



## 3700 Series

International Series 3700

### RATINGS

Model <sup>(1)</sup>	Gross Input Torque <sup>(2)</sup> N•m	Gross Input Power <sup>(2)</sup> kW (hp)	Gross Input Torque <sup>(2)(3)</sup> N•m	Gross Input Power <sup>(2)(3)</sup> kW (hp)	GWV kg	GCW kg
3700 General	990	205 (275)	n/a	n/a	n/a	n/a
3700 Fire Truck, Emergency	1254	239 (320)	n/a	n/a	n/a	n/a
3700 SP Specialty / Military	1186	246 (330)	n/a	n/a	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 outside North American markets only.  
 (2). Gross ratings as defined by ISO 1585 or SAE J1995. (3). Shift Energy Management (SEM) engine controls and torque limiting are required to obtain this rating.

### DRIVETRAIN INTERFACES

Acceptable full-load engine governed speed	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 5th Generation Electronic Controls with closed loop adaptive shifts
Shift Sequences	[C = Converter mode (lockup clutch disengaged); L = Lockup mode (lockup clutch engaged)] Option 1: 1C-[1L]-2C-2L-3L-4L 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, IESCAN, PT-CAN

**PHYSICAL DESCRIPTION**

	Length*	Dry Weight
With PTO Drive Provision	1310 mm	530 kg

\*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	PTO Drive Gear	Drive
8 o'clock (Standard)	660	68 tooth	Engine

**OIL SYSTEM**

Allison approved fluids: TES 295 and TES 389	
Capacity, excluding external circuits	37 litres
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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