



3700 Series

RATINGS

| Model ⁽¹⁾ | Input Torque Gross N•m (lb-ft) | Input Power Gross ⁽²⁾ Kw (hp) | Turbine Torque Net ⁽³⁾ N•m (lb-ft) | GVW kg (lbs) | GCW kg (lbs) |
|------------------------------|-----------------------------------|---|--|--------------|--------------|
| 3700 General | 990 (730) | 205 (275) | 1830 (1350) | n/a | n/a |
| Refuse, Concrete Mixer | 1254 (925) | 239 (320) | 1996 (1450) | n/a | n/a |
| 3200 SP Specialty / Military | 1186 (875) | 246 (330) | 1996 (1450) | n/a | n/a |

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

DRIVETRAIN INTERFACES

| | |
|---|-----------------|
| Acceptable full-load engine governed speed | 2000 – 2800 rpm |
| Acceptable engine idle speed range (with transmission in Drive) | 500 – 800 rpm |

MOUNTING

| | |
|------------|--------------------|
| To Engine | SAE No.2 |
| In Chassis | Rear mounting pads |

TORQUE CONVERTER

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

| Model | Stall Torque Ratio |
|--------|--------------------|
| TC-411 | 2.71 |
| TC-413 | 2.44 |
| TC-415 | 2.35 |
| TC-417 | 2.20 |
| TC-418 | 1.98 |
| TC-419 | 2.02 |
| TC-421 | 1.77 |

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

| Range | |
|---------|-----------|
| First | 6.93 : 1 |
| Second | 4.18 : 1 |
| Third | 2.24 : 1 |
| Fourth | 1.69 : 1 |
| Fifth | 1.20 : 1 |
| Sixth | 0.90 : 1 |
| Seventh | 0.78 : 1 |
| Reverse | -5.00 : 1 |

CONTROL SYSTEM

| | |
|------------------------|--|
| Description | Allison 4th Generation Electronic Controls with closed loop adaptive shifts |
| Shift Sequences | [C = Converter mode (lockup clutch disengaged); L = Lockup mode (lockup clutch engaged)] Option 1: 1C-[1L]-2C-2L-3L-4L Option 2: 1C-[1L]-2C-2L-3L-4L-5L-6L Option 3: 1C-[1L]-2C-2L-3L-4L-5L-6L-7L |

TCM must be calibrated for "1L" option. Second-gear-start calibrations are not available for all vehicle applications. First gear requires pre-selection.

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, SAE J1587, ISO 9141, IESCAN

PHYSICAL DESCRIPTION

| | Length* | Dry Weight |
|--------------------------|-------------------|-------------------|
| With PTO Drive Provision | 1310 mm (51.6 in) | 530 kg (1170 lbs) |

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

ENGINE-DRIVEN POWER TAKE-OFF PROVISION

| Mounting pad positions viewed from rear | Drive gear rating with one PTO N•m (lb-ft) | PTO Drive Gear | Drive |
|---|---|----------------|--------|
| 8 o'clock (Standard) | 660 (485) | 68 tooth | Engine |

OIL SYSTEM

| | |
|--|-------------------------------|
| Allison approved fluids: TES 295 and TES 389 | |
| Capacity, excluding external circuits | 37 litres (39 quarts) |
| Main circuit oil filter | Replaceable element, integral |
| Cooler circuit oil filter | Replaceable element, integral |

SPEEDOMETER PROVISION

| | |
|-------------|---|
| Description | Non-zero-crossing square wave 9 or 18 pulses per revolution of transmission output shaft |
| Location | Electronic output from TCM |

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