



JCB DIESEL GENERATOR TECHNICAL SPECIFICATIONS



G860QX



G860X

Powered by MTU

ELECTRICAL		PRIME	STAND BY
Output Rating	kVA	782	860
	kW	626	688
Frequency	Hz	50	
Rated Speed	RPM	1500	
Standard Voltage	v	400/230	
Circuit Breaker	amp	1250	
Power Factor		0.8	

ALTERNATOR		
Poles	No	4
Winding Connections		Star
Frame Mounting		SAE 0-18"
Insulation	Class	H
Enclosure		IP23
Exciter System		Self-regulating brushless
Voltage Regulator		AVR (electronic)
Stead Voltage		+/- 1.5% (tested GI)
Bearing		Single bearing sealed
Coupling		Flexible disc

Prime: This rating is for the supply of continuous electrical power, at variable load, in lieu of commercially purchase power. There is no limitation on the annual hours of operation and 10% over load power can be supplied for 1 hour in 12.

Standby: This rating is for the supply of continuous electrical power, at variable load, in the event of a Utility power failure. No overload is permitted.

ENGINE		PRIME	STAND BY
Output Rating	kW	663	733
Manufacturer		MTU	
Engine Model		12V2000G65	
Fuel		Diesel	
Injection		Direct	
Aspiration		Turbo Charged with After-Cooler	
Cylinders		12V	
Bore and Stroke	mm	130 x 150	
Displacement	l	23.88	
Cooling		Water	
Engine Oil		SAE 10W40	
Compression Ratio		16: 1	
Fuel Consumption			
100% Load Prime	l/h	163.24	
75% Load Prime	l/h	123.04	
50% Load Prime	l/h	84.85	
100% Load Standby	l/h	181.47	
Engine Oil Capacity	l	77	
Lube Oil Consumption 100% Stand By	l/h	1.81	
Coolant capacity	l	130	
Governor		Electronic	
Air Filter		Dry	

EXHAUST SYSTEM			
Maximum Temperature 100% Standby	°C	565	
Exhaust Gas Flow 100% Standby	m ³ /min	150	
Maximum Allowed Back Pressure	mbar	85	
Exhaust Flange Size (external diameter)	mm	200	

AIR SYSTEM			
Intake Air Flow 100% Standby	m ³ /h	3,240	
Cooling Air Flow 100% Standby	m ³ /h	59,040	

STARTING SYSTEM			
Starter Motor	kW	9	
Battery Capacity	Ah	260	
Auxiliary Voltage	V	24	
Starter Current – Maximum Power	Amp	1750	
– Firing Speed	Amp	800	

FUEL SYSTEM			
Diesel Specification			
Maximum Fuel Pressure at Connection	bar	+0.5	
Minimum Fuel Pressure at Connection	bar	-0.3	
Open Skid Fuel Tank Capacity	l	980	
Container Fuel Tank Capacity	l	999	

WEIGHT AND DIMENSIONS - OPEN

Length	mm	4208
Width	mm	1836
Height	mm	2389
Shipping Volume (Sea Ready)	m ³	18.46
Wet Weight (Standard Build)	Kg	5,798
Dry Weight (Standard Build)	Kg	5,600



JCB G860X

WEIGHT AND DIMENSIONS - 20 ISO CONTAINER

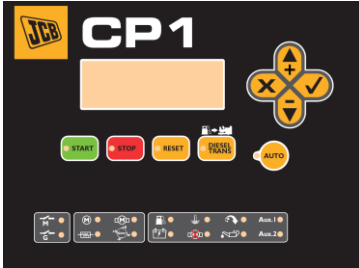
Length	mm	6,058
Width	mm	2,438
Height	mm	2,591
Shipping Volume (Sea Ready)	m ³	38.27
Wet Weight (Standard Build)	Kg	9,598
Dry Weight (Standard Build)	Kg	9,400
Sound Level @ 7M	db(A)	84



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CONTROL PANEL – JCB CP1

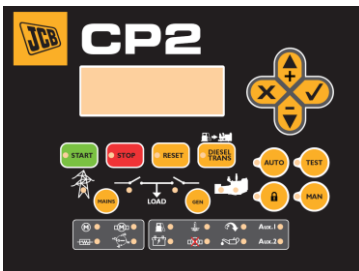
The JCB CPI control system is digital and has the capability to control, monitor and protect the generator. The display allows the user to easily monitor the status of the generator through an LCD display and LED outputs. It enables control of the generator operations through soft touch push button functionality and multi lingual capability



CONTROL PANEL – JCB CP2

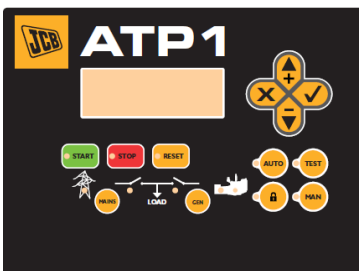
The JCB CP2 control system is digital and has the capability to control, monitor and protect the generator the same as the JCB CPI panel but additionally incorporates the functionality of the control module of the JCB ATP1.

The JCB CP2 Panel constantly monitors the mains and has to be hardwired into both mains and generator contactors. The display allows the user to easily monitor the status of the generator as well as controlling generator operation



CONTROL PANEL – JCB ATP1

The JCB ATP1 control module is integrated into an Automatic Transfer Switch, which provides automatic mains failure capability. The JCB ATP1 can communicate with a generator through either 2 wire start volt free contactors or CANBUS through CPI to ATP1 (not compatible with CP2). The JCB ATP1 when connected via CANBUS to the JCB CPI will give control functions and display generator information.



CONTROL PANEL FEATURES	CPI	CP2	ATPI
GENERATOR			
Phase to Phase Voltage	•	•	•
Phase to Neutral	•	•	•
Phase Amperage	•	•	•
Frequency	•	•	•
kVA	•	•	•
Kw	•	•	•
kVAr	•	•	•
Power Factor	•	•	•
MAINS			
Phase to Phase Voltage	x	•	•
Phase to Neutral	x	•	•
Phase Amperage	x	•	•
Frequency	x	•	•
kVA	x	x	•
Kw	x	x	•
kVAr	x	x	•
Power Factor	x	x	•
ENGINE			
Coolant Temperature	•	•	x
Oil Pressure	•	•	x
Fuel Level Percentage	•	•	x
Battery Voltage	•	•	x
Engine RPM	•	•	x
Battery Charge Alternator Voltage	•	•	x
ENGINE ALARMS			
High Water temperature	•	•	x
High Coolant Temperature	•	•	x
Low Oil Pressure	•	•	x
Low Coolant Level	•	•	x
Unexpected Shutdown	•	•	x
Failure to Stop	•	•	x
Battery Voltage Failure	•	•	x
Battery Charge Alternator Failure	•	•	x
Over Speed	•	•	x
Under Speed	•	•	x
Failure to Start	•	•	x
Low Fuel level	•	•	x
Emergency Stop	•	•	•
ALTERNATOR ALARMS			
High Frequency	•	•	•
Low Frequency	•	•	•
High Voltage	•	•	•
Low Voltage	•	•	•
Over Amperage	•	•	x
Short Circuit	•	•	x
Symmetry Between Phases	•	•	•
Incorrect Phasing	•	•	•
Inverse Power	•	•	x
Over Load	•	•	x
Generator Drop	x	x	•

• Standard x Not Available

CONTROL PANEL FEATURES		CPI	CP2	ATPI
MEASUREMENT				
Total Hours Run		•	•	•
Kilowatt Meter		•	•	•
Number of Starts		•	•	•
Number of Start Failures		•	•	•
Service Indicator		•	•	•
CONNECTIVITY				
Remote Screen (CAN)		△	△	△
Local Monitoring (CANBUS)		△	△	△
Local Monitoring (CANLAN)		△	△	△
Remote Monitoring (CANModem – Fixed)		△	△	△
Remote Monitoring (CANModem – GSM)		△	△	△
FEATURES				
Events History		•	•	•
External Start capability		•	•	•
Programmable Start Restriction		•	•	•
Mains Failure Start		•	•	•
Generator Contact Activation		•	x	x
Mains and Generators Contact Activation		x	•	•
Fuel Transfer Control		•	•	x
Engine Temperature		•	•	x
Manual Override		•	•	x
Programmable Alarms		•	•	x
Generator Start in Test Mode		•	•	x
Programmable Outputs		•	•	x
Multi Lingual		•	•	•
Programmable Timer		•	•	x
Synchronisation		•	•	x

• Standard x Not Available △ Optional

REFERENCE STANDARDS

JCB Generators are CE certified and conform to the following Directives:

- EN ISO 13857:2008
- 2006/95/EC
- 89/336/EEC
- 2000/14/EC (amended by 2005/88/EC)
- 97/68/EC (amended by 2002/88/EC & 2004/26/EC)
- Ambient reference conditions 1000mbar, 25°C, 30% relative humidity ISO8528
- Power according to ISO3046

GENERATOR FEATURES		STANDARD	OPTIONAL
ENGINE			
Engine		•	x
Cooling Pack		•	x
Tropicalised Radiator		x	•
Heavy Duty Air Filter		•	x
MTU ADEC Governor		•	x
High Water Temperature Sender		•	x
Low Oil Pressure Sender		•	x
Oil Temperature Sender		•	x
Radiator Guards		•	x
Hot Component Guards		•	x
Manual Oil Drain Pump		•	x
Electric Oil Drain Pump		x	•
Fuel Heater		x	•
Electric Fuel Transfer Pump		x	•
Low Coolant Level Senders		•	x
Battery Charger		x	•
Water Jacket Heater		x	•
Exhaust Gas Compensator		•	x
Industrial Silencer – Open Set		•	x
Residential Silencer – Open Set		x	•
Residential Silencer – Container		•	x
ELECTRICS			
Alternator		•	x
Circuit Breaker		•	x
Busbar		•	x
Heavy Duty Batteries		•	x
Battery Isolator		•	x
Preparation for Earth Spike		•	x
Anti-condensation Heater		x	•
Optional Voltages		x	•
Class F Insulation		x	•
JCB CPI Digital Controller		•	x
JCB CP2 Digital Controller		x	•
JCB ATP1 Automatic Transfer Switch		x	•
CONTAINER			
External Emergency Stop Button		•	x
Heavy Duty Base Frame		•	x
Integral Fuel Tank		•	x
Rockwool Sound Attenuation		•	x
Window for External Control Panel View		•	x
Anti-condensation Heater		x	•