

Constant Current Dimmable Driver

Model: SC42W300-1050CG-4X-INVI



Model	Output Current	Input Current	Input Power	Output Power Range	PF	Efficiency (*Typical)	Output Voltage	No load Voltage
SC42W300-1050CG-4W -INVI	300mA	0.13A	14.5W	2.7-12.6W	0.83	87%	9-42V	59V
	350mA	0.14A	16.7W	3.2-14.7W	0.85	88%	9-42V	59V
	400mA	0.15A	18.9W	3.6-16.8W	0.91	89%	9-42V	59V
	450mA	0.16A	21.2W	4.1-18.9W	0.92	89%	9-42V	59V
	500mA	0.17A	23.5W	4.5-21.0W	0.94	89.5%	9-42V	59V
	550mA	0.18A	25.8W	5.0-23.1W	0.94	89.5%	9-42V	59V
SC42W300-1050CG-4B -INVI	600mA	0.19A	28.0W	5.4-25.2W	0.95	90.0%	9-42V	59V
	650mA	0.20A	30.3W	5.9-27.3W	0.95	90.0%	9-42V	59V
SC42W300-1050CG-4G -INVI	700mA	0.21A	32.7W	6.3-29.4W	0.95	90.0%	9-42V	59V
	750mA	0.22A	35.0W	6.8-31.5W	0.95	90.0%	9-42V	59V
	800mA	0.23A	37.3W	7.2-33.6W	0.95	90.0%	9-42V	59V
	850mA	0.24A	39.7W	7.7-35.7W	0.95	90.0%	9-42V	59V
	900mA	0.25A	42.0W	8.1-37.8W	0.95	90.0%	9-42V	59V
	950mA	0.26A	44.3W	8.6-39.9W	0.95	90.0%	9-42V	59V
	1000mA	0.27A	46.7W	9.0-42.0W	0.95	90.0%	9-42V	59V
	1050mA	0.28A	46.7W	9.5-42.0W	0.95	90.0%	9-40V	59V

* Test result @230V, 50Hz, Full Load. Current setting @ 1mA-steps (NFC)

1. Parameters

Category	Item	Technical Norm
Features	Output Type	Constant Current
	Output Features	Isolation
	IP Grade	IP20
	Insulation Class	Class II
Input	Rated Input Voltage	220-240VAC
	Range of Input Voltage	198-264VAC
	Frequency	50/60Hz
	Input Current	≤0.28A (230VAC, full load)



	Input Power	≤46.7W (230VAC, full load)
	Power Factor	≥0.95 (230VAC, full load)
	THD	≤15% (230VAC, full load)
	No-load Power Consumption	≤0.5W Dim to off, 230VAC
	Inrush Current	≤45A/100us (230VAC, full load)
Output	Output Voltage Range	9-42VDC@300-1000mA
		9-40VDC@1050mA
	No Load Voltage	59VDC Max.
	Output Current	300mA -1050mA
	Max. Output Power	42W
	Efficiency	≥90% (230VAC full load@max current)
	Current Ripple (< 120 Hz)	±5% (Imax-Imin)/(Imax+Imin)
	PstLM	≤1
	SVM	≤0.4
	Current Accuracy	±5%
	Line Regulation	±5%
	Load Regulation	±5%
Started Delay Time	≤0.5S(230VAC, full load)	
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	I/P to O/P <0.7mA
Environment	Ta/Operation Temperature	-20.....+35℃
	Ts/Storage Temperature	-35.....+85℃
	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 [#] / 8-9mm
	Dimension	308.3*35.7*21.8mm (L*W*H)
Standards	Certification	CE
	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;
	EMC Standards	EN55015; EN61000-3-2 Class C; EN61000-3 EN 61547; EN 61000-4-2; EN 61000-4-5
	Performance	EN 62384



	Surge	L-N/2KV
Others	RoHS	complied to 2011/65/EU
	REACH	EU Regulation (EC) No 1907/2006
	Life Time	50000h @Ta
	Warranty	5years
	Noise	≤ 20dB @Background noise ≤15dB ,Interval≥20cm

Remark:

1. All Parameters, if not specified, are measured at 230VAC/50Hz and 25°C 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. Connected quantities of different current Breaker

TYPE	Connected quantities of different current Breaker						Input Voltage (V)	Inrush Current(A)	Time (μs)
	current (A)	10	13	16	20	25			
	Installation wire diameter	1.5mm ²	2.5mm ²	2.5mm ²	4mm ²	4mm ²			
TYPE B		13	17	21	27	33	@230VAC	45	100
TYPE C		21	28	34	43	53			
TYPE D		34	44	55	68	85			



4. Label

KGP
KGP Electronics GmbH
Hueckelstraße 19
DE-58511 Lüdenscheid

LED Driver
SC42W300-1050CG-4W-INVI

Constant Current Lighting track adaptors
For LED modules only
PRI:220-240VAC 50/60Hz Max.0.28A
SEC:300-1050mA 9-42VDC
Uout:59VDC Max.42W Fmax.50NHz

ta:-20...+35°C
tc:80°C

Rated [W]	rated I _{LED} [A]	λ	1	2	3	4	Rated I _{LED} [W]	rated I _{LED} [A]	λ	1	2	3	4
12.6	300	0.13	0.83C	-	-	-	29.4	700	0.21	ON	-	-	-
14.7	350	0.14	0.86C	-	-	-	ON	31.5	750	0.22	ON	-	ON
16.8	400	0.15	0.91C	-	-	-	ON	ON	33.6	800	0.23	ON	ON
18.9	450	0.16	0.92C	-	-	-	ON	ON	35.7	850	0.24	ON	ON
21	500	0.17	0.94C	-	-	-	ON	ON	37.8	900	0.25	ON	ON
23.1	550	0.18	0.94C	-	-	-	ON	ON	39.9	950	0.26	ON	ON
25.2	600	0.19	0.95	-	-	-	ON	ON	42	1000	0.27	ON	ON
27.3	650	0.20	0.95	-	-	-	ON	ON	42	1050	0.28	ON	ON

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23.1	550	0.18	0.94C	-	-	-	ON	ON	39.9	950	0.26	ON	ON
25.2	600	0.19	0.95	-	-	-	ON	ON	42	1000	0.27	ON	ON
27.3	650	0.20	0.95	-	-	-	ON	ON	42	1050	0.28	ON	ON

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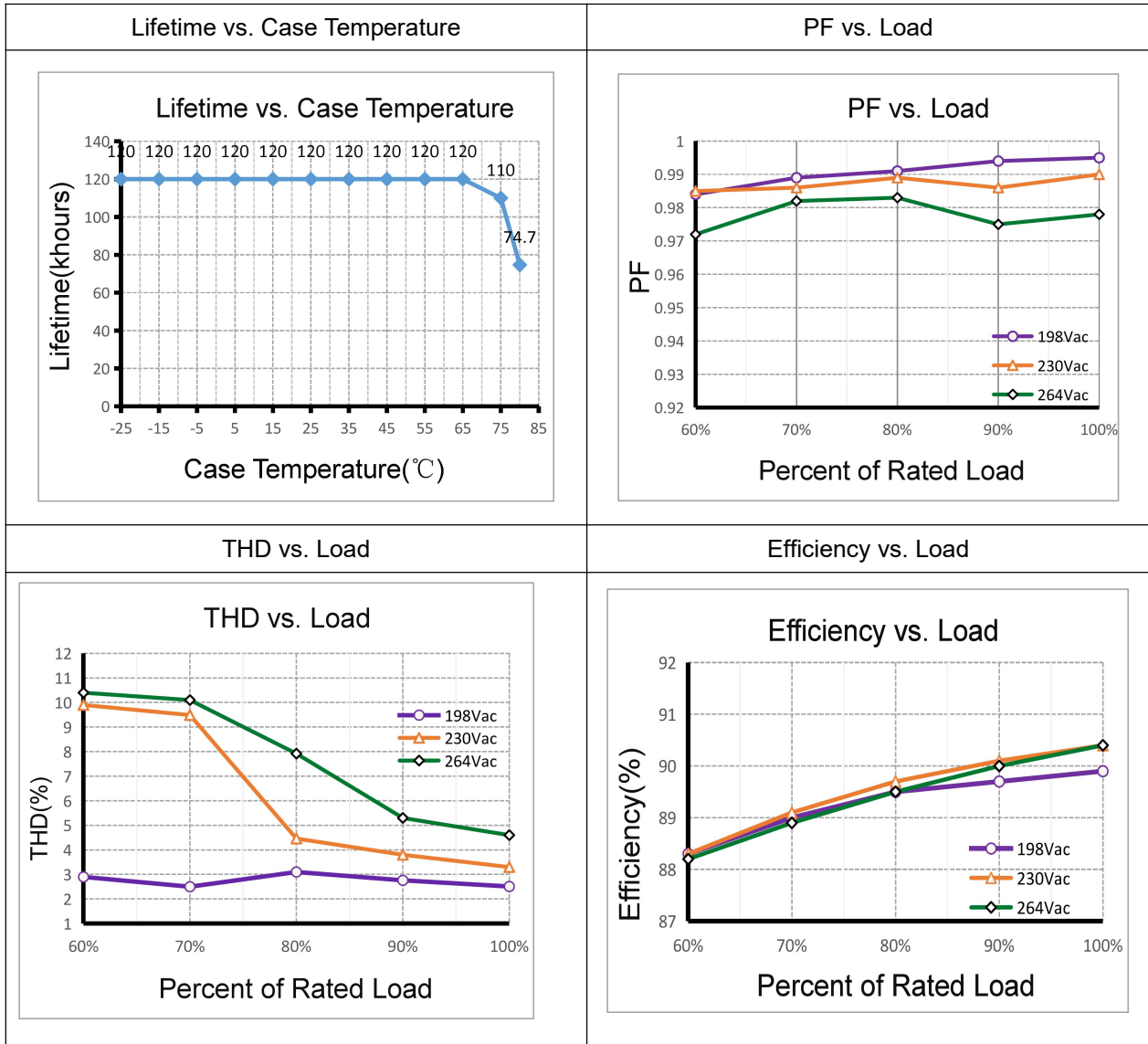
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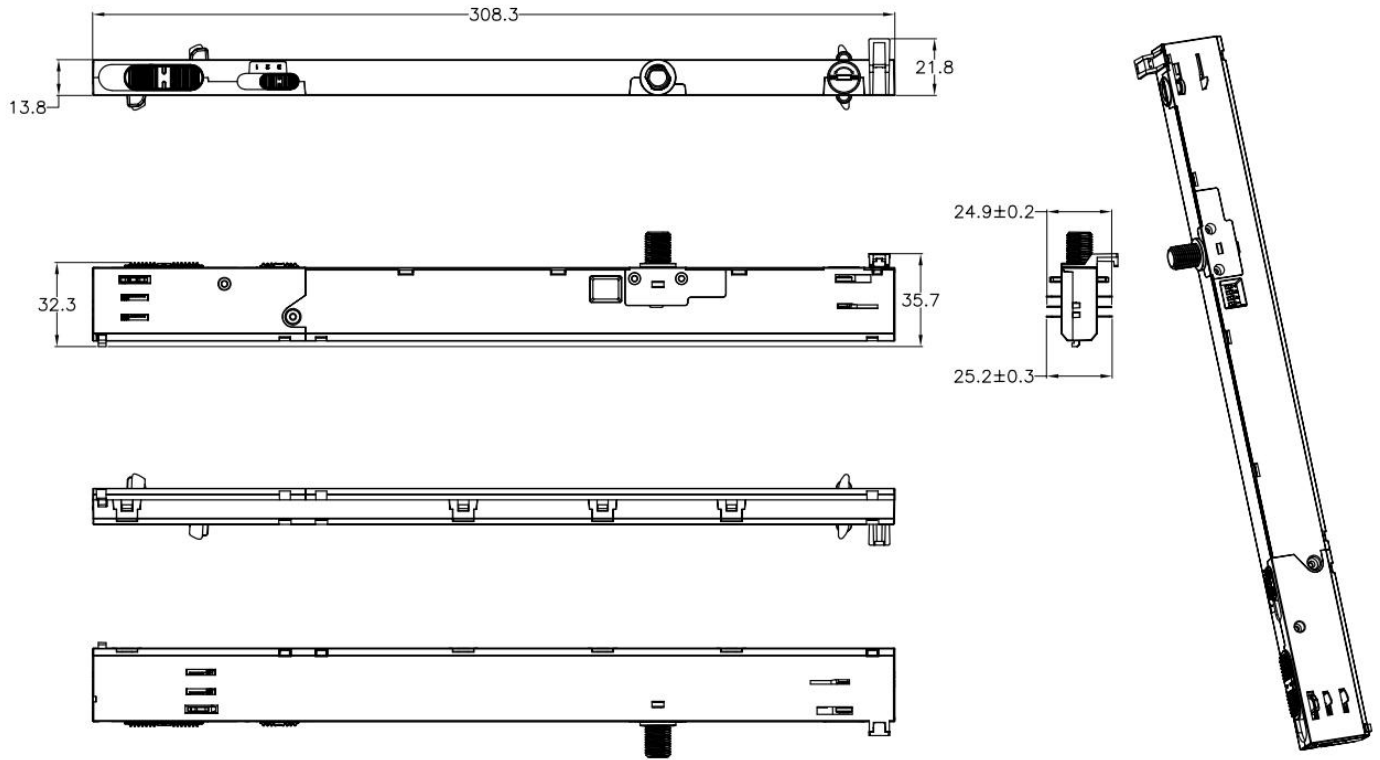
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14.7	350	0.14	0.86C	-	-	-	ON	31.5	750	0.22	ON	-	ON
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23.1	550	0.18	0.94C	-	-	-	ON	ON	39.9	950	0.26	ON	ON
25.2	600	0.19	0.95	-	-	-	ON	ON	42	1000	0.27	ON	ON
27.3	650	0.20	0.95	-	-	-	ON	ON	42	1050	0.28	ON	ON

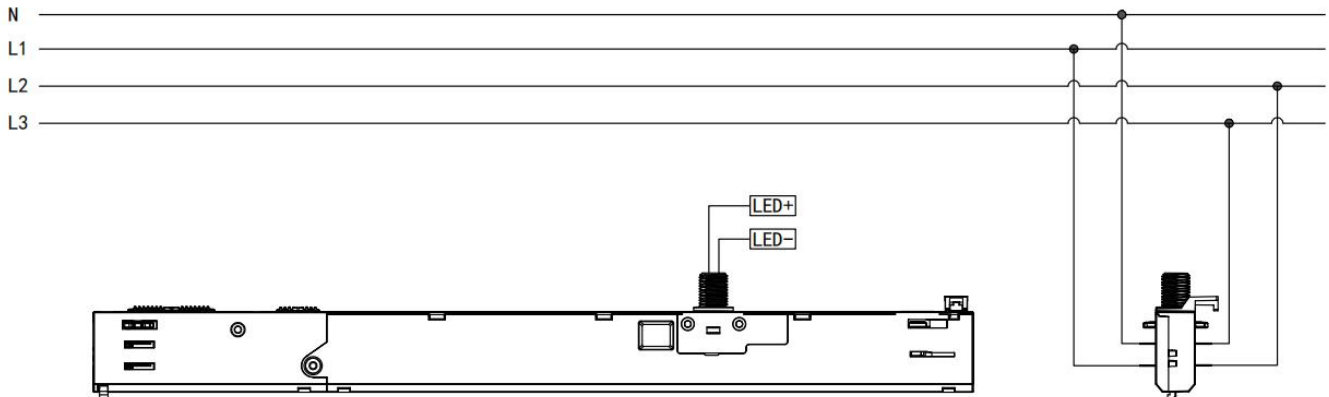
5. Electrical values



6. Dimension (Unit: mm)



7. Wiring Diagram



8. Packing information

Packing way	Model	Colour	Carton L*W*H(mm)	Pcs/ Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight/ Carton(kg)
industrial	SC42W300-1050CG-4X-INVI	White	405*340*205 MM	120	0.11	13.2	15.06
		Black					
		Grey					

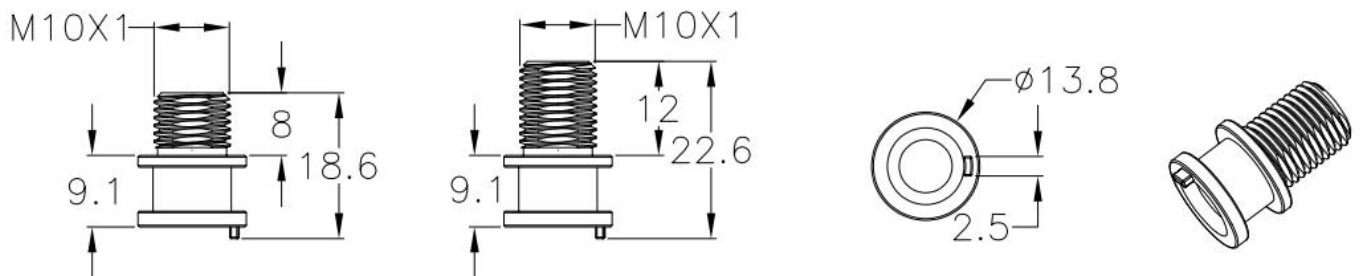


9. Lamp Screw Type

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

Ordering data

Type	Colour	Article number	Qty/ctn	Weight(g)/pcs
M10x8	White	AL	PC	2.2
	Black	AL	PC	2.2
	Gray	AL	PC	2.2
M10x12	White	AL	PC	2.35
	Black	AL	PC	2.35
	Gray	AL	PC	2.35



10. Suitable for following tracks:

Serial number	Brand	Track model	System
1	Global	4X	3P
2	Global	6X	3P
3	A.A.G STUCCHI	9000A-4-ST	3P
4	Unipro	TC312W	3P
5	PowerGEAR	Pro-0410	3P
6	PowerGEAR	Pro-0610	3P
7	BEL INTEGRA	4X	3P

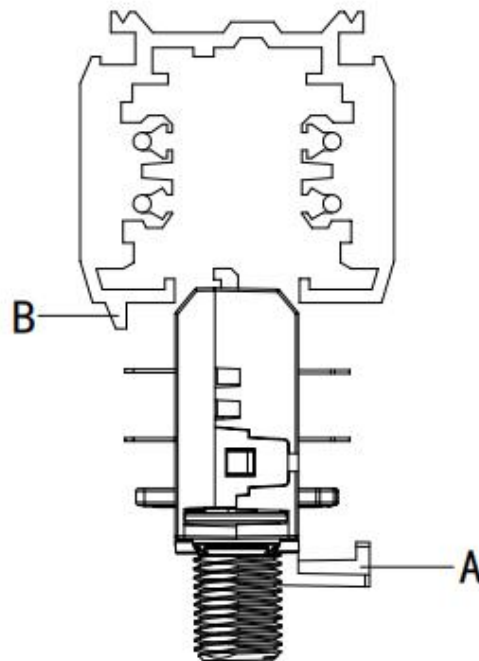
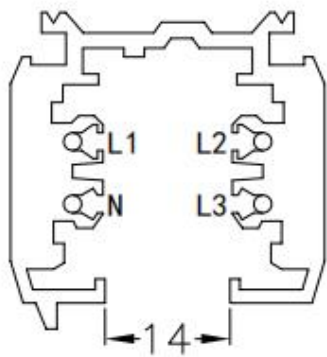
Remark:

1. The model name is 4X and 6X tracks, and its brand is Global.

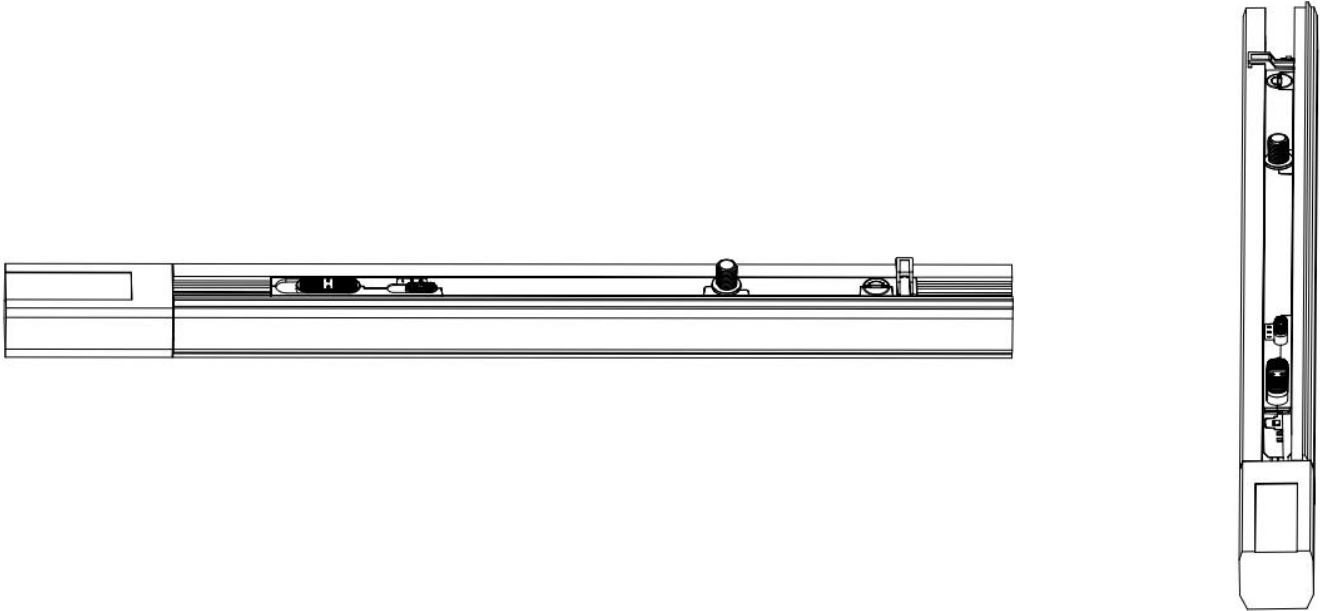


2. The model name used is the 9000A-4-ST track, and its brand is A.A.G STUCCHI.
3. The model name is TC312W tracks, and its brand is Unipro.
4. The model name is Pro-041 and Pro-0610 tracks, and its brand is PowerGEAR.
5. The model name is 4X tracks, and its brand is BEL INTEGRA.
6. If other brands are suitable, please communicate and consult first

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 0.5 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.)
- Hot plug-in is not supported due to residual output voltage of > 0 V up to mains voltage. Danger to life.
- When connecting an LED load, restart the device to activate the LED output.

14. Replace LED module

- Mains off
- Remove LED module
- Wait for 30 seconds
- Connect LED module again
- Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs



15. REVISION HISTORY

DATE	REV	Modification details
2025-12-05	V1.0	Initial release.

