

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A25EU
Revision 1
SIAI-MARCHETTI
S.210

August 21, 1990

TYPE CERTIFICATE DATA SHEET NO. A25EU

This data sheet which is a part of type certificate No. A25EU prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder	Agusta S.p.A. Via Giovanni Agusta 520 21017 Cascina Costa Samarate (VA) Italy
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I - Model S.210 (Normal Category), Approved 31 August 1972

Engine	2 Lycoming TIO-360-A1B
Fuel	100/130 minimum grade aviation gasoline
Engine limits	2575 r.p.m. (200 hp.) from sea level to critical altitude of 15,000 feet. Manifold pressure limitations: 37.5 inches Hg. at 15,000 ft., and 34.0 inches Hg. at sea level, with straight line variation between points. Maximum 40 inches Hg. manifold pressure cumulative total with altitude adjustment.
Propeller and propeller limits	2 Hartzell HC-C2YK-2B/C8468-10R Diameter: 74 in., maximum and minimum. (No further reduction permitted) Pitch setting at 30 in. station: Low: 16° Feathered: 80°, +1°, -0° Avoid continuous operation between 1975 and 2200 r.p.m. Spinners: 2 Hartzell 836-29 Governors: 2 Hartzell F6-3A
Airspeed limits (CAS)	Never exceed (Vne) 224 m.p.h. (195 knots) Maximum structural cruising (Vno) 178 m.p.h. (155 knots) Maneuvering (Va) 153 m.p.h. (133 knots) Flaps operating and extended (Vfe) 121 m.p.h. (105 knots) Landing gear operating and extended (Vlo & Vle) 126 m.p.h. (109 knots) Minimum control speed (Vmc) 82 m.p.h. (71 knots)
C.G. range	(+95.55) to (+104.06) at 3086 lb. or less (+100.35) to (+104.06) at 4078 lb. Straight line variation between points given. Variation of Moment for Landing Gear Retraction: +703 in. - lb.

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Empty weight C.G. range	None																													
Datum	9.05 in. forward of center line of nose gear attachment bolts.																													
Leveling means	Three screws on baggage compartment bulkheads in the cabin.																													
Maximum weight	4078 lb.																													
Number of seats	6 (2 at +88.58, 2 at +118.11, and 2 at +145.67)																													
Maximum baggage	132 lb. (forward compartment at +31.49) 340 lb. (rear compartment at +145.67 with seats not occupied)																													
Fuel capacity	95.1 gal. total (2 inboard wing tanks of 27.75 gal. each at +100.0; and 2 outboard wing tanks of 19.8 gal. each at +101.57).																													
Oil capacity	16 qt. total (8 qt. in each engine at +61.02). See Note 1 for data on unusable fuel and undrainable oil.																													
Maximum operating altitude	25,000 ft.																													
Control surface movements	<table border="0"> <tr> <td>Wing flaps</td> <td></td> <td>Down</td> <td>$43^{\circ} \pm 1^{\circ}$</td> </tr> <tr> <td>Ailerons</td> <td>Up</td> <td>$22^{\circ} \pm 1^{\circ}$</td> <td>Down</td> <td>$15^{\circ} \pm 1^{\circ}$</td> </tr> <tr> <td>Elevator</td> <td>Up</td> <td>$30^{\circ} \pm 1^{\circ}$</td> <td>Down</td> <td>$20^{\circ} \pm 1^{\circ}$</td> </tr> <tr> <td>Elevator trim tab</td> <td>Up</td> <td>$15^{\circ} \pm 1^{\circ}$</td> <td>Down</td> <td>$5^{\circ} \pm 1^{\circ}$</td> </tr> <tr> <td>Rudder</td> <td>Right</td> <td>$25^{\circ} \pm 1^{\circ}$</td> <td>Left</td> <td>$25^{\circ} \pm 1^{\circ}$</td> </tr> <tr> <td>Rudder trim tab</td> <td>Right</td> <td>$24^{\circ} \pm 1^{\circ}$</td> <td>Left</td> <td>$24^{\circ} \pm 1^{\circ}$</td> </tr> </table>	Wing flaps		Down	$43^{\circ} \pm 1^{\circ}$	Ailerons	Up	$22^{\circ} \pm 1^{\circ}$	Down	$15^{\circ} \pm 1^{\circ}$	Elevator	Up	$30^{\circ} \pm 1^{\circ}$	Down	$20^{\circ} \pm 1^{\circ}$	Elevator trim tab	Up	$15^{\circ} \pm 1^{\circ}$	Down	$5^{\circ} \pm 1^{\circ}$	Rudder	Right	$25^{\circ} \pm 1^{\circ}$	Left	$25^{\circ} \pm 1^{\circ}$	Rudder trim tab	Right	$24^{\circ} \pm 1^{\circ}$	Left	$24^{\circ} \pm 1^{\circ}$
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Serial Numbers eligible	A Registro Aeronautico Italiano (RAI) Certificate of Airworthiness for Export as noted below under "Import Requirements" must be submitted for each individual aircraft for which an application for airworthiness certification is made.																													
Certification basis	<p>FAR 23 effective 1 February 1965 including Amendments 23-1 through 23-6 inclusive, plus Sections 23.909, 23.1043, 23.1143, 23.1305, 23.1527, 23.1563(b), and 23.1583(k) of Amendment 23-7.</p> <p>Application for Type Certificate dated 28 March 1968. Application extended per FAR 21.17(c)(2) by FAA letter dated 20 July 1971. Type Certificate No. A25EU issued 31 August 1972.</p>																													
Validation basis	Type Certificate A25EU was issued pursuant to FAR 21.29(a)(1)(ii) in validation of the Registro Aeronautico's (RAI) certification of compliance with the aforementioned type certification basis.																													
Import requirements	<p>To be considered eligible for operation in the United States each aircraft manufactured under this type certificate must be accompanied by a certificate of airworthiness for export or certifying statement endorsed by the exporting foreign civil airworthiness authority which states (in the English language): This aircraft conforms to its U.S. type design (type certificate number A25EU) and is in a condition for safe operation.</p> <p>The U.S. airworthiness certification basis for aircraft type certificated under FAR Section 21.29 and exported by the country of manufacture is FAR Sections 21.183(c) or 21.185(c).</p> <p>The U.S. airworthiness certification basis for aircraft type certificated under FAR Section 21.29 exported from countries other than the country of manufacture (e.g., third party country) is FAR Sections 21.183(d) or 21.183(b).</p>																													

Service Information	Service bulletin, structural repair manuals, aircraft flight manuals, and overhaul and maintenance manuals, which contain a statement that the document is Registro Aeronautico Italiano (RAI) approved, are accepted by the FAA and are considered FAA approved. These approvals pertain to the type design only.
Equipment	<p>The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. In addition, the following items of equipment are required:</p> <ul style="list-style-type: none">a) Pre-stall warning indicator, Safe Flight Instrument Corp., Type 164F or equivalent.b) Turbine inlet (engine exhaust gas) temperature indicator, P/N IU087-104-1c) "R.A.I.-Approved, Airplane Model S.210 Flight Manual", RAI-approved No. 101.637/T, dated 31 May 1972 and later RAI-approved revisions.

NOTE 1. 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, and at all times thereafter.

The certificated empty weight and corresponding center of gravity locations must include:

- Unusable fuel (31.8 lb. at +100, plus 3 lb. at +101.57)
- Unusable oil (1.61 lb. at +61.02)

NOTE 2. a) The following placards must be displayed on the instrument panel in full view of the pilot:

"THIS AIRPLANE MUST BE OPERATED AS A NORMAL CATEGORY AIRPLANE
IN COMPLIANCE WITH THE OPERATING LIMITATIONS STATED IN THE
FORM OF PLACARDS, MARKINGS AND MANUALS."

"ACROBATIC MANEUVERS, INCLUDING SPINS, PROHIBITED".

In addition, all placards required in the "RAI-approved, Airplane Model S.210, Flight Manual" must be installed in the appropriate location.

- b) Each individual airplane must be equipped with a placard that specifies the kind of operation such as VFR or IFR, DAY or NIGHT, to which the airplane is limited by the equipment installed.

NOTE 3. As of November 30, 1989, SIAI Marchetti Spa became a member of Agusta S.p.A. Group.

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