



**Generating Set
Diesel**

GE.AI.220/200.SS+011

Standard Equipment and features

Canopy - Soundproofing

- Soundproof canopy IP 32 monoblock
- Polyester class1 soundproofing
- Snap handles with key lock
- Air inlet and air outlet Winding protection against water
- Inspection doors located to facilitate controls and servicing

Exhaust

- Direction pipe with rain cap
- Exhaust collectors protection
- Exhaust tubes protection guards
- Internal residential muffler -35 dbA

Fuel supply

- Daily fuel tank with inspection hatch to allow cleaning
- Low fuel level shutdown automatic system
- Fuel gauge

Handling

- Lifting lug integrated in the lifting structure
- Anti-turning forklift pockets

Base Frame

- Anti pollution Bunded base with external draining point
- Anti vibrating mounting pads
- Battery compartment externally accessible for easy service

Engine

- Engine heater 230 V
- High coolant temperature and low oil pressure shutdown system
- Oil pressure & antifreeze temperature gauge
- External oil drain points
- Engine liquids (oil and antifreeze)
- Tropicalized radiator
- Rotating components protection guards

Alternator

- AVR Automatic Voltage Regulator

Protection & connection Panel

- Magneto-thermal protection on alternator (adjustable only on variant +10 & +11)
- Emergency stop button
- Tamper proof panel
- Power cable outlet from side
- Earth leakage point
- Machine electric wiring IP 44
- Startup battery (pre-charged)

Documentation

- CE conformity declaration - User and maintenance manuals

Normatives

- All ELCOS Generating sets are compliant to CE Marking
- 2004/108/CE Electromagnetic compatibility
- 2000/14/CE Noise Emission for outdoor use
- Factory-designed systems built at Elcos ISO 9001:2008



Data and technical specifications are subject to change in order to update or improve the products.

Generating Set

Speed	rpm	1500
Frequency	Hz	50
PRP Prime power	kVA	200
Prime power (cosfi 0,8)	KW	160
LTP Limited-time running power	kVA	220
Limited time running pow. (cosfi 0,8)	KW	176
Voltage standard	V	400/230
Current PRP (cosfi 0,8)	A	289.0

Noise level

LwA	dB(A)	93
Acoustic pressure level to 7 mt	dB(A)	68
Acoustic pressure level to 1 mt	dB(A)	77

Fuel consumption

Fuel type	Type	Diesel
Fuel tank capacity	lt	450
Autonomy at 3/4 load	h	15
Fuel consumption at 4/4 load	l/h	38.9
Fuel consumption at 3/4 load	l/h	29.4
Fuel consumption at 2/4 load	l/h	20.6

General Features

Battery capacity	Ah	1 x 180
Voltage	Vdc	12
Exhaust tube diameter	mm	100
Exhaust temperature	°C	550
Exhaust gas flow	l/s	198.3
Combustion air flow	l/s	209
Cooling Fan air flow	m3/s	3.8

Dimensions / weight

Dimensions (L x w x h)	cm	360x130x205
Weight inclusive of liquids (oil and antifreeze)	kg	2475

COP

It is the power that the generating set is capable to supply, in continuous operation, for an unlimited number of hours per year at the reference environmental conditions. This is valid as long as the engine undergoes a scheduled maintenance, as specified by the manufacturer. The generating set is able to provide power equal to 100% of the nominal load. COP power is typically 30% lower than the LTP one. No overload capability is allowed for this rating.

PRP

Applicable for supplying power in lieu of commercially purchased power. Prime power is the maximum power available at a variable load for an unlimited number of hours. A 10% overload capability is available for limited time. (Equivalent to Prime Power in accordance with ISO8528 and Overload Power in accordance with ISO3046, AS2789, DIN6271, and BS5514). This rating is not applicable to all generator set models.

LTP

Applicable for supplying emergency power for the duration of normal power interruption. No sustained overload capability is available for this rating. This rating is applicable to installations served by a reliable normal utility source. This rating is only applicable to variable loads with an average load factor of 80 percent of the standby rating for a maximum of 200 hours of operation per year and a maximum of 25 hours per year at 100% of its standby rating. The standby rating is only applicable to emergency and standby applications where the generator set serves as the back up to the normal utility source. No sustained utility parallel operation is permitted with this rating. (Equivalent to Fuel Stop Power in accordance with ISO3046, AS2789, DIN6271 and BS5514). Nominally Rated.

Engine

Factory		Iveco
Emissions		Stage 2
Model		NEF N67TE2A
Speed governor		Electronic
Cooling system	Type	liquid (water + 50% Paraflu11)
Speed	rpm	1500
Nominal power	CV	239.7
Gross engine power	KWm	175
Cycle	Type	diesel 4 stroke
Injection	Type	direct
Aspiration	Type	Turbo
Numbers of cylinders	N°	6L
Bore x stroke	mm	104x132
Total displacement	lt	6.7
Engine oil features		15W40-API CG4-ACEA E3-E5
Engine oil consumption	%	0,1% fuel consumption
Total oil capacity	lt	17
Coolant liquid capacity	lt	25.5

Alternator

Factory *		Marelli
Model		MJB250LA4
Prime power 3F+N 400V (480V)	kVA	220
Prime power 1F+N 230V (240V)	kVA	88
Voltage regulator		+/-0.5%
Poles	N°	4
Phases	N°	3+N
Standard windings connection		star serie
Stator/rotor impregnation		H (ext. temp. 40°C)
Efficiency pf=0,8 4/4	%	93.2
Couple engine		elastic disk
Short circuit current		>=300% (3In)
Degree of protection		IP 23
Cooling system		autoventilate
Maxium overspeed	RPM	2250
Waveform distortion	%	< 2
Exciter		diode bridge

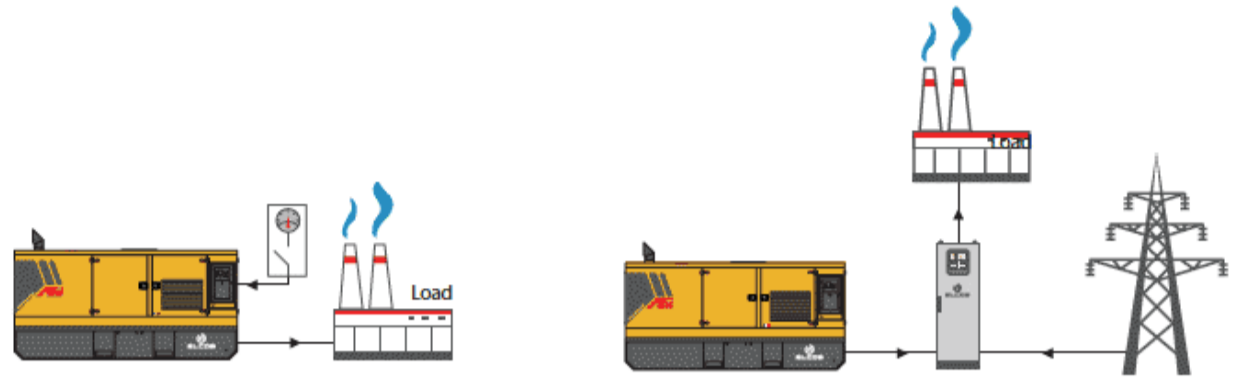
* Availability will vary according to the warehouse stock. However, in any case a primary brand will be used.

Standard operating environmental conditions

Ambient temperature	25°C
Relative Humidity	30%
Max altitude	1000mt

Control Systems on board**Variant +11 (QPE-C-VSC (105-250 SS + 275-400 SS + 450-630 SS))
Automatic control panel without switching on board**

The QPE-C panel represents the evolution of the panels for the control and management of the generating set, with its microprocessor logic it is able to meet any user-requested features. In fact, the dual operation mode MANUAL or AUTOMATIC guarantees to every type of functionality protection, analysis and control of the generating set in order to make the management easy and efficient. Variant +011 has separate switching inside a wall or floor ATS panel. IP55.



Optional

Canopy - Soundproofing

- Canopy customized painting (RAL)
- Double soundproofing-2 dB (A) at 7 mt
- Lift off doors kit
- IP 43 Conveyors

Exhaust

- Rain cap
- Exhaust flex tube
- (FAP) Antiparticulate - Exhaust catalyst

Fuel supply

- Diesel connections
- Oversized big tank
- Automatic fuel refilling system
- Tank connections 3 way valve

Engine

- Oil change pump
- Battery DC circuit breaker
- -40 C° Engine liquids
- Super hot Engine heater 230 V
- Automatic refilling oil system
- 1000 working hours spare parts kit

Alternator

- Parallel arranged AVR

Protection & connection Panel

- Differential protection (adjustable only on variant +10 & +11)

Panel

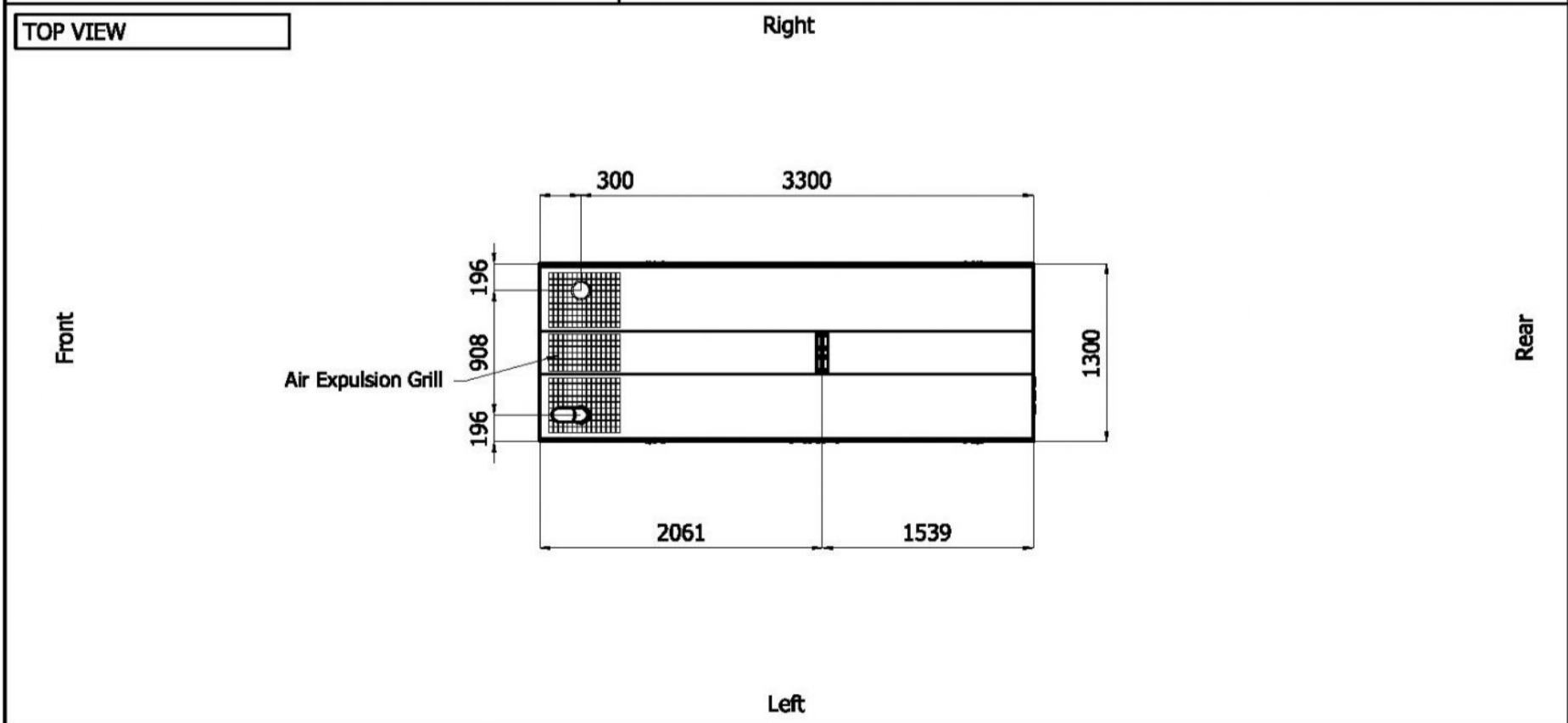
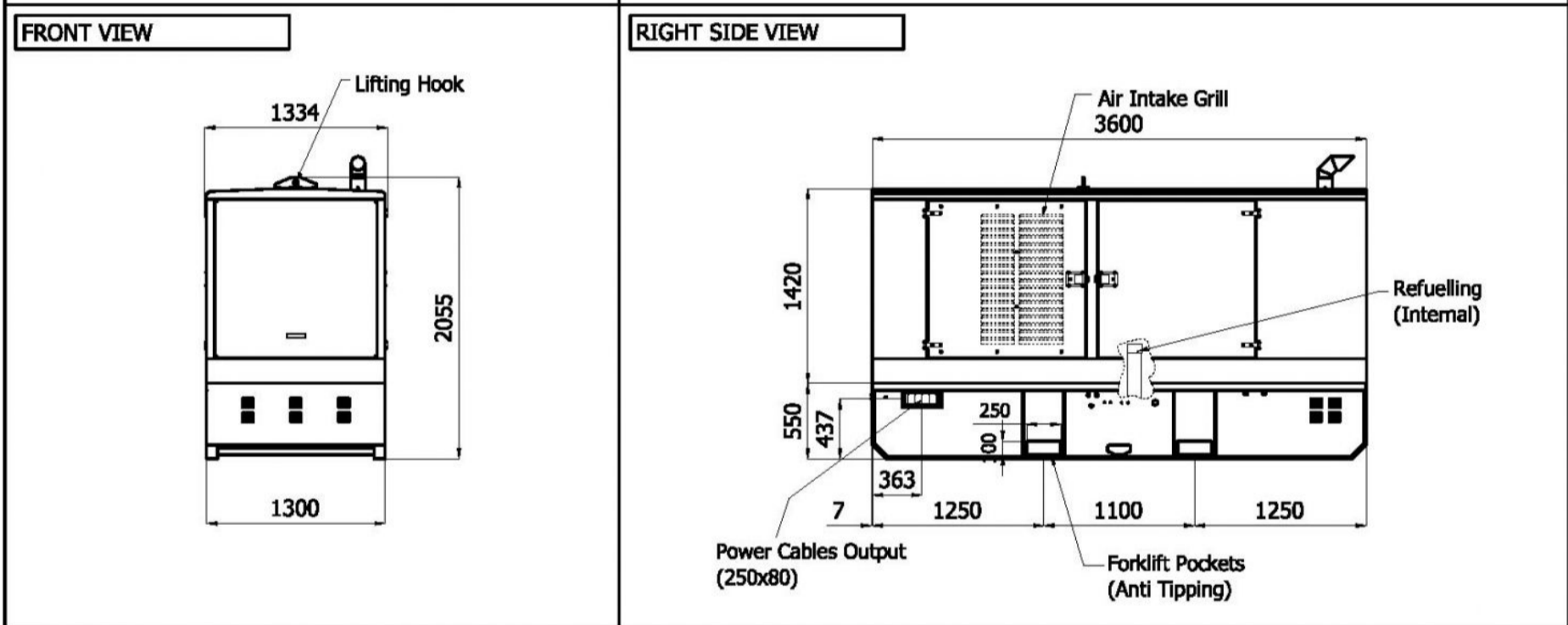
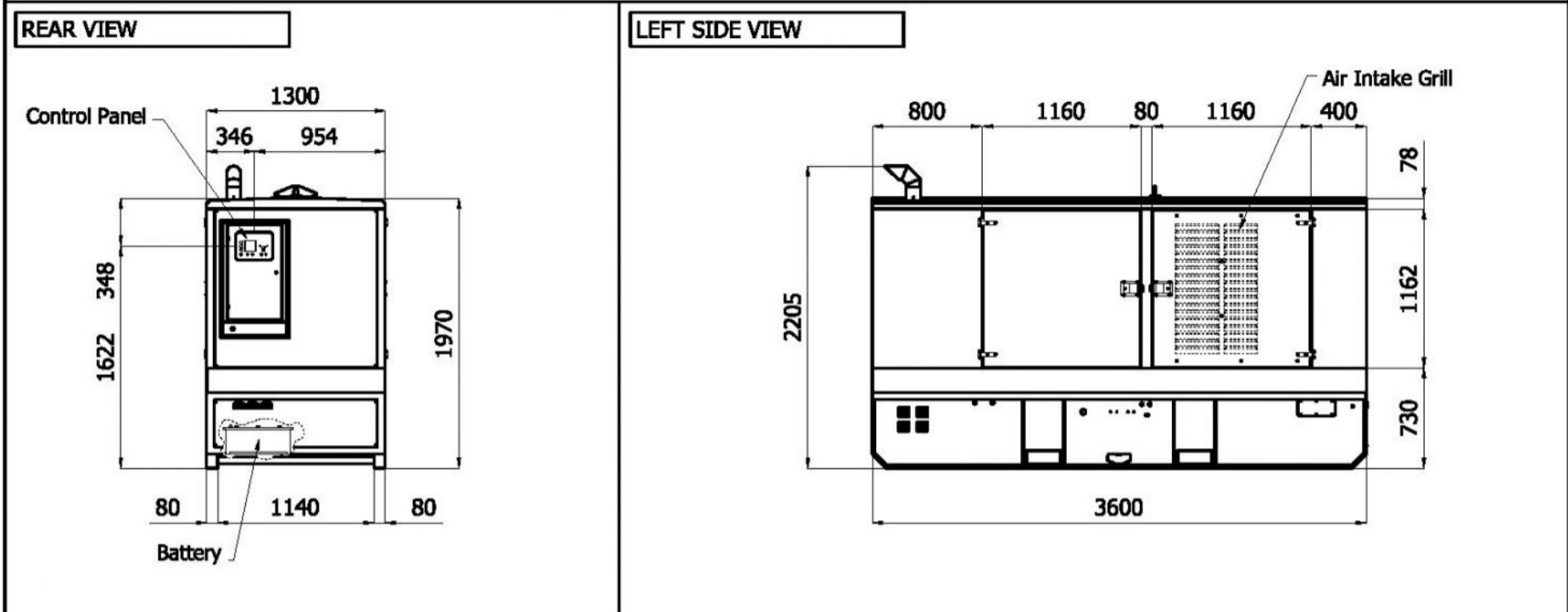
- ATS switching cabinet (QC) (only variant +11)
- Remote management software (only variant +10 & +11)
- Remote panel (only variant +10 & +11)
- Converter 485/USB (only variant +10 & +11)
- Converter 485/LAN (only variant +10 & +11)
- 16-relay module (only variant +10 & +11)
- GSM remote management modem (only variant +10 & +11)
- Radio control (only variant +11 & +12)
- UTIF counter with ARCUDI terminal box
- Socket module (only variant +11) 5 sockets
- GSM remote control system with web application without SIM card (only variant +10 & +11)
- GPS tracking system (only variant +10 & +11)

Other

- Toolbox for ordinary maintenance

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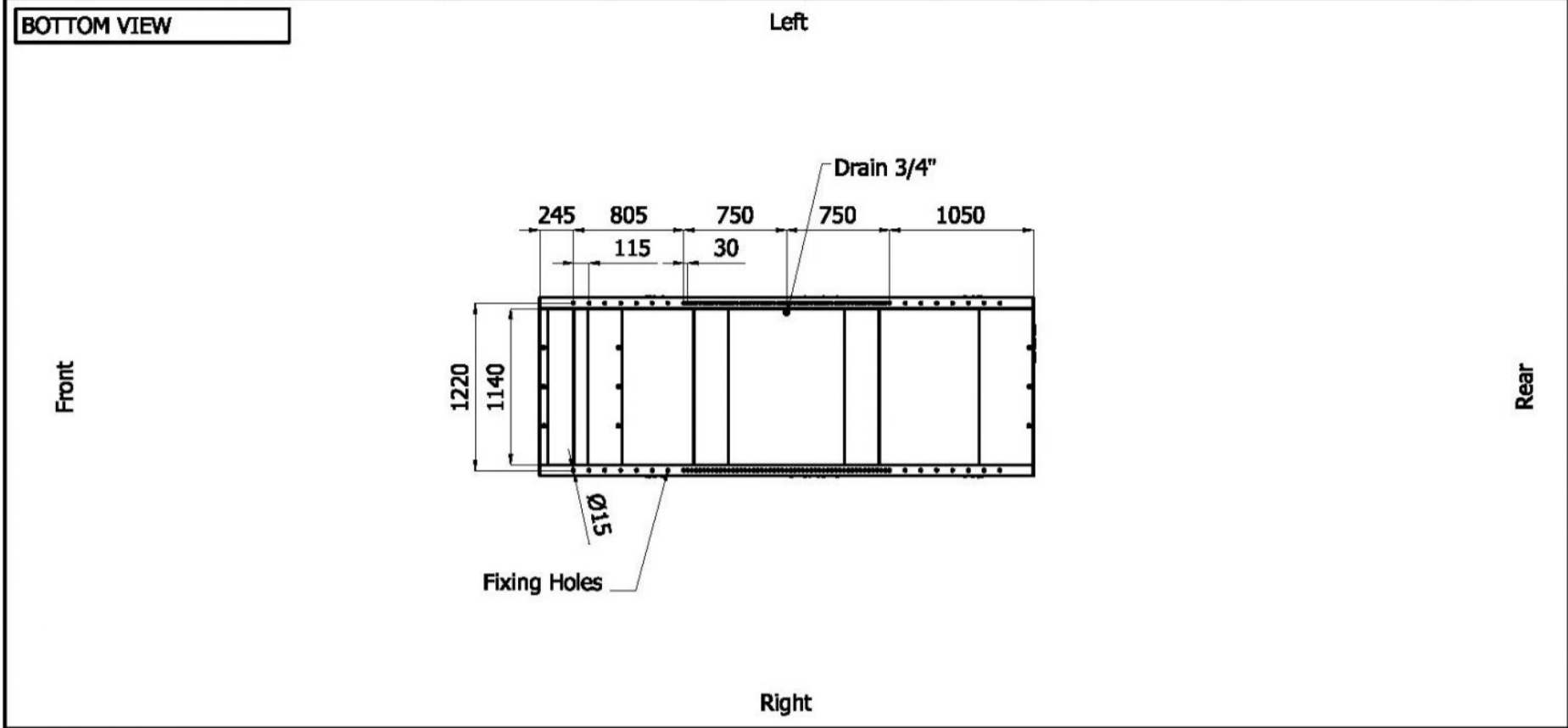
OVERALL DIMENSIONS [mm]



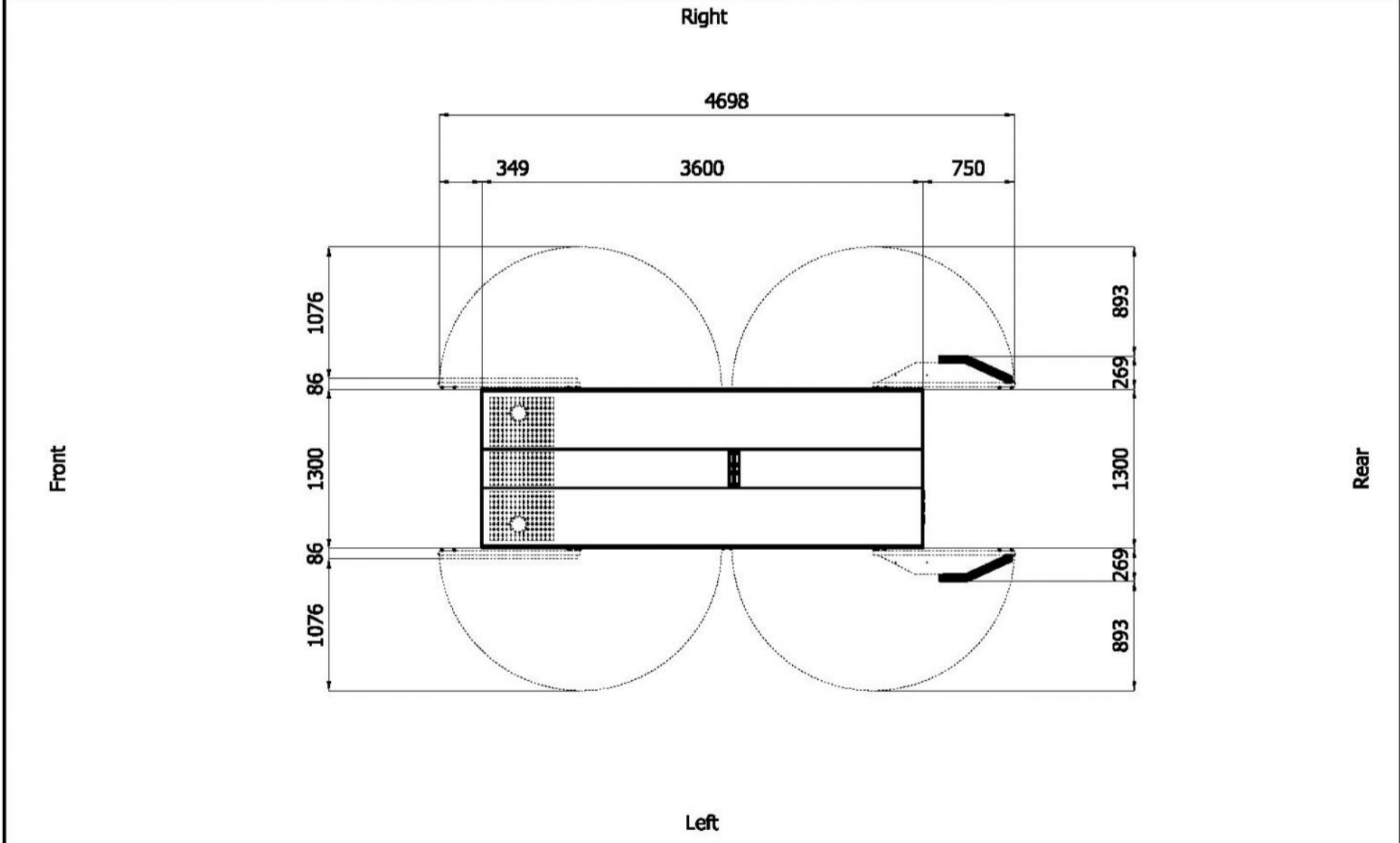
IMPORTANT:

- 1) Form and dimension refer to the generating set on catalogue
- 2) Form and dimension are subject to change in order to update or improve the products
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DIMENSIONS WITH OPEN DOORS [mm]



Note: With Lifting-Off Door Solution consider only canopy dimensions.
(Models with "Control Panel" behind rear door will mount a special cover to protect it)

VENTILATION OF THE ROOM

The windows area in the generating set room needs to be (recommended):
 Aspiration: 1.35 m²
 Expulsion: 0.70 m²
 ATTENTION: for a correct ventilation the expulsion air and the exhaust gas needs to be conveyed in the open-air

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