

# Embraer KC-390 with V2500-E5<sup>®</sup> Engines





## V2500® Engine for KC-390 The Engine of Choice

After 25 years of providing propulsion for the world's single aisle commercial passenger aircraft, IAE's V2500 engine was selected to provide power for a military aircraft for the first time on the KC-390 aircraft built by Embraer. This new multi-role tanker/transport aircraft will be launched by the Brazilian Air Force. Five additional countries have agreed to join as industrial partners, with resulting orders now totaling 60 aircraft.

### V2500-E5 Engine General Arrangement

#### Low pressure (LP) system:

- One (1) Fan stage (22 blades)
- Four (4) stage LP compressor
- Five (5) stage LP turbine

#### High pressure system:

- Ten (10) stage axial flow compressor
- Two (2) stage axial flow H.P. turbine Combustion system
- Annular, two (2) piece,
- Twenty (20) fuel nozzles, segmented wall

#### 5 main bearings, 3 compartments

#### Accessory Gearbox (AGB)

- Radial drive/tower shaft from high compressor
- Fan Case mounted AGB & Main Gearbox

### Economically Superior

Through technological advantages, the V2500 provides operators with significant performance and economic benefits, including low fuel burn. The engine also provides ease of maintenance, including comprehensive engine monitoring, fully electronic aircraft-to-engine interface, and cockpit-based maintenance.

IAE shareholders include Pratt & Whitney (NYSE: UTX), Pratt & Whitney Aero Engines International GmbH, Japanese Aero Engines Corporation and MTU Aero Engines.

V2500 is a registered trademark of International Aero Engines, AG Corporation



### V2500-E5 Program Milestones

2011	V2500 Selected for Embraer KC-390
2014	V2500-E5 FAA Engine Certification
2015	Embraer KC-390 / V2500-E5 First Flight
2016	Brazil ANAC engine certification
2018	Entry into Service

### V2500-E5 Specifications

Thrust	31,330 lbs	138 kN
Weight	5,300 lbs	2,400 kg
Length	126 inches	3.2 m
Diameter	63.5 inches	1.61 m
Bypass Ratio	4.7:1	
Overall Pressure Ratio	31	