CL-600 Challenger 600 Series

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Date: 14 February 2025

TCDSN No.: EASA.IM.A.023

Issue: 13



TYPE-CERTIFICATE DATA SHEET FOR NOISE

No. EASA.IM.A.023

for

CL-600 Challenger 600 Series

Type Certificate Holder:
Bombardier Inc.
400 Cote Vertu Road West
Dorval QC H4S 1Y9
Canada

For models:

CL-600-1A11

CL-600-2A12

CL-600-2B16



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CL-600 Challenger 600 Series TCDSN No.: EASA.IM.A.023 Date: 14 February 2025 Issue: 13

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Issue: 13

Type Certificate Holder¹ Bombardier Inc. Aircraft Type Designation¹ CL-600-1A11

(Commercial Designation Challenger 600)

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Date: 14 February 2025

Engine TC Holder Avco Lycoming Engine Type Designation ALF502L-2

Additional modifications essential to meet the requirements or needed to attain the

certificated noise levels1

None

Noise Certification Basis ICAO Annex 16, Volume I Edition / Amendment Chapter¹ 3

EASA	Maximu	ım Mass	Latera	l EPNL	Flyover EPNL		Approach EPNL		Ç00	
Record No.	Take-off ¹ (kg)	Landing (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	See Note	
A19284	18,711	16,329	89.5	94.0	84.8	89.0	91.6	98.0	-	
A19282	18,643	16,329	89.5	94.0	84.7	89.0	91.6	98.0	-	

¹ See Note 1.



Issue: 13

Type Certificate Holder¹ Bombardier Inc. Aircraft Type Designation¹ CL-600-1A11

(Commercial Designation Challenger 600)

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Date: 14 February 2025

Engine TC Holder Avco Lycoming Engine Type Designation ALF502L-2C

Additional modifications essential to meet the requirements or needed to attain the **None**

certificated noise levels¹

Noise Certification Basis ICAO Annex 16, Volume I Edition / Amendment Chapter¹ 3

FACA	Maximu	ım Mass	Latera	l EPNL	Flyove	r EPNL	Approach EPNL		Coo	
EASA Record No.	Take-off ¹ (kg)	Landing (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	See Note	
A19285	18,711	16,329	89.5	94.0	84.8	89.0	91.6	98.0	-	
A19283	18,643	16,329	89.5	94.0	84.7	89.0	91.6	98.0	-	

¹ See Note 1.



Issue: 13

Type Certificate Holder¹ Bombardier Inc. Aircraft Type Designation¹ CL-600-2A12

(Commercial Designation Challenger 601)

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Date: 14 February 2025

Engine TC Holder General Electric Company Engine Type Designation¹ CF34-1A

Additional modifications essential to meet the requirements or needed to attain the

None

certificated noise levels¹

Noise Certification Basis ICAO Annex 16, Volume I Edition / Amendment Edition 6 / Amendment 10 Chapter¹ 3

FACA	Maximu	ım Mass	Latera	l EPNL	Flyove	r EPNL	Approa	ch EPNL	Can
EASA Record No.	Take-off ¹ (kg)	Landing (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	See Note
A1924	20,457	16,329	83.7	94.0	81.1	89.0	91.2	98.0	-
A1925	20,230	16,329	83.7	94.0	80.8	89.0	91.2	98.0	-
A1926	19,550	16,329	83.8	94.0	80.3	89.0	91.2	98.0	-
A1927	19,096	16,329	83.9	94.0	79.8	89.0	91.2	98.0	-

¹ See Note 1.



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Type Certificate Holder¹ Bombardier Inc. Aircraft Type Designation¹ CL-600-2A12

(Commercial Designation Challenger 601)

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Date: 14 February 2025

Engine TC Holder General Electric Company Engine Type Designation¹ CF34-1A

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels¹

SB 601-0638 (Recertification to Chapter 4)

Noise Certification Basis ICAO Annex 16, Volume I Edition / Amendment Edition 6 / Amendment 10 Chapter¹ 4

FACA	Maximum Mass		Latera	l EPNL	Flyove	r EPNL	Approach EPNL		Coo
EASA Record No.	Take-off¹ (kg)	Landing (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	See Note
A19082	20,457	16,329	83.7	94.0	81.1	89.0	91.2	98.0	-
A19083	20,230	16,329	83.7	94.0	80.8	89.0	91.2	98.0	-
A19084	19,550	16,329	83.8	94.0	80.3	89.0	91.2	98.0	-
A19085	19,096	16,329	83.9	94.0	79.8	89.0	91.2	98.0	-

¹ See Note 1.



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Type Certificate Holder¹ Bombardier Inc. Aircraft Type Designation¹ CL-600-2A12

Engine TC Holder General Electric Company Engine Type Designation CF34-3A

Edition / Amendment

84.3

Additional modifications essential to meet the requirements or needed to attain the **None**

ICAO Annex 16, Volume I

16,329

20,457

certificated noise levels1

Noise Certification Basis

A9030

5050	Maximu	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL	
EASA Record No.	Take-off ¹ (kg)	Landing (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	See Note

94.0

Edition 6 / Amendment 10

89.0

80.2

¹ See Note 1.



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Chapter¹

91.2

3

98.0

Issue: 13

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Type Certificate Holder¹ **Bombardier Inc.** Aircraft Type Designation¹ CL-600-2A12

Engine TC Holder **General Electric Company** Engine Type Designation¹ CF34-3A

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels¹

SB 601-0638 (Recertification to Chapter 4)

Noise Certification Basis ICAO Annex 16, Volume I Edition / Amendment Edition 6 / Amendment 10 Chapter¹

FACA	Maximum Mass		Latera	l EPNL	Flyove	r EPNL	Approach EPNL		Coo
EASA Record No.	Take-off¹ (kg)	Landing (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	See Note
A19086	20,457	16,329	84.3	94.0	80.2	89.0	91.2	98.0	-



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Type Certificate Holder¹ Bombardier Inc. Aircraft Type Designation¹ CL-600-2B16

(Commercial Designation Challenger 601-3A)

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Date: 14 February 2025

Engine TC Holder General Electric Company Engine Type Designation CF34-3A

Additional modifications essential to meet the requirements or needed to attain the **None**

certificated noise levels¹

Noise Certification Basis	s ICAO Annex 16, Volume I	Edition / Amendment	Edition 6 / Amendment 10	Chapter ¹	3	

FACA	Maximu	ım Mass	Latera	l EPNL	Flyove	r EPNL	Approa	ch EPNL	Coo
EASA Record No.	Take-off ¹ (kg)	Landing (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	See Note
A1929	20,570	17,236	84.3	94.0	80.3	89.0	91.3	98.0	-
A1928	20,457	17,236	84.3	94.0	80.2	89.0	91.3	98.0	-
A1931	20,230	16,329	84.4	94.0	80.0	89.0	91.2	98.0	-
A2034	19,550	16,329	84.5	94.0	79.7	89.0	91.2	98.0	-

¹ See Note 1.



Issue: 13

Type Certificate Holder¹

Aircraft Type Designation¹ **Bombardier Inc.** CL-600-2B16

Edition 6 / Amendment 10

(Commercial Designation Challenger 601-3A)

Chapter¹

4

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Date: 14 February 2025

Engine TC Holder General Electric Company Engine Type Designation¹ CF34-3A

Edition / Amendment

Additional modifications essential to meet the requirements or needed to attain the SB 601-0638 (Recertification to Chapter 4)

ICAO Annex 16, Volume I

certificated noise levels1

Noise Certification Basis

EASA	Maximu	ım Mass	Lateral EPNL		Flyover EPNL		Approach EPNL		Coo	
EASA Record No.	Take-off ¹ (kg)	Landing (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	See Note	
A19087	20,570	17,236	84.3	94.0	80.3	89.0	91.3	98.0	-	
A19088	20,457	17,236	84.3	94.0	80.2	89.0	91.3	98.0	-	
A19089	20,230	16,329	84.4	94.0	80.0	89.0	91.2	98.0	-	
A19090	19,550	16,329	84.5	94.0	79.7	89.0	91.2	98.0	-	

¹ See Note 1.



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Date: 14 February 2025

Type Certificate Holder¹ Aircraft Type Designation¹ **Bombardier Inc.** CL-600-2B16

> (Commercial Designation Challenger 601-3R)

> > 3

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Engine TC Holder General Electric Company Engine Type Designation¹ CF34-3A1

Additional modifications essential to meet the requirements or needed to attain the None

certificated noise levels1

Noise Certification Basis ICAO Annex 16, Volume I Edition / Amendment Edition 6 / Amendment 10 Chapter¹

EASA	Maximu	ım Mass	Latera	Lateral EPNL		Flyover EPNL		Approach EPNL	
Record No.	Take-off ¹ (kg)	Landing (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	See Note
A1933	20,457	17,236	84.3	94.0	80.2	89.0	91.3	98.0	-

¹ See Note 1.



Issue: 13

Type Certificate Holder¹ Bombardier Inc. Aircraft Type Designation¹ CL-600-2B16

(Commercial Designation Challenger 601-3R)

Engine TC Holder General Electric Company Engine Type Designation CF34-3A1

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels¹

SB 601-0638 (Recertification to Chapter 4)

Noise Certification Basis

ICAO Annex 16, Volume I

Edition / Amendment

Edition 6 / Amendment 10

Chapter¹

4

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Date: 14 February 2025

EASA	Maximu	ım Mass	Lateral EPNL		Flyover EPNL		Approach EPNL		Soc
Record No.	Take-off ¹ (kg)	Landing (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	See Note
A19091	20,457	17,236	84.3	94.0	80.2	89.0	91.3	98.0	-

¹ See Note 1.



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Type Certificate Holder¹ Bombardier Inc. Aircraft Type Designation¹ CL-600-2B16

(Commercial Designation Challenger 601-3A)

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Date: 14 February 2025

Engine TC Holder General Electric Company Engine Type Designation CF34-3A2

Additional modifications essential to meet the requirements or needed to attain the **None**

certificated noise levels¹

Noise Certification Basis ICAO Annex 16, Volume I Edition / Amendment Edition 6 / Amendment 10 Chapter¹ 3

EASA	Maximu	ım Mass	Lateral EPNL		Flyover EPNL		Approach EPNL		S00	
Record No.	Take-off ¹ (kg)	Landing (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	See Note	
A1930	20,570	17,236	84.3	94.0	80.3	89.0	91.3	98.0	-	
A5838	20,457	16,329	84.3	94.0	80.2	89.0	91.2	98.0	-	
A1932	20,230	16,329	84.4	94.0	80.0	89.0	91.2	98.0	-	

¹ See Note 1.



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Type Certificate Holder¹ Bombardier Inc. Aircraft Type Designation¹ CL-600-2B16

(Commercial Designation Challenger 601-3A)

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Date: 14 February 2025

Engine TC Holder General Electric Company Engine Type Designation CF34-3A2

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels¹

SB 601-0638 (Recertification to Chapter 4)

Noise Certification Basis ICAO Annex 16, Volume I Edition / Amendment Edition 6 / Amendment 10 Chapter¹ 4

FACA	Maximu	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL	
EASA Record No.	Take-off ¹ (kg)	Landing (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	See Note
A19092	20,570	17,236	84.3	94.0	80.3	89.0	91.3	98.0	-
A19093	20,457	16,329	84.3	94.0	80.2	89.0	91.2	98.0	-
A19094	20,230	16,329	84.4	94.0	80.0	89.0	91.2	98.0	-

¹ See Note 1.



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Type Certificate Holder¹ Bombardier Inc. Aircraft Type Designation¹ CL-600-2B16

(Commercial Designation Challenger 604, 605)

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Date: 14 February 2025

Engine TC Holder General Electric Company Engine Type Designation¹ CF34-3B

Additional modifications essential to meet the requirements or needed to attain the **None**

certificated noise levels¹

Noise Certification Basis ICAO Annex 16, Volume I Edition / Amendment Edition 6 / Amendment 10 Chapter¹ 3

FACA	Maximu	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL	
EASA Record No.	Take-off ¹ (kg)	Landing (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	See Note
A1934	21,863	17,236	84.6	94.0	81.2	89.0	91.3	98.0	-
A1935	21,591	17,236	84.6	94.0	80.9	89.0	91.3	98.0	-
A1936	17,236	17,236	85.3	94.0	76.8	89.0	91.3	98.0	-

¹ See Note 1.



Issue: 13

Type Certificate Holder¹ Bombardier Inc. Aircraft Type Designation¹ CL-600-2B16

(Commercial Designation Challenger 650)

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Date: 14 February 2025

Engine TC Holder General Electric Company Engine Type Designation¹ CF34-3B

Additional modifications essential to meet the requirements or needed to attain the **None**

certificated noise levels¹

Noise Certification Basis ICAO Annex 16, Volume I Edition / Amendment Edition 6 / Amendment 10 Chapter¹ 4

FACA	Maximu	ım Mass	Latera	Lateral EPNL Flyc		r EPNL	Approach EPNL		Coo	
EASA Record No.	Take-off ¹ (kg)	Landing (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	See Note	
A19161	21,863	17,236	84.6	94.0	81.2	89.0	91.3	98.0	-	

¹ See Note 1.



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Type Certificate Holder¹ Bombardier Inc. Aircraft Type Designation¹ CL-600-2B16

(Commercial Designation Challenger 604, 605)

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Date: 14 February 2025

Engine TC Holder General Electric Company Engine Type Designation CF34-3B

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels¹ SB 604-11-016 or SB 605-11-003 (Recertification to Chapter 4)

Noise Certification Basis ICAO Annex 16, Volume I Edition / Amendment Edition 6 / Amendment 10 Chapter¹ 4

EASA	Maximu	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL	
Record No.	Take-off ¹ (kg)	Landing (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	See Note
A19095	21,863	17,236	84.6	94.0	81.2	89.0	91.3	98.0	-
A19096	21,591	17,236	84.6	94.0	80.9	89.0	91.3	98.0	-
A19097	17,236	17,236	85.3	94.0	76.8	89.0	91.3	98.0	-

¹ See Note 1.



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Type Certificate Holder¹ Bombardier Inc. Aircraft Type Designation¹ CL-600-2B16

(Commercial Designation Challenger 650)

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Date: 14 February 2025

Engine TC Holder General Electric Company Engine Type Designation CF34-3B

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels¹

SB 650-34-012 (for S/N 6050-6131) or modsum 600-6421 (for S/N 6132 and up) (MTO Take-off Mode capability)

Noise Certification Basis ICAO Annex 16, Volume I Edition / Amendment Edition 6 / Amendment 10 Chapter¹ 4

L	Maximu	ım Mass	Latera	Lateral EPNL		Flyover EPNL		Approach EPNL	
EASA Record No.	Take-off ¹ (kg)	Landing (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	See Note
A19220	21,863	17,236	85.6	94.0	79.0	89.0	91.3	98.0	-





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CS-36 Amendment level

ICAO, Annex 16, Volume I Amendment level	7	8	9	10	11-B	12	13
Corresponding CS-36 Amendment level	Initial	1	2	3	4	5	6

Note: This table is for information purposes only. It links the applicable noise requirements in Volume I of ICAO Annex 16 to the corresponding Appendices to that Volume, which were listed as acceptable means of compliance in CS-36. With the adoption of Regulation (EU) 2018/1139 (i.e. from Amendment 12 to Volume I of ICAO Annex 16) these Appendices became part of the applicable noise requirements. Their reference was removed in Amendment 6 to CS-36 and this table will not be updated further.

TCDSN EASA.IM.A.023 Notes

1. In cases where it is appropriate to issue a noise certificate, items so marked shall be included on EASA Form 45.



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Change Record

Issue	Date	Changes
Issue 1	08 January 2007	Initial Issue
Issue 2	21 February 2007	Revised
Issue 3	30 April 2007	Revised
Issue 4	15 January 2008	Revised record A5838
Issue 5	21 July 2010	Revised
Issue 6	08 November 2010	Added CL-600-2E25 (CRJ1000): Records A15227 to 15256
Issue 7	19 January 2011	Deleted CL-600-2B19 records linked to Chapter 3; Remove "Chapter 4
		option" from CL-600-2B19 records
Issue 8	27 April 2015	Added "Conical Nozzle" installation: Records A19034 - A19057
Issue 9	11 August 2015	Records A19082 - A19097 added
Issue 10	10 February 2017	Record A19161 added for Challenger 650
Issue 11	20 February 2019	Record A19220 added
Issue 12	06 March 2020	New revision due to move of CL-600-2B19, CL-600-2C10, CL-600-2D15,
		CL-600-2D24 and CL-600-2E25 to TCDS EASA IM.A.673;
		Added model CL-600-1A11
Issue 13	14 February 2025	TC-Holder address updated

-END-

