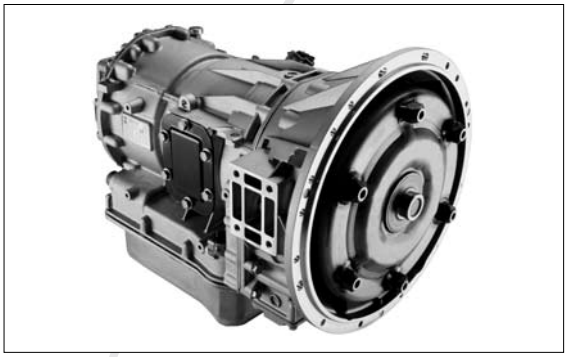
Allison INTERNATIONAL SERIES

2100/2200 Series



RATINGS

Model (1)		Input Torque Gross N•m (lb-ft)	Input Power Gross(2) Kw (hp)	Turbine Torque Net(3) N•m (lb-ft)	GVW kg (lbs)	GCW kg (lbs)
2100	General	780 (575)	224 (300)	1152 (850)	12,000 (26,500)	12,000 (26,500)
	Refuse, On-Highway,	746 (550)	224 (300)	1152 (850)	11,000 (24,200)	11,000 (24,200)
	Transit Bus, Shuttle Bus, Coach, Non-North America School Bus	610 (450)	149 (200)	1017 (750)	12,000 (26,500)	12,000 (26,500)
2100 MH	Motorhome	746 (550)	224 (300)	1152 (850)	11,800 (26,000)	13,600 (30,000)
2100 SP	Specialty Vehicles	CONTACT YOUR ALLISON REPRESENTATIVE FOR DETAILS				
2200	General	780 (575)	224 (300)	1152 (850)	11,800 (26,000)	11,800 (26,001)
	Transit Bus, Shuttle Bus, Coach, Non-North America School Bus	610 (450)	149 (200)	1017 (750)	11,800 (26,000)	11,800 (26,001)
2200 MH	Motorhome	746 (550)	224 (300)	1152 (850)	11,800 (26,000)	11,800 (26,001)
2200 SP	Specialty Vehicles	CONTACT YOUR ALLISON REPRESENTATIVE FOR DETAILS				

(1). Models including vocational designations (ie: ORS, OFS, SP, MH) are for global markets. All other models within this document are targeted for non North American markets only.
(2). Gross Power rating as defined by ISO 1585 or SAE J1995. (3). Turbine Torque limit based on iSCAAN standard deductions.

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)	5000 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	3.10 : 1
Second	1.81 : 1
Third	1.41 : 1
Fourth	1.00 : 1
Fifth	0.71 : 1
Sixth	0.61 : 1
Reverse	-4.49 : 1

CONTROL SYSTEM

Description Allison 4th 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, SAE J1587, ISO 9141, IESCAN

PHYSICAL DESCRIPTION

	Installation Length*	Dry Weight	Depth below transmission centerline	
			With Shallow Oil Sump (Standard)	With Deep Oil Sump (Optional)
SAE No.3	729 mm (28.7 in)	150 kg (330 lbs)	272 mm (10.72 in)	285 mm (11.22 in)
SAE No.2	739 mm (29.1 in)	150 kg (330 lbs)	272 mm (10.72 in)	285 mm (11.22 in)

*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 (250 lb-ft)
	Total using two PTO's: 271 N•m (200 lb-ft)
PTO drive gear ratio	1.00 x turbine speed
PTO drive gear	64 tooth

PARK PAWL*

*Available only in 2200 models (excluding refuse vocation)

OIL SYSTEM

Allison approved fluids: TES 295 and TES 389	
Capacity, excluding external circuits	
With Deep Oil Pan	14 litres (15 quarts)
With Shallow Oil Pan	12 litres (13 quarts)
Main circuit oil filter	Replaceable element, integral
Cooler circuit oil filter	Replaceable element, integral
Spin on canister filter	Standard

SPEEDOMETER PROVISION

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

TACHOGRAPH PROVISION

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

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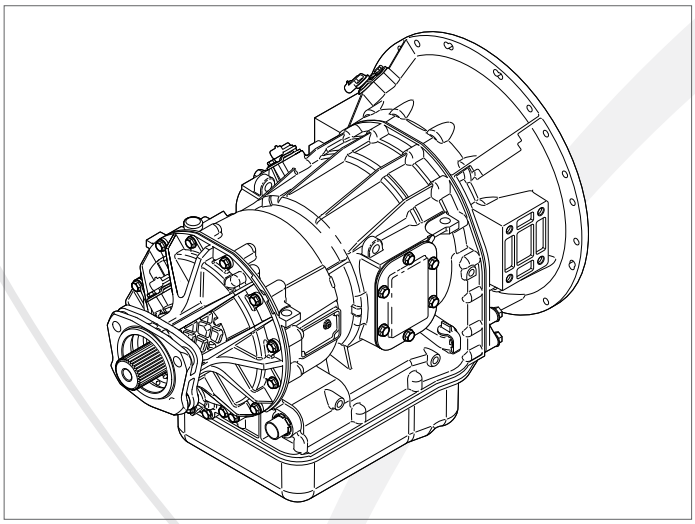

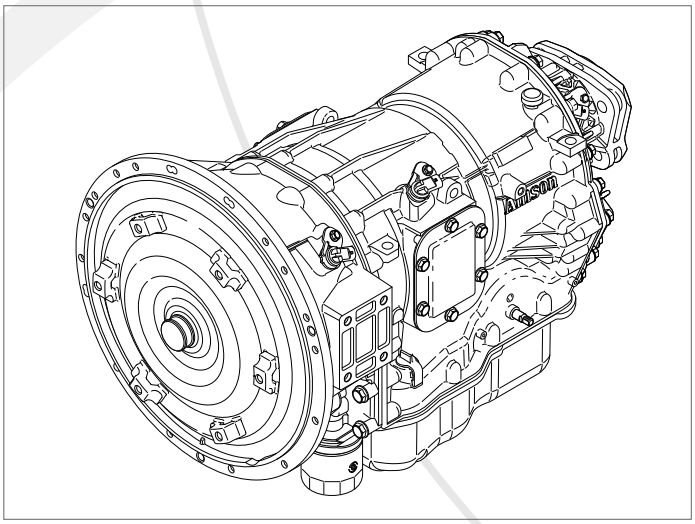

Allison Transmission