TYPE-CERTIFICATE DATA SHEET

No. E.218

for Engine
Solo 2625 series engines

Type Certificate Holder
SOLO Kleinmotoren GmbH
Stuttgarter Straße 41
71069 Sindelfingen
Germany

For Models:
Solo 2625 01
Solo 2625 02

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TABLE OF CONTENTS

I. General

1. Type / Models

Type: Solo 2625
Models: Solo 2625 01, Solo 2625 02

2. Type Certificate Holder

Solo Kleinmotoren GmbH EASA ADOAP: AP 136
Stuttgarter Straße 41
71069 Sindelfingen
Germany

3. Manufacturer

Solo Kleinmotoren GmbH from 02 June 1982 until 15 July 2013
Stuttgarter Straße 41
71069 Sindelfingen
Germany

SOLO Vertriebs- und Entwicklungs- GmbH from 16 July 2013
Stuttgarter Straße 41
71069 Sindelfingen
Germany

4. Date of Application

20 September 1996
Note: The application was made to LBA Germany before EASA had been established according to German national procedures.

5. EASA Type Certification Date

16 March 1998

II. Certification Basis

1. EASA Certification Basis

1.1. Airworthiness Standards

JAR-22 Change 5 dated October 28th 1995, Subpart H

1.2. Special Conditions (SC)

None

1.3. Equivalent Safety Findings (ESF)

None

1.4. Deviations

None

1.5. Environmental Protection

None (not required for piston engines)

III. Technical Characteristics

1. Type Design Definition

Type Design Definition in accordance with structure parts list 20 00 625 01 of 26 January 1998 (*)
(*) = or later approved revisions

2. Description

Two-stroke two-cylinder inline engine with liquid cooling, contactless dual magneto ignition, pulley for driving the propeller and exhaust muffler.
Displacement: 625 cm^3
Bore / stroke: 76mm/69mm
Compression ratio: 9,5:1
Gear ratio: according to the ratio of the engine-propeller-diameter pulleys.

3. Equipment

As stated in the type definition parts list.

4. Dimensions

Model / Variation		Solo 2625 01	Solo 2625 02	Solo 2625 01i & -01i neo	Solo 2625 02i & -02i neo
Overall Length	mm	353	353	359	359
Overall Height	mm	408	390	454	409
Width	mm	238	249	249	243

5. Dry Mass

Model / Variation	Solo 2625 01	Solo 2625 02, -01i, -02i, 01i neo and -02i neo
Mass kg	23 without exhaust system	24 without exhaust system

6. Ratings

Model / Variation	Solo 2625 01	Solo 2625 01i & -01i neo	Solo 2625 02	Solo 2625 02i & -02i neo
Take-off Power	39 kW at 6250 rpm	45 kW at 6250 rpm	47 kW at 6500 rpm	50 kW at 6600 rpm
Max. Continuous Power	39 kW at 6250 rpm	45 kW at 6250 rpm	47 kW at 6500 rpm	50 kW at 6600 rpm

Note: The performance value specified above correspond to minimum values defined under the conditions of ICAO or ARDC standard atmosphere.

7. Control System

The engine model Solo 2625 01 is equipped with one carburettor and a contactless dual magneto ignition. The engine model Solo 2625 02 is equipped with two carburettors and a contactless dual magneto ignition. The engine variations Solo 2625 01i and Solo 2625 02i are modified Solo 2625 01 respective Solo 2625 02 equipped with an electronic fuel injection, electronic ignition system and an optional redundancy system. The engine variations Solo 2625 01i neo and 02i neo are modernized 01i and 02i that incorporate a fuel pumps monitoring unit and an automatic redundancy system with new ECU software and a new throttle body.

8. Fluids (Fuel, Oil, Coolant, Additives)

See Operation and Maintenance Manual for approved fluids.

9. Aircraft Accessory Drives

None

IV. Operating Limitations

1. Temperature Limits

Cylinder head: Water temperature max. 115 °C

2. Speed Limits

Model	Solo 2625 01	Solo 2625 01i & -01i neo	Solo 2625 02	Solo 2625 02i & -02i neo
Minimum Cont. Speed	2300 rpm	2300 rpm	2300 rpm	2300 rpm
Max.Take off and Cont. Speed	6250 rpm	6250 rpm	6500 rpm	6600 rpm
Maximum Speed	7000 rpm	6600 rpm	7000 rpm	6700 rpm

3. Pressure Limits

3.1 Fuel Pressure

For 2625 01 and -02: min. 0.2 bar, max. 0.4 bar
For 2625 01i, -01i neo, -02i and -02i neo: 3 bar +/- 0,1 bar

3.2 Oil Consumption and Capacity limits:

See engine manual

V. Operating and Service Instructions

Model / variation	Solo 2625 01	Solo 2625 01i	Solo 2625 02	Solo 2625 02i	Solo 2625 01i neo	Solo 2625 02i neo
Engine Manual/ Hand-buch für den Motor	Solo Typ 2625 01, Issue 1 dated 24.09.1997 (*)	Solo Typ 2625 01i, Issue 1 dated 01.02.2017 (*)	Solo Typ 2625 02, Issue 1 dated 24.09.1997 (*)	Solo Typ 2625 01i, Issue 1 dated 01.09.2010 (*)	Solo Typ 2625 01i neo, Issue 1 dated 16.04.2019 (*)	Solo Typ 2625 02i neo, Issue 1 dated 16.04.2019 (*)
Service Manual/ Service-Anleitung für den Flug-motor	Solo 2625 01, Ausgabe 1 vom 28.02.1998 (*)	Solo 2625 01i, Ausgabe 1 vom 02.03.2018(*)	Solo 2625 02, Ausgabe 1 vom 28.02.1998 (*)	Solo 2625 02, Ausgabe 2 vom 02.09.2010 (*)	Solo 2625 01i neo & 02i neo, Ausgabe 1 vom 08.07.2019 (*)	Solo 2625 01i neo & 02i neo, Ausgabe 1 vom 08.07.2019 (*)
Parts Catalog/ Ersatz-teilliste	SOLO 2625 02 und 2625 01 Ausgabe/ issue 1 Dated 12/1997 (*)	Solo Typ 01i & 01i neo, Ausgabe /issue 1 dated 05.08.2019 (*)	SOLO 2625 02 und 2625 01 Ausgabe/ issue 1 Dated 12/1997 (*)	Solo 2625 02i & 02i neo, Ausgabe /issue dated 05.08.2019 (*)	Solo Typ 01i & 01i neo, Ausgabe /issue 1 dated 05.08.2019 (*)	Solo 2625 02i & 02i neo, Ausgabe /issue dated 05.08.2019 (*)

(*) = or later approved revisions

VI. Notes

1. The suitability and allowable operating ranges of an engine for use in a specific aircraft/propeller combination are to be demonstrated during the aircraft certification. Subsequent design control associated with these factors is the responsibility of the aircraft manufacturer.

2. For the permitted engine operating hours refer to the relevant operating instructions.

3. The deviations of the model 02 modified to 02i with fuel injection are defined in the Service Bulletin 4600-3, issue 1, dated 30.09.2010.

4. The deviations of the model 01 modified to 01i with fuel injection are defined in the Service Bulletin 4600-7, issue 1, dated 05.03.2018.

5. The deviations of the engine variations -01i neo and -02i neo are defined in the Service Bulletin 4600-10, issue 1, dated 18.09.2019.

6. Variations in engine configuration and installation components are identified by the suffix –n (for neo) instead of -i for basic injected model to the basic model number on the engine nameplate.

SECTION: ADMINISTRATIVE

I. Acronyms and Abbreviations

n/a

II. Type Certificate Holder Record

n/a

III. Change Record

Issue	Date	Changes	TC issue
Issue 01	10.03.2011	Initial Issue	Initial Issue, 10.03.2011
Issue 02	12.11.2014	Updated Manufacturer name	
Issue 03	04.06.2018	Addition of 01 modified to 01i per SB 4600-7 (see note VI.(5)), after EASA Major Change Approval 10065769	
Issue 04	27.01.2020	Corrections in the TCDS to incorporate appropriate Type Design data for the variants -02i and 01i (EASA approved major changes 10065769 in year 2011, and 10065769 in year 2018 respectively). Incorporation of new variants “-01i neo” and “-02i neo” (EASA approved major change 10072150).	

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