

European Aviation Safety Agency

EASA

TYPE-CERTIFICATE DATA SHEET

Cameron R Series Rozière Balloons - Manned Free Rozière Balloons

Type Certificate Holder: CAMERON BALLOONS LTD.
St Johns Street
Bedminster
Bristol BS3 4NH
UNITED KINGDOM

Manufacturer: CAMERON BALLOONS LTD.
St Johns Street
Bedminster
Bristol BS3 4NH
UNITED KINGDOM

For Variants: R-77, R-90, R-200, R-210, R-270, R-450, R-550

Issue 1, 05 April 2016

List of effective Pages:

Page	1	2	3	4	5	6	7
Issue	1	1	1	1	1	1	1

CONTENTS

SECTION 1: GENERAL (ALL TYPES AND VARIANTS).....	3
I. General	3
II. Certification Basis.....	3
IV. Operation and Service Instructions	5
V. Notes.....	5
SECTION 2: R-77.....	6
SECTION 3: R-90.....	6
SECTION 4: R-200.....	6
SECTION 5: R-210.....	6
SECTION 6: R-270.....	7
SECTION 7: R-450.....	7
SECTION 8: R-550.....	7

SECTION 1: GENERAL (ALL TYPES AND VARIANTS)

I. General

- | | |
|-------------------------------|--|
| 1. Data Sheet No: EASA.BA.028 | Issue Date: 05 April 2016 |
| 2. Type / Variant or Model | |
| (a) Type: | Cameron R-Type |
| (b) Variant or Model: | Refer to Section 2-8 |
| 3. Airworthiness Category: | Standard |
| 4. Type Certificate Holder: | CAMERON BALLOONS LTD.
St Johns Street
Bedminster
Bristol BS3 4NH
UNITED KINGDOM |
| 5. Manufacturer | CAMERON BALLOONS LTD.
St Johns Street
Bedminster
Bristol BS3 4NH
UNITED KINGDOM |
| 6. EASA Certification date: | 18 August 1992 |
| 7. TCDS History | This TCDS supercedes UK CAA TCDS reference BB25, Issue 1, Dated: September 2002. |

II. Certification Basis

- | | |
|--|---|
| 1. Reference Date for determining the applicable requirements: | 18 August 1992 |
| 2. Airworthiness Requirements: | Refer to Sections 2-8

♦ <i>British Civil Airworthiness Requirements, Part 31, issue dated 31/8/84,</i>

€ <i>EASA CS 31HB, Amendment 1, 05 December 2011</i> |
| 3. Special Conditions: | <i>Special Condition (Part 21.A.16B) Lights for Free Manned Balloon Flights at Night Issue: 2 Date: 22 Oct 2012</i> |
| 4. Reversion and Exemptions: | None |
| 5. Equivalent Safety Findings: | None |

III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Refer to Sections 2-8
2. Description: Manned free Rozière balloon

2.1 Envelope

Natural shape envelope with between 24 and 80 gores with vertical load tapes. Manually operated valve, and chimney rip deflation systems.

Envelopes can be fitted with additional “top tent” balloon and second reflective skin for insulation.

2.2 Baskets

Refer to Sections 2-8 and:

Cameron R-Type Flight Manual, CBL/TN/DAC/19, Issue D or later approved EASA revision.

or

Cameron Balloons Hot Air Balloon Flight Manual, and Supplements-Issue 10 or later approved EASA revision.

Note: Baskets must be in the categories listed for each variant in Sections 2-8 of this TCDS

2.3 Load Frame

Refer to Cameron R-Type Flight Manual, CBL/TN/DAC/19, Issue D or later approved EASA revision.

or

Cameron Balloons Hot Air Balloon Flight Manual, and Supplements-Issue 10 or later approved EASA revision.

Note: Load Frame must be listed as compatible with basket used.

2.4 Burner

Refer to Cameron R-Type Flight Manual, CBL/TN/DAC/19, Issue D or later approved EASA revision.

2.5 Cylinders

Refer to Cameron R-Type Flight Manual, CBL/TN/DAC/19, Issue D or later approved EASA revision.

or

Cameron Balloons Hot Air Balloon Flight Manual, and Supplements-Issue 10 or later approved EASA revision.

TCDS EASA.BA.028			Page 5 / 7
Issue 1, 05 April 2016			

3. Minimum Equipment: Refer to Cameron R-Type Flight Manual, CBL/TN/DAC/19, Issue D or later approved EASA revision.
4. Maximum Mass: Refer to Sections 2-8.
Note: MTOM = Maximum Take-Off Mass, MLM =Minimum Landing Mass.
5. Minimum Crew: One (Pilot)
6. Occupants: Not to exceed MTOM and Flight Manual Limitations. Refer to Cameron R-Type Flight Manual, CBL/TN/DAC/19, Issue D or later approved EASA revision.
7. Life Limited Parts: Refer to Cameron R-Type Maintenance Manual, CBL/TN/FJD/2917, Issue A or later approved EASA revision.
8. Permissible Lifting Gas: Helium (He)

IV. Operation and Service Instructions

1. Cameron R-Type Flight Manual, CBL/TN/DAC/19, Issue D or later approved EASA revision.
2. Cameron R-Type Maintenance Manual, CBL/TN/FJD/2917, Issue A or later approved EASA revision.

V. Notes

1. For the purpose of maintenance and inspection a log book must be maintained with each R-Type balloon envelope. If the burner, basket, instruments and/or cylinders are interchanged, they must be listed in the log book of each envelope with which they are used.
2. Throughout this document the term "basket" applies to either a hot air balloon basket or R-Type Gondola

SECTION 2: R-77

Manned free Rozière balloon. Natural shape, 24 gores, 24 vertical loadtapes. The envelope general assembly is defined by drawing CB973. The definition is listed in Table 2.1.

Table 2.1: R-77; Definitions, Limitations and Eligible Equipment

Model	Drawing	Volume: Gas		Max. Fill (%)	MTOM (kg)	Max. permitted Free lift at Take-off (kg)	Burner Cat.	Basket Cat.	Approval Date
		ft ³	m ³						
R-77	CB973	77 000	2 180	100	2 270	45	B, C	C, D, E, F	18-08-1992 ♦

SECTION 3: R-90

Manned free Rozière balloon. Natural shape, 24 gores, 24 vertical loadtapes. The envelope general assembly is defined by drawing CB 1411. The definition is listed in Table 3.1.

Table 3.1: R-90; Definitions, Limitations and Eligible Equipment

Model	Drawing	Volume: Gas		Max. Fill (%)	MTOM (kg)	Max. permitted Free lift at Take-off (kg)	Burner Cat.	Basket Cat.	Approval Date
		ft ³	m ³						
R-90	CB1411	90 000	2 549	100	2 654	52	B, C	C, D, E, F	24-07-2002 ♦

SECTION 4: R-200

Manned free Rozière balloon. Natural shape, 32 gores, 32 vertical loadtapes. The envelope general assembly is defined by drawing CB 1153. The definition is listed in Table 4.1.

Table 4.1: R-200; Definitions, Limitations and Eligible Equipment

Model	Drawing	Volume: Gas		Max. Fill (%)	MTOM (kg)	Max. permitted Free lift at Take-off (kg)	Burner Cat.	Basket Cat.	Approval Date
		ft ³	m ³						
R-200	CB1153	200 000	5 664	75	4 423	82	B, C	C, D, E, F	02-02-1996 ♦

SECTION 5: R-210

Manned free Rozière balloon. Natural shape, 32 gores, 32 vertical loadtapes. The envelope general assembly is defined by drawing CB 1193. The definition is listed in Table 5.1.

Table 5.1: R-210; Definitions, Limitations and Eligible Equipment

Model	Drawing	Volume: Gas		Max. Fill (%)	MTOM (kg)	Max. permitted Free lift at Take-off (kg)	Burner Cat.	Basket Cat.	Approval Date
		ft ³	m ³						
R-210	CB1193	210 000	5 947	75	4 644	86	B, C	C, D, E, F	11-12-1996 ♦

SECTION 6.1: R-270

Manned free Rozière balloon. Natural shape, 32 gores, 32 vertical loadtapes. The envelope general assembly is defined by drawing CB 1261. The definition is listed in Table 6.1.

Table 6.1: R-270; Definitions, Limitations and Eligible Equipment

Model	Drawing	Volume: Gas		Max. Fill (%)	MTOM (kg)	Max. permitted Free lift at Take-off (kg)	Burner Cat.	Basket Cat.	Approval Date
		ft ³	m ³						
R-270	CB1261	270 000	7 646	63	5 026	92	B, C	C, D, E, F	20-11-1997 ♦

SECTION 7: R-450

Manned free Rozière balloon. Natural shape, 72 gores, 72 free loadtapes. The envelope general assembly is defined by drawing CB 1292. The definition is listed in Table 7.1.

Table 7.1: R-450; Definitions, Limitations and Eligible Equipment

Model	Drawing	Volume: Gas		Max. Fill (%)	MTOM (kg)	Max. permitted Free lift at Take-off (kg)	Burner Cat.	Basket Cat.	Approval Date
		ft ³	m ³						
R-450	CB1292	450 000	12 744	50	6 495	120	B, C	C, D, E, F	23-04-1998 ♦

SECTION 8: R-550

Manned free Rozière balloon. Natural shape, 80 gores, 80 free loadtapes. The envelope general assembly is defined by drawing CB 1720. The definition is listed in Table 8.1.

Table 8.1: R-550; Definitions, Limitations and Eligible Equipment

Model	Drawing	Volume: Gas		Max. Fill (%)	MTOM (kg)	Max. permitted Free lift at Take-off (kg)	Burner Cat.	Basket Cat.	Approval Date
		ft ³	m ³						
R-550	CB1720	550 000	15 574	60	9 726	170	B, C	C, D, E, F	05 April 2016 €

* * *