

## **HRFW-60 S5**

**RENTAL RANGE** Powered by FPT\_IVECO



SERVICE		PRP	ESP
POWER	kVA	60	60
POWER	kW	48	48
RATED SPEED	r.p.m.	1.5	500
STANDARD VOLTAGE	V	400,	/230
AVAILABLE VOLTAGES	V	230/132 ·	230 V (t)
RATED AT POWER FACTOR	Cos Phi	0	,8



#### RENTAL RANGE

HIMOINSA Company with quality certification ISO 9001

HIMOINSA gensets are compliant with EC mark which includes the following

- 2006/42/CE Machinery safety.
   2014/30/UE Electromagnetic compatibility.
   2014/30/UE electrical equipment designed for use within certain voltage limits
   2000/14/EC Sound Power level. Noise emissions outdoor equipment. (amended by
- 2005/88/EC)

  97/68/EC Emissions of gaseous and particulate pollutants. (amended by 2012/46/EU)

  EN 12100, EN 13857, EN 60204

Ambient conditions of reference according to ISO 8528-1:2018 normative: 1000 mbar, 25°C, 30% relative humidity.

Prime Power (PRP):
According to ISO 8528-1:2018, Prime power is the maximum power which a generating set is capable of delivering continuously whilst supplying a variable electrical load when operated for an unlimited number of hours per year under the agreed operating conditions with the maintenance intervals and procedures being carried out as prescribed by the manufacturer. The permissible average power output (Ppp) over 24 h of operation shall not exceed 70 % of the PRP.

Emergency Standby Power (ESP):
According to ISO 8528-1:2018, Emergency standby power is the maximum power available during a variable electrical power sequence, under the stated operating conditions, for which a generating set is capable of delivering in the event of a utility power outage or under test conditions for up to 200 h of operation per year with the maintenance intervals and procedures being carried out as prescribed by the manufacturers. The permissible average power output over 24 h of operation shall not exceed 70 % of the ESP

Continuous Power (COP): According to Standard ISO 8528-1:2018, this is the maximum power available for continuous loads for unlimited running hours a year between the maintenance times recommended by the manufacturer under the environmental conditions established by the same.

G2 class load acceptance in accordance with ISO 8528-5:2018

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Subsidiaries:
PORTUGAL | POLAND | GERMANY | UK | SINGAPORE | UAE | PANAMA |
DOMINICAN REPUBLIC | ARGENTINA | ANGOLA | SOUTH AFRICA



#### SOUNDPROOFED RENTAL

CS5R CS5R

WATER-COOLED

THREE PHASE

50 HZ

STAGE V

DIESEL

Himoinsa has the right to modify any feature without prior notice.

Weights and dimensions based on standard products. Illustrations may include optional equipment.

Technical data described in this catalogue correspond to the available information at the moment of printing.

The illustrations and images are indicative and may not coincide in their entirety with the product

Industrial design under patent.









## Engine Specifications | 1.500 r.p.m.

Rated Output (PRP)	kW	54
Rated Output (ESP)	kW	54
Manufacturer		FPT_IVECO
Model		F34.TEVP01
Engine Type		4-stroke diesel
Injection Type		Direct, common rail
Aspiration Type		Turbocharged and after-cooled
Number of cylinders and arrangement		4-L
Bore and Stroke	mm	99 x 110
Displacement	L	3,4
Cooling System		Liquid (water + 50% glycol)
Lube Oil Specifications		ACEA E6, ACEA E9, API CJ-4
Compression Ratio		17;1

Fuel Consumption ESP	l/h	13,9
Fuel Consumption 100% PRP	l/h	13,9
Fuel Consumption 80 % PRP	l/h	11,1
Fuel Consumption 50 % PRP	l/h	7,2
Fuel Consumption 25 % PRP	l/h	4,2
Lube oil consumption with full load	g/kWh	0,25
Total oil capacity including tubes, filters	L	9,5
Total coolant capacity	L	14,6
Governor	Туре	Electrical
Air Filter	Type	Dry
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- Diesel engine
- 4-stroke cycle
- Water-cooled
- 12V electrical system
- Dry air filter
- Radiator with pusher fan
- Mechanical governor
- Hot parts protection
- Moving parts protection
- Radiator water level sensor (Opcional).



## Generator Specifications | STAMFORD

Manufacturer		STAMFORD
Model		UCI224E
Poles	No.	4
Connection type (standard)		Star-series
Mounting type		S-3 11"1/2
Insulation	Class	H class

Enclosure (according IEC-34-5)	IP23
Exciter system	Self-excited, brushless
Voltage regulator	A.V.R. (Electronic)
Bracket type	Single bearing
Coupling system	Flexible disc
Coating type	Standard (Vacuum impregnation)



- Self-excited and self-regulated
- IP23 protection
- H class insulation

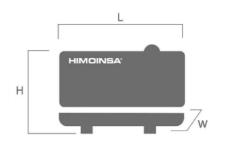






#### **WEIGHT AND DIMENSIONS**

		Standard Version
Length (L)	mm	2.660
Height (H)	mm	1.600
Width (W)	mm	1.110
Maximum shipping volume	m³	4,72
Weight with liquids in radiator and sump	Kg	1690
Fuel tank capacity	L	216
Autonomy	Hours	19
		Steel tank



#### **SOUND PRESSURE**

Sound pressure level	dB(A)@7m	62 ± 2,4	
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#### **APPLICATION DATA**

#### **EXHAUST SYSTEM**

Maximum exhaust temperature	°C	760
Maximum allowed back pressure	mbar	220
Exhaust Flange Size (external diameter)	mm	90

#### **NECESSARY AMOUNT OF AIR**

Intake air flow	m³/h	193,3
Cooling Air Flow	m³/s	1
Alternator fan air flow	m³/s	0,216

#### STARTING SYSTEM

Starting power	kW	4,2
Starting power	CV	5,71
Auxiliary Voltage	Vdc	12

#### **FUEL SYSTEM**

Fuel Oil Specifications		Diesel	
Fuel Tank	L	216	



#### • Steel chassis

- Manhole to fill the radiator
- Pre-installation or niche to house the quick connection hydraulic fittings for fuel transfer
- Anti-leakage chassis, predisposed to retain liquids (retention tray)
- Manhole for fuel tank cleaning and drainage
- Tilting cap in the exhaust
- Anti-vibration shock absorbers
- Chassis with integrated fuel tank

- Fuel level gauge
- Bodywork made from high quality steel
- High mechanical strength
- Low noise emissions level
- Soundproofing provided by high-density volcanic rock wool
- Epoxy polyester powder coating
- Full access for maintenance (water, oil and filters, no need to remove the canopy)
- Oil sump extraction kit

# Soundproofed version

- External filling of the fuel tank with safety key
- Emergency stop button (double emergency stop protection: Interior on the panel + Exterior on the bodywork)
- Mechanized for power cable output
- Door with window to visualize control panel, alarms and measurements
- Pressure locks
- IP Protection according to ISO 8528-13:2016









# FEATURES OF THE CONTROL UNITS

	Million habitan all and	CEM 7
	Voltage between phases	•
	Voltage between neutral and phase	•
8	Current intensities	•
Readings	Frequency	•
ă	Apparent power (Kva)	•
ator	Active power (Kw)	•
e .	Reactive power (kVAr)	•
و	Power factor	•
	Voltage between phases	
	Voltage between phases and neutral	
	Current intensities	
ø	Frequency	
Readings	Apparent power	
<b></b>	Active power	
Mains	Reactive power	
Σ	Power factor	
	Coolant temperature	•
g	Oil pressure	•
Readings	Fuel level (%)	•
ű	Battery voltage	•
Engine	R.P.M.	•
Ë	Battery charge alternator voltage	•
	High water temperature	•
	High water temperature by sensor	•
	Low water temperature by sensor	•
	Low oil pressure	•
	Low oil pressure by sensor	•
	Low water level	•
	Unexpected shutdown	•
	Fuel storage	•
	Fuel storage by sensor	•
	Stop failure	•
_	Battery voltage failure	•
Protections	Battery charge alternator failure	•
tect	Overspeed	•
Ģ	Underspeed	•
Engine	Start failure	•
E	Emergency stop	•

Standard

Optional







		CEM 7
	High frequency	•
	Low frequency	•
	High voltage	•
	Low voltage	•
ections	Short-circuit	•
Alternator Protect	Asymmetry between phases	•
	Incorrect phase sequence	•
	Inverse power	•
	Overload	•
	Genset signal drop	•
Counters	Total hour counter	•
	Partial hour counter	•
	Kilowatt meter	•
	Starts valid counters	•
	Starts failure counters	•
	Maintenance	•
Communications	RS232	0
	RS485	0
	Modbus IP	0
	Modbus	0
	CCLAN	0
	Software for PC	0
	Analogue modem	0
	GSM/GPRS modem	0
	Remote screen	0
	Tele signal	(0) (8 + 4)
	J1939	0
	Alarm history	•
	External start	(10) / (opc. +100)
	Start inhibition	•
	Mains failure start	
	Start under normative EJP	•
	Pre-heating engine control	•
	Genset contactor activation	•
	Mains & Genset contactor activation	
	Fuel transfer control	•
	Engine temperature control	•
	Manual override	•
Features	Programmable alarms	•
	Genset start function in test mode	•
	Programmable outputs	•
	Multilingual	•
	GPS Positioning	0
ĕ	Synchronisation	0
Functions	Mains synchronization	
	Second Zero elimination	
	RAM7	
Special	Remote screen	
		<u> </u>

Standard

Optional









## CONTROL **PANELS**

#### **NOT PICTURE**



#### CS5 (Rental stage V)

Digital manual Auto-Start control panel and thermal magnetic protection (depending on current and voltage) and differential with CEM7 and socket boxes: 2x16A (2Ph), 1x16A (3Ph), 1x32A (3Ph) and 1x63A (3Ph).

Digital control unit CEM7



- M5 control panel with electronic CEM7 control unit and switched emergency stop
- Power panel with built-in circuit breaker plates
- Safety relay in output terminal board (thermal magnetic trip and alarm in control unit)
- Socket boxes with 2x16A (2Ph), 1x16A (3Ph), 1x32A (3Ph) y 1x63A (3Ph)
- Adjustable earth leakage protection (time & sensitivity) standard in M5 and AS5, with thermal magnetic protection
- 4-pole thermal magnetic circuit breaker
- Battery charger alternator with ground connection

### Electrical system

- Starter battery/ies installed (cables and bracket included)
- Ground connection electrical installation with connection ready for ground spike (not supplied)
- Battery Switch (Opcional).



