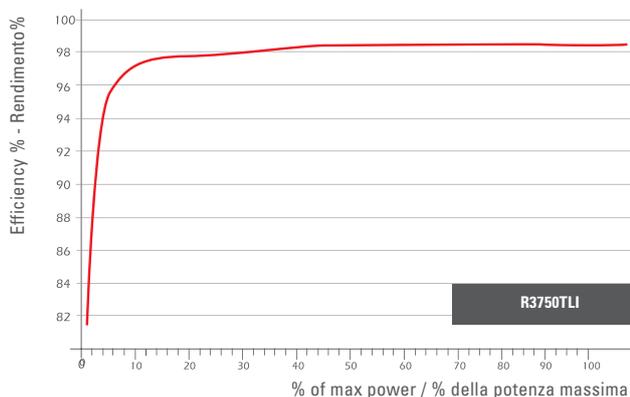
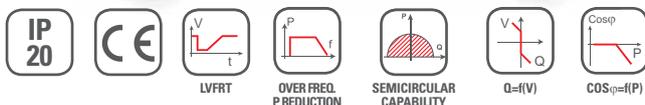


# R3000 TLI R3750 TLI

133.034.030

133.734.030



## MAXIMUM EFFICIENCY

**98.8 %**

## OUTPUT VOLTAGE

**270 V<sub>AC</sub> ± 10%**

## MPPT VOLTAGE RANGE

**485 - 820V<sub>DC</sub>**

## Advantage

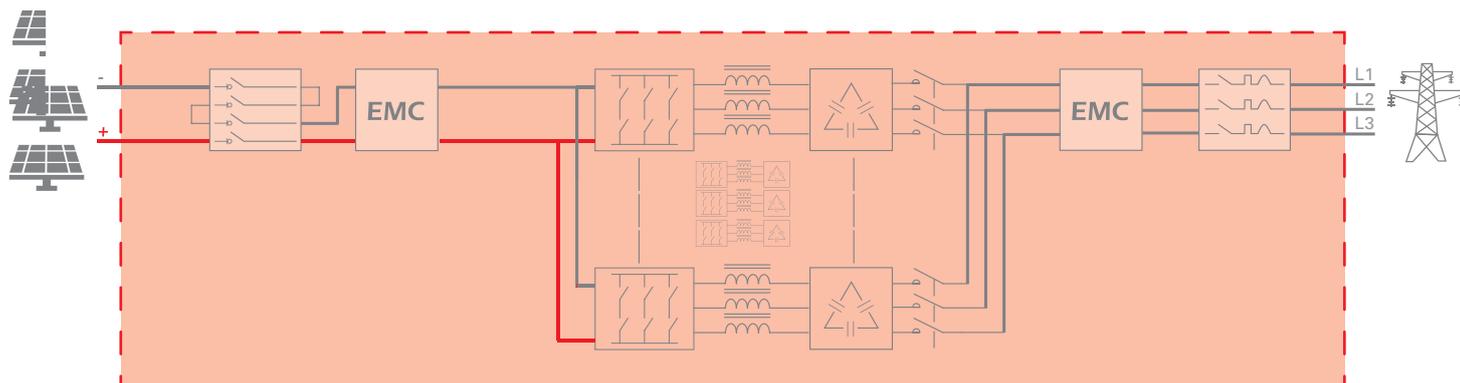
- > High efficiency, up to 99%.
- > Modular inverter (MPS system).
- > Elevato rendimento, fino a 99%.
- > Modularità dell'inverter (MPS system).

## Features

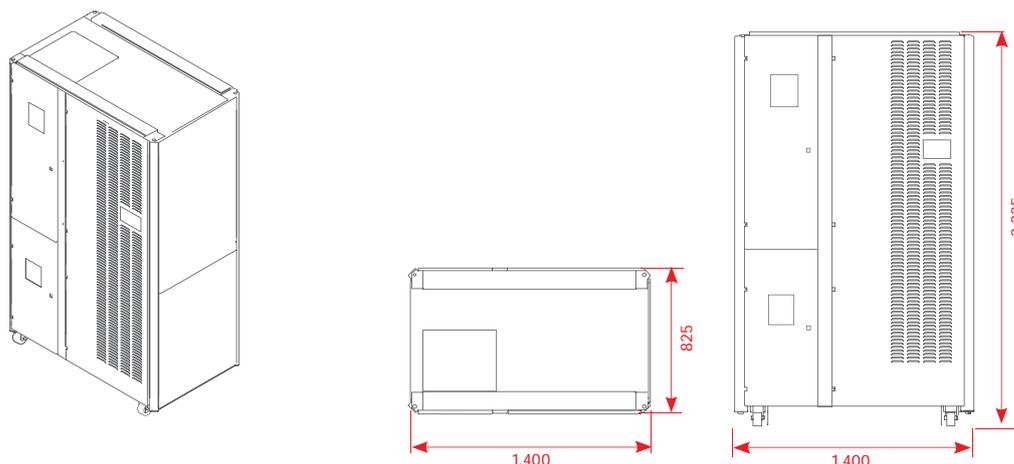
- > Use of a single magnetic component each module.
- > Advance modulation (according to IPCCM algorithm).
- > Continuous monitoring of the system and integrated datalogger.
- > Outbound communication.
- > Monitoring of the photovoltaic plant.
- > Impiego di un singolo componente magnetico per ciascun 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



## DC Input - PV Module

	R3000TLI	R3750TLI
MPPT voltage range( $V_{DC}$ )	485 - 820 V	485 - 820 V
Absolute max DC voltage ( $V_{DC}$ )	<b>1.000 V</b>	<b>1.000 V</b>
DC-voltage ripple (%)	<2%	<2%
Maximum input current ( $A_{DC}$ )	600 A	750 A
DC control mode	Rapid and efficient MPPT control	Rapid and efficient MPPT control
Number of MPPT	1	1
Reverse Polarity Protection	•	•
DC input connection	Integrated Magnetothermic Circuit Breaker	Integrated DC Switch
Oversvoltage Protection	SPD varistor device Class II (Opt. Class I+II)	SPD varistor device Class II (Opt. Class I+II)

## AC Output grid

	R3000TLI	R3750TLI
Max Power (kW) (Note 1)	<b>294 kW @ 25°C</b> <b>276 kW @ 50°C</b>	<b>365 kW @ 25°C</b> <b>345 kW @ 50°C</b>
Max Apparent Power $S_{max}$ (kVA)	294 kVA @ 25°C 276 kVA @ 50°C	365 kVA @ 25°C 345 kVA @ 50°C
Maximum Current ( $A_{AC}$ ) (Note 1)	630 A @ 25°C 592 A @ 50°C	785 A @ 25°C 740 A @ 50°C
Max unbalance current	< 2%	< 2%
AC output Voltage ( $V_{AC}$ )	<b>270V<sub>RMS</sub> ±10%</b>	<b>270V<sub>RMS</sub> ±10%</b>
Nr. Phase	3-phase (L1 - L2 - L3 - PE)	3-phase (L1 - L2 - L3 - PE)
Frequency (Hz)	50/60 Hz	50/60 Hz
Aux. power supply ( $V_{AC} - I_{AC}$ )	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)
Distortion factor (THDi) (Note 2)	<3%	<3%
Power Factor (Note 3)	From 0 to 1 inductive or capacitive	From 0 to 1 inductive or capacitive
Galvanic insulation	No (transformerless)	No (transformerless)
AC input connection	Magnetothermic circuit breaker	Magnetothermic circuit breaker

## General Data

	R3000TLI	R3750TLI
Maximum efficiency	<b>98.80%</b>	<b>98.80%</b>
European efficiency	98.20%	98.20%
Static MPPT efficiency	> 99.9 %	> 99.9 %
Dynamic MPPT efficiency	> 99.8 %	> 99.8 %
Night consumption (W)	< 60 W	< 60 W
Weight (kg)	1.250 kg	1.320 kg
Protection degree	IP20 (Opt.31)	IP20 (Opt.31)
Cooling	By using fans speed controlled by temperature	By using fans speed controlled by temperature
Dimensions (W x D x H)	1.400x825x2.235 mm	1.400x825x2.235 mm
Noise level (dBA)	< 70 dBA	< 70 dBA
Operating temperature (°C) (Note 4)	-10° C +53° C	-10° C +53° C
Storage temperature (°C)	-20° C +60° C	-20° C +60° C
Humidity (Not condensing) (%)	0 ÷ 95%	0 ÷ 95%
Height above the sea (without derating) (Note 5)	1.500 m	1.500 m
Air Flow	1.640 m³/h	2.050 m³/h
Oversvoltage Category	II	II
Color	RAL 9006	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  $S_{max}$  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.