

R1500 TLI R2250 TLI

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R2500 TLI

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MAXIMUM EFFICIENCY

98.7 %

OUTPUT VOLTAGE

270 V_{AC} ± 10%

MPPT VOLTAGE RANGE

485 - 820V_{DC}

Advantage

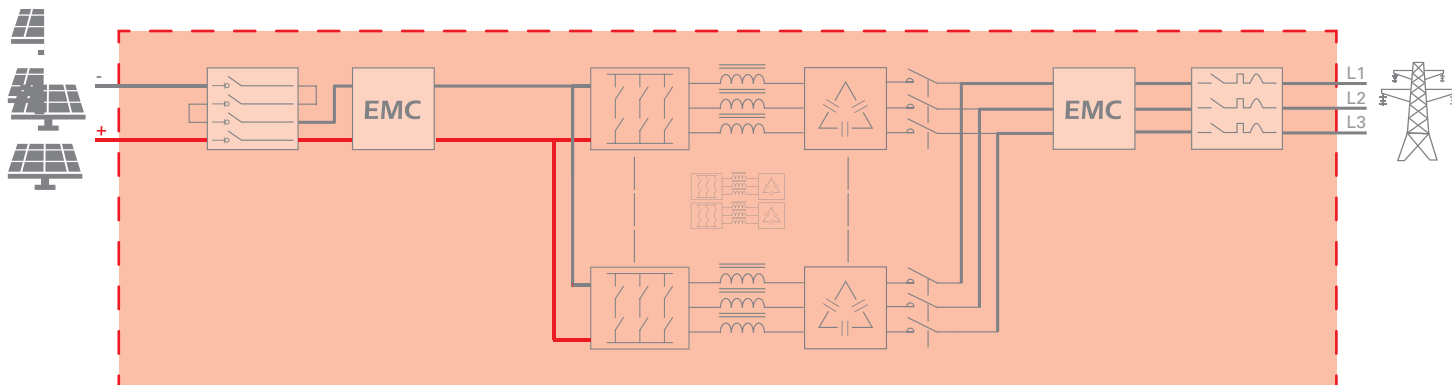
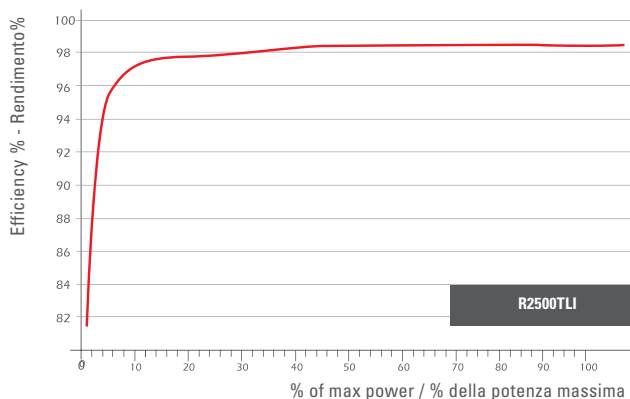
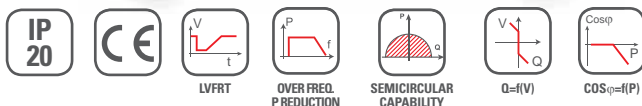
- > High efficiency, up to 99%.
- > Modular inverter (MPS system).
- > Elevato rendimento, fino a 99%.
- > Modularità dell'inverter (MPS system).

Features

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

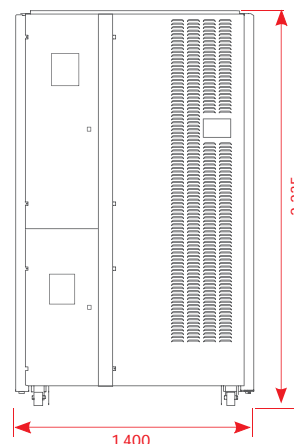
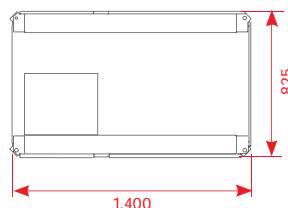
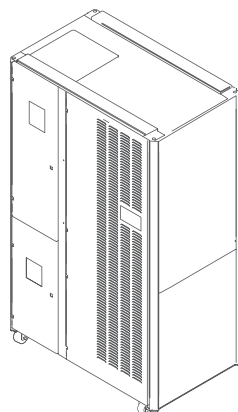


MV Central Inverter

R1500 TLI

R2250 TLI

R2500 TLI



DC Input - PV Module

	R1500TLI	R2250TLI	R2500TLI
MPPT voltage range(V_{DC})	485 - 820 V	485 - 820 V	485 - 820 V
Absolute max DC voltage (V_{DC})	1.000 V	1.000 V	1.000 V
DC-voltage ripple (%)	<2%	<2%	<2%
Maximum input current (A_{DC})	300 A	450 A	500 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 Magnetothermic Circuit Breaker	Integrated Magnetothermic Circuit Breaker	Integrated Magnetothermic Circuit Breaker
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

	R1500TLI	R2250TLI	R2500TLI
Max Power (kW) (Note 1)	147 kW @ 25°C 138 kW @ 50°C	220 kW @ 25°C 207 kW @ 50°C	240 kW @ 25°C 228 kW @ 50°C
Max Apparent Power S_{max} (kVA)	147 kVA @ 25°C 138 kVA @ 50°C	220 kVA @ 25°C 207 kVA @ 50°C	240 kVA @ 25°C 228 kVA @ 50°C
Maximum Current (A_{AC}) (Note 1)	315 A @ 25°C 300 A @ 50°C	472 A @ 25°C 445 A @ 50°C	514 A @ 25°C 490 A @ 50°C
Max unbalance current	< 2%	< 2%	< 2%
AC output Voltage (V_{AC})	270V_{RMS} ±10%	270V_{RMS} ±10%	270V_{RMS} ±10%
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

	R1500TLI	R2250TLI	R2500TLI
Maximum efficiency	98.20%	98.70%	98.70%
European efficiency	97.80%	98.20%	98.20%
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)	600 kg	630 kg	660 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)	1.400x825x2.235 mm	1.400x825x2.235 mm	1.400x825x2.235 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	820 m³/h	1.230 m³/h	1.640 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.