming.)

14.5 Forced synchronization

Long press for 10 seconds to turn on all the lights and turn on the same brightness (50%), and continue to quickly short press will not change. After a short period of time without short press operation, the module exits the synchronization mode, and the short press restores the switch function.

14.6 PUSH Dimming rate

Long press the push switch 10S to switch the dimming rate to 3S, Long press the push switch 20S to switch the dimming rate to 6S.

15. REVISION HISTORY

Date	Revision	Remark
2026.16.03	V0.01	Product release
2026.12.06	V0.02	Suitable for following tracks