



KES ENERGY

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KES ENERGY



CONTAINER POWER STATION KESCONT

General features

Materials used

- CORTEN steel (ASTM)
- Corner block (ISO 1161)
- Bolts in galvanized steel

Insulating materials

- Metallic panels with mineral fiber insulation.
Fire reaction: class 0: A2, s1-d0
- Polyester layers in class 1 fire reaction

Base frame

- Made of profiled steel sheet, cold pressed and it is based on a perimeter of the side members and a series of crosses and currents
- n°4 corner blocks suitable to allow application of the container on a truck provided with hooking system twist-lock standard.

Floor

- Made from maritime wooden panels thickness 28mm

Roof structure and Stands

- The external profile of the roof is constituted by a bordonale steel sheet cold-pressed with No. 4 corner blocks at the corners.

Walls

- They are made by assembling panels of corrugated sheet steel, thickness 20/10
- The four corners are made from stamped sheet metal, sp.4mm, welded to the corner blocks and to the longitudinal members

Painting

- Degreasing, application layer of epoxy sp.60 microns - application of polyurethane enamel RAL 5010, sp.60 microns

Documentation

- Assembly of container
- RINA certification (on request)

Normatives

- Container with external dimensions comply to the normative ISO 668
- Container with external dimensions comply to the normative ISO 1979
- Terminology used according to the normative ISO 830
- Codification, identification and marking according to the ISO 6346

► DESCRIPTION

Kes Energy containers are used for containment and the soundproofing of generators. They are prepared and assembled inside the company, therefore it left open the possibility to personalize the project to allow the adjustment of the finished product to the requirements or specifications of the customer.

Main features:

- ✓ **ROBUST**
- ✓ **VERSITILE**
- ✓ **SUITABLE FOR ROAD TRANSPORT, TRANSPORT BY SEA AND RAIL**

Both the internal configuration of the container and the external devices are defined from time to time according to the specific needs of the customer. During the offer Kes Energy provide a standard layout of the container construction. When ordering, Kes Energy carries out an accurate study based on the data supplied by the customer. Through the preparation of a preliminary design the following will be highlighted:

- The locations of different equipment inside the container
- The number and position of the doors
- The size and position of the openings for the air
- The size and position of the internal separation walls appropriate to the creation of rooms dedicated to the segregation of the panels or other accessories
- The number and position of technical passages
- The general overall dimensions

RINA CERTIFICATION (OPTIONAL):

The containers, having dimensions equal to 20', 20'HC, 40' and 40'HC, can be supplied with the RINA certificate that allows the transport of the containers by sea on container vessels. Without the RINA certificate the navel transport companies handles the containers as boxes, resulting in higher shipping costs.

TECHNICAL PASSAGES:

All technical passages are dimensioned and protected according to the specific needs of the customer. The following is possible:

- Sleeves for the passage of the fuel pipes
- Niches for emergency button, control panel of GS, tear valve, anti-fire control unit if requested, etc.
- Passages for power and auxiliary cables.

Container "Basic" and "soundproof"

Compatibly with the available internal spaces it is possible to install additional tanks, fuel refilling system, fuel tank, transfer switch panel and many other accessories.

NOISE LEVEL AT 7 METERS:

The residual noise level for the container type "light" is more than 75dB(A), measured in open field. For the container "soundproof" the basic noise level is 75dB(A). There are available solutions with more soundproof, 65dB(A) and 55dB(A).

SILENCER FOR THE EXHAUST GAS:

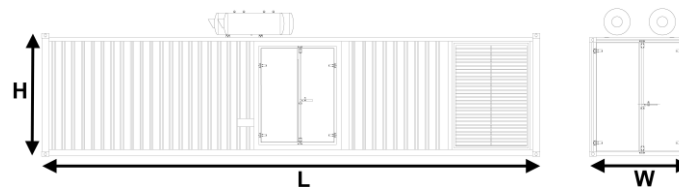
In order to ensure solutions compact as much as possible, the silencers are preferably installed inside the container as often as is physically possible. Only when no other solution is possible it will be installed externally, on the top of the container. Depending on the power of the Generating Set, the silencer installed on the top will be suitable soundproof if it is necessary to obtain a noise levels of 60/65dB(A) and 55dB (A) at 7m.

The data and specifications are subject to change in order to update or improve the products.

ISO Containers

MODELS OF ISO CONTAINERS

Depending on the required motor type and the specific needs of the customer, the dimensions of the containers may vary, therefore the power data (kVA) associated with the dimensions of the containers are purely indicative.



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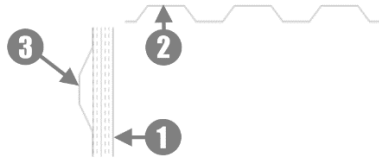
► AVAILABLE MODELS

Kes Energy containers have dimensions that conform to the standards set by ISO 668 and ISO 1979 encoding the external and internal measures of ISO containers.

Model		Dimensions mm (LxWxH)	Noise Level at 7m- dBA	Genset range (kVA)
KESCONT55-10	10'	2990 x 2438 x 2591	55	50 - 100
KESCONT75-15	15'	4550 x 2438 x 2591	75	105 - 250
KESCONT65-15	15'	4550 x 2438 x 2591	65	105 - 250
KESCONT55-15	15'	4550 x 2438 x 2591	55	105 - 250
KESCONT75T-20	20'	6058 x 2438 x 2591	>75	650 - 1000
KESCONT75-20	20'	6058 x 2438 x 2591	75	650 - 800
KESCONT75-20HC	20' HC	6058 x 2438 x 2896	75	650 - 800
KESCONT65-20HC	20' HC	6058 x 2438 x 2896	65	650 - 800
KESCONT55-20HC	20' HC	6058 x 2438 x 2896	55	275 - 630
KESCONT75T-30	30'	9125 x 2438 x 2591	>75	900 - 1000
KESCONT75-30	30'	9125 x 2438 x 2591	75	900 - 1000
KESCONT65-30	30'	9125 x 2438 x 2591	65	900 - 1000
KESCONT75T-30HC	30' HC	9125 x 2438 x 2896	>75	1250 - 3000
KESCONT75T-40	40'	12192 x 2438 x 2591	>75	900 - 1000
KESCONT75-40	40'	12192 x 2438 x 2591	75	900 - 1000
KESCONT65-40	40'	12192 x 2438 x 2591	65	900 - 1000
KESCONT75-40HC	40' HC	12192 x 2438 x 2896	75	1250 - 3000
KESCONT65-40HC	40' HC	12192 x 2438 x 2896	65	1250 - 3000

► ACOUSTIC ISOLATION FEATURES

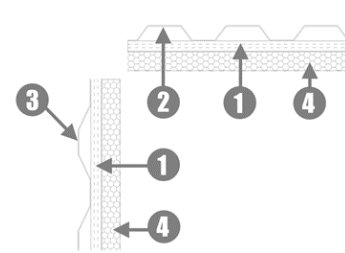
Basic Container



Construction Details

- 1 Polyester isolation layer 50mm - 40kg/m³
- 2 Container roof made of sheet metal without insulation
- 3 Exterior wall made of sheet metal

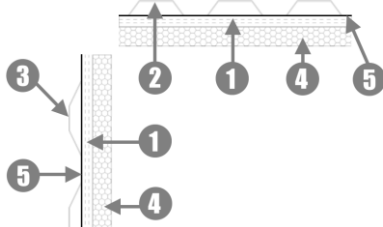
60/65 dBA Soundproof Container



Construction Details

- 1 Polyester isolation layer 50mm - 40kg/m³
- 2 Container roof made of sheet metal
- 3 Exterior wall made of sheet metal
- 4 Sound reducing 50mm sandwich panel with interior micro perforations and high density mineral fiber 80-100kg/m³ core

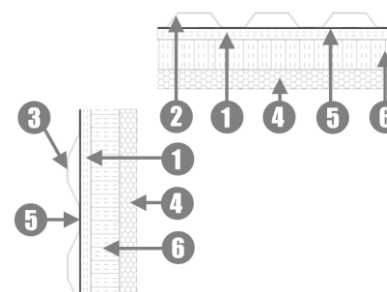
60/65 dBA Soundproof Container



Construction Details

- 1 Polyester isolation layer 30mm - 60kg/m³
- 2 Container roof made of sheet metal
- 3 Exterior wall made of sheet metal
- 4 Sound reducing 50mm sandwich panel with interior micro perforations and high density mineral fiber 80-100kg/m³ core
- 5 Layer of 3mm EPDM with density of 4kg/m² applied to the polyester isolation (no.1) to give extra soundproofing and reinforcement

55 dBA Soundproof Container



Construction Details

- 1 Polyester isolation layer 30mm - 60kg/m³
- 2 Container roof made of sheet metal
- 3 Exterior wall made of sheet metal
- 4 Sound reducing 50mm sandwich panel with interior micro perforations and high density mineral fiber 80-100kg/m³ core
- 5 Layer of 3mm EPDM with density of 4kg/m² applied to the polyester isolation (no.1) to give extra soundproofing and reinforcement
- 6 Layer of high density mineral fiber - 80-100kg/m³

The data and specifications are subject to change in order to update or improve the products

► ACCESS FEATURES

The personnel door and the double door for the maintenance are fixed to the walls of the container by hinges (galvanized steel) bolted to the frame. The counter frame is fixed on a further reinforcing frame, welded to the metal sheet of the container.

Service personnel door



FEATURES

- Self-supporting structure in metal sheet 2mm
- Opening at 180°
- Soundproofing with sandwich panel 50mm, micro-ridged on one side, micro perforated on the other side (the inner side of the container), insulating material of mineral fiber with high density (80/100Kg/mc).
- Closing with hinges and handles with lock.
- *the panic bar is optional* -
- Only for container with **55dB(A)**:
Single door without panic bar with door locks and special anti-rain and anti-noise gasket.

Double door for maintenance

FEATURES

- Self-supporting structure in metal sheet 2mm
- Opening at 180°
- Soundproofing with sandwich panel 50mm, micro-ridged on one side, micro perforated the other side (the inner side of the container), insulating material of mineral fiber with high density (80/100Kg/mc).
- Door locks with galvanized steel hinges door locks
- Special anti-rain and anti-noise gasket



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► ASPIRATION / EXPULSION

In every container are made, in correspondence of the vertical air intake grids, special internal conveyor necessary to suitably convey the cooling air engine. Depending on the required noise type are installed soundproofing baffles with honeycomb structure on the air intake and expulsion. The expulsion of the air is generally performed on the roof of the container by installing square mesh grills.

Ventilation grids



FEATURES

- Self-supporting structure in metal sheet 2mm
 - Wing grid inclined, fixed
 - Anti-intrusion square mesh grid
 - Counter frame for fixing to the tubular
 - Tubular welded to the corrugated sheet of the container
- note: doors can be removed after transport

Soundproofing baffles

FEATURES

- Galvanized sheet micro stretched, aerodynamic profile shaped
- Internal mat in mineral wool (class A1) wrapped in gauze of glass fibers for dust containment
- Dimensions 120mm thick and 400mm width. The height is variable according to the needs
- Terminals guides in the upper and lower ends can be used for fixing





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Handling



FEATURES

- ▶ Handling by crane from the upper corner casting
- ▶ Handling by fork lift (only for 20' and 20HC)

► FUEL SUPPLY

The container comes equipped with lateral niche with connections for supply and return of the fuel, necessary to connect an external tank. All the containers, included the Light one, are equipped with lateral niche with a pull lever for block the fuel.

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► ELECTRICAL SYSTEM

Lighting and motive power

The lighting system and the motive power are made with wiring and materials with minimum protection of IP54. All electrical equipment and all installed accessories are regularly connected to an appropriate facility of grounding.



FEATURES

- Light fixtures of primary brands
- Circuit breakers and switches for light control
- Motive power with universal sockets of 16A
- Electrical wiring made of copper cables with cross-section min. not less than 1.5mmq, housed in tubes or plastic trunk
- Light fixtures of primary brands

Cable entry

The cable entry is lateral and in the lower part of the container. The position of it is generally at the in correspondence of the alternator in order to have convenient access to connect the power cables. Other types of positioning and cable access (eg. cable entry from below) are available like an optional and they are examined and evaluated at the in the planning phase.

Control and command panel

The control and command panel of the genset will be installed on the perimeter wall of the container. In this way it is possible to manage and monitor the genset directly from outside. The panel has a protection of IP 55.

Emergency button

In case of emergency it is possible to push the break-glass emergency button, installed on external perimeter wall of the container.

**According to specific customer requirements, we can customize different types of systems.
Applications will be carefully planned and evaluated during the offer.**

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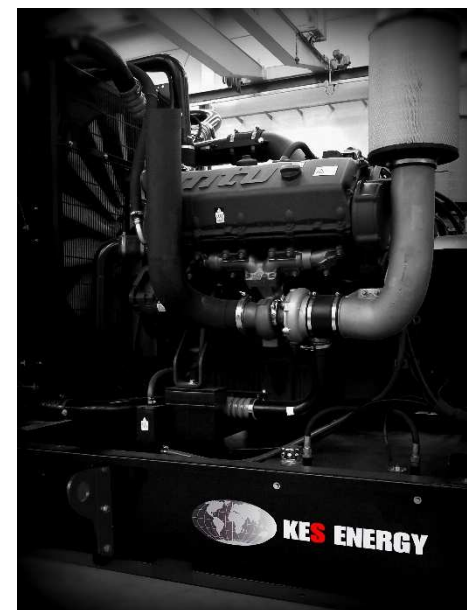
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