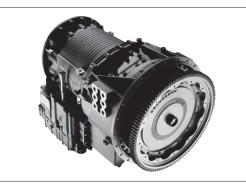


T525 (R) specification

For Applications with engines up to 410 kW (550 hp) gross input power and up to 2305 N•m gross input torque.



RATINGS

| | Gross Input Torque G N∙m | ross Input Power ⁽¹⁾ kW (hp) | GVW kg | Vocations | | | |
|--------------------------------|--|--|------------------------------|--|--|--|--|
| Tour Coach | 2305 | 410 (550) | Unlimited | Tour Coach | | | |
| (1). Gross Power rating as def | ined by ISO 1585 or SAE J1995. | | | | | | |
| DRIVETRAIN INTER | FACES | | | | | | |
| Acceptable full-load en | | | | 1700 – 2300 rpm | | | |
| Acceptable engine idle | speed range (with transmission in Drive) | | | 500 – 800 rpm | | | |
| MOUNTING | | | | | | | |
| To Engine | | SAE No.1 | | | | | |
| In Chassis | Chassis Rear support available (required for some installations) | | | | | | |
| TORQUE CONVERTE | R | MECHANICAL | . RATIOS (Gear ratios do not | t include torque converter multiplicatio | | | |
| Type Includes st | One stage, three element, polypha: andard integral damper which is operational in locku | se. Range ip. | | | | | |
| Model | Stall Torque Ratio | | First | 3.51 : 1 | | | |
| TC-521 | 2.42 | | Second | 1.91 : 1 | | | |
| TC-531 | 2.34 | | Third | 1.43 : 1 | | | |
| TC-541 | 1.90 | | Fourth | 1.00 : 1 | | | |
| TC-551 | 1.79 | | Fifth | 0.74 : 1 | | | |
| TC-561 | 1.58 | | Sixth | 0.65 : 1 | | | |
| | | | Reverse | -4.80 : 1 | | | |
| CONTROL SYSTEM | | | | | | | |
| Description | Allison 5th Generation Electronic Controls with closed loop adaptive shifts | | | | | | |
| Shift Sequences | [C = Converter mode (lockup clutch disengaged); | L = Lockup mode (lockup | clutch engaged)] | | | | |
| | Tour Coach | | | | | | |
| | Standard: 1C-[1L]-2C-2L-3L-4L-5L | | | | | | |
| | Optional: 1C–[1L]–2C–2L–3L–4L–5L–6L | | | | | | |
| ICM must be calibrated for | or "1L" option. Second-gear-start calibrations are not | available for all vehicle ap | oplications. | | | | |

Driver-to-Transmission Interface Cab-mounted shift selector, pushbutton or lever with two-digit display (range selected and range attained) **Communication Protocol - Engine/Vehicle Systems Interface** SAE J1939, IESCAN, PT-CAN

| PHYSICAL DESCRIPTION | | | | | | |
|----------------------|----------------------|------------|-------------------------------------|--|--|--|
| | Installation Length* | Dry Weight | Depth below transmission centerline | | | |
| Basic Model | 795 mm | 377 kg | 338 mm | | | |
| With Retarder | 795 mm | 411 kg | 338 mm | | | |

| *Approximate length from engine housing to output flange (depending on output fl | lange type) |
|--|-------------|
|--|-------------|

| OUTPUT RETA | ARDER PROVISION (OF | TION) | OIL SYSTEM | | | |
|--|---------------------|------------------------------|--|---------------------------------|----------------|--|
| Туре | | Integral, hydraulic | Allison approved fluids: TES 295 and TES 389 | | | |
| | Capacity | | Capacity, w/o PTO, exclue | ding external circuits | 38 litres | |
| | Torque | Power | Main circuit oil filter | Replaceable eler | nent, integral | |
| Low | 1763 N∙m | 373 kW (500 hp) | Cooler circuit oil filter | Replaceable eler | nent, integral | |
| Medium | 2170 N∙m | 447 kW (600 hp) | Electronic oil level senso | r (OLS) | Standard | |
| High | 2710 N∙m | 447 kW (600 hp) | | | | |
| SPEEDOMETER PROVISION | | | TACHOGRAPH PROV | ISION | | |
| Description | | on-zero-crossing square wave | Tone wheel | | 4 or 6-tooth | |
| 8, 16 or 40 pulses per revolution of transmission output shaft | | | Mounting | | metric thread | |
| Location | | Electronic output from TCM | Location | Transmission rear cover or reta | arder housing | |



