

## Control Panel: Parallel Model: QPA3-2A Industrial Range

### Technical Data Sheets

Control Panel Model	QPA3-2A
Type	Parallel
Applicable Range (kVA)	180 - 1050
Change Over	Absent
IP	20
Control Board Model	COELMO Lexys SYNC

### Control Panel Dimensions

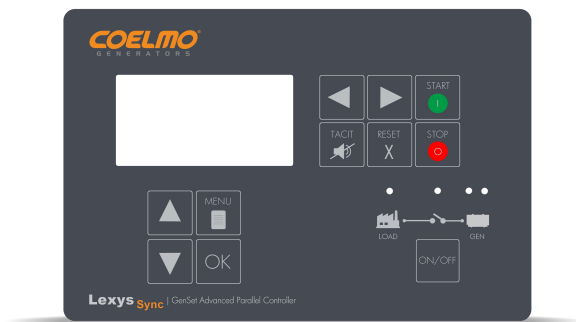
Length (mm)	1540
Width (mm)	300
Height (mm)	1350

### Standard Set-up

- Manual and Automatic start up from an external signal
- Automatic start up and shutdown according to the load
- Automatic load sharing
- Generating Set power Load/Unload Ramp
- Automatic management of the Start up according to the working hours
- Possibility of Synchronization and load sharing of up to 8 Generating Sets
- Automatic Master/Slave switch for the eventual case of a break down of the Master
- Possibility to connect CANJ1939 to the engine
- Event log upto 512 events
- Measures in real efficient values
- Black Start and shut down Management on deadband
- Voltage and Current Balance Control Management
- Scheduled Maintenance Management
- buffer battery
- Possibility to schedule the start ups
- Possibility of PLC type programming

### Available Options

- Ground Failure
- Synchronization with the mains
- To and from Mains Load/unload ramp
- Parallel to mains
- Parallel without exporting on to the mains
- Relay interface module
- Configuration software with USB adapter
- Remote monitoring and Parameter download software
- ERMES remote management kit
- Certified Company
- Programmable lock key
- ISO 9001 SA800
- ISO 14001 OHSAS 18001 AEOF



### Descriptions

The Lexys Sync parallel control panel is able to manage Generating set load sharing in parallel both locally and remotely,. The module also includes a motorized 4p circuit breaker for the closure of the synchronization on a common bus bar. The communication between the various Generating Sets functioning in parallel is made through Can bus and it is possible to manage up to 8 Generating Sets at a time that do not have to be of the same power.

Lexys Sync automatically controls starting, stopping, synchronization and load sharing of generating sets connected to the common bus bar system and analyses the thresholds of the internal protections and various digital inputs. In the case of a start up request, all units will start up simultaneously based on the required power output required from the system, synchronizing and closing each switch on the bus bar. The system manages the automatic allocation at an equal percentage of the load between the Generating sets even if they have different power sizes. The Generating Set master controls the power required by the load and the logical start and / or stops the various Generating Sets on the system depending on the performance of the load. The Master Generating set selection can be manual or automatic depending on the working hours of the individual machines.

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### Advanced Features

#### Electrical measuring instruments

- Generating Set Voltage V: L1-N, L2-N, L3-N, L1-L2, L2-L3, L3-L1
- Generating Set Current A: L1, L2, L3
- Active Generated Power KW: L1, L2, L3, kW tot.
- Apparent Generated Power KVA: L1, L2, L3, kVA tot.
- Reactive Generated Power KVAr: L1, L2, L3, kVAr tot.
- Power Factor Cos Phi: L1, L2, L3, Cos Phi medio
- Generating Set Frequency,
- Bus Bar Voltage V: L1-N, L2-N, L3-N, L1-L2, L2-L3, L3-L1
- Bus Bar Frequency
- Syncope with Phase Angle
- Frequency Alignment / Generating Set-Bus Bar Voltage
- Load Percentage
- Battery Voltage
- Energy meters: kWh, kVAh, kVArh

#### Measurements of mechanical quantities

- Engine Rounds RPM
- Cooling Liquid Temperature
- Oil Pressure
- Oil Temperature
- Fuel Level
- Working Hours
- Hour count down for Maintenance
- Number of Start Ups
- Number of Generating Sets connected to the bus bar system

#### Blocks and Alarms

- Generating Set Minimum and Maximum Voltage (Two Thresholds)
- Generating Set Minimum and Maximum Frequency (Two Thresholds) (due soglie)
- Battery Minimum and Maximum Voltage
- Low Fuel Level (Two Thresholds)
- High Oil/Water Temperature (Two Thresholds)
- Low Oil Pressure (Two Thresholds)
- Low Water Level
- Start/Stop Failure
- Incorrect phase sequence
- Communication Error on J1939 / Can Bus / Data Link
- Voltage/Current Imbalance
- Dynamo Failure CB
- Speed Governor contrôle / Voltage Failure
- Insufficient power to the system (Generating Set Insufficient)
- Maintenance Request
- Inverse Power
- Overload
- Maximum Current (Two Thresholds)
- Synchronization Failure
- Generating Set Circuit Breaker Open/Close Failure
- Incorrect Bus Bar phase sequence
- No busbar for synchronization
- Bus Bar Voltage out of range
- Dead Band