2.3.1. External On/Off Power Control:

External ON/OFF control of the generator is possible through connection of terminals 3,11,4,12 as shown in figure 2.3.1. below. The generator is switched ON or OFF by relay or circuit control between terminals 3 and 4. When the terminals are closed the generator is switched on and when the terminals are open, the generator is switched off.

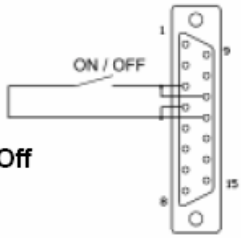

Fig. 2.3.1.a External On/Off Power Control

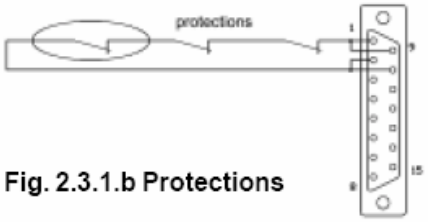

Fig. 2.3.1.b Protections

NOTE: Terminals 3-11 and 4-12 are internaly connected.
NOTE: If the generator has been switched off because of activation of some internal blocking or external protection the terminals remain closed. Next starting of the machine should be done by opening and closing the terminals again.

The MSG.X00.OW generators are equipped with external protection circuit. Different ON/OFF sensor can be connected in that circuit, as shown in fig. 2.3.1b. The sensors can control temperature, level, etc. The protection of the MSG.X00.OF power devices from overheating is serial connected in that circuit.

NOTE: Terminals on pins 1,9 and 2,10 are protection inputs and they should be connected through short circuit enabling the generator to operate. If this circuit is open, the generator will stop operating.

2.3.2. Analog Input Power Control:

The power of the generator can be controlled in the following three ways:

- The power can be set during the parameter setting of the generator.
- The power can be set through the RS 485 serial interface by the changing power command of the Remote Control Panel or PLC.
- The power can be set through the analog input - terminals 7-14 and 8-12. When a 2.5 k-Ohm potentiometer is connected to terminals 7 and 8, as shown on picture 2.3.2., the power is set from 0 to 100%.

NOTE: Terminals 7-14 and 8-12 are internaly connected.

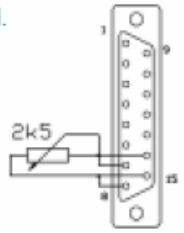

Fig. 2.3.2. Analog Input Power Control

If the PLC voltage output is used, the changes of the output voltage will cause changes in the generatir power from 0 to 100%.

NOTE: Voltage above 3V will initiate generator's digital assignment for switching on (See fig. 2.3.2.a)

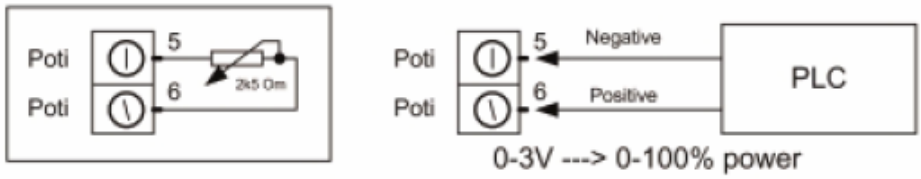

Fig. 2.3.2.a

If the PLC current output (from 0 to 20 mA) is used, there must be a 180 Ohm resistor put between terminals 5 and 6. The power will change from 20 to 100%.

NOTE: If the resistor is short-circuited it may cause failure in the analogue input at current signal.

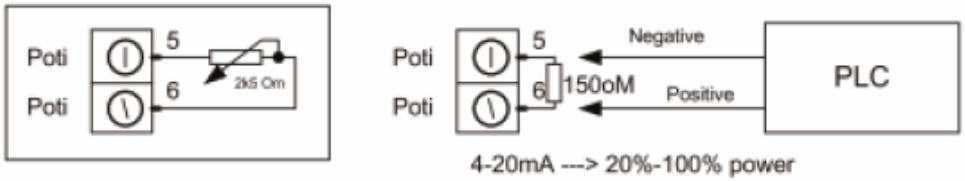

Fig. 2.3.2.b

2.3.3. RS 485 Interface Connector:

The remote Control Panel MSH-1 or the MSA2339 Adapter for PC/PLC control is connected to terminals 2, 6, 4, 8, 5, 9,(see chapter 4.2.).

CAUTION: This connector is reserved exclusively for connecting MSA2339 Adapter of MasterSonic Remote Control Panel. Connecting other devices to these terminals or using the power supply for other purposes may damage your generator.

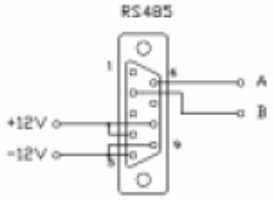

Fig. 2.3.3. RS 485 Interface Connection