



Stock #: 255035



mtu 12V1600 DS750

Technical Specification And Scope of Supply

mtu 12V1600 DS750

Customer: INDEL Power Group LLC

Quotation Date: 17. November 2023

www.mtu-solutions.com



1. Technical Specification

Product Type	mtu 12V1600 DS750
Application Group	3D

Power as per MTU Sales Program


Power per genset (ISO 8528)	750 kWel
Derated Power per genset (ISO 8528)	750 kWel
Engine speed	1800 rpm
Intake air temperature	25 deg C
Altitude	100 m

Requirements

Frequency	60 Hz
Fuel Type	Diesel
Generator voltage	480 V
Engine Model	12V1600G71S (24volts)
Grid guideline	No requirements

Selection Criteria

Phase	3 Phase
Unit Specification	UL2200 Certification
IBC Certification	Without
HCAI Certification	Without
Exhaust Emissions (EPA)	63 - EPA Stationary EMERG T2 (40CFR60)
Radiator Design Temperature	
Temp Rise	105 °
Full Load Amps	1128 A
Generator Model	LSA 49.3/L9
Generator Wire Qty	6 Wire
Generator Wire Configuration	WYE
OPU/HSD	Level 3 - Maximum Sound Attenuation Enclosure
Control panel	With Control Panel
Circuit Breaker Options	Single Circuit Breaker
Breaker Wire Color Scheme	Standard Breaker Wire Color Scheme
Country of Operation	US -United States of America
Emission cert. Authority	18 - US EPA US EPA Agency



A Rolls-Royce
solution

MODEL: 1

SERIAL: 2

RATING: 3

ENGINE: 4

RPM: 5 Hz: 6

kW: 7 kVA: 8

VOLTS 9

AMPS 10

PH 11

PF 12

WIRE CONFIG: 13

TEMP. RISE / AMB. (°C): 14 / 40

MAX. UNBALANCED LOAD: I₂ = 10%

DIESEL FUEL:
PER SPECIFICATIONS A001064/05E

MAX. INLET FUEL FLOW:
1620 (428) L/h (gal/h)

www.mtu-solutions.com

1	mtu 12V1600 DS750	-
2	--	-
4	12V1600G71S (24volts)	-
5	1800	RPM
6	60	Hz
7	750	kWe
8	938	kVA
9	480	V
10	1128	A
11	3	PH
12	0.8	PF
13	WYE	-
14	105	°C

2. Scope of Supply

Specification		QTY
SYSTEM		
System Description		
Unit Specification	UL2200 Certification	1
Enclosure Type	Level 3 - Maximum Sound Attenuation Enclosure	1
Controls	With Control Panel	1
Circuit Breaker	Single Circuit Breaker	1
Breaker Wire Color Scheme	Standard Breaker Wire Color Scheme	1
Dimensional Drawings	• XZ57500100069 • XZ57500100070	1
Engine Electrical Drawings	• XZ574K0000004	1
Electrical Generator Drawings	• XZ57500100063	1
Electrical Option Sheet	• XZ574K0000009	1
Drawings Fuel Tank	• XZ57500100071	1
Drawings Circuit Breaker	• XZ57500100073	1
Drawings Distribution Panel	• XZ574K0000003	1
Drawings Control Panel	• XZ57464400002	1
Drawings Customer	• XZ574K0000002	1

Connection
Drawings
ENGINE

Engine Genset

Engine Model	12V1600G71S (24volts)	1
---------------------	-----------------------	---

PREHEATING

Electric Operated Preheating

Coolant Preheating	Coolant Preheater • -20 Deg F Coolant Preheater (208V 1PH - 5000W) • Model: CL150810-200 Qty 1 *Water Heater Wired to the Distribution Panel (If Distribution Panel is Selected)	1
-------------------------------	---	---

STARTING

Starting Electric

Starting Batteries	Starting Battery (Group 4D), Cables & Battery Rack • Battery Rack mounted and installed • Battery Group 4D Starting Battery filled with acid (Qty 2)	1
-------------------------------	--	---

Battery Charger	Battery Charger MicroGenius 2 10A • 300W • 10 Amp • 24V • NFPA 110 • M3-22-1210-E	1
------------------------	--	---

Battery Charger Mounting	Battery Charger Mounted & AC/DC Wired • This option will be factory-wired to distribution panel (if applicable)	1
-------------------------------------	--	---

AIR INTAKE

Air Intake Filters

Air Intake	Air Filter (Standard) mtu Air Filter • P/N: SUA90069 Qty 2	1
------------	---	---

Air Restriction Indicator	Air Restriction Indicator	1
---------------------------	---------------------------	---

FUEL

Fuel Systems

Fuel Type	Diesel	1
-----------	--------	---

Fuel Filters

Fuel Water Separator	Fuel Water Separator Standard (Single)	1
----------------------	--	---

Fuel Tanks

Fuel Tank Type	Extended Fuel Tank	1
----------------	--------------------	---

Fuel Tank Capacity	48 Hour	1
--------------------	---------	---

Selected Fuel Tank	3030 Gallon Extended Sub Base Fuel Tank	1
--------------------	---	---

Spill Fill Box	Fuel Tank Spill Fill	1
----------------	----------------------	---

Overfill Protection	Without	0
---------------------	---------	---

Fuel Tank Ventilation	Standard Vents	1
-----------------------	----------------	---

Leak Switch	Standard Leak Switch	1
-------------	----------------------	---

Tank Level Alarm Panel	Without	0
------------------------	---------	---

EXHAUST

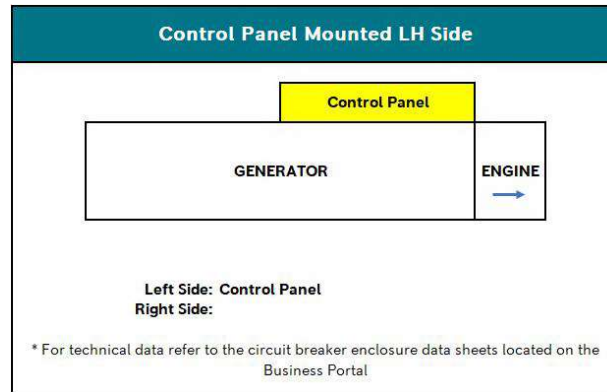
Exhaust System

Exhaust Silencer	Unit-Mounted Silencer • Silencer Model: OHBE2ZD08CF12TS-2-20040079 (Qty 1)	1
GENERATOR		
Generator		
Generator Model Number	LSA 49.3/L9	1
Generator Accessories		
Excitation System	With PMG	1
Generator Strip Heater	Generator Strip Heater 493F 250W	1
Generator Outletbox		
Convenience Receptacle	Unit Includes One (1) Convenience Receptacle * This option will be factory-wired to the distribution panel (if selected)	1
CONTROLS		
Genset Control Panel		
Configured Control Panel Series	MGC-3010 • Rolls Royce Power Systems Generator Set Controllers (MGC Series) are rugged, reliable, all-in-one digital generator set control and load share systems. The MGC-3000 Series is designed to be a high end controller that is well suited for mains fail, paralleled units, and systems with multiple buses. The MGC-3000 Series has all of the necessary items for complete generator set control, protection, and metering with a massive, but easy-to-use, programmable logic system.	1

Control Panel Mounting

Control Panel Unit Mounted LH Side

1



Paralleling

Without

0

CEM Module

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.

AEM Module

Analog Expansion Module (AEM)

1

- The AEM is a remote auxiliary device that provides additional MGC analog inputs and outputs.

Remote E-Stop

Remote E-Stop

1

ProtoNode Solution

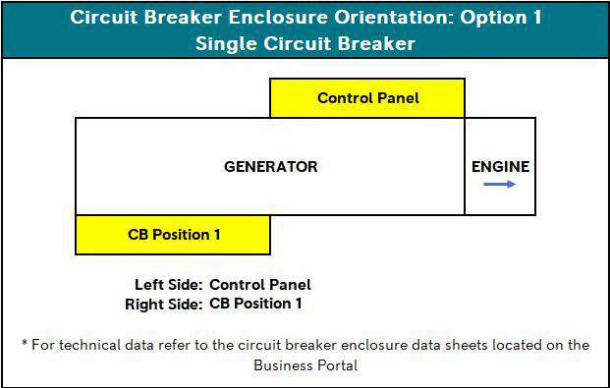
The ProtoNode solution is pre-programmed to provide a virtual plug-and-play, easy, complete protocol BACnet MS/TP, BACnet/IP, and EtherNet/IP. There are no configuration files to download in the field, and all configurations are available to the user/installer simply by selecting the proper DIP switches.

1

Ground Fault Protection	Ground Fault Indication (GFI)	1
Remote Annunciator	RDP-110c Annunciator Panel • The RDP-110c is a remote annunciation device used in conjunction with the MGC family of digital generator set controllers to provide remote annunciation of the emergency standby generator system. • This panel allows for two programmable alarms, two programmable pre-alarms, and is compatible with NFPA 110. The MGC detects an alarm or pre-alarm condition and communicates via RS-485 to the RDP-110c. • Unit can be flush or surface mounted.	1

CIRCUIT BREAKER

Circuit Breaker 1

Circuit Breaker Position	Single CB Enclosure: Position 1 	1
--------------------------	---	---

Trip Type	LSI Breaker Trip • 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.	0
-----------	---	---

Rating	100%	0
Spring Charging Motor (MMM) ERMS	Without	0
	Without ERMS	0
Amperage List	1200 Amps	1
Selected Circuit Breaker 1:	1200 Amp 3 Pole 100% LSI CB SQ-D PGL36120CU33A	1
Service Entrance Rated Distribution Panel	Service Entrance Rated	1
Distribution Panel	Distribution Panel • 125A 240VAC 1PH, UL Listed, 12 Position	1

ENCLOSURE

Housing

Wind Rating	130 MPH	1
Enclosure Material	Level 3 Aluminum • Weatherproof enclosure constructed of aluminum with fixed storm proof panels. • Enclosure consists of a bolted and welded construction. • Hinged, lockable double-door access on both sides of the enclosure. Includes UL 94 HF-1 compliant, 1.5" thick sound attenuated foam insulation installed inside enclosure walls, and attenuating air intake baffles.	1
Enclosure Lighting	Interior Enclosure Lighting • Interior enclosure lighting is designed to automatically use either AC or DC power. The lights will use the DC supply (genset batteries) if no AC supply is available. The lights may be	1

powered via AC supply if connected by the customer.

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

Enclosure Heater	Enclosure Heater • 120V 1500W 1PH with Thermostat *Note* - This option will be factory-wired to the distribution panel (if selected)	1
Motorized Intake Louver	Motorized Intake Louver *This option will be factory-wired to the distribution panel (if selected) * Selection of this option may result in a cooling package derate.	1
Gravity Exhaust Louver	Gravity Exhaust Louver * Selection of this option may result in a cooling package derate.	1

PAINTING

Painting		
Paint Color	Corporate Grey	1

BASEFRAME

Mounts Baseframe		
Selected Vibration Isolation	Pad Isolators • 1/4" thick elastomeric pad in rectangular shape placed under the base frame at each of the pre-drilled isolator mounting holes • P/N: X54599100330	1

WARRANTY

Warranty

Warranty Terms	2 Year 3000 Hour Standby Warranty	1
SHIPPING & STORAGE		
Freight		
Delivery Type	Ship Unit Wet	1
DOCUMENTATION		
Manuals		
Standard Documentation	Manual English USB	1
FUNCTIONAL TESTING		
Acceptance Testing		
Standard Commercial Test	With Standard Commercial Test	1