Code: IVI0250648T6010400M

Model: IV-250 - INDUSTRIAL RANGE | 480/277 V - THREE-PHASE | 1.800 R.P.M. | 60 Hz

Genset with manual control panel.

Image for guidance purposes.

PRP

CONTINUOUS POWER: 225 kVA

PRP "Prime Power" norma ISO 8528-1

LTP

STAND-BY POWER: 249 kVA

LTP "Limited Time Power" norma ISO 8528-1

ENGINE

MAKE	MODEL
VOLVO	TAD733GE

ALTERNATOR

MAKE	MODEL
LEROY-SOMER	TAL044-M

VOLTAGE	HZ	PHASE	COS Ø	PRP kVA/kW	LTP kVA/kW	AMP. (LTP)
480/277	60Hz	3	0,8	224,2/179,4	248,8/199,0	299,26

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ENGINE CHARACTERISTICS

MAKE	MODEL
VOLVO	TAD733GE

General Data

Power PRP (kWm)	192
Power LTP (kWm)	214
No. cylinders	6
Cylinder capacity (L)	7.15
Diameter per stroke (mm)	108 x 130
Compression ratio	18
Cooling system	LIQUID
Injection	DIRECT
Suction	TURBO-INTERC.
Series regulator	ELECTRONIC
Fly wheel coupling	2-11.5

Lubrication system

Oil capacity (L)	34
Oil consumption (%)	0.09
Min. alarm oil pressure (bar)	2

Ventilation system

Air cooling flow (m^3/h)	17640
Combustion air flow (m^3/h)	948
Max. back pressure for fan (mbar)	

Exhaust system

Exhaust gas flow (m^3/h)	2664
Exhaust back pressure (mbar)	75
Temp. exhaust gases (°C)	530

Electrical system

VDC (V)	24
Battery (Ah)	2 x 120
Engine start-up (kW)	5.5

POWER GENERATORS INMESOL

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ISO 9001 BUREAU VERITAS Certification

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ALTERNATOR CHARACTERISTICS

MAKE	MODEL
LEROY-SOMER	TAL044-M

General Data

Power PRP (kVA)	250
Power LTP (kVA)	275
Efficiency Alt. 100 %	93.4
Efficiency Alt. 110 %	93
No. Poles	4
Voltage regulator	AREP+ R180
No. wires	6
Insulation	H
Xd (%)	397
X'd (%)	19.6
X	11.7
Degree of protection	IP23

GENERATOR SET CONSUMPTION

% POWER USED	LITRES/HOUR
50%	26
75%	38
100%	51

DIMENSIONS, CAPACITIES, APPROXIMATE WEIGHT

Dimensions (mm)		
LENGTH	WIDTH	HEIGHT
3640	1200	2295

FUEL TANK (LITRES)	WEIGHT (KG)
360	3130

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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**.

ISO 9001 BUREAU VERITAS Certification

INMESOL S.L company with ISO 9001 quality certification system for the:

Design, manufacture, marketing and technical assistance of power GENSETS, lighting towers, welding GENSETS, tractor with PTO GENSET and hybrid generation systems.

Europe regulations:

Inmesol power GENSET sets comply with European legislation and were given the CE marking which includes the following directives:

- 2006/42/EC on machinery safety.
- 2005/88/EC on NOISE EMISSIONS by equipment for outdoor use (amends the 2000/14/EC).
- 2014/30/UE on Electromagnetic Compatibility.
- 2014/35/UE on electrical safety, electrical equipment designed to be used within certain voltage limits

International regulations:

Upon request, INMESOL can supply equipment that complies with the International Legislation and Regulations:

- “Technical Regulation on Safety of Machinery & Equipment” No. 753, repealing GOST R standards for exports to Russia.
- Resolution nº 90708 dated August 30th 2013 “Reglamento Técnico de Instalaciones Eléctricas RETIE” issued by the Ministry of Mining and Energy, Section 20.21 Engines and power generators, for exports to Colombia.

Information:

The power ratings are for reference to environmental conditions: barometric pressure 100 kPa, 25°C and 30% relative humidity. These are defined by ISO 8528 and ISO 3046.

PrimePower (PRP) “Main Service” is applicable for power GENSETs that function as main electric power source. It may be overloaded by 10% in limited time points, maximum once every 12 hours.

StandbyPower (LTP) “Emergency Service” applies to power GENSETs that run during Electrical Grid failure. This power may NOT BE OVERLOADED.

Nevertheless, to obtain long engine life, it is recommended that the active power average load (kW) connected to the power GENSET set in any period of 24 hours of operation does not exceed the following values:

- In Main Service 70% of the PRP power.
- In Emergency Service during Electrical Grid failure 80% of the LTP power.

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POWER GENERATORS INMESOL

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Model: IV-250 - INDUSTRIAL RANGE | 480/277 V - THREE-PHASE | 1.800 R.P.M. | 60 Hz

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 aplicated with a phosphate coat and polyester (QUALICOAT) paint.
Canopy of steel sheet sound proofed with fireproof rockwool, and treated with degreasing liquids and aplicated with a phosphate coat and polyester (QUALICOAT) paint.
Sealed chassis
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.
Residential silencer with -35 db(A) noise reduction with exhaust tube and protection cap.
Electric control cubicle with control module including protection and reading of electrical meassures engine instrumentation fuel level and engine running hours, etc. remote start possibility
Termal 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.
Manual engine oil extraction pump.
Self excited and auto regulated alternator.
Integrated lifting hook for single point lifting with crane, gensets up to 450 kVA (Except in swing-out cover model)
Base frame is prepared for trailer kit installation.
Standard electronic speed governor on engines
Horizontal outlet for hot air (till canopy 4200x1600x2245)

OPTIONS

Battery charger
Coolant preheating
AMF/ATS panel to turn a manual gen set to automatic version
Integral additional socket panel from 20 kVA till 400 kVA PRP

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DSE 6110 MKIII MANUAL CONTROL PANEL

MANUAL CONTROL, PROTECTION AND DISTRIBUTION panel, assembled on the generator set in metal cabinet with a DSE 6110 MKIII engine protection unit.

Image for guidance purposes.

It has the following:

1. STARTER SWITCH

2. PROTECTIONS:

Magnetothermal Protection.
Earth Leak Protection
Protection fuses for control module

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3. DSE 6110 MKIII PROTECTION CONTROL MODULE.

LCD SCREEN:

It is equipped with a digital LCD screen, which makes it easy to read the information concerning the ENGINE, ALTERNATOR and LOAD available in several languages. The readings that can be obtained are:

ENGINE:	ALTERNATOR AND CHARGE:
Coolant temperature	Voltages between phases and between phases and neutral.
Oil pressure	Intensities
Turning speed (rpm)	Frequency
Fuel level	
Battery voltage	
Battery alternator voltage	
Operating hours	
Number of start-ups	

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:	ALTERNATOR:
Low oil pressure	Low and High Voltage
High coolant temperature	Low and High Frequencya
Low and High battery Voltage.	Overload due to Intensity (A)
Failure of the alternator to charge batteries	Low load
Low fuel level..	

OTHER CHARACTERISTICS:

The real-time clock records the last 100 events.s.	Fully configurable via software and PC.
Configurable inputs and outputs.	Communication via USB cable for remote control
"DSE Net" for the connection of expansion modules. The possibilities of adapting the operation of the generator sets to the different current applications are expanded.	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.
Configurable alarms and timers.	ALTERNATIVE CONFIGURATIONS, which open up the working possibilities.
USB connectivity	DATA LOGGING. Option to display, either graphically or in editable tables, information on the genset operation.
Sleep Mode	Option to inhibit start-up by external signal during a specific period.
Internal PLC editor	Customisable power up text and images
Fuel and start outputs configurable when using CAN.	Five key menu navigation
Tier 4 ECO engine support including exhaust fluids & filtres	Backed-up real time clock.
CAN, MPU & alternator speed sensing (selectable depending on engine type).	

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4. PROTECTIONS

MAGNETO. PROTECTION (A)	EARTH LEAK PROTECTION	DISTRIBUTION
400A, 3P	Electronic, adjustable	Power terminals

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