

SANGAMON COUNTY, ILLINOIS

ORDINANCE
NUMBER 23-15

**AN ORDINANCE ACCEPTING BID FOR
GROUND STORAGE TANK GENERATOR INSTALLATION**

DAVE KIMSEY, Village President
DAN HOLDEN, Village Clerk

KRISTEN CHIARO
MEREDITH FERGUSON
JOHN FLETCHER
BRETT GERGER
TIM NICE
CARL TRY
Village Trustees

Published in pamphlet form by authority of the President and Board of Trustees of the Village of Chatham
on May 9, 2023

Sorling Northrup – 1 N. Old State Capitol Plaza, Suite 200, Springfield, IL 62701

ORDINANCE NO. 23-15
AN ORDINANCE ACCEPTING BID FOR
GROUND STORAGE TANK GENERATOR INSTALLATION

WHEREAS, the Village of Chatham (“Village”) is an Illinois Municipal Corporation existing and operating under the Illinois Municipal Code and the laws of the State of Illinois; and

WHEREAS, the Village requested bids for bike trail improvements and patching existing asphalt pavement within the Village of Chatham; and

WHEREAS, the Village solicited bids in accordance with Illinois law for proposals from companies willing and able to provide the services requested, and the Village opened all bids on April 21, 2023; and,

WHEREAS, the bid documents made clear that the Village reserved the right to accept or reject any and/or all parts of the bid; and,

WHEREAS, the bid documents requested bids for installation of a ground storage tank generator; and,

WHEREAS, the Village received one bid at cost of \$160,575.00 from B&B Electric, Inc.; and

WHEREAS, the Village wishes to award the bid to B&B Electric, Inc., at a cost of \$160,575.00, as further described in the bid attached hereto as **Exhibit A**; and,

WHEREAS, the Board of Trustees of the Village believe it is in the best interest of the Village to accept the bid from B&B Electric, Inc. as summarized.

NOW THEREFORE, BE IT ORDAINED by the President and Board of Trustees of the Village of Chatham, Sangamon County, Illinois, as follows:

Section 1. Recitals. The foregoing recitals shall be and are hereby incorporated into and made a part of this Resolution as if fully set forth in this Section 1.

Section 2. Acceptance of Bid. The Village hereby approves the bid from B&B Electric, Inc., at a cost of \$160,575.00 as further described in the bid attached hereto as **Exhibit A**. Any and all bids and parts thereof not explicitly approved by this Ordinance are hereby rejected. The Village authorizes the Village Manager and/or Village President, or designee of either, to execute any documents necessary to complete the purchases contemplated therein.

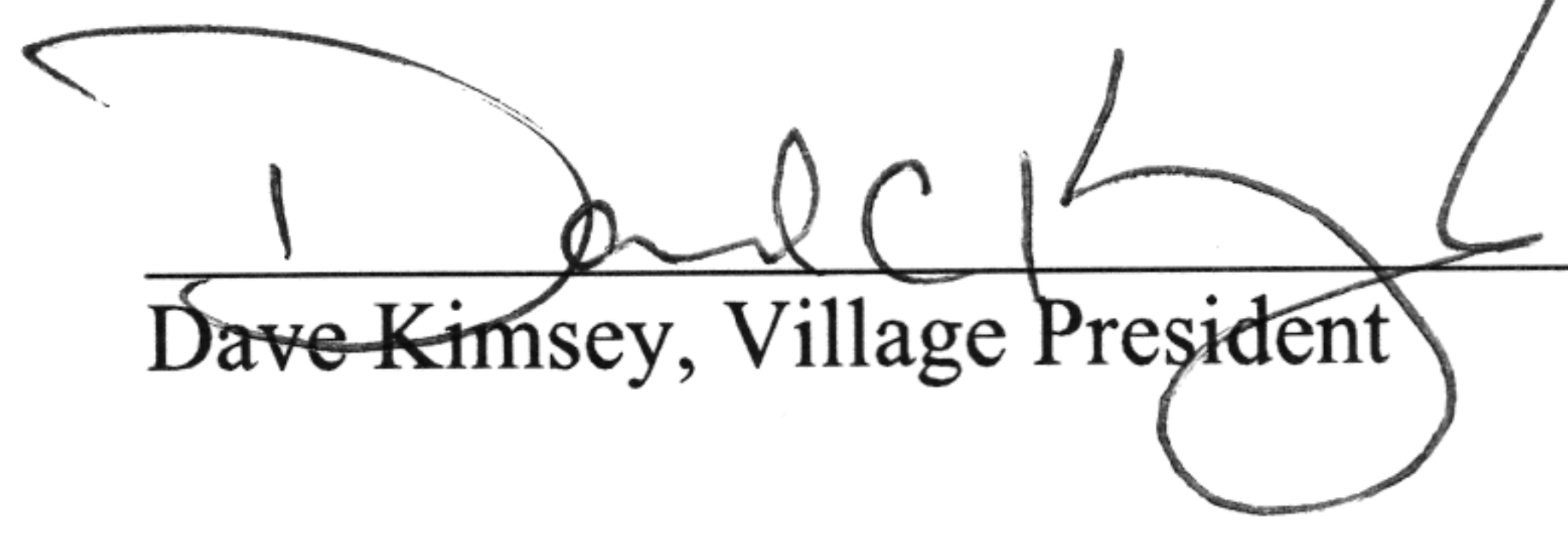
Section 3. Severability. In the event a court of competent jurisdiction finds this ordinance or any provision hereof to be invalid or unenforceable as applied, such finding shall not affect the validity of the remaining provisions of this ordinance and the application thereof to the greatest extent permitted by law.

Section 4. Repeal and Savings Clause. All ordinances or parts of ordinances in conflict herewith are hereby repealed; provided, however, that nothing herein contained shall affect any rights, actions, or causes of action which shall have accrued to the Village of Chatham prior to the effective date of this ordinance.

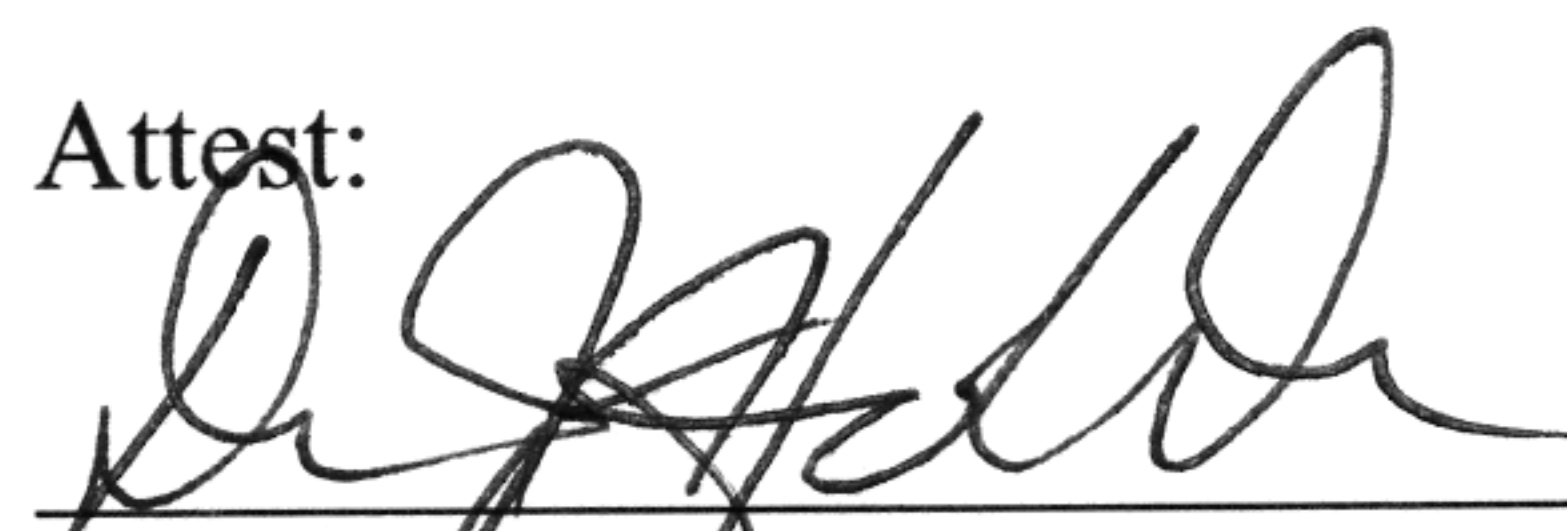
Section 5. Effective Date. This Ordinance shall be in full force and effect from and after its passage, approval and publication in pamphlet form as provided by law.

	AYE	NAY	ABSTAIN	ABSENT
KRISTEN CHIARO	✓			
MEREDITH FERGUSON	✓			
JOHN FLETCHER				✓
BRETT GERGER	✓			
TIM NICE				✓
CARL TRY	✓			
DAVE KIMSEY				
TOTAL	4	0	0	2

APPROVED by the President of the Village of Chatham, Illinois this 9 day of May, 2023.



Dave Kimsey, Village President

Attest:


Dan Holden, Village Clerk

EXHIBIT A

Ground Storage Tank Generator Installation Bid

VILLAGE OF CHATHAM, IL

GROUNDS STORAGE TANK GENERATOR INSTALLATION

9. Proposal to furnish and install materials as specified in this RFP for the following Lump Sum amount. Contractor shall supply the following breakdown of costs.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1	Furnish and Install Generator and Transfer switch	1	Lump Sum	\$ N/A	\$ 110,000.00
2	Electrical Service Connection	1	Lump Sum	\$ N/A	\$ 10,000.00
3	Electrical conduit, cabinets, wiring and connections to building/existing cabinets	1	Lump Sum	\$ N/A	\$ 25,575.00
4.	Concrete foundation pad and bollards	1	Lump Sum	\$ N/A	\$ 13,500.00
5.	Site restoration and cleanup	1	Lump Sum	\$ N/A	\$ 1,500.00
Total Base Bid					\$
				\$ N/A	\$ 160,575.00

Total Base Bid Amount \$ 160,575.00
 (Required) One hundred sixty thousand five hundred seventy five

(in writing)

10. BIDDERS are required to submit with their Unit Price Cost Proposal the following items: Additional information can be provided by BIDDER on separate page(s), but the information in items 10.a. to 10.d. below must be completed.

- a. Drawings/Certifications:
1) Shop Drawings/Catalog Cuts showing all anticipated material sources shall be provided.

Please see partial submittal. Complete submittal will be supplied once purchase orders are written.

- b. Scheduled Date of site work completion:

45 calendar days after the manufacture supply/delivery of the generator

- c. Scheduled Date of Generator/ Transfer Switch delivery/installation:

To be determined

11. Construction Schedule: Once construction activities begin, operations shall be continuous, weather pending, until the work is complete. It is understood that the manufacture lead time for supplying the generator is outside the control of the Bidder. Therefore, all work shall be completed by no later than 45 calendar days after the manufacture supply/delivery of the generator. The OWNER shall be provided with a written estimate of delivery of the generator from the manufacturer. Any delays in production shall be communicated to the OWNER on a biweekly basis after the original date of delivery.

If the BIDDER cannot meet this anticipated schedule, he/she shall note as an exception to their Proposal and state the certified date that the project will be completed by. If BIDDER fails to meet the construction schedule noted above or as an exception, OWNER reserves the right to enforce a daily penalty of \$100 per calendar day past the scheduled completion date.

12. Exceptions to Contract Documents (if any):

13. STANDARD FORM OF PROPOSAL

(Seal)

(If an Individual)

Signature of Bidder _____

Business Address _____

(If a Partnership)

(Seal)

Firm Name _____

Signed By _____ (Seal)

Business Address _____

(Insert Names and

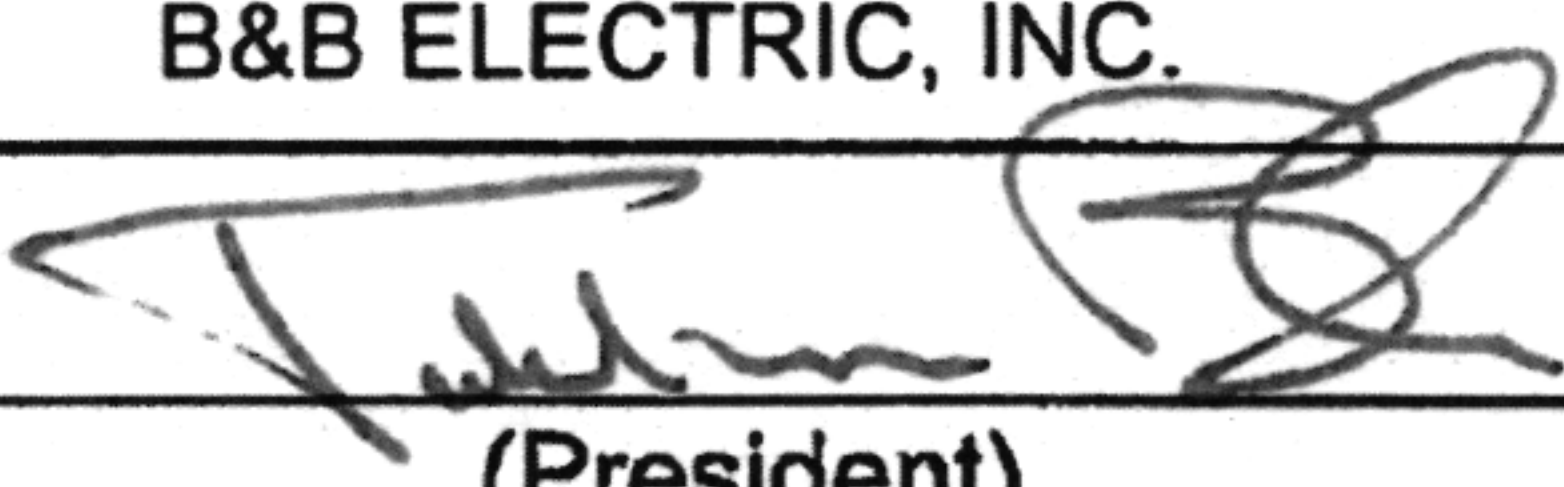
Address of all

Partners of the

Firm)

(If a Corporation)

Corporate Name B&B ELECTRIC, INC.

Signed By 
(President)

Business Address 3000 REILLY DRIVE, SPRINGFIELD, IL 62703

(Corporate Seal)

(Insert Names of
Officers)

President TODD M. BRINKMAN

Secretary KRISTIN MILLER

Treasurer KRISTIN MILLER

Attest: 
(Secretary)

(If a Joint-Venture)

Corporate Name _____

Signed By _____
(President)

Business Address _____

Corporate Name _____

Signed By _____
(President)

Business Address _____

Corporate Name _____

Signed By _____
(President)

Business Address _____

Corporate Name _____

Signed By _____
(President)

Business Address _____

QUOTATION



3000 REILLY DRIVE

SPRINGFIELD, ILLINOIS 62703

217/528-9666
FAX 217/528-5481

VILLAGE OF CHATHAM

Attn: Dustin Patterson

Re: Pump Station Generator

4/25/23

B&B Electric. will provide labor and material for electrical work on the above referenced project including,

- Provide and install a complete generator installation per the CMT drawings dated 4/6/23.
- Provide conduit and wiring for the new 175kw generator and 4X transfer switch.
- Concrete pad & bollards for the generator included.
- Diesel fuel for the generator and testing is included.
- Rigging – Lifting – Setting of the equipment is included.
- Power shutdown will be required to install the transfer switch.
- Liquidated damages due to material/equipment lead times are excluded.
- Utility fee excluded.
- All work is to be completed during normal daytime hours. (7am-3:30pm)
- Tax excluded.

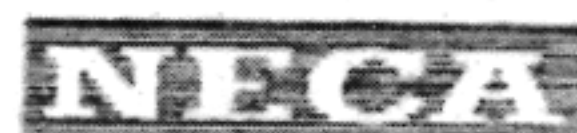
This work will be completed for the sum of \$ 160,575.00

A voluntary deduct to go with a outdoor rated NEMA 3R transfer switch instead of a 4X would be a duct of \$ 9,600.00

Aaron Andruskevitch

ACCEPTED BY _____
TITLE _____
DATE _____

COMPLETE ELECTRICAL INSTALLATION
INDUSTRIAL - COMMERCIAL



NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION

STANDARD FORM OF PROPOSAL

TO THE OWNER, VILLAGE OF CHATHAM

1. Proposal of B&B ELECTRIC, INC., 3000 REILLY DRIVE, SPRINGFIELD, IL 62703
(Name and Address of Bidder)

for GROUND STORAGE TANK GENERATOR INSTALLAION

2. In submitting this proposal, the undersigned declares that the only persons or parties interested in the proposal as principals are those named herein, and that the proposal is made without collusion with any other person, firm or corporation.

3. The undersigned further declares that he has carefully examined the Proposal, Plans, Specifications, form of CONTRACT and Contract Bond, and Special Provisions (if any), and that he has familiarized himself with all of the local conditions affecting the CONTRACT and the detailed requirements and understands that in making this Proposal he waives all right to plead any misunderstanding regarding the same.

4. The undersigned further understands and agrees that if this Proposal is accepted he/she is to furnish and provide all necessary machinery, tools, apparatus, and other means to furnish the equipment and materials specified in the CONTRACT in the manner and at the time therein prescribed, and in accordance with the requirements therein set forth.

5. The undersigned further agrees that the ENGINEER may, at any time during the progress of the WORK covered by this CONTRACT, order other work or materials. All such work and materials that do not appear in the proposal or CONTRACT as a specific item accompanied by a unit price, and which are not included under the bid price for other items in this CONTRACT, shall be performed as Extra Work, per Section 7-4. Compensation shall be paid in accordance with Section 7-4.

6. The undersigned further agrees to execute a CONTRACT for this WORK and present the same to the OWNER within fifteen (15) days after the receipt of Notice of Award of the CONTRACT by him.

7. The undersigned further agrees to begin WORK not later than the date specified in the Notice to Proceed, and to prosecute the WORK in such manner and with sufficient materials, equipment, and labor as will insure its completion within the Contract Time specified herein, it being understood and agreed that the completion within the Contract Time is an essential part of the CONTRACT. The undersigned agrees to complete the WORK within the time period stated in the Standard Form of the "Notice to Bidders", unless additional time shall be granted by the ENGINEER in accordance with the provisions of the Specifications. In case of failure to complete the WORK within the time named herein or within such extra time as may have been allowed by

extensions, the undersigned agrees that the OWNER, shall withhold, from such sums as may be due him/her under the terms of this CONTRACT, the costs set forth in the Specifications, which costs shall be considered and treated not as a penalty but as damages due to the OWNER from the undersigned by reason of inconvenience to the public, added cost of engineering and supervision, maintenance of detours, and other items which have caused an expenditure of funds resulting from the failure of the undersigned to complete the WORK within the CONTRACT Time.

8. Accompanying this Proposal is a bank draft, bank cashier's check, certified check, or bid bond complying with the requirements of the specifications made payable to

Village of Chatham

The amount of the 5% of Bid amount

If this proposal is accepted and the undersigned shall fail to execute a CONTRACT and Contract Bond as required herein, it is hereby agreed that the amount of the check or draft or bidder's bond substituted in lieu thereof, shall become the property of the OWNER, and shall be considered as payment of damages due to delay and other causes suffered by the OWNER because of the failure to execute said CONTRACT and Contract Bond; otherwise said check or draft, or bidder bond substituted in lieu thereof shall be returned to the undersigned.

**ATTACH BID BOND, BANK DRAFT, BANK CASHIER'S CHECK
OR CERTIFIED CHECK HERE**

In the event that one check or draft is intended to cover two or more proposals, the amount must be equal to the sum of the proposal guarantees of the individual sections covered.

AIA[®] Document A310[™] – 2010

Bid Bond

CONTRACTOR:

(Name, legal status and address)

B & B Electric, Inc.
3000 Reilly Drive
Springfield, IL. 62703

SURETY:

(Name, legal status and principal place of business)

The Cincinnati Insurance Company
6200 S. Gilmore Road
Fairfield, OH. 45014

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

OWNER:

(Name, legal status and address)

Village of Chatham
Village Hall, 116 E. Mulberry Street
Chatham, IL. 62629

BOND AMOUNT: (-----5%-----)

Five Percent of Bid Amount

PROJECT:

(Name, location or address, and Project number, if any)

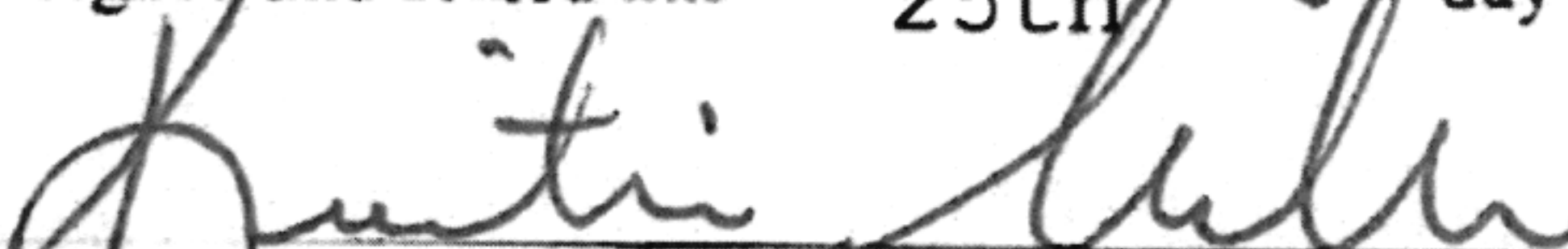
Village of Chatham, Ground Storage Tank Generator Installation

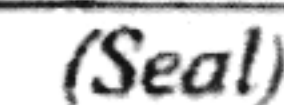
The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

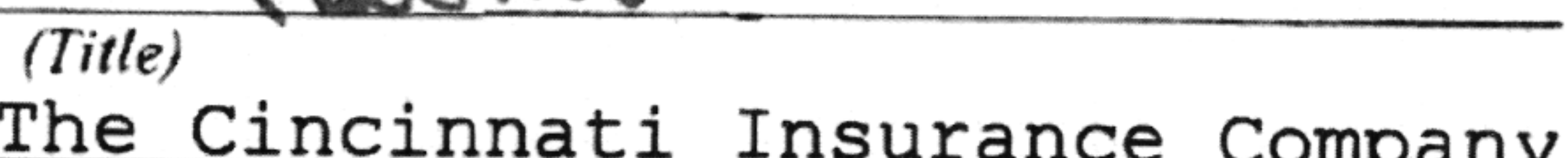
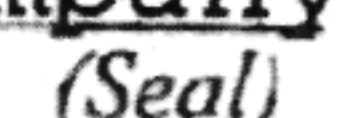
If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

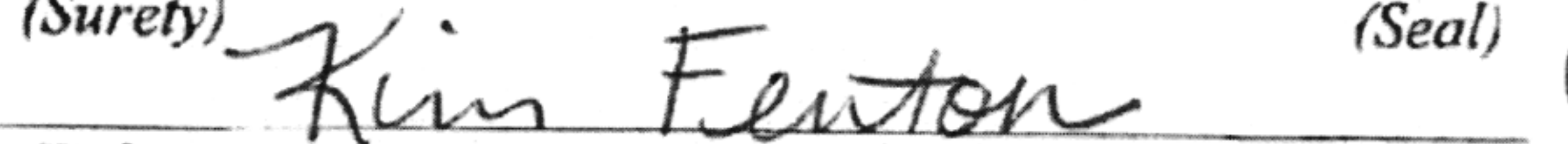
Signed and sealed this 25th day of April 2023


(Witness)

B & B Electric, Inc.
(Principal)  (Seal)


(Title)
The Cincinnati Insurance Company
(Surety)  (Seal)


(Witness) Kenzie Myers


(Title) Kim Fenton, Attorney-in-Fact

CAUTION: You should sign an original AIA Contract Document, on which this text appears in RED. An original assures that changes will not be obscured.

THE CINCINNATI INSURANCE COMPANY
THE CINCINNATI CASUALTY COMPANY

Fairfield, Ohio

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That THE CINCINNATI INSURANCE COMPANY and THE CINCINNATI CASUALTY COMPANY, corporations organized under the laws of the State of Ohio, and having their principal offices in the City of Fairfield, Ohio (herein collectively called the "Companies"), do hereby constitute and appoint

Michael A. Aiello; John S. Hester; Gary J. Hoecker; James J. Reavy; John P. Eck, Jr. Linda Garner; Todd R. Sowle; Kim Fenton; David White; Christopher Leming; Lori Ruppel Williams; Kathleen K. Stephens and/or Andrea J. Petrilli

of Springfield, Illinois

their true and legal Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign, execute, seal and deliver on behalf of the Companies as Surety, any and all bonds, policies, undertakings or other like instruments, as follows:

Any such obligations in the United States, up to
Fifty Million and No/100 Dollars (\$50,000,000.00).

This appointment is made under and by authority of the following resolutions adopted by the Boards of Directors of The Cincinnati Insurance Company and The Cincinnati Casualty Company, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the President or any Senior Vice President be hereby authorized, and empowered to appoint Attorneys-in-Fact of the Company to execute any and all bonds, policies, undertakings, or other like instruments on behalf of the Corporation, and may authorize any officer or any such Attorney-in-Fact to affix the corporate seal; and may with or without cause modify or revoke any such appointment or authority. Any such writings so executed by such Attorneys-in-Fact shall be binding upon the Company as if they had been duly executed and acknowledged by the regularly elected officers of the Company.

RESOLVED, that the signature of the President or any Senior Vice President and the seal of the Company may be affixed by facsimile on any power of attorney granted, and the signature of the Secretary or Assistant Vice-President and the Seal of the Company may be affixed by facsimile to any certificate of any such power and any such power of certificate bearing such facsimile signature and seal shall be valid and binding on the Company. Any such power so executed and sealed and certified by certificate so executed and sealed shall, with respect to any bond or undertaking to which it is attached, continue to be valid and binding on the Company.

IN WITNESS WHEREOF, the Companies have caused these presents to be sealed with their corporate seals, duly attested by their President or any Senior Vice President this 16th day of March, 2021.



STATE OF OHIO)SS:
COUNTY OF BUTLER)

THE CINCINNATI INSURANCE COMPANY
THE CINCINNATI CASUALTY COMPANY

Stephen A. Ventre

On this 16th day of March, 2021 before me came the above-named President or Senior Vice President of The Cincinnati Insurance Company and The Cincinnati Casualty Company, to me personally known to be the officer described herein, and acknowledged that the seals affixed to the preceding instrument are the corporate seals of said Companies and the corporate seals and the signature of the officer were duly affixed and subscribed to said instrument by the authority and direction of said corporations.



Keith Collett

Keith Collett, Attorney at Law
Notary Public - State of Ohio
My commission has no expiration date.
Section 147.03 O.R.C.

I, the undersigned Secretary or Assistant Vice-President of The Cincinnati Insurance Company and The Cincinnati Casualty Company, hereby certify that the above is the Original Power of Attorney issued by said Companies, and do hereby further certify that the said Power of Attorney is still in full force and effect.

Given under my hand and seal of said Companies at Fairfield, Ohio, this 25th day of April 2023



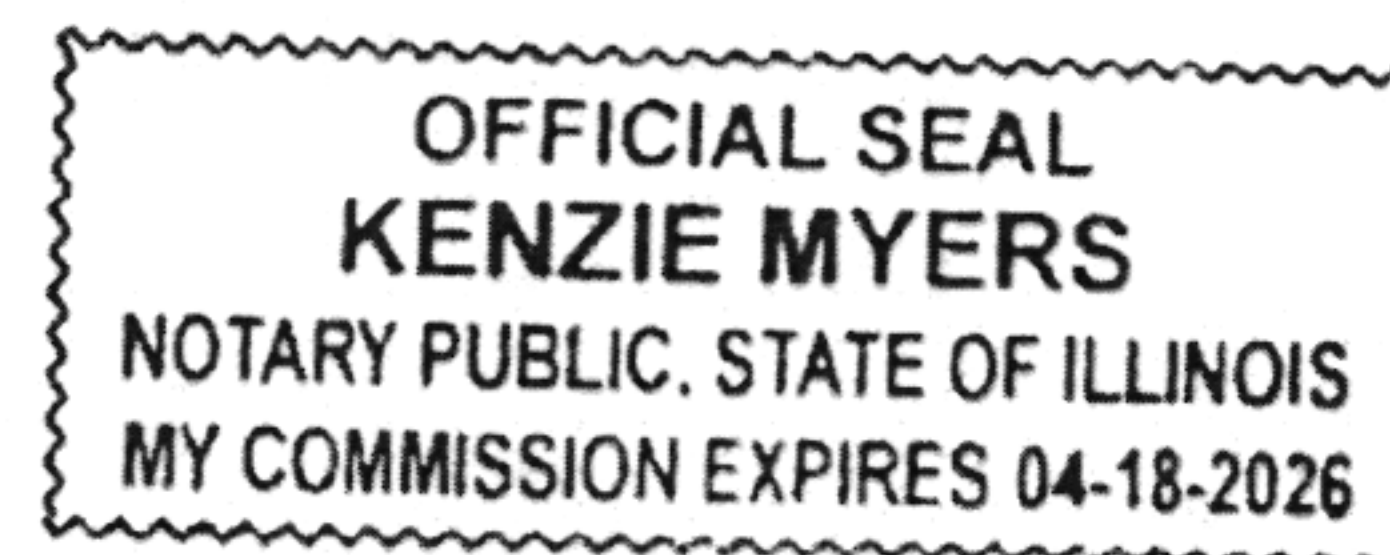
Ed H

STATE Illinois

COUNTY Sangamon

On April 25, 2023 before me, a Notary Public in and for said County and State, residing therein, duly Commissioned and Sworn personally appeared Kim Fenton known to me to be Attorney-in-Fact of The Cincinnati Insurance Company who executed the within and foregoing instrument, and known to me to be the person who executed the said instrument on behalf of the said Corporation, and they duly acknowledged to me that such Corporation executed the same. IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year stated in this certificate above.

MY COMMISSION EXPIRES: 4-18-26 NOTARY PUBLIC Kenzie Myers



Cat[®] C7.1 DIESEL GENERATOR SETS



Standby & Prime: 60Hz

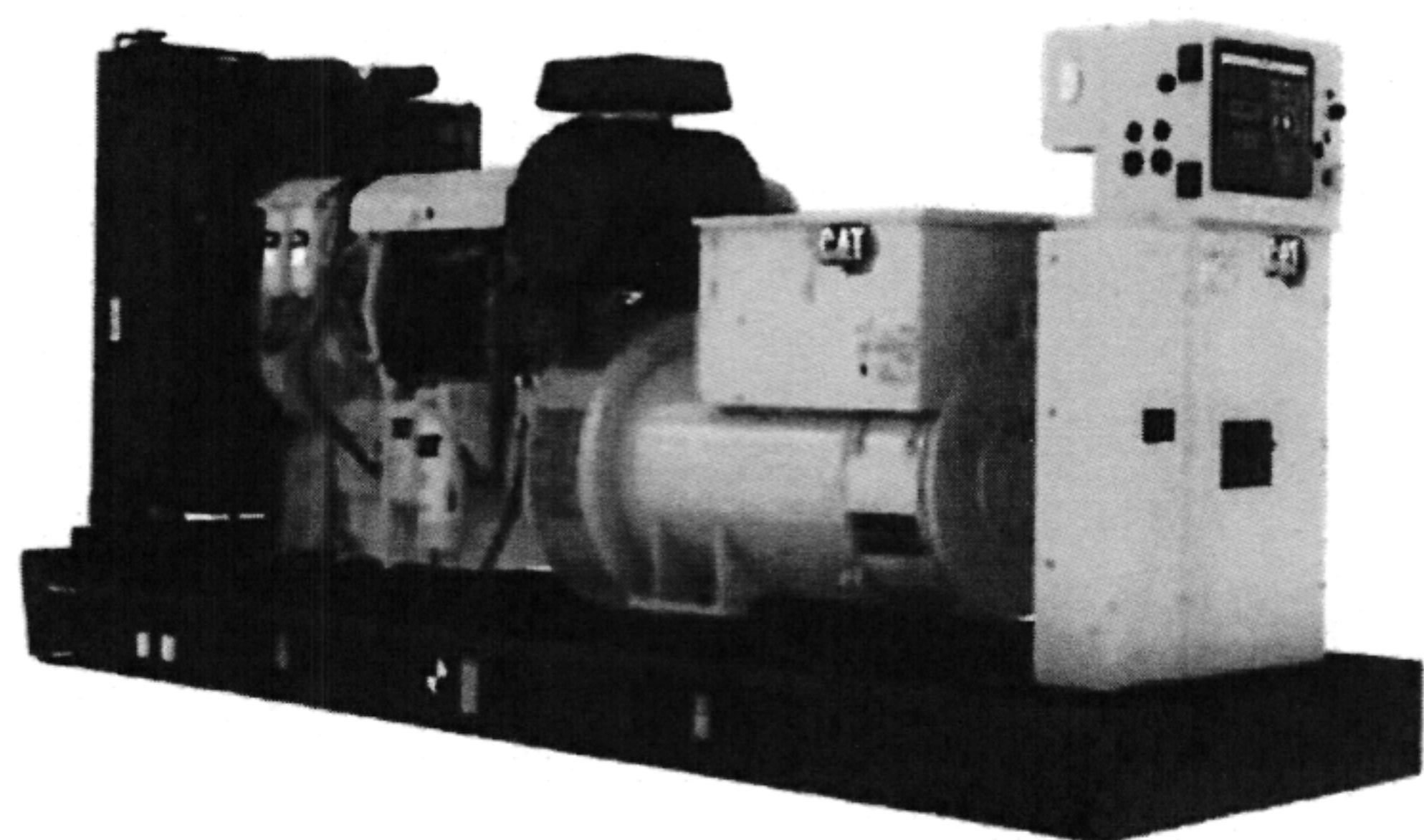


Image shown might not reflect actual configuration

Engine Model	Cat [®] C7.1 In-line 6, 4-cycle diesel
Bore x Stroke	105mm x 127mm (4.1in x 5.0 in)
Displacement	7.01 L (428 in ³)
Compression Ratio	16.7:1
Aspiration	Turbocharged Air-to-Air-Aftercooled
Fuel Injection System	Electronic, Common Rail
Governor	Electronic

Model	Standby	Prime	Emission Strategy
C7.1	175 ekW	158 ekW	EPA TIER III

PACKAGE PERFORMANCE

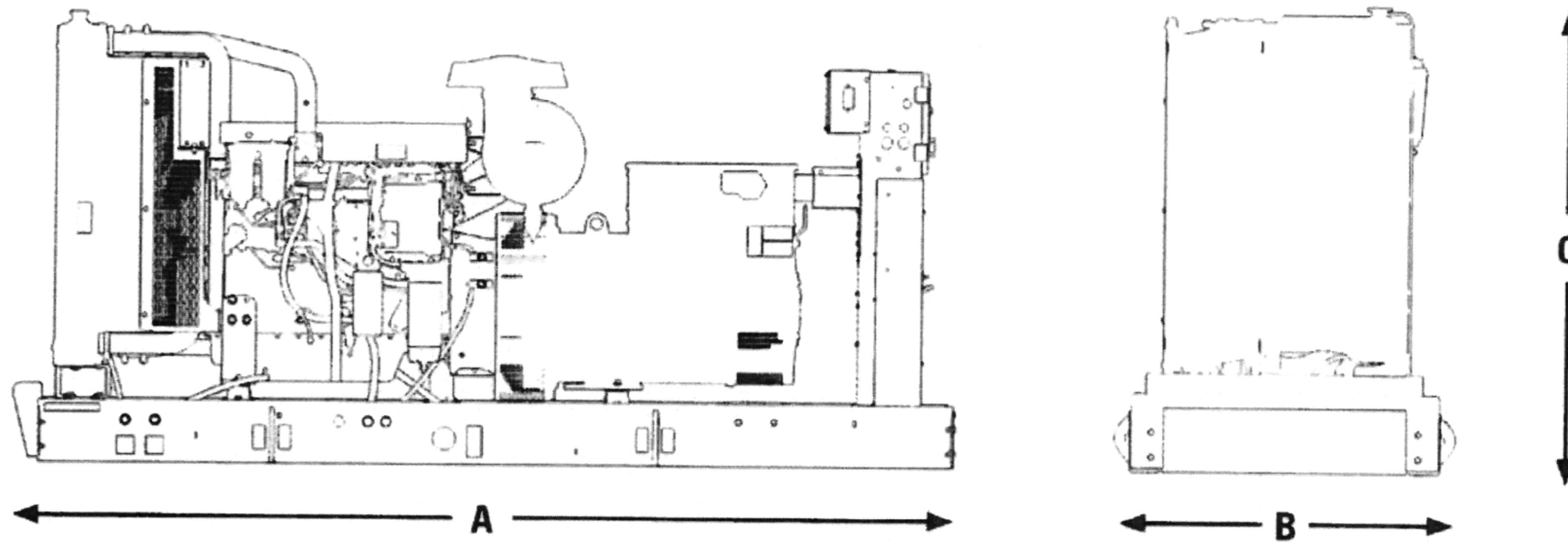
Performance	Standby	Prime
Frequency	60 Hz	
Genset Power Rating	219 kVA	196.9 kVA
Genset power rating with fan @ 0.8 power factor	175 ekW	157.5 ekW
Emissions	EPA TIER III	
Performance Number	P4378A-00	P4378C-00
Fuel Consumption		
100% load with fan, L/hr (gal/hr)	51.2 (13.5)	48.0 (12.7)
75% load with fan, L/hr (gal/hr)	41.9 (11.1)	38.3 (10.1)
50% load with fan, L/hr (gal/hr)	28.6 (7.6)	25.5 (6.7)
Cooling System¹		
Radiator air flow restriction (system), kPa (in. Water)	0.12 (0.48)	0.12 (0.48)
Engine coolant capacity, L (gal)	9.5 (2.5)	9.5 (2.5)
Radiator coolant capacity, L (gal)	11.5 (3.0)	11.5 (3.0)
Total coolant capacity, L (gal)	21 (5.5)	21 (5.5)
Inlet Air		
Combustion air inlet flow rate, m ³ /min (cfm)	15.4 (543.8)	15.2 (536.8)
Max. Allowable Combustion Air Inlet Temp, °C (°F)	51 (124)	
Exhaust System		
Exhaust stack gas temperature, °C (°F)	509 (948)	487.2 (909)
Exhaust gas flow rate, m ³ /min (cfm)	34.8 (1229)	33.7 (1190)
Exhaust system backpressure (maximum allowable) kPa (in. water)	15.0 (60.2)	15.0 (60.2)
Heat Rejection		
Heat rejection to exhaust (total) kW (Btu/min)	159.0 (9042)	149.0 (8473)
Heat rejection to aftercooler, kW (Btu/min)	37.0 (2104)	36.0 (2047)
Heat rejection to atmosphere from engine, kW (Btu/min)	32.0 (1820)	30.2 (1717)

Cat[®] C7.1 DIESEL GENERATOR SETS



Emissions (Nominal) ²	Standby	Prime
NOx + HC g/kW-hr	4.0	4.0
CO	1.0	1.0
PM	0.2	0.2
Alternator ³		
Voltages	480V	480V
Motor starting capability @ 30% Voltage Dip	387 skVA	387 skVA
Frame Size	LC5014D	LC5014D
Excitation	Self Excited	Self Excited
Temperature Rise	105°C	105°C

WEIGHTS & DIMENSIONS



Dim "A" mm (in)	Dim "B" mm (in)	Dim "C" mm (in)	Dry Weight kg (lb)
3039 (120)	1110 (44)	1476 (58)	1500 (3307)

APPLICABLE CODES AND STANDARDS:

AS1359, CSA C22.2 No100-04, UL142, UL489, UL869, UL2200, NFPA37, NFPA70, NFPA99, NFPA110, IBC, IEC60034-1, ISO3046, ISO8528, NEMA MG1-22, NEMA MG1-33, 2006/95/EC, 2006/42/EC, 2004/108/EC.

Note: Codes may not be available in all model configurations. Please consult your local Cat Dealer representative for availability.

STANDBY: Output available with varying load for the duration of the interruption of the normal source power. Average power output is 70% of the standby power rating. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

PRIME: Output available with varying load for an unlimited time. Average power output is 70% of the prime power rating. Typical peak demand is 100% of prime rated kW with 10% overload capability for emergency use for a maximum of 1 hour in 12. Overload operation cannot exceed 25 hours per year.

RATINGS: Ratings are based on SAE J1349 standard conditions. These ratings also apply at ISO3046 standard conditions.

DEFINITIONS AND CONDITIONS

¹ For ambient and altitude capabilities consult your Cat dealer. Air flow restriction (system) is added to existing restriction from factory.

² Emissions data measurement procedures are consistent with those described in EPA CFR 40 Part 89, Subpart D & E and ISO8178-1 for measuring HC, CO, PM, NOx. Data shown is based on steady state operating conditions of 77° F, 28.42 in HG and number 2 diesel fuel with 35° API and LHV of 18,390 BTU/lb. The nominal emissions data shown is subject to instrumentation, measurement, facility and engine to engine variations. Emissions data is based on 100% load and thus cannot be used to compare to EPA regulations which use values based on a weighted cycle.

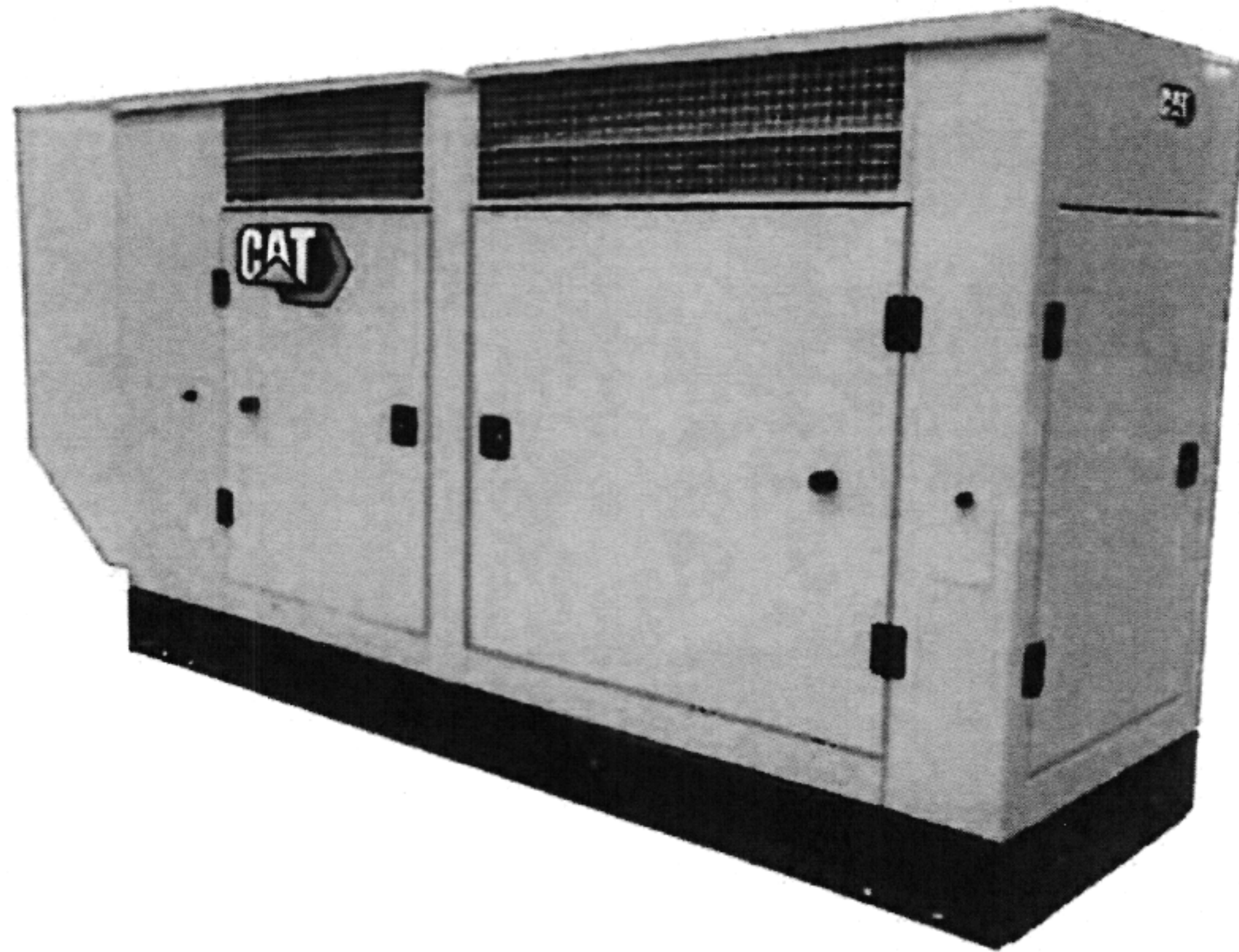
³ UL 2200 Listed packages may have oversized generators with a different temperature rise and motor starting characteristics. Generator temperature rise is based on a 40° C ambient per NEMA MG1-32.

LET'S DO THE WORK.™

LEHE1584-01 (05/20)

Materials and specifications are subject to change without notice. The International System of Units (SI) is used in this publication. © 2020 Caterpillar. All Rights Reserved. CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Corporate Yellow", the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

www.Cat.com/electricpower
All rights reserved.



Picture shown may not reflect actual configuration

Weather Protective and Sound Attenuated Enclosures

D40 to D60
D80 to D100
D125 to D200

Features

Highly Corrosion Resistant construction

- Stainless steel flush fitting latches and hinges tested and proven to withstand extreme conditions of corrosion
- Zinc plated or stainless steel fastener

Excellent Access

- Single side access for service and controls
- All non-service sides have removable doors and/or panels
- Radiator fill access
- Lube oil and coolant drains piped to the exterior of the enclosure base
- Large cable entry area for installation ease
- Double doors on both sides
- Vertically hinged doors with solid bar door stays to hold doors in place when open

Security and Safety

- Lockable access doors which give full access to control panel and breaker
- Cooling fan and battery charging alternator fully guarded
- Fuel fill, oil fill, and battery can only be reached via lockable access
- Stub-up area is rodent proof

Transportability

- These enclosures are of extremely rugged construction to withstand outdoor exposure and rough handling common on many construction sites. The sound deadening material is of a self-extinguishing design
- This range of enclosures are designed on modular principles with many interchangeable components permitting on site repair

Options

- Weather Protective - constructed with 16 gauge steel; industrial silencer mounted within the main enclosure body
- Sound Attenuated Level 1 - constructed with 16 gauge steel; weather protective with critical silencer - silencer mounted in separate upward discharging radiator hood
- Sound Attenuated Level 2 - constructed with 16 gauge steel; weather protective with critical silencer and 100% lined with sound deadening material – silencer mounted in separate upward discharging radiator hood
- Sound Attenuated Aluminum constructed with 14 gauge Aluminum 5052 grade. Weather protective with critical silencer and 100% lined with sound deadening material – silencer mounted in separate upward discharging radiator hood
- Caterpillar Yellow* or white paint
- UL Listed sub base tanks
- Externally mounted emergency stop button
- Seismic certification per applicable building codes: IBC 2000, IBC 2003, IBC 2006, IBC 2009, IBC 2012, CBC 2007, CBC 2010
- IBC certification for 180 mph wind loading

*Not available with Aluminium enclosures

Enclosures



Enclosure Sound Pressure Levels (SPL) at 100%

Weather Protective Enclosure		Cooling Air Flow Rate		SPL @7m (23ft)
Model	Standby eKW	m ³ /s	cfm	dBA
D40 (2/4)	40	1.7	3602	85
D50 (2/4)	50	1.7	3602	86
D60 (2/4)	60	1.9	4026	88
D80-8	80	3.2	6696	79
D100-8	100	3.6	7564	81
D125-8	125	4.6	9676	78
D150-10	150	4.6	9676	79
D175-4	175	5.9	12431	84
D200-2	200	5.9	12431	89

SA Level 1 Enclosure		Cooling Air Flow Rate		SPL @7m (23ft)
Model	Standby eKW	m ³ /s	cfm	dBA
D40 (2/4)	40	1.7	3602	66
D50 (2/4)	50	1.7	3602	66
D60 (2/4)	60	1.8	3899	71
D80-8	80	3.2	6696	78
D100-8	100	3.2	6696	79
D125-8	125	4.2	8899	74
D150-10	150	4.2	8899	74
D175-4	175	5.6	11830	78
D200-2	200	5.5	11654	81

SA Level 2 Enclosure		Cooling Air Flow Rate		SPL @7m (23ft)
Model	Standby eKW	m ³ /s	cfm	dBA
D80-8	80	3.2	6696	75
D100-8	100	3.2	6696	76
D125-8	125	4.2	8899	74
D150-10	150	4.2	8899	74
D175-4	175	5.2	11018	74
D200-2	200	5.1	10806	75

Enclosures



SA Aluminum Enclosure		Cooling Air Flow Rate		SPL @7m (23ft)
Model	Standby eKW	m ³ /s	cfm	dBA
D80-8	80	3.2	6696	73
D100-8	100	3.2	6696	74
D125-8	125	4.2	8899	74
D150-10	150	4.2	8899	75
D175-4	175	5.2	11018	75
D200-2	200	5.1	10806	75

The sound pressure level data shown above is quoted as free field and is for guidance only. Actual levels produced may vary according to site conditions.

Enclosure Dimensions and Weights

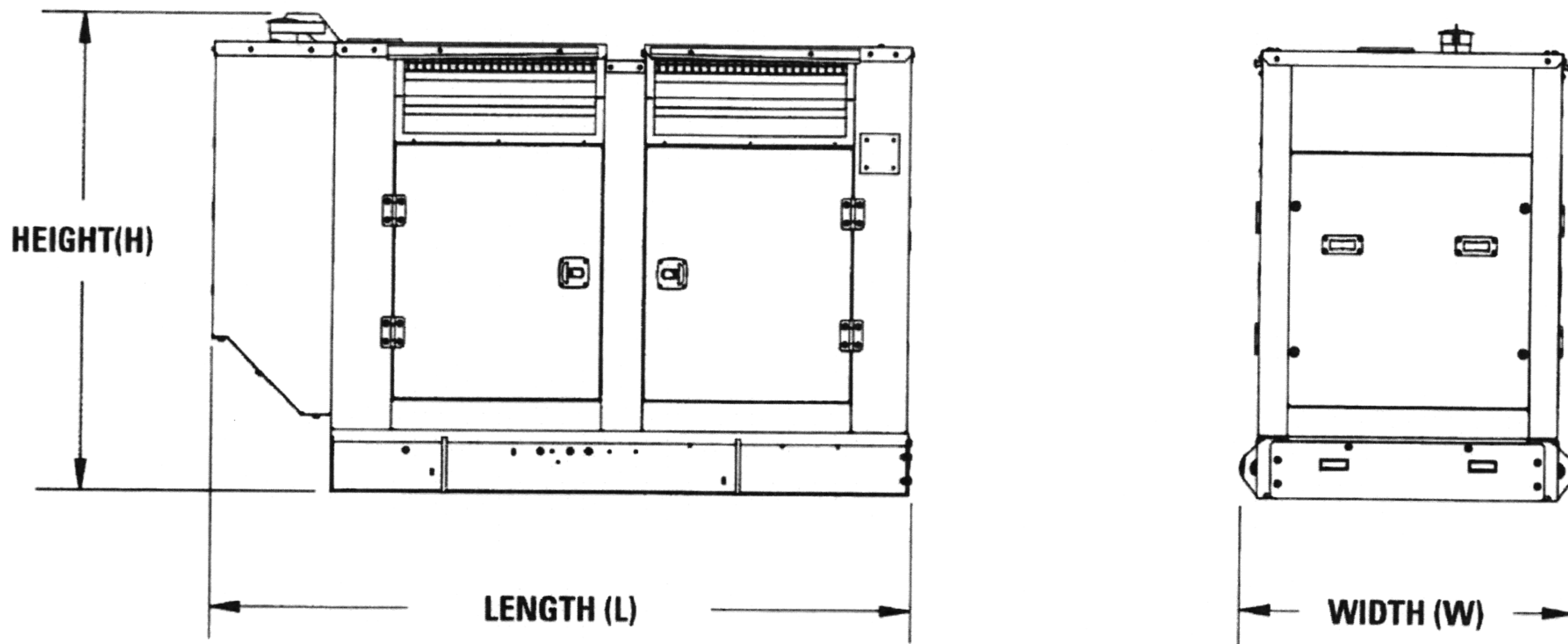


Image represents SA Level 1, SA Level 2 and SA Aluminum enclosures on skid base only

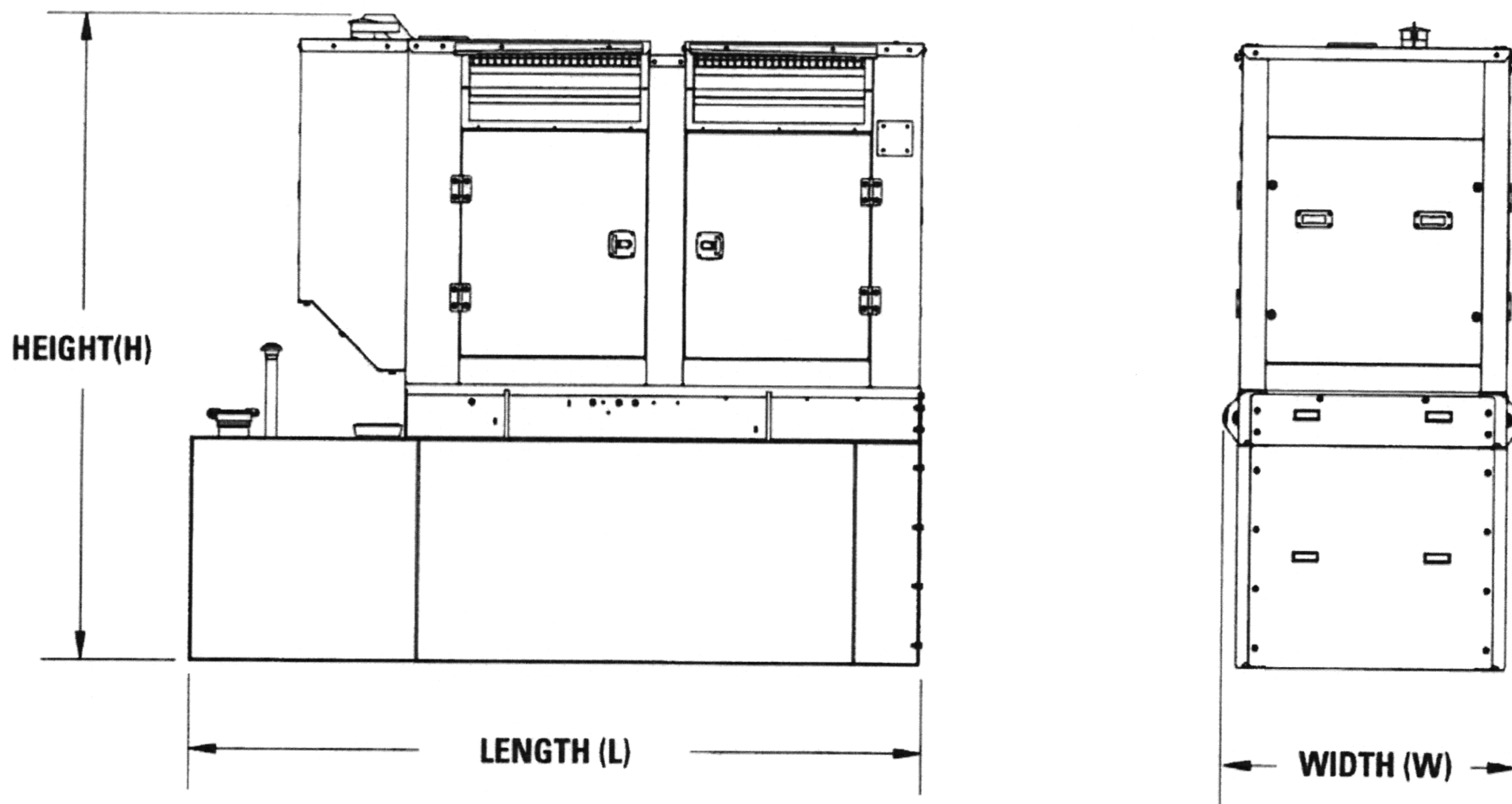


Image represents SA Level 1, SA Level 2 and SA Aluminum enclosures mounted on optional UL listed sub base tank

Model	Standby eKW	WP Industrial		SA Level 1		SA Level 2		SA Aluminum	
		kg	lb	kg	lb	kg	lb	kg	lb
D40-2	40	121	267	137	302	NA	NA	NA	NA
D50-2	50								
D60-2	60								
D80-8	80	263	580	313	690	321	708	142	312
D100-8	100								
D125-8	125	348	768	393	867	406	896	176	387
D150-10	150								
D175-4	175								
D200-2	200								

Enclosure weights (includes muffler)

Enclosures



Enclosure Dimensions Skid Bases

Engine Model	Generator Set Rating ekW	Enclosure	Width 'W'		Length 'L'		Height 'H'	
			mm	in	mm	in	mm	in
C4.4	40	WP	1075	42.3	1972	77.6	1378	54.3
	50							
	60							
	40	SA Level 1, SA Level 2 and SA Aluminum	1075	42.3	1972	77.6	1378	54.3
	50							
	60							
C4.4	80	WP	1110	43.7	2523	99.3	1773	69.8
	100							
	80	SA Level 1, SA Level 2 and SA Aluminum	1110	43.7	2891	113.8	1852	72.9
	100							
C7.1	125	WP	1110	43.7	3204	126.1	1773	69.8
	150							
	175							
	200							
	125	SA Level 1, SA Level 2 and SA Aluminum	1110	43.7	3659	144.1	1852	72.9
	150							
	175							
	200							



Enclosure Dimensions on UL Listed Sub Base Tanks

Engine Model	Generator Set Rating kW	Enclosure	137 Gallon Sub Base Tank				255 Gallon Sub Base Tank			
			Length 'L'		Height 'H'		Length 'L'		Height 'H'	
			mm	in	mm	in	mm	in	mm	in
C4.4	40	WP	2503	98.5	1912	75.3	2503	98.5	2241	88.2
	50									
	60									
	40	SA Level 1, SA Level 2 and SA Aluminum	2503	98.5	1912	75.3	2503	98.5	2241	88.2
	50									
	60									

Engine Model	Generator Set Rating kW	Enclosure	209 Gallon Sub Base Tank				394 Gallon Sub Base Tank			
			Length 'L'		Height 'H'		Length 'L'		Height 'H'	
			mm	in	mm	in	mm	in	mm	in
C4.4	80	WP	3447	135.7	2258	88.9	3447	135.7	2608	102.7
	100									
	80	SA Level 1, SA Level 2 and SA Aluminum	3447	135.7	2337	92.0	3447	135.7	2687	105.8
	100									

Engine Model	Generator Set Rating kW	Enclosure	402 Gallon Sub Base Tank				777 Gallon Sub Base Tank			
			Length 'L'		Height 'H'		Length 'L'		Height 'H'	
			mm	in	mm	in	mm	in	mm	in
C7.1	125	WP	4035	158.9	2420	95.3	5035	198.2	2706	106.5
	150									
	175									
	200									
	125	SA Level 1, SA Level 2 and SA Aluminum	4035	158.9	2499	98.4	5035	198.2	2785	106.5
	150									
	175									
	200									

Note: Weight includes oil and coolant but not fuel

Ref: WPIA, WPIB, WPIC, SATCBA, SATCBB, SAT, CBC, SATFBA, SATFBB, SATFBC, ENCAL02, ENCAL03, ENCAL04.

LET'S DO THE WORK.™

Cat® GC Control Panel

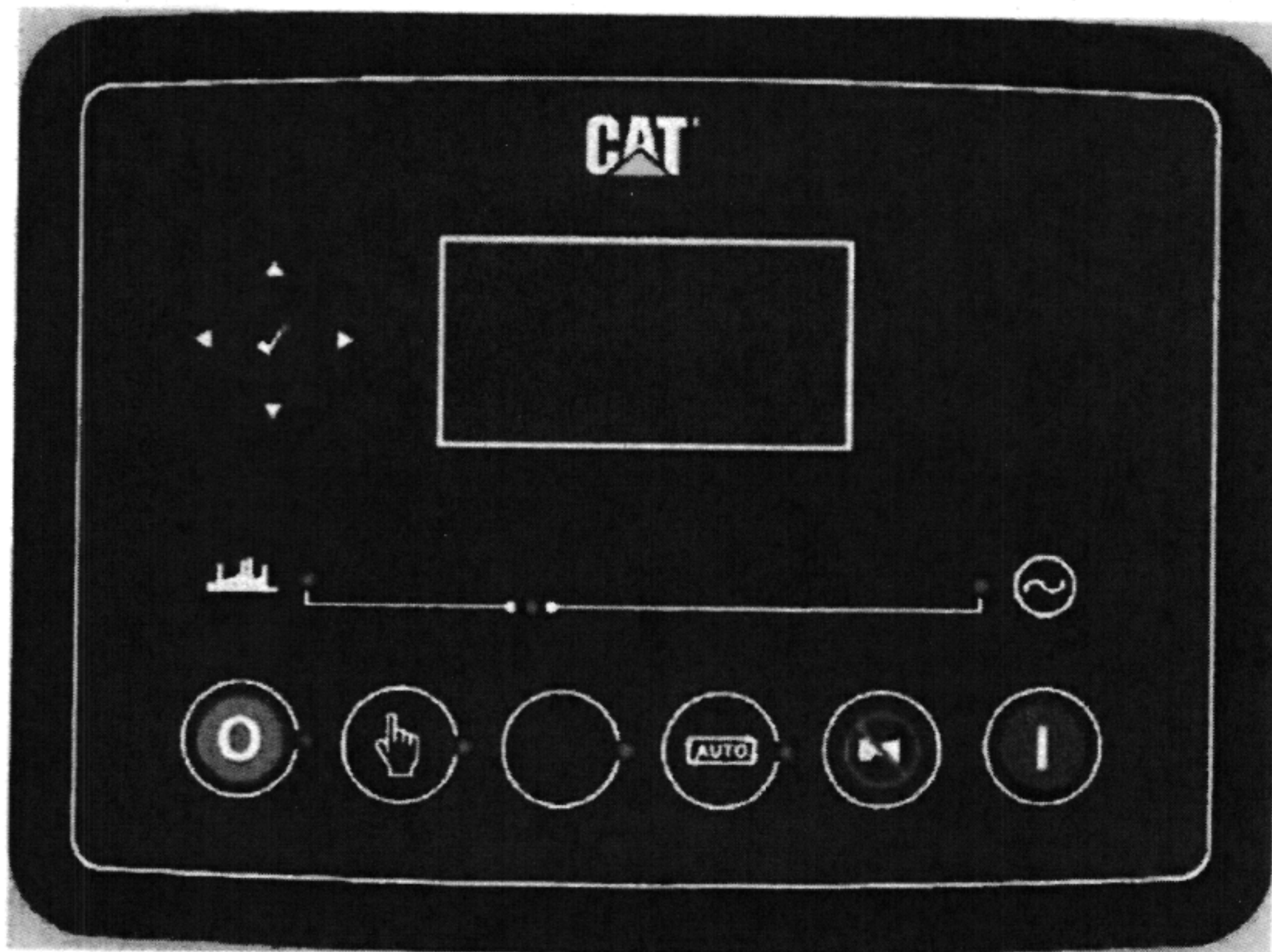


Image shown might not reflect actual configuration

GCCP 1.2 - Control Panel

GCCP 1.2 is an auto Start Control Module suitable for a wide variety of diesel gen-set applications. Monitoring an extensive number of engine parameters, the modules will display warnings, shutdown and engine status information on the backlit LCD screen, illuminated LEDs and remote PC.

FEATURES

- 4-line back-lit LCD text display
- Multiple display languages
- Five-key menu navigation
- LCD alarm indication
- Customisable power-up text and images
- Data logging facility
- Internal PLC editor
- Protections disable feature
- Fully configurable via PC using USB & RS485 communication
- Front panel configuration with PIN protection
- Power save mode
- 3-phase generator sensing and protection
- Generator current and power monitoring (kW, kvar, kVA, pf)
kW and kvar overload and reverse power alarms
- Over current protection
- Unbalanced load protection
- Breaker control via fascia buttons
- Fuel and start outputs configurable when using CAN Support for 0 V to 10 V & 4 mA to 20 mA sensors
- 8 configurable digital inputs (3 available for Customer use)
- 8 configurable digital outputs (5 available for Customer use)
- 4 configurable analogue inputs (3 available for Customer Use)
- CAN, MPU and alternator frequency speed sensing in one variant
- Real time clock
- Engine pre-heat and post-heat functions
- Engine run-time scheduler
- Engine idle control for starting & stopping
- Fuel usage monitor and low fuel level alarms
- 3 configurable maintenance alarms

BENEFITS

- Hours counter provides accurate information for monitoring and maintenance periods
- User-friendly set-up and button layout for ease of use
- Multiple parameters are monitored & displayed simultaneously for full visibility
- The module can be configured to suit a wide range of applications for user flexibility
- PLC editor allows user configurable functions to meet user specific application requirements.
- RS485 Communication port can be used for the Remote Monitoring Communication (Compatible with Cat PLG)

SPECIFICATION

DC SUPPLY

CONTINUOUS VOLTAGE RATING

8 V to 35 V Continuous
5 V for upto 1 minute

CRANKING DROPOUTS

Able to survive 0 V for 100 mS, providing supply was at least 10 V before dropout and supply recovers to 5 V. This is achieved without the need for internal batteries.

LEDs and backlight will not be maintained during cranking.

MAXIMUM OPERATING CURRENT

260 mA at 12 V, 150 mA at 24 V

MAXIMUM STANDBY CURRENT

145 mA at 12 V, 85 mA at 24 V

CHARGE FAIL/EXCITATION RANGE

0 V to 35 V

GENERATOR & MAINS (UTILITY) VOLTAGE RANGE

15 V to 415 V AC (Ph to N)
26 V to 719 V AC (Ph to Ph)

FREQUENCY RANGE

3.5 Hz to 75 Hz

MAGNETIC PICKUP VOLTAGE RANGE

+/- 0.5 V to 70 V

FREQUENCY RANGE

10,000 Hz (max)

INPUTS

DIGITAL INPUTS A TO H

Negative switching

ANALOGUE INPUTS A & D

Configurable as:

Negative switching digital input 0 V to 10 V sensor
4 mA to 20 mA sensor Resistive sensor

ANALOGUE INPUTS B & C

Configurable as:

Negative switching digital input Resistive sensor

OUTPUTS

OUTPUT A & B (FUEL & START)

15 A DC at supply voltage

AUXILIARY OUTPUTS C, D, E, F, G & H

2 A DC at supply voltage

DIMENSIONS OVERALL

216 mm x 158 mm x 43 mm
8.5" x 6.2" x 1.5"

PANEL CUT-OUT

184 mm x 137 mm
7.2" x 5.3"

MAXIMUM PANEL THICKNESS

8 mm
0.3"

STORAGE TEMPERATURE RANGE

-40°C to +85°C
-40 °F to +185 °F

OPERATING TEMPERATURE RANGE

-30°C to +70°C
-22 °F to +158 °F

LEHE2017-02 (09-20)

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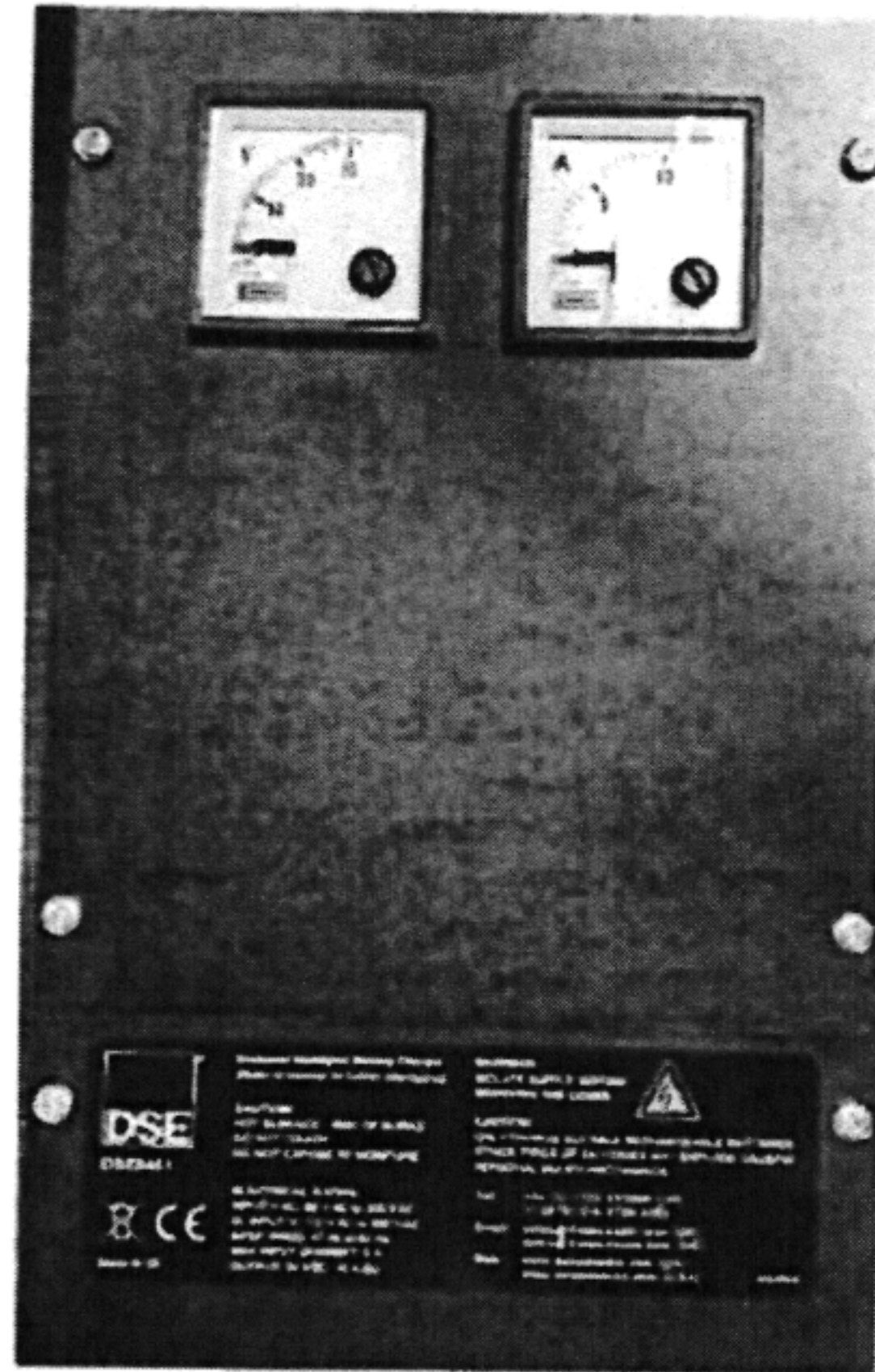


Image shown may not reflect actual package

9461 – Battery Charger

The 9461 series of metal enclosed intelligent battery chargers have been developed with safety, usability, optimised battery performance and maximum battery lifetimes in mind.

A comprehensive range of input and output protections ensures a continued safe charging environment also enabling the use of the charger as a power supply.

Features

- Intelligent two, three and four stage charging profiles
- Configurable to suit most battery types (12V/24V)
- Adjustable current limit
- Can be used as a battery charger, power supply or both at the same time
- Automatic or Manual boost and storage charge functions to help maintain battery condition
- Digital Microprocessor Technology
- Temperature compensation for battery charging
- Low Output Ripple and superb line regulation
- Available in two variants (LCD display or LCD display & analogue meters) Full Protection
- AC input Under voltage
- AC input Over voltage
- Battery charger output Over voltage
- Battery charger output Over current
- Battery temperature compensation with over temperature protection
- Output short circuit and Inversion polarity with auto recovery
- Automatic power de-rating at high ambient temperatures
- Battery charger failure indication

Automatic Boost Mode

- Boosts and equalises cell charge improving battery performance and life

Power Save Mode

- Once the battery is fully charged the chargers switch to Eco-Power to save energy

Communication

- Can be integrated into external systems through:
 - Fully configurable via PC Software
 - External remote LCD option

Attachments



Benefits

- Fully flexible to maximise the life of the battery
- Suitable for a wide range of battery types
- Switched mode design
- Fault output
- Minimum 86% efficiency throughout full operating range
- No external intervention for boost mode
- Multiple chargers can be linked together to provide larger current output
- Can be permanently connected to battery and mains (utility) supply. No need to disconnect through high load conditions.

Specification

AC Supply Voltage Range 90V to 305V (L-N)	Frequency Range 48 Hz to 64 Hz (L-N)
DC Output Rating	10 A DC at 12 V & 24 V DC
Ripple and Noise	<1%
Efficiency	>86%
Auxiliary Output	100 mA DC at 12V
Regulation Line	<0.5%
Load	2%
Temperature Sensor Input	PT1000
Protections	Short Circuit DC Over Voltage DC Over Current Reverse Polarity Over Temperature AC Under & Over Voltage Battery Charger Failure
Charge Failure Relay	3 A at 30 V DC Volt Free Relay
Dimensions Overall	165 mm x 305 mm x 110 mm (6.5 in x 12 in x 4.3 in)
Weight	2.3 kg
Operating Temperature Range	-30 °C to +55 °C
Storage Temperature Range	-40 °C to +85 °C

www.cat.com/electricpower

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