



Stock #: 240748

Technical Specification

and

Scope of Supply

**mtu 4R0120 DS80
DG04RM120A1N**

Customer: INDEL Power Group LLC

23.01.2023



I. System Description

Product type	DG04RM120A1N
	mtu 4R0120 DS80
Application Group	3D - Emergency Standby power, IFN

Power as per MTU Sales Program

Power per genset (ISO 8528)	80	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)	80	kWel
Engine speed	1.800	rpm
Intake air temperature	25	°C
Coolant temperature	0	°C
Altitude	100	m

Requirements

Frequency	60 Hz
Generator voltage	208 V
EngineType	4R924G60S
Generator model	Marathon



II. Selection Criteria for the Scope of Supply

<i>Criteria</i>	<i>Selection</i>	<i>for Product No.</i>
Application	Emergency Standby (3D)	1,
Frequency	60 Hz	1,
Generator Voltage	208 V	1,
Phase	3 Phase	1,
Unit Specification	UL2200	1,
IBC Seismic Certification	Without IBC	1,
HCAI Certification	Without HCAI	1,
Engine Model	4R 4.8L OM924LA (12volts)	1,
Exhaust Emissions (EPA)	EPA "Nonroad" T. 3 Stationary (40 CFR 60)	1,
Radiator Design Temperature	50°C	1,
Temp Rise	130°	1,
Power Output	80 kW	1,
Full Load Amps	277	1,
Generator Frame and Wire Qty	362/1604 (12 Wire)	1,
Generator Wire Configuration	Wye	1,
OPU/HSD	Level 3 - Maximum Sound Attenuation	1,
Fuel Tank	With 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,

III. Scope of Supply

valid for
product no.

1 SYSTEM CONFIGURATION

1,

1.1 System Description

1,

Model: DG04RM120A1N

1,

1.2 Cooling Package

1,

50 Deg C Cooling System

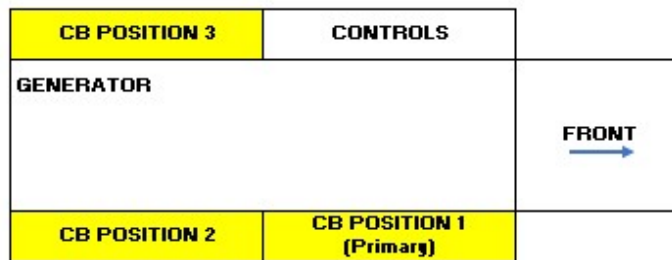
1,

- 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,

1,



Top View

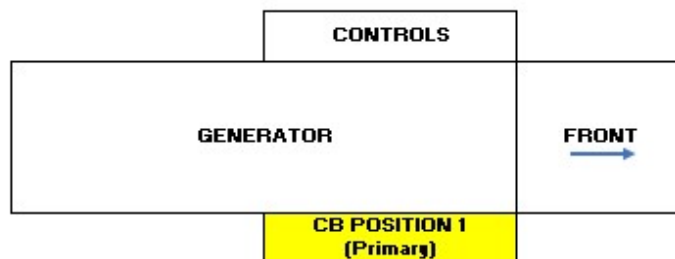
Right Side

CB Position 1/CB Position 2

Left Side

Controls/CB Position 3

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



Top View

Right Side

CB Position 1

Left Side

Controls

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Single Circuit Breaker

1,

Circuit Breaker Position 1:

1,



	valid for product no.
300 Amp 600 Volt 3 Pole 100% LSI Square-D LGL36400CU33X	1,
Circuit Breaker #1 Accessories:	1,
Standard Breaker Wire Scheme:	1,
<ul style="list-style-type: none">• Phase 1 (A) is Black label "L1"• Phase 2 (B) is Red label "L2"• Phase 3 (C) is Blue label "L3"• Neutral is White label "NEU"	
Circuit Breaker Position 1:	1,
LSI Breaker Trip:	1,
<ul style="list-style-type: none">• LSI breakers provide protection from long time overload, short time overload and instantaneous short circuit events. Specific overload current values and time delays vary with breaker type and trip unit.	
1.4 Starting Aids	1,
Starting Battery (Group 31), Cables & Battery Rack	1,
<ul style="list-style-type: none">• Battery Rack mounted and installed• Battery Group 31 Starting Battery filled with acid• Qty 1	
Battery Warming Plate	1,
Battery Charger: MicroGenius 10A	1,
<ul style="list-style-type: none">• 180W• 10 Amp• 12V• NFPA 110	
Battery Charger Mounted & AC/DC Wired	1,
Note - This option will be factory-wired to the distribution panel (if selected)	1,
With Coolant Preheating	1,
Coolant Preheater	1,
<ul style="list-style-type: none">• -20 Deg F Coolant Preheater (120V 1PH - 1500W)• Model: TPS151GT10-005• Qty 1	
Coolant Preheater Mounted & AC Wired	1,
1.5 Genset Enclosure	1,
OM900 Level 3 Enclosure	1,
<ul style="list-style-type: none">• Level 2 enclosure with air exhaust scoop.	



valid for
product no.

	<ul style="list-style-type: none">UL 94 HF-1 compliant, 1.5" thick sound attenuated foam insulation installed in scoop.	
	Weather Proof Enclosure - Aluminum	1,
	130mph Wind Rated	1,
	Sound Attenuation Kit	1,
	Exhaust Scoop - Aluminum	1,
1.6	Vibration Isolation	1,
	SUA63015 Pad Isolators	1,
	• ¼ inch thick elastomeric pad in rectangular shape placed under the base frame at each of the pre-drilled isolator mounting holes	
2	ENGINE CONFIGURATION	1,
2.1	Engine System	1,
	4R 4.8L OM924LA Charged Air Cooling	1,
	Note Emission Compliance:	1,
	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.	
2.2	Exhaust System	1,
	Unit-Mounted Silencer 4"	1,
	<ul style="list-style-type: none">Silencer Model Number: CPJS-04X-90040065Qty 1	
2.3	FUEL SYSTEM	1,
	Tank Includes Spill Fill Containment (5 Gallon capacity)	1,
	24 HR 230 Gallon Extended Sub Base Fuel Tank (with Rear Stub-Up)	1,
2.4	Air Intake System	1,
	Air Restriction Indicator	1,
	Air Filter (Standard)	1,
	MTU Air Filter	1,
	<ul style="list-style-type: none">XG2112100001Qty 1	

valid for
product no.

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,

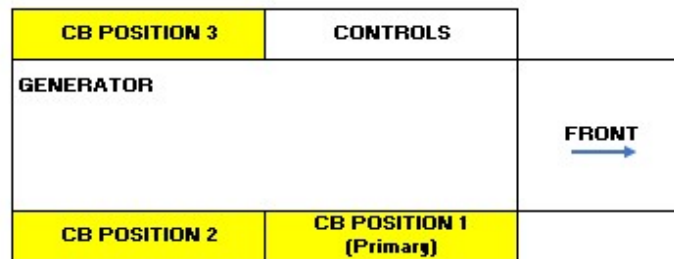
Circuit Breaker Position 1:

1,

Without Ground Fault

1,

1,



Top View

Right Side

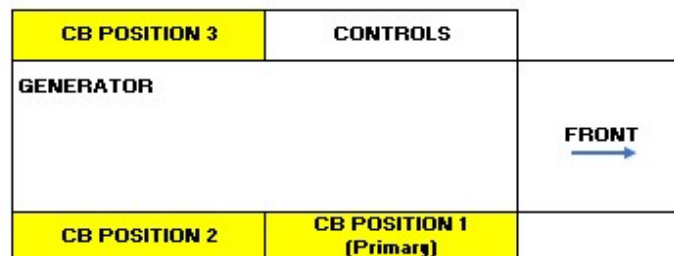
CB Position 1/CB Position 2

Left Side

Controls/CB Position 3

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

1,



Top View

Right Side

CB Position 1/CB Position 2

Left Side

Controls/CB Position 3

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		valid for product no.
	High Fuel Level Pre-Alarm	1,
	Critical Low Fuel Level Alarm	1,
	MGC- 2000 Series	1,
	<ul style="list-style-type: none">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.	
	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 Standard Two (2) Year / 3,000 Hour Basic Standby (3D), Prime (3B), and Data Center Continuous Power (DCCP) (3F) Limited Warranty (SYS-M-GEN-S-026).	
6	MISCELLANEOUS	1,
6.1	Painting	1,
	Paint Color: RAL 7001 Grey	1,
6.2	Documentation	1,
	<u>English</u>	1,
	1 Flash Drive	1,
	<u>English</u>	1,
	<u>French</u>	1,
	<u>Spanish</u>	1,
6.3	Additional Options	1,
	Mechanical Drawing: Genset Dimensional HSD	1,
	• XZG2100100033	
	Mechanical Drawing: Genset Dimensional HSG	1,
	• XZG2100100035	
	Mechanical Drawing: Fuel Tanks	1,
	• XZG2100100046	



	Electrical Drawing: Engine • XZG21K0000003	valid for product no. 1,
	Electrical Drawing: Generator • XZG21K0000010	1,
	Electrical Drawing: Breaker Options • XZG21K0000002	1,
	Electrical Drawing: Control Panel • XZG2100100055	1,
	Electrical Drawing: Options Sheet • XZG21K0000009	1,
7	FUNCTIONAL TESTING	1,
7.1	Acceptance Testing	1,
	Standard Commercial Test	1,
8	SHIPPING CONDITIONS	1,
8.1	Shipment	1,
	Ship unit with fluids installed	1,
	Genset Unit is enclosed in a Shipping Bag	1,