TH SERIES

MODEL YEAR 2026

25 – 29 – 30 – 40 – 49 – 50kW

THREE PHASE HYBRID INVERTER



FEATURES

160A Charging / Discharging
High overload capacity
Up to 98.8% efficiency

Unmatched Power, Uncompromising Design.
The TH25-50 series is built with a rugged and elegant design, engineered for ultimate durability and peak performance.
It features a charge/discharge current that sets a new benchmark, providing the resilience needed for the most demanding applications.

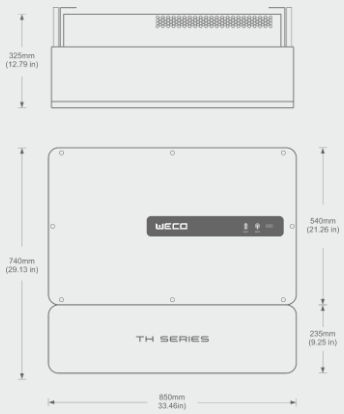
wecobatteries.com

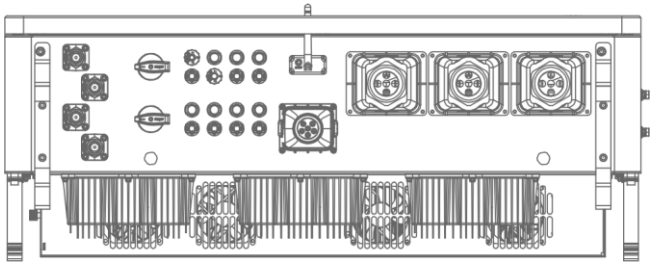
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TH SERIES

THREE PHASE HYBRID INVERTER

	Specifications	25kW	29kW	30kW	40kW	49kW	50kW
PV INPUT	Max. Power of PV Array	50	60	60	80	100	100
	Max. Input Voltage	1000 V					
	MPPT Voltage Range	140 V ~ 850 V					
	Min. Input Voltage / Start voltage	160V					
	No. of Independent MPPT Trackers	4					
	No. of Independent MPPT Strings per MPPT Input	2					
	Max. Input Current per MPPT Tracker	36 A					
	Max. Short-circuit Current per MPPT Tracker	55 A					
BATTERY	Battery Type	WECO LFP					
	Battery Voltage Range	135 V ~ 1000 V					
	Max. Charging Current / Max. Discharging Current	80A per output, or 160A single output					
	Rated Charging / Discharging Current	80A per output, or 160A single output					
AC OUTPUT/INPUT (On-Grid)	Normal AC Voltage	3W+N+PE, 220 / 380 V ; 230 / 400V ; 240 / 415 V					
	AC Voltage Range	360 V ~ 440 V					
	Rated AC Grid Frequency	50 Hz / 60 Hz					
	Power Factor	1 (-0.8 to + 0.8 adjustable)					
	Rated Active Power	25 kW	29 kW	30 kW	40 kW	49 kW	50 kW
	Max. Apparent Power	27.5 kVA	29 kVA	33 kVA	44 kVA	53.9 kVA	55 kVA
	Rated Grid Output Current (@400 V)	37.9 A	43.9 A	45.5 A	60.7 A	74.3 A	75.8 A
	Harmonics THDI (@Nominal power)	<2%					
	Max. Output Current	41.7 A	43.9 A	50 A	66.7 A	81.7 A	83.4 A
	Grid Bypass	76 A	91 A	91 A	121.6 A	152 A	152 A
BACKUP OUTPUT	Nominal Output Voltage	3W+N+PE, 220 / 380 V ; 230 / 400 V ; 240 / 415 V					
	Rated Output Frequency	50 Hz / 60 Hz					
	Rated Active Power	25 kW	29 kW	30 kW	40 kW	49 kW	50 kW
	Max. Apparent Output Power	37.5 kVA 10s	43.5 kVA 10s	45 kVA 10s	60 kVA 10s	75 kVA 10s	75 kVA 10s
	Max. Switch Time	≤ 20 mS					
	Output THDI (@Linear load)	< 2%					
EFFICIENCY	MPPT Efficiency	99.9%					
	Max. Efficiency	98.50 %					
	Euro Efficiency	98 %					





We recommend that you contact WeCo for the most up-to-date datasheet, read the warranty and manual before making any purchase decisions.
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TH SERIES

INVERTERS

	Specifications	25kW	29 KW	30 KW	40 KW	49 KW	50 KW
SAFETY PROTECTION	PV Manual Isolator / Reverse Polarity Protection	Included					
	PV String Reverse Polarity Protection	Included					
	All-pole Sensitive Residual Current Monitoring Unit	Included					
	Battery Reverse Polarity Protection	Included					
	Anti-Islanding Protection	Included					
	AC Output Over Current Protection	Included					
	AC Output Short Circuit Current Protection	Included					
	AC Over Voltage Protection	Included					
	Protection Class (As Per IEC 62109-1)	Included					
	Over Voltage Category (As Per IEC 62109-1)	AC : III ; DC : II					
GENERAL DATA	Power Factor At Rated Power	0.8 leading to 0.8 lagging					
	Dimensions (W x H x D) (mm)	825 x 795 x 327					
	Device Weight	80kg					
	Installation	Wall-mounted					
	Operating Temperature Range	-25 ^{0}C ~ +60 ^{0}C					
	Noise Emission (Typical)	< 50 dB (A)					
	Standby Consumption (On Grid)	< 35 W					
	Cooling Method	Forced Convection with Smart Activation					
	Ingress Protection Rating (As Per IEC 60529)	IP65					
	Max. Permissible Value for Relative Humidity (Non-Condensing)	0 ~ 95%					
	Max. Operating Altitude	4000 m (> 3000 m power derating)					
FEATURES	Inverter Topology (PV/Battery)	Transformerless					
	User Interface	LED & App					
	Communication with BMS	CAN					
	Communication with Meter	RS 485					
	Communication with Portal	Wi-Fi Stick					
	Integrated Power Control / Zero Export Control	Included					
STANDARD COMPLIANCE	Safety	EN 62109 - 1, EN 62109 -2 EN 62477 -1					
	EMC	IEC 61000-6-1 / -2 / -3 / -4					



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THREE PHASE HYBRID INVERTER



NooR APP MAKE YOUR LIFE EASIER

WeCo mobile app offers convenient and out-of-the-box monitoring of WeCo Energy Storage Systems, allowing users to manage everything with just a few taps.

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WeCo Smart Platform

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