



THE CORPORATION OF THE TOWNSHIP OF NORTH STORMONT

REQUEST FOR TENDER

Backup Generator

RFT-PW-03-2026

CLOSING DATE

Tuesday March 17, 2026

11:00 am

Township of North Stormont
57A Cockburn Street, Berwick ON
613-984-2821

Late Tenders will not be accepted

The Corporation of the Township of North Stormont reserves the right to accept or reject all or part of any Tender, to accept other than the lowest Tender, and to cancel this Request for Tender at any time.

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1. SUBMISSION FORMAT

Submissions may be mailed, couriered, or hand-delivered to the Township office in a sealed envelope addressed to the Township. Delivery via a third-party courier service shall be at the sole risk of the Bidder and must be arranged to ensure delivery to the Township office before the Tender closing time.

The Corporation of the Township of North Stormont
57A Cockburn Street, Berwick ON
K0C 1G0

2. SUBMISSION CLOSING

Submissions will be received until 11:00 am (local time) on Tuesday, March 17, 2026. This time and date will be considered the official closing of the Tender.

3. SUBMISSION OPENING

Municipal Staff will open submissions following the official closing. To ensure that all submission requirements are met, submissions will not be opened in a public forum.

4. PROJECT CONTACT

For any questions, comments, clarifications, or concerns regarding this Tender, please contact:

Blake Henderson
Public Works Superintendent
bhenderson@northstormont.ca
Cell: 613-551-0498

5. SCOPE OF PROJECT

The Corporation of the Township of North Stormont invites tenders from qualified contractors for the supply, delivery, and installation of one (1) outdoor-mounted standby generator at the Chrysler Sewage Pumping Station. The project includes the supply and installation of a new automatic transfer switch and the electrical decommissioning of the existing indoor generator.

6. TECHNICAL SPECIFICATIONS

All equipment supplied under this contract shall be new and certified in accordance with applicable *Canadian Standards Association (CSA)* standards and the *Ontario Electrical Safety Code*. The contractor shall ensure the following requirements are met:

6.1. Standby Generator

The following generator models, or equivalent, are acceptable:

Generac SD130 Diesel Generator Set	MTU 4R0113 DS60 Diesel Generator Set
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Specification sheets for the listed models are provided in the Appendices for reference. Proponents may submit equivalent models only if they meet or exceed all technical requirements specified in this document.

6.2. Automatic Transfer Switch

Capable of safely transferring the electrical load between utility power and generator power, and fully compatible with the facility's existing electrical system and new generator capacity.

6.3. Decommissioning of Existing Generator

The contractor shall perform all electrical decommissioning of the existing indoor generator. *The Township will be responsible for the physical removal of the existing generator, which is not included in the contractor's scope of work.*

6.4. Service and Support

The Township requires that service and technical support be readily available in the area. Proponents must demonstrate that qualified service technicians are based within a reasonable travel distance of the Township and are available to respond to service calls promptly.

7. MANDATORY SITE MEETING

The Township requires all Proponents intending to submit a quotation to attend a mandatory site meeting. The date and time will be scheduled before the closing date and coordinated through the Project Contact.

8. PRICING

All prices must be in Canadian funds. Prices must include all labour, materials, equipment, permits, insurance, administration, profit, and delivery. All taxes are extra.

9. GENERAL CONDITIONS

- 9.1. The Contractor shall provide competent workers to carry out the work safely and responsibly.
- 9.2. Township inspection staff shall confirm acceptance of work performed before the approval and issuance of payment.
- 9.3. The Contractor shall indemnify and save harmless The Township of North Stormont from and against all claims, actions, losses, expenses, costs, or damages of every nature and kind whatsoever which the Township, its employees, officers, or agents may suffer as a result of the negligence of the Contractor, its employees, officers, or agents in the performance of the contract.

10. SUBMISSIONS

- 10.1. Bidders are required to complete the **Form of Tender** in its entirety and submit it in hard copy. All entries must be completed using permanent ink or typed. Handwritten submissions must be legible.
- 10.2. The Form of Tender must be signed in ink. Electronic signatures will not be accepted.
- 10.3. Each Bidder is solely responsible for any costs associated with preparing and submitting their submission.
- 10.4. Each bid shall be accompanied by a **bid deposit** in the amount of ten percent (10%) of the total tender price, excluding HST. The bid deposit shall be in the form of a bid bond, certified cheque, money order, or cash.
- 10.5. All submissions become the property of the Township. Details of submissions may be disclosed after the evaluation process and, therefore, shall not be treated as confidential unless expressly stated otherwise.

11. NOTIFICATION OF ACCEPTANCE

- 11.1. After the contract is awarded by the Municipality, the successful Bidder will be notified of acceptance by phone or email, using the contact information provided in the Form of Tender.

11.2. Upon notification of acceptance, the successful proposal shall constitute a contract between the parties. Therefore, it is anticipated that no agreement or other separate documents will be required.

11.3. This Tender shall be open for acceptance for a period of thirty (30) days after the closing date. After this time, a quotation may only be accepted with the consent of the successful bidder or contractor.

12. BASIS OF REJECTION

12.1. The Corporation of the Township of North Stormont reserves the right to reject any or all proposals for any reason whatsoever, including, but not limited to, the criteria outlined in Schedule "A" (if applicable).

12.2. The Township has the authority and discretion to terminate this quotation at any time, without giving a reason and to accept any proposal considered best for its interest.

13. BASIS OF PAYMENT

13.1. The Contractor may submit an initial invoice to the Township to cover the cost of a deposit (if required) to order the generator. The invoice must include proof of the deposit. The Township will issue payment within thirty (30) days of receiving a complete and approved invoice.

13.2. Upon completion of all work under this Contract, the Contractor shall submit a final invoice for the remaining balance. The Township will issue payment within thirty (30) days of receiving a complete and approved invoice.

14. REGULATIONS AND POLICIES

14.1. The Contractor shall abide, if applicable, by the requirements of the *Industrial Standards Act*, *Employment Standards Act* and any other Acts or By-Laws, including Provincial and Federal Legislation which are relevant to the performance of work.

14.2. All contractors and subcontractors must comply with all Health and Safety requirements as well as the Violence and Harassment Policy for The Township of North Stormont.

15. DAMAGE BY VEHICLE OR OTHER EQUIPMENT

15.1. If at any time, in the opinion of the Public Works Superintendent or their designate, damage is done or is likely to be done to any highway, parking lot, sidewalks, surrounding sodden areas or any property thereon by the Contractor's vehicles or other equipment whether licensed or unlicensed, the Contractor shall, on the

direction of the Public Works Superintendent and at the Contractor's own expense make changes in or substitutions for such vehicles or other equipment or shall alter loadings or shall in some other manner remove the cause of damage and complete the necessary clean up and repairs to the satisfaction of the Public Works Superintendent.

16. LIABILITY INSURANCE

- 16.1.** The Contractor shall, at their own expense, within ten (10) days of notification of contract award and prior to the commencement of work, obtain and maintain insurance coverage as specified herein. Evidence of such insurance shall be provided to the Township.
- 16.2.** All insurance policies shall remain in force for the duration of the contract unless otherwise stated and shall not be cancelled unless the insurer provides the Township with at least thirty (30) days' written notice prior to cancellation.
- 16.3.** Insurance policies must be issued by a company and in a form acceptable to the Township.
- 16.4.** Any and all deductibles shall be the sole responsibility of the Contractor. The Township shall bear no responsibility for any deductibles.
- 16.5.** The Contractor is responsible for insuring its own property and assets. Failure to do so shall not impose any liability on the Township.
- 16.6.** The Contractor shall maintain Commercial General Liability Insurance issued on an occurrence basis for an amount of not less than \$5,000,000 per occurrence / \$5,000,000 annual aggregate for any negligent acts or omissions by the Contractor relating to its obligations under this agreement. Such insurance shall include, but is not limited to bodily injury and property damage including loss of use; personal injury; contractual liability; premises, property & operations; non-owned automobile; broad form property damage; broad form completed operations; owners & contractors protective; occurrence property damage; products; employees as Additional Insured; contingent employers liability; tenants legal liability; cross liability and severability of interest clause.
- 16.6.1. This insurance shall name The Corporation of the Township of North Stormont as Additional Insured** and shall include a waiver of subrogation. Coverage shall be primary and non-contributing with any insurance held by the Township.
- 16.7.** The Contractor shall maintain Automobile Liability Insurance with respect to owned or leased vehicles used directly or indirectly in the performance of the

services, covering liability for bodily injury, death, and damage to property with a limit of not less than \$2,000,000 inclusive for each and every loss.

16.8. The Contractor shall carry and maintain comprehensive insurance coverage for all supplied fuel storage tanks, pumps, and related equipment that remain the property of the Contractor for the duration of the contract. This insurance shall cover loss, theft, damage, or third-party liability associated with the supplied equipment and shall be maintained in accordance with the requirements outlined in sections 21.1 through 21.7. Evidence of such coverage shall be provided to the Township upon request.

17. INDEMNIFICATION

17.1. The Contractor shall defend, indemnify and save harmless The Corporation of the Township of North Stormont, their elected officials, officers, employees, and agents from and against any and all claims, actions, losses, expenses, fines, costs (including legal fees), interest or damages of every nature and kind whatsoever, including but not limited to bodily injury or to damage to or destruction of tangible property including loss of revenue arising out of or allegedly attributable to the negligence, acts, errors, omissions, whether willful or otherwise by bidder, their officers, employees, agents, or others who the bidder is legally responsible.

17.2. This indemnity shall be in addition to and not in lieu of any insurance to be provided by the bidder in accordance with this agreement and shall survive this agreement.

18. WORKERS' COMPENSATION

18.1. The Contractor shall comply with the regulations of the *Workplace Safety & Insurance Board of Ontario* (WSIB).

18.2. The Contractor shall provide a valid WSIB clearance certificate prior to commencing any work under this contract.

FORM OF TENDER
RFT-PW-03-2026 Backup Generator

COMPANY NAME	
CONTACT NAME	
ADDRESS	
TELEPHONE	
EMAIL	

Bid submission for the supply, delivery, and installation of one (1) outdoor-mounted standby generator at the Crysler Sewage Pumping Station, including a new automatic transfer switch and the electrical decommissioning of the existing indoor generator.

BID	SUBTOTAL	HST	TOTAL

Expected Delivery Date: _____

I/We, the undersigned Bidder, have examined RFT-PW-03-2026, including all provisions, specifications, and site requirements, and hereby offer to supply all labour, materials, equipment, and services necessary to complete the work in full compliance with this RFT. I/We accept all terms and conditions outlined therein and agree to perform the work diligently, in accordance with industry best practices, meeting all operational and response requirements specified.

Name

Witness Name

Title

Witness Signature

Signature

Date

Date

THIS PAGE MUST BE RETURNED WITH YOUR TENDER SUBMISSION

SCHEDULE "A"

RESPONSES FOR ADMINISTERING IRREGULARITIES CONTAINED IN BIDS

GENERAL		
1	Late Bids	Automatic rejection. Returned unopened to bidder.
2	Unsealed envelopes	Automatic rejection
INSUFFICIENT FINANCIAL SECURITY <i>(if required)</i>		
3	No bid deposit, uncertified cheque, or financial security not an original (i.e. photocopy)	Automatic rejection
4	The amount of financial security is insufficient	Automatic rejection
5	Name or signature of supplier, or bonding company are missing or incomplete	Automatic rejection
6	Failure to provide a letter of agreement to bond (if required)	Automatic rejection
BID DOCUMENT EXECUTION		
7	Bids completed in erasable medium	Automatic rejection
8	The signature of the representative authorized to bind the supplier is missing or incomplete on the bid document	Automatic rejection
9	Electronic signature of the representative authorized to bind the supplier shown on the admission form	Five (5) working days to obtain the original signature
10	Form of proposal or quotation missing or incomplete	Two (2) working days to correct to the satisfaction of the Treasurer or designate, or the Township reserves the right to waive this and accept the bid. Otherwise, automatic rejection.
11	Form of Tender missing or incomplete	Automatic rejection
12	Signature of witness, if required, missing or incomplete	Two (2) working days to correct to the satisfaction of the Treasurer or designate, or the Township reserves the right to waive this and accept the bid. Otherwise, automatic rejection.
13	Date of bid missing or incomplete	Two (2) working days to correct. Otherwise, automatic rejection.

SCHEDULE "A"

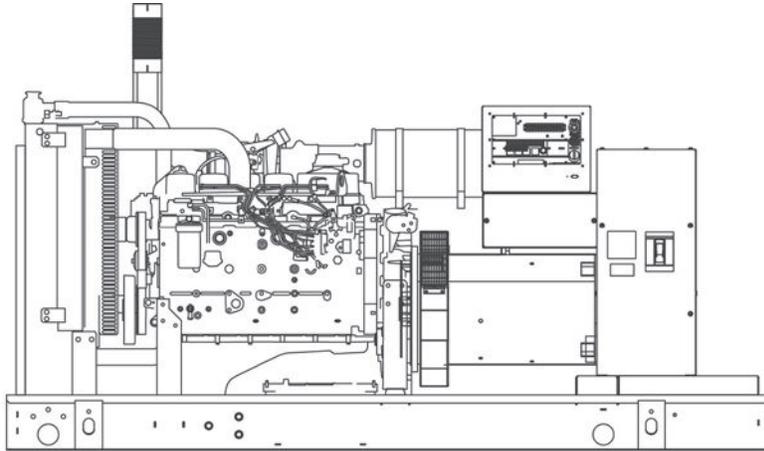
14	Incomplete, illegible or obscure bids or bids which contain information not called for, erasures, overwriting, or strikeouts not initialled.	Two (2) working days to correct to the satisfaction of the Treasurer or designate, or the Township reserves the right to waive this and accept the bid. Otherwise, automatic rejection.
15	Document, in which all necessary addenda have not been acknowledged	Two (2) working days to correct to the satisfaction of the Treasurer or designate, or the Township reserves the right to waive this and accept the bid. Otherwise, automatic rejection.
16	Failure to attend mandatory site visit (if required)	Automatic rejection
17	Bid received on documents other than those provided in the bid solicitation	Automatic rejection unless allowed for in the bid solicitation
18	Failure to insert the full bidder's business name in the space provided in the bid solicitation form	Automatic rejection unless, in the opinion of the Treasurer or designate, the incomplete nature is trivial
19	Mathematical errors	Two (2) working days to initial the corrections as made by the Township. Unless otherwise stated in the bid, the unit price shall prevail, and the total bid price shall be adjusted accordingly.
20	Qualified bids (bids qualified or restricted by an attached statement)	Automatic rejection
21	Bids containing minor, obvious clerical errors	Two (2) working days to confirm the bid to the satisfaction of the Treasurer or designate
22	Any other irregularities	Upon legal opinion, the Treasurer or designate shall have the authority to waive other irregularities or grant two (2) working days to initial such irregularities considered to be minor.

STANDBY POWER RATING

130 kW, 163 kVA, 60 Hz

PRIME POWER RATING*

117 kW, 146 kVA, 60 Hz



*Built in the USA using domestic and foreign parts

*EPA Certified Prime ratings are not available in the U.S. or its Territories.

Image used for illustration purposes only

**Certain options or customization may not hold certification valid.

CODES AND STANDARDS

Generac products are designed to the following standards:

 UL2200, UL508, UL142, UL498

 NFPA70, 99, 110, 37

 NEC700, 701, 702, 708

 ISO9001, 8528, 3046, 7637, Pluses #2b, 4

 NEMA ICS10, MG1, 250, ICS6, AB1

 **ANSI**
American National Standards Institute
ANSI C62.41

POWERING AHEAD

For over 50 years, Generac has led the industry with innovative design and superior manufacturing.

Generac ensures superior quality by designing and manufacturing most of its generator components, including alternators, enclosures and base tanks, control systems and communications software.

Generac's gensets utilize a wide variety of options, configurations and arrangements, allowing us to meet the standby power needs of practically every application.

Generac searched globally to ensure the most reliable engines power our generators. We choose only engines that have already been proven in heavy-duty industrial application under adverse conditions.

Generac is committed to ensuring our customers' service support continues after their generator purchase.

STANDARD FEATURES

ENGINE SYSTEM

General

- Oil Drain Extension
- Air Cleaner
- Fan Guard
- Stainless Steel flexible exhaust connection
- Critical Exhaust Silencer (enclosed only)
- Factory Filled Oil
- Radiator Duct Adapter (open set only)

Fuel System

- Fuel lockoff solenoid
- Primary fuel filter

Cooling System

- Closed Coolant Recovery System
- UV/Ozone resistant hoses
- Factory-Installed Radiator
- Radiator Drain Extension
- 50/50 Ethylene glycol antifreeze
- 120 VAC Coolant Heater

Engine Electrical System

- Battery charging alternator
- Battery cables
- Battery tray
- Solenoid activated starter motor
- Rubber-booted engine electrical connections

ALTERNATOR SYSTEM

- UL2200 GENprotect™
- 12 leads (3-phase, non 600 V)
- Class H insulation material
- Vented rotor
- 2/3 pitch
- Skewed stator
- Auxiliary voltage regulator power winding
- Amortisseur winding
- Brushless Excitation
- Sealed Bearings
- Automated manufacturing (winding, insertion, lacing, varnishing)
- Rotor dynamically spin balanced
- Full load capacity alternator
- Protective thermal switch

GENERATOR SET

- Internal Genset Vibration Isolation
- Separation of circuits - high/low voltage
- Separation of circuits - multiple breakers
- Silencer Heat Shield
- Wrapped Exhaust Piping
- Silencer housed in discharge hood (enclosed only)
- Standard Factory Testing
- 2 Year Limited Warranty (Standby rated Units)
- 1 Year Limited Warranty (Prime rated Units)
- Silencer mounted in the discharge hood (enclosed only)

ENCLOSURE (IF SELECTED)

- Rust-proof fasteners with nylon washers to protect finish
- High performance sound-absorbing material
- Gasketed doors
- Stamped air-intake louvers
- Air discharge hoods for radiator-upward pointing
- Stainless steel lift off door hinges
- Stainless steel lockable handles
- Rhino Coat™ - Textured polyester powder coat

TANKS (IF SELECTED)

- UL 142
- Double wall
- Vents
- Sloped top
- Sloped bottom
- Factory pressure tested (2 psi)
- Rupture basin alarm
- Fuel level
- Check valve in supply and return lines
- Rhino Coat™ - Textured polyester powder coat
- Stainless hardware

CONTROL SYSTEM



Control Panel

- Digital H Control Panel - Dual 4x20 Display
- Programmable Crank Limiter
- 7-Day Programmable Exerciser
- Special Applications Programmable PLC
- RS-232/485
- All-Phase Sensing DVR
- Full System Status
- Utility Monitoring
- Low Fuel Pressure Indication
- 2-Wire Start Compatible
- Power Output (kW)

- Power Factor
- kW Hours, Total & Last Run
- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents
- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed
- Battery Voltage
- Frequency
- Date/Time Fault History (Event Log)
- Isochronous Governor Control
- Waterproof/sealed Connectors
- Audible Alarms and Shutdowns
- Not in Auto (Flashing Light)
- Auto/Off/Manual Switch
- E-Stop (Red Mushroom-Type)
- NFPA110 Level I and II (Programmable)
- Customizable Alarms, Warnings, and Events
- Modbus protocol
- Predictive Maintenance algorithm
- Sealed Boards
- Password parameter adjustment protection

- Single point ground
- 15 channel data logging
- 0.2 msec high speed data logging
- Alarm information automatically comes up on the display

Alarms

- Oil Pressure (Pre-programmable Low Pressure Shutdown)
- Coolant Temperature (Pre-programmed High Temp Shutdown)
- Coolant Level (Pre-programmed Low Level Shutdown)
- Low Fuel Pressure Alarm
- Engine Speed (Pre-programmed Over speed Shutdown)
- Battery Voltage Warning
- Alarms & warnings time and date stamped
- Alarms & warnings for transient and steady state conditions
- Snap shots of key operation parameters during alarms & warnings
- Alarms and warnings spelled out (no alarm codes)

CONFIGURABLE OPTIONS

ENGINE SYSTEM

General

- Oil Heater
- Industrial Exhaust Silencer

Fuel System

- Flexible fuel lines
- Primary fuel filter

Engine Electrical System

- 10A UL battery charger
- 2.5A UL battery charger
- Battery Warmer

ALTERNATOR SYSTEM

- Alternator Upsizing
- Anti-Condensation Heater
- Tropical coating
- Permanent Magnet Excitation

CIRCUIT BREAKER OPTIONS

- Main Line Circuit Breaker
- 2nd Main Line Circuit Breaker
- Shunt Trip and Auxiliary Contact
- Electronic Trip Breaker

GENERATOR SET

- Gen-Link Communications Software (English Only)
- IBC Seismic Certification
- 8 Position Load Center
- 2 Year Extended Warranty
- 5 Year Warranty
- 5 Year Extended Warranty

ENCLOSURE

- Weather Protected
- Level 1 Sound Attenuation
- Level 2 Sound Attenuation
- Steel Enclosure
- Aluminum Enclosure
- 150 MPH Wind Kit
- 12 VDC Enclosure Lighting Kit
- 120 VAC Enclosure Lighting Kit
- AC/DC Enclosure Lighting Kit
- Door Alarm Switch

TANKS (Size on last page)

- Electrical Fuel Level
- Mechanical Fuel Level
- 8" Fill Extension
- 13" Fill Extension

CONTROL SYSTEM

- 21-Light Remote Annunciator
- Remote Relay Panel (8 or 16)
- Oil Temperature Sender with Indication Alarm
- Remote E-Stop (Break Glass-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Flush Mount)
- Remote Communication - Modem
- Remote Communication - Ethernet
- 10A Run Relay
- Ground Fault Indication and Protection Functions

ENGINEERED OPTIONS

ENGINE SYSTEM

- Coolant heater ball valves
- Block Heaters
- Fluid containment pans

ALTERNATOR SYSTEM

- 3rd Breaker Systems

CONTROL SYSTEM

- Spare inputs (x4) / outputs (x4) - H Panel Only
- Battery Disconnect Switch

GENERATOR SET

- Special Testing

ENCLOSURE

- Motorized Dampers
- Door switched for intrusion alert
- Enclosure ambient heaters

TANKS

- Overfill Protection Valve
- UL2085 Tank
- ULC S-601 Tank
- Stainless Steel Tank
- Special Fuel Tanks (MIDEQ and FL DEP/DERM, etc.)
- Vent Extensions

RATING DEFINITIONS

Standby - Applicable for a varying emergency load for the duration of a utility power outage with no overload capability.

Prime - Applicable for supplying power to a varying load in lieu of utility for an unlimited amount of running time. A 10% overload capacity is available for 1 out of every 12 hours. The Prime Power option is only available on International applications. Power ratings in accordance with ISO 8528-1, Second Edition

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General

Make	Iveco/FPT
EPA Emissions Compliance	Stationary Emergency
EPA Emissions Reference	See Emissions Data Sheet
Cylinder #	6
Type	In-Line
Displacement - L (cu In)	6.7 (406.86)
Bore - mm (in)	104 (4.09)
Stroke - mm (in)	128 (5.2)
Compression Ratio	16.5:1
Intake Air Method	Turbocharged/Aftercooled
Cylinder Head Type	2 Valve
Piston Type	Alloy Aluminum
Crankshaft Type	Forged Steel

Engine Governing

Governor	Electronic Isochronous
Frequency Regulation (Steady State)	+/- 0.25%

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full Flow
Crankcase Capacity - L (qts)	17 (18)

Cooling System

Cooling System Type	Closed Recovery
Water Pump	Belt Driven Centrifugal
Fan Type	Pusher
Fan Speed (rpm)	2538
Fan Diameter mm (in)	599 (23.6)
Coolant Heater Wattage	1500
Coolant Heater Standard Voltage	120 V /240 V

Fuel System

Fuel Type	Ultra Low Sulfur Diesel Fuel
Fuel Specifications	ASTM
Fuel Filtering (microns)	5
Fuel Injection	Stanadyne
Fuel Pump Type	Engine Driven Gear
Injector Type	Mechanical
Fuel Supply Line mm (in)	12.7 (0.5) NPT
Fuel Return Line mm (in)	12.7 (0.5) NPT

Engine Electrical System

System Voltage	12 VDC
Battery Charging Alternator	Std
Battery Size	See Battery Index 0161970SBY
Battery Voltage	12 VDC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Standard Model	390
Poles	4
Field Type	Revolving
Insulation Class - Rotor	H
Insulation Class - Stator	H
Total Harmonic Distortion	<3%
Telephone Interference Factor (TIF)	<50

Standard Excitation	Synchronous Brushless
Bearings	Single Seated Cartridge
Coupling	Direct, Flexible Disc
Load Capacity - Standby	100%
Prototype Short Circuit Test	Yes
Voltage Regulator Type	Digital
All	All
Regulation Accuracy (Steady State)	± 0.25%

OPERATING DATA

POWER RATINGS

		Standby
Single-Phase 120/240 VAC @1.0pf	130 kW	Amps: 542
Three-Phase 120/208 VAC @0.8pf	130 kW	Amps: 451
Three-Phase 120/240 VAC @0.8pf	130 kW	Amps: 391
Three-Phase 277/480 VAC @0.8pf	130 kW	Amps: 195
Three-Phase 346/600 VAC @0.8pf	130 kW	Amps: 156

STARTING CAPABILITIES (sKVA)

sKVA vs. Voltage Dip

Alternator	kW	480 VAC						208/240 VAC					
		10%	15%	20%	25%	30%	35%	10%	15%	20%	25%	30%	35%
Standard	130	116	174	232	290	348	406	87	131	174	218	261	305
Upsize 1	150	133	199	265	332	398	464	100	149	199	249	299	340
Upsize 2	200	187	280	373	467	560	653	140	210	280	350	420	490

FUEL CONSUMPTION RATES*

Diesel - gal/hr (l/hr)

Fuel Pump Lift - ft (m)	Percent Load	Standby
3 (1)	25%	2.9 (11.0)
	50%	5.4 (20.4)
Total Fuel Pump Flow (Combustion + Return)	75%	7.7 (29.1)
29.1 gal/hr	100%	9.6 (36.3)

* Fuel supply installation must accommodate fuel consumption rates at 100% load.

COOLING

		Standby
Coolant Flow per Minute	gal/min (l/min)	44.6 (168.8)
Coolant System Capacity	gal (L)	5.65 (21.4)
Heat Rejection to Coolant	BTU/hr	353,900
Inlet Air	cfm (m³/hr)	7900 (223.7)
Max. Operating Radiator Air Temp	F° (C°)	122 (50)
Max. Ambient Temperature (before derate)	F° (C°)	104 (40)
Maximum Radiator Backpressure	in H ₂ O	0.5

COMBUSTION AIR REQUIREMENTS

		Standby
Flow at Rated Power	cfm (m³/min)	390 (11.05)

ENGINE

		Standby
Rated Engine Speed	rpm	1800
Horsepower at Rated kW**	hp	198
Piston Speed	ft/min (m/min)	1559 (475)
BMEP	psi	213

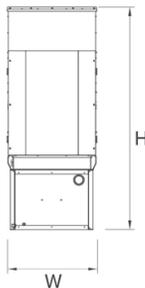
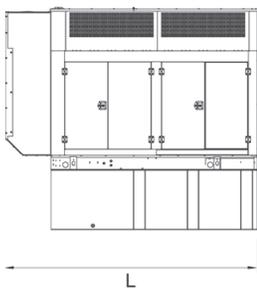
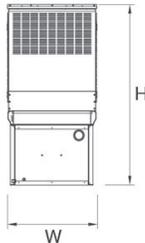
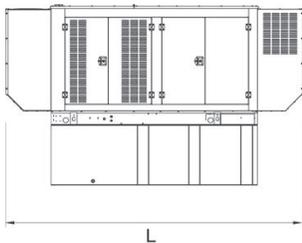
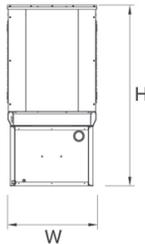
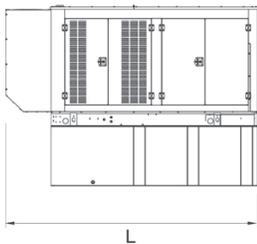
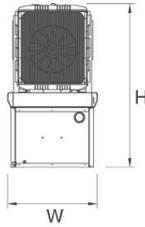
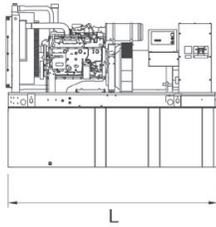
EXHAUST

		Standby
Exhaust Flow (Rated Output)	cfm (m³/min)	910 (25.8)
Max. Backpressure (Post Silencer)	inHg (Kpa)	1.5 (5.1)
Exhaust Temp (Rated Output)	°F (°C)	960 (516)
Exhaust Outlet Size (Open Set)	mm (in)	101.6 (4)

** Refer to "Emissions Data Sheet" for maximum bHP for EPA and SCAQMD permitting purposes.

Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions. Please consult a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528 and DIN6271 standards.

DIMENSIONS AND WEIGHTS*



YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER

OPEN SET

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Tank & Open Set	
			Steel	Aluminum
NO TANK	-	110 (2794) x 40 (1016) x 65 (1651)	3104 (1408)	
9	90 (340.7)	110 (2794) x 40 (1016) x 77 (1955.8)	3813 (1730)	
23	220 (832.8)	110 (2794) x 40 (1016) x 89 (2260.6)	4146 (1881)	
36	350 (1324.9)	110 (2794) x 40 (1016) x 101 (2565.4)	4488 (2036)	
53	510 (1930.6)	110 (2794) x 40 (1016) x 105 (2667)	4469 (2029)	
61	589 (2229.6)	128 (3251.2) x 49 (1244.6) x 107 (2717.8)	4948 (2244)	
72	693 (2623.3)	136 (3454.4) x 53 (1346.2) x 107 (2717.8)	4667 (2117)	

STANDARD ENCLOSURE

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	133 (3378) x 40 (1016) x 64 (1625.6)	500 (227)	
9	90 (340.7)	133 (3378) x 40 (1016) x 77 (1956)	165 (75)	
23	220 (832.8)	133 (3378) x 40 (1016) x 89 (2261)	165 (75)	
36	350 (1324.9)	133 (3378) x 40 (1016) x 101 (2565)	165 (75)	
53	510 (1930.6)	133 (3378) x 47 (1194) x 105 (2667)	165 (75)	
61	589 (2229.6)	133 (3378) x 49 (1125) x 107 (2718)	165 (75)	
72	693 (2623.3)	133 (3378) x 53 (1346) x 107 (2718)	165 (75)	

LEVEL 1 ACOUSTIC ENCLOSURE

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	154 (3912) x 40 (1016) x 64 (1626)	750 (340)	
9	90 (340.7)	154 (3912) x 40 (1016) x 77 (1956)	250 (112)	
23	220 (832.8)	154 (3912) x 40 (1016) x 89 (2261)	250 (112)	
36	350 (1324.9)	154 (3912) x 40 (1016) x 101 (2565)	250 (112)	
53	510 (1930.6)	154 (3912) x 47 (1194) x 105 (2667)	250 (112)	
61	589 (2229.6)	154 (3912) x 49 (1245) x 107 (2718)	250 (112)	
72	693 (2623.3)	154 (3912) x 53 (1346) x 107 (2718)	250 (112)	

LEVEL 2 ACOUSTIC ENCLOSURE

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	145 (3683) x 40 (1016) x 81 (2057)	1000 (454)	
9	90 (340.7)	145 (3683) x 40 (1016) x 84 (2134)	330 (150)	
23	220 (832.8)	145 (3683) x 40 (1016) x 106 (2692)	330 (150)	
36	350 (1324.9)	145 (3683) x 40 (1016) x 118 (2997)	330 (150)	
53	510 (1930.6)	145 (3683) x 47 (1194) x 122 (3099)	330 (150)	
61	589 (2229.6)	145 (3683) x 49 (1245) x 124 (3150)	330 (150)	
72	693 (2623.3)	145 (3683) x 53 (1346) x 124 (3150)	330 (150)	

*All measurements are approximate and for estimation purposes only. Sound dBA can be found on the sound data sheet. Enclosure Only weight is added to Tank & Open Set weight to determine total weight.

Specification characteristics may change without notice. Dimensions and weights are for preliminary purposes only. Please consult a Generac Power Systems Industrial Dealer for detailed installation drawings.



Diesel Generator Set

mtu 4R0113 DS60

60 kWe/60 Hz/Standby/208 - 600V

Reference **mtu 4R0113 DS60 (55 kWe)** for Prime Power for Stationary Emergency Rating Technical Data



System ratings

Voltage (L-L)	240V †	208V †	240V †	380V †	480V †	600V
Phase	1	3	3	3	3	3
PF	1	0.8	0.8	0.8	0.8	0.8
Hz	60	60	60	60	60	60
kW	60	60	60	60	60	60
kVA	60	75	75	75	75	75
Amps	250	208	180	114	90	72
skVA@30% voltage dip	103	84	84	82	145	99
Generator model	MXB-E 225 SB4	MXB-E 225 XA4	MXB-E 225 XA4	MXB-E 225 XB4	MXB-E 180 LB4	MXB-E 180 LB4
Temp rise	125 °C/40 °C	125 °C/40 °C	125 °C/40 °C	125 °C/40 °C	125 °C/40 °C	125 °C/40 °C
Connection	12 LEAD ZIG ZAG	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	12 LEAD WYE	6 LEAD WYE

† UL 2200 offered

Certifications and standards

- Emissions
 - EPA Tier 3 certified
- Generator set is designed and manufactured in facilities certified to standards ISO 9001:2008 and ISO 14001:2004
- Seismic certification – optional
 - 2021 IBC certification
- UL 2200 – optional (refer to *System ratings* for availability)
- CSA – optional
 - CSA C22.2 No. 100
 - CSA C22.2 No. 14
- Performance Assurance Certification (PAC)
 - Generator set tested to ISO 8528-5 for transient response
 - Verified product design, quality, and performance integrity
 - All engine systems are prototype and factory tested
- Power rating
 - Accepts rated load in one step per NFPA 110

Standard features*

- Single source supplier
- Global product support
- Two (2) Year/3,000 Hour Basic Limited Warranty
- 4045HF280 diesel engine
 - 4.5 liter displacement
 - Mechanical injection pump
 - 4-cycle
- HVO and GtL fuels meeting fuel specification EN15940
- Engine-generator resilient mounted
- Complete range of accessories
- Cooling system
 - Integral set-mounted
 - Engine-driven fan
- Generator
 - Brushless, rotating field generator
 - 2/3 pitch windings
 - 300% short circuit capability with optional Permanent Magnet Generator (PMG)
- Digital control panel(s)
 - UL recognized, CSA certified, NFPA 110
 - Complete system metering
 - LCD display

Standard equipment*

Engine

- Air cleaner
- Oil pump
- Oil drain extension and shut-off valve
- Full flow oil filter
- Fuel filter with water separator
- Jacket water pump
- Thermostat
- Blower fan and fan drive
- Radiator - unit mounted
- Electric starting motor - 12V
- Governor - mechanical droop
- Base - formed steel
- SAE flywheel and bell housing
- Charging alternator - 12V
- Battery box and cables
- Flexible fuel connectors
- Flexible exhaust connection
- EPA certified engine

Generator

- NEMA MG1 and IEC standards compliance for temperature rise and motor starting
- Self-ventilated and drip-proof
- Superior voltage waveform
- Analog regulator
- $\pm 1\%$ voltage regulation no load to full load
- Brushless alternator with brushless pilot exciter
- 4 pole, rotating field
- 125 °C standby temperature rise
- 1-bearing, sealed
- Flexible coupling
- Full amortisseur windings
- Balancing in accordance with IEC60034-14
- Single-phase voltage sensing
- 100% of rated load - one step
- 5% maximum total harmonic distortion

Digital control panel(s)

- Digital metering
- Engine parameters
- Generator protection functions
- Engine protection
- Windows®-based software
- Multilingual capability
- Communications to remote annunciator
- Programmable input and output contacts
- UL recognized, CSA certified, CE approved
- Event recording
- IP 54 front panel rating with integrated gasket
- NFPA 110 compatible

* Represents standard product only. Consult the factory/*mtu* Distributor for additional configurations.

Application data

Engine

Manufacturer	John Deere
Model	4045HF280
Type	4-cycle
Arrangement	4-inline
Displacement: L (in ³)	4.5 (275)
Bore: cm (in)	10.6 (4.19)
Stroke: cm (in)	12.7 (5)
Compression ratio	19:1
Rated rpm	1,800
Engine governor	mechanical droop
Maximum power: kWm (bhp)	74 (99)
Steady state frequency band	± 0.5%
Air cleaner	dry

Liquid capacity

Total oil system: L (gal)	13 (3.4)
Engine jacket water capacity: L (gal)	8.5 (2.3)
System coolant capacity: L (gal)	16.7 (4.4)

Electrical

Electric volts DC	12
Cold cranking amps under -17.8 °C (0 °F)	925
Batteries: group size	31
Batteries: quantity	1

Fuel system

Fuel supply connection size	3/8" NPT
Fuel return connection size	3/8" NPT
Maximum fuel lift: m (ft)	1.8 (6)
Recommended fuel	diesel #2/HVO
Total fuel flow: L/hr (gal/hr)	113 (29.9)

Fuel consumption

At 100% of power rating: L/hr (gal/hr)	19.3 (5.1)
At 75% of power rating: L/hr (gal/hr)	14.8 (3.9)
At 50% of power rating: L/hr (gal/hr)	10.6 (2.8)

Cooling - radiator system

Ambient capacity of radiator: °C (°F)	50 (122)
Maximum restriction of cooling air: intake and discharge side of radiator: kPa (in. H ₂ O)	0.12 (0.5)
Water pump capacity: L/min (gpm)	144 (38)
Heat rejection to coolant: kW (BTUM)	35 (1,979)
Heat rejection to air to air: kW (BTUM)	5 (278)
Heat radiated to ambient: kW (BTUM)	10.9 (619)
Fan power: kW (hp)	1.16 (1.55)

Air requirements

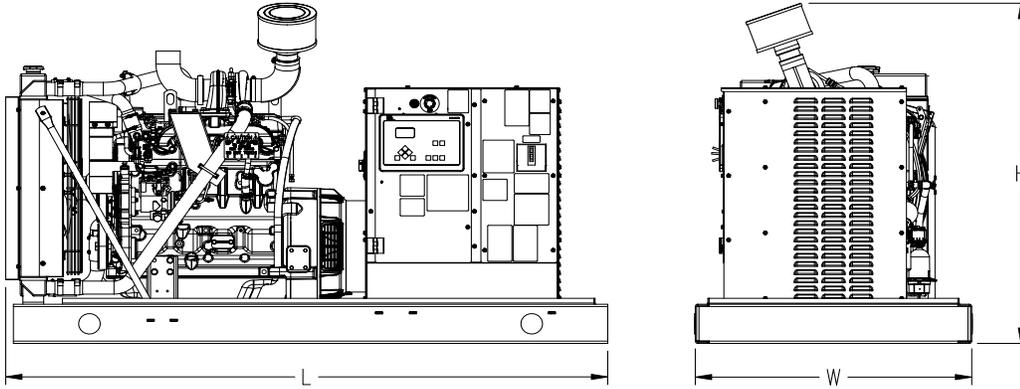
Aspirating: *m ³ /min (SCFM)	5.4 (191)
Air flow required for radiator cooled unit: *m ³ /min (SCFM)	91 (3,162)
Remote cooled applications; air flow required for dissipation of radiated generator set heat for a maximum of 25 °F rise: *m ³ /min (SCFM)	40 (1,396)

* Air density = 1.184 kg/m³ (0.0739 lbm/ft³)

Exhaust system

Gas temperature (stack): °C (°F)	545 (1,013)
Gas volume at stack temperature: m ³ /min (CFM)	14.4 (508)
Maximum allowable back pressure at outlet of engine, before piping: kPa (in. H ₂ O)	7.5 (30)
Minimum allowable back pressure: kPa (in H ₂ O)	N/A

Weights and dimensions



Drawing above for illustration purposes only, based on standard open power 480 volt generator set. Lengths may vary with other voltages. Do not use for installation design. See website for unit specific template drawings.

System	Dimensions (L x W x H)	Weight
Open Power Unit (OPU)	2,213 x 1,016 x 1,323 mm (87.12 x 40 x 52.07 in)	978-1,404 kg (2,157-3,095 lb)

Weights and dimensions are based on open power units and are estimates only. Consult the factory for accurate weights and dimensions for your specific generator set.

Sound data

Unit type	Standby full load
Level 0 (OPU): dB(A)	77

Sound data is provided at 7 m (23 ft). Generator set tested in accordance with ISO 8528-10 and with infinite exhaust.

Emissions data

NO _x + NMHC	CO	PM
3.5	0.97	0.32

All units are in g/hp-hr and shown at 100% load (not comparable to EPA weighted cycle values). Emission levels of the engine may vary with ambient temperature, barometric pressure, humidity, fuel type and quality, installation parameters, measuring instrumentation, etc. The data was obtained in compliance with US EPA regulations. The weighted cycle value (not shown) from each engine is guaranteed to be within the US EPA standards. 5-mode emission data per 40 CFR 89 or 40 CFR 1039 (as applicable) is available upon request.

Rating definitions and conditions

- Standby ratings apply to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. No overload capability for this rating. Ratings are in accordance with ISO 3046-1, BS 5514, and AS 2789. Average load factor: ≤ 85%.
- Nominal ratings at standard conditions: 25 °C and 300 meters (77 °F and 1,000 feet).
- Deration factor:
 - Consult your local **mtu** Distributor for altitude derations.
 - Consult your local **mtu** Distributor for temperature derations.