

R20000 TL

I35.132.060



MAXIMUM EFFICIENCY

98.9 %

OUTPUT VOLTAGE

400 V_{AC} ± 10%

MPPT VOLTAGE RANGE

675 - 1.000V_{DC}

Advantage

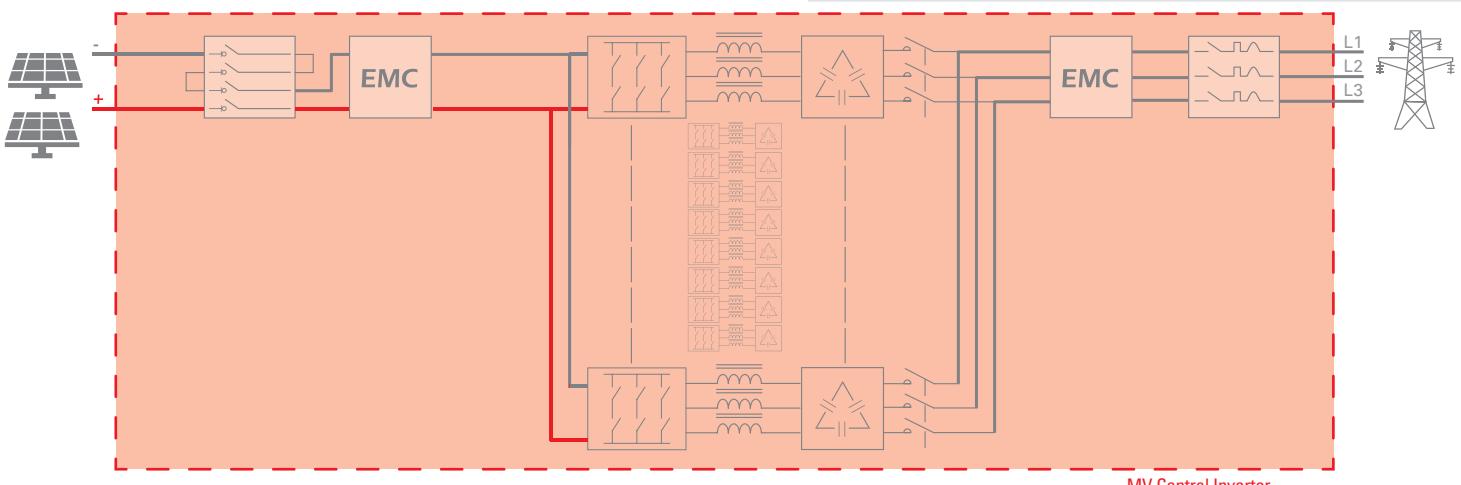
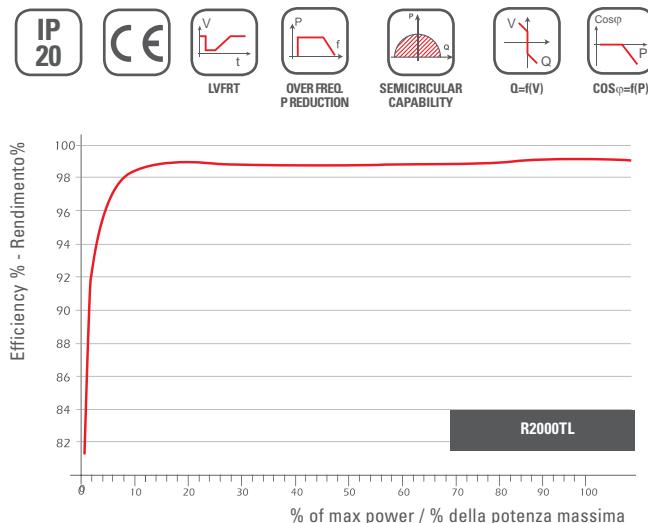
- > High efficiency, up to 99%.
- > Modular inverter (MPS system).
- > Elevato rendimento, fino a 99%.
- > Modularità dell'inverter (MPS system).

Features

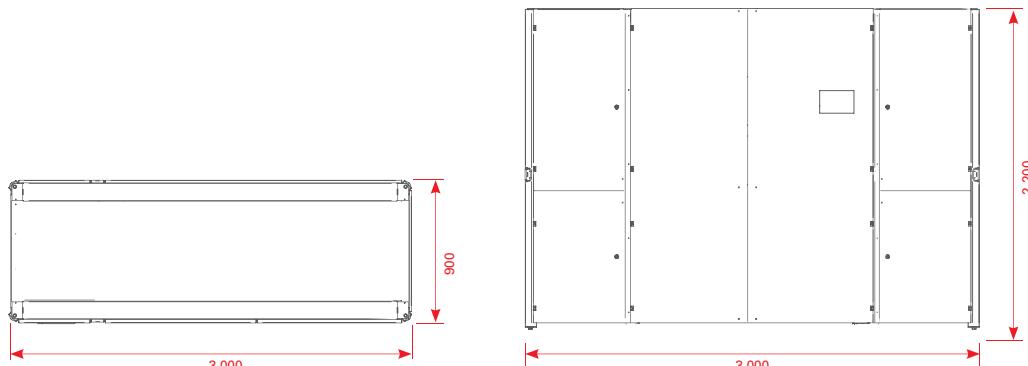
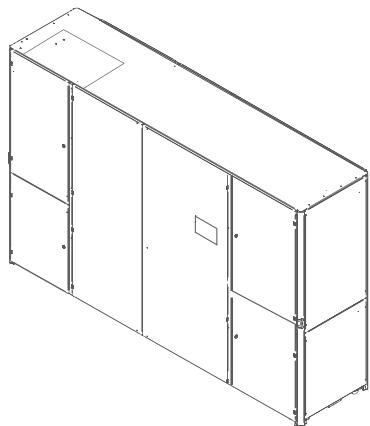
- > Use of a single magnetic component each module.
- > Advance modulation (according to IPCCM algorithm).
- > Continous monitoring of the system and integrated datalogger.
- > Outbound communication.
- > Monitoring of the photovoltaic plant.
- > Impiego di un singolo componente magnetico per ciascun modulo.
- > Modulazione all'avanguardia (secondo l'algoritmo IPCCM).
- > Supervisione continua del sistema e datalogger integrato.
- > Comunicazione verso il mondo esterno.
- > Monitoraggio dell'impianto fotovoltaico.

Accessories

- > Accessories references - page 31
- > Vedi accessori - pagina 31



Note: Block diagram refers to the converter R1.0000TL
Lo schema a blocchi si riferisce al convertitore R1.0000TL



DC Input - PV Module

	R20000TL
MPPT voltage range(V_{DC})	675 - 1.000 V
Absolute max DC voltage (V_{DC})	1.100 V
DC-voltage ripple (%)	<2%
Maximum input current (A_{DC})	3.200 A
DC control mode	Rapid and efficient MPPT control
Number of MPPT	1
Reverse Polarity Protection	•
DC input connection	Integrated DC Switch
Oversupply Protection	SPD varistor device Class I+II

AC Output grid

Max Power (kW) (Note 1)	2000 kW @ 25°C 1740 kW @ 50°C
Max Apparent Power Smax (kVA)	2000 kVA @ 25°C 1740 kVA @ 50°C
Maximum Current (A_{AC}) (Note 1)	2000 A @ 25°C 1740 A @ 50°C
Max unbalance current	< 2%
AC output Voltage (V_{AC})	400V_{RMS} ±10%
Nr. Phase	3-phase (L1 – L2 – L3 – PE)
Frequency (Hz)	50/60 Hz
Aux. power supply ($V_{AC} - I_{AC}$)	230V ±10% (L-N)
Auxiliary control supply ($V_{AC} - I_{AC}$)	230V ±10% (L-N)
Distortion factor (THDi) (Note 2)	<3%
Power Factor (Note 3)	From 0 to 1 inductive or capacitive
Galvanic insulation	No (transformerless)
AC input connection	Magnethermic circuit breaker

General Data

Maximum efficiency	98.80%
European efficiency	98.20%
Static MPPT efficiency	> 99.9 %
Dynamic MPPT efficiency	> 99.8 %
Night consumption (W)	< 60 W
Weight (kg)	2.500 kg approx.
Protection degree	IP20
Cooling	By using fans speed controlled by temperature
Dimensions (W x D x H)	3.000x900x2.200 mm
Noise level (dBA)	< 70 dBA
Operating temperature (°C) (Note 4)	-10° C +55° C
Storage temperature (°C)	-20° C +60° C
Humidity (Not condensing) (%)	0 ÷ 95%
Height above the sea (without derating) (Note 5)	1.000 m
Air Flow	5.820 m ³ /h
Oversupply Category	II
Color	RAL 9006

Note 1: Power factor ($\cos\phi$)= 1 and Vac nominal.

Note 2: THDi is lower than 3% for inverter power greater than 25%.

Note 3: P-Q capability is semicircular with radius equal to Smax for all MPPT range.

Note 4: From 45°C to 53°C derating of power.

Note 5: Above 1.500m a.s.l. derating of the power of 1% per 100m.

Note: Each inverter must be connected separately to its own LV/MV transformer or it has to be connected to a separate LV secondary input of the LV/MV transformer. Two or more inverters cannot be connected in parallel to the same LV secondary input of the LV/MV transformer.