

Tech Note - FoxESS Hybrid Inverter Recommended Cable Size and Switch-disconnection Device Selection

Disclaimer

The material in this document has been prepared by FoxESS Australia and is intended as a guideline to assist solar installers for design and cable and switch-disconnection device selection etc. It is not a statement or advice on any of the Electrical or Solar Industry standards or guidelines. Please observe all OH&S regulations when working on FoxESS equipment.

For the FoxESS hybrid inverter range, the **Maximum AC Input Current** value shown on the nameplate represents the maximum current the inverter can draw from the grid. This current supports both **battery charging and supplying power to loads connected to the EPS port**.

The table in next page presents the maximum AC input current of each inverter model, along with the **recommended minimum cable size** and **switch disconnection device (MCB, AC isolator etc.)** selection for both grid and EPS outputs.

Please note that **even if the EPS port is not intended to be connected or used**, the main switch and protection devices **must still be rated to match the inverter's maximum AC input current**, as the EPS port may be connected in the future.

The table is based on ideal conditions, and installers must verify cable sizing, protection, derating factors, and voltage drop accordingly. In addition, installers must ensure full compliance with all relevant standards, including AS/NZS 3000, AS/NZS 3008, AS/NZS 4777.1, AS/NZS 4777.2, and IEC 62109, covering cable selection, wiring, protection devices, and overall installation practices.

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On behalf of: FoxESS Australia Pty Ltd

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Model	H1-3.0-E-G2	H1-5.0-E-G2	H1-6.0-E-G2
Maximum AC Input Current	Grid 27.3A	Grid 13.6A	Grid 45.5A
Minimum AC Cable Size	EPS 6mm ²	EPS 4mm ²	EPS 10mm ²
Minimum Current for Switch Disconnection Device	32A	20A	50A
	32A	63A	32A

Model	KH8		KH9		KH9.9		KH10		KH10.5	
	Grid	EPS								
Maximum AC Input Current	63A	36.4A	63A	40.9A	63A	45A	63A	45.5A	63A	47.7A
Minimum AC Cable Size	16mm ²	10mm ²								
Minimum Current for Switch Disconnection Device	63A	50A								

Model	H3-5.0-Smart	H3-6.0-Smart	H3-8.0-Smart	H3-9.9-Smart	H3-10.0-Smart	H3-12.0-Smart	H3-15.0-Smart
	Grid	EPS	Grid	EPS	Grid	EPS	Grid
Maximum AC Input Current	9.1A	7.2A	10.9A	8.7A	14.5A	11.6A	18.2A
Minimum AC Cable Size	4mm ²						
Minimum Current for Switch Disconnection Device	20A						