

6600 Series

Off-highway Series 6600

RATINGS

Model		Input Power gross	hp (kW) net	Input Torque gross	lb-ft (N•m) net	Turbine Torque Net lb-ft (N•m)
H6620	Rear Dump Truck, Coal Hauler, Articulated Dump Hauling Applications	760 (567)	710 (529)	2500 (3390)	2270 (3078)	3790 (5139)
M6620	General	760 (567)	710 (529)	2500 (3390)	2270 (3078)	3790 (5139)
	Oil Field	900 (671)	850 (634)	2750 (3729)	2300 (3118)	4000 (5423)
	Crash Truck (ARFF Vehicle)	1025 (764)	975 (727)	3300 (4474)	3000 (4068)	5200 (7050)
	Agricultural Tractor	700 (522)	650 (485)	2000 (2712)	1860 (2522)	3340 (4528)
S6620	Stationary Applications	760 (567)	710 (529)	2500 (3390)	2270 (3078)	3790 (5139)
	Oil Field Equipment	900 (671)	850 (634)	2750 (3729)	2600 (3525)	4000 (5423)

DRIVETRAIN INTERFACES

Acceptable full-load engine governed speed	1900 – 2500 rpm
Minimum engine idle speed range (with transmission in Drive)	550 rpm

MOUNTING

Direct	SAE No. 1 automatic flywheel housing with flexplate drive. Cradle mount using engine flywheel housing mounting pads and transmission rear cover mounting pads with 0.625-11 inch series bolts
Remote	Side pads on transmission rear cover, plus front trunnion mount

TORQUE CONVERTER

Type One stage, three element, polyphase. Includes standard integral damper which is operational in lockup.

Model	Stall Torque Ratio	Kp-Factor* at Stall
TC-680	2.08	54.6 (46.9)
TC-682	1.77	43.7 (37.5)
TC-683	1.85	35.1 (30.1)

* Kp-Factor defines torque converter capacity. Kp = the ratio of converter pump speed [rpm] divided by the square root of the pump torque [lb-ft (N•m)]

MECHANICAL RATIOS (Gear ratios do not include torque converter multiplication)

Range

First	4.00 : 1
Second	2.68 : 1
Third	2.01 : 1
Fourth	1.35 : 1
Fifth	1.00 : 1
Sixth	0.67 : 1
Reverse 1	-5.15 : 1
Reverse 2	-3.46 : 1

Ratio Coverage

Forward	5.97
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CONTROL SYSTEM

Description	Automatic electronic, manual electric, manual hydraulic
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OPTIONAL ENGINE-DRIVEN POWER TAKE-OFF PROVISION¹

Side mount

Location	5 o'clock position, as viewed from rear	
PTO drive gear rating	Intermittent	46 tooth drive gear, 200 hp (149 kW)
	Continuous	46 tooth drive gear, 125 hp (93 kW)

Top Mount

Location	12 o'clock position, as viewed from rear	
PTO drive gear rating	Intermittent	46 tooth drive gear, 200 hp (149 kW)
	Continuous	46 tooth drive gear, 125 hp (93 kW)

ELECTRONIC SPEEDOMETER PROVISION

Description	LS-TTL signal, 39 pulses per output shaft revolution
Location	Output signal from transmission TCM

OUTPUT RETARDER PROVISION (OPTION)

Type	Integral, hydraulic	
Capacity	Torque	Power
	1500 lb-ft (2034 N•m)	600 hp (447 kW)

SIZE

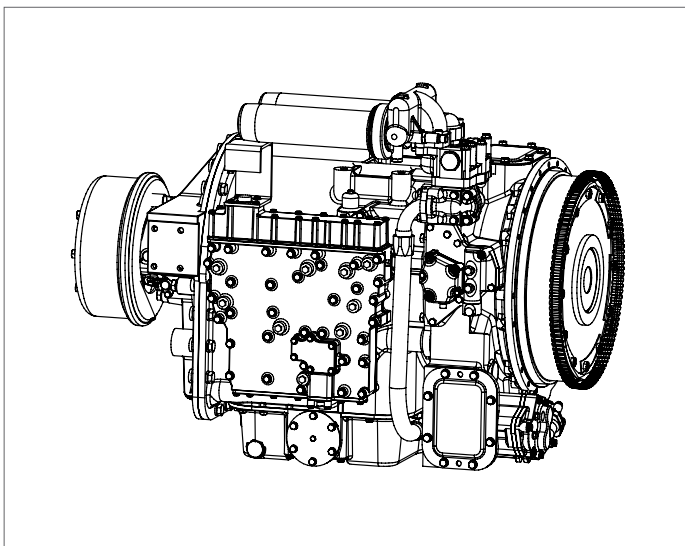
Depth (below horizontal centerline)	20.1 in (511 mm)	
Length (direct mount) ^{2,3}	Basic	With Retarder
	43.1 in (1095 mm)	46.6 in (1182 mm)
Width	28.6 in (726 mm)	31.7 in (805 mm)
Basic model	Height	Dry Weight
	34.1 in (866 mm)	2200 lb (998 kg)
With direct mount filters	38.7 in (982 mm)	2200 lb (998 kg)
With top engine-driven PTO drive gear		2230 lb (1012 kg)
With park brake (12" x 5")		2260 lb (1025 kg)
With remote mount		2255 lb (1023 kg)
With retarder		2365 lb (1073 kg)

OIL SYSTEM

Oil type	TES 439, (See " www.allisontransmission.com " for approved list)	
Capacity excluding external circuits	18.0 gallons (68 litres)	
Main circuit oil filter		
Standard	Manifold for full-flow, remote mounted, Replaceable element, integral	
Optional	Direct-mount full flow, replaceable elements (2)	
Cooler circuit oil filter (optional)	Replaceable element, remote-mounted	

1. PTO ratings apply to both top and side. Combined totals cannot exceed individual ratings.
2. For remote mounting, add 10-11 in (254-279 mm), depending on flange selection.
3. Length is approximate from engine/converter mounting surface to face of typical output flange.

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Information or specifications subject to change without notice or obligation.

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