



TYPE-CERTIFICATE DATA SHEET

No. EASA.A.613

Vulcanair P.64, P.66, V1 series

VULCANAIR S.p.A.
Via dei Mille, 1
80121 Napoli
ITALY

For models:

P.64 "Oscar"
P.64B "Oscar B"
P.64B "Oscar B 1155"
P.64B "Oscar 200"
P.66B "Oscar 100"
P.66B "Oscar 150"
P.66C "Charlie"
Vulcanair V1.0 (formerly P.64B "Oscar B 1155")
Vulcanair V1.1 (formerly P.64B "Oscar 200")
Vulcanair V1.100L (formerly P.66B "Oscar 100")
Vulcanair V1.150L (formerly P.66B "Oscar 150")
Vulcanair V1.CL (formerly P.66C "Charlie")



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SECTION A: P.64 “OSCAR”

A.I. General

1. Data Sheet No.: EASA.A.613 Date: 20 November 2013
2. a) Type: **P.64**
b) Model: P.64 “Oscar”
c) Variant: -
3. Airworthiness Category: Utility Category Aeroplanes
[see Notes 2(A), 2(B), 3, 5 and 12]
4. Type Certificate Holder: **VULCAIR S.P.A.**
Via Giovanni Pascoli, 7
80026 - Casoria (Napoli) Italy
5. Manufacturer **VULCAIR S.P.A.**
[See Note 15]: Via Giovanni Pascoli, 7
80026 - Casoria (Napoli) Italy
6. Certification Application Date: 16 February 1964
7. National Certifying Authority Registro Aeronautico Italiano - RAI (nowadays ENAC)
8. National Authority Type Certificate Date: 07 June 1966 (RAI TC No. SO/A 134)

A.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements: 16 February 1964
2. Airworthiness Requirements: CAR Part 3 effective 15 May 1956 including Amdt 3-1 through 3-8
3. Special Conditions: None
3. Exemptions: None
4. Deviations: None
5. Equivalent Safety Findings: None
6. Requirements elected to comply: None
7. Environmental Standards: Noise: None
Fuel venting & engine emission: Not Applicable



8. (Reserved) Additional National Requirements: N/A

A.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: doc. SPEC VA/206/PRD Type Design Configuration Data P.64 Oscar
2. Description: Single piston engine, four seats, high wing monoplane with fixed tricycle landing gear
3. Equipment: *(see Section H.I.)*
4. Dimensions:
 - Length: 7,230 m (23,72 ft)
 - Height: 2,770 m (9,09 ft)
 - Width (Wing Span): 9,986 m (32,76 ft)
5. Engine:
 - 5.1.1 Model: Lycoming O-360-A1A (coupled with Hartzell Propeller), or Lycoming O-360-A3A (coupled with Sensenich Propeller)
 - 5.1.2 Type Certificate: FAA Type Certificate No. E-286
 - 5.1.3 Limitations: At Take-Off and Max Continuous Power (180 HP)
- Propeller rpm: 2700 rpm
[see Notes 2(K) or 2(L), as applicable]
6. Load factors: Positive: +4,4g (Flap UP) – Negative: -1,0g (Flap UP)
7. Propeller:
 - 7.1 Model: Hartzell 2-blades metallic
Model HC-C2YK-1B/7666A or HC-C2YK-1BF/F7666A
Governor: Hartzell Model F-2-7A
Spinner: Hartzell p/n 82A0835-33
or alternatively,
Sensenich 2-blades metallic fixed pitch
Model M76EMM-O-65 or 76EM8-O-65
Governor: N/A
Spinner: Partenavia p/n 5959
 - 7.2 Type Certificate: FAA Type Certificate No. P-920 [Hartzell]
FAA Type Certificate No. P4EA [Sensenich]
 - 7.3 Number of blades: 2
 - 7.4 Diameter: Max 1,880 m (74 in) - Min 1,829 m (72 in) [Hartzell]
1,930 m (76 in) - No reduction permitted [Sensenich]
 - 7.5 Sense of rotation: Clockwise
 - 7.6 Propeller limits: Hartzell propeller:
Max 1,880 m (74 in) - Min 1,829 m (72 in)



Pitch setting at station 0,762 m (30 in):

Max +29° - Min +14°

Sensenich propeller: No reduction permitted

Pitch at 0,75R station: 1,651 m (65 in)

8. Fluids:

8.1 Fuel: Aviation Gasoline, min. grade 91/96, in accordance with latest issue of Textron Lycoming Service Instruction 1070

8.2 Oil: Single or multi-viscosity oils, in accordance with latest issue of Textron Lycoming Service Instruction 1014

8.3 Coolant: Air

9. Fluid capacities:

9.1 Fuel: Total: 200 Lt (52,8 U.S.Gal)
(see Note 1) [100 Lt (26,4 U.S.Gal) per wing tank]
at +0,650 m (+25,6 in)

Unusable: 10 Lt (2,6 U.S.Gal)

9.2 Oil: Total: 7,5 Lt (2 U.S.Gal) at -0,950 m (-37,4 in)

(see Note 1)

Unusable: 1,83 Lt (0,5 U.S.Gal)

9.3 Coolant system capacity: N/A

10. Air Speeds:

Aircraft with Sensenich Propeller:

Never exceed speed V_{NE} : 170 KIAS (315 Km/h)

Max structural cruising speed V_{NO} : 126 KIAS (234 Km/h)

Design manoeuvring speed V_A : 119 KIAS (221 Km/h)

Flap fully extended speed V_{FE} : 78 KIAS (145 Km/h)

Aircraft with Hartzell Propeller:

Never exceed speed V_{NE} : 180 KIAS (333 Km/h)

Max structural cruising speed V_{NO} : 130 KIAS (241 Km/h)

Design manoeuvring speed V_A : 121 KIAS (225 Km/h)

Flap fully extended speed V_{FE} : 78 KIAS (145 Km/h)

11. Maximum Operating Altitude: N/A

12. All-weather Operations Capability: see Aircraft Flight Manual

13. Maximum Weights:

Take-Off: 1100 kg (2425 lb)

Landing: 1100 kg (2425 lb)



14. Centre of Gravity
Range:
Rearward Limits: +0,465 m (+18,31 in) aft of datum
at any weight
+0,390 m (+15,35 in) aft of datum
Forward Limits: at 1100 kg (2425 lb)
+0,300 m (+11,81 in) aft of datum
at 825 kg (1819 lb) or less
with linear variation for intermediate weights
15. Datum: Tangent to the wing leading edge
16. Control surface deflections:
Wing Flaps: 1st pos. Down: $13,5^\circ \pm 2^\circ$
2nd pos. Down: $28^\circ \pm 2^\circ$
3rd pos. Down: $42^\circ \pm 2^\circ$
Ailerons: Up: $28^\circ \pm 2^\circ$ Down: $15^\circ \pm 1^\circ$
Rudder: Right: $20^\circ \pm 2^\circ$ Left: $20^\circ \pm 2^\circ$
Stabilator: Up: $14^\circ \pm 1^\circ$ Down: $8^\circ \pm 1^\circ$
Stabilator tab: Up: $9^\circ \pm 1^\circ$ Down: $9^\circ \pm 1^\circ$
(with respect to stabilator chord)
17. Levelling Means:
Longitudinal and lateral: Plumb weight hanging from the dedicated plate located on the cabin right roof, down to the target located on the cabin floor
18. Minimum Flight Crew: 1 (Pilot)
19. Maximum Seating Capacity: Total 4, distributed as follows:
2 at +0,360 m (+14,2 in),
2 at +1,120 m (+44,1 in)
20. Baggage/Cargo Compartments:
Max Allowable Load: 40 kg (88,2 lb)
Location: +1,600 m (+63 in) aft the datum
21. Wheels and Tyres: Nose Wheel Tyre Size: 5.00-5, Type III
Main Wheel Tyres Size: 6.00-6, Type III

A.IV. Operating and Service Instructions

1. Flight Manual: RAI approval No. 51.060/T dated 20 May 1966,
for aircraft equipped with Hartzell Propeller
RAI approval No. 54.432/T dated 02 November



1966, for aircraft equipped with Sensenich Propeller

Refer to doc. p/n NOR10.763-3 "Serie P.64 e P.66 - Indice pubblicazioni tecniche" (Index of Technical Publications) for latest applicable revision

2. Technical Manual:

– Airplane Maintenance Manual (AMM) RAI approval No. 133.159/T dated 21 July 1976
Refer to doc. p/n NOR10.763-3 "Serie P.64 e P.66 - Indice pubblicazioni tecniche" (Index of Technical Publications) for latest applicable revision

– Service Bulletins, Instructions and Letters
Refer to doc. p/n NOR10.777-4 "P.64 - P.66 Variants, Index of Service Bulletins, Service Letters and Service Instructions"

3. Spare Parts Catalogue (IPC):

Document "Catalogo Nomenclatore P64 Oscar"

Refer to doc. p/n NOR10.763-3 "Serie P.64 e P.66 - Indice pubblicazioni tecniche" (Index of Technical Publications) for latest applicable revision



SECTION B: P.64B “OSCAR B”

Differs from P.64 “Oscar” for monocoque fuselage tail cone.

B.I. General

1. Data Sheet No.: EASA.A.613 Date: 20 November 2013
2. a) Type: **P.64**
b) Model: P.64B “Oscar B”
c) Variant: -
3. Airworthiness Category: Utility Category Aeroplanes
[see Notes 2(A), 2(B), 3, 5 and 12]
4. Type Certificate Holder: **VULCAIR S.P.A.**
Via Giovanni Pascoli, 7
80026 - Casoria (Napoli)
Italy
5. Manufacturer **VULCAIR S.P.A.**
[See Note 15]: Via Giovanni Pascoli, 7
80026 - Casoria (Napoli) Italy
6. Certification Application Date: 23 March 1967
7. National Certifying Authority Registro Aeronautico Italiano - RAI (nowadays ENAC)
8. National Authority Type Certificate Date: 30 May 1967 (RAI TC No. SO/A 134)

B.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements: 23 March 1967
2. Airworthiness Requirements: CAR Part 3 effective 15 May 1956 including Amdt 3-1 through 3-8
3. Special Conditions: None
3. Exemptions: None
4. Deviations: None
5. Equivalent Safety Findings: None
6. Requirements elected to comply: None



7. Environmental Standards: Noise: None
Fuel venting & engine emission: Not Applicable
8. (Reserved) Additional National Requirements: N/A

B.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: doc. SPEC VA/207/PRD Type Design Configuration Data P.64B Oscar B
2. Description: Single piston engine, four seats, high wing monoplane with fixed tricycle landing gear
3. Equipment: *(see Section H.I.)*
4. Dimensions: Length: 7,230 m (23,72 ft)
Height: 2,770 m (9,09 ft)
Width (Wing Span): 9,986 m (32,76 ft)
5. Engine:
- 5.1.1 Model: Lycoming O-360-A1A (coupled with Hartzell Propeller), or Lycoming O-360-A3A (coupled with Sensenich Propeller)
- 5.1.2 Type Certificate: FAA Type Certificate No. E-286
- 5.1.3 Limitations: At Take-Off and Max Continuous Power (180 HP)
- Propeller rpm: 2700 rpm
(see Notes 2(K) or 2(L), as applicable)
6. Load factors: Positive: +4,4g (Flap UP) – Negative: -1,0g (Flap UP)
7. Propeller:
- 7.1 Model: Hartzell 2-blades metallic
Model HC-C2YK-1B/7666A or HC-C2YK-1BF/F7666A
Governor: Hartzell Model F-2-7A
Spinner: Hartzell p/n 82A0835-33
or alternatively,
Sensenich 2-blades metallic fixed pitch
Model M76EMM-O-65 or 76EM8-O-65
Governor: N/A
Spinner: Partenavia p/n 5959
- 7.2 Type Certificate: FAA Type Certificate No. P-920 [Hartzell]
FAA Type Certificate No. P4EA [Sensenich]
- 7.3 Number of blades: 2
- 7.4 Diameter: Max 1,880 m (74 in) - Min 1,829 m (72 in) [Hartzell]
1,930 m (76 in) - No reduction permitted [Sensenich]
- 7.5 Sense of rotation: Clockwise



- 7.6 Propeller limits:
- Hartzell propeller:
Max 1,880 m (74 in) - Min 1,829 m (72 in)
Pitch setting at station 0,762 m (30 in)
Max +29° - Min +14°
- Sensenich propeller: No reduction permitted
Pitch at 0,75R station: 1,651 m (65 in)
8. Fluids:
- 8.1 Fuel: Aviation Gasoline, min. grade 91/96, in accordance with latest issue of Textron Lycoming Service Instruction 1070
- 8.2 Oil: Single or multi-viscosity oils, in accordance with latest issue of Textron Lycoming Service Instruction 1014
- 8.3 Coolant: Air
9. Fluid capacities:
- 9.1 Fuel: Total: 200 Lt (52,8 U.S.Gal)
(see Note 1) [100 Lt (26,4 U.S.Gal) per wing tank]
at +0,650 m (+25,6 in)
Unusable: 10 Lt (2,6 U.S.Gal)
- 9.2 Oil: Total: 7,5 Lt (2 U.S.Gal) at -0,950 m (-37,4 in)
(see Note 1) Unusable: 1,83 Lt (0,5 U.S.Gal)
- 9.3 Coolant system capacity: N/A
10. Air Speeds:
- Aircraft with Sensenich Propeller:
- Never exceed speed V_{NE} : 170 KIAS (315 Km/h)
Max structural cruising speed V_{NO} : 126 KIAS (234 Km/h)
Design manoeuvring speed V_A : 119 KIAS (221 Km/h)
Flap fully extended speed V_{FE} : 78 KIAS (145 Km/h)
- Aircraft with Hartzell Propeller:
- Never exceed speed V_{NE} : 180 KIAS (333 Km/h)
Max structural cruising speed V_{NO} : 130 KIAS (241 Km/h)
Design manoeuvring speed V_A : 121 KIAS (225 Km/h)
Flap fully extended speed V_{FE} : 78 KIAS (144 Km/h)
11. Maximum Operating Altitude: N/A
12. Allweather Operations Capability: see Aircraft Flight Manual



13. Maximum Weights:

Take-Off : 1100 kg (2425 lb)

Landing: 1100 kg (2425 lb)

14. Centre of Gravity

Range:

Rearward Limits: +0,465 m (+18,31 in) aft of datum
at any weight

Forward Limits: +0,390 m (+15,35 in) aft of datum
at 1100 kg (2425 lb)

+0,300 m (+11,81 in) aft of datum
at 825 kg (1819 lb) or less

with linear variation for intermediate weights

15. Datum: Tangent to the wing leading edge

16. Control surface
deflections:

Wing Flaps: 1st pos. Down: $13,5^\circ \pm 2^\circ$

2nd pos. Down: $28^\circ \pm 2^\circ$

3rd pos. Down: $42^\circ \pm 2^\circ$

Ailerons: Up: $28^\circ \pm 2^\circ$ Down: $15^\circ \pm 1^\circ$

Rudder: Right: $20^\circ \pm 2^\circ$ Left: $20^\circ \pm 2^\circ$

Stabilator: Up: $14^\circ \pm 1^\circ$ Down: $8^\circ \pm 1^\circ$

Stabilator tab: Up: $9^\circ \pm 1^\circ$ Down: $9^\circ \pm 1^\circ$

(with respect to stabilator
chord)

17. Levelling Means:

Longitudinal and lateral: Plumb weight hanging from the dedicated plate located
on the cabin right roof, down to the target located on the
cabin floor

18. Minimum Flight Crew: 1 (Pilot)

19. Maximum Seating Capacity: Total 4, distributed as follows:

2 at +0,360 m (+14,2 in),

2 at +1,120 m (+44,1 in)

20. Baggage/Cargo

Compartments:

Max Allowable Load: 40 kg (88,2 lb)

Location: +1,600 m (+63 in)

21. Wheels and Tyres: Nose Wheel Tyre Size: 5.00-5, Type III

Main Wheel Tyres Size: 6.00-6, Type III

22. (Reserved): N/A



B.IV. Operating and Service Instructions

1. Flight Manual: RAI approval No. 58.730/T dated 29 May 1967, for aircraft equipped with Hartzell Propeller
RAI approval No. 58.680/T dated 29 May 1967, for aircraft equipped with Sensenich Propeller
Refer to doc. p/n NOR10.763-3 “Serie P.64 e P.66 - Indice pubblicazioni tecniche” (Index of Technical Publications) for latest applicable revision

2. Technical Manual:
 - Airplane Maintenance Manual (AMM) RAI approval No. 133.159/T dated 21 July 1976
Refer to doc. p/n NOR10.763-3 “Serie P.64 e P.66 - Indice pubblicazioni tecniche” (Index of Technical Publications) for latest applicable revision
 - Service Bulletins, Instructions and Letters
Refer to doc. p/n NOR10.777-4 “P.64 - P.66 Variants, Index of Service Bulletins, Service Letters and Service Instructions”

3. Spare Parts Catalogue (IPC): Document “Catalogo Nomenclatore P64B Oscar B”
Refer to doc. p/n NOR10.763-3 “Serie P.64 e P.66 - Indice pubblicazioni tecniche” (Index of Technical Publications) for latest applicable revision



SECTION C: P.64B “Oscar B 1155” and VULCANAIR V1.0

Differ from P.64 “Oscar” for monocoque fuselage tail cone and Maximum Take-Off Weight increased up to 1155 kg (2546 lb).

C.I. General

1. Data Sheet No.: EASA.A.613 Date: 20 November 2013
2. a) Type: **P.64**
b) Model: P.64B “Oscar B 1155” and
VULCANAIR V1.0 [see Notes 15 and 16]
c) Variant: -
3. Airworthiness Category: Utility Category Aeroplanes
[see Notes 2(A), 2(B), 3, 5 and 12]
4. Type Certificate Holder: **VULCANAIR S.P.A.**
Via Giovanni Pascoli, 7
80026 - Casoria (Napoli)
Italy
5. Manufacturer **VULCANAIR S.P.A.**
[See Note 15]: Via Giovanni Pascoli, 7
80026 - Casoria (Napoli) Italy
6. Certification Application Date: 30 January 1968
7. National Certifying Authority Registro Aeronautico Italiano - RAI (nowadays
ENAC)
8. National Authority Type Certificate Date: 11 June 1968 (RAI TC No. SO/A 134)

C.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements: 30 January 1968
2. Airworthiness Requirements: CAR Part 3 effective 15 May 1956 including Amdt 3-1 through 3-8
For V1.0 see Notes 16 and 19
3. Special Conditions: None
3. Exemptions: None
4. Deviations: None
5. Equivalent Safety Findings: None



6. Requirements elected to comply: None
7. Environmental Standards: Noise: None [for P.64B "Oscar B 1155"]
ICAO Annex 16, Vol. I, Chapter 10 [for V1.0]
Fuel venting & engine emission: Not Applicable
8. (Reserved) Additional National Requirements: N/A
9. (Reserved) N/A

C.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: doc. SPEC VA/208/PRD Type Design Configuration Data P.64B Oscar B 1155 / V1.0 [see Notes 16 and 19]
2. Description: Single piston engine, four seats, high wing monoplane with fixed tricycle landing gear
3. Equipment: (see Section H.I.)
4. Dimensions: Length: 7,230 m (23,72 ft)
Height: 2,770 m (9,09 ft)
Width (Wing Span): 9,986 m (32,76 ft)
5. Engine:
- 5.1.1 Model: Lycoming O-360-A1A [for P.64B "Oscar B 1155"]
- 5.1.2 Type Certificate: FAA Type Certificate No. E-286
- 5.1.3 Limitations: At Take-Off and Max Continuous Power (180 HP)
- Propeller rpm: 2700 rpm
(see Note 2K)
- or:
- 5.2.1 Model: Lycoming IO-360-M1A [for V1.0] - (see Note 19)
- 5.2.2 Type Certificate: FAA Type Certificate No. 1E10
- 5.2.3 Limitations: 180 HP at 2700 rpm
Other engine's limitations are listed in the "Aircraft Flight Manual", Operating Limitations Section
6. Load factors: Positive: +4,4g (Flap UP) – Negative: -1,0g (Flap UP)
7. Propeller:
- 7.1.1 Model: Hartzell 2-blades metallic
Model HC-C2YK-1B/7666A or HC-C2YK-1BF/F7666A
Governor: Hartzell Model F-2-7A
Spinner: Hartzell p/n 82A0835-33
[for P.64B "Oscar B 1155"]
- 7.1.2 Type Certificate: FAA Type Certificate No. P-920



- 7.1.3 Number of blades: 2
- 7.1.4 Diameter: Max 1,880 m (74 in) - Min 1,829 m (72 in)
- 7.1.5 Sense of rotation: Clockwise
- 7.1.6 Propeller limits: Max 1,880 m (74 in) - Min 1,829 m (72 in)
Pitch setting at station 0,762 m (30 in):
Max +29° - Min +14°

or:

- 7.2.1 Model: Hartzell 2-blades metallic
Model HC-C2YR-1BFP/F7497 (variable pitch)
Governor: Hartzell Model S-1-63
Spinner: Hartzell p/n 103585
[for V1.0] - (see Note 19)
- 7.2.2 Type Certificate: FAA Type Certificate No. P-920
- 7.2.3 Number of blades: 2
- 7.2.4 Diameter: 1,880 m (74 in)
- 7.2.5 Sense of rotation: Clockwise
- 7.2.6 Propeller limits: 1,880 m (74 in) - No reduction permitted

or:

- 7.3.1 Model: MT-Propeller 2-blades laminated wood composite
Model MT188R135-4G (fixed pitch)
Spinner: MT-Propeller p/n P-1629
[for V1.0] - (see Note 21)
- 7.3.2 Type Certificate: EASA Type Certificate No. EASA.P.006
- 7.3.3 Number of blades: 2
- 7.3.4 Diameter: 1,880 m (74 in)
- 7.3.5 Sense of rotation: Clockwise
- 7.3.6 Propeller limits: 1,880 m (74 in) - No reduction permitted

8. Fluids:

- 8.1 Fuel: Aviation Gasoline, min. grade 91/96, in accordance with latest issue of Textron Lycoming Service Instruction 1070 [for P.64B "Oscar B 1155"]
Aviation and automotive fuels allowed for IO-360-M1A engine are listed in the "Aircraft Flight Manual", Operating Limitations Section [for V1.0] - (see Note 19)
- 8.2 Oil: Single or multi-viscosity oils, in accordance with latest issue of Textron Lycoming Service Instruction 1014



- 8.3 Coolant: Air
9. Fluid capacities:
- 9.1 Fuel: Total: 200 Lt (52,8 U.S.Gal)
(see Note 1) [100 Lt (26,4 U.S.Gal) per wing tank]
at +0,650 m (+25,6 in)
Unusable: 10 Lt (2,6 U.S.Gal)
- 9.2 Oil: Total: 7,5 Lt (2 U.S.Gal) at -0,950 m (-37,4 in)
(see Note 1) Unusable: 1,83 Lt (0,5 U.S.Gal)
- 9.3 Coolant system capacity: N/A
10. Air Speeds:
- Never exceed speed V_{NE} : 168 KCAS (312 Km/h)
Max structural cruising speed V_{NO} : 125 KCAS (231 Km/h)
Design manoeuvring speed V_A : 122 KCAS (226 Km/h)
Flap fully extended speed V_{FE} : 78 KCAS (145 Km/h)
11. Maximum Operating Altitude: N/A
12. Allweather Operations Capability: see Aircraft Flight Manual
13. Maximum Weights:
- Take-Off: 1155 kg (2546 lb) [see Note 2(O)]
Landing: 1100 kg (2425 lb)
14. Centre of Gravity Range:
- Rearward Limits: +0,465 m (+18,31 in) aft of datum
at any weight
- Forward Limits: +0,408 m (+16,06 in) aft of datum
[for P.64B "Oscar B at 1155 kg (2546 lb)
1155"] +0,300 m (+11,81 in) aft of datum
at 825 kg (1819 lb) or less
- Forward Limits: +0,408 m (+16,06 in) aft of datum
[for V1.0] at 1155 kg (2546 lb)
+0,260 m (+10,24 in) aft of datum
at 850 kg (1874 lb) or less
with linear variation for intermediate weights
15. Datum: Tangent to the wing leading edge
16. Control surface deflections:
- Wing Flaps: 1st pos. Down: $13,5^\circ \pm 2^\circ$



	2 nd pos. Down: $28^{\circ} \pm 2^{\circ}$	
	3 rd pos. Down: $42^{\circ} \pm 2^{\circ}$	
Ailerons:	Up: $28^{\circ} \pm 2^{\circ}$	Down: $15^{\circ} \pm 1^{\circ}$
Rudder:	Right: $20^{\circ} \pm 2^{\circ}$	Left: $20^{\circ} \pm 2^{\circ}$
Stabilator:	Up: $14^{\circ} \pm 1^{\circ}$	Down: $8^{\circ} \pm 1^{\circ}$
Stabilator tab:	Up: $9^{\circ} \pm 1^{\circ}$	Down: $9^{\circ} \pm 1^{\circ}$

(with respect to stabilator chord)

17. Levelling Means:
Longitudinal and lateral: Plumb weight hanging from the dedicated plate located on the cabin right roof, down to the target located on the cabin floor
18. Minimum Flight Crew: 1 (Pilot)
19. Maximum Seating Capacity: Total 4, distributed as per Flight Manual AFM10.701-7 Section 2
20. Baggage/Cargo Compartments:
Max Allowable Load: 40 kg (88,2 lb)
Location: +1,600 m (+63 in)
21. Wheels and Tyres: Nose Wheel Tyre Size: 5.00-5, Type III
Main Wheel Tyres Size: 6.00-6, Type III

C.IV. Operating and Service Instructions

1. Flight Manual: RAI approval No. 68.320/T dated 17 July 1968 [for P.64B "Oscar B 1155"]
AFM10.701-7 (EASA approval No. 10057053 dated 11 March 2016) [for V1.0]
Refer to doc. p/n NOR10.763-3 "Serie P.64 e P.66 - Indice pubblicazioni tecniche" (Index of Technical Publications) for latest applicable revision
2. Technical Manual: Airplane Maintenance Manual (AMM) RAI approval No. 133.159/T dated 21 July 1976 [for P.64B "Oscar B 1155"]
Airplane Maintenance Manual AMM10.702-5 (EASA approval No. 10057053 dated 11 March 2016) [for V1.0]
Refer to doc. p/n NOR10.763-3 "Serie P.64 e P.66 - Indice pubblicazioni tecniche" (Index of



Technical Publications) for latest applicable revision

Service Bulletins, Instructions and Letters

Refer to doc. p/n NOR10.777-4 "P.64 - P.66 Variants, Index of Service Bulletins, Service Letters and Service Instructions"

3. Spare Parts Catalogue (IPC): Document "Catalogo Nomenclatore P64B Oscar 1155" [for P.64B "Oscar B 1155"]
Illustrated Parts Catalogue IPC10.703-7 [for V1.0]
Refer to doc. p/n NOR10.763-3 "Serie P.64 e P.66 - Indice pubblicazioni tecniche" (Index of Technical Publications) for latest applicable revision



SECTION D: P.64B “Oscar 200” and VULCANAIR V1.1

Differ from P64B “Oscar 1155” / V1.0 for power increase.

D.I. General

1. Data Sheet No.: EASA.A.613 Date: 20 November 2013
2. a) Type: **P.64**
b) Model: P.64B “Oscar 200” and
VULCANAIR V1.1 *[see Notes 15, 16 and 18]*
c) Variant: -
3. Airworthiness Category: Utility Category Aeroplanes
(see Notes 2(A), 2(B), 3, 5 and 12)
4. Type Certificate Holder: **VULCANAIR S.P.A.**
Via Giovanni Pascoli, 7
80026 - Casoria (Napoli)
Italy
5. Manufacturer **VULCANAIR S.P.A.**
[See Note 15]: Via Giovanni Pascoli, 7
80026 - Casoria (Napoli) Italy
6. Certification Application Date: 06 March 1970
7. National Certifying Authority Registro Aeronautico Italiano - RAI (nowadays
ENAC)
8. National Authority Type Certificate Date: 13 May 1971 (RAI TC No. SO/A 134)

D.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements: 06 March 1970
2. Airworthiness Requirements: CAR Part 3 effective 15 May 1956 including Amdt 3-1 through 3-8 *[see Note 16]*
3. Special Conditions: None
3. Exemptions: None
4. Deviations: None
5. Equivalent Safety Findings: None
6. Requirements elected to comply: None



7. Environmental Standards: Noise: ICAO Annex 16, Vol. I, Chapter 6
Fuel venting & engine emission: Not Applicable
8. (Reserved) Additional National Requirements: N/A
9. (Reserved) N/A

D.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: doc. SPEC VA/209/PRD Type Design Configuration Data P.64B Oscar 200 / V1.1 [see Notes 16 and 18]
2. Description: Single piston engine, four seats, high wing monoplane with fixed tricycle landing gear
3. Equipment: (see Section H.I.)
4. Dimensions: Length: 7,230 m (23,72 ft)
Height: 2,770 m (9,09 ft)
Width (Wing Span): 9,986 m (32,76 ft)
5. Engine:
- 5.1.1 Model: Lycoming IO-360-A1B
- 5.1.2 Type Certificate: FAA Type Certificate No. 1E10
- 5.1.3 Limitations: At Take-Off and Max Continuous Power (200 HP)
- Propeller rpm: 2700 rpm
(see Note 2M)
6. Load factors: Positive: +4,4g (Flap UP) – Negative: -1,0g (Flap UP)
7. Propeller:
- 7.1 Model: Hartzell 2-blades metallic
Model HC-C2YK-1B/7666A or HC-C2YK-1BF/F7666A
Governor: Hartzell Model F-2-7A
Spinner: Hartzell p/n 82A0835-33
- 7.2 Type Certificate: FAA Type Certificate No. P-920
- 7.3 Number of blades: 2
- 7.4 Diameter: Max 1,880 m (74 in) - Min 1,829 m (72 in)
- 7.5 Sense of rotation: Clockwise
- 7.6 Propeller limits: Max 1,880 m (74 in) - Min 1,829 m (72 in)
Pitch setting at station 0,762 m (30 in):
Max +29° - Min +14°
8. Fluids:
- 8.1 Fuel: Aviation Gasoline, min. grade 100/130, in accordance with latest issue of Textron Lycoming Service Instruction 1070



- 8.2 Oil: Single or multi-viscosity oils, in accordance with latest issue of Textron Lycoming Service Instruction 1014
- 8.3 Coolant: Air
9. Fluid capacities:
- 9.1 Fuel: Total: 200 Lt (52,8 U.S.Gal)
(see Note 1) [100 Lt (26,4 U.S.Gal) per wing tank]
at +0,650 m (+25,6 in)
Unusable: 10 Lt (2,6 U.S.Gal)
- 9.2 Oil: Total: 7,5 Lt (2 U.S.Gal) at -0,950 m (-37,4 in)
(see Note 1) Unusable: 1,83 Lt (0,5 U.S.Gal)
- 9.3 Coolant system capacity: N/A
10. Air Speeds:
- Never exceed speed V_{NE} : 168 KCAS (312 Km/h)
Max structural cruising speed V_{NO} : 125 KCAS (231 Km/h)
Design manoeuvring speed V_A : 122 KCAS (226 Km/h)
Flap fully extended speed V_{FE} : 78 KCAS (145 Km/h)
11. Maximum Operating Altitude: N/A
12. Allweather Operations Capability: see Aircraft Flight Manual
13. Maximum Weights:
- Take-Off: 1155 kg (2546 lb) [see Note 2(O)]
Landing: 1100 kg (2425 lb)
14. Centre of Gravity Range:
- Rearward Limits: +0,465 m (+18,31 in) aft of datum
at any weight
- Forward Limits: +0,408 m (+16,06 in) aft of datum
at 1155 kg (2546 lb)
+0,260 m (+10,24 in) aft of datum
at 850 kg (1874 lb) or less
with linear variation for intermediate weights
15. Datum: Tangent to the wing leading edge
16. Control surface deflections:
- Wing Flaps: 1st pos. Down: $13,5^\circ \pm 2^\circ$
2nd pos. Down: $28^\circ \pm 2^\circ$



	3 rd pos. Down: $42^\circ \pm 2^\circ$	
Ailerons:	Up: $28^\circ \pm 2^\circ$	Down: $15^\circ \pm 1^\circ$
Rudder:	Right: $20^\circ \pm 2^\circ$	Left: $20^\circ \pm 2^\circ$
Stabilator:	Up: $14^\circ \pm 1^\circ$	Down: $8^\circ \pm 1^\circ$
Stabilator tab: (with respect to stabilator chord)	Up: $9^\circ \pm 1^\circ$	Down: $9^\circ \pm 1^\circ$
17. Levelling Means:		
Longitudinal and lateral:	Plumb weight hanging from the dedicated plate located on the cabin right roof, down to the target located on the cabin floor	
18. Minimum Flight Crew:	1 (Pilot)	
19. Maximum Seating Capacity:	Total 4, distributed as per Flight Manual	
20. Baggage/Cargo Compartments:		
Max Allowable Load:	40 kg (88,2 lb)	
Location:	+1,600 m (+63 in)	
21. Wheels and Tyres:	Nose Wheel Tyre Size:	5.00-5, Type III
	Main Wheel Tyres Size:	6.00-6, Type III

D.IV. Operating and Service Instructions

1. Flight Manual: RAI approval No. 91.805/T dated 13 May 1971
Refer to doc. p/n NOR10.763-3 "Serie P.64 e P.66 - Indice pubblicazioni tecniche" (Index of Technical Publications) for latest applicable revision
2. Technical Manual:
 - Airplane Maintenance Manual (AMM) RAI approval No. 133.159/T dated 21 July 1976
Refer to doc. p/n NOR10.763-3 "Serie P.64 e P.66 - Indice pubblicazioni tecniche" (Index of Technical Publications) for latest applicable revision
 - Service Bulletins, Instructions and Letters
Refer to doc. p/n NOR10.777-4 "P.64 - P.66 Variants, Index of Service Bulletins, Service Letters and Service Instructions"
3. Spare Parts Catalogue (IPC): Document "Catalogo Nomenclatore P64B Oscar 200"



Refer to doc. p/n NOR10.763-3 “Serie P.64 e P.66 - Indice pubblicazioni tecniche” (Index of Technical Publications) for latest applicable revision



SECTION E: P.66B “Oscar 100” and VULCANAIR V1.100L

Same as P.64 series except for some structural modifications and improved rear visibility.

E.I. General

1. Data Sheet No.: EASA.A.613 Date: 20 November 2013
2. a) Type: **P.66**
b) Model: P.66B “Oscar 100” and
VULCANAIR V1.100L [see Note 15]
c) Variant: -
3. Airworthiness Category: Utility Category Aeroplanes
[see Notes 2(A), 2(C) and 12]
4. Type Certificate Holder: **VULCANAIR S.P.A.**
Via Giovanni Pascoli, 7
80026 - Casoria (Napoli)
Italy
5. Manufacturer **VULCANAIR S.P.A.**
[See Note 15]: Via Giovanni Pascoli, 7
80026 - Casoria (Napoli) Italy
6. Certification Application Date: 27 June 1967
7. National Certifying Authority: Registro Aeronautico Italiano - RAI (nowadays
ENAC)
8. National Authority Type Certificate Date: 24 October 1967 (RAI TC No. SO/A 134)

E.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements: 27 June 1967
2. Airworthiness Requirements: CAR Part 3 effective 15 May 1956 including Amdt 3-1 through 3-8
3. Special Conditions: None
3. Exemptions: None
4. Deviations: None
5. Equivalent Safety Findings: None
6. Requirements elected to: None



comply:

- 7. Environmental Standards: Noise: None
Fuel venting & engine emission: Not Applicable
- 8. (Reserved) Additional National Requirements: N/A
- 9. (Reserved) N/A

E.III. Technical Characteristics and Operational Limitations

- 1. Type Design Definition: doc. SPEC VA/210/PRD Type Design Configuration Data P.66B Oscar 100 / V1.100L
- 2. Description: Single piston engine, two seats, high wing monoplane with fixed tricycle landing gear
- 3. Equipment: *(see Section H.I.)*
- 4. Dimensions: Length: 7,090 m (23,26 ft)
Height: 2,770 m (9,09 ft)
Width (Wing Span): 9,986 m (32,76 ft)
- 5. Engine:
 - 5.1.1 Model: Lycoming O-235-C1, or Lycoming O-235-C1B
 - 5.1.2 Type Certificate: FAA Type Certificate No. E-223
 - 5.1.3 Limitations: At Take-Off and Max Continuous Power (115 HP)
- Propeller rpm: 2800 rpm
(see Note 9)
- 6. Load factors: Positive: +4,4g (Flap UP) – Negative: -1,0g (Flap UP)
- 7. Propeller:
 - 7.1 Model: Sensenich 2-blades metallic
Model M76AM or 76AM6
Governor: N/A
Spinner: Partenavia p/n 6118
 - 7.2 Type Certificate: FAA Type Certificate No. 1P2
 - 7.3 Number of blades: 2
 - 7.4 Diameter: Max 1,880 m (74 in) - Min 1,830 m (72 in)
 - 7.5 Sense of rotation: Clockwise
 - 7.6 Propeller limits: Max 1,880 m (74 in) - Min 1,830 m (72 in)
Pitch at 0,75R station:
Max 1,30 m (51 in) - Min 1,17 m (46 in)
- 8. Fluids:
 - 8.1 Fuel: Aviation Gasoline, min. grade 80/87, in accordance with latest issue of Textron Lycoming Service



- Instruction 1070
- 8.2 Oil: Single or multi-viscosity oils, in accordance with latest issue of Textron Lycoming Service Instruction 1014
- 8.3 Coolant: Air
9. Fluid capacities:
- 9.1 Fuel: Total: 86 Lt (22,7 U.S.Gal)
(see Notes 1 and 13) [43 Lt (11,4 U.S.Gal) per wing tank]
at +0,670 m (+26,4 in)
Unusable: 6 Lt (1,6 U.S.Gal)
- 9.2 Oil: Total: 5,67 Lt (1,5 U.S.Gal) at -1,020 m (-40,2 in)
(see Note 1)
- 9.3 Coolant system capacity: N/A
10. Air Speeds:
- Never exceed speed V_{NE} : 175 KCAS (324 Km/h)
Max structural cruising speed V_{NO} : 117 KCAS (216 Km/h)
Design manoeuvring speed V_A : 103 KCAS (191 Km/h)
Flap fully extended speed V_{FE} : 80 KCAS (148 Km/h)
11. Maximum Operating Altitude: N/A
12. Allweather Operations Capability: see Aircraft Flight Manual
13. Maximum Weights:
Take-Off : 820 kg (1808 lb)
14. Centre of Gravity Range:
- Rearward Limits: +0,370 m (+14,57 in) aft of datum
at any weight
- Forward Limits: +0,313 m (+12,32 in) aft of datum
at any weight
15. Datum: Tangent to the wing leading edge



16. Control surface
deflections:

Wing Flaps:	1 st pos. Down: $13,5^\circ \pm 2^\circ$	
	2 nd pos. Down: $28^\circ \pm 2^\circ$	
	3 rd pos. Down: $42^\circ \pm 2^\circ$	
Ailerons:	Up: $28^\circ \pm 2^\circ$	Down: $15^\circ \pm 1^\circ$
Rudder:	Right: $20^\circ \pm 2^\circ$	Left: $20^\circ \pm 2^\circ$
Stabilator:	Up: $14^\circ \pm 1^\circ$	Down: $8^\circ \pm 1^\circ$
Stabilator tab: (with respect to stabilator chord)	Up: $9^\circ \pm 1^\circ$	Down: $9^\circ \pm 1^\circ$

17. Levelling Means:

Longitudinal and lateral: Plumb weight hanging from the dedicated plate located on the cabin right roof, down to the target located on the cabin floor

18. Minimum Flight Crew: 1 (Pilot)

19. Maximum Seating Capacity: Total 2, at +0,360 m (+14,2 in)

20. Baggage/Cargo
Compartments:

Max Allowable Load: 40 kg (88,2 lb)
Location: +1,00 m (+39,4 in)

21. Wheels and Tyres: Nose Wheel Tyre Size: 5.00-5, Type III
Main Wheel Tyres Size: 6.00-6, Type III

22. (Reserved): N/A

E.IV. Operating and Service Instructions

1. Flight Manual: RAI approval No. 62.650/T dated 30 November 1967

Refer to doc. p/n NOR10.763-3 "Serie P.64 e P.66 - Indice pubblicazioni tecniche" (Index of Technical Publications) for latest applicable revision



2. Technical Manual:
 - Airplane Maintenance Manual (AMM) RAI approval No. 133.159/T dated 21 July 1976
Refer to doc. p/n NOR10.763-3 “Serie P.64 e P.66 - Indice pubblicazioni tecniche” (Index of Technical Publications) for latest applicable revision
 - Service Bulletins, Instructions and Letters
Refer to doc. p/n NOR10.777-4 “P.64 - P.66 Variants, Index of Service Bulletins, Service Letters and Service Instructions”
3. Spare Parts Catalogue (IPC): Document “Catalogo Nomenclatore P66B Oscar”
Refer to doc. p/n NOR10.763-3 “Serie P.64 e P.66 - Indice pubblicazioni tecniche” (Index of Technical Publications) for latest applicable revision



SECTION F: P.66B “Oscar 150” and VULCANAIR V1.150L

Differ from P.66B “Oscar 100 / V1.100L for power and MTOW increase, and third seat installation.

F.I. General

1. Data Sheet No.: EASA.A.613 Date: 20 November 2013
2. a) Type: **P.66**
 b) Model: P.66B “Oscar 150” and
 VULCANAIR V1.150L [see Note 15]
- c) Variant: -
3. Airworthiness Category: Utility Category Aeroplanes
 [see Notes 2(A), 2(D), 4 and 12]
4. Type Certificate Holder: **VULCANAIR S.P.A.**
 Via Giovanni Pascoli, 7
 80026 - Casoria (Napoli)
 Italy
5. Manufacturer **VULCANAIR S.P.A.**
 [See Note 15]: Via Giovanni Pascoli, 7
 80026 - Casoria (Napoli) Italy
6. Certification Application 30 December 1968
 Date:
7. National Certifying Authority Registro Aeronautico Italiano - RAI (nowadays
 ENAC)
8. National Authority Type 20 January 1969 (RAI TC No. SO/A 134)
 Certificate Date:

F.II. EASA Certification Basis

1. Reference Date for
 determining the applicable
 requirements: 30 December 1968
2. Airworthiness Requirements: CAR Part 3 effective 15 May 1956 including Amdt 3-1
 through 3-8
3. Special Conditions: None
3. Exemptions: None
4. Deviations: None
5. Equivalent Safety Findings: None
6. Requirements elected to None



comply:

- 7. Environmental Standards: Noise: ICAO Annex 16, Vol. I, Chapter 6
Fuel venting & engine emission: Not Applicable
- 8. (Reserved) Additional National Requirements: N/A
- 9. (Reserved) N/A

F.III. Technical Characteristics and Operational Limitations

- 1. Type Design Definition: doc. SPEC VA/211/PRD Type Design Configuration Data P.66B Oscar 150 / V1.150L
- 2. Description: Single piston engine, three seats, high wing monoplane with fixed tricycle landing gear
- 3. Equipment: *(see Section H.I.)*
- 4. Dimensions: Length: 7,090 m (23,26 ft)
Height: 2,770 m (9,09 ft)
Width (Wing Span): 9,986 m (32,76 ft)
- 5. Engine:
 - 5.1.1 Model: Lycoming O-320-E2A
 - 5.1.2 Type Certificate: FAA Type Certificate No. E-274
 - 5.1.3 Limitations: At Take-Off and Max Continuous Power (150 HP)
- Propeller rpm: 2700 rpm
- 6. Load factors: Positive: +4,4g (Flap UP) – Negative: -1,0g (Flap UP)
- 7. Propeller:
 - 7.1 Model: Sensenich 2-blades metallic
Model 74DM6S5-2
Governor: N/A
Spinner: Partenavia p/n 6038/B
 - 7.2 Type Certificate: FAA Type Certificate No. P-886
 - 7.3 Number of blades: 2
 - 7.4 Diameter: 1,830 m (72 in) - No reduction permitted
 - 7.5 Sense of rotation: Clockwise
 - 7.6 Propeller limits: Pitch at 0,75R station:
Max 1,52 m (60 in) - Min 1,27 m (50 in)
- 8. Fluids:
 - 8.1 Fuel: Aviation Gasoline, min. grade 80/87, in accordance with latest issue of Textron Lycoming Service Instruction 1070
 - 8.2 Oil: Single or multi-viscosity oils, in accordance with latest



- 8.3 Coolant: issue of Textron Lycoming Service Instruction 1014
Air
9. Fluid capacities:
- 9.1 Fuel: Total: 114 Lt (30,1 U.S.Gal)
(see Notes 1 and 14) [57 Lt (15,1 U.S.Gal) per wing tank]
at +0,670 m (+26,4 in)
Unusable: 6 Lt (1,6 U.S.Gal)
- 9.2 Oil: Total: 7,5 Lt (2 U.S.Gal) at -1,020 m (-40,2 in)
(see Note 1) Unusable: 1,83 Lt (0,5 U.S.Gal)
- 9.3 Coolant system capacity: N/A
10. Air Speeds:
- Never exceed speed V_{NE} : 171 KCAS (317 Km/h)
Max structural cruising speed V_{NO} : 112 KCAS (207 Km/h)
Design manoeuvring speed V_A : 110 KCAS (203 Km/h)
Flap fully extended speed V_{FE} : 78 KCAS (145 Km/h)
11. Maximum Operating Altitude: N/A
12. Allweather Operations Capability: see Aircraft Flight Manual
13. Maximum Weights:
Take-Off : 930 kg (2050 lb)
14. Centre of Gravity Range:
Rearward Limits: +0,370 m (+14,57 in) aft of datum
at any weight
Forward Limits: +0,302 m (+11,89 in) aft of datum
at 930 kg (2050 lb)
+0,271 m (+10,67 in) aft of datum
at 700 kg (1543 lb) or less
with linear variation for intermediate weights
15. Datum: Tangent to the wing leading edge
16. Control surface deflections:
Wing Flaps: 1st pos. Down: $13,5^\circ \pm 2^\circ$
2nd pos. Down: $28^\circ \pm 2^\circ$
3rd pos. Down: $42^\circ \pm 2^\circ$



Ailerons:	Up: $28^{\circ} \pm 2^{\circ}$	Down: $15^{\circ} \pm 1^{\circ}$
Rudder:	Right: $20^{\circ} \pm 2^{\circ}$	Left: $20^{\circ} \pm 2^{\circ}$
Stabilator:	Up: $14^{\circ} \pm 1^{\circ}$	Down: $8^{\circ} \pm 1^{\circ}$
Stabilator tab: (with respect to stabilator chord)	Up: $9^{\circ} \pm 1^{\circ}$	Down: $9^{\circ} \pm 1^{\circ}$

17. Levelling Means:

Longitudinal and lateral: Plumb weight hanging from the dedicated plate located on the cabin right roof, down to the target located on the cabin floor

18. Minimum Flight Crew: 1 (Pilot)

19. Maximum Seating Capacity:
(see Note 7) Total 3, distributed as follows:
2 at +0,360 m (+14,2 in),
1 at +0,860 m (+33,9 in)

20. Baggage/Cargo Compartments:
Max Allowable Load: 40 kg (88,2 lb)
Location: +1,00 m (+39,4 in)

21. Wheels and Tyres: Nose Wheel Tyre Size: 5.00-5, Type III
Main Wheel Tyres Size: 6.00-6, Type III

F.IV. Operating and Service Instructions

1. Flight Manual: RAI approval No. 72.633/T dated 20 January 1969
Refer to doc. p/n NOR10.763-3 "Serie P.64 e P.66 - Indice pubblicazioni tecniche" (Index of Technical Publications) for latest applicable revision
2. Technical Manual:
 - Airplane Maintenance Manual (AMM) RAI approval No. 133.159/T dated 21 July 1976
Refer to doc. p/n NOR10.763-3 "Serie P.64 e P.66 - Indice pubblicazioni tecniche" (Index of Technical Publications) for latest applicable revision
 - Service Bulletins, Instructions and Letters
Refer to doc. p/n NOR10.777-4 "P.64 - P.66 Variants, Index of Service Bulletins, Service Letters and Service Instructions"
3. Spare Parts Catalogue (IPC): Document "Catalogo Nomenclature P66B Oscar"
Refer to doc. p/n NOR10.763-3 "Serie P.64 e



P.66 - "Indice pubblicazioni tecniche" (Index of Technical Publications) for latest applicable revision



SECTION G: P.66C “Charlie” and VULCANAIR V1.CL

Differ from P.66B “Oscar 150” / V1.150L for MTOW increase, fourth seat installation, and fuselage framework weight decrease.

G.I. General

1. Data Sheet No.: EASA.A.613 Date: 20 November 2013
2. a) Type: **P.66**
b) Model: P.66C “Charlie” and
VULCANAIR V1.CL [*see Note 15*]
c) Variant:
3. Airworthiness Category: Utility Category Aeroplanes
[*see Notes 2(A), 2(E) and 12*]
4. Type Certificate Holder: **VULCANAIR S.P.A.**
Via Giovanni Pascoli, 7
80026 - Casoria (Napoli)
Italy
5. Manufacturer **VULCANAIR S.P.A.**
[*See Note 15*]: Via Giovanni Pascoli, 7
80026 - Casoria (Napoli) Italy
6. Certification Application Date: 12 December 1975
7. National Certifying Authority Registro Aeronautico Italiano - RAI (nowadays
ENAC)
8. National Authority Type Certificate Date: 26 February 1976 (RAI TC No. SO/A 134)

G.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements: 12 December 1975
2. Airworthiness Requirements: CAR Part 3 effective 15 May 1956 including Amdt 3-1 through 3-8 (*see Note 8*)
3. Special Conditions: None
3. Exemptions: None
4. Deviations: None
5. Equivalent Safety Findings: None



- | | |
|---|---|
| 6. Requirements elected to comply: | None |
| 7. Environmental Standards: | Noise: ICAO Annex 16, Vol. I, Chapter 6
Fuel venting & engine emission: Not Applicable |
| 8. (Reserved) Additional National Requirements: | N/A |
| 9. (Reserved) | N/A |

G.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: doc. SPEC VA/212/PRD "Type Design Configuration Data P.66C "Charlie" / V1.CL"
2. Description: Single piston engine, four seat, high wing monoplane with fixed tricycle landing gear
3. Equipment: *(see Section H.I.)*
4. Dimensions:

Length:	7,240 m (23,75 ft)
Height:	2,770 m (9,09 ft)
Width (Wing Span):	9,986 m (32,76 ft)
5. Engine *(see Note 10)*:
 - 5.1.1 Model: Lycoming O-320-H2AD
 - 5.1.2 Type Certificate: FAA Type Certificate No. E-274
 - 5.1.3 Limitations: At Take-Off and Max Continuous Power (160 HP)
- Propeller rpm: 2700 rpm
6. Load factors: Positive: +4,4g (Flap UP) – Negative: -1,0g (Flap UP)
7. Propeller *(see Note 10)*:
 - 7.1 Model: Hoffmann 2-blades laminated hard wood
Model HO23C-186-140
Governor: N/A
Spinner: Partenavia p/n 6.3009
 - 7.2 Type Certificate: FAA Type Certificate No. P3EU
 - 7.3 Number of blades: 2
 - 7.4 Diameter: 1,860 m (73,23 in) - No reduction permitted
 - 7.5 Sense of rotation: Clockwise
 - 7.6 Propeller limits: None
8. Fluids:
 - 8.1 Fuel: Aviation Gasoline, min. grade 100/130, in accordance *(see Note 11)*
with latest issue of Textron Lycoming Service Instruction 1070



- 8.2 Oil: Single or multi-viscosity oils, in accordance with latest issue of Textron Lycoming Service Instruction 1014
- 8.3 Coolant: Air
9. Fluid capacities:
- 9.1 Fuel: **P.66C “Charlie” up to s/n 24:**
(see Notes 1 and 10) Total: 136 Lt (36 U.S.Gal)
[68 Lt (18 U.S.Gal) per wing tank]
at +0,670 m (+26,4 in)
Unusable: 11 Lt (2,9 U.S.Gal)
- P.66C “Charlie” from s/n 25 except s/n 53:**
Total: 180 Lt (47,6 U.S.Gal)
[90 Lt (23,8 U.S.Gal) per wing tank]
at +0,670 m (+26,4 in)
Unusable: 18 Lt (4,8 U.S.Gal)
- 9.2 Oil: Total: 5,67 Lt (1,5 U.S.Gal) at -1,020 m (-40,2 in)
(see Note 1)
- 9.3 Coolant system capacity: N/A
10. Air Speeds:
- Never exceed speed V_{NE} : 168 KCAS (312 Km/h)
Max structural cruising speed V_{NO} : 117 KCAS (217 Km/h)
Design manoeuvring speed V_A : 114 KCAS (212 Km/h)
Flap fully extended speed V_{FE} : 83 KCAS (154 Km/h)
11. Maximum Operating Altitude: N/A
12. Allweather Operations Capability: see Aircraft Flight Manual
13. Maximum Weights:
Take-Off : 990 kg (2183 lb)



14. Centre of Gravity
Range (see Note 10):
Rearward Limits: +0,430 m (+16,93 in) aft of datum
at any weight
Forward Limits: +0,300 m (+11,81 in) aft of datum
at 990 kg (2183 lb)
+0,220 m (+8,66 in) aft of datum
at 800 kg (1764 lb) or less
with linear variation for intermediate weights
15. Datum: Tangent to the wing leading edge
16. Control surface
deflections (see Note 10):
- | | | |
|--|-----------------|------------------|
| Wing Flaps: | Up: 0° | Down: 35° ± 2° |
| Ailerons: | Up: 28° ± 2° | Down: 15° ± 2° |
| Rudder: | Right: 25° ± 2° | Left: 25° ± 2° |
| Stabilator: | Up: 14° ± 2° | Down: 8° ± 2° |
| Stabilator tab:
(with respect to stabilator
chord) | Up: 4° +0°/-1° | Down: 7° +1°/-0° |
17. Levelling Means:
Longitudinal and lateral: On the cabin floor
18. Minimum Flight Crew: 1 (Pilot)
19. Maximum Seating
Capacity: Total 4, distributed as follows:
2 at +0,360 m (+14,2 in),
2 at +1,005 m (+39,6 in)
20. Baggage/Cargo
Compartments:
Max Allowable Load: 40 kg (88,2 lb)
Location: +1,600 m (+63 in)
21. Wheels and Tyres: Nose Wheel Tyre Size: 5.00-5, Type III
Main Wheel Tyres Size: 6.00-6, Type III

G.IV. Operating and Service Instructions

1. Flight Manual: RAI approval No. 129.400/T dated 24 February 1976
Refer to doc. p/n NOR10.763-3 "Serie P.64 e
P.66 - Indice pubblicazioni tecniche" (Index of
Technical Publications) for latest applicable
revision



2. Technical Manual:
 - Airplane Maintenance Manual (AMM) RAI approval No. 143.523/T dated 24 Ottobre 1977
Refer to doc. p/n NOR10.763-3 “Serie P.64 e P.66 - Indice pubblicazioni tecniche” (Index of Technical Publications) for latest applicable revision
 - Service Bulletins, Instructions and Letters
Refer to doc. p/n NOR10.777-4 “P.64 - P.66 Variants, Index of Service Bulletins, Service Letters and Service Instructions”
3. Spare Parts Catalogue (IPC): Document “Catalogo Nomenclatore P66C Charlie”
Refer to doc. p/n NOR10.763-3 “Serie P.64 e P.66 - Indice pubblicazioni tecniche” (Index of Technical Publications) for latest applicable revision



SECTION H: DATA PERTINENT TO ALL MODELS

H.I. Common data

1. Equipment: Basic equipment required by the applicable airworthiness design standard (see certification basis) shall be installed in the aircraft for the first certification.
- In addition, the following equipment are required:
- a. Safe Flight Instrument Corp. pre-stall detector Type 164R, or equivalent
 - b. Aircraft Flight Manual (see §§ A.IV, B.IV, C.IV, D.IV, E.IV, F.IV, G.IV, as applicable)

H.II. Notes

NOTE 1: Current weight and balance report including list of equipment in certificated empty weight, and loading instructions, must be provided for each aircraft at the time of original certification.

The certificated empty weight and corresponding centre of gravity location must include:

For P.64, P.64B, P.64B “Oscar B 1155”, P.64B “Oscar 200”, V1.0 and V1.1 aircraft:

Unusable Fuel (total): 7,2 kg (15,9 lb) at +0,650 m (+25,6 in)

Engine Lubricant (total): 1,7 kg (3,7 lb) at -0,950 m (-37,4 in)

For P.66B “Oscar 100” / V1.100L and P.66B “Oscar 150” / V1.150L aircraft:

Unusable Fuel (total): 4,2 kg (9,3 lb) at +0,670 m (+26,4 in)

Engine Lubricant (total): 1,7 kg (3,7 lb) at -1,020 m (-40,2 in)

For P.66B “Oscar 150” / V1.150L aircraft with fuel tanks capacity increased up to 200 Lt (52,8 U.S.Gal) (see Note 14):

Unusable Fuel (total): 7,2 kg (15,9 lb) at +0,650 m (+25,6 in)

Engine Lubricant (total): 1,7 kg (3,7 lb) at -1,020 m (-40,2 in)

For P.66C “Charlie” aircraft up to s/n 24 plus s/n 53:

Unusable Fuel (total): 7,9 kg (17,4 lb) at +0,670 m (+26,4 in)

Undrainable oil: 0 kg (0 lb)

For V1.CL and P.66C “Charlie” aircraft from s/n 25 except s/n 53:

Unusable Fuel (total): 13 kg (28,7 lb) at +0,670 m (+26,4 in)

Undrainable oil: 0 kg (0 lb)



NOTE 2: The following placards shall be installed in clear and full view of pilot:

(A) FOR ALL MODELS

“QUESTO VELIVOLO DEVE ESSERE IMPIEGATO COME VELIVOLO DI CATEGORIA SEMIACROBATICA IN ACCORDO CON LE LIMITAZIONI DI IMPIEGO PRESCRITTE DALLE TARGHETTE, DAI CONTRASSEGNI E DAL MANUALE DI VOLO”

“THIS AIRCRAFT MUST BE OPERATED AS AN UTILITY CATEGORY AIRPLANE, IN ACCORDANCE WITH THE OPERATING LIMITATIONS PRESCRIBED BY PLACARDS, MARKINGS AND APPLICABLE FLIGHT MANUAL”

(B) FOR P.64, P.64B, P.64B “Oscar B 1155”, P.64B “Oscar 200”, V1.0, V1.1 MODELS

“LE MANOVRE ACROBATICHE SONO LIMITATE ALLE SEGUENTI:

VIRATA STRETTA	200 Km/h IAS
VIRATA IN CABRATA	240 Km/h IAS
OTTO STANCO	260 Km/h IAS
STALLO (esclusa la scampanata)	DECELERAZIONE LENTA
È VIETATA LA VITE”	

“ACROBATIC MANOEUVRES APPROVED:

STEEP TURN	200 Km/h IAS
CLIMBING TURN	240 Km/h IAS
LAZY EIGHT	260 Km/h IAS
STALLS (except whip stall)	SLOW DECELERATION
SPIN IS PROHIBITED”	

(C) FOR P.66B “Oscar 100” / V1.100L MODEL

“LE MANOVRE ACROBATICHE SONO LIMITATE ALLE SEGUENTI:

VIRATA STRETTA	180 Km/h IAS
VIRATA IN CABRATA	225 Km/h IAS
OTTO STANCO	240 Km/h IAS
STALLO (esclusa la scampanata)	DECELERAZIONE LENTA
È VIETATA LA VITE CON FLAP ESTESI”	

“ACROBATIC MANOEUVRES APPROVED:

STEEP TURN	180 Km/h IAS
CLIMBING TURN	225 Km/h IAS
LAZY EIGHT	240 Km/h IAS
STALLS (except whip stall)	SLOW DECELERATION
SPIN WITH EXTENDED FLAP IS PROHIBITED”	



(D) FOR P.66B “Oscar 150” / V1.150L MODEL

“LE MANOVRE ACROBATICHE SONO LIMITATE ALLE SEGUENTI:

VIRATA STRETTA 190 Km/h IAS

VIRATA IN CABRATA 230 Km/h IAS

OTTO STANCO 250 Km/h IAS

STALLO (esclusa

la scampanata) DECELERAZIONE LENTA

È VIETATA LA VITE CON FLAP ESTESI”

ATTENZIONE: La vite è consentita con non più di 2 persone a bordo occupanti i sedili anteriori.

“ACROBATIC MANOEUVRES APPROVED:

STEEP TURN 190 Km/h IAS

CLIMBING TURN 230 Km/h IAS

LAZY EIGHT 250 Km/h IAS

STALLS

(except whip stall) SLOW DECELERATION

SPIN WITH EXTENDED FLAP IS PROHIBITED”

WARNING: Spin is allowed with not more than 2 persons onboard that shall occupy the front seats.

(E) FOR P.66C “Charlie” / V1.CL MODEL

“LE MANOVRE ACROBATICHE SONO LIMITATE ALLE SEGUENTI:

VIRATA STRETTA 194 Km/h IAS (105 Kts)

VIRATA IN CABRATA 231 Km/h IAS (125 Kts)

OTTO STANCO 222 Km/h IAS (120 Kts)

LOOPING 241 Km/h IAS (130 Kts)

TONNEAU 222 Km/k IAS (120 Kts)

STALLO (esclusa

la scampanata) DECELERAZIONE LENTA

È VIETATA LA VITE CON FLAP ESTESI”

ATTENZIONE: La vite è consentita con non più di 2 persone a bordo occupanti i sedili anteriori.

“ACROBATIC MANOEUVRES APPROVED:

STEEP TURN 194 Km/h IAS (105 Kts)

CLIMBING TURN 231 Km/h IAS (125 Kts)

LAZY EIGHT 222 Km/h IAS (120 Kts)

LOOPING 241 Km/h IAS (130 Kts)

TONNEAU 222 Km/h IAS (120 Kts)

STALLS

(except whip stall) SLOW DECELERATION

SPIN WITH EXTENDED FLAP IS PROHIBITED”

WARNING: Spin is allowed with not more than 2 persons onboard that shall occupy the front seats.



(F) FOR P.64, P.64B MODELS

“VELOCITÀ MAX DI MANOVRA	225 Km/h IAS
VELOCITÀ MAX CON FLAP IN 3 ^A POSIZIONE	144 Km/h IAS
VELOCITÀ MAX DEL VENTO TRASVERSALE	37 Km/h (20 nodi)”
“MAX MANOEUVRING SPEED	225 Km/h IAS
MAX SPEED WITH FLAP FULLY EXTENDED	144 Km/h IAS
MAX CROSS-WIND SPEED	37 Km/h (20 knots)”

(G) FOR P.64B “Oscar B 1155” / V1.0 and P.64B “Oscar 200” / V1.1 MODELS

“VELOCITÀ MAX DI MANOVRA	232 Km/h IAS
VELOCITÀ MAX CON FLAP IN 3 ^A POSIZIONE	144 Km/h IAS
VELOCITÀ MAX DEL VENTO TRASVERSALE	37 Km/h (20 nodi)”
“MAX MANOEUVRING SPEED	232 Km/h IAS
MAX SPEED WITH FLAP FULLY EXTENDED	144 Km/h IAS
MAX CROSS-WIND SPEED	37 Km/h (20 knots)”

(H) FOR P.66B “Oscar 100” / V1.100L MODEL

“VELOCITÀ MAX DI MANOVRA	195 Km/h IAS
VELOCITÀ MAX CON FLAP IN 3 ^A POSIZIONE	144 Km/h IAS
VELOCITÀ MAX DEL VENTO TRASVERSALE	37 Km/h (20 nodi)”
“MAX MANOEUVRING SPEED	195 Km/h IAS
MAX SPEED WITH FLAP FULLY EXTENDED	144 Km/h IAS
MAX CROSS-WIND SPEED	37 Km/h (20 knots)”

(I) FOR P.66B “Oscar 150” / V1.150L MODEL

“VELOCITÀ MAX DI MANOVRA	210 Km/h IAS
VELOCITÀ MAX CON FLAP IN 3 ^A POSIZIONE	144 Km/h IAS
VELOCITÀ MAX DEL VENTO TRASVERSALE	37 Km/h (20 nodi)”
“MAX MANOEUVRING SPEED	210 Km/h IAS
MAX SPEED WITH FLAP FULLY EXTENDED	144 Km/h IAS
MAX CROSS-WIND SPEED	37 Km/h (20 knots)”

(J) FOR P.66C “Charlie” / V1.CL MODEL

“VELOCITÀ MAX DI MANOVRA	218 Km/h (118 KIAS)
VELOCITÀ MAX CON FLAP DI ATTERRAGGIO 35°	154 Km/h (83 KIAS)
VELOCITÀ MAX DEL VENTO TRASVERSALE	37 Km/h (20 nodi)”
“MAX MANOEUVRING SPEED	218 Km/h (118 KIAS)
MAX SPEED WITH LANDING FLAP 35°	154 Km/h (83 KIAS)
MAX CROSS-WIND SPEED	37 Km/h (20 knots)”



(K) For models equipped with Hartzell constant rpm propeller and Lycoming engine O-360

“EVITARE IL FUNZIONAMENTO CONTINUATIVO FRA 2000 E 2250 GIRI/MIN.”

“AVOID CONTINUOUS OPERATION BETWEEN 2000 AND 2250 RPM”

(L) For models equipped with Sensenich fixed pitch propeller and Lycoming engine O-360

“EVITARE IL FUNZIONAMENTO CONTINUATIVO FRA 2100 E 2340 GIRI/MIN.”

“AVOID CONTINUOUS OPERATION BETWEEN 2100 AND 2340 RPM”

(M) For models equipped with Hartzell constant rpm propeller and Lycoming engine IO-360-A1B

“EVITARE IL FUNZIONAMENTO CONTINUATIVO FRA 2100 E 2350 GIRI/MIN.”

“AVOID CONTINUOUS OPERATION BETWEEN 2100 AND 2350 RPM”

(N) FOR ALL MODELS

“L’AVVISATORE DI STALLO FUNZIONA SOLO CON INTERRUTTORE GENERALE INSERITO”

“STALL WARNING INOPERATIVE WITH BATTERY AND ALTERNATOR SWITCH OFF”

(O) FOR P.64B “Oscar B 1155” / V1.0 MODEL

“IL PESO MASSIMO DI DECOLLO PARI A 1155 KG È CONSENTITO A CONDIZIONE CHE IL PESO ALL’ATTERRAGGIO CALCOLATO IN BASE AL PREVISTO CONSUMO DI CARBURANTE NON SIA MAGGIORE DI 1100 KG”

“MAXIMUM TAKE-OFF WEIGHT OF 1155 KG IS ALLOWED ONLY IF THE LANDING WEIGHT CALCULATED ON THE BASIS OF FUEL CONSUMPTION IS NOT HIGHER THAN 1100 KG (2425 LB)”

(P) FOR ALL MODELS (in the baggage compartment)

“CARICO MAX AMMESSO NEL BAGAGLIAIO 40 KG”

“MAX LOAD IN BAGGAGE COMPARTMENT 40 KG (88 LB)”

NOTE 3: P.64 and P.64B models are approved for parachuting if the aircraft are modified as per “Bollettino di Modifica n°2” dated 08 March 1967. “Bollettino di Modifica n°2 bis” dated 28 April 1975 extends the applicability to models P.64B Oscar B 1155 [V1.0] e P.64B Oscar 200 [V1.1].



NOTE 4: P.66B “Oscar 150” / V1.150L model is approved for sailplane/glider towing if the aircraft is modified as per “Bollettino di Modifica Partenavia n°8 rev.4”.

NOTE 5a: P.64B, P.64B “Oscar B 1155” and P.64B “Oscar 200” / V1.1 models are approved for sailplane glider towing if the aircraft are modified as per “Bollettino di Modifica Partenavia n°8 rev.4” and equipped with any set of Lycoming engine O-360-A1A or IO-360-A1B coupled with Hartzell propeller HC-2YK-1B/7666A or HC-C2YK-1BF/F7666A.

NOTE 5b: Vulcanair V1.0 model is approved for sailplane glider towing if the aircraft is modified as per Vulcanair Service Bulletin VA-03.

NOTE 6: (Reserved)

NOTE 7: If the change “Partenavia P.66B Oscar 150 n°27” is applied, the rear seat bench may accommodate up to two occupants only if their total weight does not exceed 75 kg (165 lb). In this case the following placard shall be installed near the bench:

“LA PANCHETTA POSTERIORE PUÒ ACCOGLIERE N°1 PASSEGGERO ADULTO O N°2 BAMBINI DEL PESO COMPLESSIVO NON SUPERIORE A 75 KG”

“THE REAR BENCH CAN BE USED BY NR.1 ADULT PASSENGER OR NR.2 KIDS WHOSE TOTAL WEIGHT DOES NOT EXCEED 75 KG (165 LB)”

NOTE 8: P.66C “Charlie” / V1.CL Certification Basis also includes the following paragraphs:
FAR 23 initial issue for §§ 23.33, 23.831 and 23.1125;
FAR 23 Amdt 7 effective 14 Sept.1969 for §§ 23.65, 23.1047 and 23.1093.

NOTE 9: Lycoming engine O-235-C1 has the following limitation if equipped with magnetos Bendix model SF4LN-8 at Take-Off and Max Continuous Power (108 HP): - Propeller rpm 2600

NOTE 10: P.66C “Charlie” s/n 53 (prototype) was built and approved in a configuration similar to that of P.66B “Oscar 150”, in terms of same engine, propeller, spinner and fuselage.

P.66B “Oscar 150” engine (including lubricant capacity) and propeller limitations are applicable to P.66C “Charlie” s/n 53.

Refer to P.66C “Charlie” for all the remaining limitations, excluding the following:

- Fuel capacity

Total: 132 Lt (34,9 U.S.Gal)

[66 Lt (17,4 U.S.Gal) per wing tank]

at +0,670 m (+26,4 in)

Unusable: 11 Lt (2,9 U.S.Gal)

- For the determination of the empty weight and associated centre of gravity position:

Unusable Fuel: 7,9 kg (17,4 lb) at +0,670 m (+26.4 in)



- Stabilator tab deflections (with respect to stabilizer chord):

Up: $9^{\circ} \pm 1^{\circ}$ Down: $9^{\circ} \pm 1^{\circ}$

- Centre of Gravity Range: Same of P.66B model

P.66C "Charlie" s/n 53 Airplane Flight Manual reports all the above specific limitations.

NOTE 11: The use of Aviation Gasoline 100LL (provided that fuel lead "Pb" content is limited to 2 cm³ per US.Gal of fuel or per 3,785 Lt) is allowed.

NOTE 12: P.64, P.64B "OscarB", P.64B "Oscar B 1155" (180 HP) or V1.0, P.64B "Oscar 200" (200 HP) or V1.1, P.66B "Oscar 100" or V1.100L and P.66B "Oscar 150" or V1.150L models can be operated as Utility Category Aeroplanes if they embody the Partenavia "Bollettino di Modifica n° OS/94-01".

P.66C "Charlie" or V1.CL model can be operated as Utility Category Aeroplane if it embodies the Partenavia "Bollettino di Modifica n° 66C-23".

For all models, if only Part A of applicable "Bollettino di Modifica" is applied, the maximum seating capacity for Utility Category is limited to the two forward seats.

The Aircraft Flight Manual must include the Supplement NOR10.773-5, approved by RAI with approval No.94/4321/MAE dated 06 December 1994.

The following placard must be installed in full view of pilot:

"QUESTO VELIVOLO DEVE ESSERE IMPIEGATO IN CATEGORIA:

- SEMIACROBATICA: N°2 POSTI (SOLO ANTERIORI)
- NORMALE: N° TOTALE POSTI COME DA MANUALE DI VOLO BASE"

"THIS AIRCRAFT MUST BE OPERATED AS CATEGORY:

- UTILITY: ONLY WITH THE TWO FORWARD SEATS
- NORMAL: SEATING CAPACITY AS PER BASIC FLIGHT MANUAL"

To operate the aircraft only in Normal Category, the Aircraft Flight Manual must include the Supplement NOR10.773-4, approved by RAI with approval No.94/4321/MAE dated 06 December 1994.

The following placard must be installed in full view of pilot:

"QUESTO VELIVOLO DEVE ESSERE IMPIEGATO IN CATEGORIA NORMALE"

"THIS AIRCRAFT MUST BE OPERATED AS NORMAL CATEGORY AEROPLANE"

NOTE 13: For P.66B "Oscar 100" aircraft from s/n 44 up to s/n 74 or embodying Partenavia Change No.11, the fuel capacity is as follows:

Total: 114 Lt (30,1 U.S.Gal)
 [57 Lt (15,1 U.S.Gal) per wing tank]
 at +0,670 m (+26,4 in)

Unusable: 6 Lt (1,6 U.S.Gal)

For V1.100 and P.66B "Oscar 100" aircraft from s/n 75 onwards or embodying Partenavia Change No.31, the fuel capacity is as follows:



Total: 132 Lt (34,9 U.S.Gal)
[66 Lt (17,4 U.S.Gal) per wing tank]
at +0,670 m (+26,4 in)
Unusable: 6 Lt (1,6 U.S.Gal)

NOTE 14: For P.66B “Oscar 150” / V1.150L aircraft embodying Partenavia Change No.17, the fuel capacity is as follows:

Total: 200 Lt (52,8 U.S.Gal)
[100 Lt (26,4 U.S.Gal) per wing tank]
at +0,650 m (+25,6 in)
Unusable: see Note 1

For P.66B “Oscar 150” / V1.150L aircraft embodying Partenavia Change No.23, the fuel capacity is as follows:

Total: 132 Lt (34,9 U.S.Gal)
[66 Lt (17,4 U.S.Gal) per wing tank]
at +0,670 m (+26,4 in)
Unusable: see Note 1

NOTE 15: All models P.64 and P.66 have been manufactured by Partenavia – Costruzioni Aeronautiche S.p.A. Napoli (ITALIA). From year 2013, new aircraft are manufactured by VULCANAIR S.p.A. – via Giovanni Pascoli, 7 – 80026 Casoria (Napoli) – ITALIA and they are designated respectively from s/n 1001 and subsequent:

Vulcanair V1.0 for P.64B “Oscar B 1155”
Vulcanair V1.1 for P.64B “Oscar 200”
Vulcanair V1.100L for P.66B “Oscar 100”
Vulcanair V1.150L for P.66B “Oscar 150”
Vulcanair V1.CL for P.66C “Charlie”

NOTE 16: When major change “Vulcanair MOD.V1/02” (EASA approval 10052599) is installed for Garmin G500 and JPI EDM-930 display equipment and for updating of airplane power generation system to 24VDC, the Certification Basis is detailed in CRI A-01 which must be considered together with Special Conditions SC-B 23.div-01 issue 1 detailed in CRI B-52 “Human factor - Integrated Avionic Systems”, SC-F 23.1309-02 detailed in CRI F-52 “Protection from effects of HIRF”, SC-F 23.1309-03 detailed in CRI F-54 “Protection from effects of Lightning Strike - Indirect Effects”. The Airplane Flight Manual AFM10.701-7 (EASA approval 10057053 dated 11 March 2016) includes this major change.

NOTE 17: (reserved)

NOTE 18: P.64B “Oscar 200” s/n 09 has been modified as per EASA approved Vulcanair Major Change MOD.V1/02 “Installation of Garmin G500 and JPI EDM-930 display and updating of airplane power generation system to 24VDC” [see Note 16].



The Airplane Flight Manual p/n NOR10.707-14 must include Supplement 1-VA, EASA approval dated 16 March 2015.

NOTE 19: V1.0 model aircraft from s/n 1001 onwards are equipped with the following powerplant, as per EASA approved Major Change MOD.V1/05 “180 HP powerplant unit replacement on V1.0 aircraft”:

Engine: Lycoming model IO-360-M1A

Propeller: Hartzell model HC-C2YR-1BFP/F7497

Both aviation and automotive fuel types are allowed, in accordance with the limitations specified in the “Aircraft Flight Manual”, Operating Limitations Section.

The Airplane Flight Manual AFM10.701-7 (EASA approval 10057053 dated 11 March 2016) includes this major change.

The Certification Basis of the Major Change MOD.V1/05 is detailed in CRI A-01 closed at issue 3 dated 26 February 2016.

NOTE 20: V1.0 and V1.1 model aircraft, plus P.64B “Oscar 200” s/n 09, may activate the Terrain SVT feature on installed Garmin G500 avionics system, as per EASA approved Major Change MOD.V1/15 “Activation of Terrain SVT System”.

NOTE 21: V1.0 model aircraft from s/n 1001 onwards can be optionally equipped with the following propeller, as per Major Change MOD.V1/22 “Fixed pitch propeller - MT-Propeller” (EASA Approval 10072391):

Propeller: MT-Propeller model MT188R135-4G

In case the fixed pitch propeller would be installed, the engine Lycoming model IO-360-M1A must be converted in accordance with Lycoming SI1435.

The Airplane Flight Manual AFM10.701-7 (EASA approval 10057053 dated 11 March 2016) includes this major change.



ADMINISTRATIVE SECTION

I. Acronyms

CAR – Civil Air Regulations

ENAC – Ente Nazionale per l'Aviazione Civile (formerly RAI)

EASA – European Union Aviation Safety Agency

FAA – Federal Aviation Administration

FAR – Federal Aviation Regulations

ICAO – International Civil Aviation Organization

IPC – Illustrated Part Catalogue

KCAS – Knots Calibrated Air Speed

KIAS – Knots Indicated Air Speed

MTOW – Maximum Take-Off Weight

RAI – Registro Aeronautico Italiano

SO/A – Specifica di Omologazione

TC – Type Certificate

TCDS – Type Certificate Data Sheet

II. Type Certificate Holder Record

TC No.	Issued by	Date	TC Holder
A 134	RAI	08 April 1966	PARTENAVIA Costruzioni Aeronautiche S.p.A. Napoli - Italy
EASA.SAS.A.054 & EASA.SAS.A.055	EASA	20 August 2010	Orphan (SAS were issued to cover missing TC holder)
EASA.A.613	EASA	23 Nov 2013	VULCANAIR S.p.A. Via Giovanni Pascoli, 7 80026 Casoria (NA) Italy

III. Change Record

Issue	Date	Changes
1	20 Nov 2013	First issue
2	25 Mar 2015	Update to include major change MOD.V1/02 (EASA approval 10052599)
3	28 Apr 2016	Update to include major change MOD.V1/05 (EASA approval 10057053)
4	13 May 2016	Deletion of wrong entries in "Maximum operating altitude" fields
5	26 Oct 2017	Update to include major change MOD.V1/15 (EASA approval 10063028)
6	25 Feb 2019	Update to include major change MOD.V1/23 (EASA approval 10068927)
7	12 Feb 2020	Update to include major changes MOD.V1/22 (EASA approval 10072391) and MOD.V1/28 (EASA approval 10072390)
8	21 Oct 2022	Add equivalency to stall detector at section H.I
9	01 Aug 2023	Updated legal business address;

