



Stock #: 240722

Technical Specification

and

Scope of Supply

**mtu 4R0113 DS60
DG04RJ113A4N**

Customer: INDEL Power Group LLC

08.02.2023



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I. System Description

Product type	DG04RJ113A4N
	mtu 4R0113 DS60
Application Group	3D - Emergency Standby power, IFN

Power as per MTU Sales Program

Power per genset (ISO 8528)	60	kWel
Engine speed	1.800	rpm
Intake air temperature	25	°C
Coolant temperature	0	°C
Altitude	100	m

On-site Power

Power per genset (ISO 8528)	60	kWel
Engine speed	1.800	rpm
Intake air temperature	25	°C
Coolant temperature	0	°C
Altitude	100	m

Requirements

Frequency	60 Hz
Generator voltage	240 V
EngineType	4045HF280



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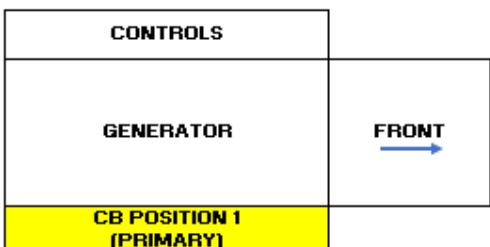
II. Selection Criteria for the Scope of Supply

Criteria	Selection	for Product No.
Application	Emergency Standby (3D)	1,
Frequency	60 Hz	1,
Generator Voltage	240 V	1,
Phase	1 Phase	1,
Unit Specification	UL2200	1,
IBC Seismic Certification	Without IBC	1,
SCAQMD Certification	Not Relevant	1,
Mobile Flex Certification	Without Mobile Flex	1,
Engine Model	JD4045HF280 (12volts)	1,
Exhaust Emissions (EPA)	EPA Stationary EMERG T3 (40CFR60)	1,
Radiator Design Temperature	50°C	1,
Temp Rise	130°	1,
Power Output	60 kW	1,
Full Load Amps	250	1,
Generator Frame and Wire Qty	362/1604 (12 Wire)	1,
Generator Wire Configuration	Double Delta	1,
OPU/HSD	Standard OPU Narrow Skid	1,
Fuel Tank	Without Fuel Tank	1,
Control panel	with control panel	1,
Circuit Breaker Options	Single Circuit Breaker	1,
Breaker Wire Color Scheme	Standard Breaker Wire Color Scheme	1,
Paralleling	No Paralleling Operation	1,
Acceptance testing	Factory acceptance	1,
Country of Operation	USA / Canada	1,
Emission cert. authority	18 US EPA Agency	1,



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III. Scope of Supply

	valid for product no.
1 SYSTEM CONFIGURATION	1,
1.1 System Description	1,
SLU: DG04RJ113A4N	1,
Model: MTU 4R0113 DS60	1,
Application 60Hz Standby	1,
1.2 Cooling System	1,
50 Deg C Cooling System	1,
• Closed loop, liquid cooled, with radiator factory mounted on engine-generator set mounting frame and integral engine-driven coolant pump	
1.3 Circuit Breaker	1,
Circuit Breaker Position 1:	1,
250 Amp 2 Pole 100% CB SQ-D JDL26250CLC	1,
LI Trip Breaker:	1,
• LI breakers provide protection from long time overload and instantaneous short circuit events. Specific overload current values and time delays vary with breaker type and trip unit.	
Circuit Breaker #1 Accessories:	1,
Circuit Breaker Mounted Right Side	1,
	1,
	
Top View	
Right Side	CB Position 1
Left Side	Controls

* For technical data refer to the circuit breaker enclosure data sheets located on the Business Portal

Standard 240 Volt 1 Phase Breaker Wire Scheme:	1,
• Phase 1 (A) is Black label "L1" • Phase 2 (B) is Red label "L2" • Neutral is White label "NEU"	



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1.4 Starting Aids

Starting Battery (Group 31), Cables & Battery Rack

- Battery Rack mounted and installed
- Battery Group 31 Starting Battery filled with acid
- Qty 1

Battery Charger: MicroGenius 10A

- 180W
- 10 Amp
- 12V
- NFPA 110

Battery Charger Mounted & AC/DC Wired

Note - This option will be factory-wired to the distribution panel (if selected)

Coolant Preheater

- -20 Deg F Coolant Preheater (120V 1PH - 1500W)
- Model: TPS151GT10-005
- Qty 1

Coolant Preheater Mounted & AC Wired

1.5 Genset Enclosure

Open Power Unit (OPU)

- Engine Generator Set mounted on base with no enclosure

1.6 Vibration Isolation

SUA63015 Pad Isolators

- 1/4 inch thick elastomeric pad in rectangular shape placed under the base frame at each of the pre-drilled isolator mounting holes

2 ENGINE CONFIGURATION

2.1 Engine System

EPA Certification Tier Level: Tier 3

4R 4.5L 4045HF280 Turbo Engine W/Charge Air Cooling

Note Emission Compliance:

The engines and/or systems, may only be certified to comply with the required country or region specific emission regulations. Where applicable, the engines and/or systems are only certified to those specific emission regulations/standards which are clearly stated in the respective RRPS/MTU defined technical specifications. It is the customer's sole responsibility to ensure that the export/import, installation and use of the engine and/or system complies with the applicable emissions regulations in the country or region where the engine and/or system will be used.



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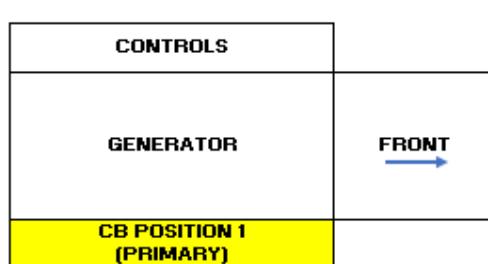
		valid for product no.
2.2	Exhaust System	1,
	No Exhaust Silencer	1,
2.3	FUEL SYSTEM	1,
	No Fuel Tank	1,
2.4	Air Intake System	1,
	Air Filter (Standard)	1,
	Air Restriction Indicator	1,
	MTU Air Filter	1,
	• SUA106417	
	• Qty 1	
3	GENERATOR CONFIGURATION	1,
3.1	Generator Specification	1,
	Generator Model Number: 362/1604	1,
3.2	Generator accessories	1,
	PMG with DVR 2400	1,
	• True RMS Sensing - One or Three Phase Connect. Senses 100 to 600 volts $\pm 10\%$ at 50/60 Hertz. Patented circuitry senses true RMS voltage rather than average for superior load regulation.	
4	CONTROL PANEL CONFIGURATION	1,
4.1	Control panel	1,
	Circuit Breaker 1 Ground Fault	1,
	Circuit Breaker Position 1:	1,
	Without Ground Fault	1,
	Modbus RTU	1,
	• ModBus RTU connects the MGC to Programmable Logic Controllers by means of communication transmission over serial lines (RS485).	
	MGC- 2000 Series	1,
	• MTU Onsite Energy's Digital Genset Controller MGC-2000 series is a highly advanced integrated generator set control system. The MGC-2000 series is perfectly focused, combining rugged construction and microprocessor technology to offer a product that will hold up to almost any environment and flexible enough to meet your application's needs. This device provides generator set control, transfer switch control, metering, protection, and programmable logic in a simple, easy-to-use, reliable, rugged, and cost effective package.	



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Control Panel Mounted LH Side 1,



Top View **Right Side** CB Position 1
 Left Side Controls

* For technical data refer to the circuit breaker enclosure data sheets located on the Business Portal

Isochronous Governor 1,

Contact Expansion Module (CEM) 1,

- The CEM is a remote device that provides additional MGC contact inputs and outputs giving the user flexibility to use the same model MGC generator set controller for simple or more complicated applications that require contact functionality or duplication of contacts for remote annunciation.

No Parallel Operation 1,

5 SERVICES AND AFTER SALES SUPPLY 1,

5.1 Warranty 1,

General Terms and Conditions of Sale, Warranty and After Sales Supply 1,
Our offer is based on the attached General Terms and Conditions of Sale for MTU Products (Rev. V-601-1803 MUS & MOE) and the Warranty will be the attached Five (5) Year / 3,000 Hour Comprehensive Extended Standby (3D) Limited Warranty (SYS-M-GEN-E-002).

6 MISCELLANEOUS 1,

6.1 Painting 1,

Paint Color: RAL 7001 Grey 1,

6.2 Additional Options 1,

Unit Includes One (1) Convenience Receptacle 1,

Note - This option will be factory-wired to the distribution panel (if selected) 1,



	valid for product no.
Mechanical Drawing: Genset Dimensional OPU • XZG3000100103	1,
Electrical Drawing: Engine • XZG30K0000020	1,
Electrical Drawing: Generator • XZG30K0000049	1,
Electrical Drawing: Breaker Options • XZG30K0000019	1,
Electrical Drawing: Control Panel • XZG3064400017	1,
Electrical Drawing: Options Sheet • XZG30K0000025	1,
6.3 Documentation	1,
<u>English</u>	1,
1 Flash Drive	1,
<u>English</u>	1,
No Hard Copy	1,
No Flash Drive	1,
7 FUNCTIONAL TESTING	1,
7.1 Acceptance Testing	1,
Standard Commercial Test	1,
8 SHIPPING CONDITIONS	1,
8.1 Shipment	1,
Genset Unit is enclosed in a Shipping Bag	1,
Ship unit with fluids installed	1,