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USER INFORMATION



WARNING

- Inverter system, in order to work correctly, needs that the temperature does not exceed 70°C or 85°C (depending on the model) on the inverter heat sink.
Normally this temperature is not reached if ambient conditions are in according with specifications 3 and (for open versions) if the engine auxiliary fan is correctly working. Inverter must be mounted in vertical position (fins in vertical position).
In case of “open version”, the internal (generator) fan must blow directly against the heatsink. This position guarantee the best thermal exchange (and so the low temperature) inside inverter.
- Never connect PMG cable to the inverter when engine is already running: inverter could fail.
- Silent blocks must be used for limiting maximum vibration on the inverter, for all frequencies and situations.



- **Inverter must be provided with an equipment-grounding conductor.**
- Neutral conductor at the inverter's output can be connected at ground or not depending on safety system implemented or local normative followed
- If exist a star point of alternator and this point is connected to ground, you can't connect the inverter's output neutral to ground (and vice-versa if you connect inverter's output neutral to ground, you can't connect star point of alternator to ground)



- The inverters are designed for an IP21 use only; do not operate the system in rain or snow without the protective enclosures
- If the system falls in water, do not try to dry it and operate it, but send it back to Microtec for safety controls
- When working, the system is a potential source of electrical shocks; do not operate it with wet hand
- **Don't touch any part of the inverters (including wires and connectors) before 5 minutes after the engine has come to a complete stop**

NOTE

- Connection and maintenance must be done by qualified operators
- It's not allowed to modify or replace any of part of the inverter. Any guarantee on modified and externally damaged parts will decay. In these conditions Microtec can't give any guarantee on the product and any responsibility for any type of accidents
- Know how to stop the generator quickly in every case of problems. Never permit anyone to operate the generator without proper instructions
- Don't clean inverter with corrosive substances.

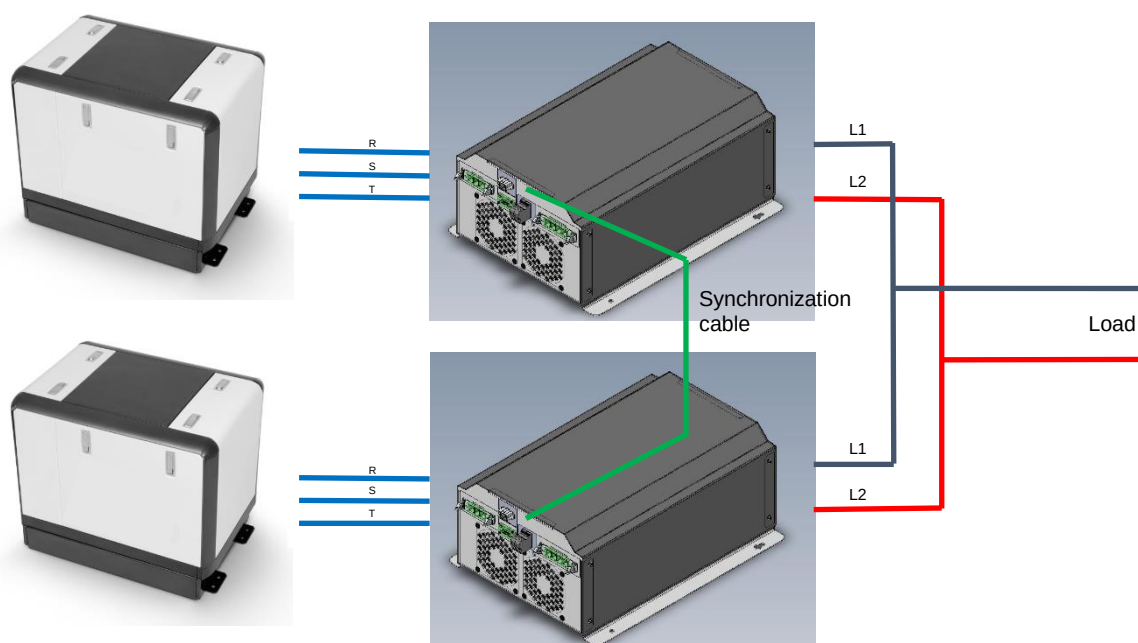
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DESCRIPTION OF SYSTEM

Today this product is qualified to connect in parallel two inverters; you can put in parallel only inverters of the same size (ex. 10kw with 10kw etc...)

The parallel connection guarantees an output current equal exactly to the sum of the rated currents of the two single inverters.

The recognition between master and slave is done automatically by the inverters without any user intervention. System has been designed to work with two separate generators that supply separately two inverters; the outputs of the inverters are connected together:



Don't connect in parallel inputs from generators (serious damages can occur).

NOTE

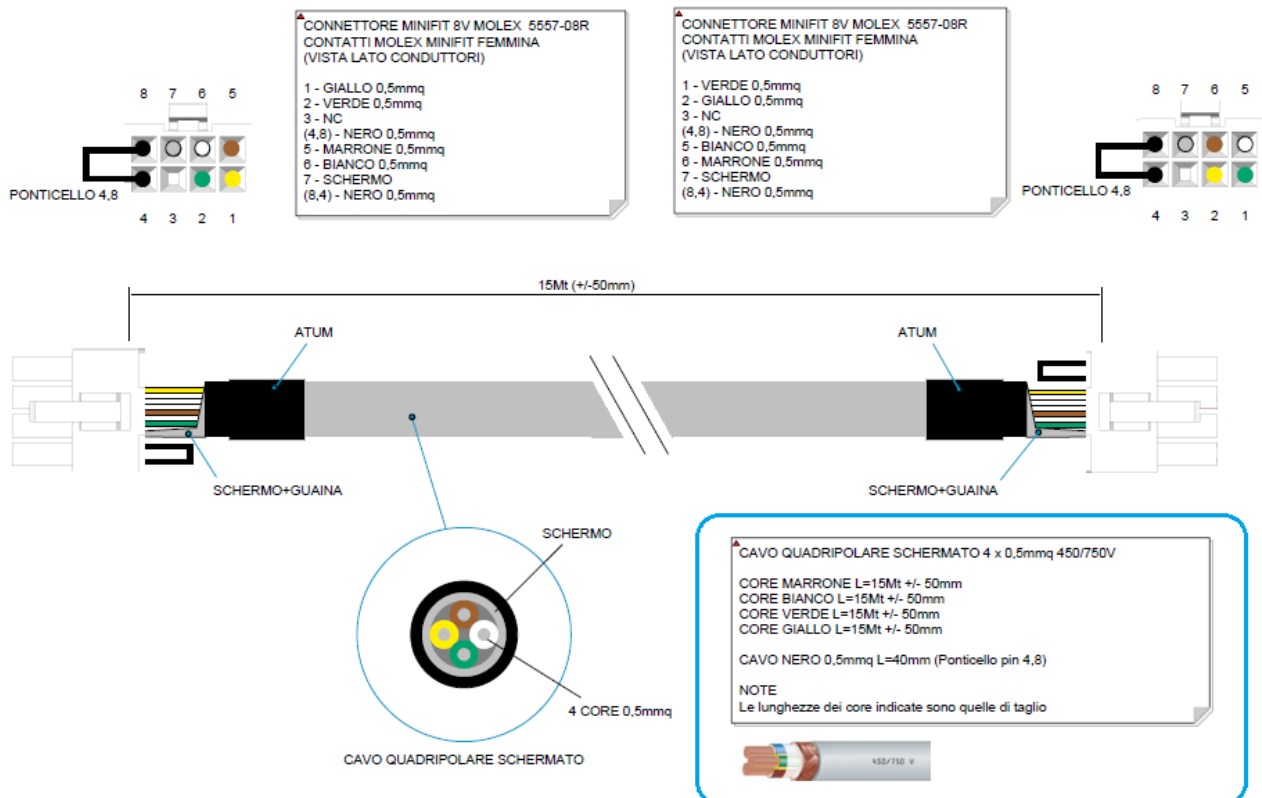
The sequence of input phases between first generator and second generator doesn't matter (example you can wire RST on first inverter and SRT on the second one without any problems)

The order of output phases doesn't matter that means you can connect L1 from first inverter with L2 of second inverter without any problems

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To guarantee a safe synchronization, we suggest you to use our shielded cables existent in three lengths: 2m (part number 1.200.000.00068), 10m (part number 1.200.000.00069) and 15m (part number 1.200.000.00070)



NOTE

The breakage (or absence) of the synchronization cable is not dangerous, simply a synchro error is generated.