

Model: AD-220 - INDUSTRIAL RANGE

400/230 V - THREE-PHASE | 1.500 R.P.M. | 50 Hz

Genset with manual control panel.

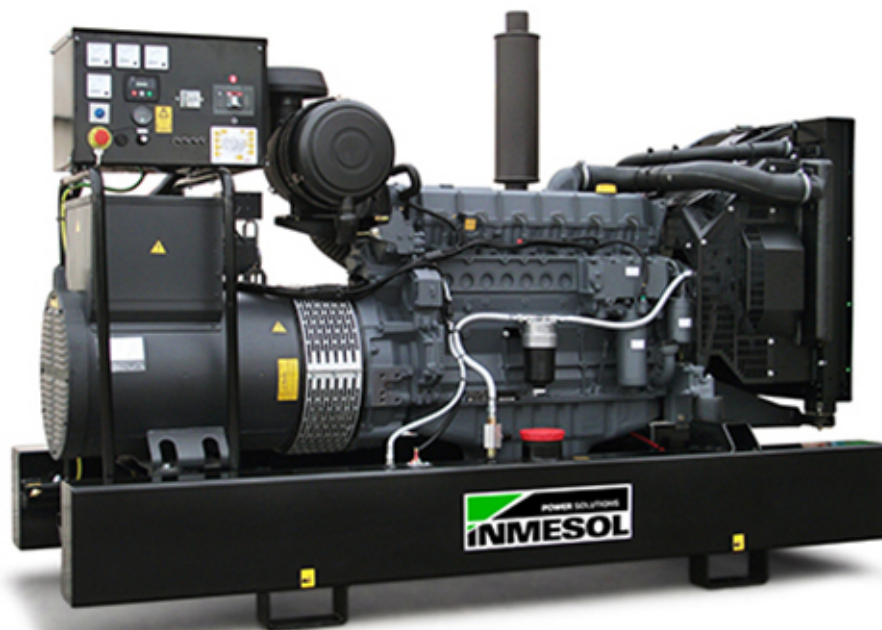


Image for guidance purposes.

PRP

CONTINUOUS POWER: 200 kVA

PRP "Prime Power" norma ISO 8528-1

LTP

STAND-BY POWER: 220 kVA

LTP "Limited Time Power" norma ISO 8528-1

ENGINE

MAKE	MODEL
DEUTZ	BF6M 1013 FC G2

ALTERNATOR

MAKE	MODEL
MECC-ALTE	ECO 38-2SN

VOLTAGE	HZ	PHASE	COS Ø	PRP kVA/kW	LTP kVA/kW	AMP. (LTP)
400/230	50	3	0,8	200,0/160,0	220,0/176,0	317,92

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ENGINE CHARACTERISTICS

MAKE	MODEL
DEUTZ	BF6M 1013 FC G2

General Data

Power PRP (kWm)	176.00
Power LTP (kWm)	193.80
No. cylinders	6
Cylinder capacity (L)	7.15
Diameter per stroke (mm)	108 x 130
Compression ratio	18.10
Cooling system	LIQUID
Injection	DIRECT
Suction	TURBO
Series regulator	ELECTRONIC
Fly wheel coupling	2 - 11,5"

Lubrication system

Oil capacity (L)	20
Oil consumption (%)	0.30
Min. alarm oil pressure (bar)	2.70

Ventilation system

Air cooling flow (m ³ /h)	11520
Combustion air flow (m ³ /h)	745.60
Max. back pressure for fan (mbar)	0

Exhaust system

Exhaust gas flow (m ³ /h)	2112
Exhaust back pressure (mbar)	30
Temp. exhaust gases (°C)	530

Electrical system

VDC (V)	12
Battery (Ah)	120
Engine start-up (kW)	3

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ALTERNATOR CHARACTERISTICS

MAKE	MODEL
MECC-ALTE	ECO 38-2SN

General Data

Power PRP (kVA)	200
Power LTP (kVA)	220
Efficiency Alt. 3/4 %	92.90
Efficiency Alt. 4/4 %	92.70
No. Poles	4
Voltage regulator	DSR
No. wires	12
Insulation	H
Xd (%)	200
X'd (%)	11
X	5.90
Degree of protection	IP21

GENERATOR SET CONSUMPTION

% POWER USED	LITRES/HOUR
50%	25.30
75%	37.70
100%	50.80

DIMENSIONS, CAPACITIES, APPROXIMATE WEIGHT

Dimensions (mm)		
LENGTH	WIDTH	HEIGHT
2500	1035	1840
FUEL TANK (LITRES)		WEIGHT (KG)
236		1820

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INMESOL GENERATOR SET

GENERAL DESCRIPTION

The “INMESOL” generator set is an electrical energy generating machine which is used in places where there is **no mains supply** or when there is a MAINS failure.

The mobile elements, distribution belt, fan, etc., and those parts which reach high temperatures during operation, exhaust manifold, etc, include their corresponding protections, in compliance with the requirements of the Machinery Directive **2006/42**.

REGULATIONS

The machine holds the “CE” marking, and the corresponding Declaration of Conformity is issued with each of them, in which it specifies that the machine complies with **R.D 842/2002 Low Voltage Regulations and with the European Directives:**

- 2006/42 on Safety in Machinery.
- 2006/95/CE on Electrical Safety.
- 2004/108/CE on Electromagnetic Compatibility.
- 2005/88/CE on NOISE EMISSIONS by equipment for outdoor use (for SOUNDPROOF GENERATOR SETS).

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IN **INDUSTRIAL**
RANGE

Scope of supply



Engine/alternator monobloc directly connected and installed via silent blocks on a frame made from high tensile electro welded steel profiles that are treated with degreasing liquids and applied with a phosphate coat and polyester (QUALICOAT) paint.

Fuel tank integrated in the base frame provided with fuel level gauge and fuel connections to the engine.

Engine with mechanical engine driven pusher fan.

Industrial silencer with -15 db(A) noise reduction and exhaust outlet tube.

Electric control cubicle with control module including protection and reading of electrical measures engine instrumentation fuel level and engine running hours, etc. remote start possibility

Thermal and magnetic circuit breaker and thermal and magnetic circuit breaker and earth fault relay.

Battery charge alternator.

Starter battery complete with cables to the engine and pole protection.

Installation prepared for earthing spike (spike not included).

Security protection for heat and moving parts as well as live electrical components.

External emergency stop push button.

Self excited and auto regulated alternator.

4 Lifting points for gen sets from 450 kVA and bigger.

Base frame is prepared for trailer kit installation.

Standard electronic speed governor on engines from 220 kVA (LTP) and up.

OPTIONS

Battery charger

Coolant preheating

AMF/ATS panel to turn a manual gen set to automatic version (consult the last page)

Residential silencer

V1 PREWIRED VERSION
FOR AMF

V2 GENSETS WITH AMF/ATS PANEL
AND 4 POLE CIRCUIT BREAKER

V3 GENSET WITH AMF CONTROL PANEL BUT WITHOUT ATS PANEL
AND SEPARATED ATS PANEL

ELECTRO EXIM SRL

ELECTRO EXIM SRL
21 Ialomicioarei St., sector 1, code 011277, BUCHAREST - ROMANIA
Phone: 0040 21 2231347 - 0040 744 755 390 - FAX: 0040 21 2231201
E-mail: office@electroexim.com - Web: www.electroexim.ro

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DSE 3110 MANUAL CONTROL PANEL

MANUAL CONTROL, PROTECTION AND DISTRIBUTION panel, assembled on the generator set in metal cabinet with a DSE 3110 engine protection unit.



Image for guidance purposes.

It has the following:

1. STARTER SWITCH

2. EMERGENCY STOP PUSHBUTTON

3. MEASURING INSTRUMENTS:

Analogue(s) ammeter(s)

Fuel level indicator.

Analogue voltmeter

Digital Hz display and hour meter (DSE 3110)

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DSE 3110 MANUAL CONTROL PANEL

4. SET CONTROL AND ENGINE PROTECTION: DSE 3110, allows:

START AND STOP the set MANUALLY.

Possibility of doing it AUTOMATICALLY via START ON SIGNAL

Digital readings of the operating hours and the Frequency

Controls the main characteristics of the engine, causing an alarm or stopping the machine:

- Low and High Voltage (STOP)
- Low and High Frequency and Speed (STOP)
- Low Oil Pressure and High Coolant Temperature (STOP)
- Failure of the Alternator Battery-Charger (ALARM)
- Low fuel level (ALARM)

5. PROTECTIONS

MAGNETO. PROTECTION (A)	EARTH LEAK PROTECTION	DISTRIBUTION
400A, 3P	Electronic, adjustable	Direct from circuit breaker

OPTIONS

OPTIONAL 1:

AUTOMATIC PANEL FOR MANUAL GENERATOR: ATS DSE 334

This panel provides the manual control generator with a reserve operation from the Mains, as the ATS sends the command to start and stop the generator. when it detects a supply failure and when the Mains is restored.



Image for guidance purposes.

It has the following:

Change over switch made up of two contactors with mechanical and electrical latching.

Battery charger

Fuses

Mains and group input and charge output connection terminal block.

DSE 334 Automatic Transfer Control Module, providing the following functions and features:

- Output to voltage free relay.
- Automatic supply failover.
- Real time clock
- 10 inputs and 5 outputs can be customised
- Events log
- Customisable timers
- Setup can be completed through PC and/ or through the panel itself.
- LED indicators.
- Four-line screen
- Input for generator set failure.
- Electric current monitoring (optional)
- Voltage levels can be adjusted to mains failure
- Generator availability indicator.
- Start signal to the engine

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OPTIONS

OPTION 2:

FAILOVER TO DSE 6010 MKII MANUAL DIGITAL CONTROL MODULE

LCD SCREEN:

It has a digital LCD screen, which provides easy reading of the information regarding the ENGINE, ALTERNATOR and CHARGING.

ENGINE:

Coolant temperature

Oil pressure

Turning speed (rpm)

Fuel level

Battery voltage

Battery alternator voltage

Operating hours

Number of start-ups

ALTERNATOR AND CHARGE:

Voltages between phases and between phases and neutral.

Intensities

Frequency

CONTROL OF THE SET:

START AND STOP the set MANUALLY.

Possibility of doing it AUTOMATICALLY via START ON SIGNAL.

PROTECTION OF THE ENGINE AND ALTERNATOR, WITH THE ALARMS ACTIVATED:

ENGINE:

Low oil pressure

High coolant temperature

Low and High battery Voltage.

Failure of the alternator to charge batteries

Low fuel level..

ALTERNATOR:

Low and High Voltage

Low and High Frequency

Overload due to Intensity (A)

OTHER CHARACTERISTICS:

The real-time clock records the last 50 events.s.

Configurable inputs and outputs.

Configurable alarms and timers.

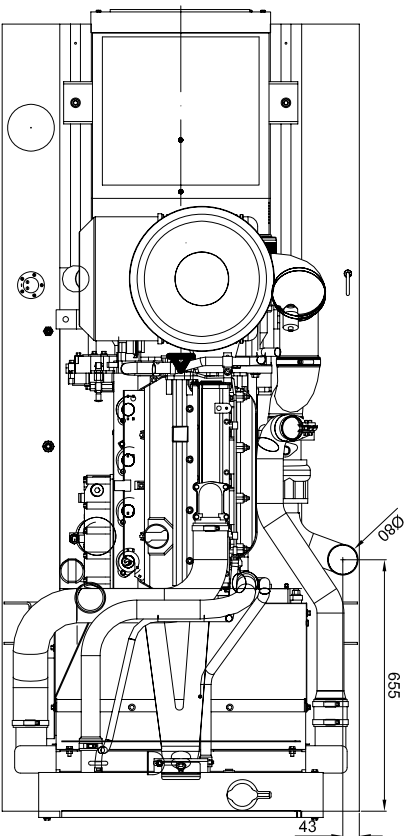
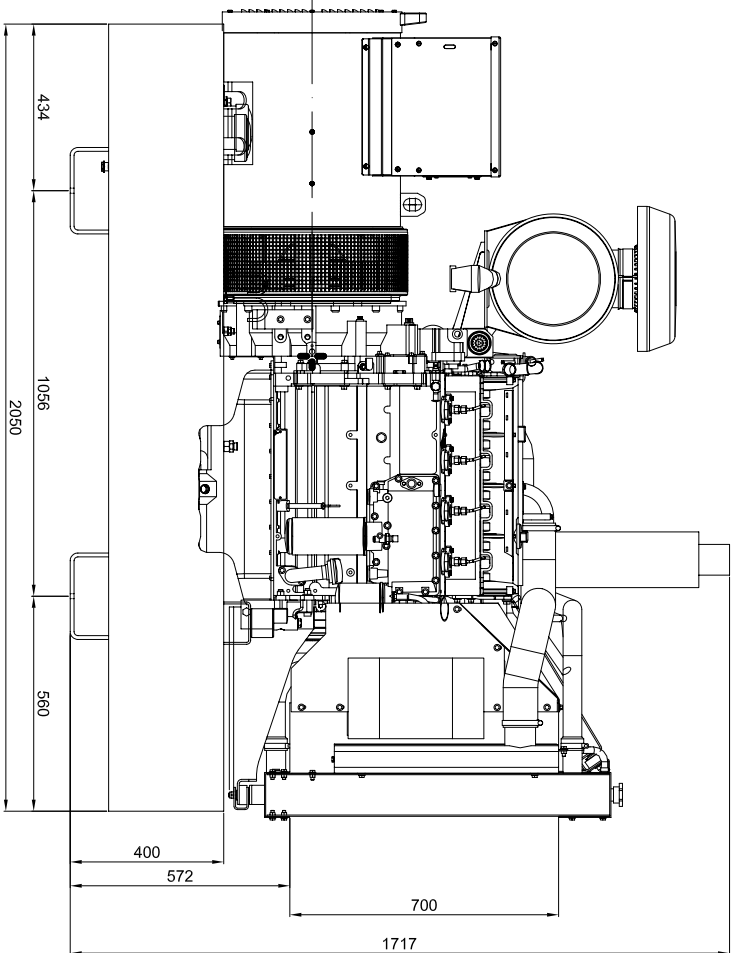
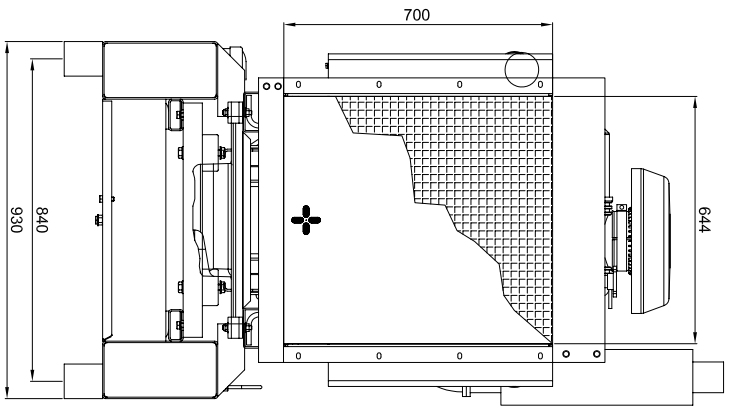
USB connectivity

Fully configurable via software and PC.

Communication via USB cable for remote control

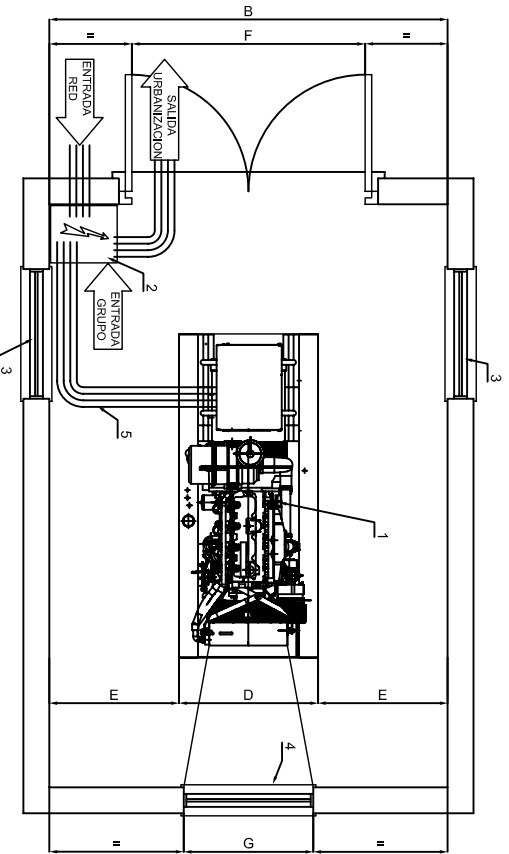
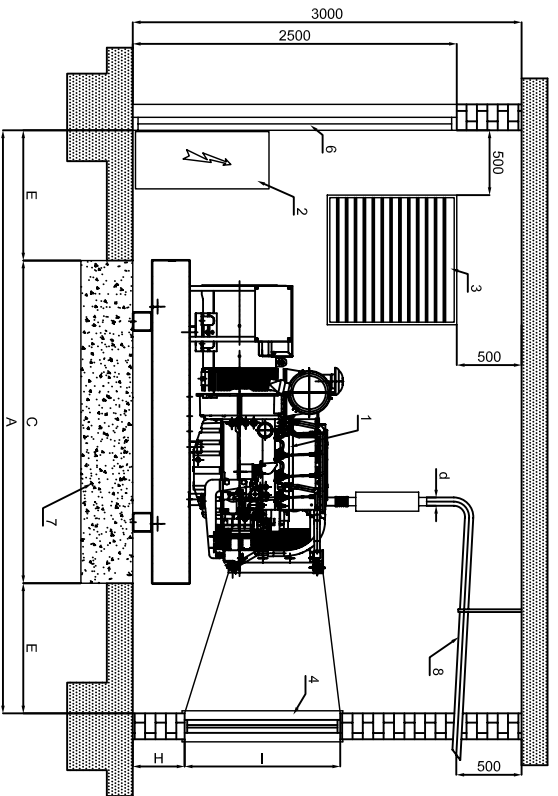
Programmable clock with multiple maintenance events which can be configured for optimal motor functioning. Weekly and/or monthly programming for up to 8 startups and shutdowns per week.

ALTERNATIVE CONFIGURATIONS, which open up the working possibilities.



CAPACIDAD DE DEPOSITO = 211,5 LTS

		<p>Las tolerancias o surtidos de aparatos de origen, a de fabricacion, se especifican en el dibujo. En caso de haber modificaciones, se avisara con la debida anticipacion. Se autoriza a los clientes a solicitar modificaciones en los detalles de los aparatos, siempre que no afecten a la seguridad de funcionamiento de los mismos.</p>	
PROYECTO:	G.E. EST-STD 105 Kva DEUTZ (AGUA)		
MODIFICADO	J.S.BELAR	MATERIAL	TOLERANCIA GENERAL
COMPROBADO	A.L.SOLANO	UDS.	mm
FECHA	12-Ago-2011	EXPEDIENTE:	
ESCALA		Nº PLANO	MARCA



DIMENSIONES DE SALA SEGUN POTENCIA											
POTENCIA	A	B	C	D	E	F	G	H	I	d	PESO SECCION HUECO ENTRADA AIRE
30 Kva	3700	2300	1700	730	1000	1250	700	400	600	50	620 kg
40 Kva	3700	2300	1700	730	1000	1250	700	500	600	80	700 kg
60 Kva	3900	2500	1900	900	1000	1400	700	500	600	80	1000 kg
85 Kva	4050	2500	2050	930	1000	1430	800	500	700	80	1100 kg
105 Kva	4250	2500	2250	930	1000	1430	800	500	800	80	1320 kg
130 Kva	4357	2500	2357	1035	1000	1535	800	500	800	80	1460 kg
150 Kva	4500	2500	2500	1035	1000	1535	800	500	800	80	1620 kg
200 Kva	4500	2500	2500	1035	1000	1535	900	500	900	110	1740 kg
250 Kva	5000	2500	3000	1200	1000	1700	900	500	900	110	2200 kg
312 Kva	4750	2500	2750	1515	1000	2015	1000	500	1100	2x110	2940 kg
380 Kva	4750	3000	2750	1515	1000	2015	1300	500	1300	2x110	3360 kg
429 Kva	5000	3000	3000	1815	1000	2315	1300	500	1300	2x110	3700 kg
500 Kva	5000	3000	3000	1815	1000	2315	1300	500	1300	2x110	3920 kg

- NOMENCLATURA**
- 1.- GRUPO ELECTROGENO
 - 2.- CUADRO DE CONTROL
 - 3.- HUECO ENTRADA DEL AIRE
 - 4.- TUNEL DE EXPULSION DEL AIRE
 - 5.- BANDEJA PASACABLES
 - 6.- PUERTA DE ACCESO
 - 7.- BASE HORMIGON ARMADO H-175
 - 8.- TUBO DE ESCAPE
 - 9.- MANGUITO FLEXIBLE
 - 10.- SILENCIADOR DE ESCAPE

EL Ø DE LA TUBERIA DE EXTENSION DEL ESCAPE PUEDE SER EL MISMO QUE EL DEL SILENCIADOR HASTA 5 m. PARA DISTANCAS MAYORES DE 5 m. DEBE AUMENTARSE EL Ø DE LA TUBERIA 10 mm POR CADA 10 m MAS DE DISTANCIA ENTRE EL GRUPO ELECTROGENO Y LA SALIDA EXTERIOR

CALCULO ESPESOR LOSA DE HORMIGON

$$D = \frac{W}{d \times B \times L}$$

D = altura bloque de hormigon
W = peso total grupo electrogeno
d = densidad del hormigon (2400 kg/m³)
B = anchura bloque de hormigon (m)
L = longitud bloque de hormigon (m)

h = 20/100 mm

INMESOL NEWLINE SOLUTIONS

PROYECTO: **GRUPO ESTATICO ESTANDAR DEUTZ**

MODIFICADO	J.S.BELAR	07-Sep-2011	MATERIAL
DIBUJADO	J.S.BELAR	03-Mar-2006	TOLERANCIA GENERAL
COMPROBADO	A.L.SOLANO	07-Sep-2011	UDS.

GRUPOS EST-STD DEUTZ
DIMENSIONES DE SALA

ESCALA

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RESO

ESCALA