

# R7200 TL

136.935.040

# R8100 TL

137.735.040

# R9000 TL

138.635.040



## MAXIMUM EFFICIENCY

**98.9 %**

## OUTPUT VOLTAGE

**330 V<sub>AC</sub> ± 10%**

## MPPT VOLTAGE RANGE

**610 - 920V<sub>DC</sub>**

## Advantage

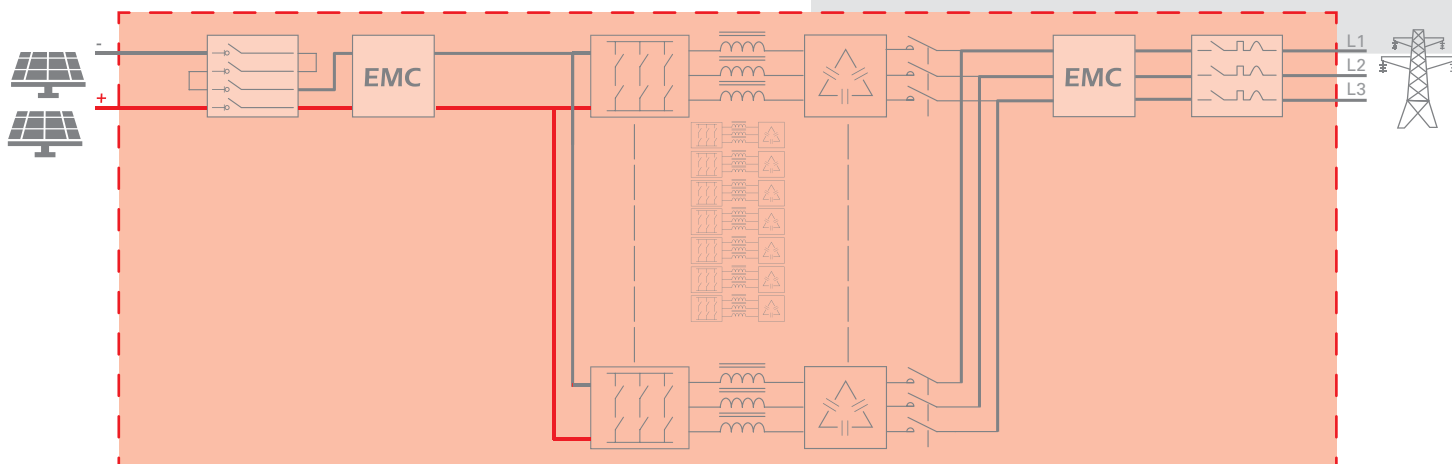
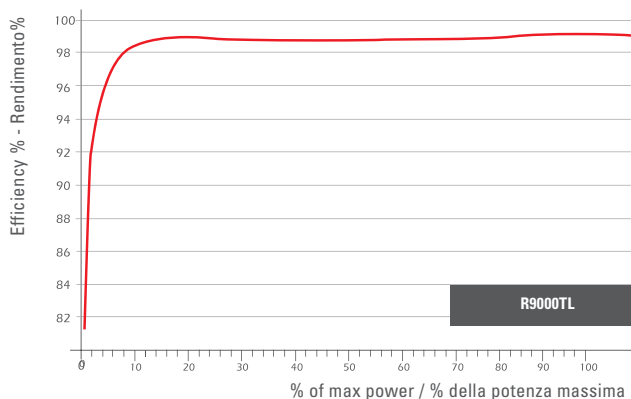
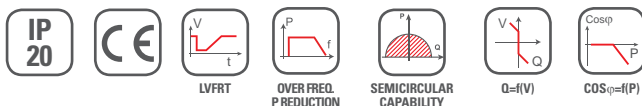
- > High efficiency, up to 99%.
- > Modular inverter (MPS system).
- > Elevato rendimento, fino a 99%.
- > Modularità dell'inverter (MPS system).

## Features

- > Use of a single magnetic component each module.
- > Advance modulation (according to IPCCM algorithm).
- > Continuous 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.

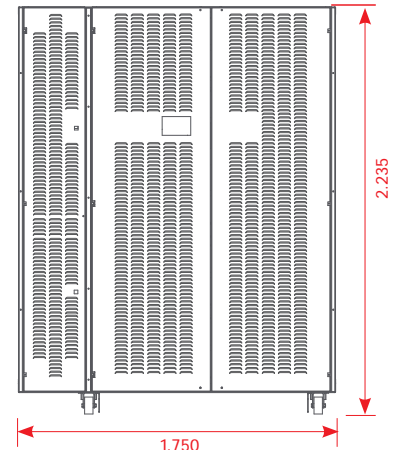
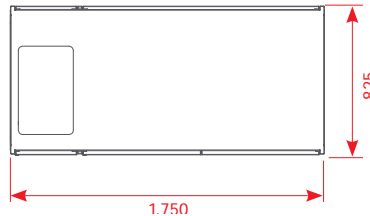
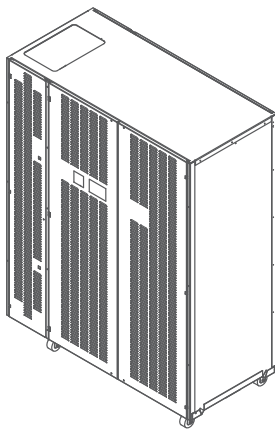
## Accessories

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



MV Central Inverter

R7200 TL  
R8100 TL  
R9000 TL



### DC Input - PV Module

	R7200TL	R8100TL	R9000TL
MPPT voltage range ( $V_{DC}$ )	610 – 920 V	610 – 920 V	610 – 920 V
Absolute max DC voltage ( $V_{DC}$ )	<b>1.000 V</b>	<b>1.000 V</b>	<b>1.000 V</b>
DC-voltage ripple (%)	<2%	<2%	<2%
Maximum input current ( $A_{DC}$ )	1.600 A	1.600 A	1.600 A
DC control mode	Rapid and efficient MPPT control	Rapid and efficient MPPT control	Rapid and efficient MPPT control
Number of MPPT	1	1	1
Reverse Polarity Protection	•	•	•
DC input connection	Integrated DC Switch	Integrated DC Switch	Integrated DC Switch
Overvoltage Protection	SPD varistor device Class II (Opt. Class I+II)	SPD varistor device Class II (Opt. Class I+II)	SPD varistor device Class II (Opt. Class I+II)

### AC Output grid

	R7200TL	R8100TL	R9000TL
Max Power (kW) (Note 1)	<b>708 kW @ 25°C</b> <b>667 kW @ 50°C</b>	<b>797 kW @ 25°C</b> <b>750 kW @ 50°C</b>	<b>885 kW @ 25°C</b> <b>833 kW @ 50°C</b>
Max Apparent Power $S_{max}$ (kVA)	708 kVA @ 25°C 667 kVA @ 50°C	797 kVA @ 25°C 750 kVA @ 50°C	885 kVA @ 25°C 833 kVA @ 50°C
Maximum Current ( $A_{AC}$ ) (Note 1)	1.240 A @ 25°C 1.170 A @ 50°C	1.395 A @ 25°C 1.315 A @ 50°C	1.550 A @ 25°C 1.460 A @ 50°C
Max unbalance current	< 2%	< 2%	< 2%
AC output Voltage ( $V_{AC}$ )	<b>330V<sub>RMS</sub> ±10%</b>	<b>330V<sub>RMS</sub> ±10%</b>	<b>330V<sub>RMS</sub> ±10%</b>
Nr. Phase	3-phase (L1 – L2 – L3 – PE)	3-phase (L1 – L2 – L3 – PE)	3-phase (L1 – L2 – L3 – PE)
Frequency (Hz)	50/60 Hz	50/60 Hz	50/60 Hz
Aux. power supply ( $V_{AC} - I_{AC}$ )	230V ±10% - 16A (L-N)	230V ±10% - 16A (L-N)	230V ±10% - 16A (L-N)
Auxiliary control supply ( $V_{AC} - I_{AC}$ )	230V ±10% - 10A (L-N)	230V ±10% - 10A (L-N)	230V ±10% - 10A (L-N)
Distortion factor (THDi) (Note 2)	<3%	<3%	<3%
Power Factor (Note 3)	From 0 to 1 inductive or capacitive	From 0 to 1 inductive or capacitive	From 0 to 1 inductive or capacitive
Galvanic insulation	No (transformerless)	No (transformerless)	No (transformerless)
AC input connection	Magnetothermic circuit breaker	Magnetothermic circuit breaker	Magnetothermic circuit breaker

### General Data

	R7200TL	R8100TL	R9000TL
Maximum efficiency	<b>98.90%</b>	<b>98.90%</b>	<b>98.90%</b>
European efficiency	98.62%	98.62%	98.62%
Static MPPT efficiency	> 99.9 %	> 99.9 %	> 99.9 %
Dynamic MPPT efficiency	> 99.8 %	> 99.8 %	> 99.8 %
Night consumption (W)	< 60 W	< 60 W	< 60 W
Weight (kg)	1.410 kg	1.540 kg	1.600 kg
Protection degree	IP20 (Opt.31)	IP20 (Opt.31)	IP20 (Opt.31)
Cooling	By using fans speed controlled by temperature	By using fans speed controlled by temperature	By using fans speed controlled by temperature
Dimensions (W x D x H)	1.750x825x2.235 mm	1.750x825x2.235 mm	1.750x825x2.235 mm
Noise level (dBA)	< 70 dBA	< 70 dBA	< 70 dBA
Operating temperature (°C) (Note 4)	-10° C +53° C	-10° C +53° C	-10° C +53° C
Storage temperature (°C)	-20° C +60° C	-20° C +60° C	-20° C +60° C
Humidity (Not condensing) (%)	0 ÷ 95%	0 ÷ 95%	0 ÷ 95%
Height above the sea (without derating) (Note 5)	1.500 m	1.500 m	1.500 m
Air Flow	3.880 m³/h	4.365 m³/h	4.850 m³/h
Overvoltage Category	II	II	II
Color	RAL 9006	RAL 9006	RAL 9006

**Note 1:** Power factor (cosφ)= 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  $S_{max}$  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.