## HIMOINSA A YANMAR COMPANY

# EHR 45/60

**BATTERY POWER GENERATOR** 

### **Mobile** Power















UPS



| GENERAL TECHNICAL DATA  |        | EHR 45/45                         | EHR 45/60           |  |
|---|--------|-----------------------------------|---------------------|--|
| Nominal rated power   | kVA    | 45                                | 45                  |  |
| Nominal energy storage capacity                               | kWh    | 42,6                              | 56,8                |  |
| Rated voltage (50Hz)  | VAC    | 400/230                           |                     |  |
| Maximum power input   | А      | 10                                | 100                 |  |
| Maximum passthrough   | А      | 100                               |                     |  |
| Operating temperature   | °C     | -15 to 50                         |                     |  |
| Protection  |        | Overload, Overheat, Short Circuit |                     |  |
| BATTERIES   |        |                                   |                     |  |
| Quantity  | Un     | 12                                | 16                  |  |
| Туре  |        | LFP (LiFePO <sub>4</sub> )        |                     |  |
| Battery system voltage  | VDC    | 48                                |                     |  |
| DoD % (depth of discharge)                                    |        | 90%                               |                     |  |
| Energy density  | Wh/kg  | 111                               |                     |  |
| Overcurrent capability  |        | up to 2 x recommended current     |                     |  |
| Lifetime (90% DoD)  | Cycles | 6000                              |                     |  |
| Battery management system                                     |        | LFP batteries with built-in BMS   |                     |  |
| Maintenance charge cycle                                      |        | 1 week                            |                     |  |
| INVERTER  |        |                                   |                     |  |
| Quantity  | Un.    | 3                                 | 3                   |  |
| Total nominal power   | kVA    | 45                                | 45                  |  |
| Max. Charging current   | А      | 600                               |                     |  |
| OVERLOAD  |        |                                   |                     |  |
| Peak power of 200% of the nominal power (short-circuit)       |        |                                   | 0,5 seconds         |  |
| 150% of nominal power where the output voltage remains stable |        | - Not eveilel-!-                  | 5 seconds           |  |
| 130% of nominal power where the output voltage remains stable |        | —— Not available                  | 30 minutes          |  |
| Start up current of loads (2 Phase motor)                     |        |                                   | 3 x nominal current |  |





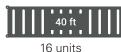
# EHR 45/60

**BATTERY POWER GENERATOR** 

| PERFORMANCE                        |     | EHR 45/45                    | EHR 45/60 |  |
|------------------------------------|-----|------------------------------|-----------|--|
| Recommended generator size         | kVA | 50 - 123                     |           |  |
| Max outlet hybrid system           | А   | 165                          |           |  |
| Recharging time / Maintenance time |     |                              |           |  |
| Recharging time                    | h   | 1,22                         | 2,45      |  |
| Maintenance recharging (@DoD%)     | h   | 8,68                         | 14,90     |  |
| Discharging autonomy               |     |                              |           |  |
| 100% nominal power                 | h   | 0,58                         | 0,78      |  |
| 75% nominal power                  | h   | 0,78                         | 1,04      |  |
| 50% nominal power                  | h   | 1,17                         | 1,55      |  |
| 25% nominal power                  | h   | 2,33                         | 3,11      |  |
| RENEWABLE ENERGY                   |     |                              |           |  |
| MPPT                               |     | 2 x 4kW MPPT                 |           |  |
| Protections                        |     | SPD + MLCB                   |           |  |
| Max. PV short circuit current      |     | 140A (max 30A per MC4 conn.) |           |  |
| Max. PV voltage                    |     | 250V                         |           |  |
| Connectors                         |     | 6 pair 30A - MC4             |           |  |

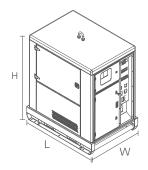
| DIMENSIONS AND WEIGHT  |    | EHR 45/45          | EHR 45/60 |
|------------------------|----|--------------------|-----------|
| Dimensions (L x W x H) | mm | 1620 x 1150 x 1920 |           |
| Weight                 | kg | 1222               | 1350      |











#### **SCOPE OF SUPPLY**

#### ANOPY

 Powder coating with primer coating according to HI-MOINSA standards.

#### ACCESIBILITY

- Wide doors to check servicing and commisioning in customer interface.
- Cables entry

#### SECURITY

- Internal locker for batteries.
- Antitheft hinges and door lockers.
- Earth pin (grounding rod not included)

#### TRANSPORTABILITY

- · Forklift pockets
- Lifting hook

#### **OPTIONALS**

- · Custom colors.
- Custom sockets distribution (input and output)
- Galvanized baseframe
- Trailer



| CONTROL PANEL          |  |  |
|------------------------|--|--|
| Model                  | <b>HICORE</b>   Control module with TFT4.3" display and buttons            |  |
| Remote generator start | Dry contact relay  |  |
| Remote communication   | 3G/4G Dual SIM modem / router.<br>eHR Battery Power Box Software / C2Cloud |  |
| Communication          | Web APP  |  |





HICORE guarantees the optimisation of the different power sources by means of an interface that has been designed to provide a guided and simple experience for any operator, who will be able to choose the most appropriate working mode at any given moment. In addition, to ensure immediate start-up, we offer a Plug&Play mode which allows the EHR to automatically decide which is the best operational option at any given moment based on a constant analysis of the load profile and the connected sources.



Start ASSISTANT to set up a working mode or to charge the batteries.



#### User experience

Easy system configuration and handling. Smart guidance throughout the start-up process with a wizard, making it esay to operate the unit.



#### **Always connected**

Get all the performance info you need through C4CLOUD which comes pre-installed on the unit. Monitor, read and analyse all the performance and load profile information locally or remotely (4G) to optimise your site's power solution.



| SOCKETS OPTIONS |                           | 400V/50Hz/3p+N |    |
|-----------------|---------------------------|----------------|----|
|                 |                           | V3             | V4 |
|                 | CETAC 5Px125A 400v        | -              | 1  |
| IN              | CETAC 3Px16A 230v         | 1              | 1  |
|                 | CETAC 5Px125A 400v        | -              | 1  |
|                 | CETAC 5Px63A 400v         | 1              | 1  |
|                 | CETAC 5Px32A 400v         | 1              | 1  |
| OUT             | CETAC/PIM/RIM 3Px16A 230v | 2              | 2  |

Every socket include circuit breaker. Power Output protected by Earth Leakage Relay. Domestic sockets with ELR



