

FASTENING & GROUNDING CLIP

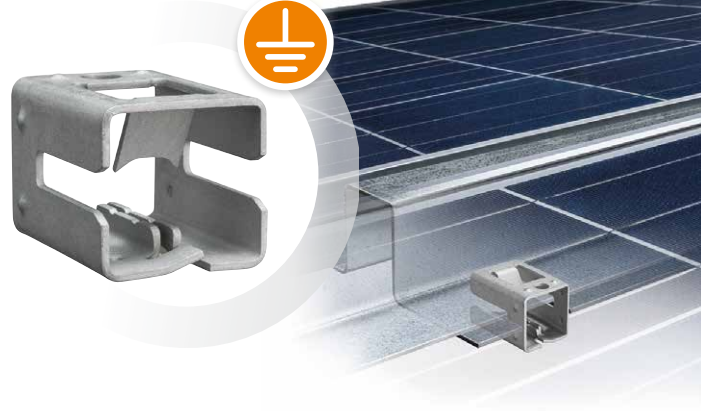
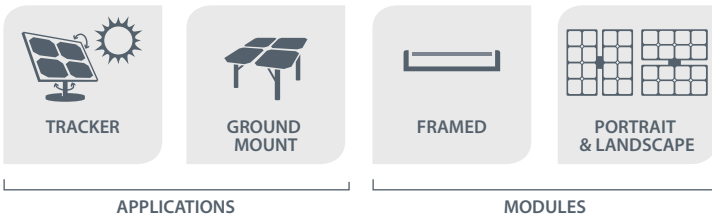
FOR FRAMED MODULES ON TRACKERS OR GROUND MOUNT



Screwless and tool-free clipped fastening solutions provide fast and simple assembly. It allows customers to reduce the overall cost of renewable energies.

PowAR™ Cinch

COMBINED PV MODULE
FASTENING & GROUNDING CLIP



Benefits

PERFORMING

- Anti-theft designed
- Tested by accredited laboratories and qualified by major module manufacturers⁽¹⁾



QUICK

- Fastening and grounding in a single operation
- 1 module installed in less than 30 seconds⁽²⁾.

COST SAVING

- Lower overall costs of the PV installation
- Lower maintenance costs: Screw-less, no periodic torque control required
- Hot spot risk reduction for PV modules thanks to elastic mechanical clamping⁽³⁾

EASY TO USE

- Tool-free set up
- Friendly: clips can be inserted from underneath the array, no need to step on the module
- Maintenance free as no torque correction required.
- Minimal training required
- Very flexible: no worry about module frame's hole and structure hole mismatch

(1) Report available on demand

(2) According to field tests results available on demand.

(3) Mechanical shocks and daily thermal cycles often induce micro-cracks within cells, leading to hot spots and power output degradation.

HOW TO SELECT THE POWAR™ CINCH REFERENCE

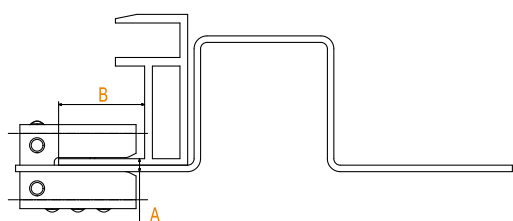
PowAR™ CINCH's choice depends on solar field's configurations and on total thicknesses of rail + module frame's lip.

Solar field's configurations

RAIL CONFIGURATION		MODULE CONFIGURATION			
		PORTRAIT		LANDSCAPE	
LONGITUDINAL RAIL	SHARED RAILS		Do not exist		PowAR™ CINCH LOCKED
	NO SHARED RAILS		PowAR™ CINCH		Do not exist
VERTICAL RAIL	SHARED RAILS		For titled fix: PowAR™ CINCH For Trackers: PowAR™ CINCH LOCKED		PowAR™ CINCH
	NO SHARED RAILS		Do not exist		PowAR™ CINCH LOCKED

Scope of use

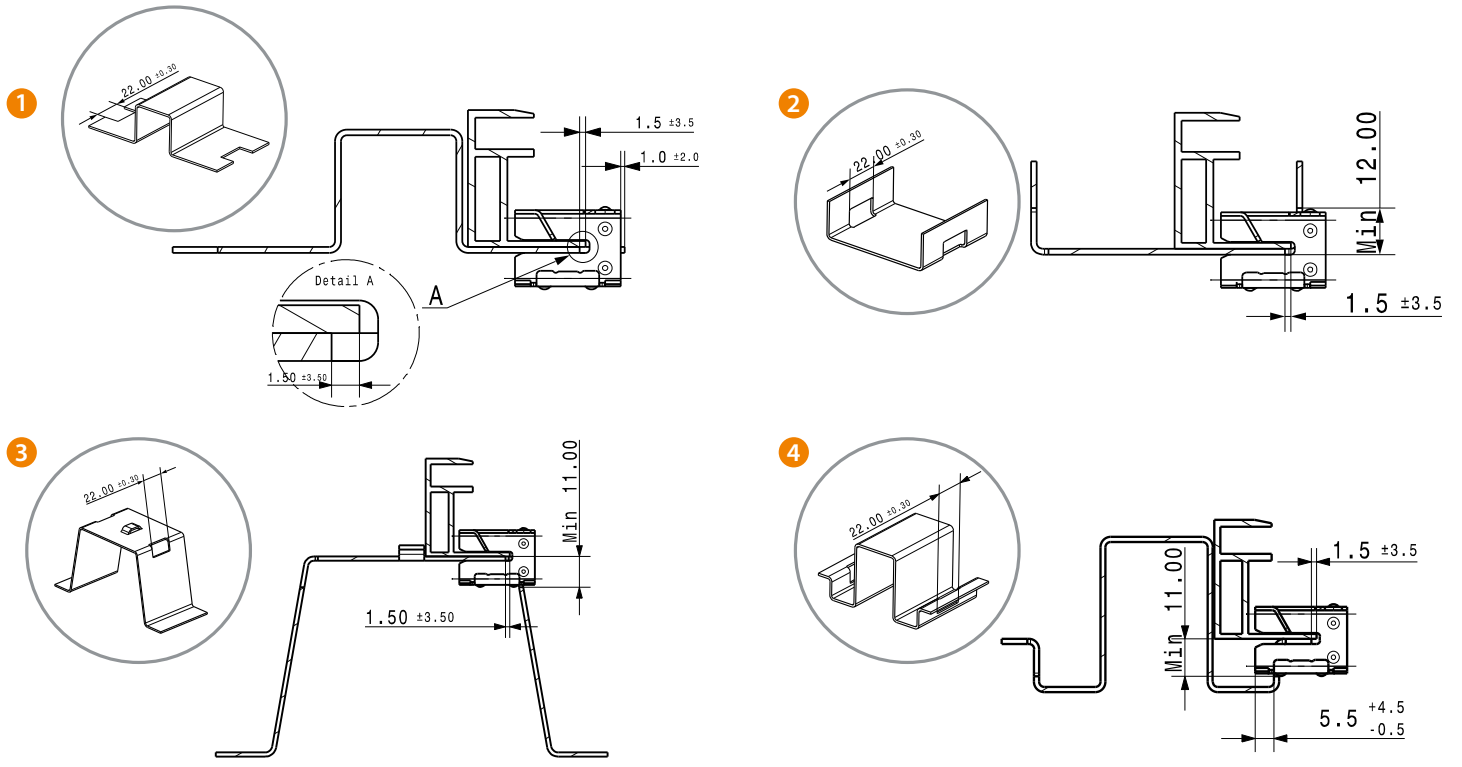
		A = THICKNESSES OF RAIL + MODULE FRAME'S LIP	
		A MIN in mm	A MAX in mm
PowAR™ CINCH	Narrow (S) Ref. 240865	2.3	3
	Wide (L) Ref. 243648		3
PowAR™ CINCH LOCKED	Narrow (S) Ref. 247433	2.7	3.55
	Wide (L) Ref. 250381		3.3
	Extra Wide (XL) Ref. 248217		3.8



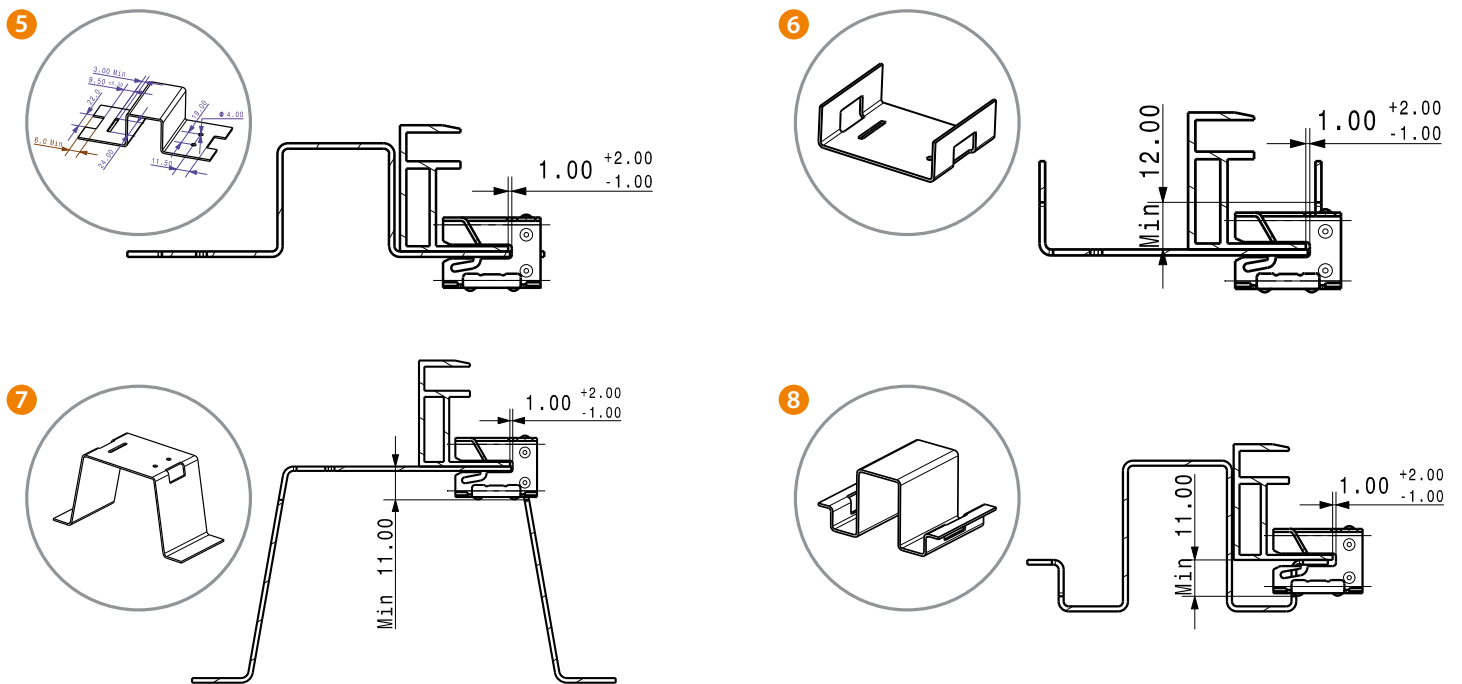
POWAR™ CINCH: FASTENING & GROUNDING CLIP FOR FRAMED MODULES ON TRACKERS OR GROUND MOUNT

EXAMPLES OF RAIL SPECIFICATIONS

PowAR™ CINCH



PowAR™ CINCH LOCKED



TECHNICAL SPECIFICATIONS



		POWAR™ CINCH NARROW (S)	POWAR™ CINCH WIDE (L)
		$2.3 \text{ mm} \leq \left(\text{Thicknesses Rail} + \text{module's frame} \right) \leq 3 \text{ mm}$	$3 \text{ mm} \leq \left(\text{Thicknesses Rail} + \text{module's frame} \right) \leq 3.8 \text{ mm}$
PRODUCT DETAILS	ARTICLE N°	240865	243648
	MATERIAL	Steel 1.1231- DIN EN 10132:2000 (SAE 1070 - ASTM AISI)	
	SURFACE TREATMENT*	Zn Al Flake coating	
	DIMENSIONS IN MM	27 x 19.5 x 20	
	WEIGHT IN G	13	
PERFORMANCES	MECHANICAL RESISTANCE	Load +5400/-2400 Pa compliant with IEC 61215-10.16:2005	
	CORROSION RESISTANCE	No red rust after 720 hours salt spray acc. EN 60068-2-11:1999	
	GROUNDING CONTINUITY	Compliant with IEC 60439-1:2004 8.2.4.1 after 240 hours salt spray, acc. to EN 60068-2-11:1999	
ENVIRONMENT	PV MODULE SPECIFICATIONS	Module with minimum lip length B of 16 mm, see page 2	
	RAIL SPECIFICATIONS	See technical drawings 2, 3, 4 and 5, see page 3	



		POWAR™ CINCH LOCKED NARROW (S)	POWAR™ CINCH LOCKED WIDE (L)	POWAR™ CINCH LOCKED EXTRA WIDE (XL)
		$2.7 \text{ mm} \leq \left(\text{Thicknesses Rail} + \text{module's frame} \right) \leq 3.55 \text{ mm}$	$3.3 \text{ mm} \leq \left(\text{Thicknesses Rail} + \text{module's frame} \right) \leq 4.15 \text{ mm}$	$3.8 \text{ mm} \leq \left(\text{Thicknesses Rail} + \text{module's frame} \right) \leq 4.65 \text{ mm}$
PRODUCT DETAILS	ARTICLE N°	247433	250381	248217
	MATERIAL	Steel 1.1231- DIN EN 10132:2000 (SAE 1070 - ASTM AISI)		
	SURFACE TREATMENT*	Zn Al Flake coating		
	DIMENSIONS IN MM	27 x 19.5 x 20		
	WEIGHT IN G	13		
PERFORMANCES	MECHANICAL RESISTANCE	Load +5400/-2400 Pa compliant with IEC 61215-10.16:2005		
	CORROSION RESISTANCE	No red rust after 720 hours salt spray acc. EN 60068-2-11:1999		
	GROUNDING CONTINUITY	Compliant with IEC 60439-1:2004 8.2.4.1 after 240 hours salt spray, acc. to EN 60068-2-11:1999		
ENVIRONMENT	PV MODULE SPECIFICATIONS	Module with minimum lip length B of 16 mm, see page 2		
	RAIL SPECIFICATIONS	See technical drawings 5, 6, 7 and 8, see page 3		

*Other surface treatment available on demand.
Product information disclosed in this "data sheet" can be modified without any previous notice.

