

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-103-C23W100-700	100mA	0.03A	6.0W	0.25-4.60W	0.33-0.68	76%	2.5-46V	60V Max.
	150mA	0.04A	8.4W	0.37-6.90W	0.35-0.79	82%		
	200mA	0.05A	10.9W	0.50-9.20W	0.37-0.84	84%		
	250mA	0.06A	13.3W	0.62-11.50W	0.40-0.87	86%		
	300mA	0.07A	15.8W	0.75-13.80W	0.43-0.89	87%		
	350mA	0.08A	18.5W	0.87-16.10W	0.45-0.91	87%		
	400mA	0.09A	20.9W	1.00-18.40W	0.47-0.92	88%		
	450mA	0.10A	23.5W	1.12-20.70W	0.48-0.93	88%		
	500mA	0.12A	26.1W	1.25-23.00W	0.50-0.94	88%		
	550mA	0.12A	26.2W	1.37-23.10W	0.52-0.94	88%	2.5-42V	
	600mA	0.12A	25.9W	1.50-22.80W	0.53-0.94	88%	2.5-38V	
	650mA	0.12A	26.1W	1.62-22.75W	0.54-0.94	87%	2.5-35V	
	700mA	0.12A	26.5W	1.75-23.10W	0.56-0.94	87%	2.5-33V	

* 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
	Rated Input Voltage	220-240VAC
	Range of Input Voltage	198-264VAC
	Range of DC Input Voltage	180-280VDC
	Frequency	0/50/60Hz, Range:0/47-63Hz
	Overvoltage protection	2h@380VAC, 48h@320VAC
	Input Current	≤0.12A max (230VAC, full load)
	Input Power	≤26.5W max (230VAC, full load)

Input	Power Factor	≥0.94 (230VAC, full load)
	THD	≤14% (230VAC, full load)
	No-load Power Consumption	≤0.5W @230VAC
	Inrush Current	≤7.9A/2.6us (230VAC, full load)
	Connected quantity of 10A Breaker Connected quantity of 13A Breaker Connected quantity of 16A Breaker Connected quantity of 20A Breaker	24pcs/type A ;39pcs/type B ;63pcs/type C@230Vac 32pcs/type A ;51pcs/type B ;82pcs/type C@230Vac 39pcs/type A ;63pcs/type B ;101pcs/type C@230Vac 49pcs/type A ;79pcs/type B ;126pcs/type C@230Vac
Output	Output Voltage Range	2.5-46VDC@100-500mA; 2.5-42VDC@550mA; 2.5-38VDC@600mA; 2.5-35VDC@650mA; 2.5-33VDC@700mA
	No-load Voltage	60VDC Max.
	Output Current	100mA-700mA (Max.output) , Factory set current of 100mA
	Max. Output Power	23.1W
	Efficiency	≥88% (230VAC, full load)
	Output LF current ripple (< 120 Hz)	±3% (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	< 700μA, I/P to O/P @230V input
Environment	Ta/Operation Temperature	-20....+50 C
	Ts/Storage Temperature	-20....+85 C
	Tc/Enclosure Temperature	85 C
	Humidity	10%....90%RH
	Atmosphere pressure	86-108KPa
Construction	Installation	Build-in/Independent
	SEC Wire preparation	0.5-1.5 [□] / 8-9mm
	PRI Wire preparation	0.5-1.5 [□] / 8-9mm
	Dimension	103.4*30*21mm (L*W*H)
Standards	Certification	CE/ENEC/SAA/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 61347-1-1:2015+A1:2017; IEC 61347-13:2014+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 IEC 61000-3-3:2013+A1:2019;
	Performance	EN 62384
	Surge	L/N-Ground:2kV; L-N:1kV
Others	RoHs	complied to 2011/65/EU
	Life Time	50000h Tc=85 C
		75000h Tc=80 C
		100000h Tc=75 C
Warranty	5years , F.R. < 10000ppm	
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



SGN Constant Current Type for operation with LED modules only
 LED Driver S-103-C23W100-700
 SEC:100-700mA 2.5-46VDC ●tc=85°C

PRI:220-240VAC 0/50/60Hz Max. 0.16A
 Range of application:DC 180-280V

wire preparation +
 -

PR: 0.5-1.5^o
 SEC: 0.5-1.5^o

Pout [W]	Iout [mA]	λ	1	2	3	4	Pout [W]	Iout [mA]	λ	1	2	3	4
4.6	100	0.33C-0.68C	-	-	-	-	18.4	400	0.47C-0.92C	-	ON	ON	-
6.9	150	0.35C-0.79C	-	-	-	ON	20.7	450	0.48C-0.93C	-	ON	ON	ON
9.2	200	0.37C-0.84C	-	-	ON	-	23.0	500	0.50C-0.94C	ON	-	-	-
11.5	250	0.40C-0.87C	-	-	ON	ON	23.1	550	0.52C-0.94C	ON	-	-	ON
13.8	300	0.43C-0.89C	-	ON	-	-	22.8	600	0.53C-0.94C	ON	-	ON	-
16.1	350	0.45C-0.91C	-	ON	-	ON	22.7	650	0.54C-0.94C	ON	-	ON	ON
							23.1	700	0.56C-0.94C	ON	ON	-	-

U-OUT:60V
 ta =50°C

ON OFF

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

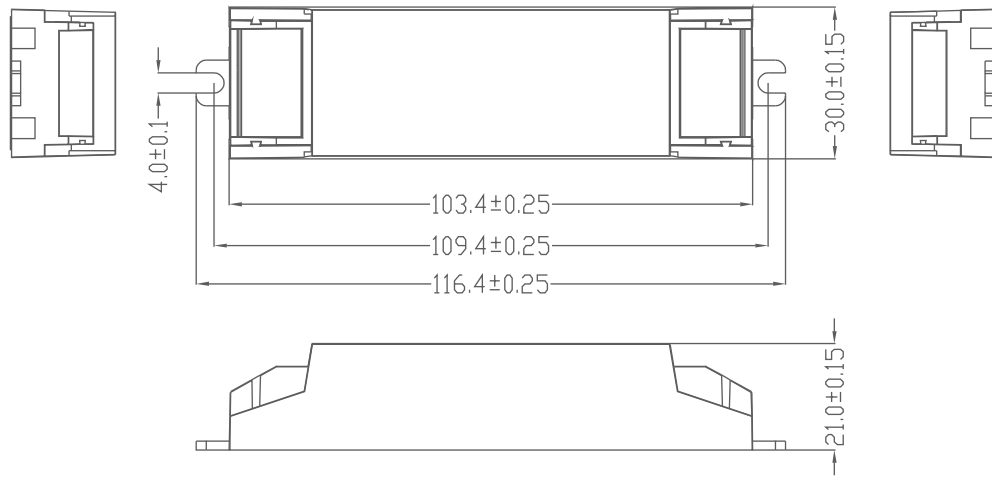


Output Current Setting

Output Current	1	2	3	4
100mA	-	-	-	-
150mA	-	-	-	ON
200mA	-	-	ON	-
250mA	-	-	ON	ON
300mA	-	ON	-	-
350mA	-	ON	-	ON
400mA	-	ON	ON	-
450mA	-	ON	ON	ON
500mA	ON	-	-	-
550mA	ON	-	-	ON
600mA	ON	-	ON	-
650mA	ON	-	ON	ON
700mA	ON	ON	-	-

Dimension (Unit: mm)

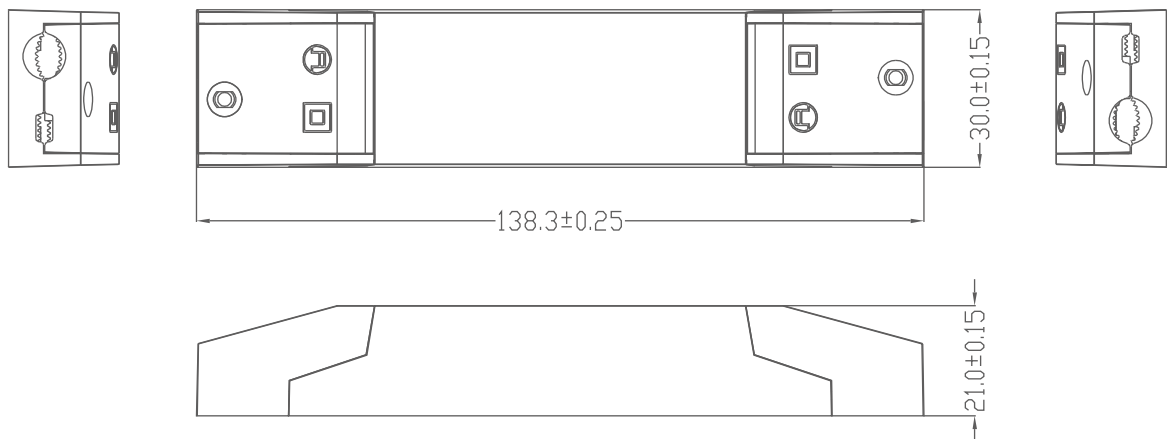
Built in type:



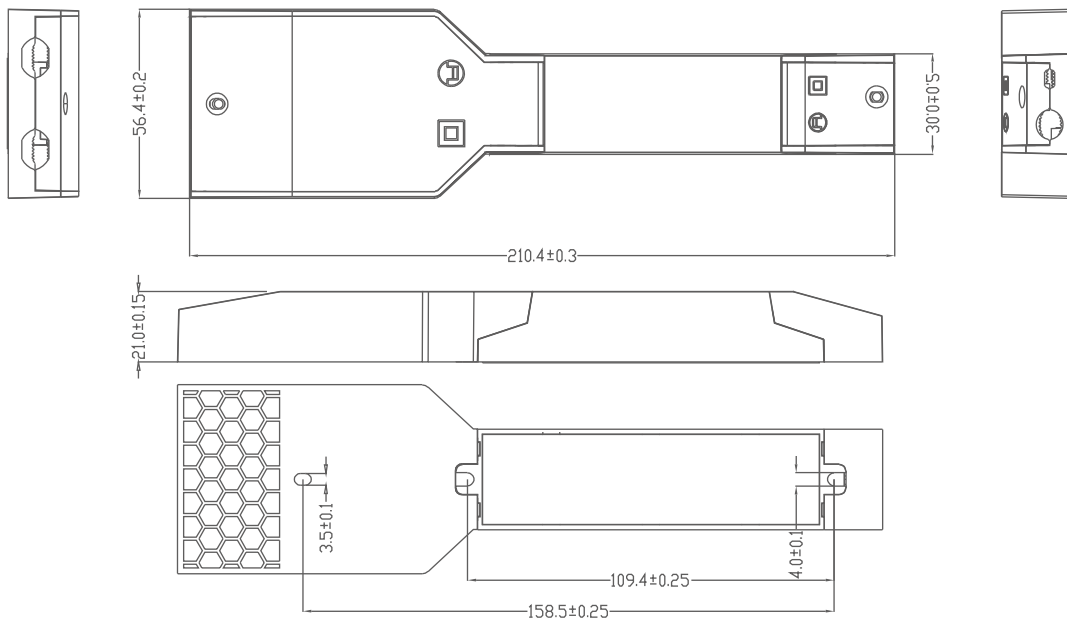
Compatible Small Strain reliefs:SR_CC15-23-36

Compatible Large Strain reliefs:SR_CC15-23-36_3POL

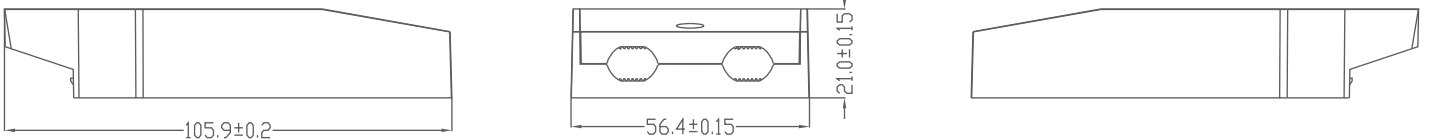
Small side cover



Large side cover



Large side cover specifications



Tolerance for dimensions ± 0.1 mm

Mechanical, Operating & Storage Conditions

Driver cross-section dimensions: 55.4-57.4 x 20.0-22.0 mm

Wire size: 0.5 - 2.5 mm²

Ambient temperature range: -20...+50 °C

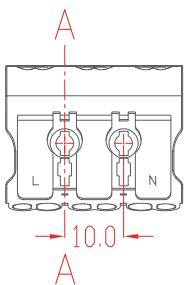
Storage temperature range: -20...+85 °C

Assembly temperature range: +5...+30 °C

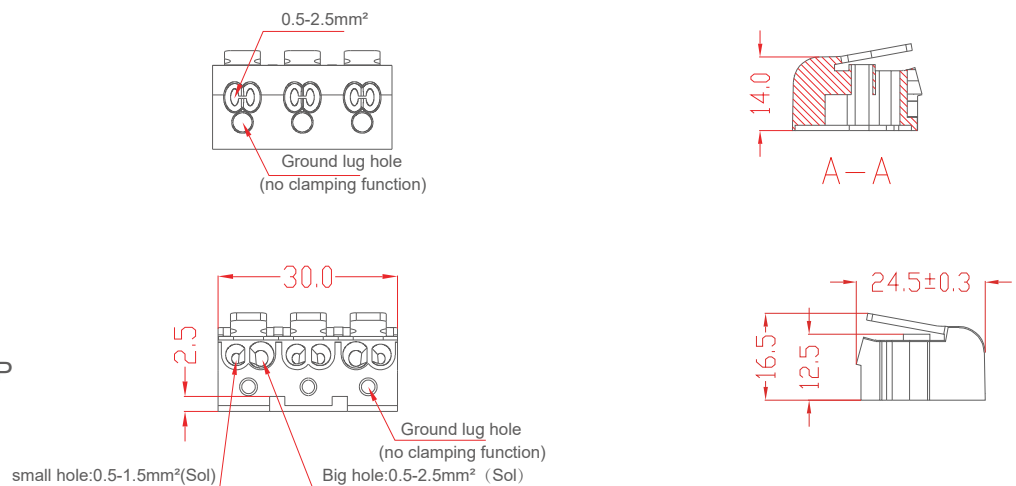
Do not store in wet or humid environment!

* Unless otherwise stated in the driver datasheet (for independent installation).
Note! T_c max temperature of the driver shall not be exceeded.

Terminal

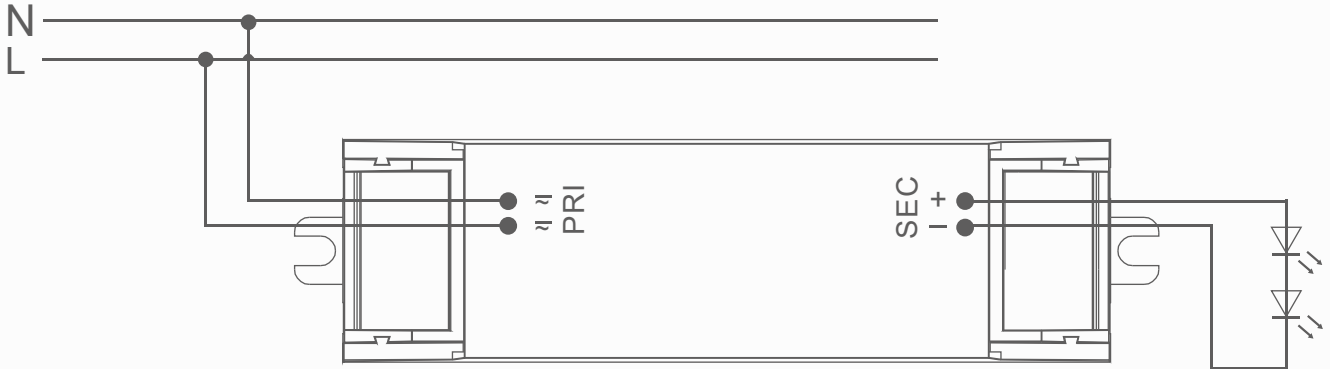


3 - pole connector for CC drivers with LC-SRB-LOOP



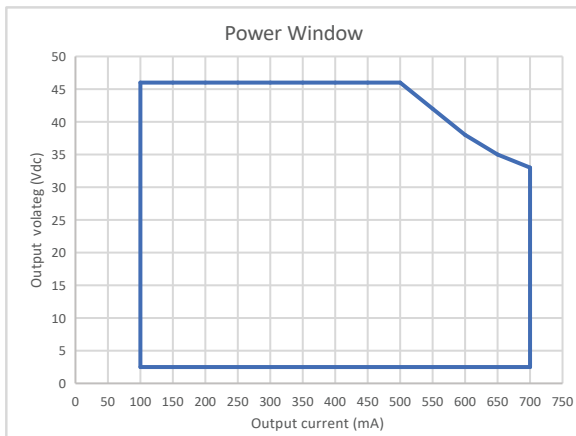
Wiring Diagram

220-240 V
0/50/60 Hz

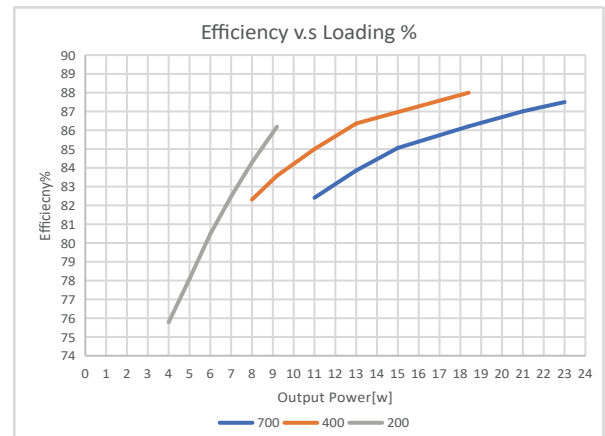


Electrical values

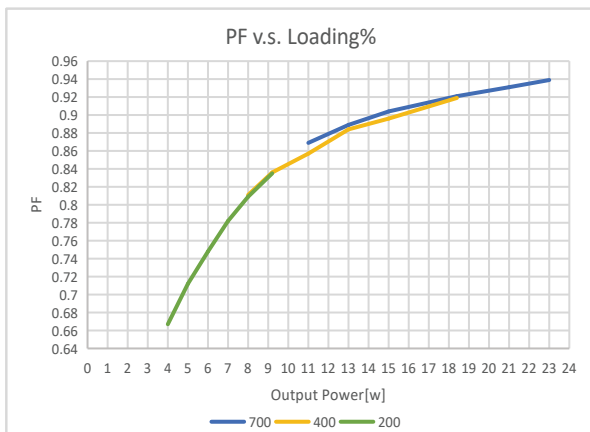
1. Operating power windows



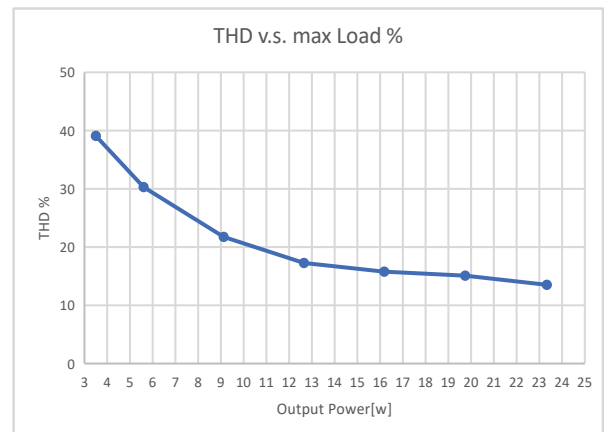
2. Efficiency v.s. Load



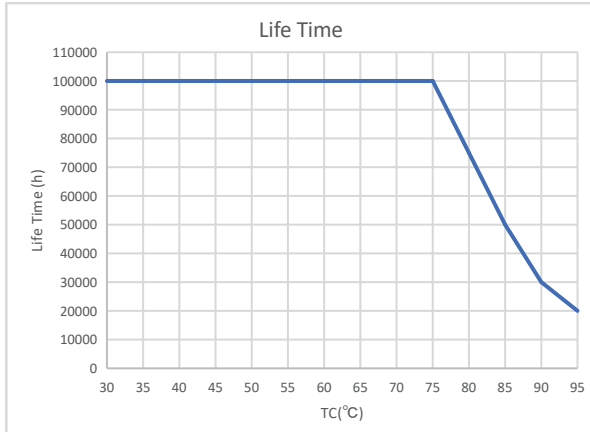
3. PF v.s. Load



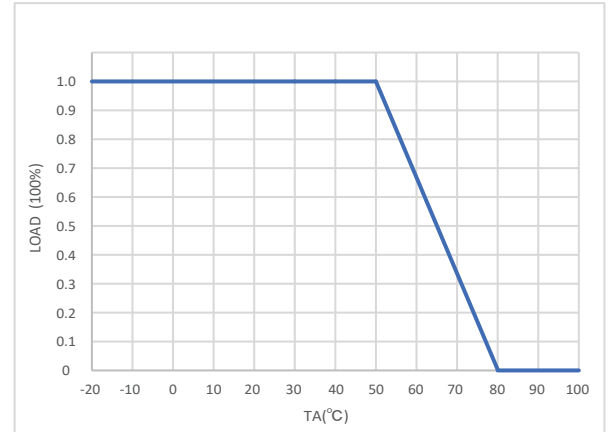
4. THD v.s. Load



5. Life time

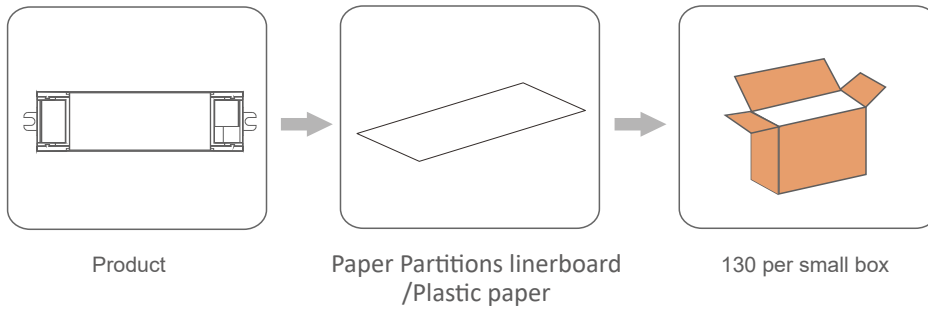


6. Derating



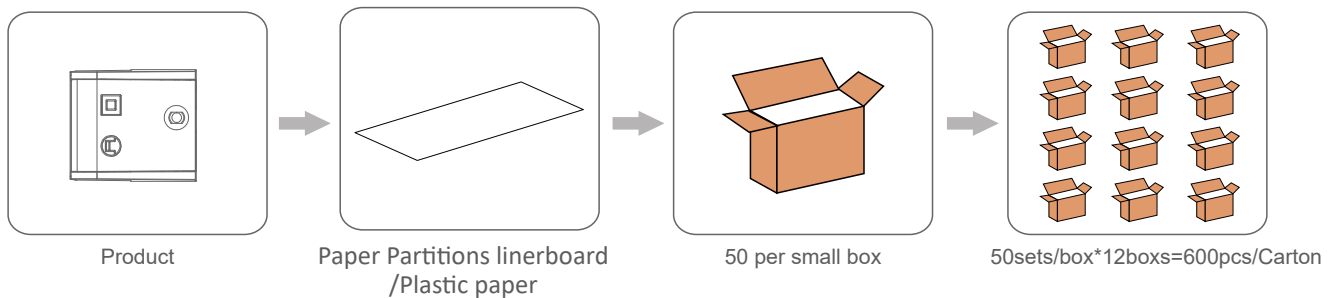
Packing information

Built in type



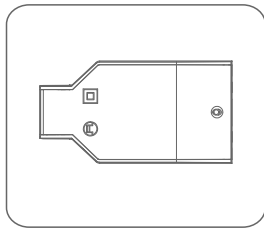
Model	Carton L*W*H(mm)	Pcs/- Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Cross weight/- Carton(kg)
S-103-C23W100-700	398*230*130	130	0.072	9.36	9.86

Small Strain reliefs

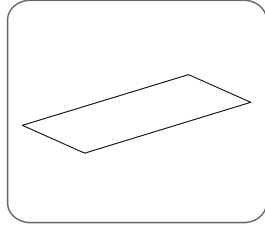


Model	Carton L*W*H(mm)	Pcs/- Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Cross weight/- Carton(kg)
S-103-C23W100-700	500*195*245	600	0.007	4.26	5.56

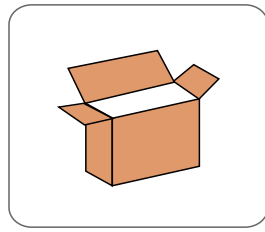
Large Strain reliefs



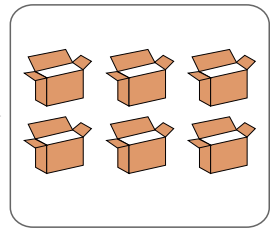
Product



Paper Partitions linerboard /Plastic paper



50 per small box



50sets/box*6boxes=300pcs/Carton

Model	Carton L*W*H(mm)	Pcs/- Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Cross weight/- Carton(kg)
S-103-C23W100-700	375*315*385	300	0.041	12.34	13.9

REVISION HISTORY

Date	Revision	Remark