

Constant Current Driver

- The housing is made from V0 flame retardant PC materials from COVESTRO.
- Small size and light weight. Wide range of applicable lamps.
- Class 2 LED driver, Safety Extra Low Voltage (SELV).
- Innovative thermal management technology intelligently protects the life of the LED driver.
- Overheat, overload, short circuit protection and automatic recovery.
- Up to 50,000-hour life time.
- 5-year warranty (AiSHi capacitor).



The certification icon represents on-going certification applications only, and final certification qualification is subject to actual products.



Model	Output Current	Input Current	Input Power	Output Power Range	PF	Typical Efficiency	Output Voltage	No load Voltage
S-138-C42W700-1050CG-3B S-138-C42W700-1050CG-3W S-138-C42W700-1050CG-3G	700mA	0.14A	33.52W	14.00-29.40W	0.93-0.98	87.7%	20-42V	59V
	750mA	0.15A	35.87W	15.00-31.50W	0.94-0.98	87.8%	20-42V	59V
	800mA	0.16A	38.26W	16.00-33.60W	0.95-0.98	87.8%	20-42V	59V
	850mA	0.16A	38.90W	17.00-34.00W	0.95-0.98	87.4%	20-42V	59V
	900mA	0.17A	41.18W	18.00-36.00W	0.96-0.98	87.4%	20-42V	59V
	950mA	0.18A	43.42W	19.00-38.00W	0.96-0.98	87.5%	20-42V	59V
	1000mA	0.19A	45.71W	20.00-40.00W	0.96-0.98	87.5%	20-42V	59V
	1050mA	0.20A	47.94W	21.00-42.00W	0.97-0.99	87.5%	20-42V	59V

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

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
	Range of DC Input Voltage	180-280VDC
	Frequency	50/60Hz
	Overvoltage protection	48hrs@320VAC, 2hrs@360VAC, 5mins@380VAC
	Input Current	≤0.20A (230VAC, full load)
	Input Power	≤47.94W (230VAC, full load)
	Power Factor	≥0.99 (230VAC, full load)
	THD	≤20% (230VAC, full load)
No-load Power Consumption	≤0.50W @230VAC	

Output	Inrush Current	≤9.5A/2.6us (230VAC, full load)
	Connected quantity of 10A Breaker	20pcs/type A ;32pcs/type B ;52pcs/type C@230Vac
	Connected quantity of 13A Breaker	26pcs/type A ;42pcs/type B ;68pcs/type C@230Vac
	Connected quantity of 16A Breaker	32pcs/type A ;52pcs/type B ;84pcs/type C@230Vac
	Connected quantity of 20A Breaker	41pcs/type A ;65pcs/type B ;105pcs/type C@230Vac
	Output Voltage Range	20-42VDC@700-800mA, 20-40VDC@850-1050mA
	No-load Voltage	59VDC Max.
	Output Current	700mA -1050mA (Max. output),Factory set current of 700mA
	Max. Output Power	42W
	Efficiency	≥87.8% (230VAC, full load)
	Output LF current ripple (< 120 Hz)	±5% (Imax-Imin) / (Imax+Imin)
	Current Accuracy	±5%
Starting Delay Time	≤0.5S (230VAC, full load)	
Pst LM	≤1	
SVM	≤0.4	
Protection	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
	Leakage current	< 250μA, I/P to O/P @230V input
Environment	Ta/Operation Temperature	-25...+35 °C
	Ts/Storage Temperature	-25...+85 °C
	Tc/Enclosure Temperature	85 °C
	Humidity	10%...90%RH
	Atmosphere pressure	86-108KPa
Construction	Installation	Independent
	SEC Wire preparation	0.5-1.5 [□]
	Dimension	143*34*32.3mm (L*W*H)
Standards	Certification	CE
	Safety Standards	EN61347-1:2015/A1:2021; EN61347-2-13:2014/A1:2017;
	Performance	EN 62384
	Surge	L-N:2kV
Others	RoHs	complied to 2011/65/EU
	Life Time	50000h Tc=75 °C
		75000h Tc=70 °C
		100000h Tc=65 °C
	Warranty	5years , F.R. < 10000ppm
Noise	≤ 24dB @Background noise ≤ 18dB , Interval≥ 15cm	
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.		

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

Label

BLACK (RAL9011)



SGN
For LED modules only
LED Driver


R Sight B.V.
Roald Dahliaan
47, 5629 MC, Eindhoven

S-138-C42W700-1050CG-3B
Constant Current Lighting track adaptors

tc:85°C
ta:35°C

PRI:220-240VAC 50/60Hz Max. 0.20A
SEC:700-1050mA 20-42VDC
U-OUT:59VDC Max. 42W Fmax. 50N↓

Pout (W)	Iout (mA)	λ	1	2	3	Pout (W)	Iout (mA)	λ	1	2	3
29.4	700	0.93-0.98	-	-	-	36.0	900	0.96-0.98	ON	-	-
31.5	750	0.94-0.98	-	-	ON	38.0	950	0.96-0.98	ON	-	ON
33.6	800	0.95-0.98	-	ON	-	40.0	1000	0.96-0.98	ON	ON	-
34.0	850	0.95-0.98	-	ON	ON	42.0	1050	0.97-0.99	ON	ON	ON



ON

OFF

SEC

+ 0.5-1.5□

- 8-9mm


CE

SELV

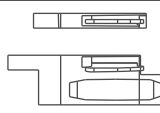
tc

X

□



WHITE (RAL9010)



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S-138-C42W700-1050CG-3W
Constant Current Lighting track adaptors

tc:85°C
ta:35°C

PRI:220-240VAC 50/60Hz Max. 0.20A
SEC:700-1050mA 20-42VDC
U-OUT:59VDC Max. 42W Fmax. 50N↓

Pout (W)	Iout (mA)	λ	1	2	3	Pout (W)	Iout (mA)	λ	1	2	3
29.4	700	0.93-0.98	-	-	-	36.0	900	0.96-0.98	ON	-	-
31.5	750	0.94-0.98	-	-	ON	38.0	950	0.96-0.98	ON	-	ON
33.6	800	0.95-0.98	-	ON	-	40.0	1000	0.96-0.98	ON	ON	-
34.0	850	0.95-0.98	-	ON	ON	42.0	1050	0.97-0.99	ON	ON	ON



ON

OFF

SEC

+ 0.5-1.5□

- 8-9mm


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SELV

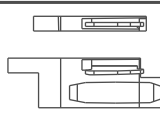
tc

X

□



GRAY (RAL7040)



SGN
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LED Driver

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Roald Dahliaan
47, 5629 MC, Eindhoven

S-138-C42W700-1050CG-3G
Constant Current Lighting track adaptors

tc:85°C
ta:35°C

PRI:220-240VAC 50/60Hz Max. 0.20A
SEC:700-1050mA 20-42VDC
U-OUT:59VDC Max. 42W Fmax. 50N↓

Pout (W)	Iout (mA)	λ	1	2	3	Pout (W)	Iout (mA)	λ	1	2	3
29.4	700	0.93-0.98	-	-	-	36.0	900	0.96-0.98	ON	-	-
31.5	750	0.94-0.98	-	-	ON	38.0	950	0.96-0.98	ON	-	ON
33.6	800	0.95-0.98	-	ON	-	40.0	1000	0.96-0.98	ON	ON	-
34.0	850	0.95-0.98	-	ON	ON	42.0	1050	0.97-0.99	ON	ON	ON



ON

OFF

SEC

+ 0.5-1.5□

- 8-9mm


CE

SELV

tc

X

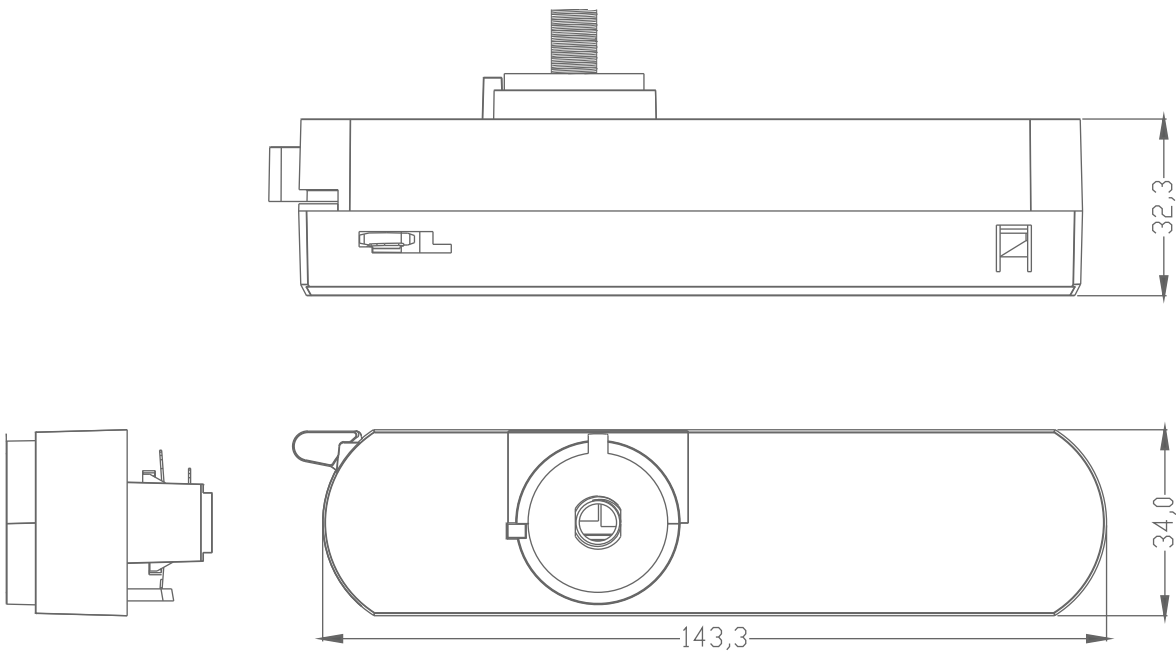
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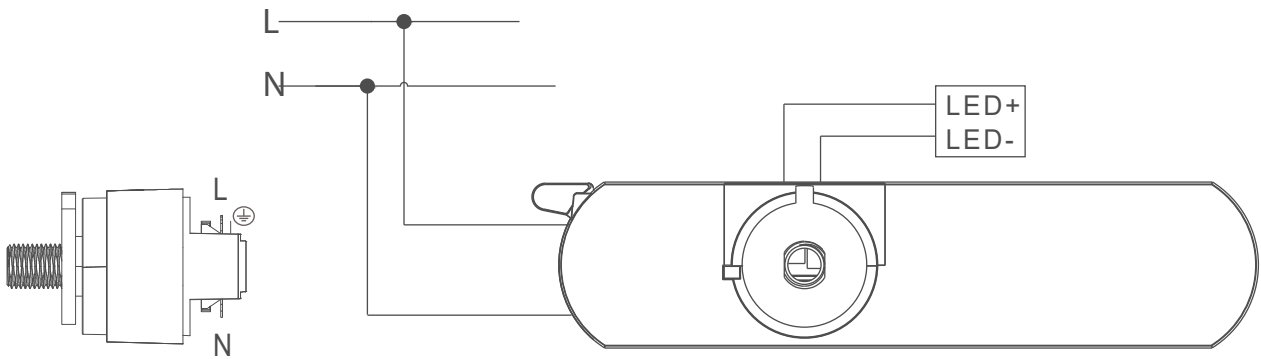
Output Current Setting

Output Current	1	2	3
700mA	-	-	-
750mA	-	-	ON
800mA	-	ON	-
850mA	-	ON	ON
900mA	ON	-	-
950mA	ON	-	ON
1000mA	ON	ON	-
1050mA	ON	ON	ON

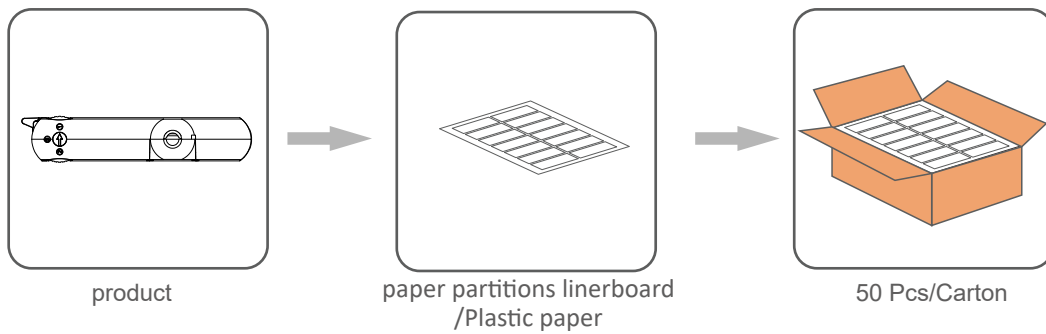
Dimension (Unit: mm)



Wiring Diagram



Packing information



Model	Carton L*W*H(mm)	Pcs/- Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Cross weight/- Carton(kg)
S-138-C42W700-1050CG-3X	310*235*230	50	0.104	5.22	5.96

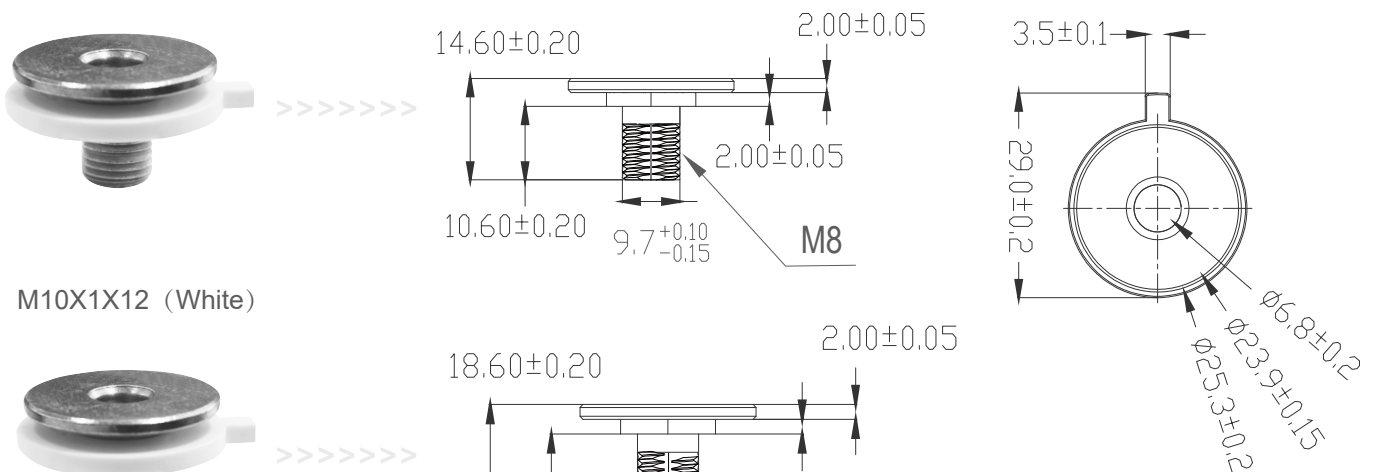
Lamp Screw Type

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

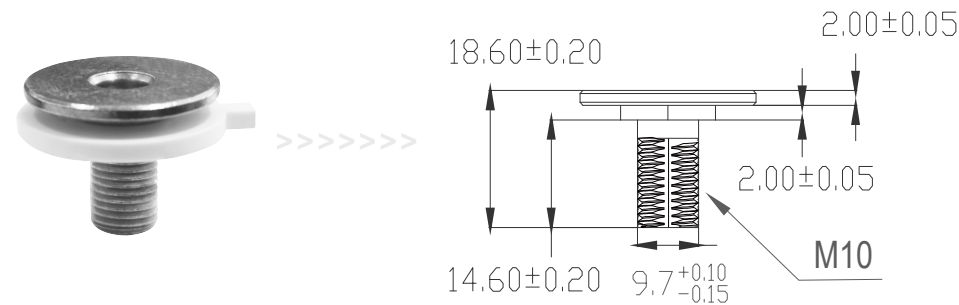
Ordering data 1

Type	Colour	Qty/ctn	Weight/pcs
M10x1x8	White	2500	9.6g
	Black	2500	9.6g
	Grey	2500	9.6g
M10x1x12	White	2500	10.0g
	Black	2500	10.0g
	Grey	2500	10.0g

M10X1X8 (White)



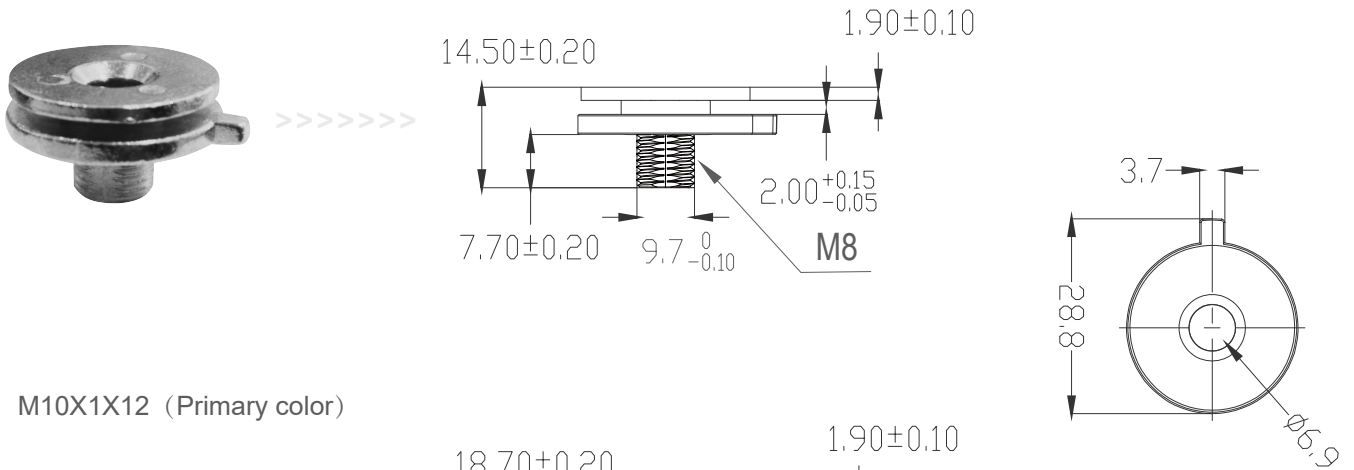
M10X1X12 (White)



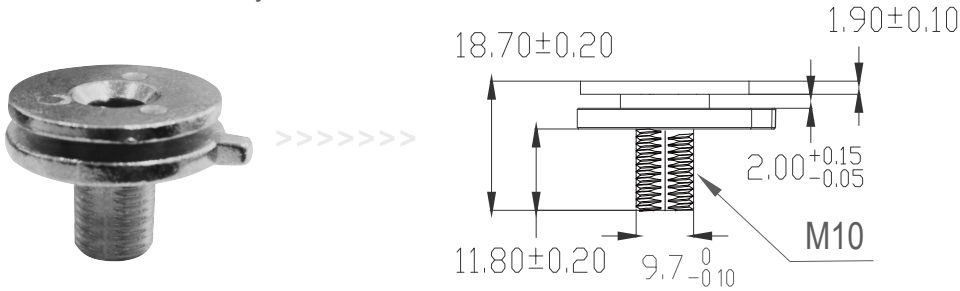
Ordering data 2

Type	Colour	Qty/ctn	Weight/pcs
M10x1x8	White	2500	16.0g
	Black	2500	16.0g
	Primary color	2500	16.0g
M10x1x12	White	2500	16.9g
	Black	2500	16.9g
	Primary color	2500	16.9g

M10X1X8 (Primary color)

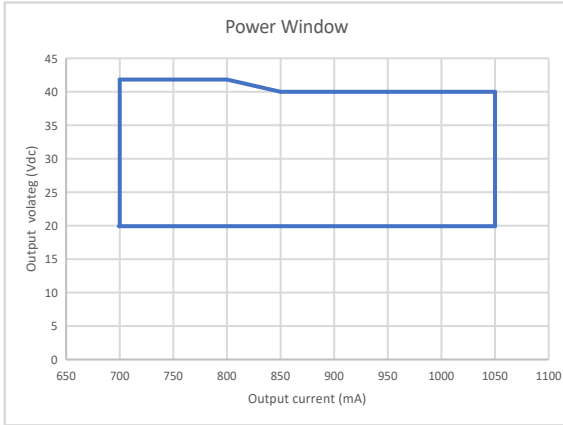


M10X1X12 (Primary color)

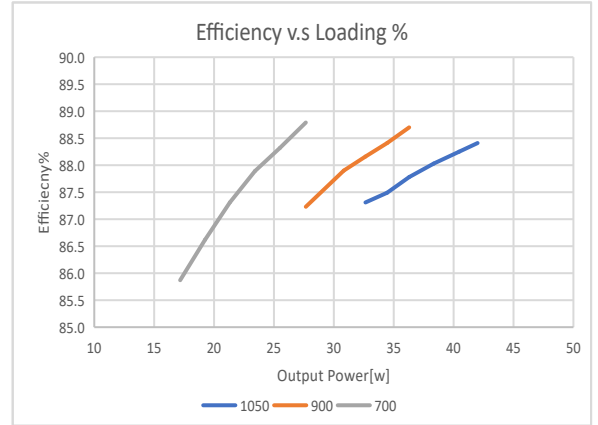


Electrical values

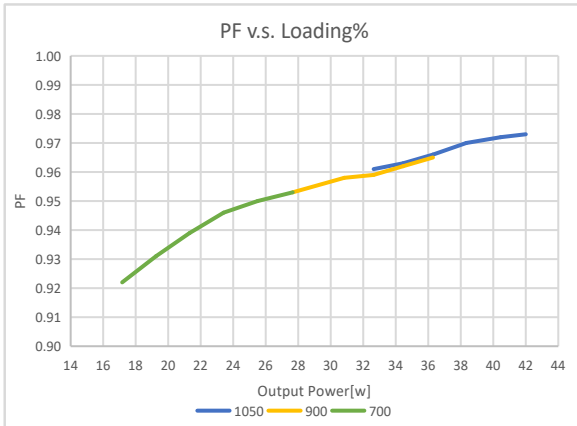
1. Operating power windows



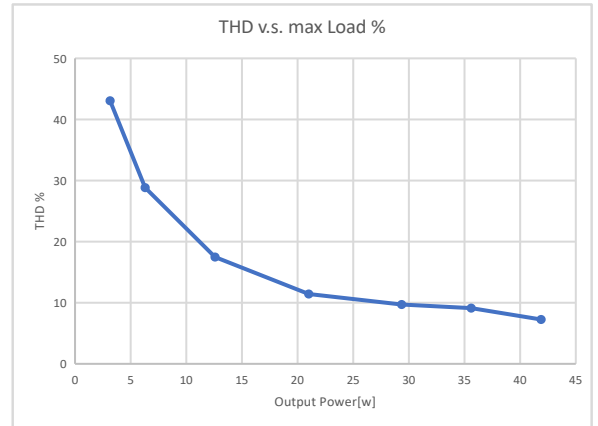
2. Efficiency v.s. Load



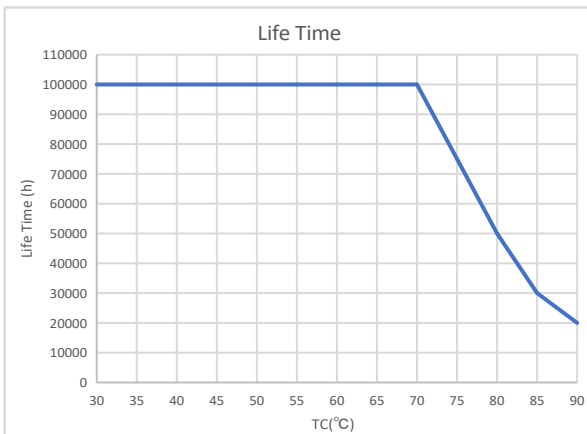
3. PF v.s. Load



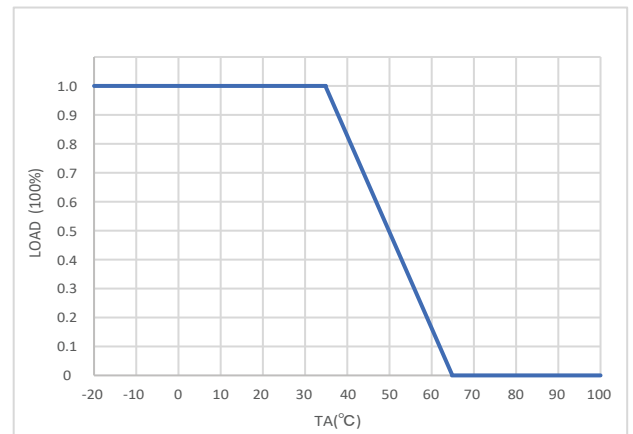
4. THD v.s. Load



5. Life time



6. Derating



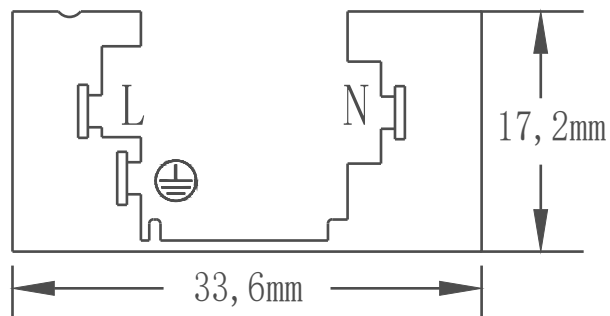
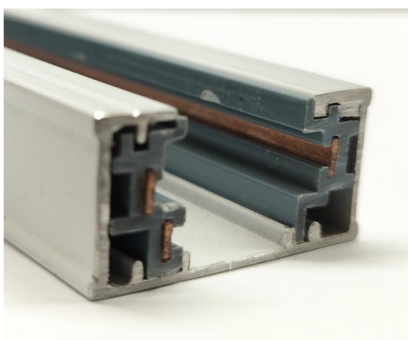
Suitable for following tracks

Serial number	Manufacturer	Type	Casing colour
1	Powergear	PRO-0310-W	white(RAL 9010)
		PRO-0310-S	silver(RAL7040)
		PRO-0310-B	black(RAL9011)
2	SAL	STR4800/1 WH	1M TRACK, white
		STR4800/1 BK	1M TRACK. black
		STR4800/2 WH	2M TRACK,white
		STR4800/2 BK	2M TRACK, black

Remark:

1. The model name is PRO-0310-X tracks, and its brand is Powergear. The "X" in the model name represents: it represents a different color (W: white; S: silver; B: black).
2. The model name is STR4800/x X tracks, and its brand is SAL. The "x" in the model name represents: it represents a different length (x=1 1M; x=2 2M). The "X" in the model name represents: it represents a different color (WH: white; BK: black).

Phase track light rail specification:



Lighting track adapter and rail system installation diagram:



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

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.)

REVISION HISTORY

Date	Revision	Remark