



JCB ENERGY ELECTRIC POWER INDUSTRY

MADRID / SPAIN



www.jcbenergy.es



GENERATOR GENERAL INFORMATION

GENERATOR	FREQUENCY	VOLTAGE	POWER FACTOR	SPEED	DIESEL ENGINE		ALTERNATOR		TYPE OF	GENERATOR OUTPUT				
Model	Hz	V	Cos Q	Rpm	Brand	Model	Series	Brand	Model	Series	Operation	kVA	kW	A
JCD 55	50	231/400	0.8	1500		BFM3C	BF		JCB	180LXA	Standby	55,0	44,0	79,5
											Prime	50,0	40,0	72,3
											Continuous	41,6	33,3	60,2
JCD 66	60	277/480	0.8	1800		BFM3C	BF		JCB	180LXA	Standby	66,0	52,8	95,4
											Prime	60,0	48,0	86,7
											Continuous	52,9	42,3	76,4

- Diesel Engines with Advanced Technology and Quality
- Alternators with Advanced Technology and Quality
- Low Exhaust Emission
- Control Panel Suitable for Flexible Application
- Patented Compact Designed and Sound proof Canopy
- Low Operating Cost, Suitable for Heavy-Duty
- Durability , Low Noise Level

- Tropical 50 °C Radiator, First Class Product Support
- Fuel Filter with Water and Particle Separator
- Low Fuel Consumption, Low Oil Consumption
- Global Technical Service and Maintenance Support
- Wide Range of Affordable Spare Parts
- High Quality and Reliable Technology
- Half Century Experience in Generator Manufacturing

STAND BY POWER RATING – (ESP):

ESP is applicable for supplying emergency power for the duration of the utility power outage. No overload capability is available for this rating. Under no condition is an engine allowed to operate in parallel with the public utility at the Stand by Power rating. This rating should be applied where reliable utility power is available. A Stand By rated engine should be sized for a maximum of an 70% average load factor and 200 hours of operation per year. This includes less than 25 hours per year at the Stand by Power rating. Stand By ratings should never be applied except in true emergency power outages. Negotiated power outages contracted with a utility company are not considered an emergency.

PRIME POWER RATING – (PRP):

Applicable for supplying electric power in lieu of commercially purchased power. Prime Power applications must be in the form of one of the following two categories:

UNLIMITED TIME RUNNING PRIME POWER (ULTP):

PRP (Prime Power) is available for an unlimited number of hours per year in a variable load application. Variable load should not exceed a 70% average of the Prime Power rating during any operating period of 250 hours. The total operating time at 100% Prime Power shall not exceed 500 hours per year. A 10% overload capability is available for a period of 1 hour within a 12-hour period of operation. Total operating time at the 10% overload power shall not exceed 25 hours per year.

LIMITED TIME RUNNING PRIME POWER (LTP):

LTP (Limited Time Prime Power) is available for a limited number of hours in a no variable load application. It is intended for use in situations where power outages are contracted, such as in utility power curtailment. Engines may be operated in parallel to the public utility up to 750 hours per year at power levels never to exceed the Prime Power rating. The customer should be aware, however, that the life of any engine will be reduced by this constant high load operation. Any operation

CONTINUOUS POWER RATING (COP):

COP is the power that the engine can continue to use under the prescribed speed and the specified environment condition in the normal maintenance period stipulated in the manufacturing plant. And Continuous Power is applicable for supplying utility power at a constant 100% load for an unlimited number of hours per year. No overload capability is available for this rating.

PAY ATTENTION TO THE POINTS BELOW IN PICKING AND USING THE GENERATOR

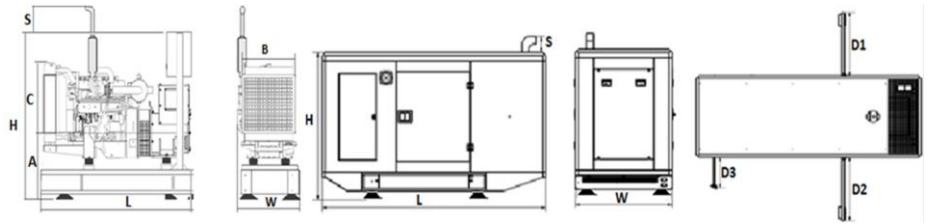
- * Generators can work on Continuous Power at 70% of Prime power value if only all maintenances are done on time with original spare parts and high-quality oils that manufacturer advice.
- * Generators should not operate below 50% of Prime Power value. In such a case, the engine will burn excessive oil and eventually have irreparable damage.
- * If your need is 1000 kVA or above, you should prefer Synchronic Systems with 2-3 generators with failure back up and simultaneous aging.
- * These points will provide advantage for you with purchasing and operating the generator.

GENERATOR DIMENSIONS AND TECHNICAL DRAWINGS



VALUES		OPEN TYPE GENERATOR	CANOPY TYPE GENERATOR
WIDTH	mm	700	1002
LENGTH	mm	1700	2269
HEIGHT	mm	1562	1597
WEIGHT (NET)	Kg	857	990
FUEL TANK CAPACITY	L	134	100

SYMBOL	OPEN	CANOPY
L	1700	2269
W	700	1002
H	1212	1392
S	350	205
A	630	
B	600	
C	515	
D1		750
D2		750
D3		360
D4		
D5		



FUEL CONSUMPTION

PERCENT OF PRIME POWER	1500 rpm	1800 rpm
	l/hr	l/hr
110 %	12,33	14,79
100 %	11,09	13,45
75 %	8,63	10,47
50 %	5,97	7,23

DIESEL ENGINE MAIN TECHNICAL PARAMETERS

50 Hz – 1500 min ⁻¹			60 Hz – 1800 min ⁻¹		
Type		BFM3C	Type		BFM3C
Speed	min ⁻¹	1500	Speed	min ⁻¹	1800
Net Frequency	Hz	50	Net Frequency	Hz	60
Power Standard		LTP	Power Standard		LTP
Power Level			Power Level		
GENERAL			GENERAL		
Aspiration		CAC	Aspiration		CAC
Governing System		Electronic	Governing System		Electronic
Governor Brand		GAC	Governor Brand		GAC
No of Cylinders		4	No of Cylinders		4
Configuration		in-line	Configuration		in-line
Injection System		In-line pump	Injection System		In-line pump
Displacement	L	3,168	Displacement	L	3,168
Bore	mm	98	Bore	mm	98
Stroke	mm	105	Stroke	mm	105
Compression Ratio		18,5:1	Compression Ratio		18,5:1
Mean Effective Pressure	Bar	12,6	Mean Effective Pressure	Bar	12,6
Piston Speed	m/s	5,25	Piston Speed	m/s	6,30
Rotation (looking at flywheel)		ccw	Rotation (looking at flywheel)		ccw
No of Teeth on Flywheel Ring Gear		103	No of Teeth on Flywheel Ring Gear		103
GOVERNOR PERFORMANCE			GOVERNOR PERFORMANCE		
Speed droop (static) mech. gov.	%	4-6	Speed droop (static) mech. gov.	%	4-6
Speed droop (static) electr. gov.	%	0-3	Speed droop (static) electr. gov.	%	0-3
Governing standards		G3	Governing standards		G3
MOMENT OF INERTIA			MOMENT OF INERTIA		
Engine without flywheel	kg m ²	5,50	Engine without flywheel	kg m ²	5,50
Flywheel (standard genset spec.)	kg m ²	0,2	Flywheel (standard genset spec.)	kg m ²	0,2
Max. step load acceptance, 1st step	%	-	Max. step load acceptance, 1st step	%	-
Sound power at full load, incl. cooling system	dB(A)	99	Sound power at full load, incl. cooling system	dB(A)	101
Sound press. (1m average, full load), incl. cool. syst.	dB(A)	87	Sound press. (1m average, full load), incl. cool. syst.	dB(A)	90
ENGINE WEIGHT			ENGINE WEIGHT		
Engine Dry, w/o Cooling System	kg	265	Engine Dry, w/o Cooling System	Kg	265
LUBRICATION SYSTEM			YAĞLAMA SİSTEMİ		
Oil specification		15W40/CI-4/SL	Oil specification		15W40/CI-4/SL
Oil consumption (as % of fuel consumption)	%	0.5	Oil consumption (as % of fuel consumption)	%	0,5
Oil capacity (sump)	l	7,5	Oil capacity (sump)	l	7,5
Min. oil pressure (warning)	Bar	1,5	Min. oil pressure (warning)	Bar	1,5
Min. oil pressure (shut down)	Bar	1.0	Min. oil pressure (shut down)	Bar	1,0
Max. permissible oil temperature (oil pan)	°C	120	Max. permissible oil temperature (oil pan)	°C	120
OUTPUT			OUTPUT		
Gross Output(LTP or StandBy Power)	Kw	50	Gross Output(LTP or StandBy Power)	Kw	60
Fan Reduction	Kw	3	Fan Reduction	Kw	3,0
Electrical Output (Stand By)	Kva	55	Electrical Output (Stand By)	Kva	66
Gross Output(PRIP or Prime Power)	Kw	45	Gross Output(PRIP or Prime Power)	Kw	55
Gross Output(Continous Power)	kw	42	Gross Output(Continous Power)	kw	50

DIESEL ENGINE MAIN TECHNICAL PARAMETERS

50 Hz – 1500 min ⁻¹			60 Hz – 1800 min ⁻¹		
COOLING SYSTEM, GENERAL ENGINE COOLING DATA			COOLING SYSTEM, GENERAL ENGINE COOLING DATA		
Max. perm. Coolant Outlet Temperature	°C	103	Max. perm. Coolant Outlet Temperature	°C	103
Max. perm. Flow Resistance (cool. syst. and piping)	Bar	0.5	Max. perm. Flow Resistance (cool. syst. and piping)	Bar	0.5
Max. Temperature of Coolant (warning)	°C	97	Max. Temperature of Coolant (warning)	°C	97
Max. Temperature of Coolant (shutdown)	°C	103	Max. Temperature of Coolant (shutdown)	°C	103
Temperature at Which Thermostat Starts to open	°C	78	Temperature at Which Thermostat Starts to open	°C	78
Temperature at Which Thermostat is Fully Open	°C	90	Temperature at Which Thermostat is Fully Open	°C	90
Delivery of Coolant Pump	m ³ /h	4,2	Delivery of Coolant Pump	m ³ /h	4,2
Min. Pressure Before Coolant Pump	Bar	0.15	Min. Pressure Before Coolant Pump	Bar	0.15
ENGINE COOLING SYSTEM			ENGINE COOLING SYSTEM		
Coolant Capacity (engine)	l	4.8	Coolant Capacity (engine)	l	4.8
Coolant Capacity (incl. cooling unit)	l	-	Coolant Capacity (incl. cooling unit)	l	-
Fan Power Consumption	kW	3	Fan Power Consumption	kW	4
Air to Boil (max. permissible cool. air temp. at fan)	°C	50	Air to Boil (max. permissible cool. air temp. at fan)	°C	50
Air Pressure Loss, external	mbar	1,5	Air Pressure Loss, external	mbar	2.0
Cooling air Flow	m ³ /h	4680	Cooling air Flow	m ³ /h	5760
HEAT BALANCE			HEAT BALANCE		
Heat Dissipation (engine radiator)	kW	42	Heat Dissipation (engine radiator)	kW	45
Heat Dissipation (CAC)	kW	8,5	Heat Dissipation (CAC)	kW	9,1
INLET / EXHAUST DATA			INLET / EXHAUST DATA		
Max. intake Depression (Switch setting)	mbar	30	Max. intake Depression (Switch setting)	mbar	30
Combustion Air Volume	m ³ /h	170	Combustion Air Volume	m ³ /h	230
Max. Exhaust Back Pressure	mbar	100	Max. Exhaust Back Pressure	mbar	100
Max. Exhaust Gas Temperature	°C	560	Max. Exhaust Gas Temperature	°C	560
Exhaust Gas Flow (at above temp)	m ³ /h	330	Exhaust Gas Flow (at above temp)	m ³ /h	450
ELECTRICAL SYSTEM			ELECTRICAL SYSTEM		
Voltage	V	12	Voltage	V	12
Starter	KW	3	Starter	KW	3
Alternator Output	A	55	Alternator Output	A	55
Batteries (minimum capacity, cold start limit -5°C)	Ah	1*55	Batteries (minimum capacity, cold start limit -5°C)	Ah	1*55

ALTERNATOR TECHNICAL PARAMETERS



ALTERNATOR TECHNICAL PARAMETERS

Insulation Class	H	Field Control System	Self-Excited
Winding Pitch	2/3 - (N° 6)	A.V.R. Model	Standard SX460
Wires	12	Voltage Regulation	± 1 %
Protection	IP 23	Sustained Short-Circuit Current	10 sec 300% (3 IN)
Altitude	m 1000	Total Harmonic (*) TGH / THC	< 5 %
Overspeed	rpm 2250	Wave Form: NEMA = TIF - (*)	< 50
Air Flow	m ³ /sec. 0.216	Wave Form: I.E.C. = THF - (*)	< 2 %
Bearing Drive	N/A -	Bearing Non-Drive	Bearing 6309-2RZ
Rotor Winding	100% Copper	Stator Winding	100% Copper

50 HZ / 231-400V COSQ 0,8 / 1500 RPM

STANDARD USING ALTERNATOR

OPTIONAL USING ALTERNATOR

BRAND/MODEL	JCB ENERGY	JCB 180LXA	LEROY-SOMER	TAL042G	STAMFORD	S1L2-R1/UC224C			
DUTY			Continuous			Stand By			
AMBIENT	C°		40°C			27°C			
CLASS / TEMP. RISE	C°		H/ 125° K			H/ 163° K			
SERIES STAR	V	380/220	400/231	415/240	1 Phase	380/220	400/231	415/240	1 Phase
PARALLEL STAR	V	190/110	200/115	208/120	220	190/110	200/115	208/120	220
SERIES DELTA	V	220	230	240	230	220	230	240	230
OUTPUT POWER	kVA	50,0	50,0	52,0	33,0	55,0	55,0	57,0	36,0
OUTPUT POWER	kW	40,0	40,0	41,6	26,4	44,0	44,0	45,6	28,8

60 HZ / 277-480V COSQ 0,8 / 1800 RPM

STANDARD USING ALTERNATOR

OPTIONAL USING ALTERNATOR

BRAND/MODEL	JCB ENERGY	JCB 180LX	LEROY-SOMER	TAL042G	STAMFORD	UC 224 D - S1L2-R			
DUTY			Continuous			Stand By			
AMBIENT	C°		40°C			27°C			
CLASS / TEMP. RISE	C°		H / 125° K			H / 163° K			
SERIES STAR	V	416/240	440/254	480/277	1 Phase	416/240	440/254	480/277	1 Phase
PARALLEL STAR	V	208/120	220/127	240/138	-	208/120	220/127	240/138	-
SERIES DELTA	V	240	254	277	240	240	254	277	240
OUTPUT POWER	kVA	57,0	61,0	61,0	41,0	63,0	67,0	67,0	45,0
OUTPUT POWER	kW	45,6	48,8	48,8	32,8	50,4	53,6	53,6	36,0

CONTROL MODULE ALERTS

Emergency Stop Malfunction
 High Generator Frequency
 Low Generator frequency, Low Load
 Over Current, Unbalanced Current
 Low Generator Voltage
 High generator Frequency
 Phase sequence error
 Overload, Heat Sensor Broken
 Low Water Level (Optional)
 Low Oil Pressure, Reverse Power
 Low Water Temperature


Start Error, Stop Error
 Magnetic Pickup Error
 Charge Alternator Error
 Unbalanced Load
 Maintenance Time Alarm
 Low Speed, High Speed
 Broken Oil Sensor Cable
 High Oil Temperature (Optional)
 Low Fuel Level (Optional), High Battery Voltage
 Low Battery Voltage, High Water Temperature
 Electronic Can bus Errors (ECU)

CONTROL PANEL SPECIFICATIONS



- Powder Painted Steel Panel with Lockable Door
- ATS (Automatic Transfer Panel)- Optional
- Control Module
- Battery Charger
- Emergency Stop Button
- Terminal Blocks
- Load Output Terminal
- System Protection MSBs
- Circuit Breaker-Optional
- LCD Screen
- Control Relays
- Backlit, 128x64 Pixels

CONTROL MODULE TECHNICAL PARAMETERS

Brand		Brand	Trans-MIDIAMF.232.GP
Dimensions	120mmx94mm.	Protection Class	IP65 From the Front
Weight	260 gr.	Environmental Conditions	2000 meters above sea level
Ambient Humidity	Max. %90.	Ambient Temperature	-20°C to +70°C
DC Battery Supply Voltage	8 - 32 V	Battery Voltage Measurement	8 – 32 V
Network Frequency	5 - 99,9 Hz	Mains Voltage Measurement	3 - 300 V phase -Neutral, 5 - 99,9 Hz
Generator Voltage Measurement	3 - 300 V	Generator Frequency	5 - 99,9 Hz
Current Transformer Secondary	5A	Working Period	Continuous
Charge Alternator Voltage Measurement	8 - 32 V	Charge Alternator Excitation	210mA &12V, 105mA &24V Nominal 2.5W
Communication Interface	RS-232	Analog Sender Measurement	0 - 1300ohm
Generator Contactor Relay Output	5A & 250V	Mains Contactor Relay Output	5A & 250V
Solenoid Transistor Outputs	1A with DC Supply	Start Transistor Outputs	1A with DC Supply
Configurable-3 Transistor Outputs	1A with DC Supply	Configurable-4 Transistor Outputs	1A with DC Supply

CONTROL MODULE FUNCTION

Mains Voltage Level Control	Generator Voltage Level Control	3 Phase Generator Protections	3 Phase AMF Function	Alarm Horn
Network Frequency Level Control	Generator Frequency level Control	- High / Low Voltage	- High / Low Frequency	Heater Tube Thermostat Control
Engine Operating Option Control	Generator Current Level Control	- High / Low Frequency	- High / Low Voltage	Modbus and SNMP
Engine Stop Option Control	Generator Powder Level Control	- Current / Voltage Asymmetry	- High / Low Water Temperature	Working Hour
Engine Speed (RPM) Level Control	Generator work Schedule and Timing Control	- Overcurrent / Overload	- High / Low Load	Ground Leakage
Battery Voltage Options Times	Oil Pressure Controllers Control	Overheat Control	Mains., Generator ATS Control	Analog Modem
Check Engine Maintenance Times	Configurable Analog Inputs and Outputs	1 Phase or 3 Phase, Phase Selection	Network, Voltage, Frequency Display	Ethernet, USB, RS232, RS485
Communication Interfaces GPRS, GSM	Keeping Error Records of Past Events	Parameter Setting via Control Module	Parameter Setting via Computer	Selectable Protection Alarm / Shutdown
Engine Speed, Voltage, Earning	Configurable Programmable Digital Inputs and Outputs	Water Temperature Current and Frequency	Hours of Operation Phase sequence	Battery Voltage Oil Pressure

SOUND PROOF CANOPY AND BASE FRAME (CHASIS) SPECIFICATIONS



- Special, Registered JCB Energy Design and Colour
- A1 Quality DKP / HRU / Galvanized Steel
- Sensitive Twist on Automatic Press Brake
- Delicate Cut on Automatic Punch and Laser Bench
- Sensitive Welding on Robotic Welding Bench
- Chemical Cleaning Nano Technology Before Painting
- Robotic Painting with Electrostatic Powder Paint
- Drying and stabilizing on 200 °C Ovens
- 1500 Hour Salt Test
- Glass wool Isolation, A1 Class Material -50/+500 °C
- Special Covering Over Glass Wool
- Best Sound Level (in DbA)
- Temperature Tests
- Rustproof Accessories
- Cable Exit Connectors and Glands
- Emergency Stop Button
- Fuel Level Gauge
- Fuel Drain Cap
- Fuel Inlet and Return Records
- I permeability Test for Fuel Tank
- Vacuumed Rubber Mounted
- High Quality weatherstrips
- High Quality Shock Absorbers
- Fuel Filling Cap (with ventilation)
- Lifting and Carrying Equipment
- Internal Exhaust Mufflers (Silencers)
- External Exhaust Mufflers (Silencers)
- Radiator water Filling Cap
- Daily Fuel Tank, External Fuel Tank

Our Quality Certificates

Certificate of Registration 

This is to certify that the Quality Management System of

JCBENERGY

JCB ENERGY ELECTRIC POWER INDUSTRY
CALLE DE TRESPADERNE, NUM 7 PLANTA 3, PUERTA C 28042 MADRID - (MADRID), SPAIN

is in accordance with the requirements of the following standard

ISO 9001:2015
(Quality Management System)

SCOPE

MANUFACTURING, SALES AND SERVICE OF GENERATOR AND GENERATOR COMPLEMENTS, WATER PUMP, FORKLIFT, UPS, REGULATOR, CONVERTERS, SHUTTER POWER SUPPLIES
(IAF Code: 18,19)

Certificate Number : 251022013422

Initial Registration Date : 25-Oct-2023
1st Surveillance Date : 25-Sep-2024
2nd Surveillance Date : 25-Sep-2025
Certificate Expiry Date : 24-Oct-2026

To verify certificate, visit at:
www.arscert.com
<https://www.iafacreditation.org>
<https://www.iafcertsearch.org/>

Issued by ARS Assessment Private Limited
Managing Director

IAF Address : 401, North Center Dr., STE 202, Norfolk, VA 23502, United States of America

Certificate of Registration 

This is to certify that the Environmental Management System of

JCBENERGY

JCB ENERGY ELECTRIC POWER INDUSTRY
CALLE DE TRESPADERNE, NUM 7 PLANTA 3, PUERTA C 28042 MADRID - (MADRID), SPAIN

is in accordance with the requirements of the following standard

ISO 14001:2015
(Environmental Management System)

SCOPE

MANUFACTURING, SALES AND SERVICE OF GENERATOR AND GENERATOR COMPLEMENTS, WATER PUMP, FORKLIFT, UPS, REGULATOR, CONVERTERS, SHUTTER POWER SUPPLIES
(IAF Code: 18,19)

Certificate Number : 25102202423

Initial Registration Date : 25-Oct-2023
1st Surveillance Date : 25-Sep-2024
2nd Surveillance Date : 25-Sep-2025
Certificate Expiry Date : 24-Oct-2026

To verify certificate, visit at:
www.arscert.com
<https://www.iafacreditation.org>
<https://www.iafcertsearch.org/>

Issued by ARS Assessment Private Limited
Managing Director

IAF Address : 401, North Center Dr., STE 202, Norfolk, VA 23502, United States of America

CERTIFICATE OF REGISTRATION 

This is to certify that the Management System of

JCBENERGY

JCB ENERGY ELECTRIC POWER INDUSTRY
CALLE DE TRESPADERNE, NUM 7 PLANTA 3, PUERTA C 28042 MADRID - (MADRID), SPAIN

is in accordance with the requirements of the following standard

ISO 27001:2013
(Information Security Management System)

SCOPE OF CERTIFICATION

PROTECTION OF RECORDS AND INFORMATION ASSETS IN MANUFACTURING, SALES AND SERVICE OF GENERATOR AND GENERATOR COMPLEMENTS, WATER PUMP, FORKLIFT, UPS, REGULATOR, CONVERTERS, SHUTTER POWER SUPPLIES

Certificate Number : QCAS-JCB-23-05158813

Initial Certification Date : 25 Oct 2023 Date of Expiry : 24 Oct 2026
1st Surveillance Date : 25 Sep 2024 2nd Surveillance Date : 25 Sep 2025

Verify the Certificate: <https://gaafs.us/site/search/>

Issued by QCAS Certifications Inc.
Managing Director

QCAS Address: 1800 Woodloch Forest, 180 Woodloch Blvd, Suite 200, Woodloch Forest, PA 15389, USA

Certificate of Registration 

This is to certify that the Occupational Health and Safety Management System of

JCBENERGY

JCB ENERGY ELECTRIC POWER INDUSTRY
CALLE DE TRESPADERNE, NUM 7 PLANTA 3, PUERTA C 28042 MADRID - (MADRID), SPAIN

is in accordance with the requirements of the following standard

ISO 45001:2018
(Occupational Health and Safety Management System)

SCOPE

MANUFACTURING, SALES AND SERVICE OF GENERATOR AND GENERATOR COMPLEMENTS, WATER PUMP, FORKLIFT, UPS, REGULATOR, CONVERTERS, SHUTTER POWER SUPPLIES
(IAF Code: 18,19)

Certificate Number : 251022013424

Initial Registration Date : 25-Oct-2023
1st Surveillance Date : 25-Sep-2024
2nd Surveillance Date : 25-Sep-2025
Certificate Expiry Date : 24-Oct-2026

To verify certificate, visit at:
www.arscert.com
www.iafacreditation.org
<https://www.iafcertsearch.org/>

Issued by ARS Assessment Private Limited
Managing Director

IAF Address : 401, North Center Dr., STE 202, Norfolk, VA 23502, United States of America

CERTIFICATE OF REGISTRATION 

This is to certify that the Management System of

JCBENERGY

JCB ENERGY ELECTRIC POWER INDUSTRY
CALLE DE TRESPADERNE, NUM 7 PLANTA 3, PUERTA C 28042 MADRID - (MADRID), SPAIN

is in accordance with the requirements of the following standard

ISO 50001:2018
(Energy Management System)

SCOPE OF CERTIFICATION

MANUFACTURING, SALES AND SERVICE OF GENERATOR AND GENERATOR COMPLEMENTS, WATER PUMP, FORKLIFT, UPS, REGULATOR, CONVERTERS, SHUTTER POWER SUPPLIES

Certificate Number : QCAS-JCB-23-05158814

Initial Certification Date : 25 Oct 2023 Date of Expiry : 24 Oct 2026
1st Surveillance Date : 25 Sep 2024 2nd Surveillance Date : 25 Sep 2025

Verify the Certificate: <https://gaafs.us/site/search/>

Issued by QCAS Certifications Inc.
Managing Director

QCAS Address: 1800 Woodloch Forest, 180 Woodloch Blvd, Suite 200, Woodloch Forest, PA 15389, USA



JCB Energy Electric Power Industry S.L.

HAS OUR TOTAL SUPPORT

We are pleased to certify that this company, with its registered office (address as below) is fully authorized as an Original Equipment Manufacturer partner to incorporate Mecc Alte AC Generators when selling and distributing generating sets.

Mecc Alte also certifies that its product sold to this company are fully covered by the Mecc Alte Warranty.

Mecc Alte provides this company access to its extensive product knowledge in order to incorporate Mecc Alte AC Generators when selling and distributing generating sets.

World class alternators 1-5000kVA.

APPROVED MANUFACTURER

Radek Mivovca



COIF PIGOT ENG. MADRID

VALDURTEL 29 December 2023

COMPANY ADDRESS: C/Av. de Tréspaderne, 7, Pta. C, 28042 Madrid, Spain



GCR CERT

CERTIFICATE



JCB ENERGY ELECTRIC POWER INDUSTRY

CALLE DE TRESPADERNE, NUM 7 PLANTA 3, PUERTA C 28042 MADRID - (MADRID), SPAIN

In recognition of the organization's Management System which complies with

GDP

The scope of activities covered by this certificate is defined below

MANUFACTURING, SALES AND SERVICE OF GENERATOR AND GENERATOR COMPLEMENTS, WATER PUMP, FORKLIFT, UPS, REGULATOR, CONVERTERS, SHUTTER POWER SUPPLIES

Certificate Number : GCR/CERT-11.2023.3586
Certificate Issue Date : 01.11.2023
Certificate Validity : 31.10.2024

Abimanyu Gaurav
Abimanyu Gaurav
Approval



GCR CERT

CERTIFICATE



JCB ENERGY ELECTRIC POWER INDUSTRY

CALLE DE TRESPADERNE, NUM 7 PLANTA 3, PUERTA C 28042 MADRID - (MADRID), SPAIN

In recognition of the organization's Management System which complies with

GHP

The scope of activities covered by this certificate is defined below

MANUFACTURING, SALES AND SERVICE OF GENERATOR AND GENERATOR COMPLEMENTS, WATER PUMP, FORKLIFT, UPS, REGULATOR, CONVERTERS, SHUTTER POWER SUPPLIES

Certificate Number : GCR/CERT-11.2023.3587
Certificate Issue Date : 01.11.2023
Certificate Validity : 31.10.2024

Abimanyu Gaurav
Abimanyu Gaurav
Approval



GCR CERT

CERTIFICATE



JCB ENERGY ELECTRIC POWER INDUSTRY

CALLE DE TRESPADERNE, NUM 7 PLANTA 3, PUERTA C 28042 MADRID - (MADRID), SPAIN

In recognition of the organization's Management System which complies with

ISO 22716:2013:GMP GOOD MANUFACTURING PRACTICES

The scope of activities covered by this certificate is defined below

MANUFACTURING, SALES AND SERVICE OF GENERATOR AND GENERATOR COMPLEMENTS, WATER PUMP, FORKLIFT, UPS, REGULATOR, CONVERTERS, SHUTTER POWER SUPPLIES

Certificate Number : GCR/CERT-11.2023.3585
Certificate Issue Date : 01.11.2023
Certificate Validity : 31.10.2024

Abimanyu Gaurav
Abimanyu Gaurav
Approval



GCR CERT

CERTIFICATE

HEALTHY & SAFE WORKPLACE CERTIFICATE

JCB ENERGY ELECTRIC POWER INDUSTRY

CALLE DE TRESPADERNE, NUM 7 PLANTA 3, PUERTA C 28042 MADRID - (MADRID), SPAIN

It has been entitled to obtain a Healthy and Safe Workplace Certificate by fulfilling the requirements for COVID-19 measures, within the physical conditions of the business with in the scope of the Healthy and Safe Workplace Certificate program.

FACTORIES - PRODUCTION LOCATIONS:
ELECTRICAL AND ELECTRONICS INDUSTRY

Certificate Number : GCR/CERT-11.2023.3600
Certificate Issue Date : 07.11.2023
Certificate Validity : 06.11.2024

Abimanyu Gaurav
Abimanyu Gaurav
Approval



GCR CERT

CERTIFICATE



JCB ENERGY ELECTRIC POWER INDUSTRY

CALLE DE TRESPADERNE, NUM 7 PLANTA 3, PUERTA C 28042 MADRID - (MADRID), SPAIN

In recognition of the organization's Management System which complies with

ISO 10002:2018

The scope of activities covered by this certificate is defined below

MANUFACTURING, SALES AND SERVICE OF GENERATOR AND GENERATOR COMPLEMENTS, WATER PUMP, FORKLIFT, UPS, REGULATOR, CONVERTERS, SHUTTER POWER SUPPLIES

Certificate Number : GCR/CERT-10.2023.3525
Certificate Issue Date : 25.10.2023
Certificate Validity : 24.10.2024

Abimanyu Gaurav
Abimanyu Gaurav
Approval





www.jcbenergy.es