



Vocational Model Guide

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Innovation That Drives

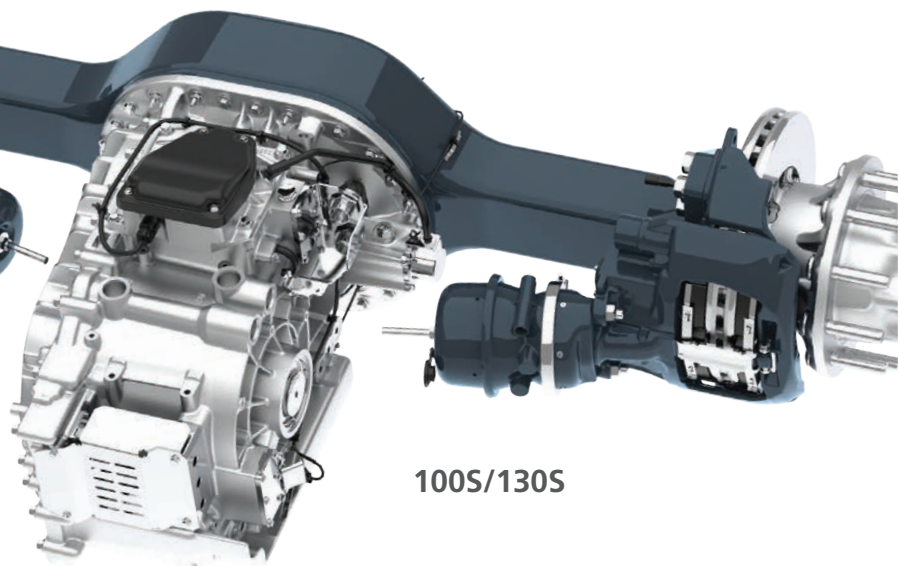
For over 100 years, Allison Transmission has been dedicated to staying on the front line of innovations in propulsion solutions, technology and emerging trends in the industry. Allison continues to lead with a product portfolio that is continually moving forward. Our newest products reflect our customers' desires for more powerful, more efficient and future-oriented solutions that meet the demands of a changing world.



eGEN Power®

Electrify Your Fleet

eGen Power® is a fully integrated e-Axle designed to fit between the wheels of medium- and heavy-duty trucks, replacing the vehicle's traditional powertrain. As some of the most powerful, lightweight and compact electric axles in their respective classes, eGen Power 100S, 130S, 100D and 130D are designed to meet the needs of a global market. The e-Axles feature fully integrated electric motors, a multi-speed gearbox, and a parallel-axis gear scheme, providing industry-high performance and efficiency while freeing up more space for critical components.



100S/130S



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FRACTRAN®

Performance Under Pressure

Allison Transmission's FracTran® is a purpose-built transmission designed to conquer the tough, exacting needs of hydraulic fracturing. As part of our proven Oil Field Series™ line of transmissions, FracTran is a reliable, durable and heavy-duty solution that increases maximum service life and minimizes downtime. With premium parts, built-in prognostics and diagnostics and 6th Generation Controls, FracTran will keep your fleet pumping for longer.



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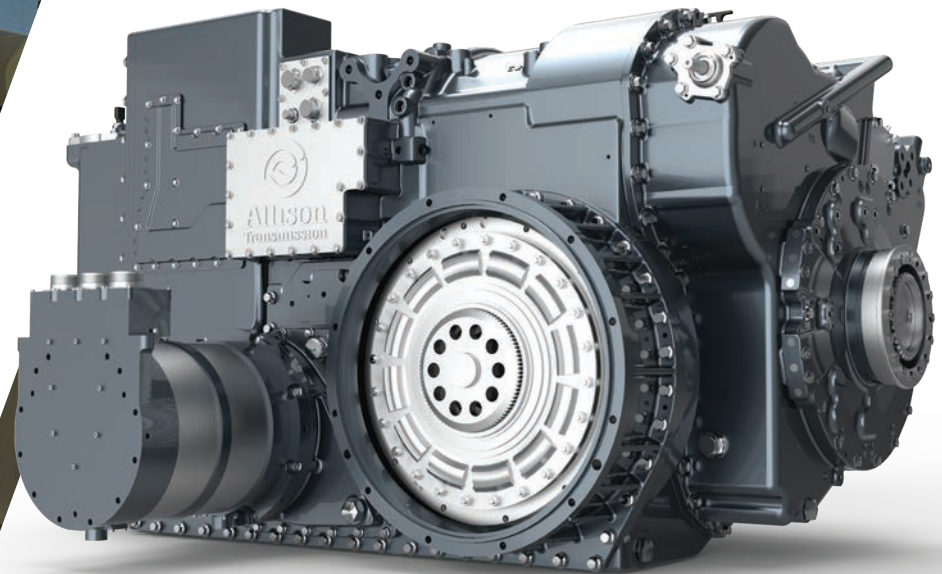


A camouflaged military tank is positioned in a grassy field with a backdrop of rugged, snow-capped mountains under a clear sky. The tank is angled towards the left, showing its turret and main gun.

eGEN Force™

Strengthening Forces Around the Globe

As a longstanding partner of the military, Allison Transmission is proud to continue our support with eGen Force™, an electric hybrid propulsion solution that meets the needs for a wide spectrum of applications including current Infantry Fighting Vehicle and future Main Battle Tank markets. eGen Force offers enhanced features such as drive-by-wire, on-board vehicle power and silent mobility designed to increase soldier survivability. eGen Force more than meets the grade by providing reliable, efficient and powerful operation that performs on the front lines.



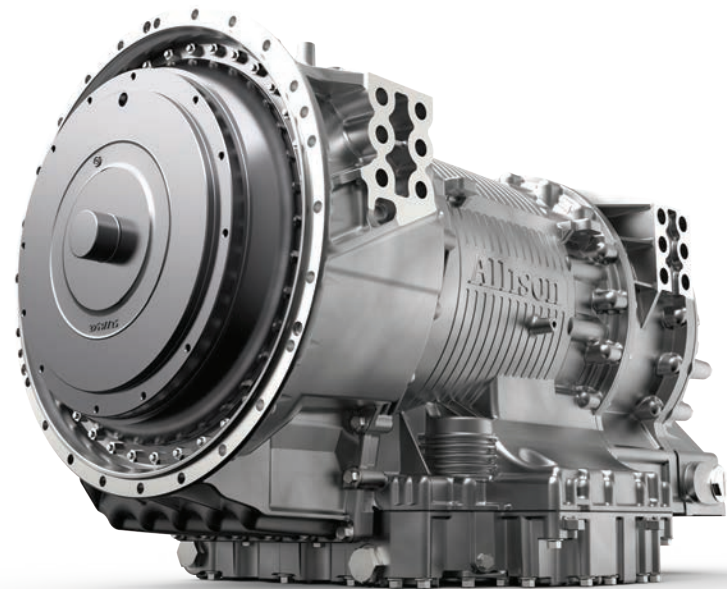
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TERRATRAN™

Powerful Performance in Challenging Conditions

A variant of Allison Transmission's proven 4000 Series™ transmission, TerraTran™ is built to conquer rough terrain in the demanding global off-highway and mining sectors. With increased torque, GVW Capacity and horsepower, TerraTran offers superior driveability, gradeability and maneuverability in any conditions. TerraTran is designed to succeed, featuring customer-driven benefits such as Industry-leading performance, a competitive total cost of ownership and Allison's patented torque converter with Continuous Power Technology™. When the job gets tough, TerraTran is the automatic choice.



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9-SPEED™

The Next Step in Proven Propulsion

Allison Transmission's 9-Speed™ is built on the tried and tested quality, reliability and durability of the Allison 2000 Series™ and engineered for the demands of commercial vehicles. Nine forward ranges offer drivers superior startability and shift smoothness while giving fleet owners improved fuel economy, increased performance and reduced maintenance costs. Additional features such as FuelSense® 2.0 increase fuel savings even more and helps fleets meet sustainability and CO₂ emissions goals. Allison's 9-Speed is a new solution with proven parts ready to hit the road.



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1000-4000 Series Specifications

Gear Ratios Torque Converter Multiplication Not Included

Model	Vocational Models											First	Second	Third	Fourth	Fifth	Sixth	Seventh	Reverse	2nd Reverse
	BUS	EVS	HS	MH	OFS	ORS	PTS	RHS	RDS	SP	TRV									
1000 ¹ /1350 ¹ /2100 ¹ /2200 ¹ /2300 ² /2350 ¹ /B 210 ¹ /B 220 ¹	✓	✓	✓	✓			✓		✓	✓		3.10:1	1.81:1	1.41:1	1.00:1	0.71:1	0.61:1	N/A	-4.49:1	N/A
1700/1750/2700/2750		✓	✓	✓			✓		✓			3.10:1	1.81:1	1.41:1	1.00:1	0.71:1	0.61:1	N/A	-4.49:1	N/A
2500 ¹ /2550 ¹ /2575		✓	✓	✓			✓		✓	✓		3.51:1	1.90:1	1.44:1	1.00:1	0.74:1	0.64:1	N/A	-5.09:1	N/A
3000/3200/B 295/B 300/B 400	✓		✓	✓		✓	✓		✓	✓	✓	3.49:1	1.86:1	1.41:1	1.00:1	0.75:1	0.65:1	N/A	-5.03:1	N/A
B 3400 xFE/3414	✓							✓				3.49:1	2.03:1	1.47:1	1.00:1	0.69:1	0.59:1	N/A	-3.80:1	N/A
3500		✓			✓	✓			✓	✓		4.59:1	2.25:1	1.54:1	1.00:1	0.75:1	0.65:1	N/A	-5.00:1	N/A
3700										✓		6.93:1	4.18:1	2.24:1	1.69:1	1.20:1	0.90:1	0.78:1	-6.03:1	N/A
4000/4200/B 500	✓	✓	✓	✓		✓			✓	✓	✓	3.51:1	1.91:1	1.43:1	1.00:1	0.74:1	0.64:1	N/A	-4.80:1	N/A
4430/4500/4600		✓	✓	✓	✓	✓			✓	✓		4.70:1	2.21:1	1.53:1	1.00:1	0.76:1	0.67:1	N/A	-5.55:1	N/A
4700/4750/4800/4850		✓			✓	✓			✓	✓		7.63:1 ³	3.51:1	1.91:1	1.43:1	1.00:1	0.74:1	0.64:1	-4.80:1	-17.12:1 ⁴

1 - Available with xFE 2 - Check with your OEM to ensure offerings 3 - Manually selected first gear 4 - SEM/LRTP or LRTP only is required

Standard Power Take-off Continuous Operation

Model	Vocation	Vocational Models											Mounting Pad Positions Viewed from Rear	Drive Gear Rating with one PTO	Drive Gear Rating with Two PTOs	Drive
		BUS	EVS	HS	MH	OFS	ORS	PTS	RHS	RDS	SP	TRV		lb-ft (N•m)	lb-ft (N•m)	
Side/Side - 1000/1350/1700/1750/2100/2200/2300/2350/2500/2550/2700/2750/B 210/B 220	BUS¹, EVS, MH¹, RDS, SP¹	✓¹	✓		✓¹					✓	✓¹		3 and 9 o'clock	250 (339)	200² (271)²	Turbine
Side/Side - 3200¹/3414/3500/B 300¹/B 400¹/B 3400 xFE¹	BUS, EVS, OFS, ORS, RHS, RDS, TRV	✓	✓			✓	✓		✓	✓		✓	4 and 8 o'clock	485 (660)	685³,⁴ (930)³,⁴	Engine
Top/Side - 3000⁵	OFS, ORS, RDS					✓	✓			✓			1 and 8 o'clock	485 (660)	685³,⁴ (930)³,⁴	Engine
	EVS		✓										1 and 8 o'clock	670 (910)	685³,⁴ (930)³,⁴	Engine
3700	SP										✓		8 o'clock	485 (660)	N/A	Engine
4200¹/4430/4500/4600/4700/4800/4850/4900/4970/B 500¹	BUS, EVS, MH, OFS, ORS, RDS, SP, TRV	✓	✓		✓	✓	✓			✓	✓	✓	1 and 8 o'clock	685 (930)	1,175³,⁴ (1,595)³,⁴	Engine

1 - PTO-delete option available 2 - Rating per PTO 3 - Total on the drive gear 4 - Minimum 600 rpm idle speed required when dual PTOs are used simultaneously 5 - Special order. Please contact Allison Representative for more information.

Engine Speeds

Model	Vocational Models											Full Load Governed Speed Min-Max	Idle Speed in Drive Min-Max	Output Shaft Speed
	BUS	EVS	HS	MH	OFS	ORS	PTS	RHS	RDS	SP	TRV			
												rpm	rpm	rpm
1000/1350/2100 2200/2350		✓	✓	✓			✓		✓	✓		2,200-3,800	500-820	5,000
1700/1750 2700/2750		✓	✓	✓			✓		✓			2,200-3,800	500-820	5,000
2300			✓				✓		✓			2,200-5,000 ¹	500-820	5,000
2500/2550/2575 B 210/B 220	✓	✓	✓	✓			✓		✓	✓		2,200-3,800	500-820	4,500
B 295	✓											1,900-2,800	500-800	N/A
3000/B 300/B 400 B 3400 xFE	✓	✓	✓	✓		✓	✓		✓	✓	✓	1,900-2,800	500-800	3,600 ²
3200						✓				✓	✓	1,900-2,800	500-800	3,600 ²
3414								✓				1,900-2,800	500-800	3,600 ²
3500		✓			✓	✓			✓	✓		1,900-2,800	500-800	3,600 ²
3700										✓		1,900-2,800	500-800	N/A
4000/4200/B 500	✓	✓	✓	✓		✓			✓	✓	✓	1,700-2,300	500-800	N/A
4430					✓	✓				✓		1,700-2,300	500-800	N/A
4500		✓	✓		✓	✓			✓	✓		1,700-2,300	500-800	N/A
4600/4700/4750		✓			✓	✓			✓	✓		1,700-2,300	500-800	N/A
4800/4850/4870		✓			✓	✓				✓		1,700-2,300 ³	500-800	N/A
4900/4970		✓							✓	✓		1,700-2,300	500-800	N/A

1 - Engines with full-load governed speed greater than 3800 rpm require Application Engineering review 2 - Retarder equipped models only
3 - 2400 rpm for Military Combat vehicle applications

Torque Converter Specifications

Model	Vocational Models											Torque Converter	Nominal Stall Torque
	BUS	EVS	HS	MH	OFS	ORS	PTS	RHS	RDS	SP	TRV		
1000/2000 B 210/B 220	✓	✓	✓	✓			✓		✓	✓		TC-210	2.05
												TC-211 ¹	1.91
												TC-221 ¹	1.73
												TC-222 ¹	1.58
3000 3414/B 295 B 300/B 400 B 3400 xFE												TC-411	2.71
												TC-413	2.44
												TC-415	2.35
	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	TC-417	2.20
												TC-418 ¹	1.98
												TC-419	2.02
												TC-421 ²	1.77
4000/B 500	✓	✓	✓	✓	✓	✓			✓	✓	✓	TC-521	2.42
												TC-531	2.34
												TC-541	1.90
												TC-551	1.79
												TC-561	1.58
												TC-571 ²	1.62

1 - Available with low rate damper 2 - Available with high rate damper

Optional Retarder Provision Integral, Hydraulic Type

Model	Vocational Models											Level	Torque Capacity	Power Capacity
	BUS	EVS	HS	MH	OFS	ORS	PTS	RHS	RDS	SP	TRV			
3000 ² /B 300/B 400/B 3400 xFE/3414	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	High	1,600 (2,170)	600 (447)
												Medium	1,300 (1,763)	500 (373)
												Low	1,100 (1,490)	400 (298)
												Very Low	811 (1,100)	N/A
												Ultra Low	553 (750)	N/A
4000 ¹ /B 500	✓	✓	✓	✓	✓	✓			✓	✓	✓	High	2,000 (2,712)	600 (447)
												Medium	1,600 (2,170)	600 (447)
												Low	1,300 (1,763)	500 (373)

1 - High and low now available on all 4000 Series 7 speeds 2 - Excluding 3700 SP

1000-4000 Series Specifications

Physical Description

Model	Vocational Models											Length ¹	Depth ² w/ Deep Oil Pan/Sump	Depth ² w/ Shallow Oil Pan/Sump	Dry Weight
	BUS	EVS	HS	MH	OFS	ORS	PTS	RHS	RDS	SP	TRV	in (mm)	in (mm)	in (mm)	lbs (kg)
1000/2000³/B 210/B 220															
SAE No. 3 Mounting	✓	✓	✓	✓			✓		✓	✓		28.02 (711.7)	11.22 (285.1)	10.71 (272.0)	323 (146.5)
SAE No. 2 Mounting	✓	✓	✓	✓			✓		✓	✓		28.40 (721.2)	11.22 (285.1)	10.71 (272.0)	323 (146.5)
3000⁴/3414/B 300/B 400/B 3400 xFE															
Basic Model	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	28.30 (718.7)	12.90 (327.7)	11.13 (282.6)	535 (243)
With PTO only	✓	✓		✓	✓	✓		✓	✓	✓	✓	32.50 (825.4)	12.90 (327.7)	11.13 (282.6)	575 (261)
With Retarder only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	28.29 (718.5)	12.90 (327.7)	11.13 (282.6)	615 (279)
With PTO & Retarder	✓	✓		✓	✓	✓		✓	✓	✓	✓	32.49 (825.2)	12.90 (327.7)	11.13 (282.6)	655 (297)
3700															
Basic Model										✓		51.58 (1310.3)	21.90 (555.0)	N/A	1,170 (531)
4000⁵/4430⁶/4500/B 500															
Basic Model	✓	✓	✓	✓		✓			✓	✓	✓	30.54 (775.7)	14.75 (374.7)	13.29 (337.6)	831 (377)
With PTO only	✓	✓		✓		✓			✓	✓	✓	33.41 (848.7)	14.75 (374.7)	13.29 (337.6)	893 (405)
With Retarder only	✓	✓	✓	✓		✓			✓	✓	✓	30.54 (775.8)	14.75 (374.7)	13.29 (337.6)	906 (411)
With PTO & Retarder	✓	✓		✓	✓	✓			✓	✓	✓	33.42 (848.8)	14.75 (374.7)	13.29 (337.6)	968 (439)
4700/4750/4800/4850/4870/4850/4900/4950															
Basic Model		✓							✓	✓		40.61 (1031.5)	14.75 (374.7)	N/A	1,087 (493)
With PTO only		✓							✓	✓		43.49 (1104.5)	14.75 (374.7)	N/A	1,149 (521)
With Retarder only		✓							✓	✓		40.61 (1031.5)	14.75 (374.7)	N/A	1,162 (527)
With PTO & Retarder		✓			✓				✓	✓		43.49 (1104.5)	14.75 (374.7)	N/A	1,224 (555)

1 - Length measured from flywheel housing to end of output shaft 2 - Depth measured below transmission centerline
 3 - 2000 SP - only 2000 model available with shallow oil pan 4 - 3000 HS, RDS, PTS - Available with deep oil pan only
 5 - 4000 HS, RDS, SP - Available with deep oil pan only 6 - 4430 is an SP model only - available with deep oil pan only

Gasoline Ratings

Model	Vocational Models						With Torque Management			Max GVW	Max GCW
	EVS	HS	MH	PTS	RDS	SP	Gross Input Power	Gross Input Torque	Net Turbine Torque		
							hp (kW)	lb-ft (N•m)	lb-ft (N•m)	lbs (kg)	lbs (kg)
1000	✓	✓		✓	✓		340 (254)	450 (610)	950 (1,288)	19,500 (8,845)	26,000 (11,800)
1000			✓			✓	340 (254)	450 (610)	950 (1,288)	22,000 (10,000)	26,000 (11,800)
1350	✓	✓		✓	✓		340 (254)	450 (610)	950 (1,288)	19,500 (8,845)	30,000 (13,600)
1350			✓			✓	340 (254)	450 (610)	950 (1,288)	22,000 (10,000)	30,000 (13,600)
2100	✓	✓		✓	✓		340 (254)	450 (610)	950 (1,288)	26,000 (11,800)	26,000 (11,800)
2100						✓	340 (254)	450 (610)	950 (1,288)	26,500 (12,000)	26,500 (12,000)
2100			✓				340 (254)	450 (610)	950 (1,288)	26,000 (11,800)	30,000 (13,600)
2200	✓	✓	✓	✓	✓	✓	340 (254)	450 (610)	950 (1,288)	26,000 (11,800)	26,000 (11,800)
2300		✓		✓	✓		365 (272)	510 (691)	950 (1,288)	33,000 (15,000)	33,000 (15,000)
2350	✓		✓			✓	340 (254)	450 (610)	950 (1,288)	30,000 (13,600)	30,000 (13,600)
2350		✓		✓	✓		365 (272)	510 (691)	950 (1,288)	30,000 (13,600)	30,000 (13,600)

Oil System

Model	Vocational Models											Capacity ¹
	BUS	EVS	HS	MH	OFS	ORS	PTS	RHS	RDS	SP	TRV	quarts (liters)
1000/2000²/B 210/B 220 (main circuit filter - spin-on canister)												
Standard Deep Oil Sump	✓	✓	✓	✓			✓		✓	✓		13.7 ⁴ (13.0) ⁴
Shallow Oil Sump	✓	✓	✓	✓			✓		✓	✓		11.6 ⁴ (11.0) ⁴
3000³/3414/B 295/B 300³/B 400³/B 3400 xFE³												
Deep Oil Sump w/ PTO	✓	✓		✓	✓	✓		✓	✓	✓	✓	29.75 ⁴ (28.1) ⁴
Deep Oil Sump w/o PTO	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	29.0 ⁴ (27.4) ⁴
Shallow Oil Sump w/ PTO	✓	✓		✓						✓	✓	26.75 ⁴ (25.3) ⁴
Shallow Oil Sump w/o PTO	✓	✓		✓						✓	✓	26.0 ⁴ (24.6) ⁴
3700³												
Deep Oil Sump w/ PTO										✓		39.0 ⁴ (37.0) ⁴
4000³/4430^{3,5}/4500³/B 500³												
Deep Oil Sump w/ PTO	✓	✓		✓	✓	✓			✓	✓	✓	51.0 ⁴ (48.0) ⁴
Deep Oil Sump w/o PTO	✓	✓	✓	✓	✓	✓			✓	✓	✓	48.0 ⁴ (45.0) ⁴
Shallow Oil Sump w/ PTO		✓		✓						✓	✓	43.0 ⁴ (41.0) ⁴
Shallow Oil Sump w/o PTO	✓	✓		✓						✓	✓	40.0 ⁴ (38.0) ⁴
4700³/4750³/4800³/4850^{3,6}/4870³/4900³/4950³												
Deep Oil Sump w/ PTO		✓			✓				✓	✓		54.0 ⁴ (51.0) ⁴
Deep Oil Sump w/o PTO		✓			✓				✓	✓		51.0 ⁴ (48.0) ⁴

1 - Transmission only. Does not include cooler, hoses or fittings. 2 - 2000 SP - 2100 PTS, 2100 PTS xFE, and 2200 PTS offer shallow pan availability. 3 - Main and lube circuit filter are integral; electronic oil sensors are standard. 4 - Amount of oil necessary to fill a dry transmission. 5 - 4430 is an SP model only - available only with deep oil pan. 6 - Retarder models must use 4-inch sump without OLS.



5000-9000 Series Specifications

Gear Ratios Torque Converter Multiplication Not Included

Model	Vocational Models				First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Reverse	2nd Reverse
	OFS	OFSi	ORS	SP										
6620/6625	✓		✓	✓	4.00:1	2.68:1	2.01:1	1.35:1	1.00:1	0.67:1	N/A	N/A	-5.15:1	-3.46:1
8610	✓		✓	✓	4.24:1	2.32:1	1.69:1	1.31:1	1.00:1	0.73:1	N/A	N/A	-5.75:1	N/A
9610	✓		✓	✓	4.24:1	3.05:1	2.32:1	1.67:1	1.00:1	0.72:1	N/A	N/A	-5.75:1	-4.13:1
9832	✓	✓			3.75:1	2.69:1	2.20:1	1.77:1	1.58:1	1.27:1	1.00:1	0.72:1	N/A	N/A

Standard Power Take-off Continuous Operation

Model	Vocational Models				Mounting Pad Positions Viewed from Rear	Top Mounting Pad Positions Viewed from Rear	Drive Gear Rating w/ Intermittent PTO	Drive Gear Rating with Continuous PTO
	OFS	OFSi	ORS	SP			lb-ft (N•m)	lb-ft (N•m)
6620/6625	✓		✓	✓	5 o'clock	12 o'clock	500 (678)	313 (424)
8610/9610	✓		✓	✓	5 o'clock	12 o'clock	1,000 (1,356)	750 (1,017)
9832	✓	✓			5 o'clock	12 o'clock	1,000 (1,356)	750 (1,017)

Engine Speeds

Model	Vocational Models				Full Load Governed Speed Min-Max	Idle Speed in Drive Min-Max	Output Shaft Speed
	OFS	OFSi	ORS	SP			
					rpm	rpm	rpm
6620/6625	✓		✓	✓	1,900-2,500	550	N/A
8610	✓		✓	✓	1,800-2,300	550	N/A
9610			✓	✓	1,800-2,100	550	N/A
9832	✓	✓			1,800-2,100	550	N/A

Optional Retarder Provision Integral, Hydraulic Type

Model	Vocational Models				Torque Capacity	Power Capacity
	OFS	OFSi	ORS	SP	lb-ft (N•m)	hp (kw)
6620/6625	✓		✓	✓	1,500 (2,034)	600 (447)
8610	✓		✓	✓	3,451 (4,679)	1,380 (1,029)
9610	✓		✓	✓	4,152 (5,630)	1,660 (1,238)
9832	✓	✓			N/A	N/A

Physical Description

Model	Vocational Models				Length w/o Retarder	Length w/ Retarder	Depth (Basic Model)	Depth w/ Direct Mount Filters	Dry Weight
	OFS	OFSI	ORS	SP	in (mm)	in (mm)	in (mm)	in (mm)	lbs (kg)
6620/6625	✓		✓	✓	43.1 (1,095)	46.6 (1,182)	34.1 (866)	38.7 (982)	2,200 (998)
8610	✓		✓	✓	55.5 (1,411)	N/A	35.3 (896)	39.8 (1,011)	3,700 (1,678)
9610	✓		✓	✓	55.5 (1,411)	N/A	35.3 (896)	39.8 (1,011)	3,700 (1,678)
9832	✓	✓			56.5 (1,435)	N/A	35.3 (896)	39.8 (1,011)	3,720 (1,687)

1 - Length measured from flywheel housing to end of output shaft

Torque Converter Specifications

Model	Vocational Models				Torque Converter	Nominal Stall Torque
	OFS	OFSI	ORS	SP		
6620/6625	✓		✓	✓	TC-580	2.89
					TC-680 (retarder)	2.17
					TC-680 (no retarder)	2.08
					TC-682	1.77
					TC-683	1.85
8610	✓		✓	✓	TC-860	2.33
					TC-880	2.2
					TC-890	1.86
					TC-1060	1.86
					TC-1070	1.78
9610/9832	✓	✓			TC-1078	1.84
					TC-1060	1.86
					TC-1070	1.78
					TC-1078	1.84
					TC-1080	1.61
					TC-1090	1.31

Oil System

Model	Vocational Models				Capacity¹
	OFS	OFSI	ORS	SP	quarts (liters)
6620/6625	✓		✓	✓	72 (68)
8610/9610	✓		✓	✓	84 (79)
9832	✓	✓			84 (79)

Recommended oil types for all models are TranSynd/TES 295 approved.
1 - Transmission only. Does not include cooler, hoses or fittings.

Features + Advantages

Allison Transmission is the world's largest manufacturer of commercial-duty automatic transmissions, electric hybrid and fully electric propulsion systems. Over the last 100 years, we have been awarded more than 1,100 patents for our innovative, performance-driven products and features in applications ranging from transit to defense.

We're committed to providing our customers around the world with the innovations they need when they need them.

Reliability

Because we engineer and manufacture reliable, fully automatic transmissions and propulsion solutions, our customers experience reduced downtime and get more work done.

Life Cycle Value

Allison Automatics are built to last. When you factor in all life cycle costs—vehicle purchase price, fuel, tires, preventive maintenance, component repair, driver wages and retail resale value—along with the increased productivity, an Allison Automatic-equipped vehicle costs less to operate.

Fully Automatic Advantage

Our patented Continuous Power Technology™ delivers smoother, seamless, full-power shifts and superior acceleration, startability and vehicle control.

Allison Torque Converter

Allison's torque converter smoothly multiplies peak engine torque, delivering more power to the wheels. By multiplying the engine torque, drivers get increased performance, faster acceleration and greater operational flexibility.

Driver Benefits

Once behind the wheel of an Allison fully automatic-equipped vehicle, drivers are more alert, comfortable and in control of the driving experience, leading to increased driver retention. Even experienced drivers benefit from more precise handling, maneuverability and ease of operation.

Performance + Productivity

Allison Automatics perform better than manual or automated manual transmissions (AMTs) that lose power and torque every time they shift, resulting in inefficient operation and less ground traveled.

Fuel Utilization

Allison fully automatic transmissions offer the best combination of economy and productivity. To get the most benefit, our sophisticated FuelSense® 2.0 with DynActive® Shifting packages increase fuel economy for a specific vehicle's needs. Allison is also the preferred transmission for alternative fuel applications, such as natural gas.

Customer Support

From our headquarters in Indianapolis, Indiana, USA, to our manufacturing plants in Hungary and India, to approximately 1,600 Allison Authorized Distributors and Dealers around the globe, customers are never far from the products, training, service and support they demand.

Easy Maintenance

With extended periods between maintenance and a proven track record, a fully automatic transmission from Allison is the best way to keep your fleet on the road while reducing total cost of ownership.

Features + Advantages

	Bus Series™	Emergency Vehicle Series™	Highway Series™	Motorhome Series™	Off Road Series™	Oil Field Series™	Pupil Transport/ Shuttle Series™	Regional Haul Series™	Rugged Duty Series™	Specialty Series™	Truck RV Series™
Torque Management	✓	✓	✓	✓			✓	✓	✓	✓	✓
High-density start/stop calibrations	✓		✓				✓				
Prognostics	✓	✓	✓	✓			✓	✓	✓	✓	✓
FuelSense® 2.0	✓		✓	✓			✓	✓	✓	✓	✓
xFE	Optional		Optional	Optional			Optional		Optional		
Oil Level Sensor		✓	✓	✓			✓	✓	✓		
2nd Reverse		✓			✓	✓			✓	✓	
Deep Oil Pan/Sump		✓	✓	✓			✓		✓		
Additional Speeds			✓								
PTO	✓	✓		✓	✓	✓		✓	✓	✓	✓
PTO Delete									Optional		
Park Pawl	✓	✓	✓	✓			✓		✓	✓	
Dual PTO	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Retarder	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Input + Output Functions

The control system provides functional management of transmission and vehicle operations tailored to the expected duty of the vehicle. This is done using Input and Output (I/O) Functions.

- Input Functions send vehicle data to the Transmission Control Module (TCM) or Vehicle Control Module (VCM) indicating the operating state of other vehicle systems or components.
- Output Functions send data out of the TCM or VCM for use in controlling the operation of other vehicle systems or components.

The combination of Input Functions and Output Functions that are used in a specific vehicle normally relate very closely with the expected use of the vehicle. The desired Inputs and Outputs must be selected when the vehicle builder defines the system calibration (SID). To learn more, visit hub.allisontransmission.com.

Input + Output Definitions

2nd Reverse Input: Provides for operation in the alternate deep reverse gear ratio.

3rd Lock up Pump Mode: Provides integrated 3rd range to optimize split-shift PTO operation and protect powertrain/split-shaft/pump components.

4th Lock up Pump Mode: Provides integrated 4th range to optimize split-shift PTO operation and protect powertrain/split-shaft/pump components.

Anti-Lock Brake System (ABS) Input: Signals the TCM when an ABS event has occurred, to disable the lock up clutch, modify the downshift schedule and disable the retarder (if equipped).

Automatic 2-1 Preselect Input: Allows an automatic 2-1 shift in a 7-speed transmission if conditions are conducive to successfully completing the shift.

Automatic Neutral: Ensures that the vehicle goes to and stays in Neutral under predetermined conditions (i.e., parking brake applied), regardless of the driver's position inside or outside of the vehicle, reducing the risk of unwanted vehicle movement.

Automatic Neutral – Dual Input: Ensures that the vehicle goes to and stays in Neutral under predetermined conditions. When input is deactivated, vehicle will return to range automatically.

Automatic Neutral - Idle Start/Stop Input: Transmission commanded to neutral when engine shuts off. When engine restarts, transmission re-engages range.

Automatic Neutral - Single Input with Selector Override: Commands the transmission to neutral when input activates. Shift selector can override neutral command (e.g., used in EVS, SP and PTS vehicles).

Aux Box Transition Input: For oil field or other on/off-highway dual-mode operation.

Auxiliary Function Range Inhibit – Dual Input: Monitors two redundant inputs for a vehicle component to prevent unwanted shifts out of neutral.

Auxiliary Function Range Inhibit – Single Input: Prevents range attainment (Drive or Reverse) under undesirable conditions.

Auxiliary Hold: Holds the vehicle in a current range (or lower) for precise speed control and smooth, consistent operation.

Differential Clutch Interface Input: Provides for operator on/off control of the differential locking clutch in the transmission transfer case. (This function is used only with 3700 models.)

Direct Hold Input: Facilitates operator selection of a specified Direct Hold range in converter mode directly from Neutral.

Direction Change Enable: Protects people and equipment from unwanted shifts that result in a change to the vehicle direction.

Engine Brake Interface Output: Lessens wear and tear on service brakes, increasing brake life by using elevated downshift points where engine brakes are most effective.

Input + Output Definitions Continued

Engine Overspeed Indicator Output: Turns on dash light or buzzer to alert the operator when engine reaches an overspeed condition.

Grade Braking/Regeneration Input: Permits the operator to use a dash-mounted switch to select whether transmission downshifts are commanded according to the normal schedule or at higher downshift speeds.

High N/V Ratio Input: Adjust transmission operating parameters to compensate for the gear ratio change and other factors associated with shifting between High, Neutral or Low positions of a transfer case.

Lock up Indicator Output: Turns on dash indicator when transmission lock up clutch is engaged. May be used to indicate when maximum engine braking is available.

Manual Lock up Enable: Used to manually control operation of the transmission lock up clutch.

Neutral at Stop: Reduces or eliminates the load on the engine while the vehicle is stopped, reducing fuel usage and emissions.

Neutral Indicator for PTO and PTO Request (NIPTO): Indicates neutral status for PTO operation.

Output Speed Indicator: Informs vehicle operators when a set speed is exceeded or when other operations can be performed, making it easier to concentrate on driving.

Overdrive Disable Input: Provides the capability, through the enabling of this function, to prevent the transmission from upshifting into overdrive.

Preselect Request Input: Signals the TCM to preselect a selectable forward drive range whenever the function is requested.

PTO Drive Interface: Protects equipment by ensuring that all operating conditions (engine speed, range, throttle position, output speed, etc.) are met before engaging the PTO and while the PTO is in operation.

Quick to Neutral: Shifts the transmission to Neutral when a signal to the TCM designates that drive to auxiliary equipment must be interrupted.

Range Indicator: Used with auxiliary vehicle systems to permit operation only in specified transmission range(s).

Retarder Interface: Provides for operator on/off control of the retarder, incorporates indication for elevated retarder temperature and illuminates brake lights during retarder operation.

Reverse Enable Input: Prevents inadvertent shifts into reverse.

Reverse Inhibit with Preselect Request Interface: Limits transmission operation to Preselect Ranges and inhibits Reverse when personnel ride at rear of vehicle (e.g., refuse vehicles).

Secondary Mode: Allows operator to select appropriate operating mode or specialty shift schedule for controlled operation.

Selector Display Blanking Input: Used to meet blackout requirements.

Service Brake Status Input: Indicates to the TCM whether vehicle braking is being provided by vehicle brakes, so transmission controls can be adapted accordingly.

Shift Selector Transition and Oil Field Pumping Input: For oil field dual-mode vehicles driven on-road in primary mode, use secondary mode for stationary oil field operations, such as pumping, swabbing or winching.

Shift Selector Transition Input: Selects which shift selector is active when two shift selectors are used.

Sump/Retarder Temperature Indicator: Turns on dash indicator or alarm when transmission temperature has exceeded specified limits.

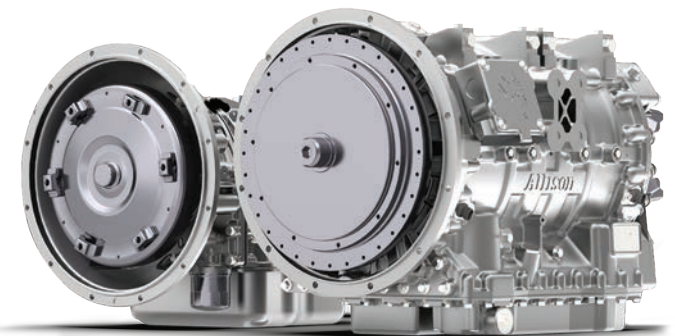
Transmission Service Indicator: Provides an indication that transmission service is required.

Two-Speed Axle Interface: Provides input signal to TCM indicating low/high ratio axle selection.

Bus Series™

Moving Cities Forward

Since 1947, Allison Transmission has been leading the charge in innovative propulsion solutions for transit fleets. That charge continues as we drive cities across the globe toward full electrification.



Allison Transmission Bus Series™ Ratings

Model	Ratio	Park Pawl	Gross Input Power	Gross Input Torque	Net Turbine Torque	Gross Input Power	Gross Input Torque	Net Turbine Torque	Max GVW	Max GCW
			With Torque Management			Without Torque Management				
			hp (kW)	lb-ft (N•m)	lb-ft (N•m)	hp (kW)	lb-ft (N•m)	lb-ft (N•m)	lbs (kg)	lbs (kg)
B 210 ¹	Close	No	270 (201)	600 (813)	850 (1,152)	230 (172)	520 (705)	850 (1,152)	29,000 (13,150)	29,000 (13,150)
B 220 ¹	Close	Yes	270 (201)	600 (813)	850 (1,152)	230 (172)	520 (705)	850 (1,152)	29,000 (13,150)	29,000 (13,150)
B 295	Close	No	-	-	-	230 (172)	620 (841)	1,370 (1,857)	33,000 (14,968)	33,000 (14,968)
B 300	Close	No	-	-	-	280 (209)	735 (997)	1,370 (1,857)	38,000 (17,236)	38,000 (17,236)
B 400 - Transit	Close	No	-	-	-	300 (224)	925 (1,254)	1,370 (1,857)	45,000 (20,412)	45,000 (20,412)
B 400 - Tour Coach	Close	No	-	-	-	330 (246)	1,000 (1,356)	1,600 (2,170)	45,000 (20,412)	45,000 (20,412)
B 3400 xFE	Close	No	-	-	-	300 (224)	925 (1,254)	1,370 (1,857)	45,000 (20,412)	45,000 (20,412)
B 500 - Transit	Close	No	-	-	-	420 (313)	1,300 (1,763)	2,450 (3,322)	-	-
B 500 - Intercity Coach	Close	No	-	-	-	550 (410)	1,700 (2,305)	2,450 (3,322)	-	-

1 - Available w/ xFE

Typical Vehicle Applications¹

Revenue-Generating/FTA Transit Bus Applications, Transit Bus, Intercity Bus (less than 53,000 lbs. GVW), Tour Coach, Shuttle Bus (over 33,000 lbs. GVW)



B 210
B 220
B 295



B 300
B 400
B 3400 xFE



B 500

1 - Any vehicle that operates on-highway and does not need a PTO requires an Allison Highway Series™ transmission

Allison Transmission Bus Series™

B 210/B 220/B 295 Input/Output Functions

Input Functions		Default Enabled	Comm Avail?	Vocation Package Number							
				353	354	369	373	374	379	380	381
A	Secondary Mode Input	Yes	Yes	142	142	142	142	142	142	142	142
C1	PTO Drive Interface 1 Input	Yes	Yes		143	143		162	162	143	
C2	PTO Drive Interface 2 Input	No	Yes							102	
E	Auxiliary Function Range Inhibit - Single Input	No	Yes	101	101	101	101	101	101	101	101
H	Engine Brake Interface Input (Standard)	No	Yes		102	102		102	102		
I	Engine Brake Interface Input (Special)	No	Yes	102			102				102
L	Automatic Neutral - Single Input	No	Yes	123	123	123	123	123	123	123	
V	Reverse Enable Input	No	Yes	143			162				143
Y	Anti-Lock Brake System (ABS) Input	Yes	Yes	121	121	121	121	121	121	121	121
AA	Service Break Status Input	Yes	Yes	162	162	162				162	162
AH	Accelerator Pedal Kickdown Input	Yes	Yes	122			122				122
AM	Reverse Inhibit w/ Preselect Request Interface Input	No	Yes								
AR	Overdrive Disable Interface Input	Yes	Yes	161	161	161	161	161	161	161	161
AS	Neutral at Stop Input	No	Yes				143	143	143		
BQ	Pump Mode Input (3rd Lockup)	No	No								
BS	Grade Braking/Regeneration Input	No	Yes								
CA	Auto Neutral - Brake-Based (BBAN) Input for PTO	No	Yes			122			122		
CB1	Preselect Request 1 Input	Yes	Yes		122			122		122	
CC	High N/v Ratio Input	No	Yes								
CD	Automatic Neutral - Single Input w/ Selector Override	Yes	Yes								
CN	Automatic Neutral - Dual Input w/ Auto Return-to-Range	No	Yes								123
CR	PTO Drive Interface - Synchronized PTO Input	No	Yes								
CS	Run/Crank Input	Yes	No								

Output Functions		Default Enabled	Comm Avail?	Vocation Package Number							
				353	354	369	373	374	379	380	381
A	Engine Brake Interface Output	No	Yes	104	104	104	104	104	104		104
B	Sump/Retarder Temperature Indicator	Yes	Yes	164	164	164	164	164	164	164	164
C	Range Indicator	Yes	No	145	145	145	145	145	145	145	145
D	Output Speed Indicator A	Yes	No	105	105	105	105	105	105	105	105
G1	PTO Drive Interface 1 Output	Yes	Yes		150	150		150	150	150	
G2	PTO Drive Interface 2 Output	No	Yes							104	
O	Transmission Service Indicator	Yes	Yes	113	113	113	113	113	113	113	113
S	Neutral Indicator for PTO & PTO Request (NIPTO)	Yes	No								
X	Overdrive Disable Interface Output	Yes	No								
AD	Range Inhibited Indicator	Yes	Yes	124	124	124	124	124	124	124	124
AN	PTO Drive Interface - Synchronized PTO Output	Yes	No								

Allison Transmission Bus Series™

B 400/B 3400 xFE/B 500 Input/Output Functions

				Vocation Package Number																		
Input Functions		Default Enabled	Comm Avail?	Transit Bus + Intercity Coach											Transit Bus + Intercity Coach (Max. Economy Calibration)							
				139	211	212	215	217	223	226	234	236	263	268	129	130	148	159	210	235	247	262
A	Secondary Mode Input	Yes	Yes	M	M	122	M	M	M	M	142	M	M	M	M	142	M	M	M	142	142	M
C1	PTO Drive Interface 1 Input	Yes	Yes	143	143	143	143	143	143		M	143	143	143			143		143	M	143	
C2	PTO Drive Interface 2 Input	No	Yes										102									
D	Shift Selector Transition Input	No	Yes																			
E	Auxiliary Function Range Inhibit - Single Input	No	Yes	101	101	101	101		101	101	101	101	101	101	101	101	101	101		101	101	101
F	Auxiliary Function Range Inhibit - Dual Input	Yes	No																			
G	Auxiliary Hold Input	Yes	No		123	123			142	142		142	142	142			142	142			M	142
H	Engine Brake Interface Input (Standard)	No	Yes	102/ 157	102/ 157	102/ 157	102/ 157	102/ 157	102/ 157	102/ 157	102/ 157	102/ 157			102/ 157	102/ 157	102/ 157	102/ 157		102/ 157	102/ 157	102/ 157
I	Engine Brake Interface Input (Special)	No	Yes																			
J	Fire Truck Pump Mode Input	No	Yes																			
K	Quick-to-Neutral Input	No	No																			
L	Automatic Neutral - Single Input	No	Yes						117	117	117	117	117	117			117	117		117	117	
Q	Two Speed Axle Interface Input	Yes	Yes																			
R	Manual Lockup Control Input	No	No																			
V	Reverse Enable Input	No	Yes												117	117						
W	Direction Change Enable Input	No	Yes						122	122		122	122	122		143		143	142	143		143
Y	Anti-Lock Brake System (ABS) Input	Yes	Yes	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121
Z	Retarder Interface Input	Yes	Yes	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161
AA	Service Brake Status Input	Yes	Yes	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162
AG	Automatic Neutral - Dual Input	Yes	Yes	117/ 142															101/ 117			
AH	Accelerator Pedal Kickdown Input	Yes	Yes												122	122	122	122	122	122	122	122
AI	Aux Function Range Inhibit - Single Input (Specialty)	No	Yes																			
AJ	Pump Mode Input	No	Yes																			
AK	Automatic Neutral - Dual Input w/ Service Brake Status	Yes	Yes					101/ 117														
AL	Shift Selector Transition & Secondary Shift Schedule	Yes	No																			
AM	Reverse Inhibit with Preselect Request Interface Input	No	Yes																123			
AQ	Shift Selector Display Blanking Input	Yes	No																			
AS	Neutral at Stop Input	No	Yes				123	123	123	123			123	123	123	123	123	123	102	123	123	123
AW	2nd Reverse Input	No	No						179				179	179								
BD	Automatic 2-1 Preselect Input (4000 7-speed only)	Yes	No																			
BS	Grade Braking/Regeneration Input	No	Yes											102								
BY	Aux Box Transition Input	Yes	Yes																			
BZ	Shift Selector Transition & Oil Field Pumping Input	Yes	No																			
CA	Automatic Neutral - Brake-Based (BBAN) Input for PTO	No	Yes																			
CB1	Preselect Request 1 Input	Yes	Yes								123	123										
CB2	Preselect Request 2 Input	Yes	Yes																			
CC	High N/v Ratio Input	No	Yes																			
CD	Automatic Neutral - Single Input wth Selector Override	Yes	Yes																			
CE	Direct Hold Input	No	Yes																			
CF	Automatic Neutral - Idle Start/Stop Input	Yes	No		117/ 142	117/ 142	117/ 142															
CH	Automatic Neutral - Single Input, Inverted	No	Yes																			
CN	Automatic Neutral - Dual Input w/ Auto Return-to-Range	No	Yes																			117
CV	Shift Selector - Multiple Transmission Control	No	Yes																			

				Vocation Package Number																		
Output Functions		Default Enabled	Comm Avail?	Transit Bus + Intercity Coach											Transit Bus + Intercity Coach (Max. Economy Calibration)							
				139	211	212	215	217	223	226	234	236	263	268	129	130	148	159	210	235	247	262
A	Engine Brake Interface Output	No	Yes	104	104	104	104	104	104	104	104	104			104	104	104	104		104	104	104
B	Sump/Retarder Temperature Indicator	Yes	Yes	164	164	164	164	164	164	164	164	164	164	164	164	164	164	164	164	164	164	164
C	Range Indicator ¹	Yes	No		145	145	145	145	145	145	145	145	145	145	145	145	145	145	113	145	145	145
D	Output Speed Indicator A	Yes	No	105	105	105	105	105	105	105	105	105	105	105	130	130	105	105	105	105	105	105
G1	PTO Drive Interface 1 Output	Yes	Yes	130	130	130	130	130	130		130	130	130	130			130		130	130	130	
G2	PTO Drive Interface 2 Output	No	Yes										104									
I	Engine Overspeed Indicator	Yes	No							130								113				113
J	Two Speed Axle Interface Output	Yes	Yes																			
K	Lockup Indicator	Yes	Yes																			
N	Secondary Mode Indicator	Yes	Yes		113	113	113		113	113	113	113	113	113				130		113		130
O	Transmission Service Indicator	Yes	Yes																			
Q	Retarder Interface Output	Yes	Yes	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124
S	Neutral Indicator for PTO and PTO Request (NIPTO)	Yes	No	145				113											145			
AJ	Output Speed Indicator At, Inverted	Yes	No																			

1 - 6th Generation Controls and newer default is always Neutral/Park

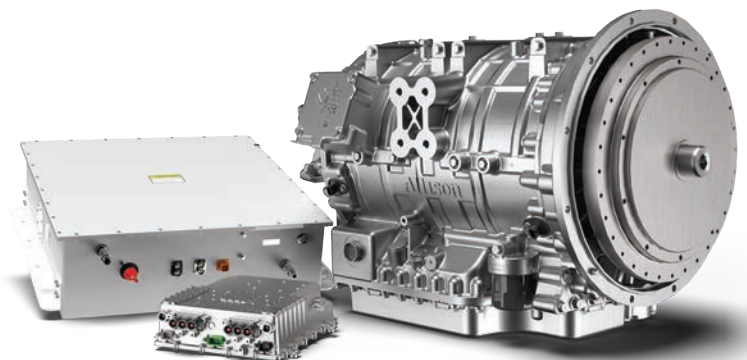


eGen Flex™



Electrifying the Future

Allison is passionate about moving propulsion technology forward and rethinking ways to evolve vehicles into full electrification. From our proven conventional and electric hybrid H 40/50 EP™ systems to our eGen Flex™ electric hybrid for transit buses and eGen Power® fully electric axles, we're determined to drive our cities into the future today.



Allison Transmission Hybrid/eGen Flex™ Ratings

Model	Continuous	Rated Input Torque	Rated Input Speed	Dry Weight	Wet Weight
	hp (kW)	lb-ft (N•m)	rpm	lbs (kg)	lbs (kg)
eGen Flex™ 40 Drive Unit - Transit Bus ¹	280 (209)	910 (1,234)	2,300	913 (414)	938 (425)
eGen Flex™ 50 Drive Unit - Suburban Coach/Articulated Bus ²	330 (246)	1050 (1,424)	2,300	913 (414)	938 (425)
H 40 - Transit Bus	280 (209)	910 (1,234)	2,300	913 (414)	938 (425)
H 50 - Transit/Coach	330 (246)	1,050 (1,424)	2,300	913 (414)	938 (425)
Rechargeable Energy Storage System (RESS)				1,201.5 (545)	
Dual Traction Inverter (DTI)	260 kW continuous 3-phase AC			48 (22)	

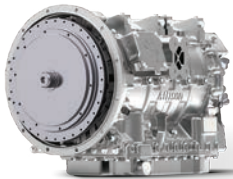
¹ Applicable for H 40 EP, eGen Flex™ 40, eGen Flex™ 40 CertPlus, eGen Flex™ 40 Max, eGen Flex™ 40 Max CertPlus ² Applicable for H 50 EP, eGen Flex™ 50, eGen Flex™ 50 CertPlus, eGen Flex™ 50 Max, eGen Flex™ 50 Max CertPlus

Features

	eGen Flex™ 40/50	eGen Flex™ 40/50 CertPlus	eGen Flex™ 40/50 Max	eGen Flex™ 40/50 Max CertPlus
Allison Drive Unit with disconnect clutch	✓	✓	✓	✓
Allison 26 kWh Lithium Titanate (LTO) Rechargeable Energy Storage System (RESS)	✓	✓	✓	✓
Allison Dual-Tracked Inverter (DTI)	✓	✓	✓	✓
Allison 5th Generation Controls	✓	✓	✓	✓
Acceleration Rate Management	✓	✓	✓	✓
Hybrid Mode	✓	✓	✓	✓
Increased Accessory Power 2 (IAP2) - Accessory electrification capability	✓	✓	✓	✓
Engine Start-Stop	✓	✓	✓	✓
EV Mode	Not Available	Not Available	✓	✓
Pre-Charge Mode	Not Available	Not Available	✓	✓
Depot Mode	Not Available	Not Available	✓	✓
Zero-Emission Zone Mode	Not Available	Not Available	✓	✓
Up to 10-mile EV Mode operation	Not Available	Not Available	✓	✓
Geofencing (to support Zero Emission Zones, Pre-Charge Mode, and Depot Mode)	Not Available	Not Available	✓	✓
California Air Resources Board (CARB) Certified	No	✓	No	✓

Typical Vehicle Applications

Hybrid Bus, Straight/Solo Bus, Articulated Bus, BRT, Shuttle Bus, Intercity Bus,
TOVK Coach



H 40 EP
H 50 EP
eGen Flex™ 40
eGen Flex™ 50

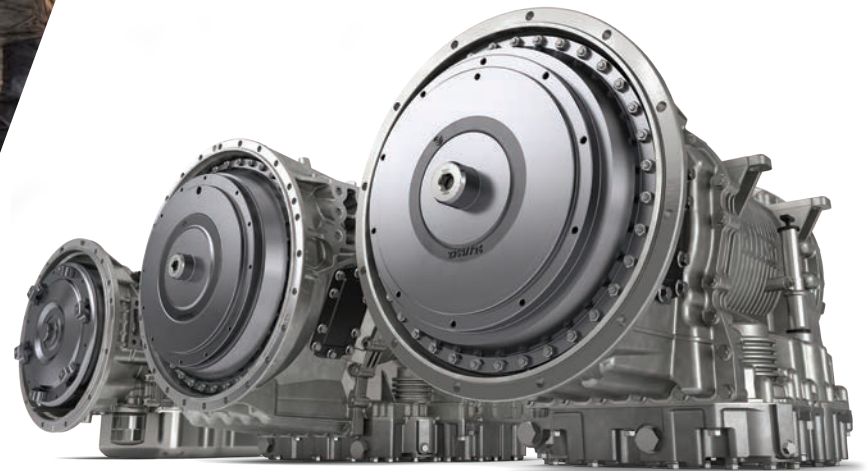


Emergency Vehicle Series™



When Every Second Counts

Allison Automatics are designed to perform in the toughest, most stringent environments. With Allison, you can optimize your fire truck or emergency vehicle to fit the needs of your application. The result is a precise combination of power and efficiency that helps keep our cities safe.



Allison Transmission Emergency Vehicle Series™ Ratings

Model	Ratio	Park Pawl	Gross Input Power	Gross Input Torque	Net Turbine Torque	Gross Input Power	Gross Input Torque	Net Turbine Torque	Max GVW	Max GCW
			With Torque Management			Without Torque Management				
			hp (kW)	lb-ft (N•m)	lb-ft (N•m)	hp (kW)	lb-ft (N•m)	lb-ft (N•m)	lbs (kg)	lbs (kg)
1000 EVS	Close	Yes	340 ^{1,2} (254) ^{1,2}	660 ^{1,2} (895) ^{1,2}	950 (1,288)	300 (224)	575 (780)	850 (1,152)	19,500 (8,845)	26,000 (11,800)
1350 EVS	Close	Yes	340 ^{1,2} (254) ^{1,2}	660 ^{1,2} (895) ^{1,2}	950 (1,288)	300 (224)	575 (780)	850 (1,152)	19,500 (8,845)	30,000 (13,600)
1700 EVS ⁵	Close	Yes	350 (261)	700 ⁶ (950) ⁶	950 (1,288)	-	-	-	19,500 (8,845)	26,000 (11,800)
1750 EVS ⁵	Close	Yes	350 (261)	700 ⁶ (950) ⁶	950 (1,288)	-	-	-	19,500 (8,845)	37,500 (17,010)
2100 EVS	Close	No	340 (254)	660 ⁴ (895) ⁴	950 (1,288)	300 (224)	575 (780)	850 (1,152)	26,000 (11,800)	26,000 (11,800)
2200 EVS	Close	Yes	340 (254)	660 ⁴ (895) ⁴	950 (1,288)	300 (224)	575 (780)	850 (1,152)	26,000 (11,800)	26,000 (11,800)
2350 EVS ²	Close	Yes	340 (254)	660 ⁴ (895) ⁴	950 (1,288)	300 (224)	575 (780)	850 (1,152)	30,000 (13,600)	30,000 (13,600)
2500 EVS	Wide	No	340 (254)	660 ⁴ (895) ⁴	950 (1,288)	300 (224)	575 (780)	850 (1,152)	33,000 (15,000)	33,000 (15,000)
2550 EVS ²	Wide	Yes	340 (254)	660 ⁴ (895) ⁴	950 (1,288)	300 (224)	575 (780)	850 (1,152)	30,000 (13,600)	30,000 (13,600)
2700 EVS ⁵	Close	Yes	350 (261)	700 ⁶ (950) ⁶	950 (1,288)	-	-	-	23,500 (10,660)	26,000 (11,800)
2750 EVS ⁵	Close	Yes	350 (261)	700 ⁶ (950) ⁶	950 (1,288)	-	-	-	23,500 (10,660)	37,500 (17,010)
3000 EVS	Close	No	-	-	-	450 (336)	1,250 (1,695)	1,700 (2,305)	-	-
3500 EVS	Wide	No	330 (246)	1,050 ¹ (1,424) ¹	1,500 (2,034)	330 (246)	985 (1,335)	1,500 (2,034)	-	-
4000 EVS - Emergency Vehicle	Close	No	-	-	-	605 (451)	1,850 (2,508)	2,600 (3,525)	-	-
4000 EVS - ARFF ³	Close	No	-	-	-	605 (451)	1,675 (2,271)	2,600 (3,525)	-	-
4500 EVS	Wide	No	605 (451)	1,850 ¹ (2,508) ¹	2,600 (3,525)	605 (451)	1,770 (2,400)	2,600 (3,525)	-	-
4700 EVS - ARFF ³	Deep	No	-	-	-	605 (451)	1,850 (2,508)	2,800 (3,795)	-	-
4800 EVS - ARFF ³	Deep	No	-	-	-	700 (522)	1,950 (2,644)	2,800 (3,795)	-	-
4850 EVS - ARFF ³	Deep	No	-	-	-	770 (574)	1,950 (2,644)	2,800 (3,795)	-	-

1 - Available in gears two through six. 2 - Check with your OEM to ensure offerings. 3 - Aircraft rescue and fire-fighting vehicle. 4 - Available in ranges three through five. 5 - Available in the Chevrolet Silverado 4500HD/ 5500HD/ 6500HD + Navistar CV Series. 6 - Available in gears three through six.

Typical Vehicle Applications¹

Aerial Ladder Platform, Aircraft Rescue and Fire-Fighting Vehicle (ARFF), Ambulance, Fire Truck Pumper (With + Without Split-Shaft PTO), Hazardous Material Vehicle, Mobile Command Center, Support Vehicle



1000 EVS | 1350 EVS
1700 EVS | 1750 EVS
2100 EVS | 2200 EVS
2350 EVS | 2500 EVS
2550 EVS | 2700 EVS
2750 EVS



3000 EVS
3500 EVS

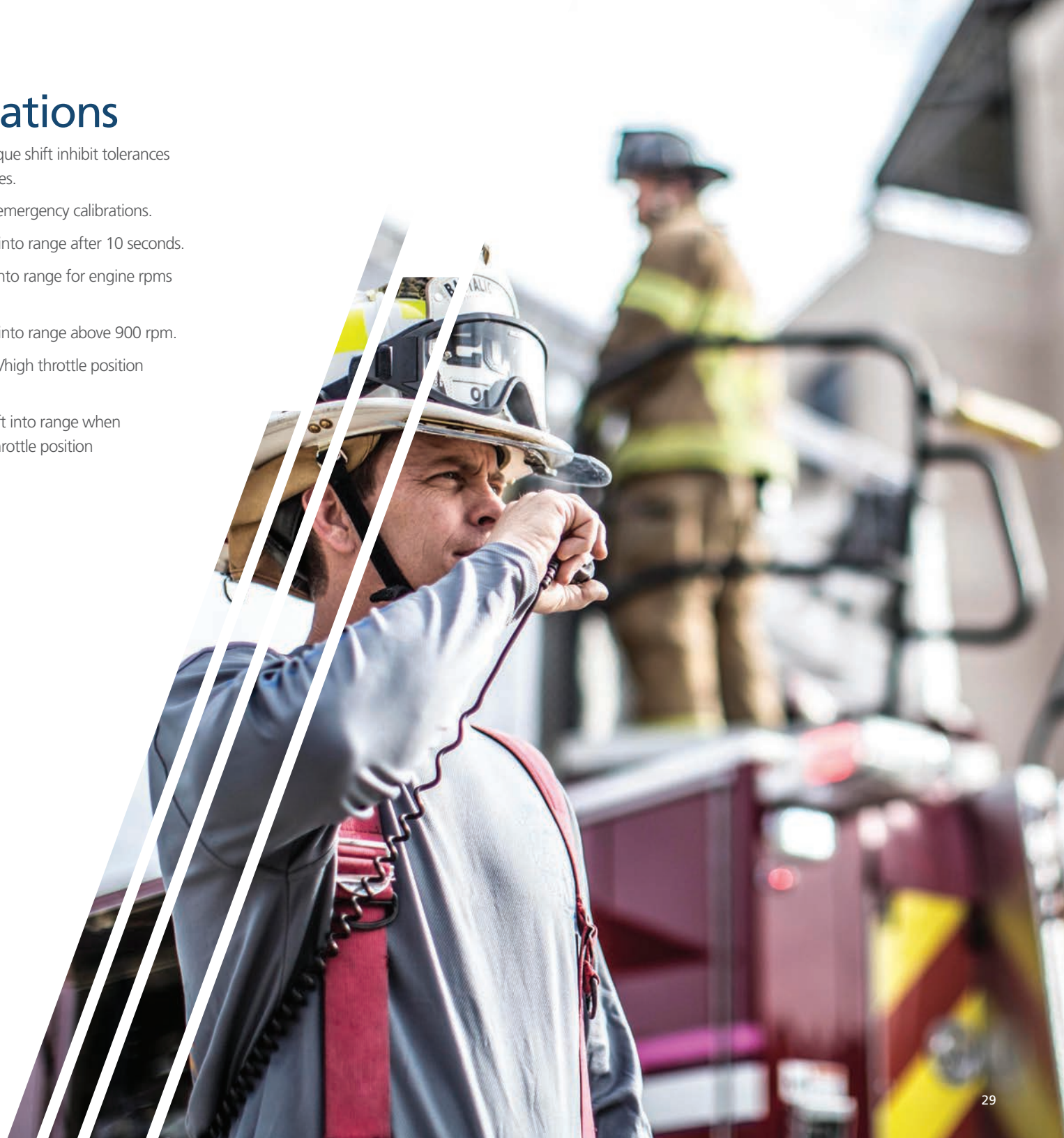


4000 EVS
4500 EVS
4700 EVS
4800 EVS
4850 EVS

¹ - Any vehicle equipped with emergency signaling (such as a siren, light bar, grill signal, porter light, etc.) that allows the vehicle to ignore general traffic laws in emergency situations requires an Allison Emergency Vehicle Series™ transmission.

Emergency Calibrations

- Emergency Vehicle Series™ calibrated with unique shift inhibit tolerances to meet the special needs of emergency vehicles.
- Low-voltage detection set at two minutes for emergency calibrations.
- General truck calibrations will not permit shift into range after 10 seconds.
- Emergency calibrations will not permit a shift into range for engine rpms above 1,260.
- General truck calibrations will not permit shift into range above 900 rpm.
- No shift inhibit detection of high output speed/high throttle position for emergency calibrations.
- General truck calibrations will not permit a shift into range when output speed is at or above 200 rpm and/or throttle position is beyond 40%.



Allison Transmission Emergency Vehicle Series™

1000/2000 Series Input/Output Functions

Input Functions		Default Enabled	Comm Avail?	Vocation Package Number									
				354	360	364	367	368	374	376	380	381	388
A	Secondary Mode Input	Yes	Yes	142	142	142	142	142	142	142	142	142	
C1	PTO Drive Interface 1 Input	Yes	Yes	143	143	143	143	143	162	101	143		
C2	PTO Drive Interface 2 Input	No	Yes								102		
E	Auxiliary Function Range Inhibit - Single Input	No	Yes	101					101		101	101	101
H	Engine Brake Interface Input (Standard)	No	Yes	102	102		102		102	102			
I	Engine Brake Interface Input (Special)	No	Yes									102	
L	Automatic Neutral - Single Input	No	Yes	123					123		123		
V	Reverse Enable Input	No	Yes									143	
Y	Anti-Lock Brake System (ABS) Input	Yes	Yes	121	121	121	121	121	121	121	121	121	
AA	Service Break Status Input	Yes	Yes	162	162	162				162	162	162	
AH	Accelerator Pedal Kickdown Input	Yes	Yes									122	
AM	Reverse Inhibit w/ Preselect Request Interface Input	No	Yes										
AR	Overdrive Disable Interface Input	Yes	Yes	161	161	161	161	161	161	161	161	161	
AS	Neutral at Stop Input	No	Yes						143	143			
BQ	Pump Mode Input (3rd Lockup)	No	No		122/123	122/123	122/123	122/123		122/123			122/102
BS	Grade Braking/Regeneration Input	No	Yes										
CA	Auto Neutral - Brake-Based (BBAN) Input for PTO	No	Yes										
CB1	Preselect Request 1 Input	Yes	Yes	122					122		122		
CC	High N/v Ratio Input	No	Yes			101/102		101/102					
CD	Automatic Neutral - Single Input w/ Selector Override	Yes	Yes				162	162					
CN	Automatic Neutral - Dual Input w/ Auto Return-to-Range	No	Yes									123	
CR	PTO Drive Interface - Synchronized PTO Input	No	Yes										
CS	Run/Crank Input	Yes	No										123
Output Functions		Default Enabled	Comm Avail?	Vocation Package Number									
				354	360	364	367	368	374	376	380	381	388
A	Engine Brake Interface Output	No	No	104	104		104		104	104		104	
B	Sump/Retarder Temperature Indicator	Yes	No	164	164	164	164	164	164	164	164	164	164
C	Range Indicator	Yes	No	145	145	145	145	145	145	145	145	145	145
D	Output Speed Indicator A	Yes	No	105	105	105	105	105	105	105	105	105	105
G1	PTO Drive Interface 1 Output	Yes	Yes	150	150	150	150	150	150	150	150		
G2	PTO Drive Interface 2 Output	No	Yes								104		
O	Transmission Service Indicator	Yes	Yes	113	113	113	113	113	113	113	113	113	
S	Neutral Indicator for PTO & PTO Request (NIPTO)	Yes	No										
X	Overdrive Disable Interface Output	Yes	No										
AD	Range Inhibited Indicator	Yes	Yes	124	124	124	124	124	124	124	124	124	124
AN	PTO Drive Interface - Synchronized PTO Output	Yes	No										

Allison Transmission Emergency Vehicle Series™

3000/4000 Series Input/Output Functions

Input Functions		Default Enabled	Comm Avail?	Vocation Package Number								
				With Split-Shaft PTO					Emergency	No Split-Shaft PTO		
				135	197	198	246	271	170	227	265	274
A	Secondary Mode Input	Yes	Yes	M	142	M	M	M	M	M	M	M
C1	PTO Drive Interface 1 Input	Yes	Yes	143	M	142	143	143	143	143	143	143
C2	PTO Drive Interface 2 Input	No	Yes					102			102	
D	Shift Selector Transition Input	No	Yes						101			
E	Auxiliary Function Range Inhibit - Single Input	No	Yes	101								
F	Auxiliary Function Range Inhibit - Dual Input	Yes	No				101/142			101/142	101/142	101/142
G	Auxiliary Hold Input	Yes	No	142								
H	Engine Brake Interface Input (Standard)	No	Yes	102/157	102/157	102/157	102/157		102/157	102/157		102/157
I	Engine Brake Interface Input (Special)	No	Yes									
J	Fire Truck Pump Mode Input	No	Yes	122/123	122/123	122/123	122/123	122/123				
K	Quick-to-Neutral Input	No	No									
L	Automatic Neutral - Single Input	No	Yes									
Q	Two Speed Axle Interface Input	Yes	Yes									
R	Manual Lockup Control Input	No	No									
V	Reverse Enable Input	No	Yes									
W	Direction Change Enable Input	No	Yes									
Y	Anti-Lock Brake System (ABS) Input	Yes	Yes	121	121	121	121	121	121	121	121	121
Z	Retarder Interface Input	Yes	Yes	161	161	161	161	161	161	161	161	161
AA	Service Brake Status Input	Yes	Yes	162	162	162	162	162	162	162	162	162
AG	Automatic Neutral - Dual Input	Yes	Yes									
AH	Accelerator Pedal Kickdown Input	Yes	Yes									
AI	Aux Function Range Inhibit - Single Input (Specialty)	No	Yes									
AJ	Pump Mode Input	No	Yes									
AK	Automatic Neutral - Dual Input w/ Service Brake Status	Yes	Yes						117/142			
AL	Shift Selector Transition & Secondary Shift Schedule	Yes	No									
AM	Reverse Inhibit with Preselect Request Interface Input	No	Yes									
AQ	Shift Selector Display Blanking Input	Yes	No									123
AS	Neutral at Stop Input	No	Yes						123			
AW	2nd Reverse Input	No	No							179	179	179
BD	Automatic 2-1 Preselect Input (4000 7-speed only)	Yes	No									
BS	Grade Braking/Regeneration Input	No	Yes									
BY	Aux Box Transition Input	Yes	Yes									
BZ	Shift Selector Transition & Oil Field Pumping Input	Yes	No									
CA	Automatic Neutral - Brake-Based (BBAN) Input for PTO	No	Yes									
CB1	Preselect Request 1 Input	Yes	Yes									
CB2	Preselect Request 2 Input	Yes	Yes									
CC	High N/v Ratio Input	No	Yes									
CD	Automatic Neutral - Single Input wth Selector Override	Yes	Yes		117	117	117	117		117	117	117
CE	Direct Hold Input	No	Yes									
CF	Automatic Neutral - Idle Start/Stop Input	Yes	No									
CH	Automatic Neutral - Single Input, Inverted	No	Yes									
CN	Automatic Neutral - Dual Input w/ Auto Return-to-Range	No	Yes									
CV	Shift Selector - Multiple Transmission Control	No	Yes									

Output Functions				Vocation Package Number										
				Default Enabled	Comm Avail?	With Split-Shaft PTO					Emergency	No Split-Shaft PTO		
						135	197	198	246	271	170	227	265	274
A	Engine Brake Interface Output	No	Yes	104	104	104	104		104	104		104		
B	Sump/Retarder Temperature Indicator	Yes	Yes	164	164	164	164	164	164					
C	Range Indicator	Yes	No	145	145	145	145	145	113					
D	Output Speed Indicator A	Yes	No	105	105	105	105	105	105	105	105	105		
G1	PTO Drive Interface 1 Output	Yes	Yes	130	130	130	130	130	130	130	130	130		
G2	PTO Drive Interface 2 Output	No	Yes					104			104			
I	Engine Overspeed Indicator	Yes	No											
J	Two Speed Axle Interface Output	Yes	Yes											
K	Lockup Indicator	Yes	Yes											
N	Secondary Mode Indicator	Yes	Yes							113	113	113		
O	Transmission Service Indicator	Yes	Yes							164	164	164		
Q	Retarder Interface Output	Yes	Yes	124	124	124	124	124	124	124	124	124		
S	Neutral Indicator for PTO and PTO Request (NIPTO)	Yes	No		113	113	113	113	145	145	145	145		
AJ	Output Speed Indicator At, Inverted	Yes	No											

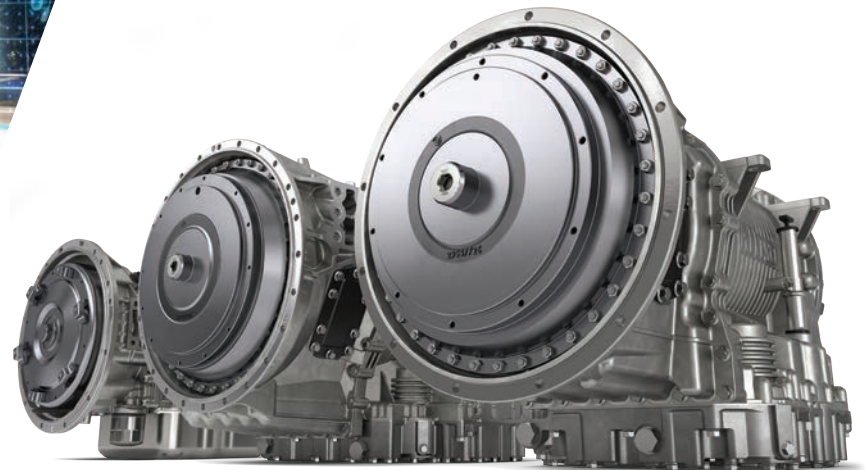


Highway Series™



From Regional Haul to the Final Mile

Allison transmissions are built for today's high start-stop duty-cycles. Whether transporting perishables around a city, running regional pickup and delivery routes or making the long haul, Allison positions you and your drivers to succeed.



Allison Transmission Highway Series™ Ratings

Model	Ratio	Park Pawl	Gross Input Power	Gross Input Torque	Net Turbine Torque	Gross Input Power	Gross Input Torque	Net Turbine Torque	Max GVW	Max GCW
			With Torque Management			Without Torque Management				
			hp (kW)	lb-ft (N•m)	lb-ft (N•m)	hp (kW)	lb-ft (N•m)	lb-ft (N•m)	lbs (kg)	lbs (kg)
1000 HS¹	Close	Yes	340 ⁴ (254) ⁴	660 ⁴ (895) ⁴	950 (1,288)	300 (224)	575 (780)	850 (1,152)	19,500 (8,845)	26,000 (11,800)
1350 HS¹	Close	Yes	340 ⁴ (254) ⁴	660 ⁴ (895) ⁴	950 (1,288)	300 (224)	575 (780)	850 (1,152)	19,500 (8,845)	30,000 (13,600)
1700 HS⁶	Close	Yes	350 (261)	700 ⁵ (950) ⁵	950 (1,288)	-	-	-	19,500 (8,845)	26,000 (11,800)
1750 HS⁶	Close	Yes	350 (261)	700 ⁵ (950) ⁵	950 (1,288)	-	-	-	19,500 (8,845)	37,500 (17,010)
2100 HS¹	Close	No	340 ⁴ (254) ⁴	660 ⁴ (895) ⁴	950 (1,288)	300 (224)	575 (780)	850 (1,152)	26,000 (11,800)	26,000 (11,800)
2200 HS¹	Close	Yes	340 ⁴ (254) ⁴	660 ⁴ (895) ⁴	950 (1,288)	300 (224)	575 (780)	850 (1,152)	26,000 (11,800)	26,000 (11,800)
2300 HS²	Close	No	365 (272)	510 (691)	950 (1,288)	-	-	-	33,000 (15,000)	33,000 (15,000)
2350 HS¹,⁴	Close	Yes	340 (254)	660 (895)	950 (1,288)	300 (224)	575 (780)	850 (1,152)	30,000 (13,600)	30,000 (13,600)
2500 HS¹	Wide	No	340 ⁴ (254) ⁴	660 ⁴ (895) ⁴	950 (1,288)	300 (224)	575 (780)	850 (1,152)	33,000 (15,000)	33,000 (15,000)
2550 HS¹,⁴	Wide	Yes	340 (254)	660 (895)	950 (1,288)	300 (224)	575 (780)	850 (1,152)	30,000 (13,600)	30,000 (13,600)
2700 HS⁶	Close	Yes	350 (261)	700 ⁵ (950) ⁵	950 (1,288)	-	-	-	23,500 (10,660)	26,000 (11,800)
2750 HS⁶	Close	Yes	350 (261)	700 ⁵ (950) ⁵	950 (1,288)	-	-	-	23,500 (10,660)	37,500 (17,010)
3000 HS	Close	No	370 (276)	1,250 ³ (1,695) ³	1,600 (2,169)	370 (276)	1,100 (1,491)	1,600 (2,169)	80,000 (36,288)	80,000 (36,288)
4000 HS	Close	No	580 (433)	1,850 ⁵ (2,508) ⁵	2,600 (3,525)	580 (433)	1,770 (2,400)	2,600 (3,525)	-	-
4500 HS	Wide	No	580 (433)	1,850 ⁵ (2,508) ⁵	2,600 (3,525)	580 (433)	1,650 (2,237)	2,600 (3,525)	-	-

1 - Available with xFE 2 - Only available with VORTEC 8.1L gasoline-powered engine applications 3 - Requires Allison Transmission engine-transmission combination approval. Only available in gears three through six 4 - Check with your OEM to ensure offerings 5 - Available in gears three through six 6 - Available in the Chevrolet Silverado 4500HD/ 5500HD/ 6500HD + Navistar CV Series

Typical Vehicle Applications¹

Armored Car, Automobile Transporter, Beverage Delivery, Distribution, Dry Bulk, Equipment Hauler (no permit/escort), Flatbed, Food Distribution, General Freight, Line Haul, Livestock Hauler, Manufacturing, Moving/Storage, One-way Rental Truck, Recycling, Shorthaul/LTL, Stake Truck, Van, Walk-in Van



1000 HS | 1350 HS
1700 HS | 1750 HS
2100 HS | 2200 HS
2300 HS | 2350 HS
2500 HS | 2550 HS
2700 HS | 2750 HS



3000 HS



4000 HS
4500 HS

Allison Transmission Highway Series™

1000/2000 Series Input/Output Functions™

Input Functions		Default Enabled	Comm Avail?	Vocation Package Number					
				354	374	371	380	381	389
A	Secondary Mode Input	Yes	Yes	142	142	142	142	142	142
C1	PTO Drive Interface 1 Input	Yes	Yes	143	162	143	143		143
C2	PTO Drive Interface 2 Input	No	Yes				102		
E	Auxiliary Function Range Inhibit - Single Input	No	Yes	101	101	101	101	101	101
H	Engine Brake Interface Input (Standard)	No	Yes	102	102				
I	Engine Brake Interface Input (Special)	No	Yes					102	
L	Automatic Neutral - Single Input	No	Yes	123	123	123	123		
V	Reverse Enable Input	No	Yes					143	
Y	Anti-Lock Brake System (ABS) Input	Yes	Yes	121	121	121	121	121	121
AA	Service Break Status Input	Yes	Yes	162		162	162	162	162
AH	Accelerator Pedal Kickdown Input	Yes	Yes					122	
AM	Reverse Inhibit w/ Preselect Request Interface Input	No	Yes						
AR	Overdrive Disable Interface Input	Yes	Yes	161	161	161	161	161	161
AS	Neutral at Stop Input	No	Yes		143				
BQ	Pump Mode Input (3rd Lockup)	No	No						
BS	Grade Braking/Regeneration Input	No	Yes			102			102
CA	Auto Neutral - Brake-Based (BBAN) Input for PTO	No	Yes						
CB1	Preselect Request 1 Input	Yes	Yes	122	122		122		
CC	High N/v Ratio Input	No	Yes						
CD	Automatic Neutral - Single Input w/ Selector Override	Yes	Yes						
CN	Automatic Neutral - Dual Input w/ Auto Return-to-Range	No	Yes					123	
CR	PTO Drive Interface - Synchronized PTO Input	No	Yes						
CS	Run/Crank Input	Yes	No						123
Output Functions		Default Enabled	Comm Avail?	Vocation Package Number					
				354	374	371	380	381	389
A	Engine Brake Interface Output	No	Yes	104	104	104		104	
B	Sump/Retarder Temperature Indicator	Yes	Yes	164	164	164	164	164	164
C	Range Indicator	Yes	No	145	145	145	145	145	145
D	Output Speed Indicator A	Yes	No	105	105	105	105	105	105
G1	PTO Drive Interface 1 Output	Yes	Yes	150	150	150	150		150
G2	PTO Drive Interface 2 Output	No	Yes				104		
O	Transmission Service Indicator	Yes	Yes	113	113	113	113	113	113
S	Neutral Indicator for PTO & PTO Request (NIPTO)	Yes	No						
X	Overdrive Disable Interface Output	Yes	No						104
AD	Range Inhibited Indicator	Yes	Yes	124	124	124	124	124	124
AN	PTO Drive Interface - Synchronized PTO Output	Yes	No						

Allison Transmission Highway Series™

3000/4000 Series Input/Output Functions™

Input Functions		Default Enabled	Comm Avail?	Vocation Package Number					
				On-Highway Vehicles					
				223	226	235	247	263	268
A	Secondary Mode Input	Yes	Yes	M	M	142	142	M	M
C1	PTO Drive Interface 1 Input	Yes	Yes	143		M	143	143	143
C2	PTO Drive Interface 2 Input	No	Yes					102	
D	Shift Selector Transition Input	No	Yes						
E	Auxiliary Function Range Inhibit - Single Input	No	Yes	101	101	101	101	101	101
F	Auxiliary Function Range Inhibit - Dual Input	Yes	No						
G	Auxiliary Hold Input	Yes	No	142	142		M	142	142
H	Engine Brake Interface Input (Standard)	No	Yes	102/157	102/157	102/157	102/157		
I	Engine Brake Interface Input (Special)	No	Yes						
J	Fire Truck Pump Mode Input	No	Yes						
K	Quick-to-Neutral Input	No	No						
L	Automatic Neutral - Single Input	No	Yes	117	117	117	117	117	117
Q	Two Speed Axle Interface Input	Yes	Yes						
R	Manual Lockup Control Input	No	No						
V	Reverse Enable Input	No	Yes						
W	Direction Change Enable Input	No	Yes	122	122	143		122	122
Y	Anti-Lock Brake System (ABS) Input	Yes	Yes	121	121	121	121	121	121
Z	Retarder Interface Input	Yes	Yes	161	161	161	161	161	161
AA	Service Brake Status Input	Yes	Yes	162	162	162	162	162	162
AG	Automatic Neutral - Dual Input	Yes	Yes						
AH	Accelerator Pedal Kickdown Input	Yes	Yes			122	122		
AI	Aux Function Range Inhibit - Single Input (Specialty)	No	Yes						
AJ	Pump Mode Input	No	Yes						
AK	Automatic Neutral - Dual Input w/ Service Brake Status	Yes	Yes						
AL	Shift Selector Transition & Secondary Shift Schedule	Yes	No						
AM	Reverse Inhibit with Preselect Request Interface Input	No	Yes						
AQ	Shift Selector Display Blanking Input	Yes	No						
AS	Neutral at Stop Input	No	Yes	123	123	123	123	123	123
AW	2nd Reverse Input	No	No	179				179	179
BD	Automatic 2-1 Preselect Input (4000 7-speed only)	Yes	No						
BS	Grade Braking/Regeneration Input	No	Yes						102
BY	Aux Box Transition Input	Yes	Yes						
BZ	Shift Selector Transition & Oil Field Pumping Input	Yes	No						
CA	Automatic Neutral - Brake-Based (BBAN) Input for PTO	No	Yes						
CB1	Preselect Request 1 Input	Yes	Yes						
CB2	Preselect Request 2 Input	Yes	Yes						
CC	High N/v Ratio Input	No	Yes						
CD	Automatic Neutral - Single Input wth Selector Override	Yes	Yes						
CE	Direct Hold Input	No	Yes						
CF	Automatic Neutral - Idle Start/Stop Input	Yes	No						
CH	Automatic Neutral - Single Input, Inverted	No	Yes						
CN	Automatic Neutral - Dual Input w/ Auto Return-to-Range	No	Yes						
CV	Shift Selector - Multiple Transmission Control	No	Yes						

Output Functions		Default Enabled	Comm Avail?	Vocation Package Number					
				On-Highway Vehicles					
				223	226	235	247	263	268
A	Engine Brake Interface Output	No	Yes	104	104	104	104		
B	Sump/Retarder Temperature Indicator	Yes	Yes	164	164	164	164	164	164
C	Range Indicator ¹	Yes	No	145	145	145	145	145	145
D	Output Speed Indicator A	Yes	No	105	105	105	105	105	105
G1	PTO Drive Interface 1 Output	Yes	Yes	130		130	130	130	130
G2	PTO Drive Interface 2 Output	No	Yes					104	
I	Engine Overspeed Indicator	Yes	No		130				
J	Two Speed Axle Interface Output	Yes	Yes						
K	Lockup Indicator	Yes	Yes						
N	Secondary Mode Indicator	Yes	Yes	113	113	113		113	113
O	Transmission Service Indicator	Yes	Yes						
Q	Retarder Interface Output	Yes	Yes	124	124	124	124	124	124
S	Neutral Indicator for PTO and PTO Request (NIPTO)	Yes	No						
AJ	Output Speed Indicator At, Inverted	Yes	No						

¹ - 6th Generation Controls and newer default is always Neutral/Park

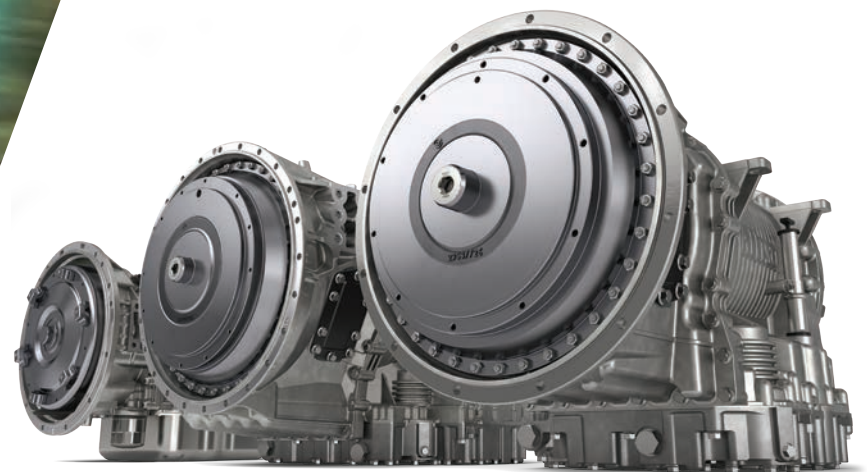


Motorhome Series™ + Truck RV Series™



Powering Your Next Adventure

For decades, Allison has provided RV and motorhome owners with proven reliability and durability, impressive fuel efficiency and a smooth ride. Our propulsion solutions deliver more power and control to the wheels while optimizing engine power. Whatever your travel plans, there's an Allison to help you reach your destination.



Allison Transmission Motorhome Series™ Ratings

Model	Ratio	Park Pawl	Gross Input Power	Gross Input Torque	Net Turbine Torque	Gross Input Power	Gross Input Torque	Net Turbine Torque	Max GVW	Max GCW
			With Torque Management			Without Torque Management				
			hp (kW)	lb-ft (N•m)	lb-ft (N•m)	hp (kW)	lb-ft (N•m)	lb-ft (N•m)	lbs (kg)	lbs (kg)
1000 MH¹	Close	Yes	340² (254)²	660² (895)²	950 (1,288)	300 (224)	575 (780)	850 (1,152)	22,000 (10,000)	26,000 (11,800)
1350 MH¹	Close	Yes	340² (254)²	660² (895)²	950 (1,288)	300 (224)	575 (780)	850 (1,152)	22,000 (10,000)	30,000 (13,600)
1700 MH⁴	Close	Yes	350 (261)	700⁴ (950)⁴	950 (1,288)	-	-	-	19,500 (8,845)	26,000 (11,800)
1750 MH⁴	Close	Yes	350 (261)	700⁴ (950)⁴	950 (1,288)	-	-	-	19,500 (8,845)	37,500 (17,010)
2100 MH¹	Close	No	340².⁵ (254)².⁵	660³ (895)³	950 (1,288)	300 (224)	575 (780)	850 (1,152)	26,000 (11,800)	30,000 (13,600)
2200 MH¹	Close	Yes	340².⁵ (254)².⁵	660³ (895)³	950 (1,288)	300 (224)	575 (780)	850 (1,152)	26,000 (11,800)	26,000 (11,800)
2350 MH¹	Close	Yes	340².⁵ (254)².⁵	660³ (895)³	950 (1,288)	300 (224)	575 (780)	850 (1,152)	30,000 (13,600)	30,000 (13,600)
2500 MH¹	Wide	No	340².⁵ (254)².⁵	660³ (895)³	950 (1,288)	300 (224)	575 (780)	850 (1,152)	33,000 (15,000)	33,000 (15,000)
2550 MH¹	Wide	Yes	340².⁵ (254)².⁵	660³ (895)³	950 (1,288)	300 (224)	575 (780)	850 (1,152)	30,000 (13,600)	30,000 (13,600)
2700 MH⁴	Close	Yes	350 (261)	700⁴ (950)⁴	950 (1,288)	-	-	-	23,500 (10,660)	26,000 (11,800)
2750 MH⁴	Close	Yes	350 (261)	700⁴ (950)⁴	950 (1,288)	-	-	-	23,500 (10,660)	37,500 (17,010)
3000 MH	Close	No	-	-	-	450 (336)	1,250 (1,695)	1,700 (2,305)	-	-
4000 MH	Close	No	-	-	-	650 (485)	1,950 (2,644)	2,800 (3,795)	-	-

1 - Available with xFE 2 - Check with your OEM to ensure offerings 3 - Available in gears three through five 4 - Available in the Chevrolet Silverado 4500HD/ 5500HD/ 6500HD + Navistar CV Series 5 - xFE models are limited to an input torque of 660 lbft

Typical Vehicle Applications¹

Type A and Bus Conversion Motorhomes (Class 5-8), Type C Motorhomes (Class 4-5), Motorhomes, Entertainer Travel Coaches



1000 MH | 1350 MH
1700 MH | 1750 MH
2100 MH | 2200 MH
2350 MH | 2500 MH
2550 MH | 2700 MH
2750 MH



3000 MH



4000 MH

1 - Class 6-8 Type C Motorhomes require a Truck RV Series™ transmission.

Allison Transmission Motorhome Series™

1000/2000 Series Input/Output Functions™

Input Functions		Default Enabled	Comm Avail?	Vocation Package Number						
				354	369	371	374	379	380	381
A	Secondary Mode Input	Yes	Yes	142	142	142	142	142	142	142
C1	PTO Drive Interface 1 Input	Yes	Yes	143	143	143	162	162	143	
C2	PTO Drive Interface 2 Input	No	Yes						102	
E	Auxiliary Function Range Inhibit - Single Input	No	Yes	101	101	101	101	101	101	101
H	Engine Brake Interface Input (Standard)	No	Yes	102	102		102	102		
I	Engine Brake Interface Input (Special)	No	Yes							102
L	Automatic Neutral - Single Input	No	Yes	123	123	123	123	123	123	
V	Reverse Enable Input	No	Yes							143
Y	Anti-Lock Brake System (ABS) Input	Yes	Yes	121	121	121	121	121	121	121
AA	Service Break Status Input	Yes	Yes	162	162	162			162	162
AH	Accelerator Pedal Kickdown Input	Yes	Yes							122
AM	Reverse Inhibit w/ Preselect Request Interface Input	No	Yes							
AR	Overdrive Disable Interface Input	Yes	Yes	161	161	161	161	161	161	161
AS	Neutral at Stop Input	No	Yes				143	143		
BQ	Pump Mode Input (3rd Lockup)	No	No							
BS	Grade Braking/Regeneration Input	No	Yes			102				
CA	Auto Neutral - Brake-Based (BBAN) Input for PTO	No	Yes		122			122		
CB1	Preselect Request 1 Input	Yes	Yes	122			122		122	
CC	High N/v Ratio Input	No	Yes							
CD	Automatic Neutral - Single Input w/ Selector Override	Yes	Yes							
CN	Automatic Neutral - Dual Input w/ Auto Return-to-Range	No	Yes							123
CR	PTO Drive Interface - Synchronized PTO Input	No	Yes							
CS	Run/Crank Input	Yes	No							
Output Functions		Default Enabled	Comm Avail?	Vocation Package Number						
				354	369	371	374	379	380	381
A	Engine Brake Interface Output	No	Yes	104	104	104	104	104		104
B	Sump/Retarder Temperature Indicator	Yes	Yes	164	164	164	164	164	164	164
C	Range Indicator	Yes	No	145	145	145	145	145	145	145
D	Output Speed Indicator A	Yes	No	105	105	105	105	105	105	105
G1	PTO Drive Interface 1 Output	Yes	Yes	150	150	150	150	150	150	
G2	PTO Drive Interface 2 Output	No	Yes						104	
O	Transmission Service Indicator	Yes	Yes	113	113	113	113	113	113	113
S	Neutral Indicator for PTO & PTO Request (NIPTO)	Yes	No							
X	Overdrive Disable Interface Output	Yes	No							
AD	Range Inhibited Indicator	Yes	Yes	124	124	124	124	124	124	124
AN	PTO Drive Interface - Synchronized PTO Output	Yes	No							

Allison Transmission Motorhome Series™

3000/4000 Series Input/Output Functions™

Input Functions		Default Enabled	Comm Avail?	Vocation Package Number			
				223	226	263	268
A	Secondary Mode Input	Yes	Yes	M	M	M	M
C1	PTO Drive Interface 1 Input	Yes	Yes	143		143	143
C2	PTO Drive Interface 2 Input	No	Yes			102	
D	Shift Selector Transition Input	No	Yes				
E	Auxiliary Function Range Inhibit - Single Input	No	Yes	101	101	101	101
F	Auxiliary Function Range Inhibit - Dual Input	Yes	No				
G	Auxiliary Hold Input	Yes	No	142	142	142	142
H	Engine Brake Interface Input (Standard)	No	Yes	102/157	102/157		
I	Engine Brake Interface Input (Special)	No	Yes				
J	Fire Truck Pump Mode Input	No	Yes				
K	Quick-to-Neutral Input	No	No				
L	Automatic Neutral - Single Input	No	Yes	117	117	117	117
Q	Two Speed Axle Interface Input	Yes	Yes				
R	Manual Lockup Control Input	No	No				
V	Reverse Enable Input	No	Yes				
W	Direction Change Enable Input	No	Yes	122	122	122	122
Y	Anti-Lock Brake System (ABS) Input	Yes	Yes	121	121	121	121
Z	Retarder Interface Input	Yes	Yes	161	161	161	161
AA	Service Brake Status Input	Yes	Yes	162	162	162	162
AG	Automatic Neutral - Dual Input	Yes	Yes				
AH	Accelerator Pedal Kickdown Input	Yes	Yes				
AI	Aux Function Range Inhibit - Single Input (Specialty)	No	Yes				
AJ	Pump Mode Input	No	Yes				
AK	Automatic Neutral - Dual Input w/ Service Brake Status	Yes	Yes				
AL	Shift Selector Transition & Secondary Shift Schedule	Yes	No				
AM	Reverse Inhibit with Preselect Request Interface Input	No	Yes				
AQ	Shift Selector Display Blanking Input	Yes	No				
AS	Neutral at Stop Input	No	Yes	123	123	123	123
AW	2nd Reverse Input	No	No	179		179	179
BD	Automatic 2-1 Preselect Input (4000 7-speed only)	Yes	Yes				
BS	Grade Braking/Regeneration Input	No	No				102
BY	Aux Box Transition Input	Yes	Yes				
BZ	Shift Selector Transition & Oil Field Pumping Input	Yes	No				
CA	Automatic Neutral - Brake-Based (BBAN) Input for PTO	No	Yes				
CB1	Preselect Request 1 Input	Yes	Yes				
CB2	Preselect Request 2 Input	Yes	Yes				
CC	High N/v Ratio Input	No	Yes				
CD	Automatic Neutral - Single Input wth Selector Override	Yes	Yes				
CE	Direct Hold Input	No	Yes				
CF	Automatic Neutral - Idle Start/Stop Input	Yes	No				
CH	Automatic Neutral - Single Input, Inverted	No	Yes				
CN	Automatic Neutral - Dual Input w/ Auto Return-to-Range	No	Yes				
CV	Shift Selector - Multiple Transmission Control	No	Yes				

Output Functions		Default Enabled	Comm Avail?	Vocation Package Number			
				223	226	263	268
A	Engine Brake Interface Output	No	Yes	104	104		
B	Sump/Retarder Temperature Indicator	Yes	Yes	164	164	164	164
C	Range Indicator	Yes	No	145	145	145	145
D	Output Speed Indicator A	Yes	No	105	105	105	105
G1	PTO Drive Interface 1 Output	Yes	Yes	130		130	130
G2	PTO Drive Interface 2 Output	No	Yes			104	
I	Engine Overspeed Indicator	Yes	No		130		
J	Two Speed Axle Interface Output	Yes	Yes				
K	Lockup Indicator	Yes	Yes				
N	Secondary Mode Indicator	Yes	Yes	113	113	113	113
O	Transmission Service Indicator	Yes	Yes				
Q	Retarder Interface Output	Yes	Yes	124	124	124	124
S	Neutral Indicator for PTO and PTO Request (NIPTO)	Yes	No				
AJ	Output Speed Indicator At, Inverted	Yes	No				



Allison Transmission Truck RV Series™ Ratings

Model	Ratio	Park Pawl	Gross Input Power	Gross Input Torque	Net Turbine Torque	Gross Input Power	Gross Input Torque	Net Turbine Torque	Max GVW	Max GCW
			With Torque Management			Without Torque Management				
			hp (kW)	lb-ft (N•m)	lb-ft (N•m)	hp (kW)	lb-ft (N•m)	lb-ft (N•m)	lbs (kg)	lbs (kg)
3000 TRV	Close	No	-	-	-	310 (231)	950 (1,288)	1,700 (2,305)	-	40,000 (18,144)
3200 TRV	Close	No	450 (336)	1,250 (1,695)	1,700 (2,305)	450 (336)	1,200 (1,627)	1,700 (2,305)	-	-
4000 TRV	Close	No	-	-	-	605 (451)	1,850 (2,508)	2,800 (3,795)	52,000 (23,587)	72,000 (32,659)

Typical Vehicle Applications

Truck-Based Recreational Vehicles, Class 6-8 Type C Motorhomes



Allison Transmission Truck RV Series™

3000/4000 Series Input/Output Functions

Input Functions		Default Enabled	Comm Avail?	Vocation Package Number			
				223	226	263	268
A	Secondary Mode Input	Yes	Yes	M	M	M	M
C1	PTO Drive Interface 1 Input	Yes	Yes	143		143	143
C2	PTO Drive Interface 2 Input	No	Yes			102	
D	Shift Selector Transition Input	No	Yes				
E	Auxiliary Function Range Inhibit - Single Input	No	Yes	101	101	101	101
F	Auxiliary Function Range Inhibit - Dual Input	Yes	No				
G	Auxiliary Hold Input	Yes	No	142	142	142	142
H	Engine Brake Interface Input (Standard)	No	Yes	102/157	102/157		
I	Engine Brake Interface Input (Special)	No	Yes				
J	Fire Truck Pump Mode Input	No	Yes				
K	Quick-to-Neutral Input	No	No				
L	Automatic Neutral - Single Input	No	Yes	117	117	117	117
Q	Two Speed Axle Interface Input	Yes	Yes				
R	Manual Lockup Control Input	No	No				
V	Reverse Enable Input	No	Yes				
W	Direction Change Enable Input	No	Yes	122	122	122	122
Y	Anti-Lock Brake System (ABS) Input	Yes	Yes	121	121	121	121
Z	Retarder Interface Input	Yes	Yes	161	161	161	161
AA	Service Brake Status Input	Yes	Yes	162	162	162	162
AG	Automatic Neutral - Dual Input	Yes	Yes				
AH	Accelerator Pedal Kickdown Input	Yes	Yes				
AI	Aux Function Range Inhibit - Single Input (Specialty)	No	Yes				
AJ	Pump Mode Input	No	Yes				
AK	Automatic Neutral - Dual Input w/ Service Brake Status	Yes	Yes				
AL	Shift Selector Transition & Secondary Shift Schedule	Yes	No				
AM	Reverse Inhibit with Preselect Request Interface Input	No	Yes				
AQ	Shift Selector Display Blanking Input	Yes	No				
AS	Neutral at Stop Input	No	Yes	123	123	123	123
AW	2nd Reverse Input	No	No	179		179	179
BD	Automatic 2-1 Preselect Input (4000 7-speed only)	Yes	No				
BS	Grade Braking/Regeneration Input	No	Yes				102
BY	Aux Box Transition Input	Yes	Yes				
BZ	Shift Selector Transition & Oil Field Pumping Input	Yes	No				
CA	Automatic Neutral - Brake-Based (BBAN) Input for PTO	No	Yes				
CB1	Preselect Request 1 Input	Yes	Yes				
CB2	Preselect Request 2 Input	Yes	Yes				
CC	High N/v Ratio Input	No	Yes				
CD	Automatic Neutral - Single Input with Selector Override	Yes	Yes				
CE	Direct Hold Input	No	Yes				
CF	Automatic Neutral - Idle Start/Stop Input	Yes	No				
CH	Automatic Neutral - Single Input, Inverted	No	Yes				
CN	Automatic Neutral - Dual Input w/ Auto Return-to-Range	No	Yes				
CV	Shift Selector - Multiple Transmission Control	No	Yes				

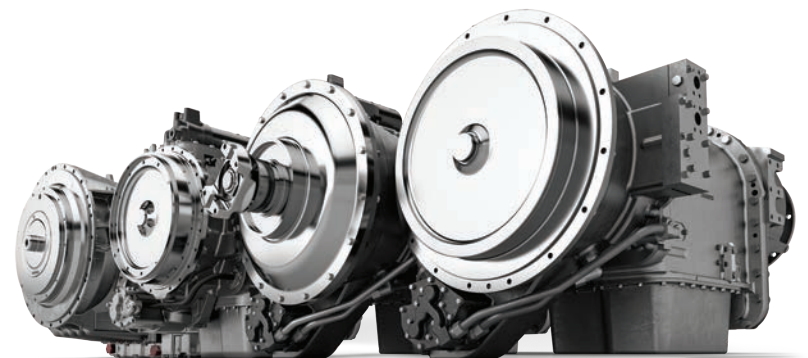
Output Functions		Default Enabled	Comm Avail?	Vocation Package Number			
				223	226	263	268
A	Engine Brake Interface Output	No	Yes	104	104		
B	Sump/Retarder Temperature Indicator	Yes	Yes	164	164	164	164
C	Range Indicator	Yes	No	145	145	145	145
D	Output Speed Indicator A	Yes	No	105	105	105	105
G1	PTO Drive Interface 1 Output	Yes	Yes	130		130	130
G2	PTO Drive Interface 2 Output	No	Yes			104	
I	Engine Overspeed Indicator	Yes	No		130		
J	Two Speed Axle Interface Output	Yes	Yes				
K	Lockup Indicator	Yes	Yes				
N	Secondary Mode Indicator	Yes	Yes	113	113	113	113
O	Transmission Service Indicator	Yes	Yes				
Q	Retarder Interface Output	Yes	Yes	124	124	124	124
S	Neutral Indicator for PTO and PTO Request (NIPTO)	Yes	No				
AJ	Output Speed Indicator At, Inverted	Yes	No				

1 - 6th Generation Controls and newer default is always Neutral/Park

Oil Field Series™

Get Maximum Results in the Field

Allison Transmission is an industry leader in designing, engineering and manufacturing fully automatic transmissions for the energy sector. In oil and gas fields all over the world, our rugged and reliable transmissions are working to make your operations more productive—even in the harshest conditions.



Allison Transmission Oil Field Series™ Ratings

Model	Ratio	Park Pawl	Gross Input Power	Gross Input Torque	Net Turbine Torque	Gross Input Power	Gross Input Torque	Net Turbine Torque	Max GVW	Max GCW
			With Torque Management			Without Torque Management				
			hp (kW)	lb-ft (N•m)	lb-ft (N•m)	hp (kW)	lb-ft (N•m)	lb-ft (N•m)	lbs (kg)	lbs (kg)
3500 OFS	Wide	No	330 (246)	985 ² (1,335) ²	1,450 (1,966)	330 (246)	860 (1,166)	1,450 (1,966)	-	-
4430 OFS	Wide	No	-	-	-	425 (317)	1,217 (1,650)	2,600 (3,525)	-	-
4500 OFS	Wide	No	-	-	-	580 (433)	1,650 (2,237)	2,600 (3,525)	-	-
4700 OFS	Deep	No	-	-	-	605 (451)	1,850 (2,508)	2,600 (3,525)	-	-
4750 OFS	Deep	No	-	-	-	665 (496)	1,950 (2,644)	3,000 (4,067)	-	-
4800 OFS	Deep	No	675 (503)	2,250 ³ (3,050) ³	2,800 (3,796)	675 (503)	2,213 (3,000)	2,800 (3,796)	-	-
4870 OFS	Wide	No	675 (503)	2,250 ³ (3,050) ³	2,800 (3,796)	675 (503)	2,213 (3,000)	2,550 (3,457)	-	-
6620 OFS - General	-	No	-	-	-	760 (567)	2,500 (3,390)	3,790 (5,139)	-	-
6620 OFS - Stationary Pump/Dual Mode	-	No	-	-	-	900 (671)	2,750 (3,729)	4,000 (5,423)	-	-
6625 OFS - General	-	No	-	-	-	760 (567)	2,500 (3,390)	3,790 (5,139)	-	-
6625 OFS - Stationary Pump/Dual Mode	-	No	-	-	-	900 (671)	2,750 (3,729)	4,000 (5,423)	-	-
8610 OFS	-	No	-	-	-	1,200 (895)	3,600 (4,881)	5,966 (8,089)	-	-
9832 OFSD	-	No	-	-	-	1,750 (1,305)	5,250 (7,118)	7,000 (9,491)	-	-
9832 OFS	-	No	-	-	-	2,600 (1,939)	7,750 (10,507)	8,000 (10,847)	-	-
9832 OFSi	-	No	-	-	-	3,200 (2,386)	9,000 (12,200)	9,400 (12,745)	-	-

1 - Straight-thru and Dropbox models 2 - Available in gears three through six 3 - Available in gears four through seven

Typical Vehicle Applications

Drilling, Cementing, Fracturing, Hoisting, Pumping



3500 OFS



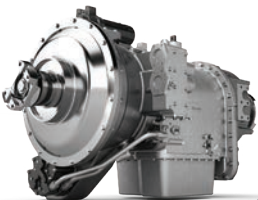
4430 OFS
4500 OFS
4700 OFS
4750 OFS



5620 OFS



6620 OFS
6625 OFS



8610 OFS



9610 OFS



9832 OFSD
9832 OFS
9832 OFSi

Allison Transmission Oil Field Series™

3000/4000 Series Input/Output Functions

				Vocation Package Number													
Input Functions		Default Enabled	Comm Avail?	Skid-Mounted Pump			Dual Mode										
				192	209	270	193	243	248	251	258	259	260	261	276	277	278
A	Secondary Mode Input	Yes	Yes	*	*	*											
C1	PTO Drive Interface 1 Input	Yes	Yes					143	102			143	102				
C2	PTO Drive Interface 2 Input	No	Yes														
D	Shift Selector Transition Input	No	No	142	142	142											
E	Auxiliary Function Range Inhibit - Single Input	No	Yes	101	101	101	101	101	101	101	101	101	101	101	101	101	101
F	Auxiliary Function Range Inhibit - Dual Input	Yes	No														
G	Auxiliary Hold Input	Yes	No														
H	Engine Brake Interface Input (Standard)	No	Yes				102/157				102/157						102/157
I	Engine Brake Interface Input (Special)	No	Yes														
J	Fire Truck Pump Mode Input (4th Lock up)	No	No														
K	Quick-to-Neutral Input	No	No	143	143	143	143	102	143	143	143	102	143	143	143	143	143
L	Automatic Neutral - Single Input	No	Yes														
Q	Two Speed Axle Interface Input	Yes	Yes														
R	Manual Lock up Control Input	No	No	161/179	161/179	161/179	123/179	123/179	123/179	123/179	123/179	123/179	123/179	123/179	123/179	123/179	123/179
V	Reverse Enable Input	No	Yes	122	122		122	122	122	122					122		
W	Direction Change Enable Input	No	Yes														
Y	Anti-Lock Brake System (ABS) Input	Yes	Yes				121	121	121	121	121	121	121	121	121	121	121
Z	Retarder Interface Input	Yes	Yes				161	161	161	161	161	161	161	161	161	161	161
AA	Service Brake Status Input	Yes	Yes				162	162	162	162	162	162	162	162	162	162	162
AF	Differential Clutch Interface Input (3700 Only)	Yes															
AG	Automatic Neutral - Dual Input	Yes	No														
AH	Accelerator Pedal Kickdown Input	Yes	Yes														
AI	Aux Function Range Inhibit - Single Input (Specialty)	No	Yes														
AJ	Pump Mode Input (4th Lock up)	No	No														
AK	Automatic Neutral - Dual Input w/ Service Brake Status	Yes	No														
AL	Shift Selector Transition & Secondary Shift Schedule	Yes	No														
AM	Reverse Inhibit with Preselect Request Interface Input	No	Yes														
AQ	Shift Selector Display Blanking Input	Yes	No	102		102				102				102			
AS	Neutral at Stop Input	No	Yes														
AW	2nd Reverse Input	No	No														
BD	Automatic 2-1 Preselect Input (4000 7-speed only)	Yes	No	M			M	M	M	M					M		M
BS	Grade Braking/Regeneration Input	No	Yes														
BY	Aux Box Transition Input	Yes	No	117	117	117	117	117	117	117	117	117	117	117	117	117	117
BZ	Shift Selector Transition & Oil Field Pumping Input	Yes	No				142	142	142	142	142	142	142	142	142	142	142
CA	Automatic Neutral - Brake-Based (BBAN) Input for PTO	No	No														
CB1	Preselect Request 1 Input	Yes	No			M					M	M	M	M		M	
CB2	Preselect Request 2 Input	Yes	No			122					122	122	122	122		122	
CC	High N/V Ratio Input	No	Yes														
CD	Automatic Neutral - Single Input w/ Selector Override	Yes	Yes					157	157	157		157	157	157	157	157	
CE	Direct Hold Input	No	No		M												
CF	Automatic Neutral - Idle Start/Stop Input	Yes	No														
CH	Automatic Neutral - Single Input, Inverted	No	Yes														
CN	Automatic Neutral - Dual Input w/ Auto Return-to-Range	No	Yes														
CV	Shift Selector - Multiple Transmission Control	No	Yes									102	102	122			

* No primary mode. Calibration forces skid-mounted pump to secondary mode.

				Vocation Package Number													
Output Functions		Default Enabled	Comm Avail?	Skid-Mounted Pump			Dual Mode										
				192	209	270	193	243	248	251	258	259	260	261	276	277	278
A	Engine Brake Interface Output	No	Yes				104				104						104
B	Sump/Retarder Temperature Indicator	Yes	Yes	164	164	164	164	164	164	164	164	164	164	164	164	164	164
C	Range Indicator ¹	Yes	No	145	145	145	145	145	145	145	145	145	145	145	145	145	145
D	Output Speed Indicator A	Yes	No	124	124	124											
G1	PTO Drive Interface 1 Output	Yes	Yes					130	130			130	130				
G2	PTO Drive Interface 2 Output	No	Yes														
I	Engine Overspeed Indicator	Yes	No														
J	Two Speed Axle Interface Output	Yes	Yes														
K	Lock up Indicator	Yes	Yes	105	105	105	105	105	105	105	105	105	105	105	105	105	105
N	Secondary Mode Indicator	Yes	Yes	113	113	113	113	113	113	113	113	113	113	113	113	113	113
O	Transmission Service Indicator	Yes	Yes														
Q	Retarder Interface Output	Yes	Yes				124	124	124	124	124	124	124	124	124	124	124
R	Differential Clutch Interface Indicator (3700 only)	Yes															
S	Neutral Indicator for PTO and PTO Request (NIPTO)	Yes	No														
AJ	Output Speed Indicator At, Inverted	Yes	No														



Allison Transmission Oil Field Series™

5000/9000 Series Input/Output Functions

Input Functions		Vocation Package Number						
		Mobile/Dual Mode			Stationary			
		401	402	403	411	412	421	930*
A	Secondary Mode Input	Mode	162	162	Mode	162		
B	D-1 Selection	162	Mode		162	Mode	Mode	
D	Shift Selector Transition Input			102	102	102	142	142
E	Auxiliary Function Range Inhibit - Single Input (Inverted)	161	161	161	161	161	101	
G	Auxiliary Hold Input	101	101	101			117	
K	Quick-to-Neutral Input (Inverted)				123		143	143
Q	Two Speed Axle Interface Input							
R1	Manual Lockup Control Input				117	117	179	179
R2	Manual Lockup Control Input (Enable)							161
Y	Anti-Lock Brake System (ABS) Input	121	121	121				
Z	Retarder Interface Input	123	123	123				
AM	Reverse Inhibit with Preselect Request Interface Input (Inverted)							
AQ	Shift Selector Display Blanking	157	157					
AW	2nd Reverse Input							
AX	Manual Mode			143		143		
AZ	Lock up Disable Request	122	122	122	122	122	161	
BC	Shift Selector Transition and Manual Mode	143	143					
BE	Engine Speed/Torque Control Input 1	142	142	142	142			
CE	Direct Hold	102	102					
CG	Engine Speed/Torque Control Input 2	117	117	117				
CI	Quick-to-Neutral Input					123		
CK1	Pressure Test Mode				157	157	157	157
CK2	Pressure Test Mode (Low Flow)							
CO	Shift Schedule 2	179	179	179	179	179		
CQ	Manual Mode (Inverted)				143		123	123
CT1	Output Break Input 1							162
CT2	Output Break Input 2							117
CU	Rapid Warmup Mode Input							121
Output Functions		Vocation Package Number						
		Mobile/Dual Mode			Stationary			
		401	402	403	411	412	421	930*
B	Sump/Retarder Temperature Indicator							
C	Range Indicator	145	145	145	145	145	145	145
D	Output Speed Indicator A						124	124
E	Output Speed Indicator B	105	105	105				
I	Engine Overspeed Indicator							
J	Two Speed Axle Interface Output							
K	Lock up Indicator	104	104	104	104	104	105	105
N	Secondary Mode Indicator	150	150	150	150	150	113	113
Q	Retarder Interface Output	124	124	124				
V	Manual Model Indicator	130	130	130	130	130	130	130
W	Neutral to Range Brake	164	164	164	164	164	164	
Z	Engine Speed/Torque Control Indicator	113	113	113	113	113		
AD	Range Inhibit Indicator							
AL	Transmission Filter Restriction Indicator				105	105	104	104
AO	Shift Schedule 2 Indicator							

* - OFS 9832 Only

Off Road Series™



Productivity That Can Move Mountains

With more than 65 years of transporting coal, precious metals, aggregate and other applications around the world, Allison fully automatic transmissions have proven themselves in some of the most challenging conditions and steepest grades.



Allison Transmission Off Road Series™ Ratings

Model	Ratio	Park Pawl	Gross Input Power	Gross Input Torque	Net Turbine Torque	Gross Input Power	Gross Input Torque	Net Turbine Torque	Max GVW	Max GCW
			With Torque Management			Without Torque Management				
			hp (kW)	lb-ft (N•m)	lb-ft (N•m)	hp (kW)	lb-ft (N•m)	lb-ft (N•m)	lbs (kg)	lbs (kg)
3000 ORS - Articulated/Rigid Rear Dump	Close	No	-	-	-	250 (186)	664 (900)	1,575 (2,135)	98,100 (44,500)	-
3200 ORS - Articulated/Rigid Rear Dump	Close	No	-	-	-	300 (224)	811 (1,100)	1,575 (2,135)	98,100 (44,500)	-
3500 ORS - Articulated/Rigid Rear Dump	Wide	No	-	-	-	330 (246)	811 (1,100)	1,420 (1,925)	98,100 (44,500)	-
4000 ORS - Articulated Dump	Close	No	-	-	-	480 (358)	1,625 (2,203)	2,450 (3,322)	151,017 (68,500)	-
4000 ORS - Rigid Rear Dump	Close	No	-	-	-	480 (358)	1,550 (2,102)	2,450 (3,322)	125,663 (57,000)	-
4200 ORS - Articulated Dump	Close	No	-	-	-	480 (358)	1,700 (2,305)	2,450 (3,322)	178,574 (81,000)	-
4430 ORS - Articulated/Rigid Rear Dump	Wide	No	-	-	-	380 (283)	1,235 (1,675)	2,450 (3,322)	151,017 (68,500)	-
4500 ORS - Articulated Dump	Wide	No	480 (358)	1,625 ¹ (2,203) ¹	2,450 (3,322)	480 (358)	1,550 (2,102)	2,450 (3,322)	151,017 (68,500)	-
4500 ORS - Rigid Rear Dump	Wide	No	-	-	-	480 (358)	1,550 (2,102)	2,450 (3,322)	151,017 (68,500)	-
4600 ORS - Articulated/Rigid Rear Dump	Wide	No	480 (358)	1,700 ¹ (2,305) ¹	2,450 (3,322)	480 (358)	1,550 (2,102)	2,450 (3,322)	178,574 (81,000)	-
4700 ORS - Articulated Dump	Deep	No	-	-	-	500 (373)	1,700 (2,305)	2,450 (3,322)	178,574 (81,000)	-
4700 ORS - Mining/Off-Highway	Deep	No	-	-	-	580 (433)	1,770 (2,400)	2,600 (3,525)	138,000 (62,596)	-
4800 ORS - Articulated Dump/Rigid Rear Dump	Deep	No	-	-	-	605 (451)	1,850 (2,508)	2,600 (3,525)	211,644 (96,000)	-
4800 ORS - Mining/Off-Highway	Deep	No	605 (451)	1,850 ² (2,508) ²	2,600 (3,525)	-	-	-	138,000 (62,596)	-
6620 ORS - Hauling Applications	-	No	-	-	-	760 (567)	2,500 (3,390)	3,790 (5,139)	-	-
6625 ORS - Hauling Applications	-	No	-	-	-	760 (567)	2,500 (3,390)	3,790 (5,139)	-	-
8610 ORS - Hauling Applications	-	No	-	-	-	1,050 (783)	3,600 (4,881)	5,650 (7,660)	-	-
9610 ORS - Hauling Applications	-	No	-	-	-	1,350 (1,007)	4,000 (5,423)	6,000 (8,135)	-	-

1 - Available in gears three through six 2 - Available in gears four through seven

Typical Vehicle Applications¹

Articulated Dump, Rigid Dump, Rigid Rear Dump



3000 ORS
3200 ORS
3500 ORS



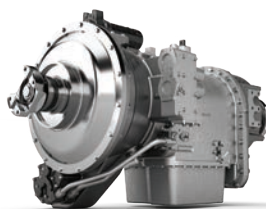
4000 ORS | 4200 ORS
4430 ORS | 4500 ORS
4600 ORS | 4700 ORS
4800 ORS



5620 ORS



6620 ORS
6625 ORS



8610 ORS



9610 ORS

¹ - Contact your Allison representative for other applications.

Allison Transmission Off Road Series™

3000/4000 Series Input/Output Functions

	Input Functions	Default Enabled	Comm Avail?	Vocation Package Number											
				Euro Refuse Truck	Premium Off-Highway										
				127	175	190	191	195	196	235	244	245	264	269	280
A	Secondary Mode Input	Yes	Yes	M	122	M	M	M	M	142	M	M	M	M	122
C1	PTO Drive Interface 1 Input	Yes	Yes	143	143	143	143	143	143	M	143	143	143	143	143
C2	PTO Drive Interface 2 Input	No	Yes										102		
D	Shift Selector Transition Input	No	Yes												
E	Auxiliary Function Range Inhibit - Single Input	No	Yes	101		101	101		101	101			101	101	
F	Auxiliary Function Range Inhibit - Dual Input	Yes	No												
G	Auxiliary Hold Input	Yes	No		117	142	142	117	142		117	117	142	142	117
H	Engine Brake Interface Input (Standard)	No	Yes		102/157	102/157	102/157	102/157	102/157	102/157	102/157	102/157		102/157	102/157
I	Engine Brake Interface Input (Special)	No	Yes	102/157											
J	Fire Truck Pump Mode Input	No	Yes												
K	Quick-to-Neutral Input	No	No												
L	Automatic Neutral - Single Input	No	Yes	117		117	117		117	117	122		117		
Q	Two Speed Axle Interface Input	Yes	Yes												
R	Manual Lockup Control Input	No	No												
V	Reverse Enable Input	No	Yes												
W	Direction Change Enable Input	No	Yes							143					
Y	Anti-Lock Brake System (ABS) Input	Yes	Yes	121	121	121	121	121	121	121	121	121	121	121	121
Z	Retarder Interface Input	Yes	Yes	161	161	161	161	161	161	161	161	161	161	161	161
AA	Service Brake Status Input	Yes	Yes	162	162	162	162	162	162	162	162	162	162	162	162
AF	Differential Clutch Interface Input (3700 Only)	Yes													
AG	Automatic Neutral - Dual Input	Yes	Yes		101/142			101/142							101/142
AH	Accelerator Pedal Kickdown Input	Yes	Yes	122						122					
AI	Aux Function Range Inhibit - Single Input (Specialty)	No	Yes												
AJ	Pump Mode Input	No	Yes											122/123	
AK	Automatic Neutral - Dual Input w/ Service Brake Status	Yes	Yes												
AL	Shift Selector Transition & Secondary Shift Schedule	Yes	No												
AM	Reverse Inhibit with Preselect Request Interface Input	No	Yes	123	123		123	123			123	123	123		179
AQ	Shift Selector Display Blanking Input	Yes	No												
AS	Neutral at Stop Input	No	Yes							123					123
AW	2nd Reverse Input	No	No								179	179			
BD	Automatic 2-1 Preselect Input (4000 7-speed only)	Yes	No												
BS	Grade Braking/Regeneration Input	No	Yes												
BY	Aux Box Transition Input	Yes	Yes												
BZ	Shift Selector Transition & Oil Field Pumping Input	Yes	No												
CA	Automatic Neutral - Brake-Based (BBAN) Input for PTO	No	Yes												
CB1	Preselect Request 1 Input	Yes	Yes												
CB2	Preselect Request 2 Input	Yes	Yes												
CC	High N/v Ratio Input	No	Yes												
CD	Automatic Neutral - Single Input wth Selector Override	Yes	Yes									122		117	
CE	Direct Hold Input	No	Yes												
CF	Automatic Neutral - Idle Start/Stop Input	Yes	No												
CH	Automatic Neutral - Single Input, Inverted	No	Yes												
CN	Automatic Neutral - Dual Input w/ Auto Return-to-Range	No	Yes												
CV	Shift Selector - Multiple Transmission Control	No	Yes				122								

				Vocation Package Number											
Input Functions		Default Enabled	Comm Avail?	Euro Refuse Truck	Premium Off-Highway										
				127	175	190	191	195	196	235	244	245	264	269	280
A	Engine Brake Interface Output	No	Yes	104	104	104	104	104	104	104	104	104		104	104
B	Sump/Retarder Temperature Indicator	Yes	Yes	164	164	164	164	164	164	164	164	164	164	164	164
C	Range Indicator ¹	Yes	No	113		113	113			145			113	145	
D	Output Speed Indicator A	Yes	No	105	105	105	105	105	105	105	105	105	105		105
G1	PTO Drive Interface 1 Output	Yes	Yes	130	130	130	130	130	130	130	130	130	130	130	130
G2	PTO Drive Interface 2 Output	No	Yes										104		
I	Engine Overspeed Indicator	Yes	No			145			145						
J	Two Speed Axle Interface Output	Yes	Yes												
K	Lock up Indicator	Yes	Yes						113					105	
N	Secondary Mode Indicator	Yes	Yes		113			113		113	113	113			113
O	Transmission Service Indicator	Yes	Yes												
Q	Retarder Interface Output	Yes	Yes	124	124	124	124	124	124	124	124	124	124	124	124
R	Differential Clutch Interface Indicator (3700 only)	Yes													
S	Neutral Indicator for PTO and PTO Request (NIPTO)	Yes	No	145	145		145	145			145	145	145		145
AJ	Output Speed Indicator A, Inverted	Yes	No												

1 - 6th Generation Controls and newer default is always Neutral/Park



Allison Transmission Off Road Series™

5000/9000 Series Input/Output Functions™

Input Functions		Vocation Package Number				
		Rear Dump				Bottom Dump
		101	102	103	922	201
A	Secondary Mode Input	Mode	162	162	162	Mode
B	D-1 Selection	162	Mode		Mode	162
D	Shift Selector Transition Input					
E	Auxiliary Function Range Inhibit - Single Input (Inverted)	161	161	161	161	161
G	Auxiliary Hold Input	101	101	Mode	101	101
K	Quick-to-Neutral Input (Inverted)					
Q	Two Speed Axle Interface Input					
R1	Manual Lockup Control Input					
R2	Manual Lockup Control Input (Enable)					
Y	Anti-Lock Brake System (ABS) Input					121
Z	Retarder Interface Input	123	123	123	123	123
AM	Reverse Inhibit with Preselect Request Interface Input (Inverted)	121	121	121	121	
AQ	Shift Selector Display Blanking					
AW	2nd Reverse Input	157	157	157	157	157
AX	Manual Mode	143	143	143	143	143
AZ	Lockup Disable Request	122	122	122	122	122
BC	Shift Selector Transition and Manual Mode					
BE	Engine Speed/Torque Control Input 1	142	142	142	142	142
CE	Direct Hold	102	102	102	102	102
CG	Engine Speed/Torque Control Input 2	117	117	117	117	117
CI	Quick-to-Neutral Input					
CK1	Pressure Test Mode					
CK2	Pressure Test Mode (Low Flow)					
CO	Shift Schedule 2	179	179	179	179	179
CQ	Manual Mode (Inverted)					
CT1	Output Break Input 1					
CT2	Output Break Input 2					
CU	Rapid Warmup Mode Input					

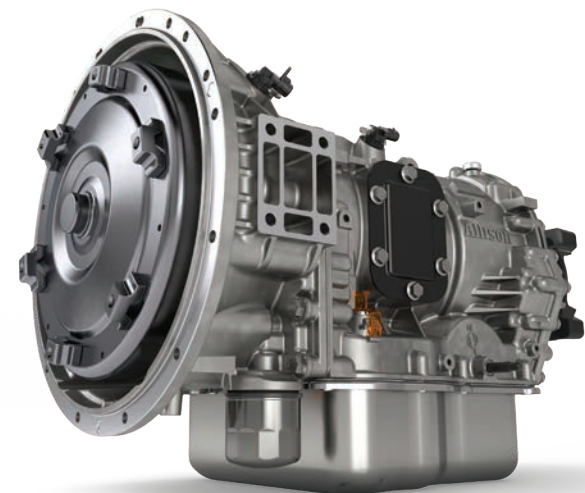
Output Functions		Vocation Package Number				
		Rear Dump				Bottom Dump
		101	102	103	922	201
B	Sump/Retarder Temperature Indicator					
C	Range Indicator	145	145	145	145	145
D	Output Speed Indicator A				113	
E	Output Speed Indicator B				105	
I	Engine Overspeed Indicator	130	130	130	130	130
J	Two Speed Axle Interface Output					
K	Lock up Indicator	104	104	104	104	104
N	Secondary Mode Indicator	150	150	150	150	150
Q	Retarder Interface Output	124	124	124	124	124
V	Manual Model Indicator					
W	Neutral to Range Brake	164	164	164	164	164
Z	Engine Speed/Torque Control Indicator	113	113	113		113
AD	Range Inhibit Indicator					
AL	Transmission Filter Restriction Indicator	105	105	105		105
AO	Shift Schedule 2 Indicator					

Pupil Transport/Shuttle Series™



When Your Cargo Is Precious

The choice is easy—trust an Allison to reliably get kids to and from school. Nearly all large school buses in the U.S. are equipped with an Allison, and thanks to superior reliability and durability, a growing number of school systems around the world rely on us.



Allison Transmission Pupil Transport/Shuttle Series™ Ratings

Model	Ratio	Park Pawl	Gross Input Power	Gross Input Torque	Net Turbine Torque	Gross Input Power	Gross Input Torque	Net Turbine Torque	Max GVW	Max GCW
			With Torque Management			Without Torque Management				
			hp (kW)	lb-ft (N•m)	lb-ft (N•m)	hp (kW)	lb-ft (N•m)	lb-ft (N•m)	lbs (kg)	lbs (kg)
1000 PTS¹ - School Bus	Close	Yes	300 (224)	660³ (895)³	950 (1,288)	300 (224)	550 (746)	850 (1,152)	19,500 (8,845)	26,000 (11,800)
1000 PTS¹ - Shuttle Bus	Close	Yes	300 (224)	565² (766)³	950 (1,288)	300 (224)	550 (746)	850 (1,152)	19,500 (8,845)	26,000 (11,800)
1350 PTS¹ - School Bus	Close	Yes	300 (224)	660³ (895)³	950 (1,288)	300 (224)	550 (746)	850 (1,152)	19,500 (8,845)	30,000 (13,600)
1350 PTS¹ - Shuttle Bus	Close	Yes	300 (224)	660³ (895)³	950 (1,288)	300 (224)	550 (746)	850 (1,152)	19,500 (8,845)	30,000 (13,600)
1700 PTS⁵	Close	Yes	350 (261)	700 (950)	950 (1,288)	-	-	-	19,500 (8,845)	26,000 (11,800)
1750 PTS⁵	Close	Yes	350 (261)	700 (950)	950 (1,288)	-	-	-	19,500 (8,845)	37,500 (17,010)
2100 PTS¹ - School Bus	Close	No	300 (224)	660³ (895)³	950 (1,288)	300 (224)	550 (746)	850 (1,152)	26,000 (11,800)	26,000 (11,800)
2100 PTS¹ - Shuttle Bus	Close	No	300 (224)	565² (766)³	950 (1,288)	300 (224)	550 (746)	850 (1,152)	26,000 (11,800)	26,000 (11,800)
2200 PTS¹ - School Bus	Close	Yes	300 (224)	660³ (895)³	950 (1,288)	300 (224)	550 (746)	850 (1,152)	26,000 (11,800)	26,000 (11,800)
2200 PTS¹ - Shuttle Bus	Close	Yes	300 (224)	565² (766)³	950 (1,288)	300 (224)	550 (746)	850 (1,152)	26,000 (11,800)	26,000 (11,800)
2300 PTS²,4	Close	No	365 (272)	510 (691)	950 (1,288)	-	-	-	33,000 (15,000)	33,000 (15,000)
2350 PTS¹,2	Close	Yes	300 (224)	660 (895)	950 (1,288)	300 (224)	550 (746)	850 (1,152)	30,000 (13,600)	30,000 (13,600)
2500 PTS¹,2	Wide	No	300 (224)	660³ (895)³	950 (1,288)	300 (224)	550 (746)	850 (1,152)	33,000 (15,000)	33,000 (15,000)
2550 PTS¹,2	Wide	Yes	300 (224)	660 (895)	950 (1,288)	300 (224)	550 (746)	850 (1,152)	30,000 (13,600)	30,000 (13,600)
2575 PTS²	Wide	Yes	300 (224)	660 (895)	950 (1,288)	300 (224)	550 (746)	850 (1,152)	33,000 (15,000)	33,000 (15,000)
2700 PTS⁵	Close	Yes	350 (261)	700 (950)	950 (1,288)	-	-	-	23,500 (10,660)	26,000 (11,800)
2750 PTS⁵	Close	Yes	350 (261)	700 (950)	950 (1,288)	-	-	-	23,500 (10,660)	37,500 (17,010)
3000 PTS - School Bus	Close	No	-	-	-	300 (224)	950 (1,288)	1,470 (1,995)	-	-
3000 PTS - Shuttle Bus	Close	No	-	-	-	300 (224)	950 (1,288)	1,470 (1,995)	33,000 (15,500)	33,000 (15,500)

1 - Available with xFE 2 - Available for School Bus applications only 3 - Check with your OEM to ensure offerings 4 - Only available with gasoline-powered engine applications 5 - Available in the Chevrolet Silverado 4500HD/ 5500HD/ 6500HD + Navistar CV Series

Typical Vehicle Applications

Class 5-8 School Bus

School Use – School Bus, Non-School Use – Church Bus, Private Academy Bus, Prison Bus, Work Bus, Poultry Bus

Class 5-7 Shuttle Bus (up to 33,000 lbs. GVW)¹

Airfield Bus, Airport Shuttle, Casino Bus, Dedicated Handicap Shuttle, Hotel Shuttle, Rental Car Shuttle, Retirement Community Shuttle, Scenic Tour Bus



1000 PTS | 1350 PTS | 1700 PTS
1750 PTS | 2100 PTS | 2200 PTS
2300 PTS | 2350 PTS | 2500 PTS
2550 PTS | 2575 PTS | 2700 PTS
2750 PTS



3000 PTS

1 - Buses requiring PTO must use Bus Series™ models. All shuttle applications greater than 33,000 lbs. GVW require B 300 or B 400 transmissions. Revenue-generating /FTA transit bus applications are excluded from Pupil Transport/Shuttle Series™ usage.

Allison Transmission Pupil Transport/Shuttle Series™

1000/2000 Series
Input/Output Functions

Input Functions		Default Enabled	Comm Avail?	Vocation Package Number								
				353	354	369	371	373	374	379	380	381
A	Secondary Mode Input	Yes	Yes	142	142	142	142	142	142	142	142	142
C1	PTO Drive Interface 1 Input	Yes	Yes		143	143	143		162	162	143	
C2	PTO Drive Interface 2 Input	No	Yes								102	
E	Auxiliary Function Range Inhibit - Single Input	No	Yes	101	101	101	101	101	101	101	101	101
H	Engine Brake Interface Input (Standard)	No	Yes		102	102			102	102		
I	Engine Brake Interface Input (Special)	No	Yes	102				102				102
L	Automatic Neutral - Single Input	No	Yes	123	123	123	123	123	123	123	123	
V	Reverse Enable Input	No	Yes	143				162				143
Y	Anti-Lock Brake System (ABS) Input	Yes	Yes	121	121	121	121	121	121	121	121	121
AA	Service Break Status Input	Yes	Yes	162	162	162	162				162	162
AH	Accelerator Pedal Kickdown Input	Yes	Yes	122				122				122
AM	Reverse Inhibit w/ Preselect Request Interface Input	No	Yes									
AR	Overdrive Disable Interface Input	Yes	Yes	161	161	161	161	161	161	161	161	161
AS	Neutral at Stop Input	No	Yes					143	143	143		
BQ	Pump Mode Input (3rd Lockup)	No	No									
BS	Grade Braking/Regeneration Input	No	Yes				102					
CA	Auto Neutral - Brake-Based (BBAN) Input for PTO	No	Yes			122				122		
CB1	Preselect Request 1 Input	Yes	Yes		122				122		122	
CC	High N/v Ratio Input	No	Yes									
CD	Automatic Neutral - Single Input w/ Selector Override	Yes	Yes									
CN	Automatic Neutral - Dual Input w/ Auto Return-to-Range	No	Yes									123
CR	PTO Drive Interface - Synchronized PTO Input	No	Yes									
CS	Run/Crank Input	Yes	No									
Output Functions		Default Enabled	Comm Avail?	Vocation Package Number								
				353	354	369	371	373	374	379	380	381
A	Engine Brake Interface Output	No	Yes	104	104	104	104	104	104	104		104
B	Sump/Retarder Temperature Indicator	Yes	Yes	164	164	164	164	164	164	164	164	164
C	Range Indicator	Yes	No	145	145	145	145	145	145	145	145	145
D	Output Speed Indicator A	Yes	No	105	105	105	105	105	105	105	105	105
G1	PTO Drive Interface 1 Output	Yes	Yes		150	150	150		150	150	150	
G2	PTO Drive Interface 2 Output	No	Yes								104	
O	Transmission Service Indicator	Yes	Yes	113	113	113	113	113	113	113	113	113
S	Neutral Indicator for PTO & PTO Request (NIPTO)	Yes	No									
X	Overdrive Disable Interface Output	Yes	No									
AD	Range Inhibited Indicator	Yes	Yes	124	124	124	124	124	124	124	124	124
AN	PTO Drive Interface - Synchronized PTO Output	Yes	No									

Allison Transmission Pupil Transport/Shuttle Series™

3000/4000 Series
Input/Output Functions

				Vocation Package Number																		
Input Functions		Default Enabled	Comm Avail?	School & Shuttle Bus										School & Shuttle Bus (Max Economy Calibration)								
				139	211	212	215	217	223	226	234	236	263	268	129	130	148	159	210	235	247	262
A	Secondary Mode Input	Yes	Yes	M	M	122	M	M	M	M	142	M	M	M	M	142	M	M	M	142	142	M
C1	PTO Drive Interface 1 Input	Yes	Yes	143	143	143	143	143	143		M	143	143	143			143		143	M	143	
C2	PTO Drive Interface 2 Input	No	Yes										102									
D	Shift Selector Transition Input	No	Yes																			
E	Auxiliary Function Range Inhibit - Single Input	No	Yes	101	101	101	101		101	101	101	101	101	101	101	101	101	101		101	101	101
F	Auxiliary Function Range Inhibit - Dual Input	Yes	No																			
G	Auxiliary Hold Input	Yes	No		123	123			142	142		142	142	142			142	142			M	142
H	Engine Brake Interface Input (Standard)	No	Yes	102/157	102/157	102/157	102/157	102/157	102/157	102/157	102/157	102/157					102/157	102/157		102/157	102/157	102/157
I	Engine Brake Interface Input (Special)	No	Yes												102/157	102/157						
J	Fire Truck Pump Mode Input	No	Yes																			
K	Quick-to-Neutral Input	No	No																			
L	Automatic Neutral - Single Input	No	Yes						117	117	117	117	117	117			117	117		117	117	
Q	Two Speed Axle Interface Input	Yes	Yes																			
R	Manual Lockup Control Input	No	No																			
V	Reverse Enable Input	No	Yes												117	117						
W	Direction Change Enable Input	No	Yes						122	122		122	122	122		143		143	142	143		143
Y	Anti-Lock Brake System (ABS) Input	Yes	Yes	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121
Z	Retarder Interface Input	Yes	Yes	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161
AA	Service Brake Status Input	Yes	Yes	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162
AG	Automatic Neutral - Dual Input	Yes	Yes	117/142															101/117			
AH	Accelerator Pedal Kickdown Input	Yes	Yes												122	122	122	122	122	122	122	122
AI	Aux Function Range Inhibit - Single Input (Specialty)	No	Yes																			
AJ	Pump Mode Input	No	Yes																			
AK	Automatic Neutral - Dual Input w/ Service Brake Status	Yes	Yes					101/117														
AL	Shift Selector Transition & Secondary Shift Schedule	Yes	No																			
AM	Reverse Inhibit with Preselect Request Interface Input	No	Yes																123			
AQ	Shift Selector Display Blanking Input	Yes	No																			
AS	Neutral at Stop Input	No	Yes				123	123	123	123			123	123	123	123	123	123	102	123	123	123
AW	2nd Reverse Input	No	No						179				179	179								
BD	Automatic 2-1 Preselect Input (4000 7-speed only)	Yes	No																			
BS	Grade Braking/Regeneration Input	No	Yes											102								
BY	Aux Box Transition Input	Yes	Yes																			
BZ	Shift Selector Transition & Oil Field Pumping Input	Yes	No																			
CA	Automatic Neutral - Brake-Based (BBAN) Input for PTO	No	Yes																			
CB1	Preselect Request 1 Input	Yes	Yes								123	123										
CB2	Preselect Request 2 Input	Yes	Yes																			
CC	High N/v Ratio Input	No	Yes																			
CD	Automatic Neutral - Single Input wth Selector Override	Yes	Yes																			
CE	Direct Hold Input	No	Yes																			
CF	Automatic Neutral - Idle Start/Stop Input	Yes	No		117/142	117/142	117/142															
CH	Automatic Neutral - Single Input, Inverted	No	Yes																			
CN	Automatic Neutral - Dual Input w/ Auto Return-to-Range	No	Yes																			117
CV	Shift Selector - Multiple Transmission Control	No	Yes																			

				Vocation Package Number																		
Output Functions		Default Enabled	Comm Avail?	School & Shuttle Bus										School & Shuttle Bus (Max Economy Calibration)								
				139	211	212	215	217	223	226	234	236	263	268	129	130	148	159	210	235	247	262
A	Engine Brake Interface Output	No	Yes	104	104	104	104	104	104	104	104	104			104	104	104	104		104	104	104
B	Sump/Retarder Temperature Indicator	Yes	Yes	164	164	164	164	164	164	164	164	164	164	164	164	164	164	164	164	164	164	164
C	Range Indicator ¹	Yes	No		145	145	145	145	145	145	145	145	145	145	145	145	145	145	113	145	145	145
D	Output Speed Indicator A	Yes	No	105	105	105	105	105	105	105	105	105	105	105	130	130	105	105	105	105	105	105
G1	PTO Drive Interface 1 Output	Yes	Yes	130	130	130	130	130	130		130	130	130	130			130		130	130	130	
G2	PTO Drive Interface 2 Output	No	Yes										104									
I	Engine Overspeed Indicator	Yes	No							130								113				113
J	Two Speed Axle Interface Output	Yes	Yes																			
K	Lockup Indicator	Yes	Yes																			
N	Secondary Mode Indicator	Yes	Yes		113	113	113		113	113	113	113	113	113				130		113		130
O	Transmission Service Indicator	Yes	Yes																			
Q	Retarder Interface Output	Yes	Yes	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124
S	Neutral Indicator for PTO and PTO Request (NIPTO)	Yes	No	145				113											145			
AJ	Output Speed Indicator At, Inverted	Yes	No																			

1 - 6th Generation Controls and newer default is always Neutral/Park



Regional Haul Series™



Delivery Is About to Pick Up

No matter what you're hauling, every stop is important. When your customers are depending on you to be there on time every time, choose Allison and the 3414 Regional Haul Series™ fully automatic transmission. Built on years of reliable performance and customer-inspired innovation, the 3414 RHS lets you deliver with confidence.



Allison Transmission Regional Haul Series™ Ratings

Model	Ratio	Park Pawl	Gross Input Power	Gross Input Torque	Net Turbine Torque	Gross Input Power	Gross Input Torque	Net Turbine Torque	Max GVW	Max GCW
			With Torque Management			Without Torque Management				
			hp (kW)	lb-ft (N•m)	lb-ft (N•m)	hp (kW)	lb-ft (N•m)	lb-ft (N•m)	lbs (kg)	lbs (kg)
3414 RHS	Close	No	410 (306)	1,450 (1,966) ¹	1,700 (2,305)	410 (306)	1,100 (1,491)	1,700 (2,305)	-	80,000 (37,194)

1 - Available in gears five through six

Typical Vehicle Applications

Beverage Delivery, Distribution, Dry Bulk, Food Distribution, General Freight, Regional Haul



Allison Transmission Regional Haul Series™ 3414 RHS Input/Output Functions

Input Functions		Default Enabled	Comm Avail?	Vocation Package Number					
				223	226	235	247	263	268
A	Secondary Mode Input	Yes	Yes	M	M	142	142	M	M
C1	PTO Drive Interface 1 Input	Yes	Yes	143		M	143	143	143
C2	PTO Drive Interface 2 Input	No	Yes					102	
D	Shift Selector Transition Input	No	Yes						
E	Auxiliary Function Range Inhibit - Single Input	No	Yes	101	101	101	101	101	101
F	Auxiliary Function Range Inhibit - Dual Input	Yes	No						
G	Auxiliary Hold Input	Yes	No	142	142		M	142	142
H	Engine Brake Interface Input (Standard)	No	Yes	102/157	102/157	102/157	102/157		
I	Engine Brake Interface Input (Special)	No	Yes						
J	Fire Truck Pump Mode Input	No	Yes						
K	Quick-to-Neutral Input	No	No						
L	Automatic Neutral - Single Input	No	Yes	117	117	117	117	117	117
Q	Two Speed Axle Interface Input	Yes	Yes						
R	Manual Lockup Control Input	No	No						
V	Reverse Enable Input	No	Yes						
W	Direction Change Enable Input	No	Yes	122	122	143		122	122
Y	Anti-Lock Brake System (ABS) Input	Yes	Yes	121	121	121	121	121	121
Z	Retarder Interface Input	Yes	Yes	161	161	161	161	161	161
AA	Service Brake Status Input	Yes	Yes	162	162	162	162	162	162
AG	Automatic Neutral - Dual Input	Yes	Yes						
AH	Accelerator Pedal Kickdown Input	Yes	Yes			122	122		
AI	Aux Function Range Inhibit - Single Input (Specialty)	No	Yes						
AJ	Pump Mode Input	No	Yes						

Input Functions (continued)		Default Enabled	Comm Avail?	Vocation Package Number					
				223	226	235	247	263	268
AK	Automatic Neutral - Dual Input w/ Service Brake Status	Yes	Yes						
AL	Shift Selector Transition & Secondary Shift Schedule	Yes	No						
AM	Reverse Inhibit with Preselect Request Interface Input	No	Yes						
AQ	Shift Selector Display Blanking Input	Yes	No						
AS	Neutral at Stop Input	No	Yes	123	123	123	123	123	123
AW	2nd Reverse Input	No	No	179				179	179
BD	Automatic 2-1 Preselect Input (4000 7-speed only)	Yes	No						
BS	Grade Braking/Regeneration Input	No	Yes						102
BY	Aux Box Transition Input	Yes	Yes						
BZ	Shift Selector Transition & Oil Field Pumping Input	Yes	No						
CA	Automatic Neutral - Brake-Based (BBAN) Input for PTO	No	Yes						
CB1	Preselect Request 1 Input	Yes	Yes						
CB2	Preselect Request 2 Input	Yes	Yes						
CC	High N/v Ratio Input	No	Yes						
CD	Automatic Neutral - Single Input wth Selector Override	Yes	Yes						
CE	Direct Hold Input	No	Yes						
CF	Automatic Neutral - Idle Start/Stop Input	Yes	No						
CH	Automatic Neutral - Single Input, Inverted	No	Yes						
CN	Automatic Neutral - Dual Input w/ Auto Return-to-Range	No	Yes						
CV	Shift Selector - Multiple Transmission Control	No	Yes						

Output Functions		Default Enabled	Comm Avail?	Vocation Package Number					
				223	226	235	247	263	268
A	Engine Brake Interface Output	No	Yes	104	104	104	104		
B	Sump/Retarder Temperature Indicator	Yes	Yes	164	164	164	164	164	164
C	Range Indicator ¹	Yes	No	145	145	145	145	145	145
D	Output Speed Indicator A	Yes	No	105	105	105	105	105	105
G1	PTO Drive Interface 1 Output	Yes	Yes	130		130	130	130	130
G2	PTO Drive Interface 2 Output	No	Yes					104	
I	Engine Overspeed Indicator	Yes	No		130				
J	Two Speed Axle Interface Output	Yes	Yes						
K	Lockup Indicator	Yes	Yes						
N	Secondary Mode Indicator	Yes	Yes	113	113	113		113	113
O	Transmission Service Indicator	Yes	Yes						
Q	Retarder Interface Output	Yes	Yes	124	124	124	124	124	124
S	Neutral Indicator for PTO and PTO Request (NIPTO)	Yes	No						
AJ	Output Speed Indicator At, Inverted	Yes	No						

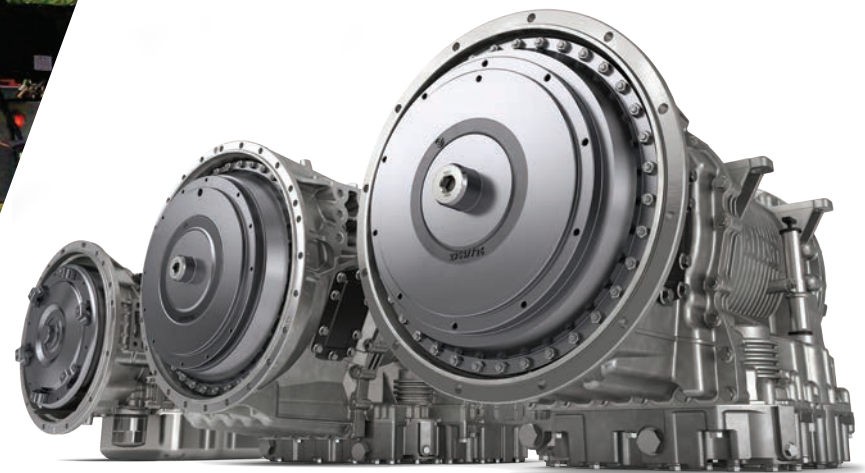
1 - 6th Generation Controls and newer default is always Neutral/Park



Rugged Duty Series™

Built to Work

There is nothing easy about the job you do, and customers always expect more. It's good to know an Allison Automatic is ready to get you on and off site no matter where the road leads. When you need to finish the job, Allison helps you do it confidently.



Allison Transmission Rugged Duty Series™ Ratings

Model	Ratio	Park Pawl	Gross Input Power	Gross Input Torque	Net Turbine Torque	Gross Input Power	Gross Input Torque	Net Turbine Torque	Max GVW	Max GCW
			With Torque Management			Without Torque Management				
			hp (kW)	lb-ft (N•m)	lb-ft (N•m)	hp (kW)	lb-ft (N•m)	lb-ft (N•m)	lbs (kg)	lbs (kg)
1000 RDS ¹	Close	Yes	340 ⁴ (254) ⁴	660 ⁴ (895) ⁴	950 (1,288)	300 (224)	575 (780)	850 (1,152)	19,500 (8,845)	26,000 (11,800)
1350 RDS ¹	Close	Yes	340 ⁴ (254) ⁴	660 ⁴ (895) ⁴	950 (1,288)	300 (224)	575 (780)	850 (1,152)	19,500 (8,845)	30,000 (13,600)
1700 RDS ⁸	Close	Yes	350 (261)	700 ⁷ (950) ⁷	950 (1,288)	-	-	-	19,500 (8,845)	26,000 (11,800)
1750 RDS ⁸	Close	Yes	350 (261)	700 ⁷ (950) ⁷	950 (1,288)	-	-	-	19,500 (8,845)	37,500 (17,010)
2100 RDS ¹	Close	No	340 ⁴ (254) ⁴	660 ⁴ (895) ⁴	950 (1,288)	300 (224)	575 (780)	850 (1,152)	26,000 (11,800)	26,000 (11,800)
2200 RDS ¹	Close	Yes	340 ⁴ (254) ⁴	660 ⁴ (895) ⁴	950 (1,288)	300 (224)	575 (780)	850 (1,152)	26,000 (11,800)	26,000 (11,800)
2300 RDS ²	Close	No	365 (272)	510 (691)	950 (1,288)	-	-	-	33,000 (15,000)	33,000 (15,000)
2350 RDS ^{1,4}	Close	Yes	340 (254)	660 (895)	950 (1,288)	300 (224)	575 (780)	850 (1,152)	30,000 (13,600)	30,000 (13,600)
2500 RDS ¹ - On/Off-Highway	Wide	No	340 ⁴ (254) ⁴	660 ⁴ (895) ⁴	950 (1,288)	300 (224)	575 (780)	850 (1,152)	33,000 (15,000)	33,000 (15,000)
2500 RDS ¹ - Refuse	Wide	No	300 (224)	600 (813)	950 (1,288)	300 (224)	550 (746)	850 (1,152)	24,200 (11,000)	24,200 (11,000)
2550 RDS ^{1,4}	Wide	Yes	340 (254)	660 (895)	950 (1,288)	300 (224)	575 (780)	850 (1,152)	30,000 (13,600)	30,000 (13,600)
2700 RDS ⁸	Close	Yes	350 (261)	700 ⁷ (950) ⁷	950 (1,288)	-	-	-	23,500 (10,660)	26,000 (11,800)
2750 RDS ⁸	Close	Yes	350 (261)	700 ⁷ (950) ⁷	950 (1,288)	-	-	-	23,500 (10,660)	37,500 (17,010)
3000 RDS - On/Off-Highway	Close	No	370 (276)	1,250 ^{3,4} (1,695) ^{3,4}	1,600 (2,169)	370 (276)	1,100 (1,491)	1,600 (2,169)	80,000 (36,288)	80,000 (36,288)
3000 RDS - Concrete Mixer	Close	No	370 (276)	1,250 ^{3,4} (1,695) ^{3,4}	1,600 (2,169)	370 (276)	1,100 (1,491)	1,600 (2,169)	62,000 (28,123)	-
3000 RDS - Volumetric Mixer	Close	No	370 (276)	1,250 ^{3,4} (1,695) ^{3,4}	1,600 (2,169)	370 (276)	1,100 (1,491)	1,600 (2,169)	80,000 (36,288)	-
3000 RDS - Refuse	Close	No	370 (276)	1,250 ^{3,4} (1,695) ^{3,4}	1,600 (2,169)	370 (276)	1,100 (1,491)	1,600 (2,169)	62,000 (28,123)	-
3000 RDS - Specialty PTO/HET	Close	No	-	-	-	370 (276)	1,250 (1,695)	1,700 (2,305)	-	-
3500 RDS - On/Off-Highway	Wide	No	330 (246)	1,050 ⁵ (1,424) ⁵	1,450 (1,966)	330 (246)	860 (1,166)	1,420 (1,925)	80,000 (36,288)	80,000 (36,288)
3500 RDS - Concrete Mixer/Refuse	Wide	No	-	-	-	330 (246)	860 (1,166)	1,420 (1,925)	60,000 (27,216)	-
3500 RDS - Volumetric Mixer	Wide	No	330 (246)	1,050 ⁵ (1,424) ⁵	1,450 (1,966)	330 (246)	860 (1,166)	1,420 (1,925)	80,000 (36,288)	-
3500 RDS - Specialty PTO	Wide	No	330 (246)	1,050 ⁵ (1,424) ⁵	1,450 (1,966)	330 (246)	950 (1,288)	1,450 (1,966)	-	-
3500 RDS - HET	Wide	No	330 (246)	1,050 ⁵ (1,424) ⁵	1,450 (1,966)	330 (246)	985 (1,335)	1,450 (1,966)	-	-
4000 RDS - On/Off-Highway	Close	No	580 (433)	1,850 ⁷ (2,508) ⁷	2,600 (3,525)	580 (433)	1,770 (2,400)	2,600 (3,525)	-	-
4000 RDS - Refuse	Close	No	-	-	-	500 (373)	1,550 (2,102)	2,450 (3,322)	-	-
4000 RDS - Specialty PTO	Close	No	-	-	-	580 (433)	1,770 (2,400)	2,600 (3,525)	-	-
4000 RDS - HET	Close	No	-	-	-	605 (451)	1,850 (2,508)	2,600 (3525)	-	-
4500 RDS - On/Off-Highway	Wide	No	580 (433)	1,850 ⁷ (2,508) ⁷	2,450 (3,322)	580 (433)	1,650 (2,237)	2,450 (3,322)	-	-
4500 RDS - Refuse	Wide	No	-	-	-	500 (373)	1,550 (2,102)	2,450 (3,322)	-	-
4500 RDS - Specialty PTO	Wide	No	580 (433)	1,770 ⁵ (2,400) ⁵	2,600 (3,525)	580 (433)	1,650 (2,237)	2,600 (3,525)	-	-
4500 RDS - HET	Wide	No	605 (451)	1,850 ⁵ (2,508) ⁵	2,600 (3,525)	605 (451)	1,650 (2,237)	2,600 (3,525)	-	-
4700 RDS - On/Off-Highway	Deep	No	580 (433)	1,850 ⁶ (2,508) ⁶	2,600 (3,525)	580 (433)	1,770 (2,400)	2,600 (3,525)	-	-
4700 RDS - Refuse	Deep	No	-	-	-	500 (373)	1,550 (2,102)	2,450 (3,322)	-	-
4700 RDS - HET	Deep	No	-	-	-	605 (451)	1,850 (2,508)	2,600 (3,525)	-	-
4900 RDS - On/Off-Highway	Deep	No	650 (485)	2,250 ⁶ (3,051) ⁶	2,800 (3,796)	650 (485)	2,213 (3,000)	2,800 (3,796)	-	-
4900 RDS - HET	Deep	No	800 (597)	2,360 (3,200)	3,025 (4,101)	800 (597)	2,360 (3,200)	2,800 (3,796)	-	-

1 - Available with xFE 2 - Only available for gasoline-powered engine applications 3 - Requires Allison Transmission engine-transmission combination approval. Only available in gears three through six. 4 - Check with your OEM to ensure offerings 5 - Available in gears two through six. 6 - Only available in gears four through seven 7 - Only available in gears three through six. 8 - Available in the Chevrolet Silverado 4500HD/ 5500HD/ 6500HD + Navistar CV Series

Typical Vehicle Applications

Airport Support, Baggage Transport Vehicle, Concrete Mixer, Concrete Pumper, Dump Truck, Equipment Hauler, Farm/Agriculture, Refuse Front Loader (Landfill + No Landfill), Heavy Equipment Transport (HET), Liquid Waste Hauler, Materials Hauler, Municipal Services Maintenance Vehicle, Packing Recycling Truck, Public Utility Vehicle, Rear Loader (Landfill + No Landfill), Roll On/Roll Off (Landfill + No Landfill), Sewer/Septic Vacuum (Landfill + No Landfill), Refuse Side Loader (Landfill + No Landfill), Special Snow Removal Vehicle, Transfer/Relocation Vehicle, Volumetric Mixer, Wood Chip Hauler, Wrecker, Yard Tractor/Spotter



1000 RDS | 1350 RDS
1700 RDS | 1750 RDS
2100 RDS | 2200 RDS
2300 RDS | 2350 RDS
2500 RDS | 2550 RDS
2700 RDS | 2750 RDS



3000 RDS
3500 RDS



4000 RDS
4500 RDS
4700 RDS



Allison Transmission Rugged Duty Series™

1000/2000 Series Input/Output Functions

Input Functions		Default Enabled	Comm Avail?	Vocation Package Number														
				354	360	365	369	371	374	376	379	380	381	382	383	384	385	389
A	Secondary Mode Input	Yes	Yes	142	142	142	142	142	142	142	142	142	142	142	142			142
C1	PTO Drive Interface 1 Input	Yes	Yes	143	143	143	143	143	162	101	162	143						143
C2	PTO Drive Interface 2 Input	No	Yes									102						
E	Auxiliary Function Range Inhibit - Single Input	No	Yes	101		101	101	101	101		101	101	101	101	101	101	101	101
H	Engine Brake Interface Input (Standard)	No	Yes	102	102		102		102	102	102			102	102			
I	Engine Brake Interface Input (Special)	No	Yes										102					
L	Automatic Neutral - Single Input	No	Yes	123		123	123	123	123		123	123						
V	Reverse Enable Input	No	Yes										143					
Y	Anti-Lock Brake System (ABS) Input	Yes	Yes	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121
AA	Service Break Status Input	Yes	Yes	162	162	162	162	162		162		162	162	162	162	162	162	162
AH	Accelerator Pedal Kickdown Input	Yes	Yes										122					
AM	Reverse Inhibit w/ Preselect Request Interface Input	No	Yes															
AR	Overdrive Disable Interface Input	Yes	Yes	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161
AS	Neutral at Stop Input	No	Yes						143	143	143							
BQ	Pump Mode Input (3rd Lockup)	No	No		122/123					122/123								
BS	Grade Braking/Regeneration Input	No	Yes					102										102
CA	Auto Neutral - Brake-Based (BBAN) Input for PTO	No	Yes				122				122							
CB1	Preselect Request 1 Input	Yes	Yes	122					122			122						
CC	High N/v Ratio Input	No	Yes			102/122										102/122	102/122	
CD	Automatic Neutral - Single Input w/ Selector Override	Yes	Yes															
CN	Automatic Neutral - Dual Input w/ Auto Return-to-Range	No	Yes										123					
CR	PTO Drive Interface - Synchronized PTO Input	No	Yes											122/143	122/143	142/143	142/143	
CS	Run/Crank Input	Yes	No															123
Output Functions		Default Enabled	Comm Avail?	Vocation Package Number														
				354	360	365	369	371	374	376	379	380	381	382	383	384	385	389
A	Engine Brake Interface Output	No	Yes	104	104		104	104	104	104	104		104	104	104			
B	Sump/Retarder Temperature Indicator	Yes	Yes	164	164	164	164	164	164	164	164	164	164	164	164	164	164	164
C	Range Indicator	Yes	No	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145
D	Output Speed Indicator A	Yes	No	105	105	105	105	105	105	105	105	105	105	105		105		105
G1	PTO Drive Interface 1 Output	Yes	Yes	150	150	150	150	150	150	150	150	150						150
G2	PTO Drive Interface 2 Output	No	Yes									104						
O	Transmission Service Indicator	Yes	Yes	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113
S	Neutral Indicator for PTO & PTO Request (NIPTO)	Yes	No															
X	Overdrive Disable Interface Output	Yes	No															104
AD	Range Inhibited Indicator	Yes	Yes	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124
AN	PTO Drive Interface - Synchronized PTO Output	Yes	No											130/150	105/130/150	130/150	105/130/150	

Allison Transmission Rugged Duty Series™

3000/4000 Series Input/Output Functions

				Vocation Package Number											
				On-/Off-Highway							Construction			Street Sweeper	
Input Functions		Default Enabled	Comm Avail?	223	263	224	235	236	247	268	146	175	280	167	169
A	Secondary Mode Input	Yes	Yes	M	M	M	142	M	142	M	M	122	122	142	M
C1	PTO Drive Interface 1 Input	Yes	Yes	143	143	143	M	143	143	143	143	143	143	M	142
C2	PTO Drive Interface 2 Input	No	Yes		102										
D	Shift Selector Transition Input	No	Yes												
E	Auxiliary Function Range Inhibit - Single Input	No	Yes	101	101	101	101	101	101	101	101				
F	Auxiliary Function Range Inhibit - Dual Input	Yes	No												
G	Auxiliary Hold Input	Yes	No	142	142	142		142	M	142		117	117		
H	Engine Brake Interface Input (Standard)	No	Yes	102/157		102/157	102/157	102/157	102/157		102/157	102/157	102/157	102/157	102/157
I	Engine Brake Interface Input (Special)	No	Yes												
J	Fire Truck Pump Mode Input	No	Yes												
K	Quick-to-Neutral Input	No	No												
L	Automatic Neutral - Single Input	No	Yes	117	117		117	117	117	117				117	117
Q	Two Speed Axle Interface Input	Yes	Yes								142			101	101
R	Manual Lockup Control Input	No	No												
V	Reverse Enable Input	No	Yes											143	
W	Direction Change Enable Input	No	Yes	122	122	122	143	122		122					122
Y	Anti-Lock Brake System (ABS) Input	Yes	Yes	121	121	121	121	121	121	121	121	121	121	121	121
Z	Retarder Interface Input	Yes	Yes	161	161	161	161	161	161	161	161	161	161	161	161
AA	Service Brake Status Input	Yes	Yes	162	162	162	162	162	162	162	162	162	162	162	162
AG	Automatic Neutral - Dual Input	Yes	Yes									101/142	101/142		
AH	Accelerator Pedal Kickdown Input	Yes	Yes				122		122		122				
AI	Aux Function Range Inhibit - Single Input (Specialty)	No	Yes												
AJ	Pump Mode Input	No	Yes												
AK	Automatic Neutral - Dual Input w/ Service Brake Status	Yes	Yes												
AL	Shift Selector Transition & Secondary Shift Schedule	Yes	No												
AM	Reverse Inhibit with Preselect Request Interface Input	No	Yes									123	179		
AQ	Shift Selector Display Blanking Input	Yes	No								123				
AS	Neutral at Stop Input	No	Yes	123	123	123	123		123	123			123		
AW	2nd Reverse Input	No	No	179	179	179				179					
BD	Automatic 2-1 Preselect Input (4000 7-speed only)	Yes	No												
BS	Grade Braking/Regeneration Input	No	Yes							102					
BY	Aux Box Transition Input	Yes	Yes												
BZ	Shift Selector Transition & Oil Field Pumping Input	Yes	No												
CA	Automatic Neutral - Brake-Based (BBAN) Input for PTO	No	Yes												
CB1	Preselect Request 1 Input	Yes	Yes					123							
CB2	Preselect Request 2 Input	Yes	Yes												
CC	High N/v Ratio Input	No	Yes												
CD	Automatic Neutral - Single Input wth Selector Override	Yes	Yes			117									
CE	Direct Hold Input	No	Yes												
CF	Automatic Neutral - Idle Start/Stop Input	Yes	No												
CH	Automatic Neutral - Single Input, Inverted	No	Yes												
CN	Automatic Neutral - Dual Input w/ Auto Return-to-Range	No	Yes												
CV	Shift Selector - Multiple Transmission Control	No	Yes												

Vocation Package Number																			
	Premium Utility w/ Split-Shaft PTO						Premium Utility w/ Soft-Start for Split-Shaft PTO						Basic Refuse		Refuse w/ Auto Neutral			Refuse w/ Auto Neutral & Service Brake	
	149	150	172	216	266	279	219	220	221	222	267	272	180	225	142	145	183	168	170
A	142	M	142	M	142	M	142	M	142	M	142	142	M	M	M	122			M
C1	M		M	143	M		M		M	143	M	M	143	143	143	143	143	143	143
C2					102						102								
D			101		157				101		157	101	101		101	101			101
E	101	101		101	101	101	101	101		101	101		122	101					
F																			
G													142	142					
H	102/157	102/157	102/157	102/157		102/157	102/157	102/157	102/157	102/157		102/157	102/157	102/157	102/157	102/157	102/157	102/157	102/157
I																			
J																			
K													117						
L																			
Q																			
R																			
V			117		117				117		117	117							
W	117	117		117	179	117	117	117		117	179								
Y	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121
Z	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161
AA	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162
AG															117/142	117/142	117/142		
AH																			
AI																			
AJ	122/123	122/123	122/123	122/123	122/123	122/143													
AK																		117/142	117/142
AL																	101	101	
AM																123			
AQ																			
AS	143	143	143		143	123	143	143	143		143	143	123	123	123		123	123	123
AW																			
BD																			
BS																			
BY							123	123	123	123	123	123							
BZ																			
CA																			
CB1																			
CB2																			
CC																			
CD																			
CE							122	122	122	122	122	122							
CF																			
CH																			
CN																			
CV																			

Allison Transmission Rugged Duty Series™

3000/4000 Series Input/Output Functions Continued

				Vocation Package Number											
Output Functions		Default Enabled	Comm Avail?	On-/Off-Highway							Construction			Street Sweeper	
				223	263	224	235	236	247	268	146	175	280	167	169
A	Engine Brake Interface Output	No	Yes	104		104	104	104	104		104	104	104	104	104
B	Sump/Retarder Temperature Indicator	Yes	Yes	164	164	164	164	164	164	164	164	164	164	164	164
C	Range Indicator ¹	Yes	No	145	145	145	145	145	145	145				113	113
D	Output Speed Indicator A	Yes	No	105	105	105	105	105	105	105	105	105	105	105	105
G1	PTO Drive Interface 1 Output	Yes	Yes	130	130	130	130	130	130	130	130	130	130	130	130
G2	PTO Drive Interface 2 Output	No	Yes		104										
I	Engine Overspeed Indicator	Yes	No												
J	Two Speed Axle Interface Output	Yes	Yes								145			145	145
K	Lockup Indicator	Yes	Yes												
N	Secondary Mode Indicator	Yes	Yes	113	113	113	113	113		113		113	113		
O	Transmission Service Indicator	Yes	Yes												
Q	Retarder Interface Output	Yes	Yes	124	124	124	124	124	124	124	124	124	124	124	124
S	Neutral Indicator for PTO and PTO Request (NIPTO)	Yes	No									145	145		
AJ	Output Speed Indicator At, Inverted	Yes	No												

1 - 6th Generation Controls and newer default is always Neutral/Park

Vocation Package Number																			
	Premium Utility w/ Split-Shaft PTO						Premium Utility w/ Soft-Start for Split-Shaft PTO						Basic Refuse		Refuse w/ Auto Neutral			Refuse w/ Auto Neutral & Service Brake	
	149	150	172	216	266	279	219	220	221	222	267	272	180	225	142	145	183	168	170
A	104	104	104	104		104	104	104	104	104		104	104	104	104	104	104	104	104
B	164	164	164	164	164	164	164	164	164	164	164	164	164	164	164	164	164	164	164
C	145	145	145	145	145	145	145	145	145	145	145	145	113						113
D	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105
G1	130		130	130	130		130		130	130	130	130	130	130	130	130	130	130	130
G2					104						104								
I		130				130		130											
J																			
K												113							
N														113			113	113	
O																			
Q	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124
S													145	145	145	145	145	145	145
AJ																			

Specialty Series™



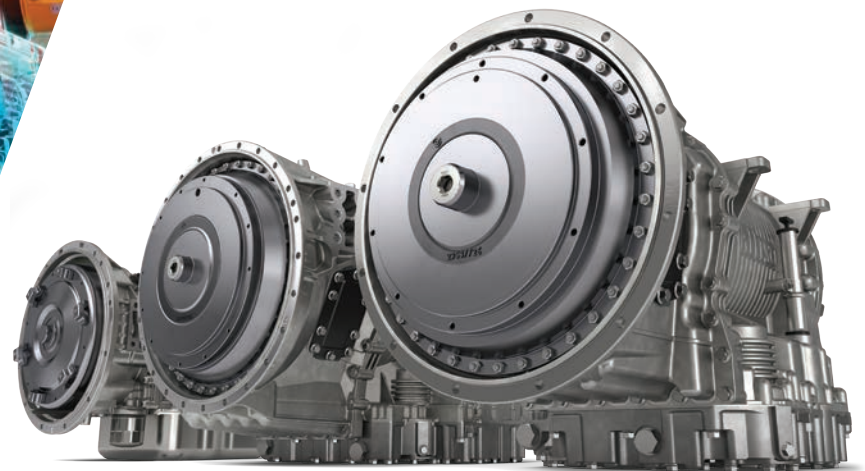
Prognostics

OIL LIFE
100%

Auxiliary Function Range Inhibit

Built for the Tough Jobs

Your vehicles are specially designed to work hard in the toughest conditions imaginable on long roads, back roads and no roads at all. Out there, you have to perform, and nothing takes your performance to a whole new level like an Allison Specialty Series™ fully automatic transmission.



Allison Transmission Specialty Series™ Ratings

Model	Ratio	Park Pawl	Gross Input Power	Gross Input Torque	Net Turbine Torque	Gross Input Power	Gross Input Torque	Net Turbine Torque	Max GVW	Max GCW
			With Torque Management			Without Torque Management				
			hp (kW)	lb-ft (N•m)	lb-ft (N•m)	hp (kW)	lb-ft (N•m)	lb-ft (N•m)	lbs (kg)	lbs (kg)
1000 SP	Close	Yes	340 ¹ (254) ¹	660 ¹ (895) ¹	950 (1,288)	300 (224)	575 (780)	850 (1,152)	22,000 (10,000)	26,000 (11,800)
1350 SP	Close	Yes	340 ¹ (254) ¹	660 ¹ (895) ¹	950 (1,288)	300 (224)	575 (780)	850 (1,152)	22,000 (10,000)	30,000 (13,600)
2100 SP	Close	No	340 ¹ (254) ¹	700 ^{1,2} (950) ^{1,2}	950 (1,288)	300 (224)	575 (780)	850 (1,152)	26,500 (12,000)	26,500 (12,000)
2200 SP	Close	Yes	340 ¹ (254) ¹	700 ^{1,2} (950) ^{1,2}	950 (1,288)	300 (224)	575 (780)	850 (1,152)	26,000 (11,800)	26,000 (11,800)
2350 SP	Close	Yes	340 ¹ (254) ¹	700 ^{1,2} (950) ^{1,2}	950 (1,288)	300 (224)	575 (780)	850 (1,152)	30,000 (13,600)	30,000 (13,600)
2500 SP	Wide	No	340 ¹ (254) ¹	700 ^{1,2} (950) ^{1,2}	950 (1,288)	300 (224)	575 (780)	850 (1,152)	33,000 (15,000)	33,000 (15,000)
2550 SP	Wide	Yes	340 ¹ (254) ¹	700 ^{1,2} (950) ^{1,2}	950 (1,288)	300 (224)	575 (780)	850 (1,152)	30,000 (13,600)	30,000 (13,600)
3000 SP - Specialty/Military	Close	No	-	-	-	350 (261)	1,050 (1,424)	1,700 (2,305)	-	-
3200 SP - Specialty/Military	Close	No	-	-	-	450 (336)	1,250 (1,695)	1,700 (2,305)	-	-
3500 SP - Specialty/Military	Wide	No	330 (246)	1,050 ⁵ (1,424) ⁵	1,500 (2,034)	330 (246)	985 (1,335)	1,500 (2,034)	-	-
3700 SP - Specialty/Military	Close	No	-	-	-	330 (246)	875 (1,186)	1,450 (1,996)	-	-
4000 SP - Specialty/Military	Close	No	-	-	-	650 (485)	1,950 (2,644)	2,800 (3,795)	-	-
4430 SP - Specialty/Military	Wide	No	-	-	-	380 (283)	1,180 (1,600)	2,600 (3,525)	-	-
4500 SP - Specialty/Military	Wide	No	605 (451)	1,850 ⁵ (2,508) ⁵	2,600 (3,525)	605 (451)	1,770 (2,400)	2,600 (3,525)	-	-
4700 SP - Specialty/Military	Deep	No	-	-	-	605 (451)	1,850 (2,508)	3,000 (4,067)	-	-
4800 SP - Specialty/Military	Deep	No	-	-	-	800 (597)	1,950 (2,644)	3,000 (4,067)	-	-
4900 SP - Specialty/Military	Deep	No	800 (597)	2,360 (3,200)	3,025 (4,101)	800 (597)	2,360 (3,200)	2,800 (3,796)	-	-
4970 SP - Specialty/Military	Wide	No	800 (597)	2,360 (3,200)	3,025 (4,101)	800 (597)	2,360 (3,200)	2,550 (3,457)	-	-
5620 SP - General ³	-	No	-	-	-	600 (447)	1,875 (2,542)	3,475 (4,711)	-	-
5620 SP - Agricultural Tractor	-	No	-	-	-	500 (373)	1,650 (2,237)	3,120 (4,230)	-	-
5620 SP - ARFF ⁴	-	No	-	-	-	750 (559)	2,500 (3,390)	3,790 (5,139)	-	-
6620 SP - General	-	No	-	-	-	760 (567)	2,500 (3,390)	3,790 (5,139)	-	-
6620 SP - Agricultural Tractor	-	No	-	-	-	700 (522)	2,000 (2,712)	3,340 (4,528)	-	-
6620 SP - ARFF ⁴	-	No	-	-	-	1,025 (764)	3,300 (4,474)	5,200 (7,050)	-	-
6625 SP - General	-	No	-	-	-	760 (567)	2,500 (3,390)	3,790 (5,139)	-	-
6625 SP - Agricultural Tractor	-	No	-	-	-	700 (522)	2,000 (2,712)	3,340 (4,528)	-	-
6625 SP - ARFF ⁴	-	No	-	-	-	1,025 (764)	3,300 (4,474)	5,200 (7,050)	-	-
8610 SP - General	-	No	-	-	-	1,050 (783)	3,600 (4,881)	5,650 (7,660)	-	-
8610 SP - Agricultural Tractor	-	No	-	-	-	850 (634)	3,200 (4,339)	5,300 (7,186)	-	-
9610 SP	-	No	-	-	-	1,350 (1,007)	4,000 (5,423)	6,000 (8,135)	-	-

1 - Check with your OEM to ensure offerings 2 - Only available in gears three through five 3 - Straight-Thru and Dropbox 4 - Aircraft Rescue + Fire Fighting (ARFF) vehicle 5 - Only available in gears two through six

Typical Vehicle Applications

Military, Crane Carrier, Equipment Hauler (with Escort or Permit), Molten Metal/Slag Hauler, Power Plant Generator Hauler, Heavy Equipment Hauler



1000 SP | 1350 SP
2100 SP | 2200 SP
2350 SP | 2500 SP
2550 SP



3000 SP
3200 SP
3500 SP
3700 SP



4000 SP
4430 SP
4500 SP
4700 SP
4800 SP



5620 SP



6620 SP
6625 SP



8610 SP



9610 SP



Allison Transmission Specialty Series™

1000/2000 Series Input/Output Functions

Input Functions		Default Enabled	Comm Avail?	Vocation Package Number												
				352	354	360	362	365	369	372	374	376	377	379	380	381
A	Secondary Mode Input	Yes	Yes	142	142	142	142	142	142	142	142	142	142	142	142	142
C1	PTO Drive Interface 1 Input	Yes	Yes	143	143	143	143	143	143	162	162	101	162	162	143	
C2	PTO Drive Interface 2 Input	No	Yes												102	
E	Auxiliary Function Range Inhibit - Single Input	No	Yes	101	101			101	101	101	101			101	101	101
H	Engine Brake Interface Input (Standard)	No	Yes		102	102			102		102	102		102		
I	Engine Brake Interface Input (Special)	No	Yes	102			102			102			102			102
L	Automatic Neutral - Single Input	No	Yes	123	123			123	123	123	123			123	123	
V	Reverse Enable Input	No	Yes													143
Y	Anti-Lock Brake System (ABS) Input	Yes	Yes	121	121	121	121	121	121	121	121	121	121	121	121	121
AA	Service Break Status Input	Yes	Yes	162	162	162	162	162	162			162			162	162
AH	Accelerator Pedal Kickdown Input	Yes	Yes	122			122			122			122			122
AM	Reverse Inhibit w/ Preselect Request Interface Input	No	Yes				123						123			
AR	Overdrive Disable Interface Input	Yes	Yes	161	161	161	161	161	161	161	161	161	161	161	161	161
AS	Neutral at Stop Input	No	Yes							143	143	143	143	143		
BQ	Pump Mode Input (3rd Lockup)	No	No			122/123						122/123				
BS	Grade Braking/Regeneration Input	No	Yes													
CA	Auto Neutral - Brake-Based (BBAN) Input for PTO	No	Yes				101		122				101	122		
CB1	Preselect Request 1 Input	Yes	Yes		122						122				122	
CC	High N/v Ratio Input	No	Yes					102/122								
CD	Automatic Neutral - Single Input w/ Selector Override	Yes	Yes													
CN	Automatic Neutral - Dual Input w/ Auto Return-to-Range	No	Yes													123
CR	PTO Drive Interface - Synchronized PTO Input	No	Yes													
CS	Run/Crank Input	Yes	No													

Output Functions		Default Enabled	Comm Avail?	Vocation Package Number												
				352	354	360	362	365	369	372	374	376	377	379	380	381
A	Engine Brake Interface Output	No	Yes	104	104	104	104		104	104	104	104	104	104		104
B	Sump/Retarder Temperature Indicator	Yes	Yes	164	164	164	164	164	164	164	164	164	164	164	164	164
C	Range Indicator	Yes	No	145	145	145		145	145	145	145	145		145	145	145
D	Output Speed Indicator A	Yes	No	105	105	105	105	105	105	105	105	105	105	105	105	105
G1	PTO Drive Interface 1 Output	Yes	Yes	150	150	150	150	150	150	150	150	150	150	150	150	
G2	PTO Drive Interface 2 Output	No	Yes												104	
O	Transmission Service Indicator	Yes	Yes	113	113	113	113	113	113	113	113	113	113	113	113	113
S	Neutral Indicator for PTO & PTO Request (NIPTO)	Yes	No				145						145			
X	Overdrive Disable Interface Output	Yes	No													
AD	Range Inhibited Indicator	Yes	Yes	124	124	124	124	124	124	124	124	124	124	124	124	124
AN	PTO Drive Interface - Synchronized PTO Output	Yes	No													

Allison Transmission Specialty Series™

3000/4000 Series Input/Output Functions

				Vocation Package Number																					
				Specialty Vehicles							Specialty Vehicles & Dock Spotter		Specialty Vehicles							Premium Utility w/ Soft-Start for Split-Shaft PTO					
Input Functions		Default Enabled	Comm Avail?	153	166	182	204	205	213	237	275	238	239	240	241	249	250	273	219	220	221	222	267	272	
A	Secondary Mode Input	Yes	Yes	M	M	142	M	M	142	M	M	142	142	142	142	142	142	M	142	M	142	M	142	142	
C1	PTO Drive Interface 1 Input	Yes	Yes	143	143	M	143	143	117	143	143			143	143	117	117	143	M		M	143	M	M	
C2	PTO Drive Interface 2 Input	No	Yes																				102		
D	Shift Selector Transition Input	No	Yes																		101		157	101	
E	Auxiliary Function Range Inhibit - Single Input	No	Yes																101	101		101	101		
F	Auxiliary Function Range Inhibit - Dual Input	Yes	No																						
G	Auxiliary Hold Input	Yes	No							142	142														
H	Engine Brake Interface Input (Standard)	No	Yes	102/157	102/157	102/157			102/157	102/157	102/157	102/157	102/157	102/157	102/157	102/157	102/157	102/157	102/157	102/157	102/157	102/157		102/157	
I	Engine Brake Interface Input (Special)	No	Yes				102/157	102/157																	
J	Fire Truck Pump Mode Input (4th Lockup)	No	Yes																						
K	Quick-to-Neutral Input	No	No																						
L	Automatic Neutral - Single Input	No	Yes									117		117		161									
Q	Two Speed Axle Interface Input	Yes	Yes		142													142							
R	Manual Lockup Control Input	No	No																						
V	Reverse Enable Input	No	Yes																		117		117	117	
W	Direction Change Enable Input	No	Yes				142	142		122	122								117	117		117	179		
Y	Anti-Lock Brake System (ABS) Input	Yes	Yes	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	
Z	Retarder Interface Input	Yes	Yes		161	161	161	161	161	161	161	161	161	161	161			161	161	161	161	161	161	161	
AA	Service Brake Status Input	Yes	Yes		162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	
AG	Automatic Neutral - Dual Input	Yes	Yes				122																		
AH	Accelerator Pedal Kickdown Input	Yes	Yes																						
AI	Aux Function Range Inhibit - Single Input (Specialty)	No	Yes	142	101	101			101	101	101	101	101	101	101	101	101	101							
AJ	Pump Mode Input (4th Lockup)	No	Yes			122/143			122/143							122/143	122/143								
AK	Automatic Neutral - Dual Input w/ Service Brake Status	Yes	Yes																						
AL	Shift Selector Transition & Secondary Shift Schedule	Yes	No																						
AM	Reverse Inhibit with Preselect Request Interface Input	No	Yes				123																		
AQ	Shift Selector Display Blanking Input	Yes	No	123	123	123			123	123		123	123	123	123	123	123								
AS	Neutral at Stop Input	No	Yes					123											143	143	143		143	143	
AW	2nd Reverse Input	No	No									179	179	179	179	179	179								
BD	Automatic 2-1 Preselect Input (4000 7-speed only)	Yes	No						M			M	M	M	M	M	M								
BS	Grade Braking/Regeneration Input	No	Yes																						
BY	Aux Box Transition Input	Yes	Yes															123	123	123	123	123	123	123	
BZ	Shift Selector Transition & Oil Field Pumping Input	Yes	No																						
CA	Automatic Neutral - Brake-Based (BBAN) Input for PTO	No	Yes				101	101																	
CB1	Preselect Request 1 Input	Yes	Yes																						
CB2	Preselect Request 2 Input	Yes	Yes																						
CC	High N/v Ratio Input	No	Yes																						
CD	Automatic Neutral - Single Input wth Selector Override	Yes	Yes										117		117		161								
CE	Direct Hold Input	No	Yes																122	122	122	122	122	122	
CF	Automatic Neutral - Idle Start/Stop Input	Yes	No																						
CH	Automatic Neutral - Single Input, Inverted	No	Yes																						
CN	Automatic Neutral - Dual Input w/ Auto Return-to-Range	No	Yes																						
CV	Shift Selector - Multiple Transmission Control	No	Yes								123														

Input Functions				Default Enabled		Comm Avail?		Vocation Package Number																			
								Specialty Vehicles						Specialty Vehicles & Dock Spotter		Specialty Vehicles						Premium Utility w/ Soft-Start for Split-Shaft PTO					
153	166	182	204	205	213	237	275	238	239	240	241	249	250	273	219	220	221	222	267	272							
A	Engine Brake Interface Output	No	Yes	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104					
B	Sump/Retarder Temperature Indicator	Yes	Yes	164	164	164	164	164	164	164	164	164	164	164	164	164	164	164	164	164	164	164					
C	Range Indicator¹	Yes	No	145		145	113	113	145	145	145	145	145	145	145	145		145	145	145	145	145					
D	Output Speed Indicator A	Yes	No		105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105					
G1	PTO Drive Interface 1 Output	Yes	Yes	130	130	130	130	130	130	130	130			130	130	130	130	130	130		130	130					
G2	PTO Drive Interface 2 Output	No	Yes																		104						
I	Engine Overspeed Indicator	Yes	No									130	130						130								
J	Two Speed Axle Interface Output	Yes	Yes		145												145										
K	Lockup Indicator	Yes	Yes																		113						
N	Secondary Mode Indicator	Yes	Yes	113	113							113	113	113	113	113	113	113									
O	Transmission Service Indicator	Yes	Yes																								
Q	Retarder Interface Output	Yes	Yes		124	124	124	124	124	124	124	124	124	124	124		124	124	124	124	124						
S	Neutral Indicator for PTO and PTO Request (NIPTO)	Yes	No				145	145																			
AJ	Output Speed Indicator At, Inverted	Yes	No																								

1 - 6th Generation Controls and newer default is always Neutral/Park



Allison Transmission Specialty Series™

5000–9000 Series Input/Output Functions

	Input Functions	Parameter Code	Vocation Package Number						
			On-/Off-Highway		Coal/Auger/Trencher	Crash Truck			Crane
			301	302	501	701	702	703	801
A	Secondary Mode Input	Mode	162	Mode	Mode	162	162	Mode	Mode
B	D-1 Selection	162	Mode	162	162	Mode	Mode	162	162
D	Shift Selector Transition Input							102	102
E	Auxiliary Function Range Inhibit - Single Input (Inverted)	161	161	161	161	161	161	161	161
G	Auxiliary Hold Input	101	101		101	101	101	101	101
K	Quick-to-Neutral Input (Inverted)								
Q	Two Speed Axle Interface Input	142	142					142	142
R1	Manual Lockup Control Input (Lockup)								
R2	Manual Lockup Control Input (Enable)								121
Y	Anti-Lock Brake System (ABS) Input				121	121	121	121	123
Z	Retarder Interface Input	123	123		123	123	123	123	
AM	Reverse Inhibit with Preselect Request Interface Input (Inverted)	121	121						
AQ	Shift Selector Display Blanking								157
AW	2nd Reverse Input	157	157	157				157	143
AX	Manual Mode	143	143	143	143	143	143	143	122
AZ	Lockup Disable Request	122	122	122	122	122	122	122	
BC	Shift Selector Transition and Manual Mode								
BE	Engine Speed/Torque Control Input 1			142	142	142	142		
CE	Direct Hold	102	102	102					117
CG	Engine Speed/Torque Control Input 2	117	117	117	117	117	117	117	
CI	Quick-to-Neutral Input			123					
CK1	Pressure Test Mode								
CK2	Pressure Test Mode (Low Flow)								
CO	Shift Schedule 2	179	179	179	179	179	179	179	179
CQ	Manual Mode (Inverted)								
CT1	Output Break Input 1								
CT2	Output Break Input 2								
CU	Rapid Warmup Mode Input								

	Output Functions	Parameter Code	Vocation Package Number						
			On-/Off-Highway		Coal/Auger/Trencher	Crash Truck			Crane
			301	302	501	701	702	703	801
B	Sump/Retarder Temperature Indicator								
C	Range Indicator	145	145	145	145	145	145	145	145
D	Output Speed Indicator A	113	113					113	113
E	Output Speed Indicator B								
I	Engine Overspeed Indicator	130	130				130	130	130
J	Two Speed Axle Interface Output	105	105					105	105
K	Lockup Indicator	104	104	104	104	104	104	104	104
N	Secondary Mode Indicator	150	150	150	150	150	150	150	150
Q	Retarder Interface Output	124	124		124	124	124	124	124
V	Manual Model Indicator			130	130	130			
W	Neutral to Range Brake	164	164	164	164	164	164	164	164
Z	Engine Speed/Torque Control Indicator			113	113	113	113		
AD	Range Inhibit Indicator								
AL	Transmission Filter Restriction Indicator			105	105	105	105		
AO	Shift Schedule 2 Indicator								



The Allison HUB™ provides a centralized location for access to Allison technical information. Access to the Allison HUB is available to everyone. Likewise, the Allison HUB provides approximately 1,600 Authorized Distributors and Dealers worldwide additional resources that support the service of Allison transmissions.

Basic User Account Features

For free, the below features are available to all Allison HUB users:

Web-Based Service Training

Web modules currently include product familiarization, preventive maintenance and basic diagnostic information for Allison Transmission's most popular on-highway transmissions – the 1000 Series™, 2000 Series™, 3000 Series™ and 4000 Series™ automatic transmissions.

Service Tips

Bulletins that provide general notifications regarding Allison products.

Warranty Status Check

The Warranty Status Check tool allows users to check for coverage on a transmission based on serial number. Results shown are for serial numbers registered with Allison, or for transmissions registered with added Extended Transmission Coverage (ETC).

How To Register

To register for a Basic user account, complete the steps below:

1. Visit hub.allisontransmission.com.
2. Select "Need a HUB account? Request here."
3. On the next page, if you do not have a Customer Code, select "I do not have a Customer Code."
4. Complete the registration form and submit.*

*Requests are typically fulfilled within 24-48 hours

Allison HUB™ Premium

Allison is offering Allison HUB™ Premium, a subscription package service, which provides an enhanced level of access for Allison Authorized service locations and Basic users.

Key Features:

Digital Manuals

Digital Manuals provide instant access to the latest revisions of Allison's printed manuals in online and offline formats. Covering all current products, users can access:

- Operation and Maintenance
- Principles of Operation
- Mechanics Tips
- Service Manual
- Troubleshooting Manual

Allison Mobile App

iOS and Android mobile apps are available to access Digital Manuals on the go.

Instruction Sheets

Instruction Sheets contain detailed technical information for repairs of specific products and are vital for inspections.

Parts Catalog

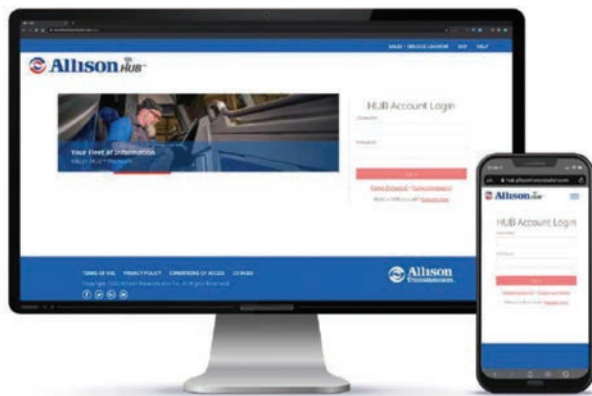
The Allison Parts Catalog is a product database that allows users to search by Serial, Assembly or Detail Part Numbers.

Service Information Letters

Service Information Letters provide instructions for troubleshooting technical components, enhancing product reliability.

Unit History

Search for build/ship and warranty information to find historical build data, configuration information and warranty claims performed on a transmission.



hub.allisontransmission.com

For additional information about the Allison HUB or available subscription packages, visit

allisontransmission.com/allisonhub

Allison DOC®

Allison DOC® (Diagnostic Optimized Connection) is a Windows-based diagnostic tool that allows users to troubleshoot and service Allison electronically controlled commercial transmissions and transmission control systems. Each Allison DOC software program requires a separate valid subscription license to activate the product.

Allison DOC Premium is designed for use on 1000/2000, 3000/4000 Series and TC10® Product Family transmissions, and transmissions using CEC5/CEC3/CEC2/CEC1 controls.

Allison DOC Premium (H 40/50 EP™) designed for use with Allison's H 40/50 EP Systems, it is capable of reading from H 40/50 EP System controllers using the J1939 communication protocol

Allison DOC Fleets supports the 4th and 5th Generation Transmission Control Modules (TCMs) (1000/2000, 3000/4000 Series, TC10 and Off-Highway CEC3 and CEC5 Product Families) with the latest features as well as legacy control systems.

Allison DOC Fleets (FuelSense® 2.0) allows users to trim FuelSense 2.0 parameters quickly, customizing fuel economy and performance.

TRANSHEALTH™ Monitoring

- Monitors 1000/2000 and 3000/4000 Series Product Families TCM data
- Monitors data from the hybrid PCM, Engine, DPIM and Energy Storage System (DOC® Premium (H 40/50 EP™) Only)
- Provides the clutch-by-clutch transmission condition at the time of service (if reprogramming is enabled)

Diagnostics

- Displays DTCs, transmission diagnostic data and Input/Output functions
- Displays CMCs, Transmission Information and SEM/LRTP and auto-detected information
- Includes SmartConnect for detecting the PC-to-vehicle translator device and communication link

Prognostics

- Shows information stored on the TCM related to oil life, filter life and data for use in predicting transmission health (DOC Premium Only)
- Displays real-time data flowing on vehicle's database
- Monitors data exchange between transmission controller and other control modules

FuelSense® 2.0 Trimming (DOC Premium + DOC Fleets FuelSense only)

- FuelSense 2.0 parameter reprogramming capability for vehicles equipped with a FuelSense 2.0 package
- Graphical interface enables fleets to optimize fuel economy and performance to their specific needs

For additional information on the latest Allison DOC software, translator devices and cables, visit allisonstore.noregon.com

Terms and Conditions for Allison Transmission Coverage

Transmission Coverage Definitions and Requirements

Standard Limited Warranty

All Allison automatic transmissions carry a Standard Limited Warranty based upon Vocational Model Series and vocations.* Standard Limited Warranty includes 100% parts and labor for the designated coverage period. Mileage limitations for specific Vocational Model Series and/or vocations may apply.

Extended Transmission Coverage

In addition to Standard Limited Warranty, Allison transmissions listed in this brochure are eligible for Extended Transmission Coverage. Extended Transmission Coverage begins at the end of the Standard Limited Warranty coverage period and increases the coverage period. Extended Transmission Coverage is available for purchase through Allison Authorized Distributors and Dealers.

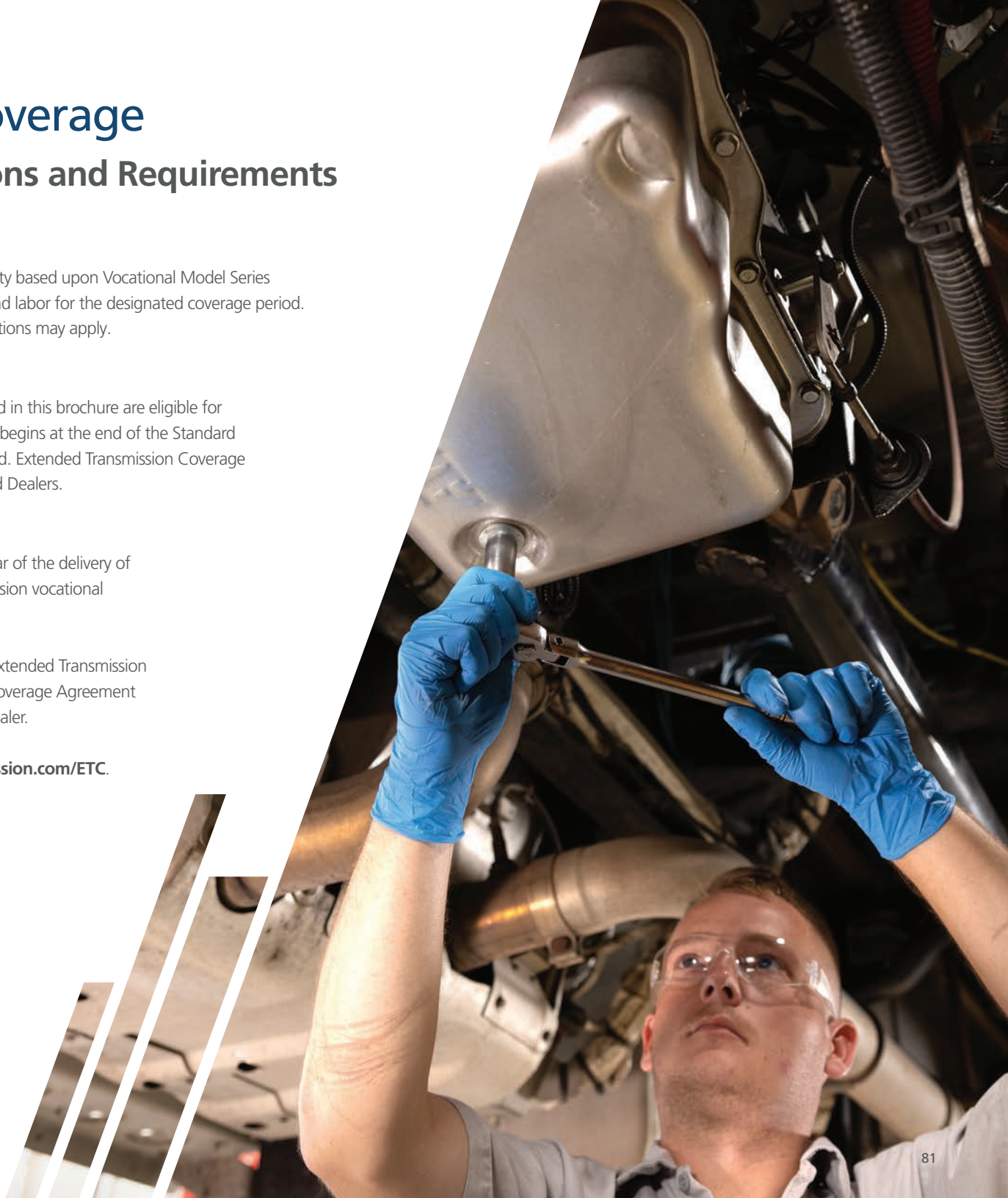
Coverage Pricing

Extended Transmission Coverage must be purchased within one year of the delivery of the vehicle. Suggested retail prices are established for each transmission vocational model/vocation combination.

The terms and conditions under which Allison Transmission offers Extended Transmission Coverage are set forth on the back of the Extended Transmission Coverage Agreement Registration, available from any Allison Authorized Distributor or Dealer.

For current prices and coverage information, go to allisontransmission.com/ETC.

* See Warranty Parchment for exact coverage details



The FuelSense® 2.0 Advantage

Allison's FuelSense® 2.0 delivers upgraded features that provide vehicles with a precise balance of fuel economy and performance.

FuelSense 2.0's flagship feature is **DynActive® Shifting**—innovative shift scheduling that uses an algorithm to choose the optimal shift point, based on vehicle specifications and environmental parameters, to continuously find the ideal balance of fuel economy and performance for your duty-cycle. **DynActive® Shifting** helps vehicles operate at peak efficiency, no matter the driving conditions.

Acceleration Rate Management helps prevent aggressive driving practices by automatically controlling engine torque. With five levels of control, it provides more precision by limiting vehicle acceleration to a customized, calibrated rate. Full engine torque is permitted if the vehicle is unable to reach the calibrated acceleration rate, such as when carrying a heavy load or climbing a grade.

And **Neutral at Stop** trims fuel consumption and emissions by reducing or eliminating the load on the engine when the vehicle is stopped. Standard **Neutral at Stop** allows transmission shifts to a partial neutral condition as the vehicle comes to a stop with service brakes engaged. Premium provides full neutral as the vehicle comes to a stop with service brakes engaged. Both versions lock the output while stopped to prevent vehicle roll-back.

FuelSense® 2.0 from Allison Transmission—the ultimate in precision, customized fuel economy and performance.



**Earlier Lock Up
Lower Engine Speeds
+ Extra Fuel Economy**

xFE

Real Changes. Real Fuel Savings.

xFE is another innovative, fuel-saving technology from Allison. xFE saves fuel through gear and torque converter optimization coupled with FuelSense® 2.0 with DynActive® Shifting technology.

xFE models are designed to deliver significantly more torque converter lock up operation and spend more time in higher ranges at lower engine speeds producing exceptional fuel savings.



Fluid + Filter Change Recommendations

Use of the proper fluid and filters is the simplest thing that an owner can do to ensure the ongoing performance and reliability of Allison automatic transmissions. Allison Transmission has designed extensive specification and testing programs to verify the quality of fluids. As a result, the specific fluid and filter change interval recommendations closely match today's operating environments.

Local conditions, severity of operation or duty-cycle may require more or less frequent fluid change intervals that differ from the information contained in the following charts. Allison Transmission recommends that customers use fluid analysis as the primary method for determining fluid change intervals for those vehicles not equipped with prognostic software. In the absence of a fluid analysis program, the fluid change intervals listed in the following charts should be used.

If you have questions regarding fluid or filter change intervals, or models not listed in this brochure, a complete list of approved fluids can be found at **allisontransmission.com**. You can also contact the Allison Technical Assistance Center at 1-800-252-5283.

1000/2000 Series™ Fluid + Filter Change Interval Recommendations

		Duty Cycle	Prognostics Turned Off or Not Calibrated in TCM		Prognostics Turned On	
			Allison Approved TES 295°/468°/668° Fluid	Allison Approved TES 389° Fluid	Allison Approved TES 295°/468°/668° Fluid	Allison Approved TES 389° Fluid
Fluid		General*	150,000 Miles (240,000 km) or 4,000 Hours or 48 Months	50,000 Miles (80,000 km) or 2,000 Hours or 24 Months	When indicated by controller or 48 Months, whichever occurs first	When indicated by controller or 24 Months, whichever occurs first (MY2010)
		Severe**	75,000 Miles (120,000 km) or 3,000 Hours or 36 Months	12,000 Miles (20,000 km) or 500 Hours or 6 Months		
Filters	Spin-On Control Main Filter	General*	50,000 Miles (80,000 km) or 2,000 Hours or 24 Months	50,000 Miles (80,000 km) or 2,000 Hours or 24 Months	When indicated by controller or 48 Months, whichever occurs first	When indicated by controller or 24 Months, whichever occurs first (MY2010)
		Severe**	50,000 Miles (80,000 km) or 2,000 Hours or 24 Months	12,000 Miles (20,000 km) or 500 Hours or 6 Months		
	Internal Filter	All	Overhaul	Overhaul	Overhaul	Overhaul

* General Vocation: All vocations not classified as Severe ** Severe Vocation: On-/Off-Highway, Refuse, City Transit, Shuttle Transit

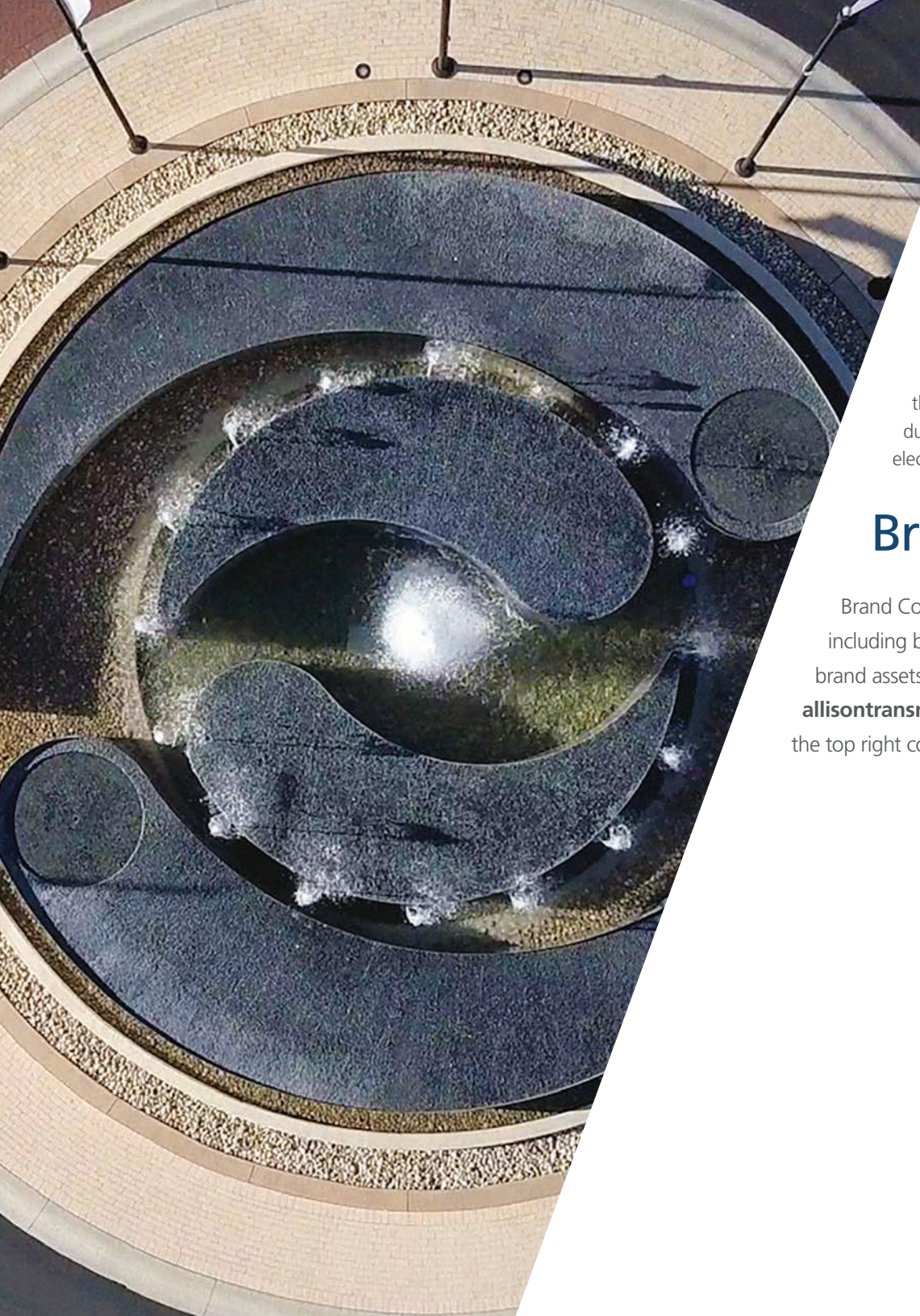
3000/4000 Series™ Fluid + Filter Change Interval Recommendations

		Duty Cycle	Prognostics Turned Off or Not Calibrated in TCM		Prognostics Turned On	
			Allison Approved TES 295°/468°/668° Fluid	Allison Approved TES 389° Fluid	Allison Approved TES 295°/468°/668° Fluid	Allison Approved TES 389° Fluid
Fluid		General*	300,000 Miles (480,000 km) or 6,000 Hours or 48 Months	25,000 Miles (40,000 km) or 1,000 Hours or 12 Months	When indicated by controller or 60 Months, whichever occurs first	When indicated by controller or 24 Months, whichever occurs first (MY2010)
		Severe**	150,000 Miles (240,000 km) or 6,000 Hours or 36 Months	12,000 Miles (20,000 km) or 500 Hours or 6 Months		
Filters	Main Filter	General*	75,000 Miles (120,000 km) or 3,000 Hours or 36 Months	25,000 Miles (40,000 km) or 1,000 Hours or 12 Months	When indicated by controller or 60 Months, whichever occurs first	When indicated by controller or 24 Months, whichever occurs first (MY2010)
		Severe**	75,000 Miles (120,000 km) or 3,000 Hours or 36 Months	12,000 Miles (20,000 km) or 500 Hours or 6 Months		
	Internal Filter	All	Overhaul	Overhaul	Overhaul	Overhaul
	Lube/Auxiliary Filter	General*	75,000 Miles (120,000 km) or 3,000 Hours or 36 Months	25,000 Miles (40,000 km) or 1,000 Hours or 12 Months	When indicated by controller or 60 Months, whichever occurs first	When indicated by controller or 24 Months, whichever occurs first (MY2010)
		Severe**	75,000 Miles (120,000 km) or 3,000 Hours or 36 Months	12,000 Miles (20,000 km) or 500 Hours or 6 Months		

* General Vocation: All vocations not classified as Severe ** Severe Vocation: On-/Off-Highway, Refuse, City Transit, Shuttle Transit

5000/9000 Series™ Fluid + Filter Change Interval Recommendations

	Allison Approved TES 353° Fluid	Allison Approved TES 439° Fluid
Fluid	Up to 4,000 Hours or 48 Months	Up to 1,200 Hours or 48 Months
Filters	When fluid is changed or 600 Hours	When fluid is changed or 600 Hours



Connected Services

Connected Services provides fleet managers with visibility to critical maintenance data that improves uptime and service efficiency in their Allison equipped medium- and heavy-duty commercial vehicles. Fleet owners can better maintain their transmissions and hybrid electric propulsion systems, maximizing asset life and efficiency.

Brand Connect

Brand Connect is the one-stop-shop for all Allison Transmission marketing materials, including brochures, fliers, images and videos. To access and download any Allison brand assets you need for marketing materials, visit the Brand Connect site at **allisontransmission.webdamdb.com**. To register, go to “Login/Register” in the top right corner of the page. Once registered, your account will be activated.



The Allison Promise

Provide the most reliable and valued propulsion solutions in the world to enable our customers to work more efficiently

A World of Support

From our headquarters in Indianapolis, Indiana, USA, to our manufacturing plants in Hungary and India, to approximately 1,600 Allison Authorized Distributors and Dealers around the globe, you are never far from the products, training, service and support you demand.

Our support starts from the moment an Allison transmission is specified. We work with you to ensure that the model and ratings fit your engine to create a tailored package of powerful performance and reliable efficiency. When you need parts or service, you can count on global access to factory-trained specialists and Allison Genuine Parts™.

Note: Features and specifications listed in this document are subject to change without notice. Although every attempt has been made to ensure the accuracy of information contained within, Allison Transmission makes no representation about the completeness, correctness or accuracy and assumes no responsibility for any errors or omissions. Features and functionality may vary depending on selected options.

This guide to be used from October 2023 – December 2025

One Allison Way
Indianapolis, Indiana USA 46222-3271

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Information or specifications subject to
change without notice or obligation.

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