

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	Efficiency	Output Voltage	No load Voltage
S-103-C23W150-500	150mA	0.09A	8.1W	0.37-6.90W	0.41-0.86	85%	2.5-46V	60V Max.
	200mA	0.10A	10.8W	0.50-9.20W	0.44-0.89	85%		
	250mA	0.11A	13.3W	0.62-11.50W	0.44-0.91	86%		
	300mA	0.12A	16.0W	0.75-13.80W	0.52-0.94	86%		
	350mA	0.13A	18.5W	0.87-16.10W	0.52-0.95	87%		
	400mA	0.14A	21.1W	1.00-18.40W	0.54-0.96	87%		
	450mA	0.15A	23.5W	1.12-20.70W	0.53-0.96	88%		
	500mA	0.16A	26.1W	1.25-23.00W	0.52-0.96	88%		

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

Parameters

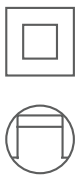
Category	Item	Technical Norm
Features	Output Type	Constant Current
	Output Features	Isolation
	IP Grade	IP20
	Insulation Class	Class II
	Rated Input Voltage	220-240VAC
	Range of Input Voltage	198-264VAC
	Range of DC Input Voltage	180-280VDC
	Frequency	0/50/60Hz, Range:0/47-63Hz
	Overvoltage protection	2h@380VAC, 48h@320VAC
	Input Current	≤0.16A max (230VAC, full load)
	Input Power	≤26.1W max (230VAC, full load)
	Power Factor	≥0.96 (230VAC, full load)
	THD	≤13% (230VAC, full load)

Input	No-load Power Consumption	≤0.5W @230VAC	
	Inrush Current	≤7.9A/2.6us (230VAC, full load)	
	Connected quantity of 10A Breaker	24pcs/type A ;39pcs/type B ;63pcs/type C@230Vac	
	Connected quantity of 13A Breaker	32pcs/type A ;51pcs/type B ;82pcs/type C@230Vac	
	Connected quantity of 16A Breaker	39pcs/type A ;63pcs/type B ;101pcs/type C@230Vac	
	Connected quantity of 20A Breaker	49pcs/type A ;79pcs/type B ;126pcs/type C@230Vac	
Output	Output Voltage Range	2.5-46VDC@150-500mA	
	No-load Voltage	60VDC Max.	
	Output Current	150mA-500mA (Max.output) , Factory set current of 150mA	
	Max. Output Power	23W	
	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

Output Current Setting

Output Current	1	2	3
150mA	-	-	-
200mA	-	-	ON
250mA	-	ON	-
300mA	-	ON	ON
350mA	ON	-	-
400mA	ON	-	ON
450mA	ON	ON	-
500mA	ON	ON	ON

Label



SGN Constant Current Type for operation with LED modules only
LED Driver U-OUT:60V
S-103-C23W150-500 Iin:0.16A Max.

wire preparation [8-9mm]
 PRI: 0.5-1.5°
 SEC: 0.5-1.5°

PIN1	PIN2	PIN3	I _{rated} (mA)	P _{rated} (W)	U _{rated} (V)	U _N /f _N	t _a [°C]	t _c [°C]	λ
OFF	OFF	OFF	150	6.9	2.5-46	220-240VAC 0/50/60Hz	50	85	0.41C-0.86C
OFF	OFF	ON	200	9.2					0.44C-0.89C
OFF	ON	OFF	250	11.5					0.44C-0.91C
OFF	ON	ON	300	13.8					0.52C-0.94C
ON	OFF	OFF	350	16.1					0.52C-0.95
ON	OFF	ON	400	18.4					0.54C-0.96
ON	ON	OFF	450	20.7					0.53C-0.96
ON	ON	ON	500	23.0					0.52C-0.96

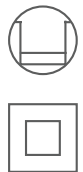
Range of application: 180-280VDC

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

110V
 ON 1
 OFF 2 3

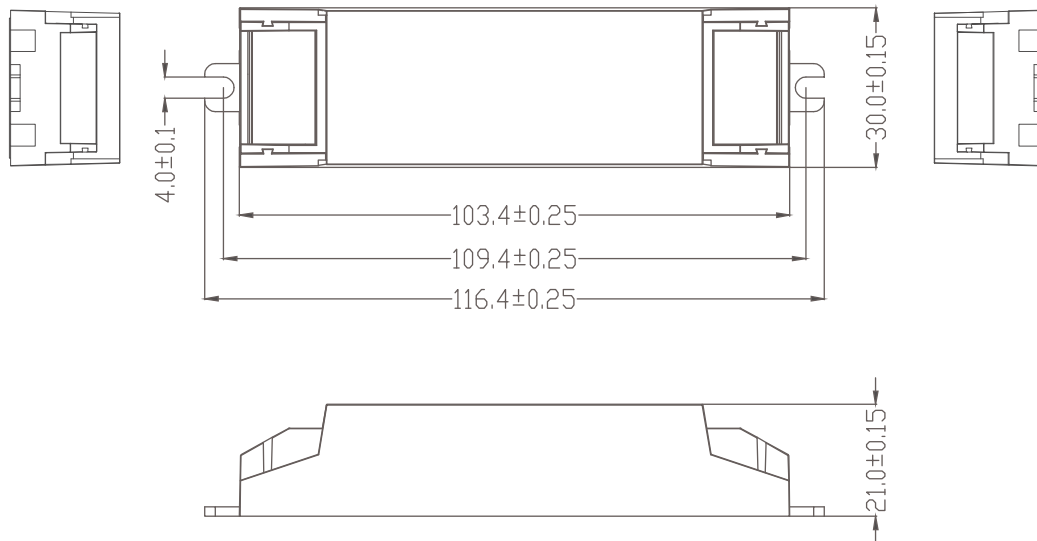
CB
 SEC
 CUK
 CA

18
 CE
 110



Dimension (Unit: mm)

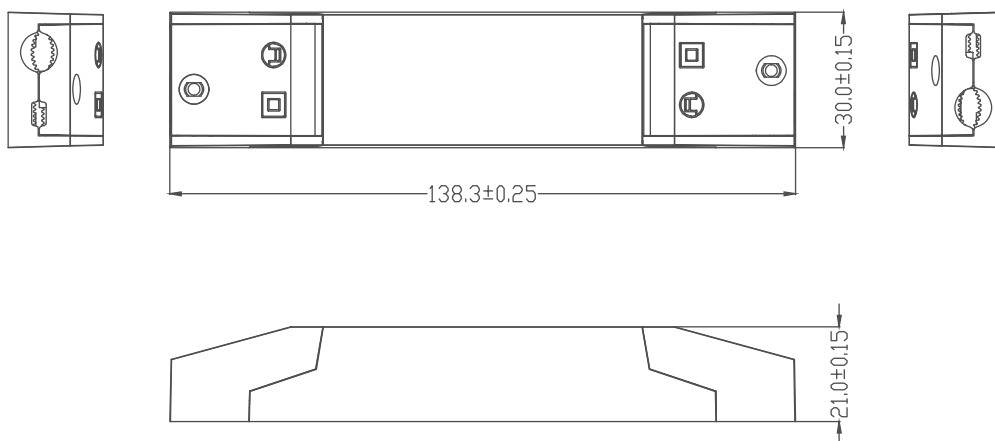
Built in type:



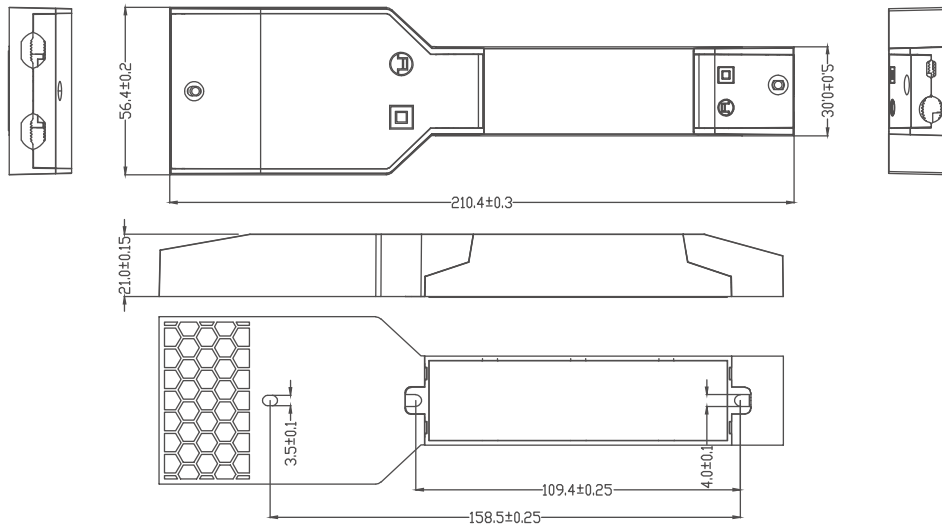
Compatible Small Strain reliefs:SR_CC15-23-36

Compatible Large Strain reliefs:SR_CC15-23-36_3POL

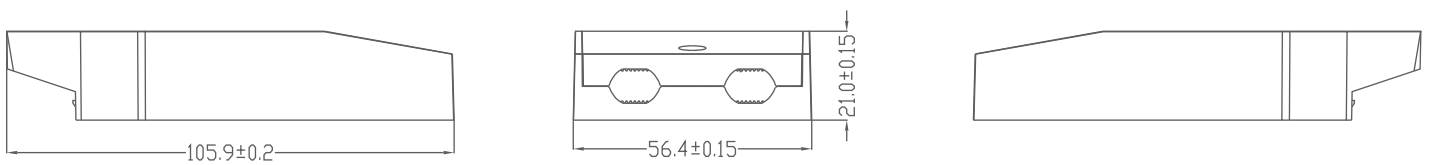
Small side cover



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

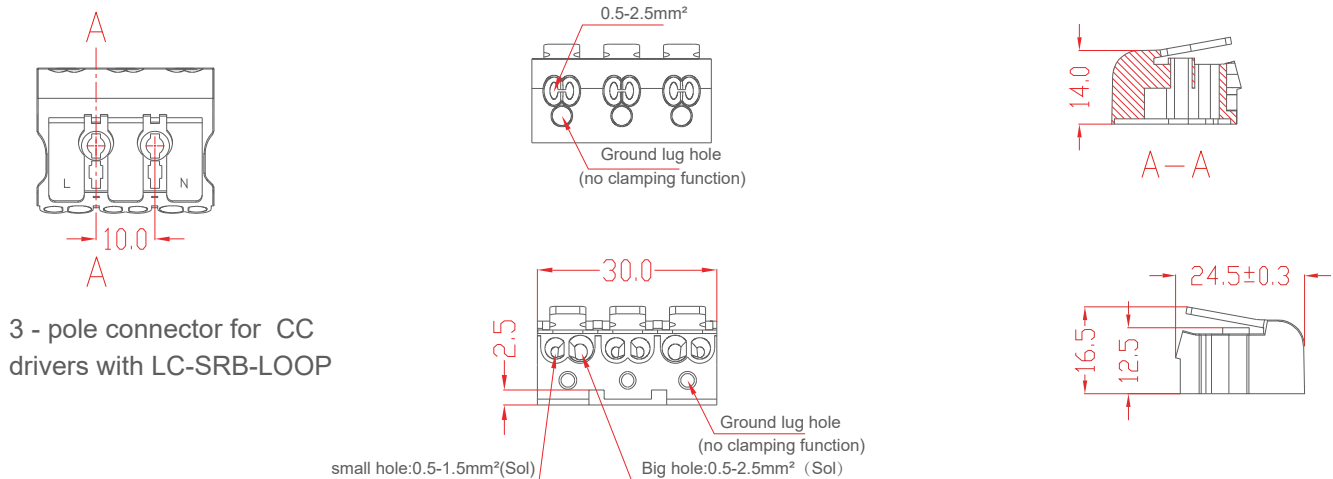
Storage temperature range: -20...+85 °C

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.

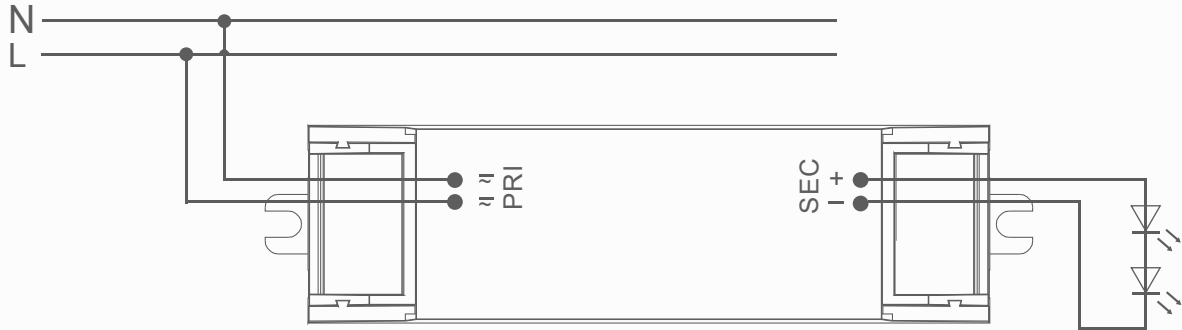
Terminal



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

Wiring Diagram

220-240 V
0/50/60 Hz

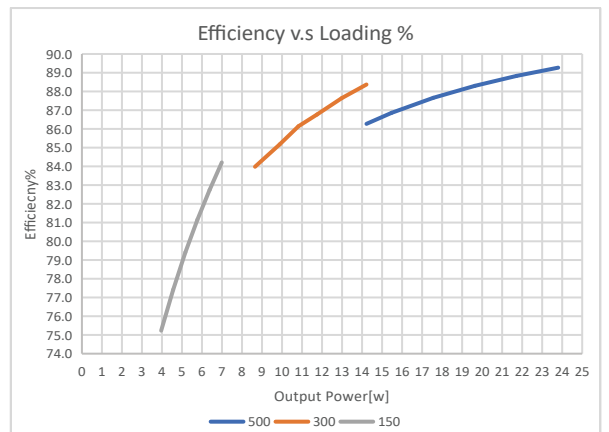


Electrical values

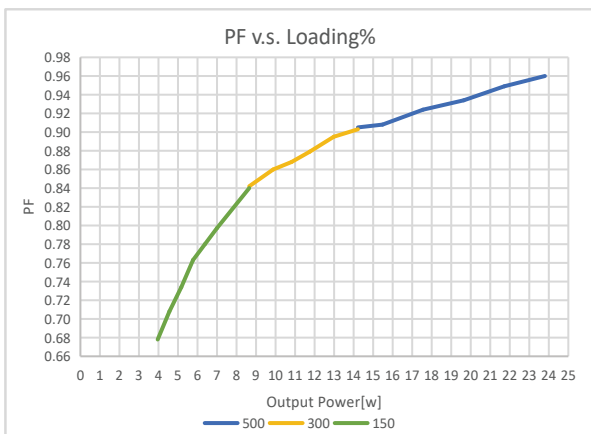
1. Operating power windows



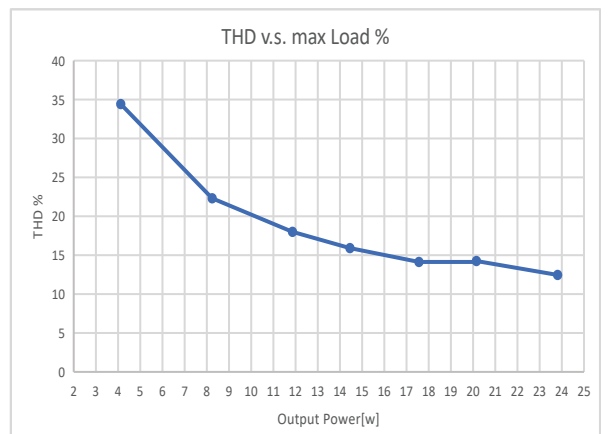
2. Efficiency v.s. Load



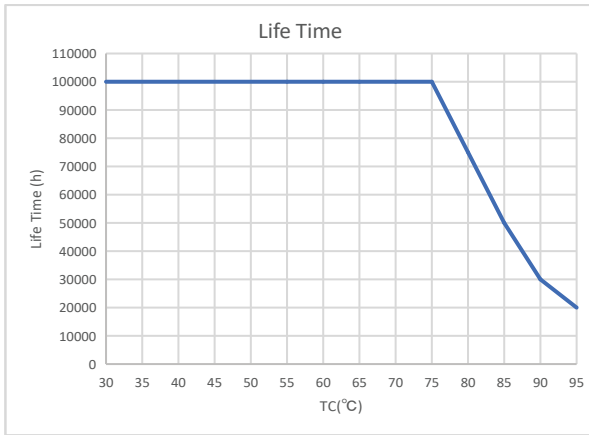
3. PF v.s. Load



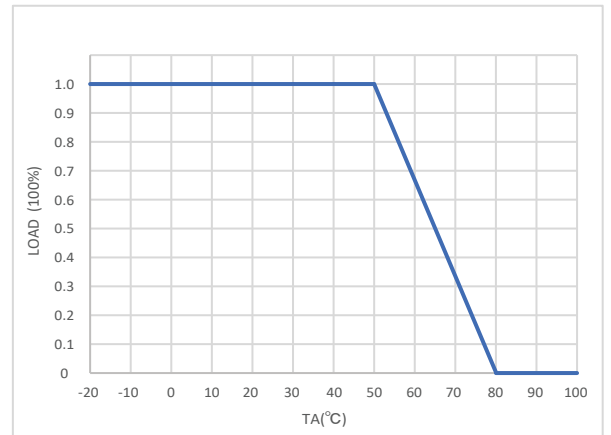
4. THD v.s. Load



5. Life time

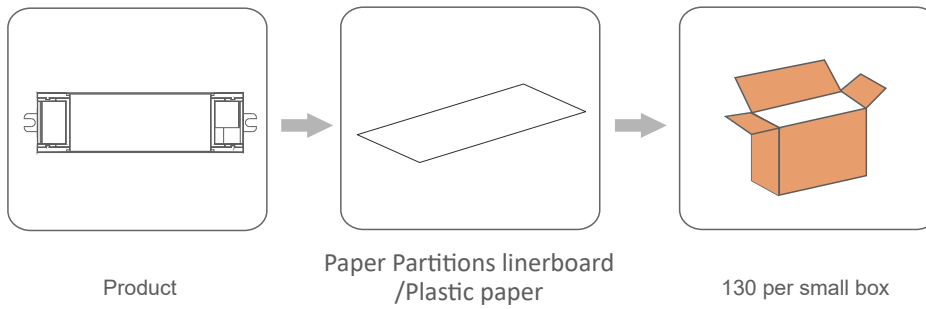


6. Derating



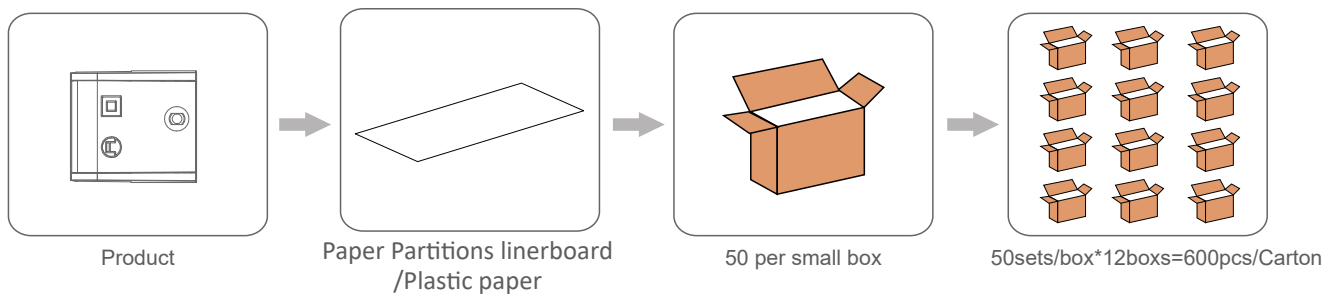
Packing information

Built in type



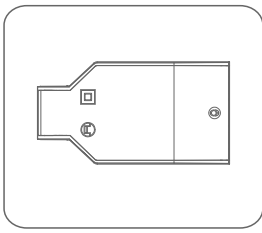
Model	Carton L*W*H(mm)	Pcs/- Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Cross weight/- Carton(kg)
S-103-C23W150-500	398*230*130	130	0.072	9.36	9.86

Small Strain reliefs

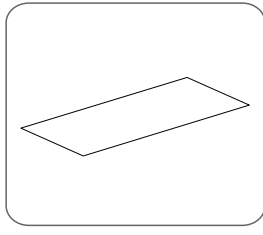


Model	Carton L*W*H(mm)	Pcs/- Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Cross weight/- Carton(kg)
S-103-C23W150-500	500*195*245	600	0.007	4.26	5.56

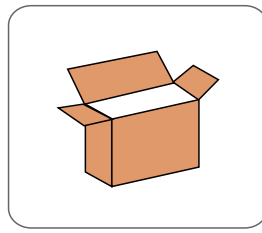
Large Strain reliefs



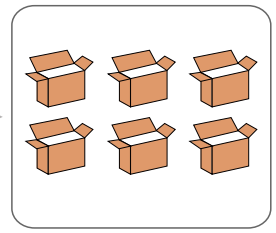
Product



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-C23W150-500	375*315*385	300	0.041	12.34	13.9

REVISION HISTORY

Date	Revision	Remark