



2500/2550 Series

International Series 2500/2550

RATINGS

Model ⁽¹⁾	Gross Input Torque ⁽²⁾ N•m	Gross Input Power ⁽²⁾ kW (hp)	Gross Input Torque ⁽²⁾⁽³⁾ N•m	Gross Input Power ⁽²⁾⁽³⁾ kW (hp)	GWG kg	GCW kg
2500 General	780	224 (300)	895	254 (340)	15,000	15,000
	746	224 (300)	766	224 (300)	12,000	12,000
	705	149 (200)	750	164 (220)	15,000	15,000
2500 MH Motorhome	746	224 (300)	895	254 (340)	15,000	15,000
2500 SP Specialty Vehicles	CONTACT YOUR ALLISON REPRESENTATIVE FOR DETAILS					
2550 General	780	224 (300)	895	224 (300)	13,600	13,600
	705	149 (200)	750	149 (200)	13,600	13,600
2550 SP Specialty Vehicles	CONTACT YOUR ALLISON REPRESENTATIVE FOR DETAILS					

(1). Models including vocational designations (ie: ORS, OF5, SP, MH) are for global markets. All other models within this document are targeted for outside North American markets only.
 (2). Gross ratings as defined by ISO 1585 or SAE J1995. (3). Shift Energy Management (SEM) engine controls and torque limiting are required to obtain this rating.

DRIVETRAIN INTERFACES

Acceptable full-load engine governed speed	2200 – 3800* rpm
Acceptable engine idle speed range (with transmission in Drive)	500 – 820 rpm
Maximum output shaft speed at 105 km/hr (65 mi/hr)	4500 rpm

* Engines with full load governed speed greater than 3800 rpm require Application Engineering review

MOUNTING

To Engine SAE No.3, SAE No.2

TORQUE CONVERTER

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

Model	Stall Torque Ratio
TC-210	2.05
TC-211	1.91
TC-221	1.73
TC-222	1.58

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

Range	
First	3.51 : 1
Second	1.90 : 1
Third	1.44 : 1
Fourth	1.00 : 1
Fifth	0.74 : 1
Sixth	0.64 : 1
Reverse	-5.09 : 1

CONTROL SYSTEM

Description Allison 5th Generation Electronic Controls with closed loop adaptive shifts

Shift Sequences [C = Converter mode (lockup clutch disengaged); L = Lockup mode (lockup clutch engaged)]

Option 1: 1C-[1L]-2C-2L-3L-4L-5L

Option 2: 1C-[1L]-2C-2L-3L-4L-5L-6L

Driver-to-Transmission Interface

Cab-mounted shift selector

Communication Protocol - Engine/Vehicle Systems Interface

SAE J1939, IESCAN, PT-CAN

PHYSICAL DESCRIPTION

	Installation Length*	Dry Weight	Depth below transmission centerline	
			With Shallow Oil Sump	With Deep Oil Sump
SAE No.3	729 mm	150 kg	272 mm	285 mm
SAE No.2	739 mm	150 kg	272 mm	285 mm

*Approximate length from engine housing to output flange (depending on output flange type)

TURBINE-DRIVEN POWER TAKE-OFF PROVISION

PTO drive	Torque converter turbine-driven spur gear
PTO mounting pads	Six-bolt, 3 o'clock and 9 o'clock positions (as viewed from rear)
PTO drive gear rating (continuous operation)	Using one PTO: 339 N•m Total using two PTO's: 271 N•m
PTO drive gear ratio	1.00 x turbine speed
PTO drive gear	64 tooth

OIL SYSTEM

Allison approved fluids: TES 295 and TES 389

Capacity, excluding external circuits

With Deep Oil Pan 14 litres

With Shallow Oil Pan 12 litres

Spin on canister filter Standard

SPEEDOMETER PROVISION

Description	Non-zero-crossing square wave
Location	8, 16 or 40 pulses per revolution of transmission output shaft Electronic output from TCM

TACHOGRAPH PROVISION

Tone wheel	6-tooth
Mounting Location	M18 x 1.5 metric thread Transmission rear cover

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