



Image shown may not reflect actual package

## **HUSH 55 SERIES**

The compact self-supporting NED modular enclosure, are designed to guarantee 55db(A) at 7 meters in a free field, and optimum performance in all the condition. Fully designed on modular principles, the enclosure permits a full easy on-site repair, thanks to the easy interchangeable panels.

The enclosure, fully made in cold galvanized steel sheet, fixed with steel bolts and rivets. The absence of welding in all the components of the enclosure and the high resistance epoxy powder painting, allowing extreme durability, robustness and high resistance to corrosion over the time still in the outdoor installation.

The low noise emission level, fully comply the European Community Directive 2005/88/CE, thanks to the continuous investment in research, and the development by our specialist engineers.

All NED enclosure are fully weatherproof and incorporate internally the full exhaust silencing system.

About the Security and Safety, all the Hush 55 series incorporate a control panel viewing via large viewing window in lockable enclosure door, an Emergency stop push button mounted on enclosure exterior above the control panel, and all the electrical components fully guarded.

All the insulation material used, are made with sound absorbing materials with Euroclass A1 fire resistance certificate.

Standard reference conditions: temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to diesel specific weight 0,850kg/l and conforming to BS2869, Class A2. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.

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## General Information

### Automatic Diesel Generator Set Model:

Voltage / Frequency	r.p.m.	PRP (Prime Power)*	LTP (Standby)*
200-400V/50Hz	1500	120kVA/96kW	132kVA/106kW
/	1800	/	/

\*Ratings at 0.8 power factor

### Weights: kg

Net (only generator)	/
Wet (+ lube oil & coolant)	/
Fuel, lube oil & coolant	/

### Dimension: mm

Canopy Model	HUSH 55
Length	3000
Width	1500
Height	2000
Tank	360

**Engine Information**

<b>Engine Brand</b>	<b>IVECO</b>	
<b>Engine Model</b>	<b>N45TM3</b>	
<b>Cylinders</b>	<b>4</b>	<b>IN LINE</b>
<b>Speed</b>	<b>1500</b>	<b>R.p.m.</b>
<b>Displacement</b>	<b>4,5</b>	<b>L</b>
<b>Air Intake</b>	<b>TURBO CHARGED</b>	
<b>Standard Voltage</b>	<b>12</b>	<b>V</b>
<b>Cooling</b>	<b>LIQUID</b>	
<b>Flywheel P.R.P. Power</b>	<b>/</b>	<b>kWm</b>
<b>Flywheel L.T.P. Power</b>	<b>/</b>	<b>kWm</b>
<b>Fuel Cons. at 100% (L.T.P.)</b>	<b>/</b>	<b>l/hr</b>
<b>Fuel Cons. at 100% (P.R.P.)</b>	<b>27,6</b>	<b>l/hr</b>
<b>Fuel Cons. at 80% (P.R.P.)</b>	<b>21,6</b>	<b>l/hr</b>
<b>Fuel Cons. at 50% (P.R.P.)</b>	<b>14,4</b>	<b>l/hr</b>
<b>Fuel Cons. at 25% (P.R.P.)</b>	<b>/</b>	<b>l/hr</b>
<b>Engine Speed Regulator</b>	<b>MECHANICAL</b>	
<b>Governing Class</b>	<b>ISO 8528</b>	
<b>Emission Class</b>	<b>STAGE 0</b>	

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## Definitions

### **P.R.P.**

Output available with varying load for an unlimited time. Average power output is 70% of the prime power rating. Typical peak demand is 100% of prime rated kW with 10% overload capability for emergency use for a maximum of 1 hour in 12.

Overload operation cannot exceed 25 hours per year.

### **L.T.P.**

Output available with varying load for the duration of the interruption of the normal source power. Average power output is 70% of the standby power rating. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

## Standard on the engine

- Dry filters on the intake,
- Feed pump,
- Oil and diesel filters,
- Radiator with thermostatic valve,
- Electric start with starter motor, alternator and voltage regulator,
- Switch for low oil pressure alarm,
- Switch for high water temperature alarm,
- Manual pump emptying oil from the cup,
- Standard radiator,
- Lead acid battery,
- Residential exhaust muffler

## Alternator Information

Alternator Brand	LEROY SOMER	
Alternator Model	TAL044-E	
P.R.P. Power	125	kVA
P.R.P Power	100	kW
Phase	3 Phase	
Precision	+/- 0.5%	
Insulation Class	H	
IP Protection	23	
Pole	4	
Power Factor	0.8	cosfi

## Definitions

### Continuous rating 40°C – IEC 60034-1

Running at constant load limited to the insulation class; permissible overload 1 hour in 12.

### Standby rating 40°C

Running at constant load **without** over load, for a limited duration of maximum 500h/year, with a permissible increase of the temperature rise above class H.

### Standby rating 27°C

Same conditions than standby duty 40°C but with acceptance of a lower ambient temperature (27°C) that allows to increase the rating and the temperature rise for the same level of temperature in the alternator.

## **Compliance with internationally recognized standard**

All the range and brand of the alternator that we use on our generator complies with international standards and regulations: IEC 60034 and derivative.

All the range and brand of the alternator that we use on our generator are designed, manufactured and marketed in an ISO 9001 and ISO 14001 environment.

## **Electrical features**

- **Frequency**

All the alternator used in our generator may operate either 50 or 60 Hz.

- **Power factor P.F.**

All the alternator used in our generator are designed to operate between 0.8 and 1 power factor.

- **Waveform**

Total harmonic distortion (THD), at no load or linear load is less than 5% according to IEC.

TIF/Telephone influence factor according to NEMA is less than 50.

- **Transient features**

Transient voltage dip for rated step load at 0.8 power factor is less than 18%.

Recovery time for a 20% transient voltage dip is less than 0.5s.

- **Overload acceptance**

All the alternator used in our generator can be overloaded according to NEMA.

- **EMI suppression**

All the alternator used in our generator are provided with an EMI suppression device in accordance with EN 55011.



## **Mechanical features**

- **Enclosure**

Standard enclosure is IP23.

- **Balancing**

All the rotors are dynamically balance according to ISO 1940 and NFC 51-111.

- **Overspeed**

The maximum overspeed is 2250 min.

- **Insulation and protection**

All the alternator used in our generator are class H insulated. The standard winding protection can accept up to 95% relative humidity.

- **Mechanical structure**

Steel frame. Aluminium, cast iron or steel housing and flanges depending on the model.

<b>AMF Brand</b>	<b>ComAp</b>	
<b>AMF Model</b>	<b>InteliLite AMF25</b>	
<b>Standard Characteristic</b>	<ul style="list-style-type: none"> <li>• Single gen-set controller for Stand-by and Primepower applications</li> <li>• Direct communication with EFI engines</li> <li>• Total remote monitoring and control</li> <li>• Easy to install, configure and use</li> <li>• Wide range of communication capabilities including:             <ul style="list-style-type: none"> <li>• connection via RS232, RS485, CAN and on board USB</li> <li>• internet access using Ethernet, GPRS or 4G</li> <li>• support for Modbus and SNMP protocols</li> </ul> </li> <li>• Internal PLC support with PLC editor and monitor included in LiteEdit</li> <li>• Cloud-based monitoring and control via WebSupervisor</li> <li>• Active SMS and emails in different languages</li> <li>• SNMP traps</li> <li>• Geofencing and tracking via WebSupervisor</li> <li>• 2x 10 A binary outputs for cranking and fuel solenoid</li> <li>• Option for up to 16 additional binary inputs/outputs</li> <li>• Flexible event based history with up to 350 events</li> <li>• Load shedding, dummy load capability</li> <li>• Tier 4 final support</li> <li>• Automatic temperature based cooling/heating</li> <li>• Comprehensive gen-set protections</li> <li>• Multipurpose flexible timers</li> <li>• True RMS measurement</li> <li>• Available also in low temperature (LT) version</li> </ul>	

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## General Features

### Ambient conditions

- Operating temperature: -30 to+70°C
- Storage temperature: -30 to +80°C
- Relative humidity: <80% (IEC/EN 60068-2-78)
- Maximum pollution degree: 2
- Overvoltage category: 3
- Measurement category: III
- Climatic sequence: Z/ABDM (IEC/EN 60068-2-61)
- Shock resistance: 15g (IEC/EN 60068-2-27)
- Vibration resistance: 0.7g (IEC/EN 60068-2-6)

### Housing

- Version: Flush mount
- Material: Polycarbonate
- Degree of protection: IP65 on front, IP 20 terminals

### Certifications and compliance

- Certifications obtained: cULus, EAC
- UL Marking:
  - Use 60°C/75°C copper (CU) conductor only
  - AWG Range: 24 - 12 AWG stranded or solid
  - Field Wiring Terminals Tightening Torque: 5lb.in
- Comply with standards: IEC/EN 61010-1, IEC/EN 61000-6-2, IEC/EN 61000-6-3, UL508, CSA C22.2 N°14