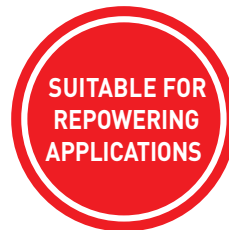


REFUSOL 33K-3T

From Tradition to Innovation



- Three MPP trackers
- Lightweight design
- Compatible with legacy **REFU***sol* inverters

The completely new **REFU***sol* inverter is developed for a maximum of flexibility in commercial and industrial PV systems.

With three MPP trackers, each system design can be realized, including different orientations and tilts. Compact dimensions paired with a high power density per weight gives more installation location flexibility – on the rooftop or on ground mounted systems. It fits to any mid-size project.

Each inverter can be individually connected to the REFUlog portal for remote monitoring, configuration and updates. Portal comes for free with each inverter during the warranty period of 10 years. For easy integration into a local network, an Ethernet or WiFi stick is available.



Art. No.

REFU 33K-3T
853P033

DC DATA

Max. input voltage (V)	1.100
Rated input voltage (V)	625
Start-up input voltage (V)	200
Operating input voltage range (V)	180 - 1000
Number of independent MPPT	3
Number of DC inputs	6
Max. current per MPPT (A)	40
Max. short circuit current (A)	50
DC connection	MC4

AC DATA

Rated power (kW)	33
Max. AC power (kVA)	37
Max. output current (A)	56
Nominal grid voltage (V)	3/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
Weighted efficiency (EU/CEC) (%)	98,2

PROTECTION

DC switch	integrated
Safety protection	Anti-islanding, DC reverse polarity, Anti reverse power function, Ground fault, RCMU, Overtemperature, Overvoltage, Overcurrent
Protection class / overvoltage category	Class I / DC and AC: Type II standard

COMMUNICATION

RS485 / USB	yes / yes
Ethernet / WiFi	optional (Art. No. 924024) / optional (Art. No. 924025)

GENERAL DATA

Ambient temperature (°C)	-30 ... +60
Self-consumption at night (W)	< 3
Topology	transformerless
Type of protection (IEC 60529)	IP65
Allowable rel. air humidity range (%)	0 ... 100
Max. operating latitude (m above sea level)	4000
Noise level (dBA)	< 60 dB
Weight (kg)	36
Cooling	Active
Dimension (H x W x D) (mm)	480 x 585 x 220
Display	LCD
Certification	EN 61000-6-1, EN 61000-6-3, EN 61000-3-11, EN 61000-3-12, IEC 62109-1 / 2, IEC62116, IEC 61727, IEC61683, IEC 60068 (1, 2, 14, 30) VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, CEI 0-21 / CEI 0-16, UNE 206 007-1, EN 50549, G98 / G99, EN 50530
Warranty	10 years

No responsibility is taken for the correctness of this information. Subject to modification.