



TYPE-CERTIFICATE DATA SHEET

NO. EASA.A.377

for

MS 880 and RALLYE 100 Series

Type Certificate Holder

DAHER AEROSPACE

7 AVENUE DE L'UNION
94390 ORLY AEROGARE CEDEX
FRANCE

For models: MS 880 B, MS 880B-D, MS 881, MS 885, MS 886, MS 883, MS 887, MS 884
RALLYE 100 S, RALLYE 100 S-D, RALLYE 100 ST, RALLYE 100 ST-D, RALLYE 110 ST
RALLYE 150 T, RALLYE 150 T-D, RALLYE 150 ST, RALLYE 150 ST-D, RALLYE 150 SV,
RALLYE 150 SVS
RALLYE 180 T, RALLYE 180 T-D, RALLYE 180 TS



Intentionally left blank



TABLE OF CONTENTS

SECTION A:	MODEL MS 880	8
A.I.	GENERAL	8
1.	Type/ Model/ Variant	8
2.	Airworthiness Category	8
3.	Manufacturer	8
4.	Type Certification Application Date	8
5.	State of Design Authority Type Certificate Date	8
6.	Other information	8
A.II.	EASA CERTIFICATION BASIS	8
1.	Reference Date for determining the applicable requirements	8
2.	Airworthiness Requirements	8
3.	Special Conditions	8
4.	Exemptions	8
5.	Deviations	8
6.	Equivalent Safety Findings	8
7.	Environmental Protection	8
A.III.	TECHNICAL CHARACTERISTICS AND OPERATIONAL LIMITATIONS	9
1.	Type Design Definition	9
2.	Description	9
3.	Equipment	9
4.	Dimensions	9
5.	Engine	9
6.	Load factors	10
7.	Propeller	10
8.	Fluids	12
9.	Fluid capacities	13
10.	Air Speeds	14
11.	Flight Envelope	14
12.	Approved Operations Capability	14
13.	Maximum Masses (see Note 12)	14
14.	Centre of Gravity Range	15
15.	Datum	16
16.	Control surface deflections	16
17.	Levelling Means	16
18.	Minimum Flight Crew	16
19.	Maximum Passenger Seating Capacity	17
20.	Baggage/ Cargo Compartments	17
21.	Wheels and Tyres	17
22.	Special equipment	17
A.IV.	OPERATING AND SERVICE INSTRUCTIONS	18
1.	Flight Manuals (one per model)	18
2.	Technical Manual	18
3.	Repair Manual	18
4.	Weight and Balance Manual	18
5.	Illustrated Parts Catalogue	18
6.	Service Information and Service Bulletins	18
A.V.	NOTES	18
SECTION B:	MODEL RALLYE 100	20



TABLE OF CONTENTS

B.I.	GENERAL	20
1.	Type/ Model/ Variant.....	20
2.	Airworthiness Category.....	20
3.	Manufacturer	20
4.	Type Certification Application Date.....	20
5.	State of Design Authority Type Certificate Date.....	20
6.	Other information	20
B.II.	EASA CERTIFICATION BASIS	20
1.	Reference Date for determining the applicable requirements	20
2.	Airworthiness Requirements	20
3.	Special Conditions	20
4.	Exemptions.....	20
5.	(Reserved) Deviations.....	20
6.	Equivalent Safety Findings	20
7.	Environmental Protection.....	20
B.III.	TECHNICAL CHARACTERISTICS AND OPERATIONAL LIMITATIONS	20
1.	Type Design Definition.....	21
2.	Description	21
3.	Equipment	21
4.	Dimensions	21
5.	Engine.....	21
6.	Load factors.....	21
7.	Propeller	22
8.	Fluids	22
9.	Fluid capacities.....	23
10.	Air Speeds	23
11.	Flight Envelope	23
12.	Approved Operations Capability	23
13.	Maximum Masses (see Note 5)	24
14.	Centre of Gravity Range	24
15.	Datum.....	25
16.	Control surface deflections.....	26
17.	Levelling Means.....	26
18.	Minimum Flight Crew.....	26
19.	Maximum Passenger Seating Capacity	26
20.	Baggage/ Cargo Compartments	27
21.	Wheels and Tyres	27
22.	Special equipment	27
B.IV.	OPERATING AND SERVICE INSTRUCTIONS.....	28
1.	Flight Manuals (one per model)	28
2.	Technical Manual	28
3.	Repair Manual.....	28
4.	Weight and Balance Manual.....	28
5.	Illustrated Parts Catalogue.....	28
6.	Service Information and Service Bulletins	28
B.V.	NOTES.....	28
SECTION C: MODEL RALLYE 150.....		29
C.I.	GENERAL	29
1.	Type/ Model/ Variant.....	29



TABLE OF CONTENTS

2.	<i>Airworthiness Category</i>	29
3.	<i>Manufacturer</i>	29
4.	<i>Type Certification Application Date</i>	29
5.	<i>State of Design Authority Type Certificate Date</i>	29
6.	<i>Other information</i>	29
C.II.	EASA CERTIFICATION BASIS	29
1.	<i>Reference Date for determining the applicable requirements</i>	29
2.	<i>Airworthiness Requirements</i>	29
3.	<i>Special Conditions</i>	29
4.	<i>Exemptions</i>	29
5.	<i>(Reserved) Deviations</i>	29
6.	<i>Equivalent Safety Findings</i>	29
7.	<i>Environmental Protection</i>	29
C.III.	TECHNICAL CHARACTERISTICS AND OPERATIONAL LIMITATIONS	29
1.	<i>Type Design Definition</i>	30
2.	<i>Description</i>	30
3.	<i>Equipment</i>	30
4.	<i>Dimensions</i>	30
5.	<i>Engine</i>	30
6.	<i>Load factors</i>	31
7.	<i>Propeller</i>	31
8.	<i>Fluids</i>	31
9.	<i>Fluid capacities</i>	32
10.	<i>Air Speeds</i>	32
11.	<i>Flight Envelope</i>	33
12.	<i>Approved Operations Capability</i>	33
13.	<i>Maximum Masses (see Note 5)</i>	33
14.	<i>Centre of Gravity Range</i>	34
15.	<i>Datum</i>	35
16.	<i>Control surface deflections</i>	35
17.	<i>Levelling Means</i>	36
18.	<i>Minimum Flight Crew</i>	36
19.	<i>Maximum Passenger Seating Capacity</i>	36
20.	<i>Baggage/ Cargo Compartments</i>	36
21.	<i>Wheels and Tyres</i>	36
22.	<i>Special equipment</i>	37
C.IV.	OPERATING AND SERVICE INSTRUCTIONS.....	37
1.	<i>Flight Manuals (one per model)</i>	37
2.	<i>Technical Manual</i>	37
3.	<i>Repair Manual</i>	37
4.	<i>Weight and Balance Manual</i>	37
5.	<i>Illustrated Parts Catalogue</i>	37
6.	<i>Service Information and Service Bulletins</i>	37
C.V.	NOTES.....	37
SECTION D: MODEL RALLYE 180.....		39
D.I.	GENERAL	39
1.	<i>Type/ Model/ Variant</i>	39
2.	<i>Airworthiness Category</i>	39
3.	<i>Manufacturer</i>	39



TABLE OF CONTENTS

4.	<i>Type Certification Application Date</i>	39
5.	<i>State of Design Authority Type Certificate Date</i>	39
6.	<i>Other information</i>	39
D.II.	EASA CERTIFICATION BASIS	39
1.	<i>Reference Date for determining the applicable requirements</i>	39
2.	<i>Airworthiness Requirements</i>	39
3.	<i>Special Conditions</i>	39
4.	<i>Exemptions</i>	39
5.	<i>(Reserved) Deviations</i>	39
6.	<i>Equivalent Safety Findings</i>	39
7.	<i>Environmental Protection</i>	39
D.III.	TECHNICAL CHARACTERISTICS AND OPERATIONAL LIMITATIONS	40
1.	<i>Type Design Definition</i>	40
2.	<i>Description</i>	40
3.	<i>Equipment</i>	40
4.	<i>Dimensions</i>	40
5.	<i>Engine</i>	40
6.	<i>Load factors</i>	40
7.	<i>Propeller</i>	41
8.	<i>Fluids</i>	41
9.	<i>Fluid capacities</i>	41
10.	<i>Air Speeds</i>	41
11.	<i>Flight Envelope</i>	42
12.	<i>Approved Operations Capability</i>	42
13.	<i>Maximum Masses (see Note 6)</i>	42
14.	<i>Centre of Gravity Range</i>	42
15.	<i>Datum</i>	42
16.	<i>Control surface deflections</i>	43
17.	<i>Levelling Means</i>	43
18.	<i>Minimum Flight Crew</i>	43
19.	<i>Maximum Passenger Seating Capacity</i>	43
20.	<i>Baggage/ Cargo Compartments</i>	43
21.	<i>Wheels and Tyres</i>	44
22.	<i>Special equipment</i>	44
D.IV.	OPERATING AND SERVICE INSTRUCTIONS	44
1.	<i>Flight Manuals (one per model)</i>	44
2.	<i>Technical Manual</i>	44
3.	<i>Repair Manual</i>	44
4.	<i>Weight and Balance Manual</i>	44
5.	<i>Illustrated Parts Catalogue</i>	44
6.	<i>Service Information and Service Bulletins</i>	44
D.V.	NOTES.....	44
SECTION E GENERAL NOTES		46
ADMINISTRATIVE SECTION		49
I.	ACRONYMS & ABBREVIATIONS	49
II.	TYPE CERTIFICATE HOLDER RECORD.....	49
III.	CHANGE RECORD	50



TABLE OF CONTENTS



SECTION A: MODEL MS 880

A.I. General

1. Type/ Model/ Variant	
1.1 Type	MS 880
1.2 Model	MS 880 B, MS 880 B-D, MS 881, MS 885, MS 886, MS 883, MS 887, MS 884
2. Airworthiness Category	(See Section E Note 2)
a)	<u>MS 881, MS 885, MS 886, MS 883, MS 887, MS 884:</u> Normal and Utility Categories
b)	<u>MS 880 B, MS 880 B-D:</u> Utility Category
3. Manufacturer	COMPAGNIE DAHER FRANCE
4. Type Certification Application Date	Not recorded
5. State of Design Authority Type Certificate Date	<u>MS 880 B:</u> 26-October-1961 <u>MS 880 B-D:</u> 22-June-1976 <u>MS 885:</u> 04-December-1961 <u>MS 881:</u> 06-June-1963 <u>MS 886:</u> 15-July-1964 <u>MS 883:</u> 30-April-1969 <u>MS 887:</u> 31-May-1972 <u>MS 884:</u> 26-September-1972
6. Other information	The EASA Type Certificate replaces DGAC-France Type Certificate No.13

A.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements	November 1960
2. Airworthiness Requirements	French Norma AIR 2052 - Ed. Novembre 1959
3. Special Conditions	None
4. Exemptions	None
5. Deviations	None
6. Equivalent Safety Findings	None
7. Environmental Protection	CS 36 (ICAO Annex 16, volume I, as applicable)



A.III. Technical Characteristics and Operational Limitations

1. Type Design Definition	MS 880 Airplane main drawing No. 880-00.0.001 MS 881 Airplane main drawing No. 881-00.0.001 MS 885 Airplane main drawing No. 885-00.0.001 MS 886 Airplane main drawing No. 886-00.0.001 MS 883 Airplane main drawing No. 883-00.0.001 MS 887 Airplane main drawing No. 887-00.0.001 MS 884 Airplane main drawing No. 884-00.0.001
2. Description	Single-engine, all-metal, three or four seats, low-wing airplane, conventional tail, fixed tricycle landing gear
3. Equipment	The basic required equipment as prescribed in the applicable airworthiness requirements (see certification basis) must be installed in the aircraft for airworthiness certification. The applicable DGAC/EASA approved Flight Manual is required for all operations. Included within the Flight Manual (if necessary) is information in the form of supplements, which cover installation of optional systems and equipment that are required for safe operation of the aircraft.

4. Dimensions	<u>MS 880, 885, 881, 883 and 884</u>	<u>MS 886</u>	<u>MS 887</u>
4.1 Span for large wing tips: for small wing tips:	9.740 m (31.95 ft) 9.600 m (31.50 ft)		
4.2 Length	6.950 m (22.80 ft)	7.000 m (22.97 ft)	7.160 m (23.49 ft)
4.3 Height	2.600 m (8.53 ft)		
4.4 Wing Area	12.28 m ² (132.18 sq.ft)		

5. Engine

5.1 Model	<u>MS 880</u> : Continental (or Rolls Royce) O.200A <u>MS 885</u> : Continental (or Rolls Royce) O.300A or B or C or D <u>MS 881</u> : Potez 4E20 or 4E20A or 4E20B <u>MS 886</u> : Lycoming O.320.E <u>MS 883</u> : Lycoming O.235.C2A <u>.../...</u>
-----------	---



Model (Cont'd)	<u>MS 887</u> : Lycoming O.235.F2A <u>MS 884</u> : Franklin 4A.235.B3
5.2 Type Certificate	/
5.3 Limitations	<ul style="list-style-type: none"> - Continental (or Rolls Royce) O.200A: All operations: 2750 RPM (74,6 kW - 100 HP) (see Note 1) - Continental (or Rolls Royce) O.300A or B or C or D: All operations: 2700 RPM (108.1 kW - 145 HP) - Potez 4E20: All operations: 2750 RPM (77 kW - 105 CV) - Lycoming O.320.E: All operations: 2700 RPM (111.9 kW – 150 HP) - Lycoming O.235.C2A: All operations: 2800 RPM (85.8 kW – 115 HP) - Lycoming O.235.F2A: All operations: 2800 RPM (93.2 kW – 125 HP) - Franklin 4A.235.B3: All operations: 2800 RPM (93.2 kW – 125 HP)

6. Load factors

6.1 Normal Category

Flaps up: $n = + 3.8 - 1.5$

6.2 Utility Category

Flaps up: $n = + 4.4 - 1.8$

7. Propeller

7.1 <u>MS 880</u>	
7.1.1 Model	<u>MS 880 B and MS 880 B-D</u> : McCauley: IA 105 SCM 7146 or McCauley: IA 101 DCM 6948 <u>MS 880 B only</u> : Evra: 90.55.C3
7.1.2 Type Certificate	/
7.1.3 Number of blades	2
7.1.4 Diameter	1.81 m (71.26 in.) 1.75 m (68.90 in.) 1.80 m (70.90 in.)

} Respectively for propeller models here above



7.1.5 Minimum Static RPM at sea level	2500 RPM * 2500 RPM 2400 RPM	} (*) (see Note 2) } Respectively for propeller models } here above
---------------------------------------	------------------------------------	---

7.2 MS 885	
7.2.1 Model	McCaughey 1C 172 MDM 7652 to 7658 (see Note 3) or McCaughey 1C 172 EM 7652 to 7658 (see Note 4)
7.2.2 Type Certificate	/
7.2.3 Number of blades	2
7.2.4 Diameter	1.93 m (75.98 in.)
7.2.5 Minimum Static RPM at sea level	2350 to 2200 RPM

7.3 MS 881		
7.3.1 Model	Ratier 2446, pitch: 3.5 or Ratier FH 110, pitch: 4	
7.3.2 Type Certificate	/	
7.3.3 Number of blades	2	
7.3.4 Diameter	1.85 m (72.83 in.)	
7.3.5 Minimum Static RPM at sea level	2575 RPM 2550 RPM	} Respectively for propeller models } here above

7.4 MS 886	
7.4.1 Model	McCaughey 1C 172 MGM 7650 to 7658
7.4.2 Type Certificate	/
7.4.3 Number of blades	2
7.4.4 Diameter	1.93 m (75.98 in.)
7.4.5 Minimum Static RPM at sea level	2450 to 2250 RPM

7.5 MS 883	
7.5.1 Model	Sensenich 76.AK.S6.2.44
7.5.2 Type Certificate	/
7.5.3 Number of blades	2
7.5.4 Diameter	1.88 m (74 in.)
7.5.5 Minimum Static RPM at sea level	2400 RPM (see Note 5)



7.6 MS 887	
7.6.1 Model	MacCauley IA 135 KCM 7147
7.6.2 Type Certificate	/
7.6.3 Number of blades	2
7.6.4 Diameter	1.80 m (70.87 in.)
7.6.5 Minimum Static RPM at sea level	2510 RPM (see Note 6)

7.7 MS 884	
7.7.1 Model	Sensenich M72 CCS 0.54
7.7.2 Type Certificate	/
7.7.3 Number of blades	2
7.7.4 Diameter	1.83 m (72.05 in.)
7.7.5 Minimum Static RPM at sea level	2425 RPM

8. Fluids

8.1 Fuel	<ul style="list-style-type: none"> - Continental O.200, Continental O.300, Lycoming O.320.E and O.235.C2A engines: 80/87 minimum aviation grade gasoline or AVGAS 100 LL - Potez 4E20 engines: 100 minimum aviation grade gasoline - Lycoming O.235.F2A and Franklin 4A.235.B3 engines: 100/130 minimum aviation grade gasoline or AVGAS 100 LL
8.2 Oil	<ul style="list-style-type: none"> - Continental O.200 and Continental O.300 engines: SAE 20 for OAT < 5°C, SAE 40 for OAT > 5°C - Potez 4E20 engines: SAE 40 for OAT < 5 °C, SAE 50 for OAT > 5°C - Franklin 4A.235.B3 engines: SAE 20-30 for OAT < 5 °C SAE 40-50 for OAT > 5°C - For other engines: see Note 7
8.3 Coolant	N/A



9. Fluid capacities

9.1 Fuel

Two structural wing Tanks

Aircraft	<u>MS 880</u>	<u>MS 885/881/886</u> And <u>MS 880</u> (see <u>Note 9</u>)	<u>MS 880/884/887</u>	<u>MS 885/881/886/883/884/887</u> And <u>MS 880</u> (see <u>Note 9</u>)
Gauge type	Sight tube gauges (see Note 11)		Electrical gauges	
Capacity				
Total:				
Both tanks	104 litres (27.47 US Gal)	180 litres (47.55 US Gal)	105 litres (27.74 US Gal)	184 litres (48.61 US Gal)
Each tank	52 litres (13.74 US Gal)	90 litres (23.76 US Gal)	52.5 litres (13.87 US Gal)	92 litres (24.30 US Gal)
Total usable:				
Both tanks	102 litres (26.95 US Gal)	178 litres (47.02 US Gal)	96 litres (25.36 US Gal)	170 litres (44.91 US Gal)
Each tank	51 litres (13.47 US Gal)	89 litres (23.51 US Gal)	48 litres (12.68 US Gal)	85 litres (22.45 US Gal)
Unusable:	4.2 litres (1.11 US Gal)			

9.2 Oil	
9.2.1 Maximum capacity	<u>MS 880/881:</u> 4.7 litres (4.97 qts) or 5.7 litres (6.02 qts) (see Note 13) <u>MS 885/886:</u> 8 litres (8.45 qts) <u>MS 883:</u> 6 litres (6.34 qts) <u>MS 887:</u> 5.7 litres (6.02 qts) <u>MS 884</u> 7 litres (7.40 qts)
9.2.2 Usable capacity	Refer to Airplane Flight Manual
9.3 Coolant system capacity	N/A



10. Air Speeds

10.1 Normal Category

(Indicated Airspeeds) (see Section E, Note 4)

V _{NE} (Never exceed speed):	250 km/h (135 KIAS)
V _D (Design Diving Speed):	280 km/h (151 KIAS)
V _{NO} (Maximum structural cruising speed):	200 km/h (108 KIAS)
V _A (Design Manoeuvring Speed):	193 km/h (104 KIAS)
V _{FE} (Flap Extended Speed):	140 km/h (76 KIAS)

10.2 Utility Category

V _{NE} (Never exceed speed):	270 km/h (146 KIAS)
V _D (Design Diving Speed):	300 km/h (162 KIAS)
V _{NO} (Maximum structural cruising speed):	200 km/h (108 KIAS)
V _A (Design Manoeuvring Speed):	193 km/h (104 KIAS)
V _{FE} (Flap Extended Speed):	140 km/h (76 KIAS)

11. Flight Envelope	Refer to Aircraft Flight Manual
12. Approved Operations Capability	Day & Night VFR Flight into known icing conditions is prohibited

13. Maximum Masses

(see Note 12)

Aircraft	<u>MS 880</u>	<u>MS 881</u>	<u>MS 883</u>	<u>MS 885, 886, 884</u>	<u>MS 887</u>
<u>Normal Category</u>					
Maximum Takeoff	/	800 kg (1764 lbs)	825 kg (1819 lbs)	850 kg (1874 lbs)	840 kg (1852 lbs)
Maximum Landing	/	800 kg (1764 lbs)	825 kg (1819 lbs)	850 kg (1874 lbs)	840 kg (1852 lbs)
<u>Utility Category</u>					
Maximum Takeoff	770 kg (1698 lbs) for all variants				
Maximum Landing	770 kg (1698 lbs) for all variants				
Maneuvers	770 kg (1698 lbs) for all variants				



14. Centre of Gravity Range

Aircraft	MS 880		MS 881			MS 885, 886		
	/	**	***	/	**	***	/	**
Weight:	< 610 kg (1345 lbs)	= 770 kg (1698 lbs)	< 610 kg (1345 lbs)	= 770 kg (1698 lbs)	= 800 kg (1764 lbs)	< 680 kg (1499 lbs)	= 770 kg (1698 lbs)	= 850 kg (1874 lbs)
Forward Limit:								
- Aft of datum	0.17 m (6.69 in.)	0.20 m (7.87 in.)	0.17 m (6.69 in.)	0.20 m (7.87 in.)	0.21 m (8.27 in.)	0.17 m (6.69 in.)	0.18 m (7.07 in.)	0.19 m (7.48 in.)
- From engine firewall	0.826 m (32.52 in.)	0.858 m (33.78 in.)	0.826 m (32.52 in.)	0.858 m (33.78 in.)	0.865 m (34.06 in.)	0.826 m (32.52 in.)	0.839 m (33.03 in.)	0.852 m (33.54 in.)
	*		*			*		
Aft limit:								
- Aft of datum	0.39 m (15.35 in.)							
- From engine firewall	1.047 m (41.22 in.)							
	(*) Straight line variation between points given. (**) Maximum weight in Utility Category (***) Maximum weight in Normal Category							

Aircraft	MS 883			MS 887			MS 884		
	/	**	***	/	**	***	/	**	***
Weight:	< 680 kg (1499 lbs)	= 770 kg (1698 lbs)	= 825 kg (1819 lbs)	< 625 kg (1378 lbs)	= 770 kg (1852 lbs)	= 840 kg (1819 lbs)	< 625 kg (1378 lbs)	= 770 kg (1698 lbs)	= 850 kg (1874 lbs)
Forward Limit:									
- Aft of datum	0.17 m (6.69 in.)	0.18 m (7.07 in.)	0.19 m (7.48 in.)	0.16 m (6.30 in.)	0.18 m (7.07 in.)	0.19 m (7.48 in.)	0.16 m (6.30 in.)	0.18 m (7.07 in.)	0.19 m (7.48 in.)
- From engine firewall	0.826 m (32.52 in.)	0.839 m (33.03 in.)	0.852 m (33.54 in.)	0.813 m (32.01 in.)	0.839 m (33.03 in.)	0.852 m (33.54 in.)	0.813 m (32.01 in.)	0.839 m (33.03 in.)	0.852 m (33.54 in.)
	*			*					
Aft limit:									
- Aft of datum	0.39 m (15.35 in.)								
- From engine firewall	1.047 m (41.22 in.)								
	(*) Straight line variation between points given. (**) Maximum weight in Utility Category (***) Maximum weight in Normal Category								



14.1 Fuel	Aft of datum: at Station + 0.41 m (16.14 in.) From firewall: at Station + 1.067 m (41.01 in.)
14.2 Oil in the sump	<u>MS 880 B/880 B-D/881/883/844:</u> Aft of datum: at Station - 1.21 m (47.64 in.) From firewall: at Station - 0.544 m (21.42 in.) <u>MS 885/886:</u> Aft of datum: at Station - 1.15 m (45.28 in.) From firewall: at Station - 0.493 m (19.41 in.) <u>MS 887:</u> Aft of datum: at Station - 1.25 m (49.21 in.) From firewall: at Station - 0.593 m (23.35 in.)

15.Datum	Wing leading edge of reference chord located at 0.657 m (25.86 in.) aft of engine firewall Reference chord length: 1.30 m (51.18 in.)
-----------------	--

16.Control surface deflections

a) Elevator	
- Up	25° ± 1°
- Down	30° ± 1°
b) Elevator tab	
- Up	30° ± 1° (see Note 10)
- Down	28° ± 1°
c) Rudder relative to fin	
- Left and Right	30° + 0° - 2°
d) Ailerons relative to wing	
- Up	17°30 ± 1°
- Down	13°30 ± 1°
e) Flaps relative to wing	
- Up	0°
- Down	30° + 1°

17.Levelling Means	Upper spar of horizontal frame (canopy rail)
18.Minimum Flight Crew	1 (Pilot) Aft of datum: at Station + 0.29 m (11.42 in.) From firewall: at Station + 0.947 m (37.28 in.)



19. Maximum Passenger Seating Capacity	3 (see Note 8)
	One at front R.H. Station, One or two (with 2 seat belts) at rear Station
	Aft of datum: Front seats: at + 0.29 m (11.42 in.) Rear seat: at + 1.12 m (44.09 in.) From firewall: Front seats: at + 0.947 m (37.28 in.) Rear seat: at + 1.777 m (69.96 in.)

20. Baggage/ Cargo Compartments	<u>MS 880</u> : 100 kg (220 lbs) (see Note 8) or 110 kg (242 lbs) <u>MS 881</u> : 110 kg (242.51 lbs) <u>MS 883</u> : 115 kg (253.53 lbs) <u>MS 885, 886</u> : 110 kg (242.51 lbs) <u>MS 887, 884</u> : 154 kg (339.51 lbs)
	Aft of datum: At + 1 to 1.12 m (39.37 to 44.09 in.) From firewall: At + 1.657 to 1.777 m (65.24 to 69.96 in.)

21. Wheels and Tyres

21.1 Nose landing gear	Wheel: Morane Saulnier Tire: 330 x 130 Pressure: 1.4 bars (20.31 psi)																
21.2 Main landing gear	Track: 2000 mm (78.74in.)																
	<table border="1"> <tr> <td><u>MS 880, 881, 883, 885 and 886</u></td> <td><u>MS 884 and 887</u></td> </tr> <tr> <td>Wheels: Morane Saulnier</td> <td>Cleveland</td> </tr> <tr> <td>Tires: Dimensions</td> <td>420 x 150</td> <td>6.00-6.6 PR</td> <td>15x6.006.4 PR</td> </tr> <tr> <td>Brand</td> <td>/</td> <td>/</td> <td>Dunlop Goodyear</td> </tr> <tr> <td>Pressure</td> <td>1.5 bars (21.76 psi)</td> <td>1.5 bars (21.76 psi)</td> <td>1.5 bars (21.76 psi) 1.8 bars (26.11 psi)</td> </tr> </table>	<u>MS 880, 881, 883, 885 and 886</u>	<u>MS 884 and 887</u>	Wheels: Morane Saulnier	Cleveland	Tires: Dimensions	420 x 150	6.00-6.6 PR	15x6.006.4 PR	Brand	/	/	Dunlop Goodyear	Pressure	1.5 bars (21.76 psi)	1.5 bars (21.76 psi)	1.5 bars (21.76 psi) 1.8 bars (26.11 psi)
<u>MS 880, 881, 883, 885 and 886</u>	<u>MS 884 and 887</u>																
Wheels: Morane Saulnier	Cleveland																
Tires: Dimensions	420 x 150	6.00-6.6 PR	15x6.006.4 PR														
Brand	/	/	Dunlop Goodyear														
Pressure	1.5 bars (21.76 psi)	1.5 bars (21.76 psi)	1.5 bars (21.76 psi) 1.8 bars (26.11 psi)														

22. Special equipment	N/A
------------------------------	-----



A.IV. Operating and Service Instructions

1. Flight Manuals (one per model)

DGAC/EASA approved Flight Manual original issue or later revisions.

2. Technical Manual

SOCATA RALLYE Maintenance Manual at revision 10 or later revisions.

3. Repair Manual

SOCATA RALLYE Repair Manual at revision 10 or later revisions.

4. Weight and Balance Manual

N/A

5. Illustrated Parts Catalogue

SOCATA RALLYE Spare Parts Catalogue at revision 12 or later revisions.

6. Service Information and Service Bulletins

Refer to our website

A.V. Notes

1. For MS 880 B:

- Maximum normal operation power: 2700 RPM given by French decree dated April 3rd, 1980.
- Specific limitation for operation in Germany: the MS 880 B-D is limited for maximum continuous operation to 2650 RPM and during takeoff.

2. Maximum static RPM at sea level: 2550 RPM. Do not go beyond 2650 RPM in continuous operation.

3. Continental O.300A or B

4. Continental O.300C or D

5. Do not operate above 2600 RPM

6. Do not continuously operate between 2025 and 2325 RPM.

7.

below	- 12° C	SAE 20		SAE 20 W 30
from	- 12° C to + 21° C	SAE 30		SAE 40 or 20 W 30
from	- 1° C to + 32° C	SAE 40	or	SAE 40
above	+ 15° C	SAE 50		SAE 40 or SAE 50

Monograde oils

Multigrade oils

8. All variants:

- The rear seat can be occupied by two people provided that the aircraft is equipped with a 4th seat belt and that total passengers' weight on the rear seat is below the maximum authorised weight on that seat.
- Passenger(s) are allowed on the rear seat if the front passenger seat is already occupied, preferably by the passenger with the highest weight.



For MS 880:

- Max. weight on rear seat: 110 kg (242 lbs) [or 100 kg (220 lbs) if aircraft equipped with large fuel tanks].
9. For aircraft equipped with large fuel tanks.
10. $20^\circ \pm 1^\circ$ for aircraft equipped with Mod n° 23 and for MS 883/887.
Elevator automatic tab: automaticity ratio: 100 % for MS 885/886.
11. Indications of sight tube gauges are valid only when the aircraft is in a level flight attitude.
12. The aircraft empty weight must include unusable fuel quantity:
- MS 880:
Aircraft equipped with large fuel tanks: 500 kg (1102 lbs)
Aircraft not equipped with large fuel tanks: 495 kg (1091 lbs)
 - MS 883/885/886: 540 kg (1190 lbs)
 - MS 881/884: 525 kg (1157 lbs)
 - MS 887: 518 kg (1142 lbs)
13. If specification CES 1108 engine installed.



SECTION B: MODEL RALLYE 100

B.I. General

1. Type/ Model/ Variant	
1.1 Type	RALLYE 100
1.2 Model	RALLYE 100 S, RALLYE 100 S-D, 100 ST, 100 ST-D, 110 ST
2. Airworthiness Category	(See Section E, Note 2)
a)	<u>RALLYE 110 ST:</u> Normal and Utility Categories
b)	<u>RALLYE 100 S, 100 S-D, 100 ST, 100 ST-D:</u> Utility Category
3. Manufacturer	COMPAGNIE DAHER FRANCE
4. Type Certification Application Date	Not recorded
5. State of Design Authority Type Certificate Date	<u>RALLYE 100 S:</u> 06-April-1973 <u>RALLYE 100 ST:</u> 04-October-1974 <u>RALLYE 100 S-D and 100 ST-D:</u> 22-June-1976 <u>RALLYE 110 ST:</u> 17-January-1979
6. Other information	The EASA Type Certificate replaces DGAC-France Type Certificate No. 13

B.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements	<u>RALLYE 100 S, 100 S-D, 100 ST, 100 ST-D:</u> February 1973 <u>RALLYE 110 ST:</u> October 1978
2. Airworthiness Requirements	French Norma AIR 2052 - Ed. Novembre 1959
3. Special Conditions	None
4. Exemptions	None
5. (Reserved) Deviations	None
6. Equivalent Safety Findings	None
7. Environmental Protection	CS 36 (ICAO Annex 16, volume I, as applicable)

B.III. Technical Characteristics and Operational Limitations



1. Type Design Definition	RALLYE 100 S Airplane main drawing No. 880-00.0.002 RALLYE 100 ST Airplane main drawing No. 880-00.0.022 RALLYE 110 ST Airplane main drawing No. 887-00.0.004
2. Description	Single-engine, all-metal, two or four seats, low-wing airplane, conventional tail, fixed tricycle landing gear
3. Equipment	The basic required equipment as prescribed in the applicable airworthiness requirements (see certification basis) must be installed in the aircraft for airworthiness certification. The applicable DGAC/EASA approved Flight Manual is required for all operations. Included within the Flight Manual (if necessary) is information in the form of supplements, which cover installation of optional systems and equipment that are required for safe operation of the aircraft.

4. Dimensions	<u>RALLYE 100 S, 100 S-D, 100 ST, 100 ST-D</u>	<u>RALLYE 110 ST</u>
4.1 Span for large wing tips: for small wing tips:	9.740 m (31.95 ft) 9.600 m (31.50 ft)	
4.2 Length	7.045 m (23.11 ft)	7.240 m (23.75 ft)
4.3 Height	2.800 m (9.19 ft)	
4.4 Wing Area	12.28 m ² (132.08 sq.ft)	

5. Engine

5.1. Model or	<u>RALLYE 100 S, 100 S-D, 100 ST, 100 ST-D:</u> Continental (or Rolls Royce) O.200A <u>RALLYE 110 ST:</u> Lycoming O.235.L2A
5.2 Type Certificate	/
5.3 Limitations	- Continental (or Rolls Royce) O.200A (see Note 1): All operations: 2750 RPM (74.6 kW - 100 HP) - Lycoming O.235.L2A: All operations: 2600 RPM (83 kW – 112 HP)

6. Load factors

6.1 Normal Category
Flaps up:

$$n = + 3.8 - 1.5$$



6.2 Utility Category

Flaps up:

$n = +4.4 - 1.8$

7. Propeller

7.1 RALLYE 100 S, 100 S-D, 100 ST, 100 ST-D	
7.1.1 Model	McCauley: IA 105 SCM 7146 or McCauley: IA 101 DCM 6948 or McCauley: 1A 101 DCM 6946, only for RALLYE 100 ST equipped with Thielman exhaust pipe
7.1.2 Type Certificate	/
7.1.3 Number of blades	2
7.1.4 Diameter	1.81 m (71.26 in.) 1.75 m (68.90 in.) 1.75 m (68.90 in.) } Respectively for propeller models here above
7.1.5 Minimum Static RPM at sea level	2500 RPM * } (*) (see Note 2) 2500 RPM } Respectively for propeller models 2500 RPM } here above
7.2 RALLYE 110 ST	
7.2.1 Model	McCauley 1A 103 TCM 6958 or 1A 103 TCM 6958 M1
7.2.2 Type Certificate	/
7.2.3 Number of blades	2
7.2.4 Diameter	1.75 m (68.90 in.)
7.2.5 Minimum Static RPM at sea level	2300 RPM

8. Fluids

8.1 Fuel	<ul style="list-style-type: none"> - Continental (or Rolls Royce) O.200A: 80/87 minimum aviation grade gasoline or AVGAS 100 LL - Lycoming O.235.L2A: 91/96 minimum aviation grade gasoline or AVGAS 100 LL
8.2 Oil	<ul style="list-style-type: none"> - Continental (or Rolls Royce) O.200A: SAE 20 for OAT < 5°C, SAE 40 for OAT > 5°C - Lycoming O.235.L2A: SAE 40 for OAT < 5 °C, SAE 50 for OAT > 5°C



8.3 Coolant	N/A
-------------	-----

9. Fluid capacities

9.1 Fuel	Two structural wing Tanks: Total: 105 litres (27.74 US Gal) [2 x 52.5 litres (13.87 US Gal)] Usable: 96 litres (25.36 US Gal) [2 x 48 litres (12.68 US Gal)] Unusable: 6 liters (1.6 US Gal)
9.2 Oil	
9.2.1 Maximum capacity	<u>RALLYE 100 S, 100 S-D, 100 ST, 100 ST-D:</u> 4.7 litres (4.97 qts) or 5.7 litres (6.02 qts) (see Note 6) <u>RALLYE 110 ST:</u> 5.7 litres (6.02 qts)
9.2.2 Usable capacity	Refer to Airplane Flight Manual

10. Air Speeds

10.1 Normal Category (for RALLYE 110 ST only)	(Indicated Airspeeds) (see Section E, Note 4)
V_{NE} (Never exceed speed):	250 km/h (135 KIAS)
V_D (Design Diving Speed):	280 km/h (151 KIAS)
V_{NO} (Maximum structural cruising speed):	200 km/h (108 KIAS)
V_A (Design Manoeuvring Speed):	193 km/h (104 KIAS)
V_{FE} (Flap Extended Speed):	140 km/h (76 KIAS)
10.2 Utility Category	
V_{NE} (Never exceed speed):	270 km/h (146 KIAS)
V_D (Design Diving Speed):	300 km/h (162 KIAS)
V_{NO} (Maximum structural cruising speed):	200 km/h (108 KIAS)
V_A (Design Manoeuvring Speed):	193 km/h (104 KIAS)
V_{FE} (Flap Extended Speed):	140 km/h (76 KIAS)

11. Flight Envelope	Refer to Aircraft Flight Manual
12. Approved Operations Capability	Day & night VFR Flight in icing conditions is prohibited



13. Maximum Masses

(see Note 5)

Aircraft	<u>RALLYE 100 S, 100 S-D</u>	<u>RALLYE 100 ST, 100 ST-D</u>	<u>RALLYE 110 ST</u>
<u>Normal Category</u>			
Maximum Takeoff	/	/	770 kg (1698 lbs)
Maximum Landing	/	/	770 kg (1698 lbs)
<u>Utility Category</u>			
Maximum Takeoff	750 kg (1653 lbs)	770 kg (1698 lbs)	770 kg (1698 lbs)
Maximum Landing	750 kg (1653 lbs)	770 kg (1698 lbs)	770 kg (1698 lbs)
Maneuvers	750 kg (1653 lbs)	770 kg (1698 lbs) or 750 kg (1653 lbs) (Spinning)	770 kg (1698 lbs) or 750 kg (1653 lbs) (Spinning)

14. Centre of Gravity Range

Aircraft	<u>All variants</u>	<u>RALLYE 100 S and 100 S-D</u>	<u>RALLYE 100 ST and 100 ST-D</u>	<u>RALLYE 110 ST</u>
<u>Utility category with Spinning authorised</u>				
Weight	< 610 kg (1345 lbs)		= 750 kg (1693 lbs)	
Forward Limit:				
- Aft of datum	0.17 m (6.69 in.)		0.20 m (7.87 in.)	
- From engine firewall	0.826 m (32.52 in.)		0.855 m (33.66 in.)	
Aft limit:				
- Aft of datum	/		0.29 m (11.42 in.)	0.25 m (9.84 in.)
- From engine firewall	/		0.943 m (37.13 in.)	0.904 m (35.59 in.)
<u>Utility category with Spinning forbidden:</u>				
Weight	< 610 kg (1345 lbs)	/		= 770 kg (1698 lbs)
Forward Limit:				
- Aft of datum	0.17 m (6.69 in.)	/		0.21 m (8.27 in.)
- From engine firewall	0.826 m (32.52 in.)	/		0.865 m (33.06 in.)
Aft limit:				
- Aft of datum	/			0.39 m



Aircraft	All variants	RALLYE 100 S and 100 S-D	RALLYE 100 ST and 100 ST-D	RALLYE 110 ST
- From engine firewall	/			(15.35 in.) 1.047 m (41.22 in)
Normal category: Weight	< 610 kg (1345 lbs)	/		= 770 kg (1698 lbs)
Forward Limit: - Aft of datum	0.17 m (6.69 in.)	/		0.21 m (8.27 in.)
- From engine firewall	0.826 m (32.52 in.)	/		0.865 m (33.06 in.)
Aft limit: - Aft of datum	/			0.39 m (15.35 in.)
- From engine firewall	/			1.047 m (41.22 in)
Straight line variation between points given.				

14.1 Fuel	Aft of datum: at Station + 0.41 m (16.14 in.) From firewall: at Station + 1.067 m (41.01 in.)
14.2 Oil in the sump	<u>RALLYE 100 S/100 S-D:</u> Aft of datum: at Station - 1.21 m (47.64 in.) From firewall: at Station - 0.544 m (21.42 in.) <u>RALLYE 110 ST:</u> Aft of datum: at Station - 1.20 m (47.24 in.) From firewall: at Station - 0.543 m (21.38 in.)

15. Datum	Wing leading edge of reference chord located at 0.657 m (25.86 in.) aft of engine firewall Reference chord length: 1.30 m (51.18 in.)
------------------	--



16. Control surface deflections

<u>RALLYE 100 S, 100 S-D, 100 ST, 100 ST-D:</u>	
a) Elevator	
- Up	30° ± 1°
- Down	25° ± 1°
<u>RALLYE 110 ST:</u>	
a) Elevator	
- Up	22° ± 1°
- Down	20° ± 1°
<u>ALL:</u>	
b) Elevator tab	
- Up	30° ± 1° (see Note 4)
- Down	28° ± 1°
c) Rudder relative to fin	
- Left and Right	30° + 0° - 2°
d) Ailerons relative to wing	
- Up	17°30 ± 1°
- Down	13°30 ± 1°
e) Flaps relative to wing	
- Up	0°
- Down	30° + 1°

17. Levelling Means	Upper spar of horizontal frame (canopy rail)
18. Minimum Flight Crew	1 (Pilot) Aft of datum: at Station + 0.29 m (11.42 in.) From firewall: at Station + 0.947 m (37.28 in.)

19. Maximum Passenger Seating Capacity	1 for RALLYE 100 S and S-D: One at front R.H. Station,
	2 for RALLYE 100 ST, 100 ST-D and RALLYE 110 ST: One at front R.H. Station, One at rear Station or two (with 2 seat belts) (see Note 3) No passenger allowed on the rear seat in spinning configuration (see Note 3)



	<p>Aft of datum: Front seats: at + 0.29 m (11.42 in.) Rear seat: at + 1.12 m (44.09 in.) From firewall: Front seats: at + 0.947 m (37.28 in.) Rear seat: at + 1.777 m (69.96 in.)</p>
--	---

20. Baggage/ Cargo Compartments	<p><u>RALLYE 100 S and 100 S-D:</u> 20 kg (44 lbs) <u>RALLYE 100 ST and 100 ST-D:</u> 110 kg (242 lbs) <u>RALLYE 110 ST:</u> 100 kg (220 lbs) No baggage/cargo allowed in spinning configuration for RALLYE 100 ST, 100 ST-D and RALLYE 110 ST (see Note 3)</p>
	<p>Aft of datum: At + 1 to 1.12 m (39.37 to 44.09 in.) From firewall: At + 1.657 to 1.777 m (65.24 to 69.96 in.)</p>

21. Wheels and Tyres

21.1 Nose landing gear	<p>Wheel: Morane Saulnier Tire: 330 x 130 Pressure: 1.4 bars (20.31 psi)</p>
21.2 Main landing gear	<p>Track: 2000 mm (78.74in.)</p>
	<p>Wheels: Cleveland</p>
	<p>Tires: 6.00-6.6 PR or 15x6.006.4 PR (Dunlop or Goodyear)</p>
	<p>Pressure: 1.5 bars (21.76 psi) for Cleveland and Dunlop tires 1.8 bars (26.11 psi) for Goodyear tires</p>

22. Special equipment	N/A
------------------------------	-----



B.IV. Operating and Service Instructions

1. Flight Manuals (one per model)

DGAC/EASA approved Flight Manual original issue or later revisions.

2. Technical Manual

SOCATA RALLYE Maintenance Manual at revision 10 or later revisions.

3. Repair Manual

SOCATA RALLYE Repair Manual at revision 10 or later revisions.

4. Weight and Balance Manual

N/A

5. Illustrated Parts Catalogue

SOCATA RALLYE Spare Parts Catalogue at revision 12 or later revisions.

6. Service Information and Service Bulletins

Refer to our website

B.V. Notes

1. Maximum normal operation power: 2700 RPM given by French decree dated April 3rd, 1980.
Specific limitation for operation in Germany:
The RALLYE 100 S-D and 100 ST-D are limited for maximum continuous operation to 2650 RPM and during takeoff.
2. Maximum static RPM at sea level: 2550 RPM. Do not go beyond 2650 RPM in continuous operation.
3. For RALLYE 100 ST, 100 ST-D and RALLYE 110 ST:
 - The rear seat can be occupied by two people provided that the aircraft is equipped with a 4th seat belt and that the total passengers' weight on the rear seat is below the maximum authorised weight on that seat.
Passenger(s) allowed on the rear seat if the front passenger seat is already occupied, preferably by the passenger with the highest weight.
 - In spinning configuration, remove pads on rear seat and no baggage allowed.
4. $20^{\circ} \pm 1^{\circ}$ for aircraft equipped with Mod n° 23.
5. Aircraft empty weight must include unusable fuel quantity:
 - RALLYE 100 S, 100 S-D, 100 ST, 100 ST-D: 495 kg (1091 lbs)
 - RALLYE 110 ST: 520 kg (1146 lbs)
6. If specification CES 1108 engine installed.



SECTION C: MODEL RALLYE 150

C.I. General

1. Type/ Model/ Variant	
1.1 Type	RALLYE 150
1.2 Model	RALLYE 150 T, RALLYE 150 T-D, 150 ST, 150 ST-D, 150 SV, 150 SVS
2. Airworthiness Category	(See Section E, Note 2)
a)	<u>RALLYE 150 ST, 150 ST-D, 150 SV and 150 SVS:</u> Normal and Utility Categories
b)	<u>RALLYE 150 T and 150 T-D:</u> Utility Category
3. Manufacturer	COMPAGNIE DAHER FRANCE
4. Type Certification Application Date	Not recorded
5. State of Design Authority Type Certificate Date	<u>RALLYE 150 T:</u> 26-November-1974 <u>RALLYE 150 ST:</u> 20-March-1975 <u>RALLYE 150 T-D and 150 ST-D:</u> 22-June-1976 <u>RALLYE 150 SV and 150 SVS:</u> 06-February-1979
6. Other information	The EASA Type Certificate replaces DGAC-France Type Certificate No.13

C.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements	September 1974
2. Airworthiness Requirements	French Norma AIR 2052 - Ed. Novembre 1959
3. Special Conditions	None
4. Exemptions	None
5. (Reserved) Deviations	None
6. Equivalent Safety Findings	None
7. Environmental Protection	CS 36 (ICAO Annex 16, volume I, as applicable)

C.III. Technical Characteristics and Operational Limitations



1. Type Design Definition	RALLYE 150 T Airplane main drawing No. 886-00.0.002 RALLYE 150 ST Airplane main drawing No. 886-00.0.006 RALLYE 150 SV Airplane main drawing No. 886-00.0.018 RALLYE 150 SVS Airplane main drawing No. 886-00.0.024
2. Description	Single-engine, all-metal, three or four seats, low-wing airplane, conventional tail, fixed tricycle landing gear.
3. Equipment	The basic required equipment as prescribed in the applicable airworthiness requirements (see certification basis) must be installed in the aircraft for airworthiness certification. The applicable DGAC/EASA approved Flight Manual is required for all operations. Included within the Flight Manual (if necessary) is information in the form of supplements, which cover installation of optional systems and equipment that are required for safe operation of the aircraft.

4. Dimensions

Span	9.740 m (31.95 ft) for large wing tips, 9.600 m (31.50 ft) for small wing tips
Length	7.240 m (23.75 ft)
Height	2.800 m (9.19 ft)
Wing Area	12.28 m ² (132.08 sq.ft)

5. Engine

5.1. Model	<u>RALLYE 150 T, 150 T-D, 150 ST and 150 ST-D:</u> Lycoming O.320.E <u>RALLYE 150 SV and 150 SVS:</u> Lycoming O.320.D2A
5.2 Type Certificate	/



5.3 Limitations	<p>(See Note 1)</p> <ul style="list-style-type: none"> - Lycoming O.320.E: All operations: 2700 RPM (111.9 kW – 150 HP) - Lycoming O.320.D2A: For RALLYE 150 SV: All operations: 2600 RPM (115 kW – 155 HP) For RALLYE 150 SVS: All operations: 2500 RPM (112 kW – 150 HP)
-----------------	--

6. Load factors

6.1 Normal Category

Flaps up: $n = + 3.8 - 1.5$

6.2 Utility Category

Flaps up: $n = + 4.4 - 1.8$

7. Propeller

<u>7.1 RALLYE 150 T, 150 T-D, 150 ST and 150 ST-D</u>	
7.1.1 Model	McCauley 1C 172 MGM 7650 to 7658 or Sensenich 74 DM6 054 to 6056
7.1.2 Type Certificate	/
7.1.3 Number of blades	2
7.1.4 Diameter	1.93 m (75.98 in.) 1.88 m (74.00 in.) } Respectively for propeller models here above
7.1.5 Minimum Static RPM at sea level	2450 to 2250 RPM

<u>7.2 RALLYE 150 SV and 150 SVS</u>	
7.2.1 Model	Sensenich 74 DM6 – 061
7.2.2 Type Certificate	/
7.2.3 Number of blades	2
7.2.4 Diameter	1.88 m (74.00 in.)
7.2.5 Minimum Static RPM at sea level	2300 RPM

8. Fluids

8.1 Fuel	80/87 minimum aviation grade gasoline or AVGAS 100 LL
----------	--



8.2 Oil	- Lycoming O.320.E: See Note 2 - Lycoming O.320.D2A: SAE 40 < 5 °C, SAE 50 > 5°C
8.3 Coolant	N/A

9. Fluid capacities

9.1 Fuel

Two structural wing Tanks

Aircraft	<u>RALLYE 150 ST and 150 ST-D</u>		<u>RALLYE 150 T, 150 T-D, 150 SV and 150 SVS</u>
Capacity			
Total:			
Both tanks	105 litres (27.74 US Gal)	184 litres (48.61 US Gal)	184 litres (48.61 US Gal)
Each tank	52.5 litres (13.87 US Gal)	92 litres (24.30 US Gal)	92 litres (24.30 US Gal)
Total usable:			
Both tanks	96 litres (25.36 US Gal)	170 litres (44.91 US Gal)	170 litres (44.91 US Gal)
Each tank	48 litres (12.68 US Gal)	85 litres (22.45 US Gal)	85 litres (22.45 US Gal)
Unusable:	4.2 litres (1.11 US Gal)		

9.2 Oil	
9.2.1 Maximum capacity	7.5 litres (7.93 qts)
9.2.2 Usable capacity	Refer to Airplane Flight Manual
9.3 Coolant system capacity	N/A

10. Air Speeds

10.1 Normal Category

(Indicated Airspeeds) (see Section E, Note 4)

V _{NE} (Never exceed speed):	250 km/h (135 KIAS)
V _D (Design Diving Speed):	280 km/h (151 KIAS)
V _{NO} (Maximum structural cruising speed):	200 km/h (108 KIAS)
V _A (Design Manoeuvring Speed):	193 km/h (104 KIAS)
V _{FE} (Flap Extended Speed):	160 km/h (86 KIAS)



10.2 Utility Category

V _{NE} (Never exceed speed):	270 km/h (146 KIAS)
V _D (Design Diving Speed):	300 km/h (162 KIAS)
V _{NO} (Maximum structural cruising speed):	200 km/h (108 KIAS)
V _A (Design Manoeuvring Speed):	193 km/h (104 KIAS) or For <u>RALLYE 150 T and T-D</u> 210 km/h (113 KIAS)
V _{FE} (Flap Extended Speed):	160 km/h (86 KIAS)

11. Flight Envelope	Refer to Aircraft Flight Manual
12. Approved Operations Capability	Day & night VFR Flight in icing conditions is prohibited

13. Maximum Masses

(see Note 5)

Aircraft	<u>RALLYE 150 ST, 150 ST-D, RALLYE 150 SV, 150 SVS</u>	<u>RALLYE 150 T & 150 T-D</u>
<u>Normal Category</u>		
Maximum Takeoff	870 kg (1918 lbs)	/
Maximum Landing	870 kg (1918 lbs)	/
<u>Utility Category</u>		
Maneuvers	770 kg (1698 lbs) (Spinning)	950 kg (2094 lbs)



14. Centre of Gravity Range

Aircraft	<u>RALLYE 150 ST and 150 ST-D</u>	<u>RALLYE 150 SV and 150 SVS</u>	<u>RALLYE 150 T and 150 T-D</u>
<u>Utility category:</u> <u>Spinning authorised</u>			
Weight	= 770 kg (1698 lbs)	= 770 kg (1698 lbs)	/
Forward Limit:			
- Aft of datum	0.17 m (6.69 in.)	0.17 m (6.69 in.)	/
- From engine firewall	0.829 m (32.64 in.) *	0.829 m (32.64 in.) *	/
Aft limit:			
- Aft of datum	0.24 m (9.45 in.) 0.891 m (35.08 in.)		/

Aircraft	<u>RALLYE 150 ST and 150 ST-D</u>		<u>RALLYE 150 SV and 150 SVS</u>		<u>RALLYE 150 T and 150 T-D</u>	
<u>Normal and Utility categories:</u> <u>Spinning prohibited</u>						
Weight	< 745 kg (1642 lbs)	= 870 kg (1918 lbs)	< 745 kg (1642 lbs)	= 870 kg (1918 lbs)	< 745 kg (1642 lbs)	= 950 kg (2094 lbs)
Forward Limit:						
- Aft of datum	0.16 m (6.30 in.)	0.23 m (9.05 in.)	0.16 m (6.30 in.)	0.23 m (9.05 in.)	0.16 m (6.30 in.)	0.27 m (10.63 in.)
- From engine firewall	0.813 m (32.01 in.) *	0.885 m (34.84 in.)	0.813 m (32.01 in.) *	0.885 m (34.84 in.)	0.813 m (32.01 in.) *	0.924 m (36.38 in.)
Aft limit:						
- Aft of datum	0.39 m (15.35 in.)					
- From engine firewall	1.047 m (41.22 in.)					

(*) Straight line variation between points given.



14.1 Fuel	
Aft of datum:	at Station + 0.41 m (16.14 in.)
From firewall:	at Station + 1.067 m (41.01 in.)
14.2 Oil in the sump	
Aft of datum:	<u>RALLYE 150 ST, 150 ST-D, 150 T, 150 T-D:</u> at Station - 1.15 m (45.26 in.)
From firewall:	at Station - 0.493 m (19.41 in.)
Aft of datum:	<u>RALLYE 150 SV, 150 SVS:</u> at Station - 1.15 m (45.26 in.)
From firewall:	at Station - 0.493 m (19.41 in.)

15. Datum	Wing leading edge of reference chord located at 0.657 m (25.86 in.) aft of engine firewall Reference chord length: 1.30 m (51.18 in.)
------------------	--

16. Control surface deflections

<u>All RALLYE 150, except models 150 ST, 150 ST-D, 150 SV and 150 SVS:</u>	
a) Elevator	
- Up	25° ± 1°
- Down	30° ± 1°
<u>RALLYE 150 ST, 150 ST-D, 150 SV and 150 SVS:</u>	
a) Elevator	
- Up	22° ± 1°
- Down	20° ± 1°
<u>ALL:</u>	
b) Elevator tab	
- Up	30° ± 1° (see Note 4)
- Down	28° ± 1°
c) Rudder relative to fin	
- Left and Right	30° + 0° - 2°
d) Ailerons relative to wing	
- Up	17°30 ± 1°
- Down	13°30 ± 1°
e) Flaps relative to wing	
- Up	0°
- Down	30° + 1°



17. Levelling Means	Upper spar of horizontal frame (canopy rail)
18. Minimum Flight Crew	1 (Pilot)
Aft of datum:	at Station + 0.29 m (11.42 in.)
From firewall:	at Station + 0.947 m (37.28 in.)
19. Maximum Passenger Seating Capacity	3 (see Note 3)
Aft of datum:	One at front R.H. Station, One at rear Station or two (with 2 seat belts) Front seats: at + 0.29 m (11.42 in.) Rear seat: at + 1.12 m (44.09 in.)
From firewall:	Front seats: at + 0.947 m (37.28 in.) Rear seat: at + 1.777 m (69.96 in.)

20. Baggage/ Cargo Compartments	<u>RALLYE 150 ST, 150 ST-D, 150 SV and 150 SVS:</u> 130 kg (287 lbs) <u>RALLYE 150 T and 150 ST-D:</u> 140 kg (309 lbs) No baggage/cargo allowed in spinning configuration for RALLYE 150 ST, 150 ST-D, 150 SV and 150 SVS (see Note 3)
	Aft of datum: At + 1 to 1.12 m (39.37 to 44.09 in.) From firewall: At + 1.657 to 1.777 m (65.24 to 69.96 in.)

21. Wheels and Tyres

21.1 Nose landing gear

Wheel:

Morane Saulnier

Tire:

RALLYE 150 ST, 150 ST-D, 150 T and 150 T-D:
330 x 130

RALLYE 150 SV and 150 SVS:
5.00-4 6 PR

Pressure:

1.4 bars (20.31 psi)

21.2 Main landing gear

Track:

2000 mm (78.74 in.)



		<u>All</u>			<u>RALLYE 150 T only</u>	
Wheel:		Cleveland				
Tires: Dimensions		6.00-6.6 PR	15x6.006.4 PR		15x6.006.4 PR	
Brand		/	Dunlop	Goodyear	Dunlop	Goodyear
Pressure		1.5 bars (21.76 psi)	1.5 bars (21.76 psi)	1.8 bars (26.11 psi)	1.5 bars (21.76 psi)	1.8 bars (26.11 psi)

22.Special equipment	N/A
-----------------------------	-----

C.IV. Operating and Service Instructions

1. Flight Manuals (one per model)

DGAC/EASA approved Flight Manual original issue or later revisions.

2. Technical Manual

SOCATA RALLYE Maintenance Manual at revision 10 or later revisions.

3. Repair Manual

SOCATA RALLYE Repair Manual at revision 10 or later revisions.

4. Weight and Balance Manual

N/A

5. Illustrated Parts Catalogue

SOCATA RALLYE Spare Parts Catalogue at revision 12 or later revisions.

6. Service Information and Service Bulletins

Refer to our website

C.V. Notes

- The RALLYE 150 SV and 150 SVS have been deliberately limited respectively to 2600 RPM and 2500 RPM by the manufacturer.

Specific limitation for operation in Germany:

The RALLYE 150 T-D and 150 ST-D are limited for maximum continuous operation to 2600 RPM and during takeoff.

-

below	- 12° C	SAE 20	SAE 20 W 30
from	- 12° C to + 21° C	SAE 30	SAE 40 or 20 W 30
from	- 1° C to + 32° C	SAE 40	or SAE 40
above	+ 15° C	SAE 50	SAE 40 or SAE 50

Monograde oils

Multigrade oils



3. The rear seat can be occupied by two people provided that the aircraft is equipped with a 4th seat belt and that the total passengers' weight on the rear seat is below the maximum authorised weight on that seat.
Passenger(s) are allowed on the rear seat if the front passenger seat is already occupied, preferably by the passenger with the highest weight.
For RALLYE 150 ST, 150 ST-D, 150 SV and 150 SVS:
 - In spinning configuration, remove pads on rear seat and no baggage allowed.
4. $20^{\circ} \pm 1^{\circ}$ for aircraft equipped with Mod n° 23.
Elevator automatic tab: automaticity ratio: 100 % for RALLYE 150 T, 150 T-D, 150 ST and 150 ST-D.
5. The aircraft empty weight must include unusable fuel quantity:
 - RALLYE 150 T and 150 T-D: 535 kg (1179 lbs)
 - RALLYE 150 ST and 150 ST-D: 525 kg (1157 lbs)
 - RALLYE 150 SV and 150 SVS: 540 kg (1190 lbs)



SECTION D: MODEL RALLYE 180

D.I. General

1. Type/ Model/ Variant	
1.1 Type	RALLYE 180
1.2 Model	RALLYE 180 T, RALLYE 180 T-D, 180 TS
2. Airworthiness Category	Utility Category (See Section E, Note 2)
3. Manufacturer	COMPAGNIE DAHER FRANCE
4. Type Certification Application Date	Not recorded
5. State of Design Authority Type Certificate Date	RALLYE 180 T: 15-September-1977 RALLYE 180 T-D: 25-October-1977 RALLYE 180 TS: 12-December-1978
6. Other information	The EASA Type Certificate replaces DGAC-France Type Certificate No.13

D.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements	January 1977 and October 1978 for RALLYE 180 TS
2. Airworthiness Requirements	French Norma AIR 2052 - Ed. Novembre 1959
3. Special Conditions	None
4. Exemptions	None
5. (Reserved) Deviations	None
6. Equivalent Safety Findings	None
7. Environmental Protection	CS 36 (ICAO Annex 16, volume I, as applicable)



D.III. Technical Characteristics and Operational Limitations

1. Type Design Definition	RALLYE 180 T Airplane main drawing No. 886-00.0.015 RALLYE 180 TS Airplane main drawing No. 886-00.0.025
2. Description	Single-engine, all-metal, three or four seats, low-wing airplane, conventional tail, fixed tricycle landing gear.
3. Equipment	The basic required equipment as prescribed in the applicable airworthiness requirements (see certification basis) must be installed in the aircraft for airworthiness certification. The applicable DGAC/EASA approved Flight Manual is required for all operations. Included within the Flight Manual (if necessary) is information in the form of supplements, which cover installation of optional systems and equipment that are required for safe operation of the aircraft.

4. Dimensions

Span	9.740 m (31.95 ft) for large wing tips, 9.600 m (31.50 ft) for small wing tips
Length	7.240 m (23.75 ft)
Height	2.800 m (9.19 ft)
Wing Area	12.28 m ² (132.08 sq.ft)

5. Engine

5.1. Model	Lycoming O.360.A
5.2 Type Certificate	/
5.3 Limitations	- <u>RALLYE 180 T (see Note 1)</u> : All operations: 2700 RPM (135 kW – 180 HP) (see Note 7) - <u>RALLYE 180 TS</u> : All operations: 2500 RPM (123 kW – 165 HP)

6. Load factors

6.1 Utility Category
Flaps up:

$$n = + 4.4 \quad - 1.8$$



7. Propeller

7.1 Model	Sensenich 76 EM8 054
7.2 Type Certificate	/
7.3 Number of blades	2
7.4 Diameter	1.93 m (75.98 in.)
7.5 Minimum Static RPM at sea level	2300 RPM (see Note 2)

8. Fluids

8.1 Fuel	91/96 minimum aviation grade gasoline or AVGAS 100 LL
8.2 Oil	See Note 3
8.3 Coolant	N/A

9. Fluid capacities

9.1 Fuel	Two structural wing Tanks: <u>Total</u> : 184 litres (48.61 US Gal) Each tank: 92 litres (24.30 US Gal) <u>Usable</u> : 170 litres (44.91 US Gal) Each tank: 85 litres (22.45 US Gal) <u>Unusable</u> : 4.2 litres (1.1 US Gal)
9.2 Oil	
9.2.1 Maximum capacity	7.5 litres (7.93 qts)
9.2.2 Usable capacity	Refer to Airplane Flight Manual
9.3 Coolant system capacity	N/A

10. Air Speeds

(Indicated Airspeeds) (see Section E, Note 4)

V _{NE} (Never exceed speed):	270 km/h (146 KIAS)
V _D (Design Diving Speed):	300 km/h (162 KIAS)
V _{NO} (Maximum structural cruising speed):	200 km/h (108 KIAS)
V _A (Design Manoeuvring Speed):	210 km/h (113 KIAS)
V _{FE} (Flap Extended Speed):	160 km/h (86 KIAS)



11. Flight Envelope	Refer to Aircraft Flight Manual
12. Approved Operations Capability	Day & night VFR Flight in icing conditions is prohibited

13. Maximum Masses (see Note 6)

Maximum Takeoff	950 kg (2094 lbs)
Maximum Landing	950 kg (2094 lbs)
Maneuvers	950 kg (2094 lbs)

14. Centre of Gravity Range

Forward limit	0.16 m (6.30 in.) aft of datum * 0.813 m (32.01 in.) from firewall * (*) under 745 kg (1642 lbs)
Intermediate limit	0.27 m (10.63 in.) aft of datum * 0.923 m (36.34 in.) from firewall * (*) at 950 kg (2094 lbs)
	Straight line variation between points given.
Aft limit	0.39 m (15.35 in.) aft of datum 1.047 m (41.22 in.) from firewall

14.1 Fuel	
Aft of datum:	at Station + 0.41 m (16.14 in.)
From firewall:	at Station + 1.067 m (41.01 in.)
14.2 Oil in the sump	
Aft of datum:	at Station - 1.15 m (45.26 in.)
From firewall:	at Station - 0.493 m (19.41 in.)

15. Datum	Wing leading edge of reference chord located at 0.657 m (25.86 in.) aft of engine firewall Reference chord length: 1.30 m (51.18 in.)
------------------	---



16. Control surface deflections

a) Elevator	
- Up	25° ± 1°
- Down	30° ± 1°
b) Elevator tab	
- Up	30° ± 1° (see Note 5)
- Down	28° ± 1°
c) Rudder relative to fin	
- Left and Right	30° + 0° - 2°
d) Ailerons relative to wing	
- Up	17°30 ± 1°
- Down	13°30 ± 1°
e) Flaps relative to wing	
- Up	0°
- Down	30° + 1°

17. Levelling Means	Upper spar of horizontal frame (canopy rail)
18. Minimum Flight Crew	1 (Pilot)
Aft of datum:	at Station + 0.29 m (11.42 in.)
From firewall:	at Station + 0.947 m (37.28 in.)
19. Maximum Passenger Seating Capacity	4 (see Note 4)
Aft of datum:	One at front R.H. Station, Two at rear Station Front seats: at + 0.29 m (11.42 in.) Rear seat: at + 1.12 m (44.09 in.)
From firewall:	Front seats: at + 0.947 m (37.28 in.) Rear seat: at + 1.777 m (69.96 in.)

20. Baggage/ Cargo Compartments	140 kg (309 lbs)
Aft of datum:	At + 1 to 1.12 m (39.37 to 44.09 in.)
From firewall:	At + 1.657 to 1.777 m (65.24 to 69.96 in.)



21. Wheels and Tyres

21.1 Nose landing gear	Wheel: Morane Saulnier Tire: 5.00-4 6 PR Pressure: 1.4 bars (20.31 psi)
21.2 Main landing gear	Track: 2000 mm (78.74 in.)
	Wheels: Cleveland
	Tires: 6.00-6.6 PR or 15x6.006.4 PR (Dunlop or Goodyear)
	Pressure: 1.5 bars (21.76 psi) for Cleveland and Dunlop tires 1.8 bars (26.11 psi) for Goodyear tires

22. Special equipment	N/A
-----------------------	-----

D.IV. Operating and Service Instructions

1. Flight Manuals (one per model)

DGAC/EASA approved Flight Manual original issue or later revisions.

2. Technical Manual

SOCATA RALLYE Maintenance Manual at revision 10 or later revisions.

3. Repair Manual

SOCATA RALLYE Repair Manual at revision 10 or later revisions.

4. Weight and Balance Manual

N/A

5. Illustrated Parts Catalogue

SOCATA RALLYE Spare Parts Catalogue at revision 12 or later revisions.

6. Service Information and Service Bulletins

Refer to our website

D.V. Notes

1. Specific limitation for operation in Germany:
The RALLYE 180 T-D is limited for maximum continuous operation to 2575 RPM.
2. Do not continuously operate between 2150 and 2350 RPM.



3.

below	- 12° C	SAE 20		SAE 20 W 30
from	- 12° C to + 21° C	SAE 30		SAE 40 or 20 W 30
from	- 1° C to + 32° C	SAE 40	or	SAE 40
above	+ 15° C	SAE 50		SAE 40 or SAE 50
		<hr/>		<hr/>
		Monograde oils		Multigrade oils

4. Passenger(s) are allowed on the rear seat if the front passenger seat is already occupied, preferably by the passenger with the highest weight.
5. 20° ± 1° for aircraft equipped with Mod n° 23.
Elevator automatic tab: automaticity ratio: 100 % for RALLYE 180 T and 180 T-D.
6. The aircraft empty weight must include unusable fuel quantity: 550 kg (1212 lbs).
7. Exhaust pipe Thielmann (opt. 278). Refer to AFM Section 5 "Noise limitation".



SECTION E GENERAL NOTES

Note 1: Design differences between models:

- MS 881 is identical to MS 880 except for engine and fuel tanks.
- MS 885 is identical to MS 880 except for engine, automatic elevator tab, fuel tanks, miscellaneous equipment.
- MS 886 is identical to MS 885 except for engine.
- MS 883 is identical to MS 880 except for engine, reinforced nose landing gear and miscellaneous equipment.
- MS 884 is identical to MS 880 except for engine and miscellaneous equipment.
- MS 887 is identical to MS 880 except for engine, re-enforced nose landing gear and miscellaneous equipment.
- RALLYE 100 S and 100 S-D are two-seater airplane and are identical to MS 880 except for large rudder, modified elevator deflection, local structural reinforcements and miscellaneous equipment.
- RALLYE 100 ST and 100 ST-D are identical to RALLYE 100 S and 100 S-D plus rear seat.
- RALLYE 150 ST and 150 ST-D are identical to RALLYE 100 ST and 100 ST-D except for engine and elevator tabs (automatic tab on the left side –as for MS 892 (refer to TCDS A.379)- and controlled tab on the right side).
- RALLYE 150 T and 150 T-D are identical to RALLYE 100 ST and 100 ST-D except for engine, heavy airframe and associated wing, landing gear, elevator, elevator tabs (as for RALLYE 150 ST), elevator deflection and fuel tanks.
- RALLYE 150 SV is identical to RALLYE 150 ST except for engine and instrument panel.
- RALLYE 150 SVS is identical to RALLYE 150 SV except for Thielmann round shaped exhaust pipe and miscellaneous equipment (tachometer, engine placards and engine monitoring).
- RALLYE 180 T and 180 T-D are identical to RALLYE 150 T except for engine, battery installed in rear fuselage section (near rear seat) and fuel tanks.
- RALLYE 180 TS is identical to RALLYE 180 T except for Thielmann oval shaped exhaust pipe and miscellaneous equipment (tachometer, engine placards and engine monitoring).
- RALLYE 110 ST is identical to RALLYE 100 ST except for engine, instrument panel, miscellaneous equipment and modified rear surfaces (identical to RALLYE 150 ST) (elevator setting and deflection).

Note 2: a) Normal Category:

All aerobatic maneuvers are **prohibited**, spinning included.

b) Utility Category:

- The following maneuvers are **authorized** with the following initial speeds (V_i):
 - Climb zoom: $V_i = 240 \text{ km/h (130 kt)}$
 - Lazy heights: $V_i = 220 \text{ km/h (119 kt)}$
 - High bank turns (60°): $V_i = 175 \text{ km/h (94.5 kt)}$ for RALLYE 150 T and 150 T-D, 180 T and 180 T-D,
 $V_i = 170 \text{ km/h (92 kt)}$ for other models.

Stalls



- Inverted flight is **prohibited**.
- Spinning is **forbidden except** for the following models and conditions:

RALLYE 100 S and 100 S-D	750 kg max. (1653 lbs)
RALLYE 100 ST and 100 ST-D	750 kg max. (1653 lbs)
RALLYE 150 ST and 150 ST-D	770 kg max. (1698 lbs)
RALLYE 150 SV and 150 SVS	770 kg max. (1698 lbs)
RALLYE 110 ST	750 kg max. (1653 lbs)

Vi = 100 km/h (54 kt) for all models,
No passenger or baggage or cargo allowed on the rear seat.

Note 3: Glider or banderole towing is authorized for the following models and associated limitations:

Models:

- MS 885 and MS 886,
- RALLYE 150 ST, 150 ST-D, 150 T, 150 T-D,
- RALLYE 180 T, 180 T-D, 180 T-S,
- RALLYE 150 SV and 150 SVS.

Limitations:

- Maximum Takeoff weight:
 - 760 kg (1675 lbs) for MS 885, MS 886 and RALLYE 150 models,
 - 780 kg (1719 lbs) for RALLYE 180 models.
- Towed glider maximum takeoff weight:
 - 500 kg (1102 lbs) for MS 885, MS 886, RALLYE 150 models,
 - 650 kg (1433 lbs) for RALLYE 180 models.
- Towed banderole:
 - 100CxS drag (m²/ft²) coefficient must be equal or below:

120 (1291)	for MS 885, MS 886 and RALLYE 150 models,
180 (1937)	for RALLYE 180 models.
- Mandatory propeller configurations:
 - Sensenich 74DM6 056 for RALLYE 150 ST, 150 ST-D, 150 T, 150 T-D
 - Mac Cauley 7652 for MS 885
 - Mac Cauley 7650 or 7652 for MS 886
 - Sensenich 76EM8 054 or 056 for RALLYE 180 models
 - Sensenich 74DM6 061 for RALLYE 150 SV and 150 SVS
- Mandatory engine instrument:
 - Cylinder head thermometer on cylinder No. 3 for MS 885 only.
- Minimum speed with towed glider:
 - Vi = 90 km/h (48.6 kt) for MS 885, MS 886 and RALLYE 150 models
 - Vi = 100-110 km/h (54-59 kt) for RALLYE 180 models
- Towing speed envelope:
 - 90 km/h (48.6 kt) < Vi < 110 km/h (59 kt)
(depending on glider limitations) for MS 885, MS 886 and RALLYE 150 models.
 - 100 km/h (54 kt) < Vi < 120 km/h (65 kt)
(depending on glider limitations) for RALLYE 180 models.



- Placard to be placed on instruments panel in clear view of the pilot:
 - French placard:

Remorquage planeurs ou banderoles	
- Remorquage avec hélices:	<ul style="list-style-type: none">Sensenich 74DM6 056 (R 150 ST, 150 ST-D, 150 T et 150 T-D)Mac Cauley 7652 (MS 885)Mac Cauley 7650 ou 7652 (MS 886)Sensenich 76EM8 054 ou 056 (R 180 T, 180 T-D et 180 T-S)Sensenich 74DM6 061 (R 150 SV et 150 SVS)
- Masse maximale au décollage:	760 kg (780 kg RALLYE 180 T, 180 T-D et 180 TS)
- Vitesse minimale de remorquage:	90 km/h (100-110 km/h RALLYE 180 T, 180 T-D et 180 TS)
- Vitesse optimale de montée:	100-105 km/h (volets 0°) (110-115 km/h RALLYE 180 T, 180 T-D et 180 TS)
- Masse maximale du planeur remorqué:	500 kg (650 kg RALLYE 180 T, 180 T-D et 180 TS)
- 100CxS maximal des banderoles:	120 (180 RALLYE 180 T, 180 T-D et 180 TS)

- English placard:

Glider or banderole towing	
- Towing with propellers:	<ul style="list-style-type: none">Sensenich 74DM6 056 (R 150 ST, 150 ST-D, 150 T and 150 T-D)Mac Cauley 7652 (MS 885)Mac Cauley 7650 ou 7652 (MS 886)Sensenich 76EM8 054 ou 056 (R 180 T, 180 T-D and 180 T-S)Sensenich 74DM6 061 (R 150 SV et 150 SVS)
- Maximum takeoff weight:	760 kg (1675 lbs) [780 kg (1719 lbs) RALLYE 180 T, 180 T-D and 180 TS]
- Minimum towing speed:	90 km/h [100-110 km/h (54-59 kt) RALLYE 180 T, 180 T-D and 180 TS]
- Optimal climbing speed:	100-105 km/h (54-57 kt) (flaps 0°) [110-115 km/h (59-62 kt) RALLYE 180 T, 180 T-D, 180 TS]
- Towed glider maximum weight:	500 kg (1102 lbs) [650 kg (1433 lbs) RALLYE 180 T, 180 T-D and 180 TS]
- Maximum 100CxS for banderoles:	120 (180 RALLYE 180 T, 180 T-D and 180 TS)

Note 4: Lateral wind limit: 35 km/h (20 kts).



ADMINISTRATIVE SECTION

I. Acronyms & Abbreviations

DGAC: Direction Générale de l'Aviation Civile
EASA : European Aviation Safety Agency
ICAO: International Civil Aviation Organization
RPM: Revolution per minute (engine speed)
kW: Kilowatt

II. Type Certificate Holder Record

1961 to 1963:	Société MORANE-SAULNIER 5, rue Volta PUTEAUX (Seine) FRANCE
1963 to 1979	Société d'Exploitation des Etablissements MORANE-SAULNIER 46, Avenue Kléber PARIS 16è FRANCE
1979 to 2000	Société de Construction d'Avions de Tourisme et d'Affaire "S.O.C.A.T.A." - Groupe AEROSPATIALE Boîte Postale n° 930 65009 TARBES FRANCE
2000 to 2009:	EADS SOCATA 65921 TARBES Cedex 9 FRANCE
2009 to 2018:	SOCATA 65921 TARBES Cedex 9 FRANCE
Since 2018 to 2022:	DAHER AEROSPACE 23 ROUTE DE TOURS 41400 SAINT-JULIEN-DE-CHEDON FRANCE
Since 2022:	DAHER AEROSPACE 7 AVENUE DE L'UNION 94390 ORLY AEROGARE CEDEX France



III. Change Record

Issue	Date	Changes	TC Issue No. & Date
Issue 01	12/10/2010	Transfer from the DGAC TCDS No. 49 issue 13 dated January 1979 to the EASA TCDS form.	Initial Issue, 12/10/2010
Issue 02	02/10/2015	<ul style="list-style-type: none"> - Correction: Moving from “Variant” category to “Model” category all previously categorized “variants” of each airplane type at Issue 01 of this EASA Type Certificate Data Sheet to be in conformity with previous DGAC type certificate data sheet - Paragraph 9.2 “Oil”: Adding of M.S. 883 maximum capacity - Correction of a mistake in Sensenich reference of propeller used on RALLYE 180: read 76 EM8 054 instead of 74 EM8 054 - Editorial changes 	
Issue 03	15/12/2019	Update according to the EASA template Issue 2 of 2019. Change of the name of the TC holder: SOCATA becomes DAHER AEROSPACE.	Issue 1, 24/03/2020
Issue 04	07/08/2024	Change of TCH address in heading page and in Administrative Section.	Issue 2, 07/08/2024

-END-

