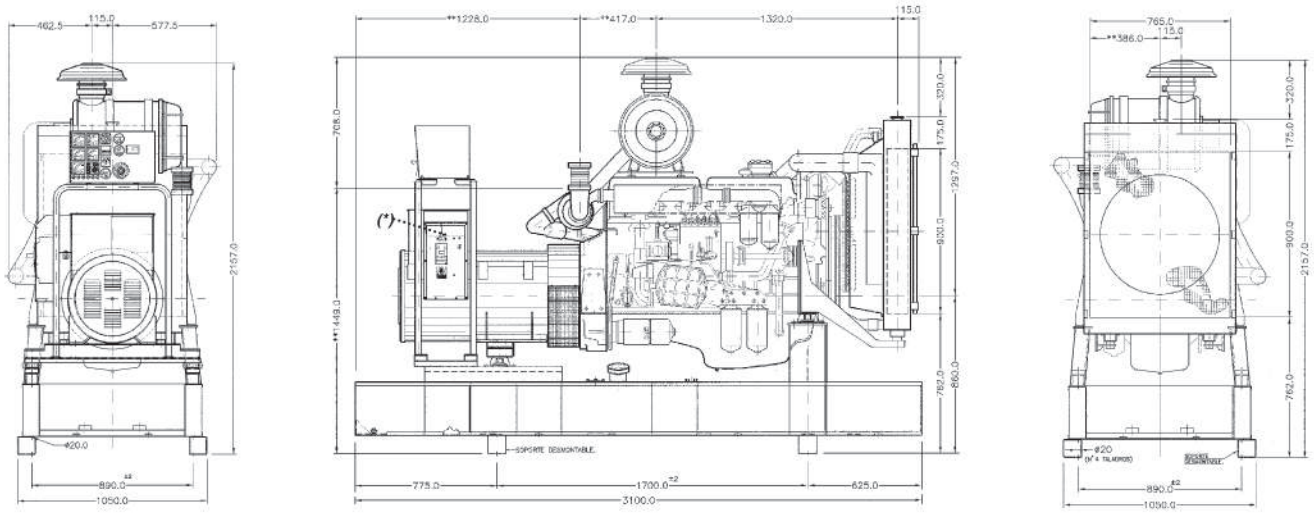
Version
Open skid version

Weight : 2.600 Kg.
Dimensions : 3.100 x 1.155 x 2.160 mm
Fuel tank capacity : 610 Lts.

HIW 250• 265 kVA at 50 Hz - 292 kVA at 60 Hz

Tor



(*): MCCB Shown on front view for display purposes ONLY. Actual location on left lateral view.

GENERATING SET PERFORMANCE		50 Hz		60 Hz	
SERVICE		*Max.Standby Power (F.S.P.) (3)*	*Prime Power (P.R.P.)(1)-(L.T.P.)(2)*	*Max.Standby Power (F.S.P.) (3)*	*Prime Power (P.R.P.)(1)-(L.T.P.)(2)*
Rated output	kVA	265	250	292	265
Active power output at 0,8 p.f.	kW	220	200	234	212
Rated speed	r.p.m.	1.500		1.800	
Standard voltage	V	400		440	
Voltage available	V	380/220 to 415/240	-	220/127 to 480/277	

Ambient reference conditions: *1.000 mbar, 27°C, 30% relative humidity.*
** The indicated performance may change according to the alternator model.*

PRIME MOVER PERFORMANCE		1.500 r.p.m.		1.800 r.p.m.	
SERVICE		*Max.Standby Power (F.S.P.)**	*Prime Power (P.R.P.)-(L.T.P.)**	*Max.Standby Power (F.S.P.)**	*Prime Power (P.R.P.)-(L.T.P.)**
Rated output	kW	243	221	263	239
	CV	330	300	357	325
BMEP	kg/cm²	14,3	13,0	12,9	11,8
	MPa	1,40	1,28	1,27	1,16
Mean piston speed	m/s	7,8		9,4	
	ft./sec.	25,6		30,8	
Flywheel housing		SAE 1 / 14"			

Ambient reference conditions: *1.000 mbar, 25°C, 30% relative humidity. Rating according to ISO 3046.*
** Net performance at flywheel with tolerance of ± 3% and available after ~ 50 hours running.*

(1) *Prime Power (P.R.P.) - ISO 8528: prime power is the maximum power available during a variable power sequence, which may be run for an unlimited number of hours per year, between stated maintenance intervals. The permissible average power output during a 24 hours period shall not exceed 80% of the prime power. 10% overload available for governing purposes only.*

(2) *Limited Time Running Power (L.T.P.) - ISO 8528: the limited time running power is the maximum power which a generating set is capable of delivering for up to 500 h per year of which a maximum of 300 h is continuous running, between stated maintenance intervals..*
10% overload available for governing purposes only.

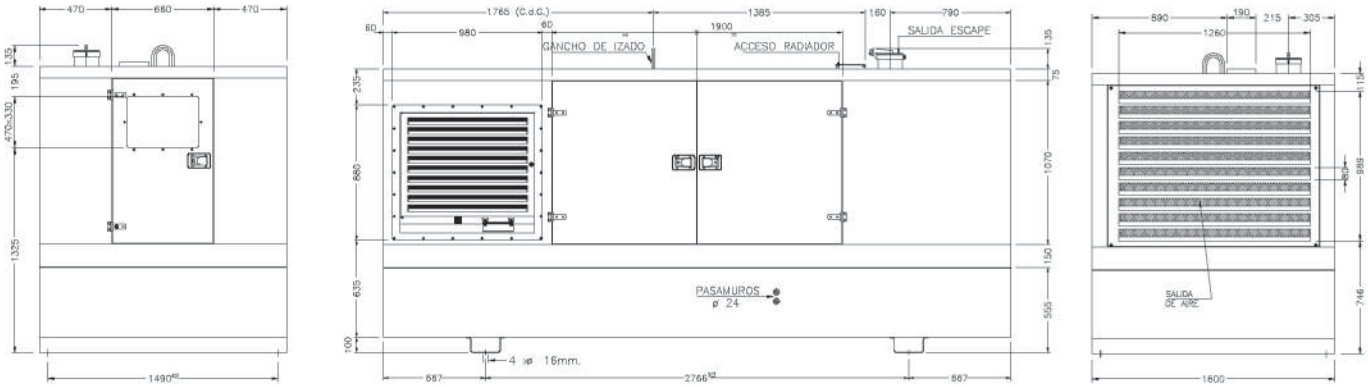
(3) *Max Stand-by power (ISO 3046 Fuel Stop power): power available for use at variable loads for limited annual time (500h), within the following limits of maximum operating time:*
100% loads 25 h per year - 90% loads 200 h per year
No overload available. Applicable in case of failure of the main in areas of reliable electrical network.

Soundproofed version

Weight : 3.965 Kg.
Dimensions : 4.100 x 1.600 x 1.985
Fuel tank capacity : 292 Lts.
dB(A) : 65,5

HIW 250• 265 kVA at 50 Hz - 292 kVA at 60 Hz

Tor



PRIME MOVER DATA

Manufacturer		**IVECO** *aifo*
Model		8210 SRi 25
Diesel 4 stroke - Injection type		direct
Aspiration type		turbocharged aftercooled
Cylindres, number and arrangement		6 in line
Bore x stroke	mm • in	137 x 156 • 5,39 x 6,14
Total displacement	L • In^3	13,8 • 842
Cooling system		liquid coolant
Lube oil specifications		MIL-L2104E (ACEA E3-96)
Specific fuel consumption (prime) [4]	g/kWh	(50 Hz) 205 • (60 Hz) 217
Specific fuel consumption (at full load)		0,8% max.of fuel consumption
Speed governor	type • class	electronic • A1
Air filter		dry

4) Fuel consumption values (g/kWh), with ± 5% tolerance, refer to a run-in engine fed with Diesel fuel having a net calorific value of 42.840 kj/kg (10.200 kcal/kg)

SYNCHRONOUS GENERATOR *

Poles	Nº	4
Phases	Nº	3 + N
(Standard) winding connections		Star-series
Frame mounting		B 2
Cooling		by ventilating fan
Windings treatment	type	for humid and saline
Insulation	class	H
Damper windings		for parallel
Enclosure (according to IEC 34-5)		IP21
Waveform distorsion		no more than 5%
Overexcitation device (option)		per Icc ≥ 3 In
Exciter		brushless exciter design with solid state
Voltage regulator		static electronic design
Steady voltage precision		Within ±1,5% from no load to full with cos ϕ=0,8÷1

**Alternators used by HIMOINSA Gensets meet the requirements of following Standars: ISO 8528; IEC 34-1; CEI 2-3; VDE 0530; BS 4999-5000; NF 51-100*
**** Ambient reference conditions:** 1.000 mbar, 27ºC, 30% relative humidity.*

GENERATING SET INSTALLATION DATA

EXHAUST SYSTEM

		50 Hz	60 Hz
Max. exhaust temperature at full load (after turbine)	°C	450	410
	°F	842	770
Exhaust gas flow	Kg/h	1.270	1.590
	lb/h	2.794	3.498
Heat rejected to exhaust	kcal/ kWh	640	680
Maximum allowable back pressure	mm H_2O	500	
	in H_2O	19,6	

ENGINE ROOM AIR REQUIREMENT

		50 Hz	60 Hz
Fan air flow	m^3/s	4,7	6,8
	ft^3/s	166	240
Air requirement for combustion at 100% load /rated speed	m^3/h	1.050	1.320
	ft^3/min	604	760
Heat radiated to ambient (engine) and generator	kcal/ kWh	198	204

COOLING SYSTEM

		50 Hz	60 Hz
ATB (without canopy) - nominal rating	°C	50	
	°F	122	
Heat rejected to coolant (water+oil)	kcal / kWh	400	460

ELECTRIC STARTING SYSTEM

Breakaway current	A	1.670
Cranking motor rating	kW	6,6
Minimum recommended battery capacity	Ah	2 x 155
Auxiliary voltage	Vcc	24

LIQUID CAPACITY (REFILL)

Lube oil total system including sump, filters etc.	kg	~ 25
	l	~ 27,5
	qts	~ 29
Jacket water engine only	l	~ 36
	qts	~ 38
Oil capacity of standard sump	kg	~ 12
at minimum level	l	~ 13,2
	qts	~ 14
	kg	~ 20
at maximum level	l	~ 22
	qts	~ 23

GENERATING SET TRANSPORT DATA

Basic data Open skid genset

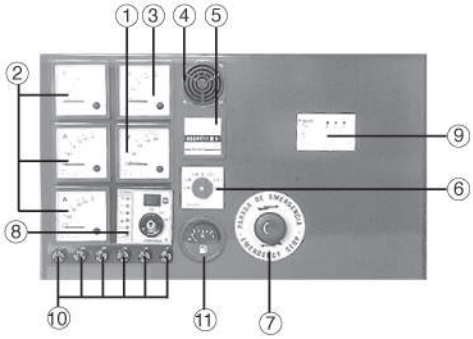
Shipping volume seaworthy packing	m^3	11,8
	ft^3	416,7
Dry weight (with standard accessories)	kg	≈ 2.600
	lb	≈ 5.720

Basic data Soundproofed genset

Shipping volume seaworthy packing	m^3	19,9
	ft^3	702,8
Dry weight (with standard accessories)	kg	≈ 3.965
	lb	≈ 8.723

KEY START CONTROL

Key start control panel for **open skid** version



Optional:
24V Gauges, 1 Water Temperature
& 1 Oil Pressure.

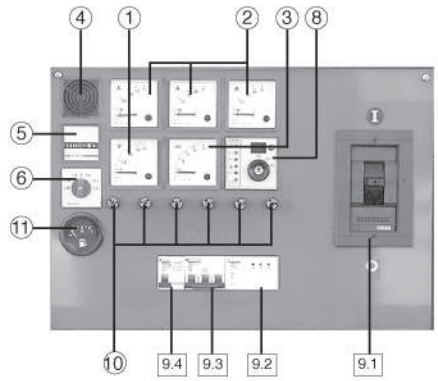
"MSE"

(Control panel mounted on supports above alternator) + MPM 400

1.- Voltmeter 72x72 (0-500V).
2.- 3 Ammeters
3.- Frequency meter 45Hz-65Hz 220V.
4.- Acoustic alarm 12-24V.
5.- Hour meter 230V.
6.- Voltmeter selector switch (L1-LN; L2-LN; L3-LN; L1-L2; L2-L3; L3-L1).
7.- Emergency stop button.
8.- Key start Switchboard 12/24 CTME 01 with overspeed control
9.- Electronic differential relay (without retard).
10.- Protection fuses (from right to left)
- 10.1 Protect the electronic regulation
- 10.2 Protect the electronic switchboard
- 10.3 Protect the differential relay + coil
- 10.4 Protect the W Phase
- 10.5 Protect the V Phase
- 10.6 Protect the U Phase

11.- Fuel level gauge.
12.- Speed electronic regulation, in the control panel (only in complete genset supply)
13.- Thermal magnetic protection three poles, in moulded case at side of the alternator (MCCB), including maximum coil, toroid and copper bars.

Key start control panel for **soundproofed** version



Optional:
24V Gauges, 1 Water Temperature
& 1 Oil Pressure.

Located on the canopy:
- *Output terminal*
- *Auxiliary plugs*
- *Emergency stop button*

"MHE"

(Control and protection panel fitted inside the canopy and accessible by rear door)

1.- Voltmeter 72x72 (0-500V).
2.- 3 Ammeters.
3.- Frequency meter 45Hz-65Hz 220V.
4.- Acoustic alarm 12-24V.
5.- Hour meter 230V.
6.- Voltmeter selector switch (L1-LN; L2-LN; L3-LN; L1-L2; L2-L3; L3-L1).
7.- Emergency stop button.
8.- Key start Switchboard 12/24 CTME 01 with overspeed control
9.- **Thermal magnetic protections:**
- 9.1. Thermal magnetic protection three poles, including toroid and maximum coil.
- 9.2. Electronic differential relay (without retard).

Secondary protections:
- 9.3. Thermal magnetic protection 16 A., 3P, for protected plug of industrial use standard CEI EN 60309-1-2, 3P+N+Ground.
- 9.4. Magneto thermal differential automatic breaker, 1P, 16A, for protected plug of industrial single phase + ground.

10.- Protection fuses (from right to the left)
- 10.1 Protect the electronic regulation
- 10.2 Protect the electronic switchboard
- 10.3 Protect the differential relay + coil
- 10.4 Protect the U Phase
- 10.5 Protect the V Phase
- 10.6 Protect the W Phase

11.- Fuel level gauge.
12.- Speed electronic regulation, in the control panel (only in complete genset supply)