

POWERING A WORKING WORLD

VERTICAL SHAFT V-TWIN OHV ENGINES

INTRODUCTION

Vanguard V-Twin engines have been developed to perform in the most demanding commercial applications. Application-engineered to power heavy duty equipment, these engines feature a number of advanced technologies and integrated components which ensure the most efficient power source from a compact and durable design. Backed by an industry leading global after sales and support network, Vanguard V-Twin commercial grade engines are the number one choice for many professionals around the world.

KEY FEATURES

V-TWIN OHV TECHNOLOGY

- Combustion chamber performance is optimized for enhanced fuel economy with lowered emissions.
- Reduced fuel consumption leads to lower operating costs.
- CO² and NO^x emissions are lowered thanks to improved emissions control.

MAGNETRON® ELECTRONIC IGNITION

· Quick, dependable starting with no maintenance required.

OPTIMIZED CUBIC DISPLACEMENT

 Equipment productivity is boosted with greater power and torque from the engine.

DURA-BORE™ CAST IRON CYLINDER SLEEVE

• Built-in cast-iron cylinder sleeve provides added protection and enhances the overall engine durability.

FULL PRESSURE LUBRICATION

- Ensures optimal lubrication for all internal components at all times, even when operating on inclinations.
- Spin-on oil filter provides enhanced filtration to keep oil cleaner for longer life.

ADVANCED DEBRIS MANAGEMENT SYSTEMS

- Debris is effectively controlled to allow for better airflow and engine cooling.
- Overall maintenance and equipment downtime is reduced.
 Available with either a 5" Donaldson cyclonic air cleaner or integrated panel air filtration system.



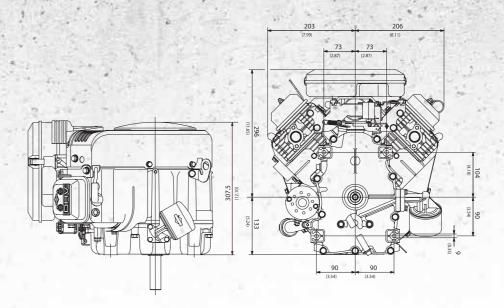


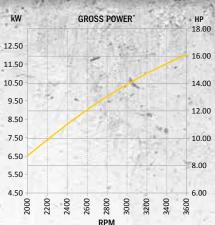
POWERING A WORKING WORLD

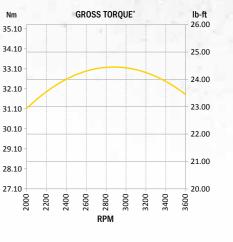
ENGINE TECHNICAL INFORMATION



VANGUARD™ VERTICAL SHAFT V-TWIN 16.0 GROSS HP*









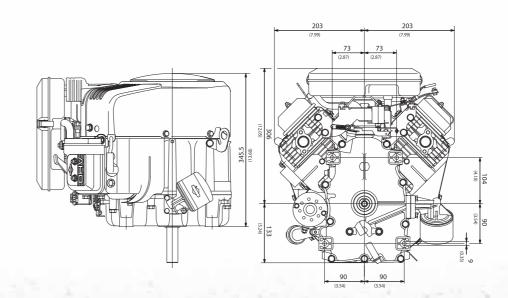
FUEL CONSUMPTION IN LITRES PER HOUR"

LOAD:	FULL
LITDEC.	F 4

All power levels are stated gross HP at 3600rpm per SAEJ1940 as rated by Briggs & Stratton.

* (Load @ 3'600 rpm). Fuel consumption is depending on engine configuration, application and operating condition

VANGUARD™ VERTICAL SHAFT V-TWIN 18.0 GROSS HP*

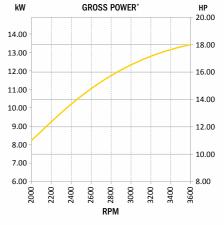


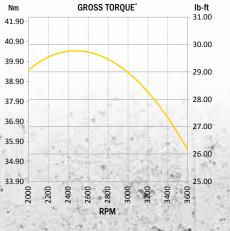


FUEL CONSUMPTION IN LITRES PER HOUR"

LOAD:	FULL
LITDEC.	FO

All power levels are stated gross HP at 3600rpm per SAEJ1940 as rated by Briggs & Stratton.



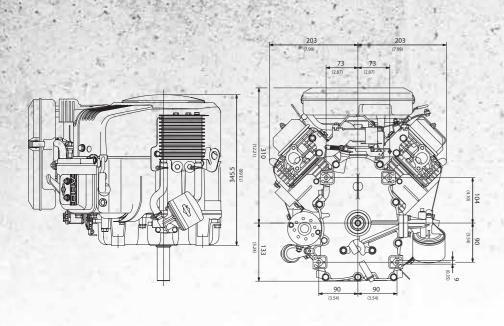


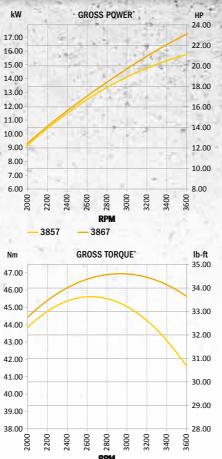
ENGINETIECHNICA INFORWATION





VANGUARD™ VERTICAL SHAFT V-TWIN 21.0 - 23.0 GROSS HP*





GROSS POWER*

20.00

19.00 18.00

17.00

16.00

15.00

14.00

13.00

11.00

9.00

28.00

26.00

24.00

22.00

20.00

18.00

16.00

14.00

12.00

44.00

43.00

42.00

41.00

39.00

38.00

37.00

36.00 35.00



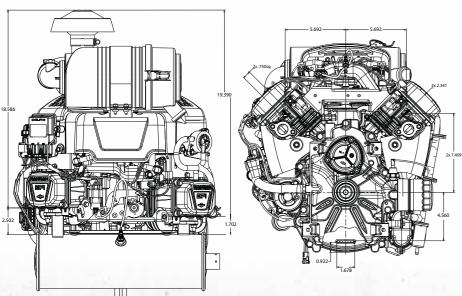
FUEL CONSUMPTION IN LITRES PER HOUR*

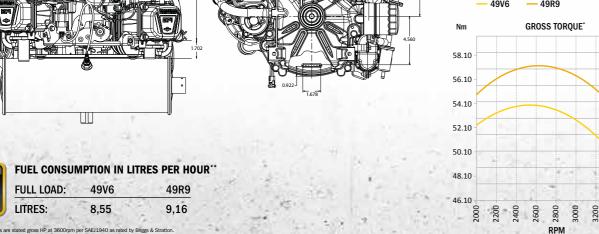
FULL LOAD:	3857	3867
LITRES	6.7	7.2

^{*} All power levels are stated gross HP at 3000rpm per SAEJ1940 as rated by Enggs & Stratton.

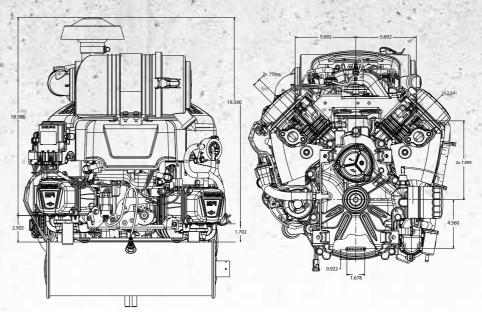
** (Load @ 3'600 rpm). Fuel consumption is depending on engine configuration, application and operating conditions

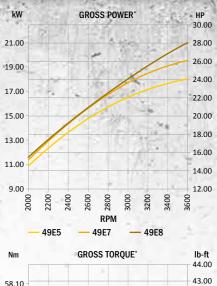
VANGUARD™ VERTICAL SHAFT V-TWIN 24.0 - 26.0 GROSS HP*

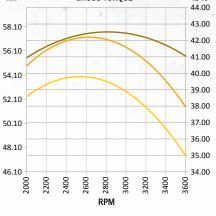




VANGUARD™ VERTICAL SHAFT V-TWIN EFI 24.0 - 28.0 GROSS HP*









FUEL CONSUMPTION IN LITRES PER HOUR'

FULL LOAD:	49E5	49E7	49E8
LITRES:	7,57	7,95	8,82

All power levels are stated gross HP at 3600rpm per SAEJ1940 as rated by Enggs & Stratton.

(Load @ 3'600 rpm). Fuel consumption is depending on engine configuration, application and operating condition

FUEL SAVINGS

WANGUARD E F ELECTRONIC FUEL INJECTION



Our Vanguard $^{\sim}$ V-Twin EFI engines feature an automotive-based, closed-loop EFI system that delivers easier starting and improved performance, with fuel savings of up to 25%.

SPEED SENSING

Directs the right amount of fuel precisely when it's needed.

EXHAUST SENSING

For more accurate fuel delivery and maximum efficiency.

FUEL DELIVERY

Pressurises the fuel before it reaches the injectors.











REWIND START





N/A



WITH FOAM PRE-CLEANER

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ENGINE TYPE	V-TWIN, 4-STROKE, AIR COOLED, OHV (OVERHEAD VALVE)	V-TWIN, 4-STROKE, AIR COOLED, OHV (OVERHEAD VALVE)	V-TWIN, 4-STROKE, AIR COOLED, OHV (OVERHEAD VALVE)		V-TWIN, 4-STROKE, AIR COOLED, OHV (OVERHEAD VALVE)		EFI V-TWIN, 4-STROKE, AIR COOLED, OHV (OVERHEAD VALVE)				
MODEL NUMBER	3057	3567	3857	3867	49V6	49R9	49E5	49E7	49E8		
GROSS POWER (HP[KW/NM]) @ 3'600 RPM	16,0 [11,94/31,65]*	18,0 [13,43/35,61]	21,0 [15,67/41,54]*	23,0° [17,16/45,50]°	24,0 [17,90/47,48]*	26,0 [19,40/51,43]*	24,0 [17,90/ 47,48]*	26,0 [19,40/ 51,43]*	28,0 [20,89/ 55,39]*		
DISPLACEMENT (CC)	479	570	627		810		810				
CYLINDER	CAST IRON SLEEVE	CAST IRON SLEEVE	CAST IRON_SLEEVE		CAST IRON SLEEVE		CAST IRON SLEEVE				
BORE & STROKE (MM)	68,0 X 66,0	72,0 X 70,0	75,5 X 70,0		75,5 X 70,0		83,8 X 73,4			83,8 X 73,4	
FUEL TANK CAPACITY (L)	N/A	N/A	N/A		N/A		N	/A		N/A	
OIL CAPACITY (L)	1,7	1,7	1,7		1,7		1,	98		1,98	
DRY WEIGHT (KG)	32,4	33,3	35		35		41	L,3		41,3	
FEATURES	OIL FILTER, FULL PRESSURE LUBRICATION	OIL FILTER, FULL PRESSURE LUBRICATION	OIL FILTER, OIL FILTER, FULL PRESSURE LUBRICATION FULL PRESSURE LUB DONALDSON CYC AIR CLEANER		RE LUBRICATION N CYCLONIC	OIL FILTER, FULL PRESSURE LUBRICATION, DONALDSON CYCLONIC AIR CLEANER, EFI					

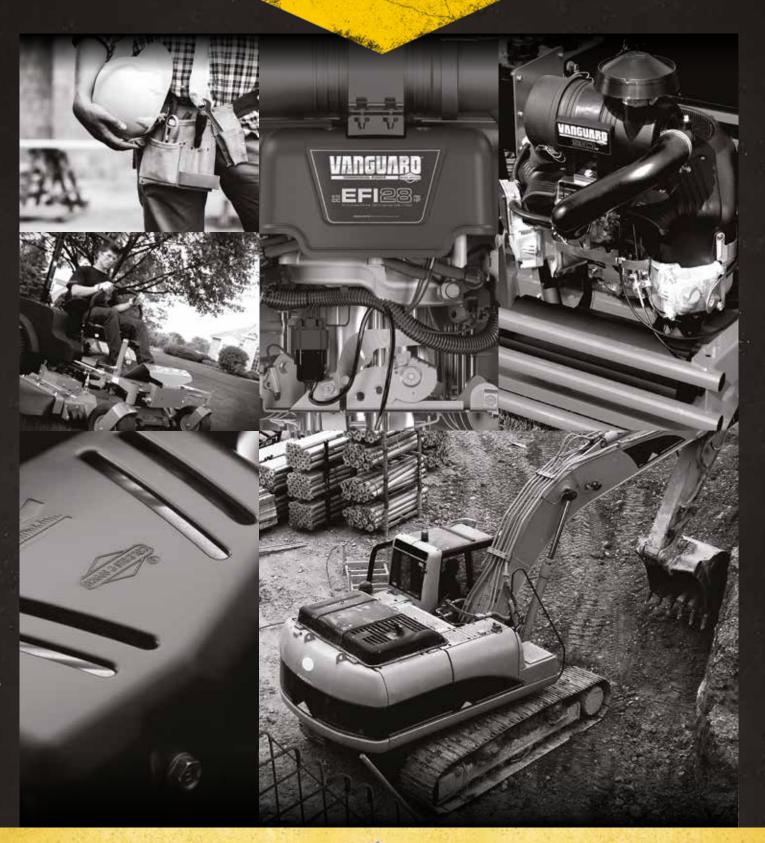




REWIND START









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COMMERCIAL POWER

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