



DIESEL GENERATOR DATA SHEET

Power By ISUZU

Model: AI41

ISUZU

Output Ratings

Generator set model	Voltage (V)	Hz	Phase	P.F.	Prime Power		Standby Power	
					KVA	KW	KVA	KW
AI41	230/400	50	3	0.8	38	30	41	33

•220/380V, 240/415V, 254/440V is available

Dimension & weight

Generator set model	Type	L*W*H (mm)	Weight (kg)
AI41	Open	1600*720*1000	650
	Silent	2300*910*1250	900

Other datas

Circuit Breaker capacity (A)	63
Battery Brand	Include
Base Fuel Tank Capacity	80

Notes:

- Standby power: Continuous running at variable load for duration of an emergency. No overload is permitted on these ratings. In accordance with ISO 3046.
- Prime power: Continuous running at variable load for unlimited periods with 10% overload available for 1 hour in any 12 hour period. In accordance with ISO8528, ISO3046.
- Standard reference conditions 25°C (77°F) Air Inlet Temp, 100m(328 ft) A.S.L. 30% relative humidity.

Warranty

- The standard warranty period: One year after ex-work or 1000 operation hours whichever come first shall apply.
- Consumable parts (air filter, fuel filter, lube oil filter), All failures and damages due to the mal-operation, neglect of maintenance and operation not according to the operation manual, are out of the scope of warranty.

Standard Features

• Engine include one set filters
• Brushless Alternator with AVR
• Radiator with engine driven fan
• Auto control system with LCD show
• 3P circuit breaker
• Battery charger and Start battery
• Industrial silencer
• Anti-vibration pads
• 8hrs bottom fuel tank ≤ 650KVA
• Standard tools kits
• User manual & Wiring diagrams
• Standard tools kits

Options

• Silent canopy (powder coated)
• ATS
• Remote Control panel
• Synchronization system
• Mobile trailer
• Engine heater (water/oil)
• Fuel and water separator
• Alternator space heater
• PMG
• ABB or 4P circuit breaker
• External fuel tank
• Double wall base fuel tank
• Residential exhaust silencer



Manufacturer reserves the right to make changes in model, technical specifications, color, equipment and accessories without prior notice.

Engine

GENERAL ENGINE DATA

Engine brand	ISUZU
Engine model	JE493ZLDB-02
Aspiration	Intercooling Turbo
Type of combustion chamber	Direct injection
Number of cylinders	4
Bore/Stroke(mm)	93 x 102
Displacement(L)	2.77
Compression ratio	18.2:1
Rated output(KW)	38
Standby output(KW)	42
Rated speed(r/min)	1500
No load Speed(r/min)	≤1575
Idling speed(r/min)	≤850
Steady speed adjusting ratio at rated condition	≤5%
Fuel consumption rate(g/kw.h)	210
Rated output FSN	<3.0
Crankshaft rotating direction	Clockwise(from the front view of diesel engine)
Cooling method	Forced water cooling
Lubricating method	Pressure lubrication and splash
Starting method	Electric motor start
Net mass(kg)	245
Firing order	1-3-4-2
Exhaust temperature °C	<500
Fan diameter(mm)	420
Oil sump capacity L	5.6
Max oil temperature °C	110
Coolingwater temperature °C	85±10
Starting motor	12V/2.8kW

ALTERNATOR

Alternator manufacturer	Leroy-somer Electro-technique (Fuzhou) Company Ltd.
Alternator brand	Leroysomer
Alternator model	TAL-A42-E
Control system	SHUNT
A.V.R.	Included
Voltage regulation	±1.0%
Insulation system	Class H
Protection	IP23
Rated power factor	0.8
Winding pitch	Two thirds
Winding leads	6
Frequency (Hz)	50
Voltage (V)	400
Phase	3
Output ratings (kVA/kW)	
-----Cont.H-40°C	38/30.4
-----Standby-27°C	42/33.4
THF	<2%
TIF	<50
Max. overspeed (Rev/Min)	2250
Bearing	Single

Control System

Ai Power adopts ComAp AMF9 or Deepsea DSE6020 as the standard controller for single gen-set applications.. AMF25 or DSE7320 for option.



ComAP AMF9



Deepsea DSE6020

Features

- Single-genset controller for stand-by and prime power applications
- 3 phase AMF function
- 3 phase generator protections
 - over/under frequency, over/under voltage, over current
- True RMS voltage measurement
- True RMS current measurement
- Event and performance log
 - Gen-set ext alarm, Engine hours history, ECU Text alarm, Test Run scheduler
- Power Measurements
- User interface
- Inputs and outputs
 - Configurable analogue/digital, binary
- Direct communication with EFI engines
- Engine Protections
 - Oil pressure, Coolant temperature, Fuel level
- Breaker control via fasica buttons
- Fuel Pump control
- Optional Active Calls(SMS alarm/event)
- Miscellaneous features
- Communication interface
 - USB plug-in, Optional RS232, RS485, GSM
- Multiple display languages
- Start on low battery
- Real-time clock
- Zero power mode
- LCD and LED alarm indication
- Configuration Suite PC Software.
- IP65 protection class
- Remote monitoring

Protection function:

- Low oil Pressure
- High water temperature
- High voltage and low voltage
- Over current
- Over speed
- Emergency stop
- Low fuel alarm and shutdown
- Fail to start

Open and Silent Generator

Ai Power silent generator is widely used in residential area which require quiet environment, its reasonable and elegant design not only reduce the noise to applicable to the environment protection, but also a good view on the road. Our 10kva to 650kva generator adopts normal silent canopy, from 650kva to 1500kva adopts 20ft container canopy, the higher power adopts 40HQ container canopy.



Open Generator Standard Supply

The Open Type Generator Includes:

1. Automatic control panel.
2. 3 phases or single phase brushless alternator.
3. anti-vibration pad.
4. different brand engine.
5. water cooled radiator.
6. battery protection switch.
7. sealed lead acid free maintenance battery.
8. trickle battery charger.
9. 3P Chinese brand Circuit breaker.
10. Exhaust silencer, elbow and flange.



Silent Generator Standard Supply

Silent Generator Standard Supply:

1. AMF automatic control system
2. Fresh air inlet cooling system
3. Emergency stop
4. 3P Chinese brand Circuit Breaker
5. Cable output placement
6. 8hrs strong base fuel tank
7. stainless steel hinges
8. maintenance door



Silent Canopy Features

Silent Canopy Features:

1. more than 2mm thick steel canopy.
2. High quality paint and strict powder paint processing.
3. large-scale impedance combined type silencer.
4. Stainless steel door locks and hinges.
5. High quality fireproof, soundproof and insulation materials.
6. Clear monitoring control panel and outer emergency stop.
7. Lifting ear is mounted in the base frame for easy pull.
8. Fuel and lub oil drainout is all connected to the canopy.
9. Fuel refill opening is on the outer canopy.

