

# **IND JP 110 / DIESEL GENERATOR GROUP**

<b>Generator Model</b>	: IND JP 110	StandBy Power (ESP) :	110kVA 88kW
Engine	: Perkins	Prime Power (PRP) :	100kVA 80kW
Alternator	: Stamford	Voltage :	380/220 V

## **Ratings And Standard Reference Conditions**

**Prime Power (PRP)** These ratings are applicable for supplying continious electrical power (at variable load) in lieu of commercially purchased power. There is no limitation to the annual hours of operation and this model can supply %10 overload power for 1 hour in 12 hours.

**Standby Power (ESP)** is defined as the maximum power available during a variable electrical power sequence, under the stated operating, for which a generating set is capable of delivering in the event of a utility power outage or under test conditions for up to 500 hours of operation per year under average of 70% load. No overload is permitted on these ratings.

Standard Reference Conditions air inlet temperature 25°C, barometric pressure 100kPa [110m altitude] and 30% relative humidity.

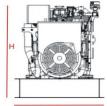


#### **General Features:**

- ◆ Heavy duty water cooled engine
- ◆ Self excited H class alternator
- ◆ Tropcial type radiator with mechanical fan
- ◆ Fully guarded engine-driven fan
- ◆ Static or spare daily fuel tank
- ◆ Fully welded steel baseframe with lifting points
- ◆ Linear vibration isolators between base and engine-generator
- ◆ Starter batteries and connection cables
- ◆ Engine-driven battery charging alternator
- ◆ Industrial exhaust muffler
- ◆ Primary and secondary fuel filters
- ◆ Auto Start control system with digital instrumentation
- ◆ Emergency stop pushbutton
- ◆ Control panel with digital-automatic main control module
- ◆ Indeks Factory load, performance and function tests,
- ◆ Operation & Maintenance Manual
- ◆ Wide range of optional extra features available
- ◆ Block water heater unit

Photo may be demonstration or a different size generator

# INDERS



Overall Dimensions & Weights (Without Canopy)

Length (L) 2000 mm
Width (W) 850 mm
Height (H) 1550 mm

♦ Weight 1300 kg

Factory: A.O.S.B. 10037 Sk. No:11 35580 Cigli / Izmir / Turkey

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# TECHNICAL SPECIFICATIONS IND JP 110

#### Units

General		
Brand		INDEKS
Model		IND JP 110
StandBy Power	kVA	110kVA
Prime Power	kVA	100kVA

Engine				
Manufacturer		Perkins		
Model		1104C-44TAG2		
StandBy Power(Net)	kWm	99.5 KWm		
Prime Power (Net)	kWm	90.1 KWm		
Speed	Rpm	1500 rpm		
Cylinder Number & Arrangement		4 Vertical in-line		
Bore & Stroke	mm	105mm x 127mm		
Displacement	Lt	4,40		
Aspiration & Cooling		Turbo Charged		
Compression Ratio		18.3:1		
Governor Type		Electronic		
Cooling Type		Water Cooled		
Oil System Capacity (Including Filters)	Lt	8,00		
Fuel System		Direct Injection		
Fuel Consumption (%50 of Prime Power)	Lt/h	201 g/KWh / 11.8 L/h		
Fuel Consumption (%75 of Prime Power)	Lt/h	205 g/KWh /17.1 L/h		
Fuel Consumption (%100 of Prime Power)	Lt/h	203 g/KWh / 22.6 L/h		
Exhaust Gas Flow(at Stand-By Power)	m³/min	16,30		
Exhaust Gas Temperature (at StandBy Power)	°C	543		

Alternator					
Manufacturer		Stamford			
Туре		Brushless , Synchronous, Single Bearing			
Model		UCI274C			
Phase/Poles		3 Phase/4 Poles			
Excitation System		Self Exciting			
Frequence	Hz	50			
Voltage	V	380/220 V			
Speed	Rpm	1500			
Excessive Loading Capacity		For 1 Hour % 110, For 2 Minutes %150			
Protection Class		IP23			
Insulation Class		Н			

# Chassis

- ◆ Formed steel base with linear vibration isolators between base and engine-generator
- ◆ Base frame design incorporates a fuel tank (fuel gauge and drain plug on the fuel tank)
- ◆ Military / Civilian type easy lifting systems

### **Control System**

- ◆ Control supervision and protection panel is mounted on the genset base frame.
- ◆ Indeks micro processed control unit.
- Standart indicators, alarms, buttons, keys.
- ◆ Useful design for Automatic / Manuel working

#### **Optional Equipment**

- ◆ Customer designed sound proof canopy
- ◆ Automatic syncronization and power sharing systems
- ◆ PMG
- ◆ Alternator Heater
- ◆ Trailer
- ◆ Residental Type Silencer
- ◆ Automatic Fuel Refill System

- ◆ Automatic load transfer panel
- ◆ Digital AVR
- ◆ Remote systems
- ◆ Oil Drain Pump
- ◆ Seismic Sensor
- ◆ Tool kits

• Remote Monitoring Systems with SCADA - PLC, Connection to BMS system and extra special solutions in Medium Voltage

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#### **CONTROL SYSTEM**

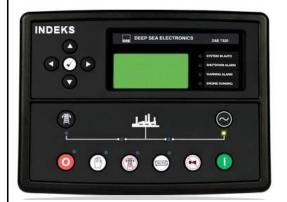


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#### General Features:

The DSE7320 is an Auto Mains (Utility) Failure Control Module suitable for a wide variety of single, diesel or gas, gen-set applications.

Monitoring an extensive number of engine parameters, the module will display warnings, shutdown and engine status information on the back-lit LCD screen, illuminated LEDs, remote PC and via SMS text alerts (with external modem).

The DSE7320 will monitor the mains (utility) supply and includes USB, RS232 and RS485 ports as well as dedicated DSENet® terminals for system expansion.

### **Key Features**

- ◆ 4-Line back-lit LCD text display
- ◆ Five key menu navigation
- ◆ Front panel editing with PIN protection
- ◆ LED and LCD alarm indication
- ◆ Customisable status screens
- ♦ 9 configurable inputs
- ◆ 8 configurable outputs
- ◆ 3 configurable maintenance alarms
- ◆ Configurable event log (250)
- ◆ CAN and Magnetic Pick-up/Alt. Sensing
- ◆ Power monitoring (kW h, kV Ar, kV A h, kV Ar h)
- ◆ Load switching (load shedding and dummy load outputs)
- ◆ Backed up real time clock
- ♦ Fully configurable via DSE Config. Suite PC software
- ◆ User selectable RS232 and RS485 communications
- ◆ Power save mode
- ◆ Flexible sender inputs
- ◆ Fuel usage monitor and low fuel alarms
- ◆ Charge alternator failure alarm
- ◆ Manual speed control (on compatible CAN engines)
- ♦ Manual fuel pump control
- ◆ Engine exerciser
- ◆ "Protections disabled" feature
- ◆ kW overload protection
- ◆ Automatic load transfer
- ◆ Independent Earth Fault trip
- ◆ USB connectivity
- ◆ Backed up real time clock
- ◆ Configurable display languages
- ◆ SMS Messaging (additional external modem required)
- $\ \, \begin{picture}(100,0) \put(0,0){\line(0,0){100}} \put(0,0){\line(0,$
- ◆ DSENet® expansion compatible

#### **Key Benefits**

- clarity
- ◆ Real-time clock provides accurate event logging
- ◆ Multiple date and time scheduler
- ◆ Set maintenance periods can be configured to maintain optimum engine performance
- Ethernet communications (via DSE860/865 modules), provides advanced remote monitoring at low cost
- Modules can be integrated into building management systems (BMS)
- ◆ Increased input and output expansion capability via DSENet®
- ◆ Licence-free PC software
- ◆ IP65 rating (with supplied gasket) offers increased resistance
- $\ \ \, \ \ \,$  to water ingress

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