

## Control Panel: **Manual** Model: **QMA3** Industrial Range

### ■ Technical Data Sheets

Control Panel Model	QMA3
Type	Manual with Aut. Remote Start
Applicable Range(kVA)	180 - 2058
Chang Over	Absent
IP	20
Control Board Model	GIOTTO M

### ■ Control Panel Dimensions

Length (mm)	650
Width (mm)	400
Height (mm)	260

### ■ Standard Set-up

- Hour Meter
- Voltmeter
- Amperometer
- Frequency meter
- Emergency Stop Button

### ■ Available Options

- Fuel Level Indicator\*
- Engine Temperature Indicator\*
- Oil Pressure Indicator\*

\* Transducers Not Included



### ■ Description

The manual control panel is contained in an iron steel box and is mounted on the Generating Set. A side opening allows easy inspection of the circuits. A magnetothermic circuit breaker for the protection of the generating set and eventual plug sockets are available upon request. The control board (micro processor) that is supplied along with the Automatic control panel allows 2 different operational functions: "manual" and "supermanual". The diagnostics is multilingual (Italian, English, French and Spanish), with clear messages regarding the operational state and active alarms. The electronic board is entrusted with the management of operational safety, thanks to visual/acoustic alarms and eventual engine shutdown, it can help prevent damage caused by malfunctions. The control board counts the number of start attempts and issues the following clear messages on the illuminated display: Running hours, engine speed, the start attempts, phase-phase voltage and phase-neutral voltage, battery voltage, current on 3 phase, frequency, battery voltage and the alarms.

The manual control panel signals an alarm when maintenance is required on the generating set and offers the possibility to calibrate measuring instruments and to regulate many parameters. 2 programmable inputs and 2 programmable outputs are also included.