

EMBRAER PHENOM 100 Model Guide

The EMBRAER PHENOM 100 is a turbofan jet. The registry lists its family variant as EMB-500, made by Embraer. The supplied sources give no seat count, range, speed or weight figures. They do give AFM limitations (Revision 15) and engine compressor-wash guidance, which matter most for operating cost and corrosion care.

KEY TAKEAWAYS

- The AFM allows a minimum crew of 1 pilot, in the left seat, with an operative autopilot and flight director.
- Flaps-extended altitude limit: 15000 ft with yaw damper operative, 12000 ft if it is not.
- Exceeding the 139 kt maximum tire ground speed means the tires must be replaced.
- Salt-laden operation needs frequent compressor desalination washes, from daily to biweekly.

OPERATING LIMITS FROM THE AFM

Day and night VFR, IFR, icing conditions and extended over-water flight are approved when the required equipment is installed and working. Load factor limits are 3.27 g flaps up and 2.00 g flaps down. No acrobatic maneuvers or spins are authorized.

SINGLE-PILOT REQUIREMENTS

Single-pilot flight requires the pilot in the left seat, an operative autopilot and flight director, and a headset-mounted microphone. Check the Kinds of Operation Equipment List against the aircraft, or confirm an approved MEL covers any inoperative item.

ENGINE WASHING AND CORROSION CARE

The wash schedule depends on how salty the operating environment is. Continual: daily desalination wash. Frequent: weekly. Occasional: biweekly. Performance-recovery washes follow engine trend monitoring. Ask for the aircraft's wash history and home-base environment. Corrosion is not covered by the engine warranty.

PERFORMANCE

Max Altitude Flaps Extended Yaw Damper On Ft	15000
Max Altitude Flaps Extended Yaw Damper Off Ft	12000
Max Tire Ground Speed Kt	139

SAFETY NOTES

- No acrobatic maneuvers, including spins, are authorized.
- Tire ground speed above 139 kt requires tire replacement; check the records for any overspeed event.
- Corrosion checks matter for coastal or tropical aircraft; suggested cleaning intervals are 90, 45 or 15 days by zone severity.