

# R B

RENTAL BUILDING  
POWER GENERATORS



**ELCOS**  
POWER GENERATORS



**THE PERFECT SOLUTION  
FOR RENTAL APPLICATION**

**15 - 500 kVA**

1500-1800 r.p.m. - 50/60 Hz

400/230 V - 480/277 V



**MOBILE  
POWER GENERATORS**



**ROBUSTLY  
BUILT**

**STAGE 5**



## RENTAL BUILDING POWER GENERATORS

# 15 - 500 kVA

**Fully washable product**  
both externally and internally with a nozzle

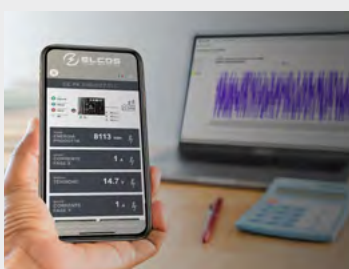
**Central Lifting hook**  
oversized and reinforced, it allows the GS to be moved with a crane

**Super soundproofed Canopy**  
built to be used in extreme environments  
Soundproofed with durable class 1 rated rot-proof polyester fiber

**External fuel connectors**  
to ease the connection to an external tank

**Anti-rollover forklift tunnels**  
to ensure safe lifting and handling

**Rubber bumpers**  
to ensure greater protection against impacts during handling



REMOTE MONITORING

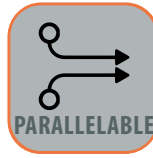


FUEL WATER SEPARATOR FILTER



LATERAL HOOK FOR TRANSPORT

# The perfect solution for rental applications



**Terminal box accessible from the outside**  
with cable holders to ensure a secure connection

**Wide opening doors**  
for inspection and maintenance

**Battery compartment accessible from outside**  
for easy maintenance

**Daily tank reinforced with non-cutting edge bulkheads**

**Reinforced frame and brackets**  
to guarantee robustness during handling on site and during transport on trucks or trailers



# R/B

RENTAL BUILDING  
POWER GENERATORS



**ELCOS**  
POWER GENERATORS



# RANGE

## 10/40 KVA



**MOBILE  
APPLICATION**



**EASY TO USE,  
TRANSPORT, CONNECT  
AND MAINTAIN**



**Battery compartment externally accessible for easy maintenance**



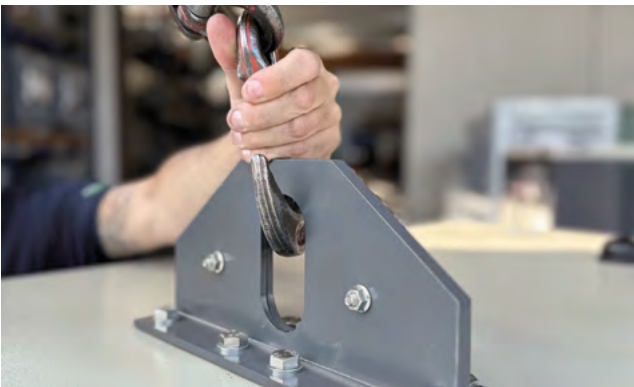
**Control Panel Door with key lock and porthole, tamper and weather proof**



**Refuelling at ease with Quick Coupling connectors**



**Tank filler with wide tank refilling point**



**Central Lifting hook oversized and reinforced, it allows the GS to be moved with a crane**



**Side hooks for fixing to the truck bed**



**Inspection doors with double frame and airtight gasket**



**Battery isolator lockable, it is used during maintenance and storage**

# R/B

RENTAL BUILDING  
POWER GENERATORS



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POWER GENERATORS



# RANGE

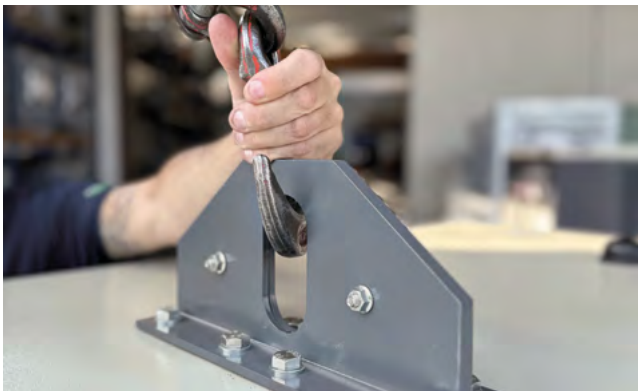
## 50/100 KVA



**MOBILE  
APPLICATION**



**EASY TO USE,  
TRANSPORT, CONNECT  
AND MAINTAIN**



**Central Lifting hook oversized and reinforced, it allows the GS to be moved with a crane**



**Power Terminal Box for cables with eye, it avoids damage to the contacts of the switch**



**Quick Coupling connectors to ease the connection to an external fuel tank**



**3-way valve for external tank connection**



**Heat protection grille**



**Side hooks for attaching to the truck bed**



**Inspection doors with double frame and airtight gasket**



**Battery isolator lockable, it is used during maintenance and storage**

# R/B

RENTAL BUILDING  
POWER GENERATORS



**ELCOS**  
POWER GENERATORS



# RANGE

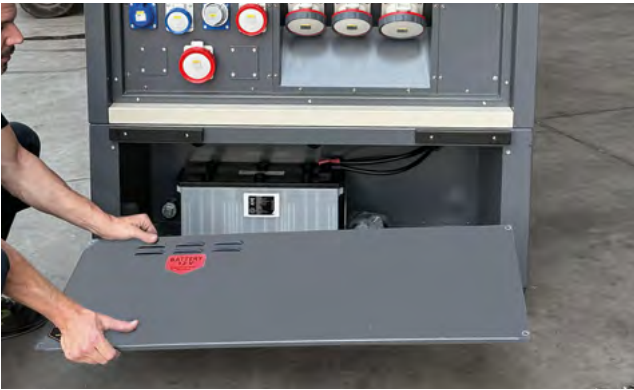
## 130/250 KVA



**MOBILE  
APPLICATION**



**EASY TO USE,  
TRANSPORT, CONNECT  
AND MAINTAIN**



**Battery compartment externally accessible for easy maintenance**



**Power Terminal Box for cables with eye, it avoids damage to the contacts of the switch**



**Quick Coupling connectors to ease the connection to an external fuel tank**



**Large tank filler neck**



**Central Lifting hook oversized and reinforced, it allows the GS to be moved with a crane**



**Anti-rollover forklift tunnels to ensure safe lifting and handling**



**Inspection doors with double frame and airtight gasket**



**Battery isolator lockable, it is used during maintenance and storage**

# R/B

RENTAL BUILDING  
POWER GENERATORS



**ELCOS**  
POWER GENERATORS



# RANGE

## 300/500 KVA



**MOBILE  
APPLICATION**



**EASY TO USE,  
TRANSPORT, CONNECT  
AND MAINTAIN**



**Battery compartment externally accessible for easy maintenance**



**Power Terminal Box for cables with eye, it avoids damage to the contacts of the switch**



**Quick Coupling connectors to ease the connection to an external fuel tank**



**Large tank filler neck**



**Fuel inspection hatch**



**Oil change pump**



**3-way valve for external tank connection**



**Battery isolator lockable, it is used during maintenance and storage**

## QPE - QPA

## 15-40 kVA



- Command and control module
- Emergency stop button
- Magneto-thermal switch with release coil
- Differential protection adjustable and excludible
- CE 2P+T 16A 230V IP65 plug to supply the battery charger and pre-heater
- Battery charger

- **Standard sockets:**
    - n.1 SCHUKO 2P+T 16A 230V IP65
    - n.1 CE 2P+T 16A 230V IP65
    - n.1 CE 3P+N+T 16A 400V IP65
    - n.1 CE 3P+N+T 32A 400V IP65
    - n.1 CE 3P+N+T 63A 400V IP65 (30/40 kVA)
    - General Differential Protection 0.03A\*
    - Circuit breaker for each socket
- \* For 16A and 32A sockets

## QPE - QPA

## 50-100 kVA



- Command and control module
- Emergency stop button
- Magneto-thermal switch with release coil
- Differential protection adjustable and excludible
- Power terminal block for cables with eye
- Slide and cable holder for power cable entry
- CE 2P+T 16A 230V IP65 plug to supply the battery charger and pre-heater
- Battery charger

- **Standard sockets:**
    - n.1 SCHUKO 2P+T 16A 230V IP65
    - n.1 CE 2P+T 16A 230V IP65
    - n.1 CE 3P+N+T 16A 400V IP65
    - n.1 CE 3P+N+T 32A 400V IP65
    - n.1 CE 3P+N+T 63A 400V IP65
    - General Differential Protection 0.03A\*
    - Circuit breaker for each socket
- \* For 16A and 32A sockets

## QMC

## 15-40 kVA



- Command and control module
- Emergency stop button
- Magneto-thermal switch with release coil
- General differential protection
- Remote control connector

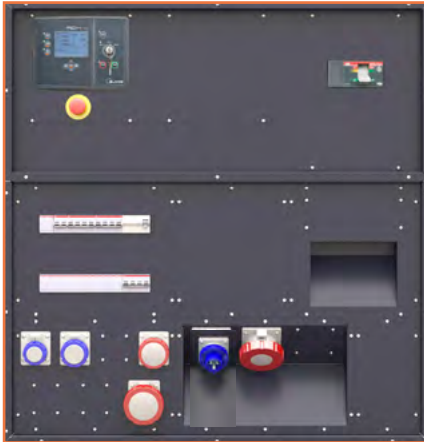
- **Sockets:**
  - n.1 SCHUKO 2P+T 16A 230V IP65
  - n.1 CEE 2P+T 16A 230V IP65
  - n.1 CE 3P+N+T 16A 400V IP65
  - n.1 CE 3P+N+T 32A 400V IP65
  - n.1 CE 3P+N+T 63A 400V IP65 (30/40kVA)
  - Circuit breaker for each socket

# Panel on board



## QPE - QPA

130-250 kVA



- Command and control module
  - Emergency stop button
  - Magneto-thermal switch with release coil
  - Differential protection adjustable and excludible
  - Power terminal block for cables with eye
  - Slide and cable holder for power cable entry
  - CEE 2P+T 16A 230V IP65 plug to supply the battery charger and pre-heater
  - Battery charger
- **Standard sockets:**
    - n.1 SCHUKO 2P+T 16A 230V IP55
    - n.1 CE 2P+T 16A 230V IP65
    - n.1 CE 3P+N+T 16A 400V IP65
    - n.1 CE 3P+N+T 32A 400V IP65
    - n.1 CE 3P+N+T 63A 400V IP65
    - General Differential Protection 0.03A\*
    - Circuit breaker for each socket
- \* For 16A and 32A sockets

## QPE - QPA

300-500 kVA



- Command and control module
- Emergency stop button
- Magnetothermal switch with release coil
- Differential protection
- Power terminal block for cables with eye
- Slide and cable holder for power cable entry
- CEE 2P+T 16A 230V IP65 plug for C. B. and Heater supply
- Battery charger
- **Standard sockets:**
  - n.1 SCHUKO 2P+T 16A 230V IP65
  - n.1 CE 2P+T 16A 230V IP65
  - n.1 CE 3P+N+T 16A 400V IP65
  - n.1 CE 3P+N+T 32A 400V IP65
  - n.1 CE 3P+N+T 63A 400V IP65
  - General Differential Protection 0.03A\*
  - Circuit breaker for each socket

\* For 16A and 32A sockets

## QMC

50-100 kVA



- Command and control module
  - Emergency stop button
  - Magneto-thermal switch with release coil
  - Remote control connector
- **Sockets:**
    - n.1 SCHUKO 2P+T 16A 230V IP65
    - n.1 CE 2P+T 16A 230V IP65
    - n.1 CE 3P+N+T 16A 400V IP65
    - n.1 CE 3P+N+T 32A 400V IP65
    - n.1 CE 3P+N+T 63A 400V IP65
    - General Differential Protection 0.03A\*
    - Circuit breaker for each socket

\* For 16A and 32A sockets

## QPE POLYVALENT PANEL

### Applications

- ◆ Auto-production (island)
- ◆ Construction site
- ◆ Rental
- ◆ Emergency to the mains

**+011**  
VARIANT

### Variant +011 Without integrated switching

With this variant the SWITCHING is externally managed through separate ATS panels (optional).

## MC4 # evo



### → Equipment

- Microprocessor logic
- Backlit refractive display
- 16-event alarm history list
- Multi-language management
- Troubleshooting with suggestions

### → Engine Measures

- Engine RPM\*
- Engine oil pressure BAR
- Engine oil temperature\*
- Engine oil level\*
- Cooling system pressure\*
- Cooling system temperature°C
- Coolant level %
- Fuel consumption\*
- Fuel level %
- Total operating hours
- Partial operating hours (resettable)
- Hours to maintenance
- Battery charger voltage
- Start up counter

### → Alternator Measures

- Genset voltage three-phase
- Genset star voltage RN.SN.TN.
- Genset three-phase current
- Genset frequency
- Genset apparent power KVA
- Genset actual power KW
- Genset reactive power KWR
- Genset KWh
- Genset power factor cosfi

### → Controls

- Manual start up and stop
- Automatic start up and stop from AMF
- Start up and stop through contact
- Fuel pump control
- Lock ● Reset
- Programmable automatic test
- Emergency stop button
- Main counter command closed
- G.s. counter command closed

## QPA PARALLEL PANEL

### Applications

- ◆ Auto-production (island)
- ◆ Redundancy
- ◆ Rental
- ◆ Load request

**+014**  
VARIANT

### Variant +014 With integrated motorized switch

This variant allows the GS to synchronize in parallel with each other, to have power supply management, load management, redundancy, load request. It monitors the GS managing measurements and alarms, It starts it and stops it depending on the system parameters.

## ComAp IntelliGen 200



### → Equipment

- Microprocessor logic
- LCD display
- Events history (up to 250 records)

### → Alternator Measures

- Gen-set voltage Ph-Ph
- Gen-set voltage Ph-N
- Bus synchronization voltage
- Synchronoscope
- Gen-set current
- Gen-set Frequency
- Gen-set apparent power KVA
- Gen-set active power KW
- Gen-set reactive power KVAR
- Gen-set produce power KWh
- Power factor Cosfi

### → Engine Measures

- Engine RPM
- Engine fuel level
- Oil system pressure
- Fuel consumption
- Total operating hours
- Partial operating hours (resettable)
- Hours to maintenance
- Battery/battery charger voltage
- Start-up counter

## QMC MANUAL PANEL

### Applications

- ◆ Auto-production (island)
- ◆ Construction site
- ◆ Rental

**+012**  
VARIANT

### Variant +012 Manual panel

With this variant, the GS is controlled manually by the operator and it enables the view of parameters.

## SML



### → Equipment

- Digital voltmeter
- Digital frequency
- Digital ammeter
- Digital Kilovoltammeter
- Digital Battery voltage
- Digital fuel level
- Analog hour meter
- Ignition key
- Connector Remote Control
- Emergency stop button

# Control and command modules



## → Main Measures

- Mains voltage RST
- Mains frequency

## → Signals/Protections

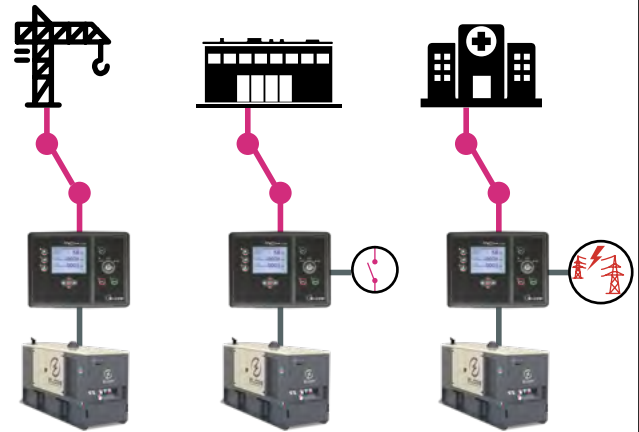
- Failed to start
- Failed to stop
- Low oil level\*
- Low oil pressure
- Minimum oil pressure (pre-alarm)
- Low cooling liquid level
- Very high cooling liquid level
- High temperature (pre-alarm)
- Generator battery charger
- No fuel
- Low fuel level (pre-alarm)
- Start up
- Stop
- Fuel pump running
- Battery connected
- Battery charging

- Battery undervoltage
- Battery overvoltage
- Genset overvoltage
- Genset undervoltage
- Genset overload
- Genset short circuit
- Genset maximum frequency
- Genset minimum frequency
- Genset connected
- Genset contactor closed
- Circuit breaker protection
- Mains connected
- Mains overvoltage
- Mains undervoltage
- Mains contactor closed
- Emergency button pressed

## → Communication Interfaces

- CAN-BUS communication
- USB port for saving parameters and firmware updates
- RS485 serial output

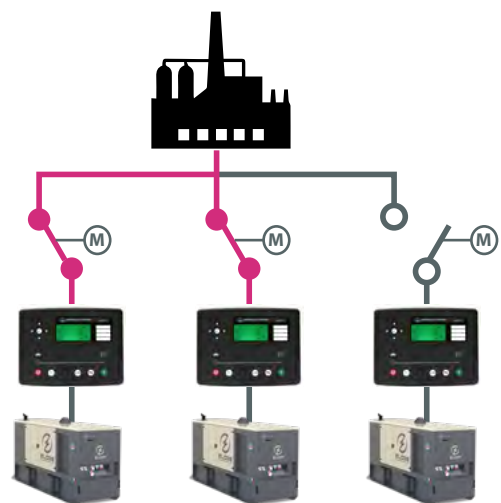
## Operating diagram



## → Controls

- Automatic synchronizing and power control (speed governor or ECU)
- Peak shaving
- Load shedding
- Load sharing
- Voltage and PF control (AVR)
- R.O.C.O.F. and vector shift protection
- Manual start up and stop
- Start up and stop through remote contact
- Manual and Automatic mode button
- Buttons for manual command of the MAINS and G.S. switches
- Lock
- Alarms Reset
- Mute siren button
- Programmable automatic test
- Emergency stop button
- Controller redundancy
- Dead bus sensing
- Bus failure detection
- Dead bus synchronising
- SCADA monitoring via DSE software

## Operating diagram



## → Connector Remote Control

For connecting:

- Radio control Elcos (optional)
- Control with Elcos-Cable to start and stop the genset from distance (optional)

## → Signals / Protectors

- Low oil pressure
- High coolant temperature
- Fault dynamo battery charger
- Fuel reserve (G.S. stops after 5min.)
- Generic Fault
- IP 55

## → Commands

- Manual start and stop
- Emergency stop button

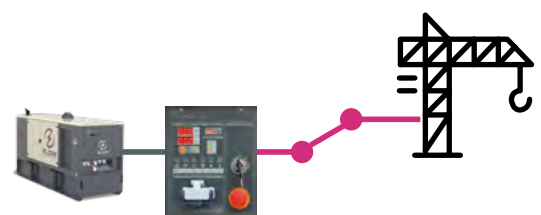
## → Measures engine

- Fuel tank level
- Total workinghours
- Battery voltage

## → Measures alternator

- GS Voltage R-S
- GS Current on phase R
- Generator Frequency Hz
- Apparent Power generator KVA

## Operating diagram

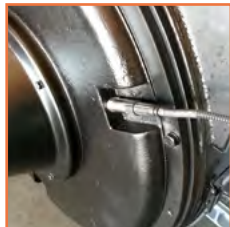




## Engine

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Heavy duty air filter  
Fuel/Water separator filter  
Engine liquids -40 °C  
Radiator level sensor  
230 Vac engine pre-heater  
Automatic oil refilling system



## Alternator

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230 Vac anti-condensation heaters  
RTD-PT100 probes on stator windings  
PT100 probe on bearings  
Temperature control unit up to 4 PT100 probes



## Batteries

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Maintenance free high efficiency starter batteries



## Fuel Supply

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Oversized Tank on board  
External refilling point with warning light for full tank  
Automatic fuel refilling system on board



## Exhaust

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Catalytic converter (CAT)  
Particulate filter (DPF)  
Spark arrestor



## Handling

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Off-road trailer with 2 pneumatic wheels and tow bar  
Roadworthy trailer (80km/h)

# Optional



## Canopy

- Custom colour paint
- High resistance canopy treatment for corrosive environments
- Stainless steel canopy
- Internal and external LED lighting with micro-switches
- Door opening alarm system



## Electrical System

### QPE

- MASTER / SLAVE device
- GSM remote management modem
- EVO remote control system via LAN / GSM / GPRS with GPS
- Start-Stop radio control (500 mt indoors / 5 km outdoors range)
- Start and Stop module for load request for QPE
- 50Hz 400V / 60Hz 480V switch selector
- Voltage potentiometer with output on the panel
- Option with QBM DSE7310 controller on board
- Option with QBM ComAp AMF25 controller on board



### QMC

- Differential protection adjustable
- Start-stop radio control (500 mt indoors / 5 km outdoors range)
- Auto Start-Stop at load request (QMC)



### QPA

- Option with ComAp controller on board



### RB

- Additional socket with thermal breaker
- Differential module for single socket 0.3 or 0.03A
- Quick coupling connectors installed on board
- Mains / GS switching on board (15/100 kVA)

## REMOTE MONITORING



GSM - GPS - GRPS



- ✓ Power Generator status
- 🔔 Alarms and indicators
- 📊 Fuel level and consumption
- 📍 GPS Position



**ELCOS**  
POWER GENERATORS

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