

VANGUARD®



2026 VANGUARD® POWER GUIDE





Valued Customer,

Briggs & Stratton is pleased to introduce to you its robust 2026 lineup of best-in-class Vanguard power solutions. We remain committed to providing end-to-end power solutions that will exceed your expectations and effortlessly power your toughest equipment, whether with our engines, batteries, or both.

The value we bring lies not only within the quality and customization of our products but also in our 117 years of expertise in providing power that has set the foundation for what we are doing today.

We know power better than anyone, and that has allowed us to quickly develop one of the most unique and innovative battery systems in the market. Our dynamic lineup of fully customizable Vanguard™ Commercial Lithium-Ion batteries continues to take the industry by storm and has allowed us to expand into new markets to provide power in ways we never thought possible. With an expanded lineup of Fi Series fixed battery packs and the recent addition of our Vanguard Si Series swappable battery packs, you are in control of the power you need with a team of experts by your side every step of the way. Additionally, our new line includes advanced battery chargers, motors, and motor controllers, ensuring you have all the components you need for a complete power solution.

While there's been an intense focus on transforming Briggs & Stratton into a leading and innovative provider of electrified power, commercial engines are just as important to the future of this company. We continue to invest heavily in the growth of our Vanguard Commercial Engine business and remain committed to providing you with new engine innovations and cutting-edge technologies for many years to come. The expanded 2026 lineup offers the rugged reliability and exceptional performance you have come to expect from these powerhouse engines.

From development through application to world-class training and unparalleled support, our customers are the motivation behind everything we do. The team at Briggs & Stratton takes great pride in being your trusted partner in power. Thank you for your continued loyalty.

A handwritten signature in black ink, appearing to read 'Tom Rugg', with a stylized flourish at the end.

Tom Rugg
Senior Vice President and Group President,
Power & Energy Solutions



POWER EXPERTISE



**GLOBAL LEADER
IN APPLYING POWER
FOR OVER 110 YEARS.**

Commercial Battery Pack Lineup.*

Fi Series Fixed Battery Packs Aluminum Diecast Enclosure



Fi7.0 (tall)
7.0 kWh¹



Fi7.0 (long)
7.0 kWh¹



Fi5.0
5.0 kWh¹



Fi3.5
48V 3.5 kWh¹



Fi3.5
24V 3.5 kWh¹



Fi1.5
1.5 kWh¹

Si Series Swappable Battery Packs



Si1.5
1.5 kWh¹

* Visualization of our Vanguard commercial battery packs only, independent of nominal voltage and features.

¹ Total energy measured using a 0.2C discharge per IEC 61960-3:2017.

² See www.vanguardpower.com for warranty details.

³ Zero emissions apply only to the battery pack during operation.

⁴ The battery pack is silent, however the application itself may make noise.

Commercial Engine Lineup.*

Vertical Shaft V-Twin Engines



EFI Marine
40.0 Gross HP¹



EFI/ETC 40.0
Gross HP¹



EFI/ETC 37.0
Gross HP¹



36.0 Gross HP¹



EFI/ETC 33.0
Gross HP¹



EFI 28.0
Gross HP¹



26.0 Gross HP¹



23.0 Gross HP¹



18.0 Gross HP¹



16.0 Gross HP¹



EFI/ETC 27.0
Gross HP¹



27.0 Gross HP¹



EFI/ETC 25.0
Gross HP¹



25.0 Gross HP¹



23.0 Gross HP¹



20.0 Gross HP¹

Horizontal Shaft V-Twin Engines



EFI Marine
40.0 Gross HP¹



EFI/ETC 40.0
Gross HP¹



EFI/ETC 37.0
Gross HP¹



35.0 Gross HP¹



EFI/ETC 33.0
Gross HP¹



33.0 Gross HP¹



EFI/ETC 23.0
Gross HP¹



23.0 Gross HP¹



18.0 Gross HP¹



16.0 Gross HP¹

Horizontal Shaft Single-Cylinder Engines



Vanguard® 400
EFI/ETC 14.0
Gross HP¹



Vanguard 400
14.0 Gross HP¹



Vanguard 300
10.0 Gross HP¹



Vanguard 200
6.5 Gross HP¹



Vanguard 160
5.0 Gross HP¹

* Visualization of our Vanguard engines only, independent of gross power HP features.
The icons visualize the maximum possible features.

¹ Engines are stated in gross HP at 3,600 rpm per SAE J1940 as rated by Briggs & Stratton.

² Extra year limited warranty after engine registration. Applies only to Vanguard 160, 200, 300, 400 and 400 EFI/ETC after engine registration. See www.vanguardpower.com for warranty details.

³ Available on select engines.

Vanguard Commercial Battery Packs

Page		Model Number
13	Vanguard 48V 1.5kWh ¹ Swappable Battery Pack - Si1.5	80105739
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15	Vanguard 24V 3.5kWh ¹ Fixed Battery Pack - Fi3.5	80127410
16	Vanguard 48V 3.5kWh ¹ Fixed Battery Pack - Fi3.5	80110583
17	Vanguard 48V 5.0kWh ¹ Fixed Battery Pack - Fi5.0	80112254
18	Vanguard 48V 7.0kWh ¹ Fixed Battery Pack - Fi7.0 (long)	80104774
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Vanguard Battery Chargers

21	NEW Si1.5 Charging Dock 1425W	80126934
22	1050W Charger	80086414
23	1425W Charger	80126739
24	NEW 3000W Charger	80114089

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Vanguard Motor Controllers

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¹ Total energy measured using a 0.2C discharge per IEC 61960-3:2017.

Vanguard Horizontal Shaft Single-Cylinder Engines

Page		Model Number
39	Vanguard 160 - 5.0 Gross HP ¹ Single-cylinder, 4-stroke, air-cooled, OHV	10V3
40	Vanguard 200 - 6.5 Gross HP ¹ Single-cylinder, 4-stroke, air-cooled, OHV	12V3
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Vanguard Horizontal Shaft V-Twin Engines

45	Vanguard 16.0 Gross HP ¹ V-Twin, 4-stroke, air-cooled, OHV	3054
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48	Vanguard 33.0 - 35.0 Gross HP ¹ V-Twin, 4-stroke, air-cooled, OHV	6114, 6134
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51	Vanguard EFI/ETC 33.0 Gross HP ¹ V-Twin, 4-stroke, air-cooled, OHV with EFI/ETC	61A1
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53	Vanguard EFI/ETC 40.0 Gross HP ¹ V-Twin, 4-stroke, air-cooled, OHV with EFI/ETC	61G2
54	Vanguard 40.0 Gross HP ¹ EFI - Marine V-Twin, 4-stroke, air-cooled, OHV with EFI	61G4

¹ All Vanguard engines are stated in gross HP at 3,600 rpm per SAE J1940 as rated by Briggs & Stratton.

Vanguard Vertical Shaft V-Twin Engines

56	Briggs & Stratton 20.0 Gross HP ¹ V-Twin, 4-stroke, air-cooled, OHV	40T8
57	Briggs & Stratton 23.0 Gross HP ¹ V-Twin, 4-stroke, air-cooled, OHV	44C7
58	Briggs & Stratton 25.0 Gross HP ¹ V-Twin, 4-stroke, air-cooled, OHV	44T9
59	Briggs & Stratton 25.0 Gross HP ¹ EFI/ETC V-Twin, 4-stroke, air-cooled, OHV with EFI/ETC	44X9
60	Briggs & Stratton 27.0 Gross HP ¹ V-Twin, 4-stroke, air-cooled, OHV	49T8
61	Briggs & Stratton 27.0 Gross HP ¹ EFI/ETC V-Twin, 4-stroke, air-cooled, OHV with EFI/ETC	49X9
63	Vanguard 16.0 Gross HP ¹ V-Twin, 4-stroke, air-cooled, OHV	3057
64	Vanguard 18.0 Gross HP ¹ V-Twin, 4-stroke, air-cooled, OHV	3567
65	Vanguard 23.0 Gross HP ¹ V-Twin, 4-stroke, air-cooled, OHV	3867
66	Vanguard 26.0 Gross HP ¹ V-Twin, 4-stroke, air-cooled, OHV	49R9
67	Vanguard EFI 28.0 Gross HP ¹ V-Twin, 4-stroke, air-cooled, OHV with EFI	49E8
69	Vanguard 33.0 Gross HP ¹ EFI/ETC V-Twin, 4-stroke, air-cooled, OHV with EFI/ETC	61A6
70	Vanguard 36.0 Gross HP ¹ V-Twin, 4-stroke, air-cooled, OHV	6137
71	Vanguard 37.0 Gross HP ¹ EFI/ETC V-Twin, 4-stroke, air-cooled, OHV with EFI/ETC	61A7
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73	Vanguard 40.0 Gross HP ¹ EFI - Marine V-Twin, 4-stroke, air-cooled, OHV with EFI	61G9

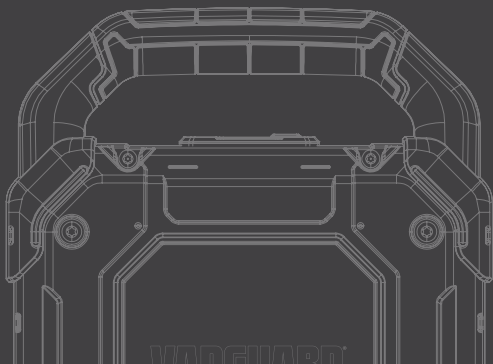
¹ All Vanguard engines are stated in gross HP at 3,600 rpm per SAE J1940 as rated by Briggs & Stratton.



Vanguard Battery Systems.

Reliable Power. Easy Integration.

Industry-leading commercial battery solutions for a new generation of commercial equipment.



Si Series

Taking lithium-ion battery technology to a whole new level

Swappable Battery Packs

Ability to swap out between applications on the job site to reduce downtime. Multiple mounting configurations.

Efficient

Multiple batteries can be combined in parallel for additional capacity.

Increased Uptime

Up to 1000-cycle life to 80% initial capacity.

Operational Confidence

Integrated Battery Management System.

Secure Hold On Battery

Straightforward to integrate. Minimal movement, if any, to prevent wear on electrical connections.

Flexibility

Single CANbus J1939 communication protocol allows OEMs to communicate with the battery's J1939 (automotive standard) CANbus.

Easy Troubleshooting

CANbus diagnostics opportunities.



Fi Series

Leader of the pack in power, performance and safety

Fixed Battery Packs

Designed to integrate seamlessly into any equipment.

Expandable

Packs can be combined in parallel for additional capacity.

Increased Uptime

Up to 2000-cycle life.¹

Durable

Multiple protective features tested to withstand harsh conditions, including extreme temperatures, impact, vibration, moisture and dirt.

Unique CMA Design

Cell Module Assembly design for efficient power and safety.

Battery Management System

Monitors, controls temperatures and voltages of each cell bank to ensure safe operations and protects the battery to prevent misuse and abuse, safeguarding your investment.



¹ Based on cell life cycle testing using a 1A discharge and 0.5C charge.

Electrification. Integration. Standardisation.

Vanguard Battery Systems offer a fully integrated solution. This includes Lithium-Ion battery packs with a built-in BMS, motors, motor controllers, and chargers. All acting as a comprehensive one-stop shop, significantly reducing the workload for OEMs.



BATTERY



**BATTERY
MANAGEMENT
SYSTEM (BMS)**



MOTOR



**MOTOR
CONTROLLER**



CHARGER

LITHIUM-ION BATTERY PACKS
VANGUARD 48V 1.5kWh¹

LITHIUM-ION BATTERY PACKS



Battery Type	Swappable battery pack - Si1.5 Lithium-ion integrated Battery Management System
Model Number	80105739
Nominal Voltage (V)	51.4
Top Voltage (V)	58.8
Cut-Off Voltage (V)	35.0
Nominal Capacity / Energy (Ah / kWh)	28.4 / 1.5
Weight (lbs)	26
Durability (Cycles) at 80% Capacity Retention ⁵	Up to 1000
Charge Time (Hours) ⁶ Charger	1.25 1425W
Dimensions L x W x H (in)	10.1 x 5.3 x 16.7
Features	Battery Management System, 8 Year Commercial Limited Warranty, plug-in ready charging system, user-swappable between applications, aluminum diecast enclosure



1.5kWh BATTERY



BATTERY MANAGEMENT SYSTEM (BMS)



CHARGER

¹ Total energy measured using a 0.2C discharge per IEC 61960-3:2017.

² See www.vanguardpower.com for warranty details. 3-year limited warranty applies to battery and charger.

³ Zero emissions apply only to the battery pack during operation.

⁴ The battery pack is silent, however the application itself may make noise.

⁵ Based on cell life cycle testing using a 10A discharge and 1C charge.

⁶ Based on preliminary testing, may vary based on conditions.

LITHIUM-ION BATTERY PACKS
VANGUARD 48V 1.5kWh¹

LITHIUM-ION BATTERY PACKS



Battery Type	Fixed battery pack - Fi1.5 Lithium-ion integrated Battery Management System
Model Number	80113908
Nominal Voltage (V)	51.4
Top Voltage (V)	58.8
Cut-Off Voltage (V)	35.0
Nominal Capacity / Energy (Ah / kWh)	28.4 / 1.5
Weight (lbs)	25.6
Durability (Cycles) at 80% Capacity Retention⁵	Up to 1000
Charge Time (Hours)⁶ Charger	1.25 1425W
Dimensions L x W x H (in)	10.0 x 5.1 x 14.6
Features	Battery Management System, 8 Year Commercial Limited Warranty, plug-in ready charging system, user-swappable between applications, aluminum diecast enclosure



1.5kWh BATTERY



BATTERY MANAGEMENT SYSTEM (BMS)



CHARGER

¹ Total energy measured using a 0.2C discharge per IEC 61960-3:2017.

² See www.vanguardpower.com for warranty details. 3-year limited warranty applies to battery and charger.

³ Zero emissions apply only to the battery pack during operation.

⁴ The battery pack is silent, however the application itself may make noise.

⁵ Based on cell life cycle testing using a 10A discharge and 1C charge.

⁶ Based on preliminary testing, may vary based on conditions.



Battery Type	Fixed battery pack - Fi3.5 Lithium-ion integrated Battery Management System		
Model Number	80127410		
Nominal Voltage (V)	25.8		
Top Voltage (V)	29.4		
Cut-Off Voltage (V)	17.5		
Nominal Capacity / Energy (Ah / kWh)	135.9 / 3.5		
Weight (lbs)	58.0		
Durability (Cycles) at 80% Capacity Retention⁵	Up to 2000		
Charge Time (Hours)⁶ Charger	6 1050W	5 1425W	4 3000W
Dimensions L x W x H (in)	18.9 x 10.7 x 10.4		
Features	Battery Management System, 8 Year Commercial Limited Warranty, plug-in ready charging system, aluminum diecast enclosure, ingress protection rating IP56 and pressure washer Up to 10 batteries can be combined in parallel for additional capacity.		



3.5kWh BATTERY



BATTERY MANAGEMENT SYSTEM (BMS)



CHARGER

¹ Total energy measured using a 0.2C discharge per IEC 61960-3:2017.

² See www.vanguardpower.com for warranty details. 3-year limited warranty applies to battery and charger.

³ Zero emissions apply only to the battery pack during operation.

⁴ The battery pack is silent, however the application itself may make noise.

⁵ Based on cell life cycle testing using a 1A discharge and 0.5C charge.

⁶ Based on preliminary testing, may vary based on conditions.

LITHIUM-ION BATTERY PACKS

VANGUARD 48V 3.5kWh¹

LITHIUM-ION BATTERY PACKS



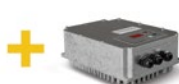
Battery Type	Fixed battery pack - Fi3.5 Lithium-ion integrated Battery Management System		
Model Number	80110583		
Nominal Voltage (V)	51.6		
Top Voltage (V)	58.8		
Cut-Off Voltage (V)	35.0		
Nominal Capacity / Energy (Ah / kWh)	67.5 / 3.5		
Weight (lbs)	58.0		
Durability (Cycles) at 80% Capacity Retention ⁵	Up to 2000		
Charge Time (Hours) ⁶ Charger	4 1050W	3 1425W	2 3000W
Dimensions L x W x H (in)	18.9 x 10.7 x 10.4		
Features	Battery Management System, 8 Year Commercial Limited Warranty, plug-in ready charging system, aluminum diecast enclosure, ingress protection rating IP56 and pressure washer Up to 10 batteries can be combined in parallel for additional capacity.		



3.5kWh BATTERY



BATTERY MANAGEMENT SYSTEM (BMS)



CHARGER

¹ Total energy measured using a 0.2C discharge per IEC 61960-3:2017.

² See www.vanguardpower.com for warranty details. 3-year limited warranty applies to battery and charger.

³ Zero emissions apply only to the battery pack during operation.

⁴ The battery pack is silent, however the application itself may make noise.

⁵ Based on cell life cycle testing using a 1A discharge and 0.5C charge.

⁶ Based on preliminary testing, may vary based on conditions.

LITHIUM-ION BATTERY PACKS

VANGUARD 48V 5.0kWh¹

LITHIUM-ION BATTERY PACKS



Battery Type	Fixed battery pack - Fi5.0 Lithium-ion integrated Battery Management System	
Model Number	80112254	
Nominal Voltage (V)	51.6	
Top Voltage (V)	58.8	
Cut-Off Voltage (V)	35.0	
Nominal Capacity / Energy (Ah / kWh)	98.7 / 5.0	
Weight (lbs)	93.9	
Durability (Cycles) at 80% Capacity Retention⁵	Up to 2000	
Charge Time (Hours)⁶	5.5	3
Charger	1050W	3000W
Dimensions L x W x H (in)	23.5 x 10.4 x 14.2	
Features	Battery Management System, 8 Year Commercial Limited Warranty, plug-in ready charging system, aluminum diecast enclosure, ingress protection rating IP56 and pressure washer Up to 10 batteries can be combined in parallel for additional capacity.	



5.0kWh BATTERY



BATTERY MANAGEMENT SYSTEM (BMS)



CHARGER

¹ Total energy measured using a 0.2C discharge per IEC 61960-3:2017.

² See www.vanguardpower.com for warranty details. 3-year limited warranty applies to battery and charger.

³ Zero emissions apply only to the battery pack during operation.

⁴ The battery pack is silent, however the application itself may make noise.

⁵ Based on cell life cycle testing using a 1A discharge and 0.5C charge.

⁶ Based on preliminary testing, may vary based on conditions.

LITHIUM-ION BATTERY PACKS
VANGUARD 48V 7.0kWh¹

LITHIUM-ION BATTERY PACKS



Battery Type	Fixed battery pack - Fi7.0 long Lithium-ion integrated Battery Management System	
Model Number	80104774	
Nominal Voltage (V)	51.6	
Top Voltage (V)	58.8	
Cut-Off Voltage (V)	35.0	
Nominal Capacity / Energy (Ah / kWh)	135.9 / 7.0	
Weight (lbs)	116.0	
Durability (Cycles) at 80% Capacity Retention ⁵	Up to 2000	
Charge Time (Hours) ⁶ Charger	8 1050W	4 3000W
Dimensions L x W x H (in)	34.4 x 10.4 x 11.1	
Features	Battery Management System, 8 Year Commercial Limited Warranty, plug-in ready charging system, aluminum diecast enclosure ingress protection rating IP66 and pressure washer Up to 10 batteries can be combined in parallel for additional capacity.	



7.0kWh BATTERY



**BATTERY MANAGEMENT
SYSTEM (BMS)**



CHARGER

¹ Total energy measured using a 0.2C discharge per IEC 61960-3:2017.

² See www.vanguardpower.com for warranty details. 3-year limited warranty applies to battery and charger.

³ Zero emissions apply only to the battery pack during operation.

⁴ The battery pack is silent, however the application itself may make noise.

⁵ Based on cell life cycle testing using a 1A discharge and 0.5C charge.

⁶ Based on preliminary testing, may vary based on conditions.

LITHIUM-ION BATTERY PACKS
VANGUARD 48V 7.0kWh¹

LITHIUM-ION BATTERY PACKS



Battery Type	Fixed battery pack - Fi7.0 tall Lithium-ion integrated Battery Management System	
Model Number	80112214	
Nominal Voltage (V)	51.7	
Top Voltage (V)	58.8	
Cut-Off Voltage (V)	35.0	
Nominal Capacity / Energy (Ah / kWh)	134.6 / 7.0	
Weight (lbs)	110.0	
Durability (Cycles) at 80% Capacity Retention⁵	Up to 2000	
Charge Time (Hours)⁶ Charger	8 1050W	4 3000W
Dimensions L x W x H (in)	23.5 x 10.4 x 14.2	
Features	Battery Management System, 8 Year Commercial Limited Warranty, plug-in ready charging system, aluminum diecast enclosure ingress protection rating IP56 and pressure washer Up to 10 batteries can be combined in parallel for additional capacity.	



7.0kWh BATTERY



BATTERY MANAGEMENT SYSTEM (BMS)



CHARGER

¹ Total energy measured using a 0.2C discharge per IEC 61960-3:2017.

² See www.vanguardpower.com for warranty details. 3-year limited warranty applies to battery and charger.

³ Zero emissions apply only to the battery pack during operation.

⁴ The battery pack is silent, however the application itself may make noise.

⁵ Based on cell life cycle testing using a 1A discharge and 0.5C charge.

⁶ Based on preliminary testing, may vary based on conditions.

Lithium-Ion Battery Chargers

Vanguard offers a variety of chargers that pair with Vanguard Battery Packs.

Plug into standard wall outlets.

Can be combined in parallel for reduced charging times.

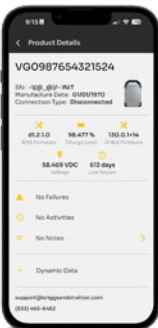




Charger Type	Si Series 1425W single-bay-mounted charger with Bluetooth® monitoring
Model Number	80126934
Charging Rate (A / kW)	30/ 1.425
Rated Voltage (V)	100 - 240 (AC)
Operating Voltage (V)	85 - 265 (AC)
Dimensions L x W x H (in)	24.44 x 13.9 x 10.4
Features	Works seamlessly with battery pack, Bluetooth capabilities for monitoring AC input and DC output, enclosure rating IP44 / NEMA4



VANGUARD IoT APP



- > The free Vanguard IoT application interfaces wirelessly with Vanguard batteries and chargers over Bluetooth.
- > Allows for easy maintaining and updating of battery, including firmware.
- > View data from the battery pack including: cell temperature, cell voltage, terminal voltage, current (both charge and discharge), and how much power the application is drawing.
- > Display diagnostic information related to battery charges.
- > Allows users to configure battery charger.
- > Cloud connectivity.

¹ See www.vanguardpower.com for warranty details.

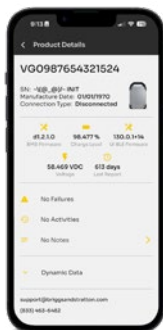
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Charger Type	Fi Series 1050W single-phase charging system with Bluetooth® monitoring
Model Number	80086414
Charging Rate (A / kW)	25 / 1.05
Rated Voltage (V)	100 - 240 (AC)
Operating Voltage (V)	85 - 265 (AC)
Dimensions L x W x H (in)	13.2 x 7.1 x 4.4
Features	Works seamlessly with battery pack, Bluetooth capabilities for monitoring AC input and DC output, designed for your safety Can be connected in parallel (2) to reduce the charging time.



VANGUARD IOT APPLICATION



- > The free Vanguard IoT application interfaces wirelessly with Vanguard batteries and chargers over Bluetooth.
- > Allows for easy maintaining and updating of battery, including firmware.
- > View data from the battery pack including: cell temperature, cell voltage, terminal voltage, current (both charge and discharge), and how much power the application is drawing.
- > Display diagnostic information related to battery charges.
- > Allows users to configure battery charger.
- > Cloud connectivity.

¹ See www.vanguardpower.com for warranty details.

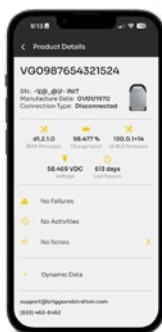
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Charger Type	Fi / Si Series 1425W single-phase charging system with Bluetooth monitoring
Model Number	80126739
Charging Rate (A / kW)	30 / 1.425
Rated Voltage (V)	100 - 240 (AC)
Operating Voltage (V)	85 - 265 (AC)
Dimensions L x W x H (in)	13.4 x 8.1 x 4.5
Features	Works seamlessly with battery pack, Bluetooth capabilities for monitoring AC input and DC output, designed for your safety Can be connected in parallel (2) to reduce the charging time.



VANGUARD IoT APPLICATION



- > The free Vanguard IoT application interfaces wirelessly with Vanguard batteries and chargers over Bluetooth.
- > Allows for easy maintaining and updating of battery, including firmware.
- > View data from the battery pack including: cell temperature, cell voltage, terminal voltage, current (both charge and discharge), and how much power the application is drawing.
- > Display diagnostic information related to battery charges.
- > Allows users to configure battery charger.
- > Cloud connectivity.

¹ See www.vanguardpower.com for warranty details.

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Charger Type	Fi Series 3000W single-phase charging system
Model Number	80114089
Charging Rate (A / kW)	60 / 3
Rated Voltage (V)	100 - 240 (AC)
Operating Voltage (V)	90 - 264 (AC)
Dimensions L x W x H (in)	12.7 x 8.6 x 5.5
Features	Works seamlessly with battery pack, designed for your safety

¹ See www.vanguardpower.com for warranty details.



Motor Type	MVG1500
Model Number	TBC
Motor Type	Brushless PM
Nominal Input Voltage	48 VDC
Maximum Input Voltage	72 VDC
Output Power (Continuous)	1500 W
Output Power (Peak)	3500 W
Nominal Torque	5 Nm
Maximum Torque	20 Nm
Nominal Speed	3600 RPM
Maximum Speed	4000 RPM (at 48V)
Efficiency (Peak)	92%
Operating Temperature Range	Up to 40°C
Enclosure Rating	IP65
D x L Body/PTO (in)	8.8 x 6.1 x 6.3
Features	Internal motor controller, simplified system integration, brushless PM, automotive grade design, high torque outer rotor design

¹ See www.vanguardpower.com for warranty details.

MC Motor Controllers

J1939 Communication

Simplified integration with Vanguard battery packs.

Automotive Grade Design

Outstanding resilience and reliability.

Auto-Tuning

Less work to optimize your system.

Fault Protection

Keep the equipment working as well as possible, as long as possible.

Multiple Control Modes

Control speed, torque, or a combination.





Controller Type	MC2000
Model Number	80094680
Nominal Input Voltage	48 VDC
Maximum Input Voltage	72 VDC
Minimum Input Voltage	18 VDC
Phase Current (Peak)	200 A
Efficiency (Peak)	99%
Supported Motor Types	Three-phase SPM
Fault Protection	Over/under voltage, over temperature, over current
Operating Temperature Range	-4 to 203°F (-20 to 95°C)
Storage Temperature Range	-31 to 203°F (-35 to 95°C)
Enclosure Rating	IPx5
L x W x H (in)	4.9 x 5.7 x 2.0
Features	Supports Hall effect or sensorless motors; speed, torque, and hybrid control modes; thermal cutback; Bluetooth communication; 100% end-of-line test at power

¹ See www.vanguardpower.com for warranty details.



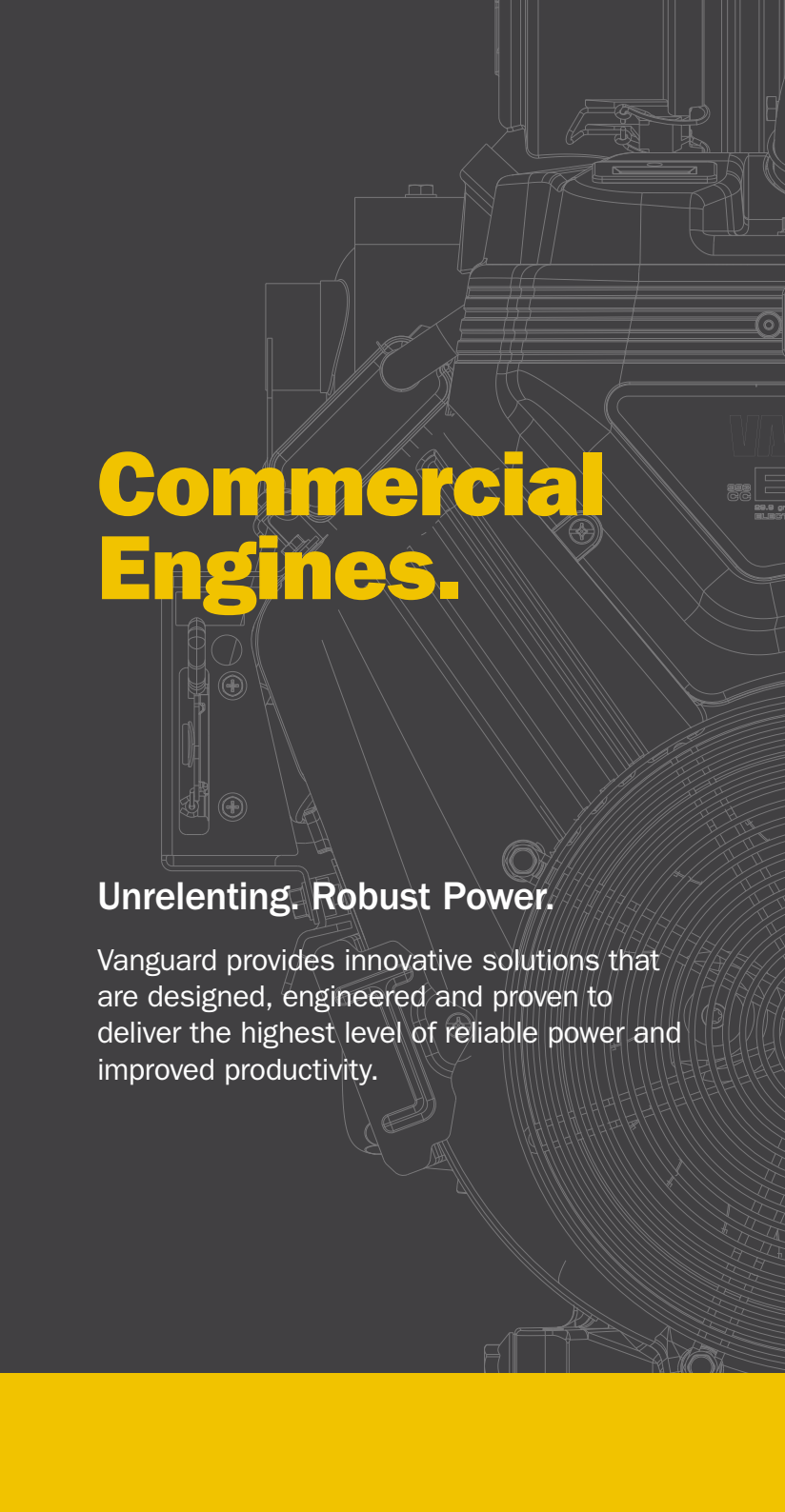
Controller Type	MC4000
Model Number	80135006
Nominal Input Voltage	48 VDC
Maximum Input Voltage	72 VDC
Minimum Input Voltage	18 VDC
Phase Current (Peak)	430 A
Efficiency (Peak)	99%
Supported Motor Types	Three-phase SPM
Fault Protection	Over/under voltage, over temperature, over current
Operating Temperature Range	-4 to 203°F (-20 to 95°C)
Storage Temperature Range	-31 to 203°F (-35 to 95°C)
Enclosure Rating	IPx5
L x W x H (in)	6.8 x 5.7 x 2.0
Features	Supports Hall effect or sensorless motors; speed, torque, and hybrid control modes; thermal cutback; Bluetooth communication; 100% end-of-line test at power

¹ See www.vanguardpower.com for warranty details.



Controller Type	MC8000
Model Number	80135007
Nominal Input Voltage	48 VDC
Maximum Input Voltage	72 VDC
Minimum Input Voltage	18 VDC
Phase Current (Peak)	840 A
Efficiency (Peak)	99%
Supported Motor Types	Three-phase SPM
Fault Protection	Over/under voltage, over temperature, over current
Operating Temperature Range	-4 to 203°F (-20 to 95°C)
Storage Temperature Range	-31 to 203°F (-35 to 95°C)
Enclosure Rating	IPx5
L x W x H (in)	9.7 x 5.7 x 2.0
Features	Supports Hall effect or sensorless motors; speed, torque, and hybrid control modes; thermal cutback; Bluetooth communication; 100% end-of-line test at power

¹ See www.vanguardpower.com for warranty details.

A detailed technical line drawing of a Vanguard commercial engine, showing various components like the cylinder head, cooling fan, and belt drive system. The drawing is rendered in white lines on a dark gray background.

Commercial Engines.

Unrelenting. Robust Power.

Vanguard provides innovative solutions that are designed, engineered and proven to deliver the highest level of reliable power and improved productivity.

VANGUARD 400 EFI/ETC



- > Consistent power.
- > Maximized productivity.
- > Better fuel efficiency.
- > In-house designed EFI System exclusively available for the Vanguard 400 EFI/ETC in our Single-Cylinder engine lineup.

The Single-Cylinder Advantage.

Game-changing improvements of user experience and total cost of ownership.



Exclusive 3-in-1 fuel and ignition shutoff¹.



Our quality assurance to safeguard your investment.²



Optimized sound and tone quality.



Lower vibration improving operator's comfort.



High inclination package allows up to 45° angle of operation³.



200 hour oil replacement intervals, double the industry standard.



600 hour air cleaner life, double the industry standard.



Reduced environmental impact by 50% less oil waste⁴.

EXCLUSIVE TO THE VANGUARD 400 EFI/ETC



Maximized productivity and improved fuel savings.



Consistent power in any conditions.



Reduced equipment downtime with CAN J1939 and EFI Diagnostic Tool.

¹ Not applicable to Vanguard 400 EFI/ETC.

² Extra year limited warranty after engine registration applies to Vanguard 160, 200, 300, 400 and 400 EFI/ETC. See www.vanguardpower.com for warranty details.

³ High Inclination Package optional. Refer to equipment operators manual for usage instructions.

⁴ Based on manufacturer's service recommendations per operator's manuals.

THE NEXT GENERATION OF **V-TWIN EFI ENGINES.**

Boosts overall performance and productivity in commercial applications.

- > Better fuel efficiency.
- > Quick load acceptance.
- > Improved user experience.
- > Enhanced total cost of ownership.



Easier to service.

- > The CAN J1939 communication protocol simplifies application integration, diagnostics and troubleshooting.
- > EFI Diagnostic Tool ensures reduced equipment downtime.

Selectable speed*.

- > One engine for multiple applications when the only difference is engine operating speed.
- > Control speed setting via CANbus.



* OEM Selectable Speed System available on models 61A1, 61A2, 61A6, 61A7, 61G2, and 61G8.

Less maintenance. Maximized up-time.



With the exclusive Oil Guard System, the equipment can run harder on the job and longer between oil maintenance. It is a revolutionary technology with an external oil reservoir that ensures longer engine life and lower total cost of ownership.

EXTENDED OIL MAINTENANCE INTERVALS

- > A **500-hour** oil change interval reduces downtime.
- > **Saves up to 60%** on oil maintenance costs¹.

OPTIMIZED OIL FILTRATION

- > 82% larger filter decreases oil aeration.
- > 80% improved filtration efficiency.
- > Thermal breakdown protection.

FASTER AND EASIER OIL CHANGES

- > Operator focused design.

CONSISTENT ENGINE LUBRICATION

- > Operates continuously at angles up to 45°²

¹ Cost savings are based on standard oil maintenance per unit per season with 100-hour interval versus the new Oil Guard System 500-hour service interval.

² Refer to specific usage/operating conditions as approved by the equipment manufacturer in the operator's manual.

Maximized productivity. Fuel savings.



The engine control module constantly monitors and fine-tunes every single engine operating point thousands of times per minute. The module takes in all of the signals from the engine sensors to make cycle-by-cycle decisions on how much fuel and spark to provide the EFI engine and when to do it.

Electronic Fuel Injection technology provides:

IMPROVED STARTING

- > Easy all-weather electric starting enables remote operation.
- > Improved tolerance for stale fuel.

INCREASED POWER

- > Speed sensing directs the right amount of fuel precisely when it is needed.

BETTER FUEL EFFICIENCY

- > Saves money and needs less fuel resulting in longer run time.

AUTOMATIC ALTITUDE COMPENSATION

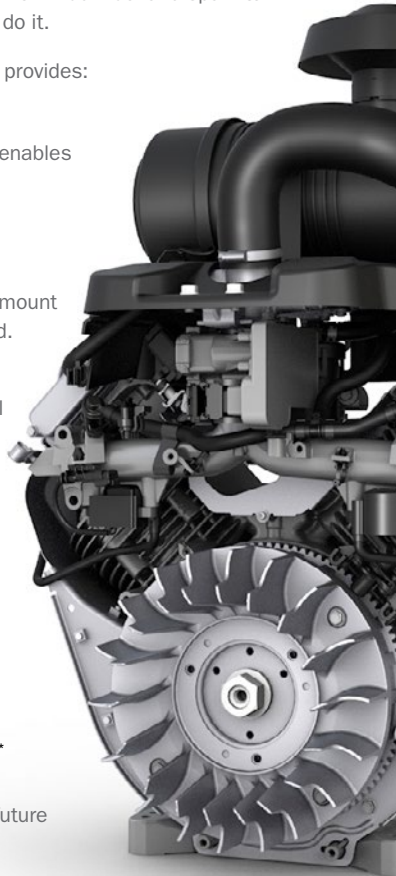
- > Smooth performance as environmental conditions change at different altitudes.

EFI DIAGNOSTICS TOOL

- > Easier diagnostics and faster troubleshooting.

IN-HOUSE DESIGNED EFI SYSTEM*

- > Enables us to quickly respond to customer needs and to address future emissions regulations.



* Available for Vanguard 400 EFI/ETC engine.

Consistent power. No matter the terrain.



The ETC technology reacts instantly to any applied load from its environment to deliver power in any condition. The flywheel speed sensor detects any change in RPM and sends a signal to the throttle body, ensuring consistent engine speed.

Electronic Throttle Control technology ensures:

CONSISTENT SPEED

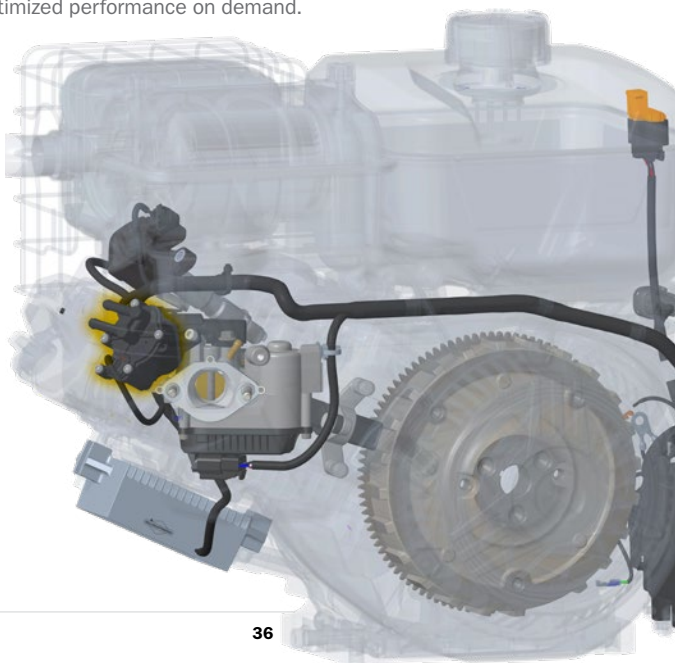
- > Responds to any applied load from its environment.

SMOOTH PERFORMANCE

- > Significantly enhances the experience of the end-user.

BETTER LOAD PICKUP

- > Optimized performance on demand.



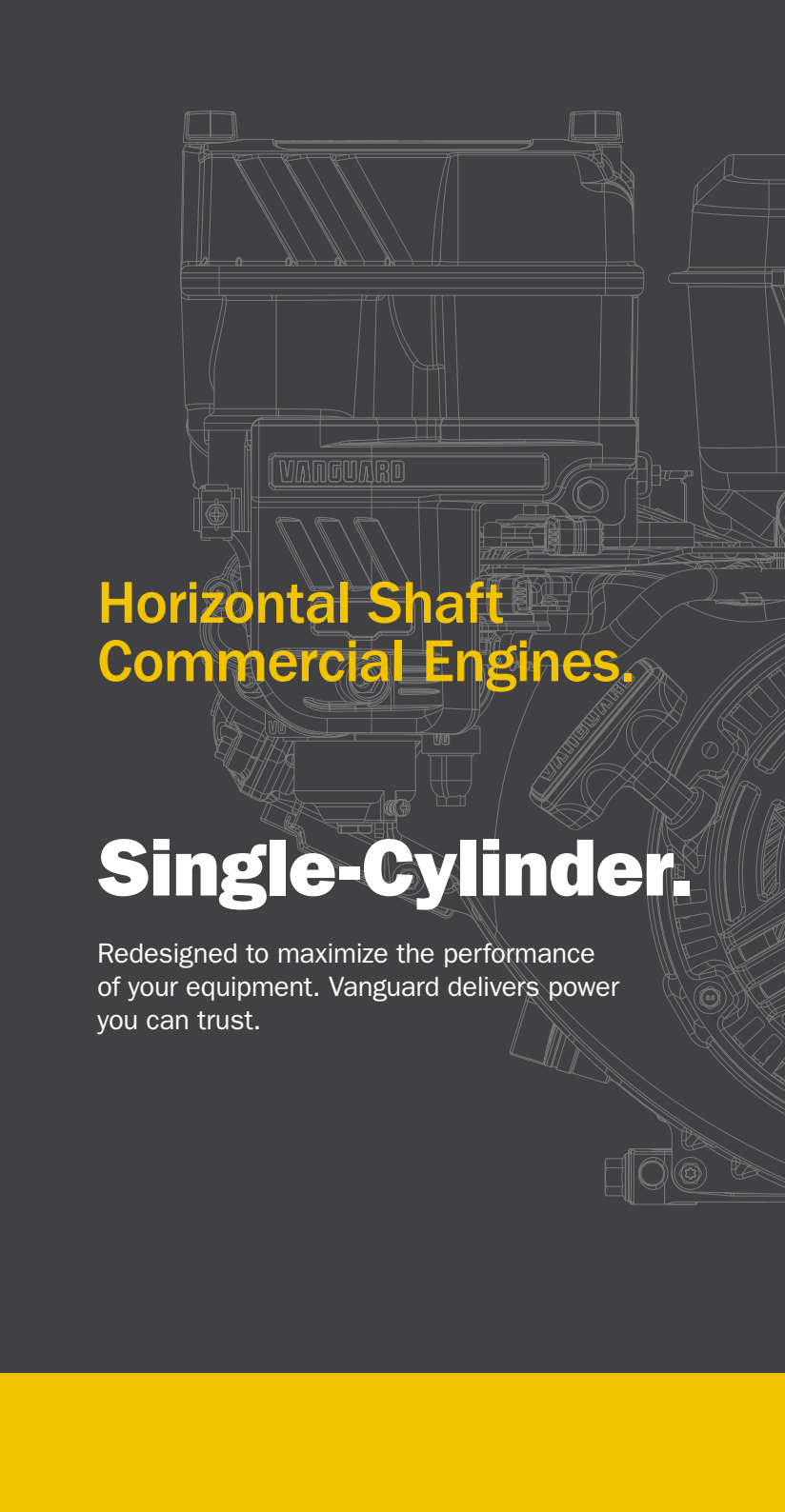
Ready to Transport. No More Engine Damage.



The patented TransportGuard integrates a single action fuel and ignition shut-off switch. This fuel shut-off system **eliminates operator error** and ensures **trouble free equipment transportation**.

- > No more oil/fuel dilution.
- > No more unnecessary oil changes/wastage.
- > No more damage.
- > No more costly downtime due to maintenance.
- > Not available on competitive engines.



A detailed white line art illustration of a Vanguard horizontal shaft commercial engine, set against a dark gray background. The engine is shown from a front-three-quarter perspective, highlighting its various components including the cooling shroud with 'VANGUARD' branding, the flywheel, and the base. The text is overlaid on the left side of the engine.

**Horizontal Shaft
Commercial Engines.**

Single-Cylinder.

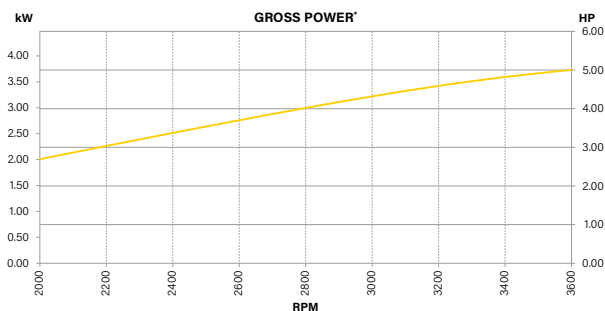
Redesigned to maximize the performance of your equipment. Vanguard delivers power you can trust.

HORIZONTAL • SINGLE-CYLINDER
VANGUARD 160 – 5.0 GROSS HP¹

HORIZONTAL • SINGLE-CYLINDER



Engine Type	Single-cylinder, 4-stroke, air cooled, OHV (Overhead Valve)
Model Number	10V3
Gross HP¹	5.0
Displacement (cc)	169
Cylinder	Cast iron sleeve
Bore (in)	2.44
Stroke (in)	2.2
Fuel Tank Capacity (l)	3.1
Oil Capacity (oz)	20
Weight (lbs)	39.5
Dimensions L x W x H (in)	10.78 x 14.42 x 14.22
Features	TransportGuard, optimized starting, cyclonic air filtration, engine warranty ²
Optional	Electric start, low oil sensor, 45° inclination package, clear flange muffler, 2:1 and 6:1 gear reduction package



¹ All power levels are stated in gross HP per SAE J1940 as rated by Briggs & Stratton.

² Extra year warranty after engine registration. See www.vanguardpower.com for warranty details.

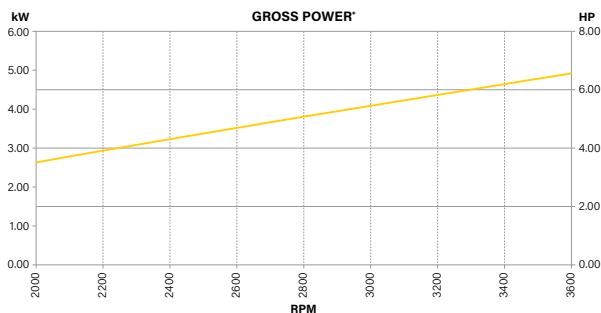
HORIZONTAL • SINGLE-CYLINDER
VANGUARD 200 – 6.5 GROSS HP¹

HORIZONTAL • SINGLE-CYLINDER



²

Engine Type	Single-cylinder, 4-stroke, air cooled, OHV (Overhead Valve)
Model Number	12V3
Gross HP ¹	6.5
Displacement (cc)	203
Cylinder	Cast iron sleeve
Bore (in)	2.68
Stroke (in)	2.2
Fuel Tank Capacity (l)	3.1
Oil Capacity (oz)	20
Weight (lbs)	39.5
Dimensions L x W x H (in)	11.39 x 14.78 x 14.22
Features	TransportGuard, optimized starting, cyclonic air filtration, engine warranty ²
Optional	Electric start, low oil sensor, 45° inclination package, clear flange muffler, low profile air cleaner, 2:1 and 6:1 gear reduction package



¹ All power levels are stated in gross HP per SAE J1940 as rated by Briggs & Stratton.

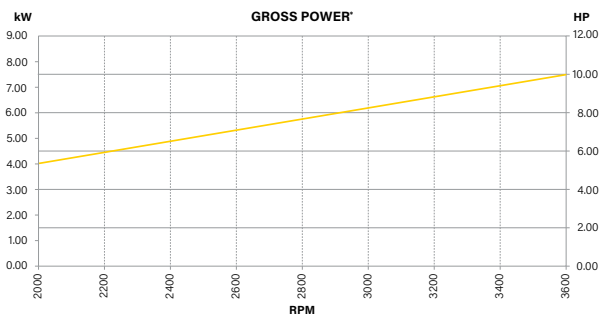
² Extra year warranty after engine registration. See www.vanguardpower.com for warranty details.

HORIZONTAL • SINGLE-CYLINDER
VANGUARD 300 – 10.0 GROSS HP¹

HORIZONTAL • SINGLE-CYLINDER



Engine Type	Single-cylinder, 4-stroke, air cooled, OHV (Overhead Valve)
Model Number	19V3
Gross HP¹	10.0
Displacement (cc)	307
Cylinder	Cast iron sleeve
Bore (in)	3.15
Stroke (in)	2.40
Fuel Tank Capacity (l)	4.8
Oil Capacity (oz)	30
Weight (lbs)	71
Dimensions L x W x H (in)	13.0 x 17.3 x 17.6
Features	TransportGuard, optimized starting, cyclonic air filtration, engine warranty ²
Optional	Electric start, low oil sensor, 45° inclination package, clear flange muffler



¹ All power levels are stated in gross HP per SAE J1940 as rated by Briggs & Stratton.

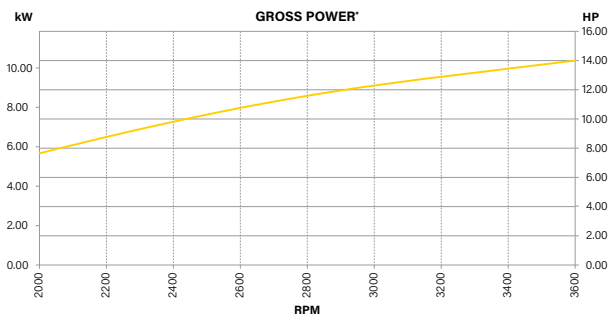
² Extra year warranty after engine registration. See www.vanguardpower.com for warranty details.

HORIZONTAL • SINGLE-CYLINDER
VANGUARD 400 – 14.0 GROSS HP¹

HORIZONTAL • SINGLE-CYLINDER



Engine Type	Single-cylinder, 4-stroke, air cooled, OHV (Overhead Valve)
Model Number	25V3
Gross HP ¹	14.0
Displacement (cc)	408
Cylinder	Cast iron sleeve
Bore (in)	3.46
Stroke (in)	2.6
Fuel Tank Capacity (l)	5.74
Oil Capacity (oz)	32
Weight (lbs)	78
Dimensions L x W x H (in)	14.3 x 17.9 x 18.1
Features	TransportGuard, optimized starting, cyclonic air filtration, engine warranty ²
Optional	Electric start, low oil sensor, 45° inclination package, clear flange muffler, low profile air cleaner



¹ All power levels are stated in gross HP per SAE J1940 as rated by Briggs & Stratton.

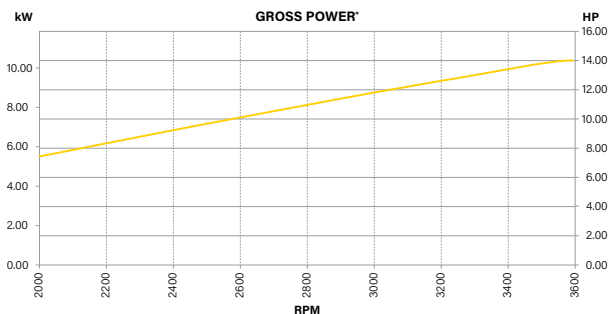
² Extra year warranty after engine registration. See www.vanguardpower.com for warranty details.

HORIZONTAL • SINGLE-CYLINDER EFI/ETC
VANGUARD 400 EFI/ETC – 14.0 GROSS HP¹



HORIZONTAL • SINGLE-CYLINDER EFI/ETC

Engine Type	Single-cylinder, 4-stroke, air cooled, OHV (Overhead Valve)
Model Number	25E3
Gross HP ¹	14.0
Displacement (cc)	408
Cylinder	Cast iron sleeve
Bore (in)	3.46
Stroke (in)	2.64
Fuel Tank Capacity (l)	5.99
Oil Capacity (oz)	32
Weight (lbs)	87
Dimensions L x W x H (in)	21.3 x 14.3 x 18.6
Features	Vanguard EFI/ETC, automotive style starting, cyclonic air filtration, engine warranty ²
Optional	Low oil sensor, 45° inclination package, clear flange muffler, low mount or remote air cleaner, remote mount control panel



¹ All power levels are stated in gross HP per SAE J1940 as rated by Briggs & Stratton.

² Extra year warranty after engine registration. See www.vanguardpower.com for warranty details.

A detailed technical line drawing of a V-Twin engine, showing various components like the cylinder heads, valves, pistons, and cooling system. The drawing is rendered in a light gray color against a dark gray background.

**Horizontal Shaft
Commercial Engines.**

V-Twins.

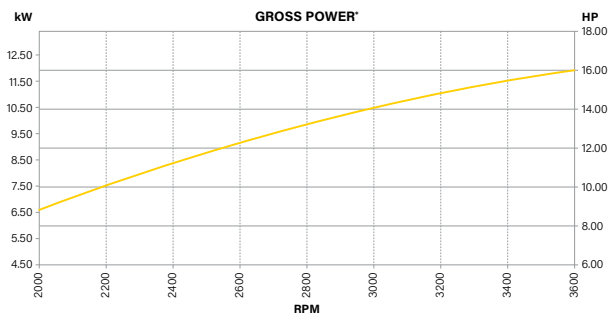
Built to deliver productivity at its best,
regardless of the application or environment.

HORIZONTAL • V-TWIN
VANGUARD 16.0 GROSS HP¹

HORIZONTAL • V-TWIN



Engine Type	V-Twin, 4-stroke, air cooled, OHV (Overhead Valve)
Model Number	3054
Gross HP¹	16.0
Displacement (cc)	479
Cylinder	Cast iron sleeve
Bore (in)	2.68
Stroke (in)	2.6
Fuel Tank Capacity (l)	NA
Oil Capacity (oz)	48
Weight (lbs)	72
Dimensions L x W x H (in)	10.98 x 16.14 x 17.24
Features	High efficiency head design, Magneton® electronic ignition
Optional	Oil cooler, rewind start, fuel tank ³ , muffler



¹ All power levels are stated in gross HP per SAE J1940 as rated by Briggs & Stratton.

² See www.vanguardpower.com for warranty details.

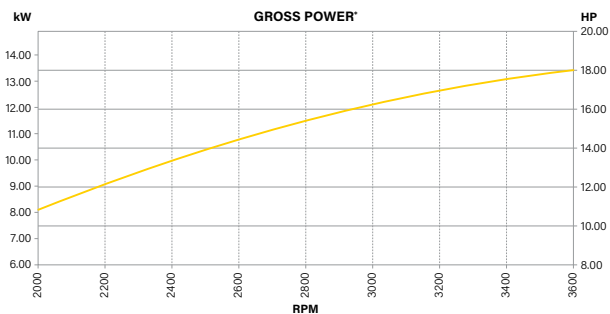
³ Optional fuel tank shown.

HORIZONTAL • V-TWIN
VANGUARD 18.0 GROSS HP¹

HORIZONTAL • V-TWIN



Engine Type	V-Twin, 4-stroke, air cooled, OHV (Overhead Valve)
Model Number	3564
Gross HP¹	18.0
Displacement (cc)	570
Cylinder	Cast iron sleeve
Bore (in)	2.83
Stroke (in)	2.76
Fuel Tank Capacity (l)	NA
Oil Capacity (oz)	48
Weight (lbs)	74
Dimensions L x W x H (in)	12.52 x 16.14 x 17.24
Features	High efficiency head design, Magneton® electronic ignition, low profile dual-clean air cleaner
Optional	Oil cooler, rewind start, fuel tank ³ , muffler



¹ All power levels are stated in gross HP per SAE J1940 as rated by Briggs & Stratton.

² See www.vanguardpower.com for warranty details.



Engine Type V-Twin, 4-stroke, air cooled, OHV (Overhead Valve)

Model Number 3864

Gross HP² 23.0

Displacement (cc) 627

Cylinder Cast iron sleeve

Bore (in) 2.97

Stroke (in) 2.76

Fuel Tank Capacity (l) NA

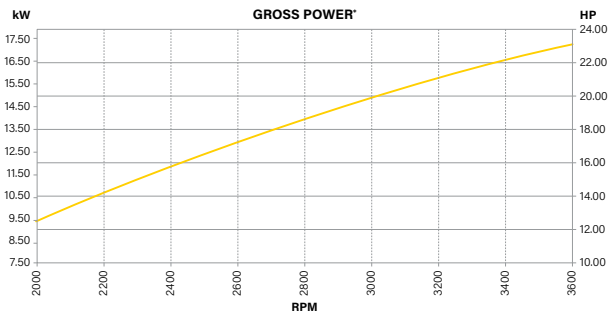
Oil Capacity (oz) 48

Weight (lbs) 77

Dimensions
L x W x H (in) 12.52 x 16.02 x 17.68

Features Oil cooler, high efficiency head design, Magnetrón® electronic ignition, low profile dual-clean air cleaner

Optional Rewind start, fuel tank³, muffler, cyclonic air cleaner



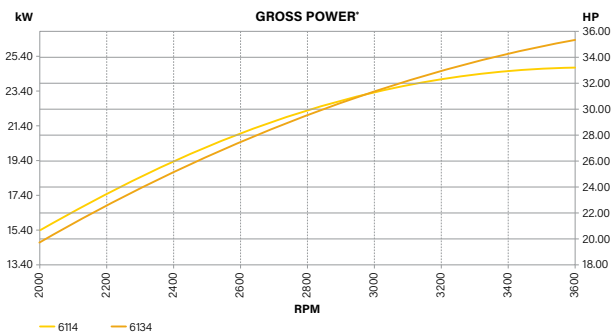
¹ All power levels are stated in gross HP per SAE J1940 as rated by Briggs & Stratton.

² See www.vanguardpower.com for warranty details.

³ Optional fuel tank shown.



Engine Type	V-Twin, 4-stroke, air cooled, OHV (Overhead Valve)	
Model Number	6114	6134
Gross HP¹	33.0	35.0
Displacement (cc)	993	
Cylinder	Cast iron sleeve	
Bore (in)	3.37	
Stroke (in)	3.41	
Fuel Tank Capacity (l)	NA	
Oil Capacity (oz)	78	
Weight (lbs)	125	
Dimensions L x W x H (in)	14.92 x 19.53 x 28.54	
Features	Cyclonic air cleaner, high efficient head design, Magneton® electronic ignition, V-Twin OHV Technology	
Optional	Muffler, flat panel air cleaner	



¹ All power levels are stated in gross HP per SAE J1940 as rated by Briggs & Stratton.

² See www.vanguardpower.com for warranty details.

THE PERFECT **DIESEL ALTERNATIVE.**

Our EFI/ETC Vanguard V-Twin engines are powering change across the board.

- > Improved performance.
- > Better fuel efficiency.
- > Consistent speed.
- > Easy all-weather electric starting.
- > Altitude compensation.
- > Stale fuel resistance.
- > CAN J1939 communications.
- > OEM selectable speed.*



**Maximized
productivity and
fuel efficiency.**

* OEM Selectable Speed System available on models 61A1, 61A2 and 61G2.

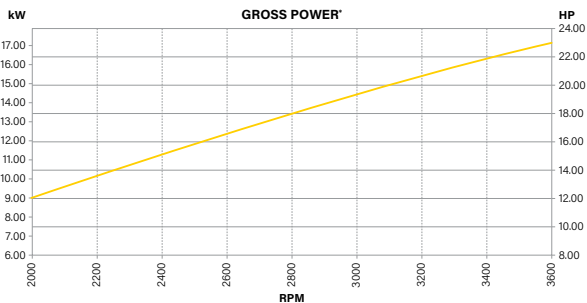


HORIZONTAL • V-TWIN EFI/ETC
VANGUARD 23.0 GROSS HP¹ EFI/ETC

HORIZONTAL • V-TWIN EFI



Engine Type	V-Twin, 4-stroke, air cooled, OHV (Overhead Valve)
Model Number	38E3
Gross HP¹	23.0
Displacement (cc)	627
Cylinder	Cast iron sleeve
Bore (in)	2.97
Stroke (in)	2.76
Fuel Tank Capacity (l)	NA
Oil Capacity (oz)	48
Dry Weight (lbs)	77
Dimensions L x W x H (in)	12.52 x 16.02 x 17.68
Features	Vanguard EFI, V-Twin OHV Technology, Magnetron® electronic ignition, low profile dual-clean air cleaner
Optional	Rewind start, muffler, cyclonic air cleaner



¹ All power levels are stated in gross HP per SAE J1940 as rated by Briggs & Stratton.

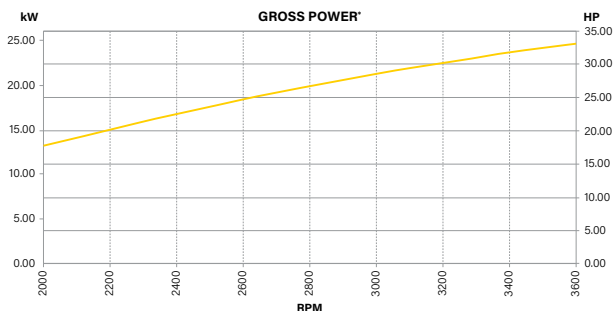
² See www.vanguardpower.com for warranty details.

HORIZONTAL • V-TWIN EFI/ETC
VANGUARD 33.0 GROSS HP¹ EFI/ETC

HORIZONTAL • V-TWIN EFI/ETC



Engine Type	V-Twin, 4-stroke, air cooled, OHV (Overhead Valve)
Model Number	61A1
Gross HP¹	33.0
Displacement (cc)	993
Cylinder	Cast iron sleeve
Bore (in)	3.37
Stroke (in)	3.41
Fuel Tank Capacity (l)	NA
Oil Capacity (oz)	78
Dry Weight (lbs)	125
Dimensions L x W x H (in)	14.92 x 19.53 x 28.54
Features	Vanguard EFI/ETC, cyclonic air cleaner, high efficiency head design, Magnetron [®] electric ignition
Optional	Muffler, flat panel air cleaner



¹ All power levels are stated in gross HP per SAE J1940 as rated by Briggs & Stratton.

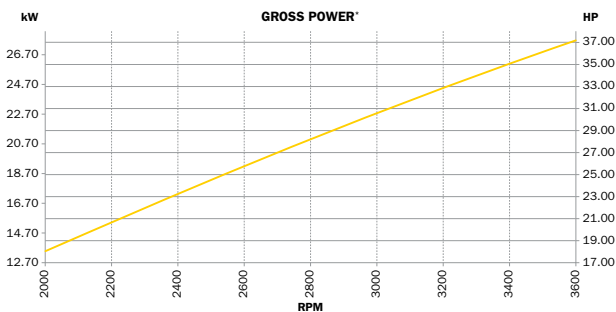
² See www.vanguardpower.com for warranty details.

HORIZONTAL • V-TWIN EFI/ETC
VANGUARD 37.0 GROSS HP¹ EFI/ETC

HORIZONTAL • V-TWIN EFI/ETC



Engine Type	V-Twin, 4-stroke, air cooled, OHV (Overhead Valve)
Model Number	61A2
Gross HP¹	37.0
Displacement (cc)	993
Cylinder	Cast iron sleeve
Bore (in)	3.37
Stroke (in)	3.41
Fuel Tank Capacity (l)	NA
Oil Capacity (oz)	78
Dry Weight (lbs)	125
Dimensions L x W x H (in)	14.92 x 19.53 x 28.54
Features	Vanguard EFI/ETC, cyclonic air cleaner, high efficiency design, Magnetron® electric ignition
Optional	Muffler, flat panel air cleaner



¹ All power levels are stated in gross HP per SAE J1940 as rated by Briggs & Stratton.

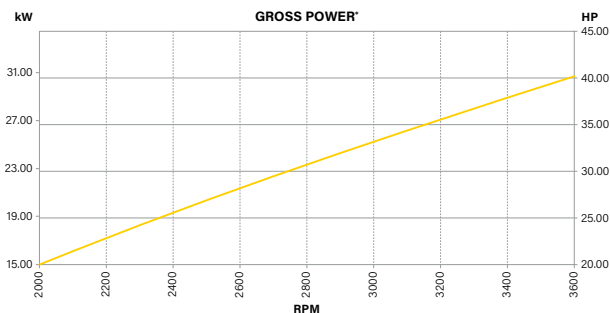
² See www.vanguardpower.com for warranty details.

HORIZONTAL • V-TWIN EFI/ETC
VANGUARD 40.0 GROSS HP¹ EFI/ETC

HORIZONTAL • V-TWIN EFI/ETC



Engine Type	V-Twin, 4-stroke, air cooled, OHV (Overhead Valve)
Model Number	61G2
Gross HP¹	40.0
Displacement (cc)	993
Cylinder	Cast iron sleeve
Bore (in)	3.37
Stroke (in)	3.41
Fuel Tank Capacity (l)	NA
Oil Capacity (oz)	78
Dry Weight (lbs)	125
Dimensions L x W x H (in)	14.92 x 19.53 x 28.54
Features	Vanguard EFI/ETC, cyclonic air cleaner, high efficiency, Magneton [®] electric ignition
Optional	Muffler, flat panel air cleaner

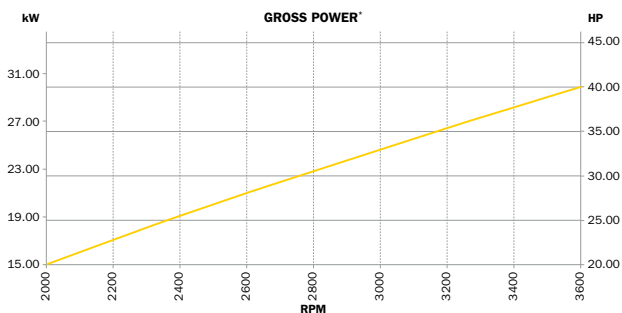


¹ All power levels are stated in gross HP per SAE J1940 as rated by Briggs & Stratton.

² See www.vanguardpower.com for warranty details.



Engine Type	V-Twin, 4-stroke, air cooled, OHV (Overhead Valve) with EFI
Model Number	61G4
Gross HP¹	40.0
Displacement (cc)	993
Cylinder	Cast iron sleeve
Bore (in)	3.37
Stroke (in)	3.41
Fuel Tank Capacity (l)	NA
Oil Capacity (oz)	78
Dry Weight (lbs)	125
Dimensions L x W x H (in)	14.92 x 19.53 x 28.54
Features	EFI, low profile air cleaner, electronic ignition, direct throttle control, 20/50 A alternator
Optional	Oil pressure switch



¹ All power levels are stated in gross kilowatts per SAE J1940 as rated by Briggs & Stratton.

² See www.vanguardpower.com for warranty details.



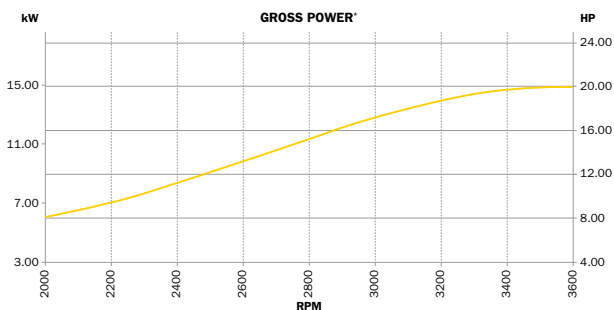
**Vertical Shaft
V-Twin Engines.**

CXi Series.TM

These V-Twin engines are specially designed for zero turn mowers and other high-debris applications to endure extended use in extreme conditions.



Engine Type	V-Twin, 4-stroke, air cooled, OHV (Overhead Valve)
Model Number	40T8
Gross HP¹	20.0
Displacement (cc)	656
Cylinder	Cast iron sleeve
Bore (in)	2.97
Stroke (in)	2.89
Fuel Tank Capacity (l)	NA
Oil Capacity (oz)	64
Dry Weight (lbs)	82
Dimensions L x W x H (in)	19.3 x 17.6 x 15.7
Features	Integrated cyclonic air cleaner, Magnetron® electronic ignition
Optional	Alternators, oil pressure switch, flexible oil drain extension

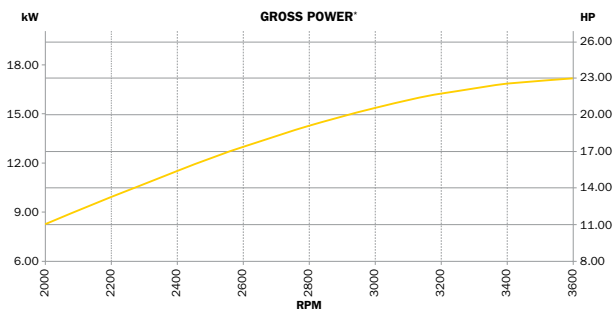


¹ All power levels are stated in gross HP per SAE J1940 as rated by Briggs & Stratton.

² See www.vanguardpower.com for warranty details.



Engine Type	V-Twin, 4-stroke, air cooled, OHV (Overhead Valve)
Model Number	44C7
Gross HP¹	23.0
Displacement (cc)	724
Cylinder	Cast iron sleeve
Bore (in)	3.12
Stroke (in)	2.89
Fuel Tank Capacity (l)	NA
Oil Capacity (oz)	67 (75 with optional Oil Xtend™)
Dry Weight (lbs)	82
Dimensions L x W x H (in)	19.3 x 17.6 x 15.7
Features	Integrated cyclonic air cleaner, Magnetron® electronic ignition
Optional	Oil Xtend™ System, alternators, oil pressure switch

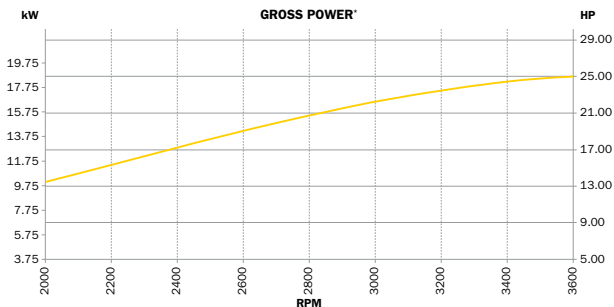


¹ All power levels are stated in gross HP per SAE J1940 as rated by Briggs & Stratton.

² See www.vanguardpower.com for warranty details.



Engine Type	V-Twin, 4-stroke, air cooled, OHV (Overhead Valve)
Model Number	44T9
Gross HP¹	25.0
Displacement (cc)	724
Cylinder	Cast iron sleeve
Bore (in)	3.12
Stroke (in)	2.89
Fuel Tank Capacity (l)	NA
Oil Capacity (oz)	67 (75 with optional Oil Xtend™)
Dry Weight (lbs)	84
Dimensions L x W x H (in)	19.3 x 17.6 x 15.7
Features	Integrated cyclonic air cleaner, Magnetron® electronic ignition
Optional	Oil Xtend™ System, alternators, oil pressure switch



¹ All power levels are stated in gross HP per SAE J1940 as rated by Briggs & Stratton.

² See www.vanguardpower.com for warranty details.

VERTICAL • V-TWIN EFI/ETC
BRIGGS & STRATTON 25.0 GROSS HP¹ EFI/ETC

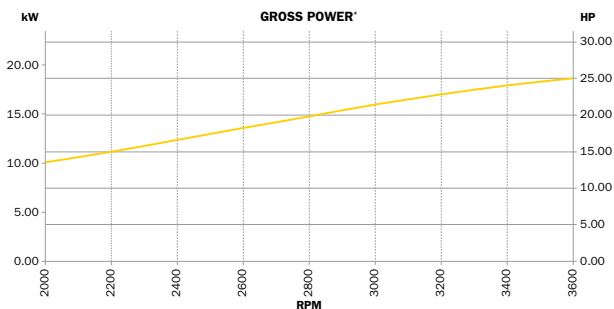


Shown with optional Oil Xtend.



VERTICAL • V-TWIN EFI/ETC

Engine Type	V-Twin, 4-stroke, air cooled, OHV (Overhead Valve)
Model Number	44X9
Gross HP¹	25.0
Displacement (cc)	724
Cylinder	Cast iron sleeve
Bore (in)	3.12
Stroke (in)	2.89
Fuel Tank Capacity (l)	NA
Oil Capacity (oz)	67 (75 with optional Oil Xtend™)
Dry Weight (lbs)	86.5
Dimensions L x W x H (in)	19.3 x 17.6 x 15.7
Features	Integrated cyclonic air cleaner, Magnetron® electronic
Optional	Oil Xtend™ System, alternators, oil pressure switch

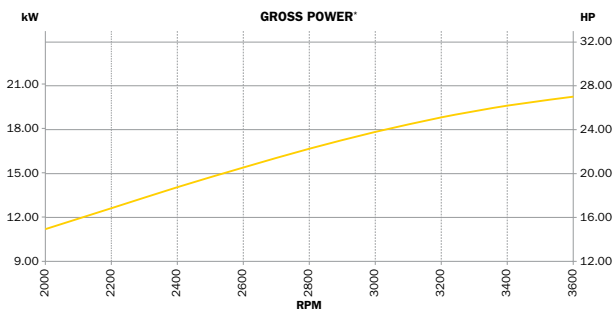


¹ All power levels are stated in gross HP per SAE J1940 as rated by Briggs & Stratton.

² See www.vanguardpower.com for warranty details.



Engine Type	V-Twin, 4-stroke, air cooled, OHV (Overhead Valve)
Model Number	49T8
Gross HP¹	27.0
Displacement (cc)	810
Cylinder	Cast iron sleeve
Bore (in)	3.3
Stroke (in)	2.89
Fuel Tank Capacity (l)	NA
Oil Capacity (oz)	67 (75 with optional Oil Xtend™)
Dry Weight (lbs)	84
Dimensions L x W x H (in)	19.3 x 17.6 x 15.7
Features	Integrated cyclonic air cleaner, Magnetron® electronic
Optional	Oil Xtend™ System, alternators, oil pressure switch



¹ All power levels are stated in gross HP per SAE J1940 as rated by Briggs & Stratton.

² See www.vanguardpower.com for warranty details.

VERTICAL • V-TWIN EFI/ETC
BRIGGS & STRATTON 27.0 GROSS HP¹ EFI/ETC

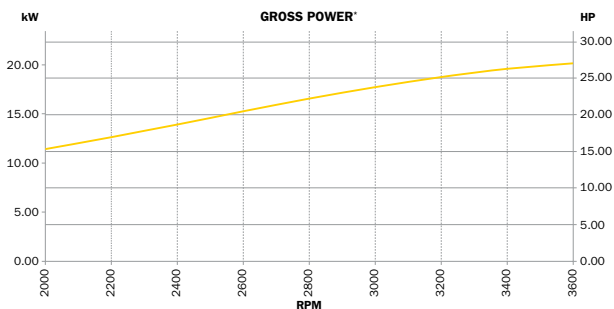


Shown with optional Oil Xtend.



VERTICAL • V-TWIN EFI/ETC

Engine Type	V-Twin, 4-stroke, air cooled, OHV (Overhead Valve) with EFI/ETC
Model Number	49X9
Gross HP¹	27.0
Displacement (cc)	810
Cylinder	Cast iron sleeve
Bore (in)	3.3
Stroke (in)	2.89
Fuel Tank Capacity (l)	NA
Oil Capacity (oz)	67 (75 with optional Oil Xtend™)
Dry Weight (lbs)	89
Dimensions L x W x H (in)	19.3 x 17.6 x 15.7
Features	Integrated cyclonic air cleaner, Magnetron® electronic
Optional	Oil Xtend™ System, alternators, oil pressure switch



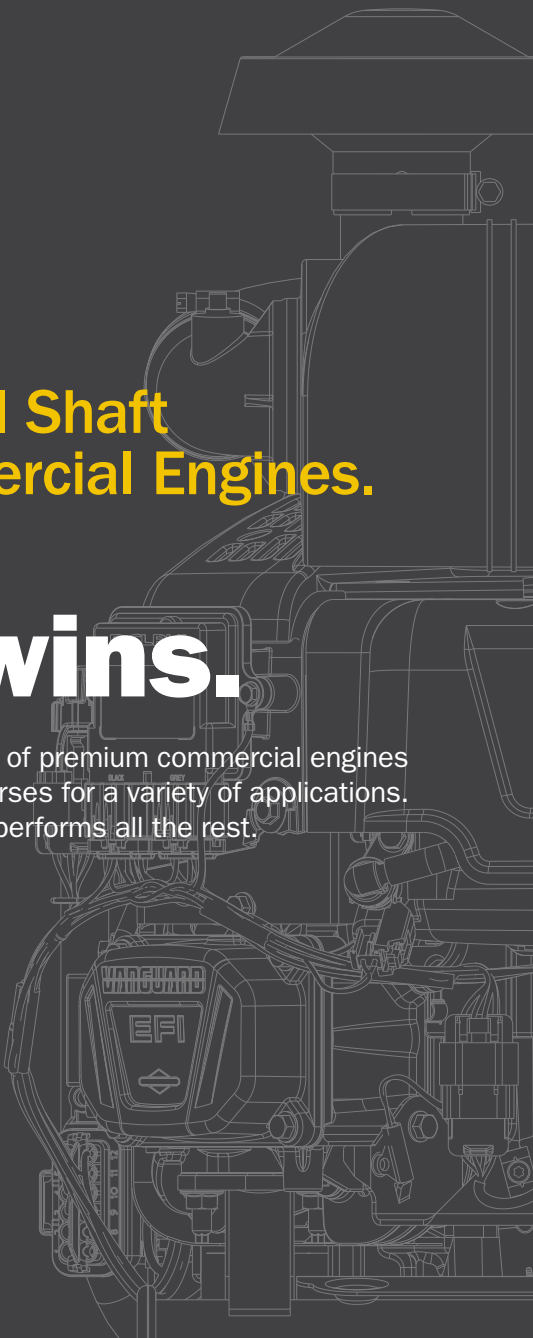
¹ All power levels are stated in gross HP per SAE J1940 as rated by Briggs & Stratton.

² See www.vanguardpower.com for warranty details.

Vertical Shaft Commercial Engines.

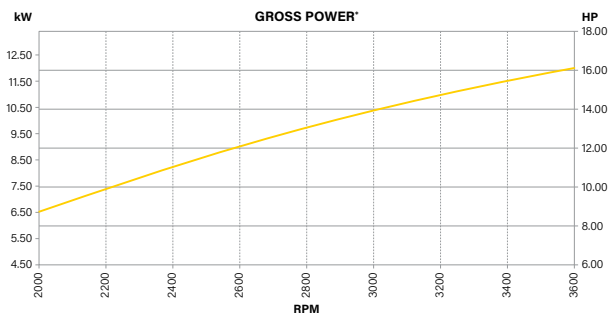
V-Twins.

The robust line of premium commercial engines are the workhorses for a variety of applications. Power that outperforms all the rest.





Engine Type	V-Twin, 4-stroke, air cooled, OHV (Overhead Valve)
Model Number	3057
Gross HP¹	16.0
Displacement (cc)	479
Cylinder	Cast iron sleeve
Bore (in)	2.68
Stroke (in)	2.6
Fuel Tank Capacity (l)	NA
Oil Capacity (oz)	48
Dry Weight (lbs)	72
Dimensions L x W x H (in)	10.98 x 16.14 x 17.24
Features	Low-profile dual-clean air cleaner, Magnetron® electronic ignition, high efficiency head design
Optional	Oil cooler, rewind start



¹ All power levels are stated in gross HP per SAE J1940 as rated by Briggs & Stratton.

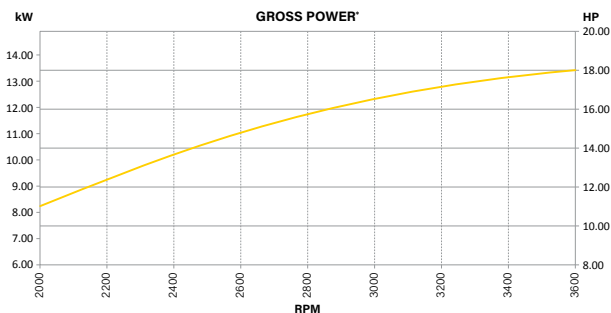
² See www.vanguardpower.com for warranty details.

VERTICAL • V-TWIN
VANGUARD 18.0 GROSS HP¹

VERTICAL • V-TWIN



Engine Type	V-Twin, 4-stroke, air cooled, OHV (Overhead Valve)
Model Number	3567
Gross HP²	18.0
Displacement (cc)	570
Cylinder	Cast iron sleeve
Bore (in)	2.83
Stroke (in)	2.76
Fuel Tank Capacity (l)	NA
Oil Capacity (oz)	48
Dry Weight (lbs)	74
Dimensions L x W x H (in)	12.52 x 16.14 x 17.24
Features	High efficiency head design, low-profile dual-clean air cleaner, Magnetron® electronic ignition
Optional	Oil cooler, rewind start

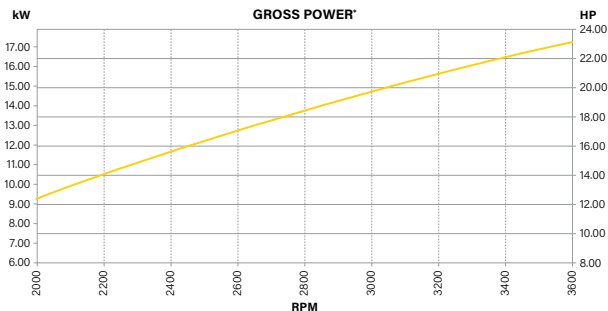


¹ All power levels are stated in gross HP per SAE J1940 as rated by Briggs & Stratton.

² See www.vanguardpower.com for warranty details.



Engine Type	V-Twin, 4-stroke, air cooled, OHV (Overhead Valve)
Model Number	3867
Gross HP¹	23.0
Displacement (cc)	627
Cylinder	Cast iron sleeve
Bore (in)	2.97
Stroke (in)	2.76
Fuel Tank Capacity (l)	NA
Oil Capacity (oz)	48
Dry Weight (lbs)	83.7
Dimensions L x W x H (in)	12.52 x 16.02 x 17.68
Features	High efficiency head design, low-profile dual-clean air cleaner, Magneton® electronic ignition, oil cooler
Optional	Cyclonic air cleaner, rewind start



¹ All power levels are stated in gross HP per SAE J1940 as rated by Briggs & Stratton.

² See www.vanguardpower.com for warranty details.

VERTICAL • V-TWIN
VANGUARD 26.0 GROSS HP¹

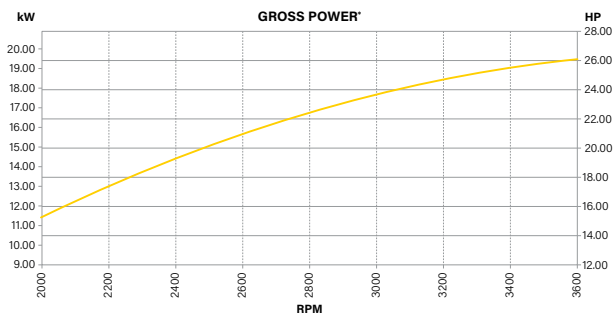
VERTICAL • V-TWIN



Optional Feature



Engine Type	V-Twin, 4-stroke, air cooled, OHV (Overhead Valve)
Model Number	49R9
Gross HP¹	26.0
Displacement (cc)	810
Cylinder	Cast iron sleeve
Bore (in)	3.3
Stroke (in)	2.89
Fuel Tank Capacity (l)	NA
Oil Capacity (oz)	67
Dry Weight (lbs)	92
Dimensions L x W x H (in)	19.94 x 18.53 x 22.89
Features	Full pressure lubrication system with oil filter, cyclonic air cleaner
Optional	Oil Guard System



¹ All power levels are stated in gross HP per SAE J1940 as rated by Briggs & Stratton.

² See www.vanguardpower.com for warranty details.

VERTICAL • V-TWIN EFI
VANGUARD 28.0 GROSS HP¹ EFI

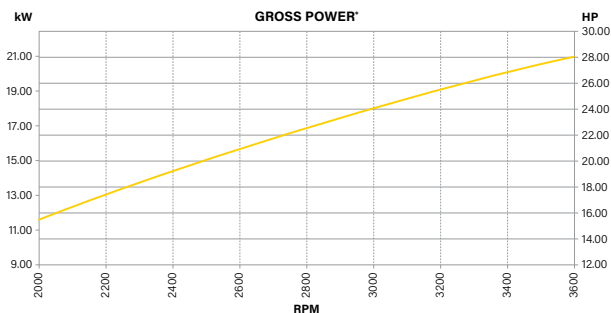


Optional Feature



VERTICAL • V-TWIN EFI

Engine Type	V-Twin, 4-stroke, air cooled, OHV (Overhead Valve)
Model Number	49E8
Gross HP¹	28.0
Displacement (cc)	810
Cylinder	Cast iron sleeve
Bore (in)	3.3
Stroke (in)	2.89
Fuel Tank Capacity (l)	NA
Oil Capacity (oz)	67
Weight (lbs)	92
Dimensions L x W x H (in)	19.94 x 18.53 x 22.89
Features	Cyclonic air cleaner, computer controlled electric ignition, Vanguard EFI
Optional	Oil Guard System



¹ All power levels are stated in gross HP per SAE J1940 as rated by Briggs & Stratton.

² See www.vanguardpower.com for warranty details.

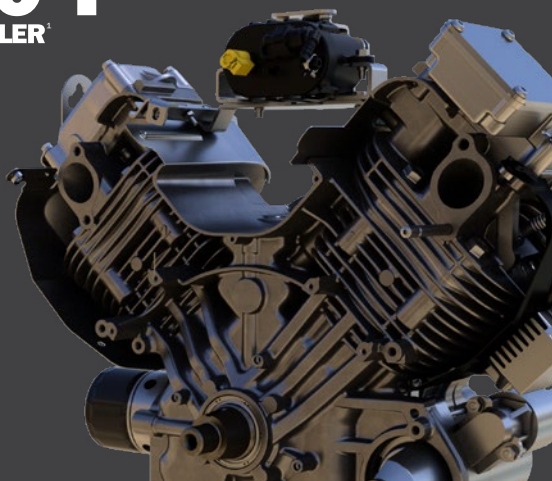
THE ORIGINAL. REBORN.

VANGUARD BIG BLOCKS

- > **Enhanced head design runs cooler** even in the hottest, harshest conditions.
- > **Upgraded blower housing** scroll and chopper fan to improve airflow.
- > **Optimized starting** and cold crank power.
- > **Unrelenting** quality and productivity.



60°F
COOLER¹



¹ Compared to previous version.

VERTICAL • V-TWIN EFI/ETC
VANGUARD 33.0 GROSS HP¹ EFI/ETC

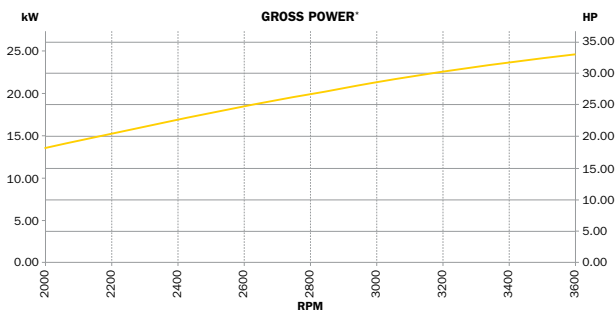


Optional Feature



VERTICAL • V-TWIN EFI/ETC

Engine Type	V-Twin, 4-stroke, air cooled, OHV (Overhead Valve) with EFI/ETC
Model Number	61A6
Gross HP¹	33.0
Displacement (cc)	993
Cylinder	Cast iron sleeve
Bore (in)	3.37
Stroke (in)	3.41
Fuel Tank Capacity (l)	NA
Oil Capacity (oz)	82
Weight (lbs)	125
Dimensions L x W x H (in)	22.09 x 20.24 x 24.57
Features	Cyclonic air cleaner, full pressure lubrication system with oil filter
Optional	Oil Guard System, alternator, oil pressure switch



¹ All power levels are stated in gross HP per SAE J1940 as rated by Briggs & Stratton.

² See www.vanguardpower.com for warranty details.

VERTICAL • V-TWIN
VANGUARD 36.0 GROSS HP¹

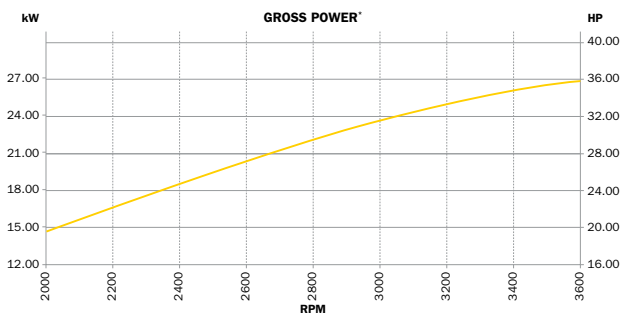
VERTICAL • V-TWIN



Optional Feature



Engine Type	V-Twin, 4-stroke, air cooled, OHV (Overhead Valve)
Model Number	6137
Gross HP¹	36.0
Displacement (cc)	993
Cylinder	Cast iron sleeve
Bore (in)	3.37
Stroke (in)	3.41
Fuel Tank Capacity (l)	NA
Oil Capacity (oz)	82
Dry Weight (lbs)	125
Dimensions L x W x H (in)	23.66 x 20.24 x 24.65
Features	Cyclonic air cleaner, full pressure lubrication system with oil filter, Magnetron® electric ignition
Optional	Oil Guard System, low profile air cleaner, alternators



¹ All power levels are stated in gross HP per SAE J1940 as rated by Briggs & Stratton.

² See www.vanguardpower.com for warranty details.

VERTICAL • V-TWIN EFI/ETC
VANGUARD 37.0 GROSS HP¹ EFI/ETC

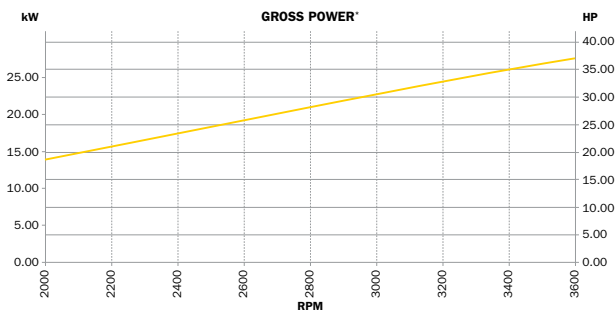


Optional Feature



VERTICAL • V-TWIN EFI/ETC

Engine Type	V-Twin, 4-stroke, air cooled, OHV (Overhead Valve) with EFI/ETC
Model Number	61A7
Gross HP¹	37.0
Displacement (cc)	993
Cylinder	Cast iron sleeve
Bore (in)	3.37
Stroke (in)	3.41
Fuel Tank Capacity (l)	NA
Oil Capacity (oz)	82
Weight (lbs)	125
Dimensions L x W x H (in)	22.09 x 20.24 x 24.65
Features	Cyclonic air cleaner, full pressure lubrication system with oil filter
Optional	Oil Guard System, alternators, oil pressure switch



¹ All power levels are stated in gross HP per SAE J1940 as rated by Briggs & Stratton.

² See www.vanguardpower.com for warranty details.

VERTICAL • V-TWIN EFI/ETC
VANGUARD 40.0 GROSS HP¹ EFI/ETC

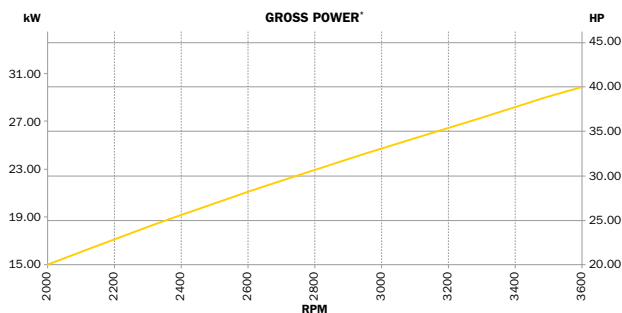
VERTICAL • V-TWIN EFI/ETC



Optional Feature



Engine Type	V-Twin, 4-stroke, air cooled, OHV (Overhead Valve)
Model Number	61G8
Gross HP¹	40.0
Displacement (cc)	993
Cylinder	Cast iron sleeve
Bore (in)	3.37
Stroke (in)	3.41
Fuel Tank Capacity (l)	NA
Oil Capacity (oz)	82
Dry Weight (lbs)	125
Dimensions L x W x H (in)	22.09 x 20.24 x 24.65
Features	Cyclonic air cleaner, full pressure lubrication system with oil filter
Optional	Oil Guard System, alternators, oil pressure switch



¹ All power levels are stated in gross kilowatts per SAE J1940 as rated by Briggs & Stratton.

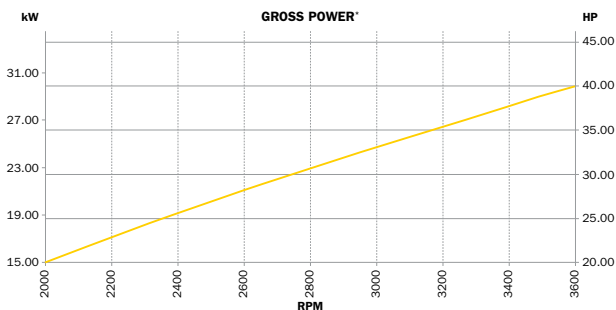
² See www.vanguardpower.com for warranty details.

VERTICAL • V-TWIN EFI
VANGUARD 40.0 GROSS HP¹ EFI MARINE



VERTICAL • V-TWIN EFI

Engine Type	V-Twin, 4-stroke, air cooled, OHV (Overhead Valve) with EFI
Model Number	61G9
Gross HP²	40.0
Displacement (cc)	993
Cylinder	Cast iron sleeve
Bore (in)	3.37
Stroke (in)	3.41
Fuel Tank Capacity (l)	NA
Oil Capacity (oz)	82
Weight (lbs)	125
Dimensions L x W x H (in)	23.66 x 20.24 x 24.65
Features	Low profile air cleaner, full pressure lubrication system with oil filter, direct throttle control, 20/50 A alternator
Optional	Oil pressure switch



¹ All power levels are stated in gross kilowatts per SAE J1940 as rated by Briggs & Stratton.

² See www.vanguardpower.com for warranty details.

- Features Key:
- Not available
 - s** Standard
 - o** Optional

Features Key: – Not available \$ Standard o Optional		Model Number	Nominal Voltage (V)		Discharge Cut Off Voltage (V)	Nominal Capacity / Energy (Ah / kWh)	Weight (lbs)	Durability (cycles) at 80% Capacity Retention	Charge Time 1050W (hrs)	Charge Time 1425W (hrs)	Charge Time 3000W (hrs)	Dimensions (in)			Battery Management System (BMS)	Single CANbus Communication	Dual CANbus Communication	J1939 Communication	Plug-In Ready Charging System	Aluminum Diecast Enclosure	Parallel Capable	
												L x W x H										
Vanguard Commercial Battery Packs																						
Vanguard 48V 1.5kWh Swappable Battery Pack - S11.5		80105739	51.4	42	28.4 / 1.5	26	1000	–	1.25	–	10.1 x 5.3 x 16.7	\$	\$	–	\$	\$	\$	\$	\$	\$	Yes	
Vanguard 48V 1.5kWh Fixed Battery Pack - F11.5		80113908	51.4	42	28.4 / 1.5	26	1000	–	1.25	–	10.0 x 5.1 x 14.6	\$	\$	–	\$	\$	\$	\$	\$	\$	Yes	
Vanguard 24V 3.5kWh Fixed Battery Pack - F13.5		80127410	25.8	17.5	135.9 / 3.5	58	2000	6	5	4	18.9 x 10.7 x 10.4	\$	–	\$	\$	\$	\$	\$	\$	\$	Yes	
Vanguard 48V 3.5kWh Fixed Battery Pack - F13.5		80110583	51.6	35	67.5 / 3.5	58	2000	4	3	2	18.9 x 10.7 x 10.4	\$	–	\$	\$	\$	\$	\$	\$	\$	Yes	
Vanguard 48V 5.0kWh Fixed Battery Pack - F15.0		80112254	51.6	35	98.7 / 5.1	86	2000	5.5	4	2.5	23.5 x 10.4 x 14.2	\$	–	\$	\$	\$	\$	\$	\$	\$	Yes	
Vanguard 48V 7.0kWh Fixed Battery Pack - F17.0 (long)		80104774	51.6	35	135.9 / 7.0	105	2000	8	4	–	34.5 x 11.0 x 10.3	\$	–	\$	\$	\$	\$	\$	\$	\$	Yes	
Vanguard 48V 7.0kWh Fixed Battery Pack - F17.0 (tall)		80112214	51.6	35	135.9 / 7.0	102	2000	8	4	–	23.5 x 10.4 x 14.2	\$	–	\$	\$	\$	\$	\$	\$	\$	Yes	

Total energy measured using a 0.2C discharge per IEC 61960-3:2017.

Download the e-version of the 2026 Vanguard Power Guide from our website:
www.vanguardpower/powerguide

- Features Key:
- Not available
 - s** Standard
 - o** Optional

Model Number	Displacement (cc)	Fuel Tank (l)	Dry Weight (lbs)	Oil Capacity (oz)	Dimensions (in) L x W x H	Cast Iron Sleeve Cylinders	Governor			Fuel	Air Cleaner			Starting	Ignition			Lubrication	
							Mechanical Governor	Electronic Throttle Control	OEM Selectable Speed		Carburetor	Electronic Fuel Injection	Integrated Cyclonic Air Cleaner		Automotive Style Air Cleaner With Foam Pre-Cleaner (Dual Element)	Centrifugal Multi Stage Cyclonic Air Cleaner	Manual Choke	Magnetron Ignition	ECM Fired Ignition Coil
Vanguard Horizontal Shaft Single-Cylinder Commercial Engines																			

Briggs & Stratton / Vanguard Vertical Shaft V-Twin Commercial Engines																				
Briggs & Stratton 20.0 Gross HP	40T8	656	–	82	64	19.3 x 17.6 x 15.7	\$	\$	–	\$	–	\$	–	\$	–	\$	–	\$	–	–
Briggs & Stratton 23.0 Gross HP	44C7	724	–	82	67	19.3 x 17.6 x 15.7	\$	\$	–	\$	–	\$	–	\$	–	\$	–	\$	–	–
Briggs & Stratton 25.0 Gross HP	44T9	724	–	84	67	19.3 x 17.6 x 15.7	\$	\$	–	\$	–	\$	–	\$	–	\$	–	\$	–	–
Briggs & Stratton EFI/ETC 25.0 Gross HP	44X9	724	–	86.5	67	19.3 x 17.6 x 15.7	\$	–	\$	–	\$	–	\$	–	\$	–	\$	–	\$	–
Briggs & Stratton 27.0 Gross HP	49T8	810	–	84	67	19.3 x 17.6 x 15.7	\$	\$	–	\$	–	\$	–	\$	–	\$	–	\$	–	–
Briggs & Stratton EFI/ETC 27.0 Gross HP	49X9	810	–	89	67	19.3 x 17.6 x 15.7	\$	–	\$	–	\$	–	\$	–	\$	–	\$	–	\$	–
Vanguard 16.0 Gross HP	3057	479	–	72	48	11.0 x 16.1 x 17.2	\$	\$	–	\$	–	\$	–	\$	–	\$	–	\$	–	–
Vanguard 18.0 Gross HP	3567	570	–	74	48	12.5 x 16.1 x 17.2	\$	\$	–	\$	–	\$	–	\$	–	\$	–	\$	–	–
Vanguard 23.0 Gross HP	3867	627	–	83.7	48	12.5 x 16 x 17.7	\$	\$	–	\$	–	\$	–	\$	0	\$	–	\$	–	–
Vanguard 26.0 Gross HP	49R9	810	–	92	67	19.8 x 18.1 x 22.8	\$	\$	–	\$	–	\$	–	\$	–	\$	–	\$	–	0 ¹
Vanguard EFI 28.0 Gross HP	49E8	810	–	92	67	19.9 x 18.5 x 22.9	\$	–	\$	–	\$	–	\$	–	\$	–	\$	–	\$	0 ¹
Vanguard EFI/ETC 33.0 Gross HP	61A6	993	–	125	82	22.1 x 20.2 x 24.6	\$	–	\$	–	\$	–	\$	–	\$	–	\$	–	\$	0 ¹
Vanguard 36.0 Gross HP	6137	993	–	125	82	23.7 x 20.2 x 24.7	\$	\$	–	\$	–	\$	–	0	\$	\$	–	\$	–	0 ¹
Vanguard EFI/ETC 37.0 Gross HP	61A7	993	–	125	82	22.1 x 20.2 x 24.7	\$	–	\$	–	\$	–	\$	–	\$	–	\$	–	\$	0 ¹
Vanguard EFI/ETC 40.0 Gross HP	61G8	993	–	125	82	22.1 x 20.2 x 24.7	\$	–	\$	–	\$	–	\$	–	\$	–	\$	–	\$	0 ¹
Vanguard EFI Marine 40.0 Gross HP	61G9	993	–	125	82	23.7 x 20.2 x 24.7	\$	–	\$	–	\$	–	\$	–	\$	–	\$	–	\$	–

The gross power rating for individual gasoline engine models is labeled in accordance with SAE (Society of Automotive Engineers) code J1940 Small Engine Power & Torque Rating Procedure, and is rated in accordance with SAE J11995. Torque values are derived at 2600 RPM for those engines with "rpm" called out on the label and 3060 for all others; horsepower values are derived at 3600 RPM. The gross power curves can be viewed at www.BRIGGSANDSTRATTON.COM. Net power values are taken with exhaust and air cleaner installed whereas gross power values are collected without these attachments. Actual gross engine power will be higher than net engine power and is affected by, among other things, ambient operating conditions and engine-to-engine variability. Given the wide array of products on which engines are placed, the gasoline engine may not develop the rated gross power when used in a given piece of power equipment. This difference is due to a variety of factors including, but not limited to, the variety of engine components (air cleaner, exhaust, charging, cooling, carburetor, fuel pump, etc.), application limitations, ambient operating conditions (temperature, humidity, altitude), and engine-to-engine variability. Due to manufacturing and capacity limitations, Briggs & Stratton may substitute an engine of higher rated power for this engine. All Vanguard engines are stated in gross kilowatt at 3600 rpm per SAE J1940 as rated by Briggs & Stratton. ¹ Oil Guard System allows 45° inclination.

VANGUARD®



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8-year commercial warranty on our swappable and fixed battery packs.

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