

## REFU*sol* 25K/33K-3T

For repowering and plant modernization

The REFU*sol* 25K/33K-3T is a compact inverter for the modernization of existing PV plants. It enables integration into existing systems and ensures economical operation.



AFCI (arc fault protection)<sup>1</sup>



150% DC/AC ratio for optimization of system costs



Higher yields with 3 MPPTs



Type I + II DC surge protection<sup>1</sup>



The REFU*sol* 25K/33K-3T is a compact string inverter designed for commercial, industrial, and repowering PV systems. Developed for demanding environments, it offers robust protection with optional AFCI and integrated DC surge protection (Type I + II).

Integration into the REFU*view* platform enables monitoring and operation across mixed REFU inverter generations, supporting modernization projects.



### Reliability & Operation

- IP65 protection for demanding environments
- 110% AC overloading capability
- Technical support from Germany



### Installation & System Integration

- Suitable for rooftop and ground-mounted systems
- Integration into existing and new PV systems
- Simple commissioning and system integration



### Safety & Protection

- AFCI (optional) for arc fault protection<sup>1</sup>
- DC surge protection Type I + II<sup>1</sup>
- Integrated DC switch

# TECHNICAL DATA

Art. No.

REFU<sub>sol</sub> 25K-3T  
853P025

REFU<sub>sol</sub> 33K-3T  
853P033

## DC DATA

Max. recommended PV power (kWp)	37.5	49.5
Max. input voltage (V)	1100	
Rated input voltage (V)	620	
Start-up input voltage (V)	200	
Operating voltage range (V)	180 – 1000	
MPPT voltage range (V)	480 – 850	
Number of independent MPPT(s)	3	
Number of DC inputs	2 for each MPPT	
Max. current per MPPT (A)	40	
Max. short circuit current per MPPT (A)	50	
DC connection	MC4	

## AC DATA

Rated power (kW)	25	33
Max. AC power (kVA)	28	37
Max. output current (A)	42.4	56
Nominal grid voltage (V)	3P/N/PE: 230/400	
Grid voltage range (V)	310 – 480	
Nominal grid frequency (Hz)	50 / 60	
Grid frequency range (Hz)	45 – 55 / 55 – 65	
Active power adjustable range (%)	0 – 100	
Total harmonic distortion (THDi) (%)	< 3	
Adjustable power factor range	1 (0.8 inductive ... 0.8 capacitive)	
AC connection	OT (M6)	

## PERFORMANCE

Max. efficiency (%)	98.6
EU efficiency (%)	98.2

## PROTECTION

DC switch	Integrated
Safety protection	Anti-islanding, DC reverse polarity, anti-reverse power ground fault, RCMU, Overtemperature, Overvoltage, Overcurrent
String monitoring	each MPPT
Protection class / Over voltage category	Class I / DC: OCV II; AC: OCV III
SPD	DC: Type II / AC: Type II <sup>1</sup>
AFCI	Optional <sup>1</sup>

## COMMUNICATION

RS485 / USB	yes / yes
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## GENERAL DATA

Ambient temperature (°C)	-30 ... +60 (> 45 derating)
Self-consumption at night (W)	<1
Topology	transformerless
Type of protection	IP65
Permissible RH range (%)	0 ... 100
Max. operating latitude (m above sea level)	4000
Noise level (dBA)	< 60
Weight (kg)	36
Cooling	Active
Dimensions (H x W x D) (mm)	480 x 585 x 220
Display	LCD / BLE / App
Certification	EN 50549-1, VDE-AR-N 4105, VDE-AR-N 4110, EN 61000-6-1/2/3/4, EN 61000-6-11/12, IEC 62109-1/2, EN 300 328 V2.1.1, EN 301 489-1 V2.1.1, EN 301 489-17 V3.1.1, DIN V VDE 0126, IEC 62116, IEC 61727, IEC 61683, IEC 60068-2-1/2/14/30
Warranty	10 years

<sup>1</sup> DC SPD Type I+II with AFCI available on request