This data sheet, which is part of Type Certificate No. 8805, prescribes conditions and limitations under which the product, for which the Type Certificate was issued, meets the airworthiness requirements of the Brazilian Aeronautical Regulations.


ENGINE

Applicable to S/N 20800001 through 20800276:
Pratt & Whitney of Canada Ltd., PT6A-114 Turbo Prop
Pratt & Whitney of Canada Ltd., PT6A-114A Turbo Prop
(When operated to PT6A-114 operating limitations)

Applicable to S/N 20800277 and Up:
Pratt & Whitney of Canada Ltd., PT6A-114A Turbo Prop

FUEL


ENGINE LIMITS

Applicable to S/N 20800001 through 20800276:
P&W PT6A-114 or PT6A-114A when operated to PT6A-114 operating limits

<table>
<thead>
<tr>
<th></th>
<th>Shaft Horse power</th>
<th>NG Gas Generator Speed (% rpm)</th>
<th>Indicator Torque (ft-lb)</th>
<th>Prop Shaft Speed (rpm)</th>
<th>Maximum Permissible Interturbine Temp. (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Takeoff static &amp; Max. Continuous</td>
<td>600(1)</td>
<td>101.6</td>
<td>1 658</td>
<td>1 900</td>
<td>805</td>
</tr>
<tr>
<td>Maximum climb</td>
<td>600(1)</td>
<td>101.6</td>
<td>1 658/1 970(2)</td>
<td>1 900</td>
<td>765</td>
</tr>
<tr>
<td>Maximum cruise</td>
<td>600(1)</td>
<td>101.6</td>
<td>1 658/1 970(2)</td>
<td>1 900</td>
<td>740</td>
</tr>
<tr>
<td>Idle</td>
<td>-</td>
<td>52 min.</td>
<td>-</td>
<td>-</td>
<td>685</td>
</tr>
<tr>
<td>Starting (2 sec.)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1 090</td>
</tr>
<tr>
<td>Max. reverse (1 min.)</td>
<td>600(1)</td>
<td>101.6</td>
<td>1 658</td>
<td>1 825</td>
<td>805</td>
</tr>
<tr>
<td>Transient (2 sec.)</td>
<td>-</td>
<td>102.6</td>
<td>2 200</td>
<td>2 090</td>
<td>850</td>
</tr>
</tbody>
</table>
**ENGINE LIMITS (Cont.)**

Applicable to S/N 20800277 and Up:
P&W PT6A-114A

<table>
<thead>
<tr>
<th></th>
<th>Engine Limit</th>
<th>NG Gas Generator Speed (rpm)</th>
<th>Indicator Torque (ft-lb)</th>
<th>Prop Shaft Speed (rpm)</th>
<th>Maximum Permissible Interturbine Temp. (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Takeoff static &amp; max. continuous</td>
<td>675&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>101.6</td>
<td>1 865</td>
<td>1 900</td>
<td>805</td>
</tr>
<tr>
<td>Maximum climb</td>
<td>675&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>101.6</td>
<td>1 865/1 970&lt;sup&gt;(2)&lt;/sup&gt;</td>
<td>1 900</td>
<td>765</td>
</tr>
<tr>
<td>Maximum cruise</td>
<td>675&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>101.6</td>
<td>1 865/1 970&lt;sup&gt;(2)&lt;/sup&gt;</td>
<td>1 900</td>
<td>740</td>
</tr>
<tr>
<td>Idle</td>
<td>-</td>
<td>52 min.</td>
<td>-</td>
<td>-</td>
<td>685</td>
</tr>
<tr>
<td>Starting (2 sec.)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1 090</td>
</tr>
<tr>
<td>Max. reverse (1 min.)</td>
<td>675&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>101.6</td>
<td>1 865</td>
<td>1 825</td>
<td>805</td>
</tr>
<tr>
<td>Transient (2 sec.)</td>
<td>-</td>
<td>102.6</td>
<td>2 200</td>
<td>2 090</td>
<td>850</td>
</tr>
</tbody>
</table>

<sup>(1)</sup> Flat Rated:
The engines may produce more power than that for which the airplane has been certificated. Under these conditions, the stated torque, ITT, or Ng limitations shall not be exceeded.

<sup>(2)</sup> If maximum torque is used, propeller r.p.m. must be set so as not to exceed power limitation.

**PROPELLER AND PROPELLER LIMITS**

Applicable to S/N 20800001 through 20800276:
Hartzell composite three-bladed, constant speed, full-feathering, reversible Model: HC-B3MN3/M10083
Diameter: Maximum 100 inches, minimum 100 inches, no cutoff approved
Pitch at 42-inch station:
- Low pitch (Beta pickup) 9°
- Feathered 78.4°
- Maximum Reverse -18°

Applicable to S/N 20800001 and Up and all TKS equipped Aircraft:
McCauley aluminum three-bladed, constant speed, full-feathering, reversible Model: 3GFR34C703/106GA-0
Diameter: Maximum 106 inches, minimum 104 inches (2-inch cutoff on diameter allowed)
Pitch at 30-inch station:
- Low pitch (Beta pickup) +15.6°
- Feathered +88°
- Maximum Reverse -14°

**AIRSPEED LIMITS (IAS)**

S/N 20800001 through 20800060

<table>
<thead>
<tr>
<th>IAS (kias)</th>
<th>Maneuvering (V&lt;sub&gt;a&lt;/sub&gt;) – at 3 311 kg (7 300 lb)</th>
<th>Maximum operating (V&lt;sub&gt;MO&lt;/sub&gt;)</th>
</tr>
</thead>
<tbody>
<tr>
<td>148</td>
<td>175 kias</td>
<td>175 kias</td>
</tr>
<tr>
<td>150</td>
<td>125 kias</td>
<td></td>
</tr>
</tbody>
</table>

See POH for variations with weight and altitude.

Flaps extended (V<sub>FE</sub>)

- to 10°                  175 kias
- 10° to 20°               150 kias
- 20° to 30°               125 kias
<table>
<thead>
<tr>
<th><strong>AIRSPEED LIMITS (IAS)</strong> (Cont.)</th>
<th>S/N 20800061 and up:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum operating ($V_{MO}$):</td>
<td>175 kias</td>
</tr>
<tr>
<td>Maneuvering ($V_{A}$) – at 3 629 kg (8 000 lb):</td>
<td>150 kias</td>
</tr>
<tr>
<td>See POH for variations with weight and altitude.</td>
<td></td>
</tr>
<tr>
<td>Flaps extended ($V_{FE}$)</td>
<td></td>
</tr>
<tr>
<td>- to 10°</td>
<td>175 kias</td>
</tr>
<tr>
<td>- 10° to 20°</td>
<td>150 kias</td>
</tr>
<tr>
<td>- 20° to 30°</td>
<td>125 kias</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>CG RANGE</strong></th>
<th>Takeoff and flight</th>
</tr>
</thead>
<tbody>
<tr>
<td>S/N 20800001 and up</td>
<td></td>
</tr>
<tr>
<td>+4.42 m (+174.06 in) to +4.68 m (184.35 in) at 3 629 kg (8 000 lb)</td>
<td></td>
</tr>
<tr>
<td>+4.13 m (+162.41 in) to +4.68 m (184.35 in) at 1 905 kg (4 200 lb)</td>
<td></td>
</tr>
<tr>
<td>Straight line variation between points given</td>
<td></td>
</tr>
<tr>
<td>Landing</td>
<td></td>
</tr>
<tr>
<td>+4.41 m (173.44 in) to +4.68 m (184.35 in) at 3 538 kg (7 800 lb)</td>
<td></td>
</tr>
<tr>
<td>+4.13 m (162.41 in) to +4.68 m (184.35 in) at 1 905 kg (4 200 lb)</td>
<td></td>
</tr>
<tr>
<td>Straight line variation between points given</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>EMPTY WT. C.G. RANGE</strong></th>
<th>None</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>MAXIMUM WEIGHT</strong></th>
<th>3 629 kg (8 000 lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S/N 20800001 and up</td>
<td></td>
</tr>
<tr>
<td>Takeoff and flight.</td>
<td></td>
</tr>
<tr>
<td>Landing</td>
<td>3 538 kg (7 800 lb)</td>
</tr>
<tr>
<td>Ramp</td>
<td>3 645 kg (8 035 lb)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>NO. OF SEATS</strong></th>
<th>1 through 2 [at +3.39 m (133.5 in) to +3.72 m (146.5 in)] pilot seats locations.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 through 11 refer to current Pilot’s Operating Handbook and ANAC Approved Flight Manual for passenger seating arrangements.</td>
</tr>
<tr>
<td></td>
<td>With 1 pilot configuration the maximum number of passengers is limited to 9.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>MAXIMUM BAGGAGE</strong></th>
<th>Reference weight and balance data</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>FUEL CAPACITY</strong></th>
<th>1 268 l (335 gal.) (1 257 l (332 gal) usable), two 634 l (167.5 gal) tanks in wings at +4.65 m (183 in)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>See NOTE 1 for data on unusable fuel.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>OIL CAPACITY</strong></th>
<th>13.25 l (3.5 gal) total, 8.97 l (2.37 gal) usable in engine mounted tank at +1.76 m (69.2 in).</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>MAXIMUM OPERATING ALTITUDE</strong></th>
<th>9 144 m (30 000 ft)</th>
</tr>
</thead>
</table>
CONTROL SURFACE

MOVEMENTS

Elevator: Up 25° ±2° Down 20° ±2°
Elevator (w/ TKS fairing) Up 18° ±2° Down 20° ±2°
Elevator trim tab: Up 15° ±2° Down 15° ±2°
rudder: Right 25° ±2° Left 25° ±2°
Aileron: Up 25° +4°, -0° Down 16° +1°, -0°
Aileron trim tab: Up 15° ±2° Down 15° ±2°
Spoiler Up 40° ±5° Down 0° +0° -5°
Wing flaps: 0° ±1° Up, 10° +1° -2° Down, 20° ±2° Down, 30° +1° -2° Down.

LH & RH Flap Extension to be symmetric within 1/2° at all positions.
Tab servo actions:
Aileron (RH) (Tab adjusted to neutral)
50% of aileron travel ±1° Up and Down.
Aileron (LH) 50% of aileron travel ±1° Up and Down.
Main Surface (Measured perpendicular to hinge line)

SERIAL NUMBER

ELIGIBLE

20800001 and up


ENGINE

Pratt & Whitney of Canada Ltd., PT6A-114 Turbo Prop. S/N 208B0001 through 208B0178 and 208B0180 through 208B0229, and as modified by SK208-84.
Pratt & Whitney of Canada Ltd., PT6A-114A Turbo Prop
a) S/N 208B0001 through S/N 208B0178 and 208B180 through 208B0229 and as modified by SK208-84 when operated to PT6A-114 operating limits.
b) S/N 208B0179, S/N 208B0230 and on. And as modified by SK208-80

FUEL


ENGINE LIMITS

P&W PT6A-114 or PT6A-114A when operated to PT6A-114 operating limits.

<table>
<thead>
<tr>
<th></th>
<th>Shaft Horse power</th>
<th>NG Gas Generator Speed (% rpm)</th>
<th>Indicator Torque (ft-lb)</th>
<th>Prop Shaft Speed (rpm)</th>
<th>Maximum Permissible Interturbine Temp. (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Takeoff static &amp; max. continuous</td>
<td>600(1)</td>
<td>101.6</td>
<td>1 658</td>
<td>1 900</td>
<td>805</td>
</tr>
<tr>
<td>Maximum climb</td>
<td>600(1)</td>
<td>101.6</td>
<td>1 658/ 1 970(2)</td>
<td>1 900</td>
<td>765</td>
</tr>
<tr>
<td>Maximum cruise</td>
<td>600(1)</td>
<td>101.6</td>
<td>1 658/ 1 970(2)</td>
<td>1 900</td>
<td>740</td>
</tr>
<tr>
<td>Idle</td>
<td>-</td>
<td>52 min.</td>
<td>-</td>
<td>-</td>
<td>685</td>
</tr>
<tr>
<td>Starting (2 sec.)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1 090</td>
</tr>
<tr>
<td>Max. reverse (1 min.)</td>
<td>600(1)</td>
<td>101.6</td>
<td>1 658</td>
<td>1 825</td>
<td>805</td>
</tr>
<tr>
<td>Transient (2 sec.)</td>
<td>-</td>
<td>102.6</td>
<td>2 200</td>
<td>2 090</td>
<td>850</td>
</tr>
</tbody>
</table>
### ENGINE LIMITS

**P&W PT6A-114A**

<table>
<thead>
<tr>
<th></th>
<th>Shaft Horsepower</th>
<th>NG Gas Generator Speed (% rpm)</th>
<th>Indicator Torque (ft-lb)</th>
<th>Prop Shaft Speed (rpm)</th>
<th>Maximum Permissible Interturbine Temp. (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Takeoff static &amp; max. continuous</td>
<td>675 (1)</td>
<td>101.6</td>
<td>1 865</td>
<td>1 900</td>
<td>805</td>
</tr>
<tr>
<td>Maximum climb</td>
<td>675 (1)</td>
<td>101.6</td>
<td>1 865/1 970 (2)</td>
<td>1 900</td>
<td>765</td>
</tr>
<tr>
<td>Maximum cruise</td>
<td>675 (1)</td>
<td>101.6</td>
<td>1 865/1 970 (2)</td>
<td>1 900</td>
<td>740</td>
</tr>
<tr>
<td>Idle</td>
<td>-</td>
<td>52 min.</td>
<td>-</td>
<td>-</td>
<td>685</td>
</tr>
<tr>
<td>Starting (2 sec.)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1 090</td>
</tr>
<tr>
<td>Max. reverse (1 min.)</td>
<td>675 (1)</td>
<td>101.6</td>
<td>1 865</td>
<td>1 825</td>
<td>805</td>
</tr>
<tr>
<td>Transient (2 sec.)</td>
<td>-</td>
<td>102.6</td>
<td>2 200</td>
<td>2 090</td>
<td>850</td>
</tr>
</tbody>
</table>

(1) Flat Rated: The engines may produce more power than that for which the airplane has been certificated. Under these conditions, the stated torque, ITT, or Ng limitations shall not be exceeded.

(2) If maximum torque is used, propeller r.p.m. must be set so as not to exceed power limitation.

### PROPELLER AND PROPELLER LIMITS

Hartzell composite three-bladed, constant speed, full-feathering, reversible Model: HC-B3MN3/M10083
Diameter: Maximum 100 inches, minimum 100 inches, no cutoff approved
Pitch at 42-inch station:
- Low pitch (Beta pickup) 9°
- Feathered 78.4°
- Maximum Reverse -18°

McCauley aluminum three-bladed, constant speed, full-feathering, reversible Model: 3GFR34C703/106GA-0
Note: All aircraft equipped with TKS anti-ice system must use this propeller.
Diameter: Maximum 106 inches, minimum 104 inches (2-inch cutoff on diameter allowed)
Pitch at 30-inch station:
- Low pitch (Beta pickup) +15.6°
- Feathered +88°
- Maximum Reverse -14°

### *AIRSPEED LIMITS (IAS)*

<table>
<thead>
<tr>
<th>Condition</th>
<th>Maximum Operating ($V_{MO}$): 175 kias</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maneuvering ($V_{m}$) – at 3 969 kg (8 750 lb):</td>
<td>148 kias</td>
</tr>
<tr>
<td>See POH for variations with weight and altitude.</td>
<td></td>
</tr>
<tr>
<td>Flaps extended ($V_{FE}$) - to 10°</td>
<td>175 kias</td>
</tr>
<tr>
<td>- 10° to 20°</td>
<td>150 kias</td>
</tr>
<tr>
<td>- 20° to 30°</td>
<td>125 kias</td>
</tr>
</tbody>
</table>
### CG RANGE

<table>
<thead>
<tr>
<th>Condition</th>
<th>CG Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Takeoff and flight</td>
<td>+5.05 m (+199.15 in) to +5.19 m (204.35 in) at 3 969 kg (8 750 lb)</td>
</tr>
<tr>
<td></td>
<td>+4.91 m (+193.37 in) to +5.19 m (204.35 in) at 3 629 kg (8 000 lb)</td>
</tr>
<tr>
<td></td>
<td>+4.56 m (+179.60 in) to +5.19 m (204.35 in) at 2 495 kg (5 500 lb)</td>
</tr>
</tbody>
</table>

### MAXIMUM WEIGHT

<table>
<thead>
<tr>
<th>Condition</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Takeoff and flight</td>
<td>3 969 kg (8 750 lb)</td>
</tr>
<tr>
<td>Landing</td>
<td>3 696 kg (8 500 lb)</td>
</tr>
<tr>
<td>Ramp</td>
<td>3 985 kg (8 785 lb)</td>
</tr>
</tbody>
</table>

For Flight into Known icing

With PT6A-114 engine and PT6A-114A when operated to PT6A-114 operating limits.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Takeoff and flight: Cargo pod Installed</td>
<td>3 626 kg (8 000 lb)</td>
</tr>
<tr>
<td>Takeoff and flight: Cargo pod removed</td>
<td>3 833 kg (8 450 lb)</td>
</tr>
</tbody>
</table>

With PT6A-114A (675 hp) engine

<table>
<thead>
<tr>
<th>Condition</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Takeoff and flight: Cargo pod Installed</td>
<td>3 878 kg (8 550 lb)</td>
</tr>
<tr>
<td>Takeoff and flight: Cargo pod removed</td>
<td>3 969 kg (8 750 lb)</td>
</tr>
</tbody>
</table>

With PT6A-114A (675 hp) engine and TKS Anti-ice system installed.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Takeoff and flight</td>
<td>3 969 kg (8 750 lb)</td>
</tr>
</tbody>
</table>

### NO. OF SEATS

1 through 2 [at +3.39 m (133.5 in) to +3.72 m (146.5 in)] pilot seats locations.

3 through 11 refer to current Pilot’s Operating Handbook and ANAC Approved Flight Manual for passenger seating arrangements.

With 1 pilot configuration the maximum number of passengers is limited to 9.

### MAXIMUM BAGGAGE

Reference weight and balance data

### FUEL CAPACITY

1 268 l (335 gal.) (1 257 l (332 gal) usable), two 634 l (167.5 gal) tanks in wings at +5.18 m (203.8 in).

See NOTE 1 for data on unusable fuel.

### OIL CAPACITY

13.25 l (3.5 gal) total, 8.97 l (2.37 gal) usable in engine mounted tank at +1.76 m (69.2 in).

### MAXIMUM OPERATING ALTITUDE

7 620 m (25 000 ft),

6 096 m (20 000 ft) for flight into known icing.
CONTROL SURFACE MOVEMENTS

- **Elevator:**
  - Up: 25° ± 2°
  - Down: 20° ± 2°

- **Elevator (w/ TKS fairing):**
  - Up: 22° +1° -0°
  - Down: 20° ± 2°

- **Elevator trim tab:**
  - Up: 15° ± 2°
  - Down: 15° ± 2°

- **Rudder:**
  - Right: 25° ± 2°
  - Left: 25° ± 2°

- **Aileron:**
  - Up: 25° ± 4°, -0°
  - Down: 16° ± 1°, -0°

- **Aileron trim tab:**
  - Up: 15° ± 2°
  - Down: 15° ± 2°

- **Spoiler:**
  - Up: 40° ± 5°
  - Down: 0° ± 0° -5°

- **Wing flaps:**
  - Up: 0° ± 1° Up, 10° +1° -2° Down
  - Down: 20° ± 2° Down, 30° +1° -2° Down

- LH & RH Flap Extension to be symmetric within 1/2° at all positions.

- Tab servo actions:
  - Aileron (RH) (Tab adjusted to neutral)
    - 50% of aileron travel ±1° Up and Down.
  - Aileron (LH) 50% of aileron travel ±1° Up and Down.

- Main Surface (Measured perpendicular to hinge line)

SERIAL NUMBER ELIGIBLE

208B00001 and up

III - Model 208B (Normal Category), approved 22 September 1989 for S/N 208B2197 and S/N 208B5000 and on.

ENGINE


FUEL


ENGINE LIMITS

<table>
<thead>
<tr>
<th></th>
<th>Shaft Horse power</th>
<th>NG Gas Generator Speed (% rpm)</th>
<th>Indicator Torque (ft-lb)</th>
<th>Prop Shaft Speed (rpm)</th>
<th>Maximum Permissibl e Interturbine Temp. (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Takeoff static &amp; max. continuous</strong></td>
<td>867 (1)</td>
<td>103.7</td>
<td>2 397</td>
<td>1 900</td>
<td>850</td>
</tr>
<tr>
<td><strong>Maximum climb</strong></td>
<td>867 (1)</td>
<td>103.7</td>
<td>2 397</td>
<td>1 900</td>
<td>825</td>
</tr>
<tr>
<td><strong>Maximum cruise</strong></td>
<td>867 (1)</td>
<td>103.7</td>
<td>2 397</td>
<td>1 900</td>
<td>805</td>
</tr>
<tr>
<td><strong>Idle</strong></td>
<td>-</td>
<td>55 min.</td>
<td>-</td>
<td>-</td>
<td>700</td>
</tr>
<tr>
<td><strong>Starting (2 sec.)</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1 090</td>
</tr>
<tr>
<td><strong>Max. reverse (1 min.)</strong></td>
<td>867 (1)</td>
<td>103.7</td>
<td>2 500</td>
<td>1 825</td>
<td>850</td>
</tr>
<tr>
<td><strong>Transient (20 sec.)</strong></td>
<td>-</td>
<td>105.4</td>
<td>2 600</td>
<td>2 090 (2)</td>
<td>905</td>
</tr>
</tbody>
</table>
(1) Flat Rated:
The engines may produce more power than that for which the airplane has been certificated. Under these conditions, the stated torque, ITT, or Ng limitations shall not be exceeded.

(2) 2 090 RPM NP may be employed in an emergency condition to complete a flight, and may be employed at all ratings. Not limited to 20 seconds.

**PROPELLER AND PROPELLER LIMITS**

Hartzell composite three-bladed, constant speed, full-feathering, reversible Model: HC-B3TN-3AF/T10890CNB-2

Diameter: Maximum 106 inches, minimum 104 inches, no cutoff approved

Pitch at 42-inch station:
- Low pitch (Beta pickup) 8.5°
- Feathered 78.4°
- Maximum Reverse -21°

***AIRSPEED LIMITS (IAS)**

- Maximum operating \( V_{MO} \):
  - 175 kias
- Maneuvering \( V_{\alpha} \) – at 3 995 kg (8 807 lb):
  - 148 kias
- See POH for variations with weight and altitude.
- Flaps extended \( V_{FE} \):
  - Up – TO/APCH 150 kias
  - TO/APR - LAND 125 kias

**CG RANGE**

**W ith or Without Cargo Pod**

- Takeoff and flight:
  - +5.06 m (+199.15 in) to +5.19 m (204.35 in) at 3 995 kg (8 807 lb)
  - +4.91 m (+193.37 in) to +5.19 m (204.35 in) at 3 629 kg (8 000 lb)
  - +4.70 m (+185.00 in) to +5.19 m (204.35 in) at 2 948 kg (6 500 lb)
- Straight line variation between points given

- Landing:
  - +5.01 m (197.22 in) to +5.19 m (204.35 in) at 3 696 kg (8 500 lb)
  - +4.91 m (193.37 in) to +5.19 m (204.35 in) at 3 626 kg (8 000 lb)
  - +4.70 m (185.00 in) to +5.19 m (204.35 in) at 2 495 kg (5 500 lb)
- Straight line variation between points given

**CG RANGE**

**With TKS Fairing**

- Takeoff and flight:
  - +5.06 m (+199.15 in) to +5.19 m (204.35 in) at 3 969 kg (8 750 lb)
  - +4.91 m (+193.37 in) to +5.19 m (204.35 in) at 3 629 kg (8 000 lb)
  - +4.70 m (+185.00 in) to +5.19 m (204.35 in) at 2 948 kg (6 500 lb)
- Straight line variation between points given

- Landing:
  - +5.01 m (197.22 in) to +5.19 m (204.35 in) at 3 696 kg (8 500 lb)
  - +4.91 m (193.37 in) to +5.19 m (204.35 in) at 3 626 kg (8 000 lb)
  - +4.70 m (185.00 in) to +5.19 m (204.35 in) at 2 495 kg (5 500 lb)
- Straight line variation between points given

**EMPTY WT. CG RANGE**

None

**MAXIMUM WEIGHT**

- Takeoff and flight. (with or without cargo pod)
  - 3 995 kg (8 807 lb)
- Takeoff and flight (with TKS fairing)
  - 3 969 kg (8 750 lb)
- Landing
  - 3 696 kg (8 500 lb)
- Ramp
  - 4 011 kg (8 842 lb)
- Ramp (TKS fairing)
  - 3 985 kg (8 785 lb)
For flights Into Known Icing (w/ TKS):
- 208B with cargo pod; 3 995 kg (8 807 lb) takeoff and flight.
- 208b with fairing; 3 969 kg (8 750 lb) takeoff and landing

**NO. OF SEATS**
1 through 2 [at +3.39 m (133.5 in) to +3.72 m (146.5 in)] pilot seats locations.
3 through 11 refer to current Pilot’s Operating Handbook and ANAC Approved Flight Manual for passenger seating arrangements.
With 1 pilot configuration the maximum number of passengers is limited to 9.

**MAXIMUM BAGGAGE**
Reference weight and balance data

**FUEL CAPACITY**
1 284 l (339.1 gal.) (1 269 l (335.3 gal) usable), two 634 l (167.5 gal) tanks in wings at +5.18 m (203.8 in).
See NOTE 1 for data on unusable fuel.

**OIL CAPACITY**
8..93 l (2.36 gal) total, 3.71 l (0.98 gal) usable in engine mounted tank at +1.76 m (69.2 in).

**MAXIMUM OPERATING ALTITUDE**
7 620 m (25 000 ft).
6 096 m (20 000 ft) for flight into known icing.

**CONTROL SURFACE MOVEMENTS**

<table>
<thead>
<tr>
<th>Surface</th>
<th>Up</th>
<th>Down</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elevator</td>
<td>+24°</td>
<td>-1°</td>
</tr>
<tr>
<td>Elevator (w/ TKS)</td>
<td>+22°</td>
<td>-0°</td>
</tr>
<tr>
<td>Elevator trim tab</td>
<td>15°</td>
<td>±2°</td>
</tr>
<tr>
<td>Rudder</td>
<td>Right 25°</td>
<td>±2°</td>
</tr>
<tr>
<td>Aileron</td>
<td>+25°</td>
<td>+4°</td>
</tr>
<tr>
<td>Aileron trim tab</td>
<td>15°</td>
<td>±2°</td>
</tr>
<tr>
<td>Spoiler</td>
<td>40°</td>
<td>±5°</td>
</tr>
<tr>
<td>Wing flaps</td>
<td>0°</td>
<td>1°Up</td>
</tr>
</tbody>
</table>

Main Surface (Measured perpendicular to hinge line)
LH & RH Flap Extension to be symmetric within 1/2° at all positions.
Tab servo actions:
- Aileron (RH) (Tab adjusted to neutral)
  - 50% of aileron travel ±1° Up and Down.
- Aileron (LH) 50% of aileron travel ±1° Up and Down.

**SERIAL NUMBER ELIGIBLE**
208B2197 and 208B5000 and on

**DATA PERTINENT TO ALL MODELS:**

**DATUM**
2.54 m (100.00 in) forward of center of nose gear jack point.

**LEVELING MEANS**
Two jig located nutplates and screws installed on the left side of fuselage below side windows and forward of cargo door.
IMPORT ELIGIBILITY

A Brazilian Certificate of Airworthiness may be issued on the basis of on an FAA Export Certificate on Airworthiness (or a third country Export Certificate on Airworthiness, in case of used aircraft imported from such country), including the following statement:

“The aircraft covered by this certificate has been inspected, tested and found to be in conformity with the Brazilian approved type design as defined by the Brazilian Type Certificate no. 8805 and in condition of safe operation”.

(See note 4)

CERTIFICATION BASIS

Brazilian Type Certificate No. 8805 issued on 12 February 1988 based on the RBAC 21.29 including following requirements:

 Applies to Models 208 and 208B when equipped with PW PT6A-114 engine and Hartzell Propeller.

 RBAC 23, which endorses the 14 CFR Part 23 effective 01 February 1965, as amended by 23-1 through 23-28.

- SFAR 27 effective 01 February 1974, as amended by amendment 27-1 through 27-4.
- Equivalent levels of safety applicable to Model 208 and 208B not equipped with the Garmin G1000 Integrated Cockpit System:
  (a) RBAC/14 CFR Part 23.955(f)(2), Fuel System.
- Special Conditions:
  (a) 23-ACE-3; Dynamic Evaluation, Engine Installation.
- Noise requirements: 14 CFR part 36 effective 01 December 1974, as amended by amendments 36-1 through 36-12.

 Applies to:

(a) Model 208 and 208B when equipped with P&W PT6A-114 engine and McCauley propeller, and
(b) Model 208B when equipped with P&W PT6A-114A engine and either McCauley or Hartzell propeller, and
(c) Model 208 when equipped with P&W PT6A-114A engine and McCauley propeller.

 RBAC 23, which endorses the 14 CFR Part 23 effective 01 February 1965, as amended by 23-1 through 23-28.

- SFAR 27 effective 01 February 1974, as amended by amendment 27-1 through 27-4.
- Special Conditions:
  (a) 23-ACE-3; Dynamic Evaluation, Engine Installation.
- Equivalent level of safety applicable to Model 208 and 208B not equipped with the Garmin G1000 Integrated Cockpit System:
  (a) RBAC/14 CFR Part 23.955(f)(2), Fuel System.
- Noise requirements: 14 CFR part 36 effective 01 December 1974, as amended by amendments 36-1 through 36-18.
CERTIFICATION BASIS
(Cont.)

Applies to G1000 Model 208B serial 208B2197 and 208B5000 and on equipped with P&WC PT6A-140 (867 SHP) engine and Hartzell propeller:


- RBAC 34 / CFR Part 34 (Emissions) of the Federal Aviation Regulations effective August 10, 1990, original.
- Special Conditions as follows:
  (a) 23-ACE-3: Dynamic Evaluation, Engine Installation.

Additions for the Garmin G1000 Integrated Cockpit System (ICS), applicable to the model 208 and 208B when equipped with P&W PT6A-114A engine and model 208B when equipped with P&W PT6A-114A or P&W PT6A-140 engine. Original paragraphs amended by 23-1 through 23-28 and addressed during the G1000 certification are included:

RBAC/14 CFR 23 regulations as amended by Amendment N/C:
- RBAC/14 CFR 23.303, 23.305(a), (b), 23.307(a), 23.601, 23.609, 23.671(a), 23.1367 and 23.1381.

RBAC/14 CFR 23 regulations as amended by Amendment 23-7:
- RBAC/14 CFR 23.561(e), 23.611, 23.689(a) and 23.867(a)(b).

RBAC/14 CFR 23 regulations as amended by Amendment 23-13:
- RBAC/14 CFR 23.1589.

RBAC/14 CFR 23 regulations as amended by Amendment 23-14:
- RBAC/14 CFR electrical aspects of 23.1365(a), (b), 23.1419(b), (c), and 23.771(a).

RBAC/14 CFR 23 regulations as amended by Amendment 23-17:
- RBAC/14 CFR 23.607, 23.685(a), and electrical aspects of 23.1309(a)(1), (a)(2), (c), 23.1165 (b), (c).

RBAC/14 CFR 23 regulations as amended by Amendment 23-20:
- RBAC/14 CFR 23.1301, 23.1327, 23.1335, 23.1547(b), (e), electrical aspects of 23.1351(a), (b), (c), (d), (e), and electrical aspects of 23.1361(a), (b), (c).

RBAC/14 CFR 23 regulations as amended by Amendment 23-21:
- RBAC/14 CFR 23.1501, 23.1541(a)(1)(2), (b)(1)(2), and 23.1353(g).

RBAC/14 CFR 23 regulations as amended by Amendment 23-23:
- RBAC/14 CFR 23.603(a), (b), and 23.605.

RBAC/14 CFR 23 regulations as amended by Amendment 23-26:
- RBAC/14 CFR 23.1529.

RBAC/14 CFR 23 regulations as amended by Amendment 23-28:
CERTIFICATION BASIS (Cont.)

RBAC/14 CFR 23.301(a)(d).
RBAC/14 CFR 23 regulations as amended by Amendment 23-34:
RBAC/14 CFR 23.853(e), 23.1523, 23.1581(a)(2), 23.1583(a)(1), (b), (h), and 23.1585(a), (b), (d).

RBAC/14 CFR 23 regulations as amended by Amendment 23-43:
RBAC/14 CFR 23.1322, 23.1331, and 23.1357(a), (b), (c), (d), (e).

RBAC/14 CFR 23 regulations as amended by Amendment 23-45:

RBAC/14 CFR 23 regulations as amended by Amendment 23-49:
RBAC/14 CFR 23.677(d), 23.867(a)(b), 23.1303(a), (b), (c), (d), (e)(1), (f), avionics aspects of 23.1309(a)(1)(2), (b)(1)(2)(3)(4), (c)(1)(2)(iii)(3), (d), (e), (f)(1), 23.1311, 23.1321(a), (c), (d), (e), 23.1323(a), (b)(1)(2), (c), 23.1329, 23.1351(c)(4), (d)(1), 23.1361(c), 23.1365(a), (b), (d), (e), 23.1431(a), (b), (d), (e).

RBAC/14 CFR 23 regulations as amended by Amendment 23-50:
RBAC/14 CFR 23.1325(a), (b)(1)(i)(ii)(iii), (b)(2)(i)(3), (c)(1)(2), (d), (e), 23.1543(b), (c), 23.1553, 23.1545(a), (b)(4), (d), 23.1555(a), (b), 23.1567(a).

RBAC/14 CFR 23 regulations as amended by Amendment 23-51:
RBAC/14 CFR 23.777(a), (b), 23.955(a)(1)(2), (f), 23.959, 23.1337(a)(1)(2), (b)(1)(4), (c), (d), 23.1183, and 23.1203(b), (c), (d), (e).

RBAC/14 CFR 23 regulations as amended by Amendment 23-52:
RBAC/14 CFR 23.1305(a)(1)(2)(3)(5), (c)(1-7), (e)

RBAC/14 CFR 23 regulations as amended by Amendment 23-53:
RBAC/14 CFR 23.901(a), (b)

RBAC/14 CFR 23 regulations as amended by Amendment 23-57:
RBAC/14 CFR 23.1308

Additions for Model 208B equipped with Garmin G1000 and P&WC PT6A-140 engine:

RBAC/14 CFR 23 regulations as amended by Amendment 23-34:
RBAC/14 CFR 23.1581(a)(2)(3), (b), (d)

RBAC/14 CFR 23 regulations as amended by Amendment 23-51:

RBAC/14 CFR 23 regulations as amended by Amendment 23-52:
RBAC/14 CFR 23.1305(a)(4).

- Special Conditions as follows:
  (a) Model 208B with G1000, 23-214-SC; HIRF, with guidance from AC20-158.

- Equivalent Level of Safety as follows:
  (1) Applicable to Model 208 and 208B equipped with the Garmin G1000 Integrated Cockpit System:
  (a) 23.1305 Powerplant instruments – (c)(2), (c)(5), Amendment 52.
(b) 23.1549 Powerplant and auxiliary power unit instruments – (a) through (c), Amendment 45, additionally, with guidance from AC 23.1311-1B, Installation of Electronic Display (Section 9 – Powerplant Displays), Section 9.4 Direct-Reading Alphanumeric-Only Displays.

(2) Applicable to Model 208 with Garmin G1000 and 208B with or without the Garmin G1000 and equipped with the optional TKS ice protection System:
(a) 23.207 Stall Warning – (c) Amendment 7.

(3) Applicable to Model 208B equipped with P&W PT6A-140 Engine:
(a) 23.145 longitudinal control, amendment 17.

Compliance with ice protection has been demonstrated in accordance with § 23.1419 when ice protection equipment is installed in accordance with the airplane equipment list and is operated per the Pilot’s Operating Handbook and ANAC Approved Airplane Flight Manual.

**REQUIRED EQUIPMENT**

The basic required equipment, as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the airplane.

**NOTES:**

**NOTE 1**  
**Weight and balance.**
Current weight and balance report including list of equipment included in certificated empty weight and loading instructions, when necessary, must be provided for each aircraft at the time of original certification. Verify from aircraft records whether or not SK 208-52 “Wing Take External Sump Installation” has been installed. The certified empty weight and corresponding center of gravity location must include full oil of 13.15 kg (29 lb) (at +1.76 m (69.2 in)), and unusable fuel as follows:

<table>
<thead>
<tr>
<th>Model</th>
<th>Serial Effectivity / Modification</th>
<th>Unusable Fuel kg (lb) @ c.g.m (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>208</td>
<td>20800001 through 20800130 not modified with SK208-52</td>
<td>9.12 (20.1) @ +4.72 (185.7)</td>
</tr>
<tr>
<td>208</td>
<td>20800001 through 20800130 modified with SK208-52</td>
<td>10.93 (24.1) @ +4.73 (186.4)</td>
</tr>
<tr>
<td>208B</td>
<td>208B0001 and on</td>
<td>10.93 (24.1) @ +4.73 (186.4)</td>
</tr>
<tr>
<td>208B</td>
<td>208B0001 through 208B0089 not modified with SK208-52</td>
<td>9.12 (20.1) @ +5.22 (205.7)</td>
</tr>
<tr>
<td>208B</td>
<td>208B0001 through 208B0089 modified with SK208-52</td>
<td>10.93 (24.1) @ +5.24 (206.4)</td>
</tr>
<tr>
<td>208B</td>
<td>208B0090 and on</td>
<td>10.93 (24.1) @ +5.24 (206.4)</td>
</tr>
</tbody>
</table>

**NOTE 2**  
**Markings and placards.**
The placards specified in the Pilot’s Operating Handbook and ANAC Approved Airplane Flight Manuals listed below (or later revision) must be displayed:

<table>
<thead>
<tr>
<th>Model</th>
<th>US POH</th>
<th>Brazilian POH</th>
</tr>
</thead>
<tbody>
<tr>
<td>208 (600 SHP)</td>
<td>D1307-27-13PH</td>
<td>D1307-34-13BR</td>
</tr>
<tr>
<td>208 (675 SHP)</td>
<td>D1352-7-13PH</td>
<td>D1352-7-13BR</td>
</tr>
<tr>
<td>208 (675 SHP)</td>
<td>208PHBUS-01</td>
<td>208PHBBR-01 (with Garmin G1000)</td>
</tr>
<tr>
<td>208B (600 SHP)</td>
<td>D1309-29-13PH</td>
<td>D1309-29-13BR</td>
</tr>
<tr>
<td>208B (675 SHP)</td>
<td>D1329-23-13PH</td>
<td>D1329-24-13BR</td>
</tr>
<tr>
<td>208B (675 SHP)</td>
<td>208PHBUS-01</td>
<td>208PHBBR-01 (with Garmin G1000)</td>
</tr>
<tr>
<td>208B (867 SHP)</td>
<td>208PHCUS-00</td>
<td>208PHCBR-00 (with Garmin G1000)</td>
</tr>
<tr>
<td>208B (867 SHP)</td>
<td>208PHDUS-00</td>
<td>208PHDBR-00 (with Garmin G1000)</td>
</tr>
</tbody>
</table>
Model 208 airplanes modified in accordance with SK-208-12 should use Cessna P/N D1307-7-13BR (or later revision).

NOTE 3  Continuing Airworthiness
Mandatory inspection times for all wing and wing carry through structural components are contained in the applicable Model 208 Series Maintenance Manual.

NOTE 4  The differences of the Brazilian airplanes in relation to the basic FAA type design are summarized below:
1 – The Brazilian Airplane Flight Manual listed in Note 2.

2 – Markings and placards: For the approved markings and placards translations contact the TC holder and/or ANAC at the following address: gcpcgr@anac.gov.br

NOTE 5  Airplanes 20800001 through 20800060 are eligible for operation at the same weight and C.G. approved for S/N 20800061 and up when modified in accordance with SK-208-12 or SK-208-85A “208A to 208 Caravan I Cargo Configuration Conversion”.

NOTE 6  In addition to the placards required by NOTE 2 above, the prescribed operating limitations indicated by an asterisk (*) must be displayed as permanent marking.

[Signature]
HELIO TARQUINIO JUNIOR
Gerente-Geral de Certificação de Produto Aeronáutico
(General Manager, Aeronautical Product Certification)