

Heavy Vehicle Specialist Certificate

Must be presented to a CoF (Heavy) Inspecting Organisation
Heavy Vehicle Specialist Inspector and Inspecting Organisation

Heavy Vehicle Specialist Inspector's or Manufacturing Inspecting Organisation's Name (PRINT IN CAPS)
Chris Clarke

ID
CJC

Vehicle Registration*

VIN/Chassis Number
7A9C2002XF1023394

Component being certified:

- Chassis
- Load Anchorage
- Log Bolsters
- Towing Connection
- Brakes
- SRT
- PSV Stability
- PSV Rollover
- Swept Path
- PBS

Certification Category
HVEK

Description of Work
CERTIFY TO SCHEDULE 5
ROLL STABILTY FUNCTION ACTIVATED

Code/Standard/Rule Certified to
HVBR 32015/3 Schedule 5

Component Load Rating(s)
24000KG

General Drawing Number(s)
N/A

Supporting Documents
BRAKE RULE CERTIFICATE - CJC153198

Special Conditions*
WARNING LAMP MUST ILLUMINATE WHEN IGNITION IS SWITCHED ON & THEN EXTINGUISH IMMEDIATELY OR WHEN VEHICLE SPEED EXCEEDS 7 KPH

Certification Expiry Date (if applicable)

or Hubodometer Reading (whichever comes first)

Declaration

I the undersigned, declare that I am the Heavy Vehicle Specialist Inspector identified and I hold a current valid appointment. I certify that the above mentioned vehicle component's design, manufacture and installation, and this certification complies in all respects with the Land Transport Rule: Vehicle Standards Compliance 2002 and my Appointment. To the best of my knowledge the information contained in the Certificate is true and correct.

Designer's ID (if different from inspector below)

Inspector's Signature

Inspector's Name (PRINT IN CAPS)

ID Number

Date
9-Jul-15

Number
515198

CoF Vehicle Inspector ID

CoF Vehicle Inspector Signature

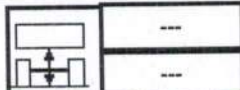

Date

All fields excluding those marked with * must be completed before this certificate can be accepted.

WABCO


START-UP PROTOCOL

System	Trailer EBS-E	WABCO part number	480 102 080 0
Production date	2014-11-17	Serial number	437000908800F
Serial number (modulator)	000000034733		
Fingerprint Customer EOL / Customer Development / Flash Program	W503643 / 2015-07-09 ; 00000000 / 0000-00-00 ; 00000000 / 0000-00-00		

WABCO		TRAILER EBS-E		GGVS/ADR TUEH TB 2007 - 019.00 361-041-08											
HERSTELLER MANUFACTURER CONSTRUCTEUR	DOMETT TT		GIO	Pin1	Pin3	Pin4									
TYP TYPE TYPE	3ASBR		1	---	---	---									
FAHRZEUG IDENTNR. CHASSIS NUMBER NUMERO DE CHASSIS	7A9C2002XF1023394		2	---	---	---									
BREMSBERECHNUNGS-NR. BRAKE CALCULATION NO. CALCUL DE FREINAGE NO.	TP51289S		3	---	---	---									
POLRADZÄHNEZAHL c-d e-f POLE WHEEL TEETH c-d e-f DENTS ROUE DENTÉE c-d e-f	80	---	4	---	---	---									
		ABS-System ABS system Système ABS	5	DIAG	DIAG	DIAG									
RSS RSS RSS	Einfachbereifung Single Tire Monte simple	Lenkacher Steering axle Essieu vireur	6	---	---	---									
	Zwillingsbereifung Twin Tire Monte jumelée	Kippkritisches Fahrzeug Critical Trailer Vehicule critique	7	---	---	---									
Subsystems	SB	I/O	24N	 											
	pm (bar)	6.5	pm (bar)	0.7	2.0	---	6.5							(bar)	
														1.0	Pz
ACHSE AXLE ESSIEU										TYP TYPE	(mm)	(mm)		TR (daN)	
1	1200	0.3	2.1	6400	3.6	0.5	1.8	---	6.1	-	14 / 24	61	80	283	2823
2	1200	0.3	2.1	6400	3.6	0.5	1.8	---	6.1	-	14 / 24	61	80	283	2823
3	1200	0.3	2.1	6400	3.6	0.5	1.8	---	6.1	-	14	62	80	283	2823
4	0	---	---	0	---	---	---	---	---	-	---	---	---	---	---
5	0	---	---	0	---	---	---	---	---	-	---	---	---	---	---

Diagnostic memory	OK	Warning lamp control	OK
Parameter setting	carried out	Stop light power supply	OK
EBS pressure test	OK	Lifting axle test	Not tested
Redundancy test	OK	ECAS height sensor calibration	Not tested
ABS sensor assignment	OK	Height sensor axle load	Not tested
RTR check	Not tested	Leak test	Not tested
Immobilizer test	Not tested	Signal outputs TEBS	Not tested
Signal inputs	Not tested	Tag axle test	Not tested

Diagnostic memory ELEX	Not tested	Signal outputs ELEX	Not tested
TailGUARDlight	Not tested	TailGUARD	Not tested

Manufacturer	DOMETT TT	Vehicle ident. no	7A9C2002XF1023394
Vehicle type	3ASBR	Odometer reading	0.0 km
next Service	0 km	Trip reading	0.0 km
Tester	Chris Clarke	Signature 	
Date	2015-07-09 5:05:28 p.m.		

trailer (full, semi-, centre-axle) with air brake system acc. to UN/ECE-R.13.11

please note!

This brake calculation is made under consideration of
 -the legal prescriptions mentioned above in the version valid at the time of making the program (V6.14.04.20).
 -the functional characteristics of our products as well as the data of the brake out of the test approvals of the axle manufacturers, and
 -the other vehicle data included in the brake calculation.
 Please check whether these data correspond to the actual vehicle data.
 Our conditions of delivery apply (particularly section 9.0).
 In any case we commend to do a braking harmonisation!
 WABCO Brake V6.14.04.20 db 08.07.2014

distribution: DOMETT TT
 7A9C2002XF1023394
 SODC: JH150712
 LT400: CJC 515198

vehicle manufacturer: DOMETT TT
 trailer model : 3ASBR
 trailer type : 3-axle-semi-trailer
 remarks : air / hydraulic / VA suspension
 WABCO TRAILER - EBS
 TRISTOP 1+2: 14/24
 265/70 R 19,5

axle 1 + 2 + 3 : BPW, TSB 3709, 361-041-08 ECE,

		unladen		laden	
total mass	P in kg	6000	- 7000	26000	- 26000
king-pin	PS kg	2400	- 3400	6800	- 6800
axle 1	P1 in kg		1200		6400
axle 2	P2 in kg		1200		6400
axle 3	P3 in kg		1200		6400
total axle mass	PR in kg		3600		19200
wheel base	E in mm	6675	- 6675		
centre of gravity height	h in mm		1140		2148
K-factor		Kv min	1.8693	Kc min	1.0216
K-factor		Kv max	1.8730	Kc max	1.0216

		axle 1	axle 2	axle 3
no. of combined axles		1	1	1
no. of brake chambers per axle line	KDZ	2	2	2
The power output corresponds to		BC 0056.2BC	0056.2BC	0055.2
brake chamber manufacturer		BPW	BPW	BPW
chamber size		14/24	14/24	14.
lever length	lBh in mm	80	80	80
brake factor	[-]	20.50	20.50	20.50
dyn. rolling radius	rdyn min in mm	421	421	421
dyn. rolling radius	rdyn max in mm	421	421	421
threshold torque	Co Nm	12.0	12.0	12.0

calculation:

chamber pressure (rdyn min) pH at z=22,5%bar	2.5	2.5	2.5
chamber pressure (rdyn max) pH at z=22,5%bar	2.5	2.5	2.5
chamber press. (servo) pcha at pm6,5bar bar	6.1	6.1	6.1
piston force ThA at pm6,5bar N	4934	4934	4934
brake force (rdyn min) T lad. at pm6,5bar N	37898	37898	37898
brake force (rdyn max) T lad. at pm6,5bar N	37898	37898	37898
brake force within 1 % rolling friction proportion %	33.3	33.3	33.3

braking rate z laden 0.604 for rdyn min
 z = sum (TR)/PRmax 0.604 for rdyn max

Trailer may only be operated in combination with trucks/tractors with ISO 7638 supply (5 or 7 polar).

brake diagram :

maximum pressure: 8.5 bar

axle 1:

valve 1: 971 002 ... 0 WABCO
 EBS emergency valve

valve 2: 480 102 ... 0 WABCO
 EBS trailer modulator

brake cylinder: BPW 05.444.38...

axle 2:

valve 1: 971 002 ... 0 WABCO
 EBS emergency valve

valve 2: 480 102 ... 0 WABCO
 EBS trailer modulator

brake cylinder: BPW 05.444.38...

axle 3:

valve 1: 971 002 ... 0 WABCO
 EBS emergency valve

valve 2: 480 102 ... 0 () WABCO or 480 207 0.. 0 / 2.. 0
 EBS trailer modulator

brake cylinder: BPW 05.444.30...

test type III (zIII = 0.30)	for rdyn min :	axle1	axle2	axle3
at pm 3.5 bar =>	pcha in bar :	3.2	3.2	3.2
test type III (zIII = 0.06)	for rdyn min :	axle1	axle2	axle3
at pm 1.2 bar =>	pcha in bar :	1.0	1.0	1.0

compatibility band laden

compatibility band unladen

vehicle manufacturer: DOMETT TT
 trailer model : 3ASBR
 trailer type : 3-axle-semi-trailer

brake chamber and lever length :
 axle 1 : 2 x type/diameter 14/24 (BPW) lever length 80 mm
 axle 2 : 2 x type/diameter 14/24 (BPW) lever length 80 mm
 axle 3 : 2 x type/diameter 14. (BPW) lever length 80 mm

brake diagram :

valve :
 971 002 ... 0 WABCO EBS emergency valve
 480 102 ... 0 WABCO EBS trailer modulator
 480 102 ... 0 WABCO EBS trailer modulator or 480 207 C.. 0 / 2.. 0

EBS input data

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vehicle manufacturer: DOMETT TT
 trailer model : 3ASBR
 trailer type : 3-axle-semi-trailer
 brake calculation no. : TP 51289S

tire circumference main axle : 2650 for rdyn max
 tire circumference auxiliary axle : 2650 for rdyn max

assignment pm / deceleration z: pm 0.7 bar z = 0.010
 (laden condition) 2.0 bar z = 0.142
 6.5 bar z = 0.600

control pressure pm			6,5	control pressure pm			0.7	2.0	6.5
axle	axle load unladen	bellow pr. unladen	brake pr. unladen	axle load laden	bellow pr. laden	brake pr. laden			
1	1200	to be	2.1	6400	to be	0.5	1.8	6.1	
2	1200	entered by the vehicle manufact.	2.1	6400	entered by the vehicle manufact.	0.5	1.8	6.1	
3	1200		2.1	6400		0.5	1.8	6.1	
4	0		0,0	0		0,0	0,0	0,0	0,0
5	0		0,0	0		0,0	0,0	0,0	

The unladen values indicated in the above table are values for the basic parameter set. Higher unladen axle loads and liftaxles are automatically recognized and do not require separate adjustment. The above unladen axle loads must not be fallen below.

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axle 1	axle 2	axle 3			
axle load pcy1	axle load pcy1	axle load pcy1			
1200	2.1	1200	2.1	1200	2.1
1700	2.5	1700	2.5	1700	2.5
2200	2.9	2200	2.9	2200	2.9
2700	3.3	2700	3.3	2700	3.3
3200	3.6	3200	3.6	3200	3.6
3700	4.0	3700	4.0	3700	4.0
4200	4.4	4200	4.4	4200	4.4
4700	4.8	4700	4.8	4700	4.8
6400	6.1	6400	6.1	6400	6.1

data sheet to ECE vehicle type-approval certificate concerning braking equipment: according to ECE R13 annex 11

axle 1 : reference axle: BPW	D 115-2	brake lining: BPW 8101
test report :	361-041-08 ECE	date : 01.04.2011
axle 2 : reference axle: BPW	D 115-2	brake lining: BPW 8101
test report :	361-041-08 ECE	date : 01.04.2011
axle 3 : reference axle: BPW	D 115-2	brake lining: BPW 8101
test report :	361-041-08 ECE	date : 01.04.2011

calc. verif. of residual (hot) braking force type III
(item 4.2.1 of appendix 2 to annex 11)

axle 1	(rdyn 421 mm)	T = 16.7 % Fe
axle 2	(rdyn 421 mm)	T = 16.7 % Fe
axle 3	(rdyn 421 mm)	T = 16.7 % Fe

calculated actuator stroke in mm
(item 4.3.1.1 of appendix 2 to annex 11)

axle 1	(sp = 51 mm)	s = 48 mm
axle 2	(sp = 51 mm)	s = 48 mm
axle 3	(sp = 52 mm)	s = 48 mm

average thrust output in N at pm = 6,5 bar (however max. pcha = 7,0 bar)

axle1	ThA = 4934 N
axle2	ThA = 4934 N
axle3	ThA = 4934 N

calc. residual (hot) braking force in N
(item 4.3.1.4 of appendix 2 to annex 11)

axle 1	(rdyn 421 mm)	T = 34349 N
axle 2	(rdyn 421 mm)	T = 34349 N
axle 3	(rdyn 421 mm)	T = 34349 N

braking rate of the vehicle
(item 4.3.2 to appendix 2 to annex 11)

basic test	type III
of subject	(calculated)
trailer (E)	residual
	(hot)braking
0.60	0.55

required braking rate
(items 1.5.3 and 1.7.2 to annex 11)

>= 0,4 and
>= 0,6*E (0.36)

axle 1	(rdyn 421 mm)	T = 34349 N
axle 2	(rdyn 421 mm)	T = 34349 N
axle 3	(rdyn 421 mm)	T = 34349 N

basic test	type III
of subject	(calculated)
trailer (E)	residual
	(hot)braking
0.60	0.55

braking rate of the vehicle
(item 4.3.2 to appendix 2 to annex 11)

required braking rate
(items 1.5.3 and 1.7.2 to annex 11)

>= 0,4 and
>= 0,6*E (0.36)

data sheet to ECE vehicle type-approval certificate concerning braking equipment: according to ECE R13 annex 11

axle 1 : reference axle: BPW	D 115-2	brake lining: BPW 8200
test report :	361-041-08 ECE	date : 02.04.2011
axle 2 : reference axle: BPW	D 115-2	brake lining: BPW 8200
test report :	361-041-08 ECE	date : 02.04.2011
axle 3 : reference axle: BPW	D 115-2	brake lining: BPW 8200
test report :	361-041-08 ECE	date : 02.04.2011

calc. verif. of residual (hot) braking force type III
(item 4.2.1 of appendix 2 to annex 11)

axle 1	(rdyn 421 mm)	T = 16.7 % Fe
axle 2	(rdyn 421 mm)	T = 16.7 % Fe
axle 3	(rdyn 421 mm)	T = 16.7 % Fe

calculated actuator stroke in mm
(item 4.3.1.1 of appendix 2 to annex 11)

axle 1	(sp = 51 mm)	s = 47 mm
axle 2	(sp = 51 mm)	s = 47 mm
axle 3	(sp = 52 mm)	s = 47 mm

average thrust output in N at pm = 6,5 bar (however max. pcha = 7,0 bar)

axle1	ThA = 4934 N
axle2	ThA = 4934 N
axle3	ThA = 4934 N

calc. residual (hot) braking force in N
(item 4.3.1.4 of appendix 2 to annex 11)

axle 1	(rdyn 421 mm)	T = 35680 N
axle 2	(rdyn 421 mm)	T = 35680 N
axle 3	(rdyn 421 mm)	T = 35680 N

basic test	type III
of subject	(calculated)
trailer (E)	residual

braking rate of the vehicle (item 4.3.2 to appendix 2 to annex 11)	0.60	(hot)braking 0.57
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required braking rate (items 1.5.3 and 1.7.2 to annex 11)		>= 0,4 and >= 0,6*E (0.36)
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axle 1	(rdyn 421 mm)	T = 35680 N
axle 2	(rdyn 421 mm)	T = 35680 N
axle 3	(rdyn 421 mm)	T = 35680 N

basic test	type III
of subject	(calculated)
trailer (E)	residual

braking rate of the vehicle (item 4.3.2 to appendix 2 to annex 11)	0.60	(hot)braking 0.57
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required braking rate (items 1.5.3 and 1.7.2 to annex 11)		>= 0,4 and >= 0,6*E (0.36)
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data sheet to ECE vehicle type-approval certificate concerning braking equipment: according to ECE R13 annex 11

axle 1 : reference axle: BPW	D 115-2	brake lining: BPW 8302
test report :	361-041-08 ECE	date : 03.04.2011
axle 2 : reference axle: BPW	D 115-2	brake lining: BPW 8302
test report :	361-041-08 ECE	date : 03.04.2011
axle 3 : reference axle: BPW	D 115-2	brake lining: BPW 8302
test report :	361-041-08 ECE	date : 03.04.2011

calc. verific. of residual (hot) braking force type III
(item 4.2.1 of appendix 2 to annex 11)

axle 1	(rdyn 421 mm)	T = 16.7 % Fe
axle 2	(rdyn 421 mm)	T = 16.7 % Fe
axle 3	(rdyn 421 mm)	T = 16.7 % Fe

calculated actuator stroke in mm
(item 4.3.1.1 of appendix 2 to annex 11)

axle 1	(sp = 51 mm)	s = 39 mm
axle 2	(sp = 51 mm)	s = 39 mm
axle 3	(sp = 52 mm)	s = 39 mm

average thrust output in N at pm = 6,5 bar (however max. pcha = 7,0 bar)

axle1	ThA = 4934 N
axle2	ThA = 4934 N
axle3	ThA = 4934 N

calc. residual (hot) braking force in N
(item 4.3.1.4 of appendix 2 to annex 11)

axle 1	(rdyn 421 mm)	T = 36428 N
axle 2	(rdyn 421 mm)	T = 36428 N
axle 3	(rdyn 421 mm)	T = 36428 N

basic test	type III
of subject	(calculated)
trailer (E)	residual

braking rate of the vehicle (item 4.3.2 to appendix 2 to annex 11)	0.60	(hot)braking 0.58
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required braking rate (items 1.5.3 and 1.7.2 to annex 11)		>= 0,4 and >= 0,6*E (0.36)
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axle 1	(rdyn 421 mm)	T = 36428 N
axle 2	(rdyn 421 mm)	T = 36428 N
axle 3	(rdyn 421 mm)	T = 36428 N

basic test	type III
of subject	(calculated)
trailer (E)	residual

braking rate of the vehicle (item 4.3.2 to appendix 2 to annex 11)	0.60	(hot)braking 0.58
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required braking rate (items 1.5.3 and 1.7.2 to annex 11)		>= 0,4 and >= 0,6*E (0.36)
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reference values

reference values for z = 45% for max rdyn: 421 mm

	pz [bar]	T [N]	T [N]
axle 1	1.0		2836
	6.1		28235
axle 2	1.0		2836
	6.1		28235
axle 3	1.0		2836
	6.1		28235

VIN - no.:

	Axle(s) / Achse(n)				
	14/24	14/24	14./	/	/
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)					
Maximum stroke smax = ...mm maximaler Hub smax =mm	61	61	62		
Lever length =mm Hebellänge =mm	80	80	80		

reference values for $z = 0.45$

Angabe der Referenzwerte für $z = 0.45$

brake calculation no: TP 51289S date 09.07.2015

Bremsberechnung Nr: TP 51289S vom 09.07.2015

for max rdyn: 421 mm

für max rdyn: 421 mm

	Axle(s) / Achse(n)				
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)	14/24	14/24	14./	/	/
Maximum stroke $s_{max} = \dots$ mm maximaler Hub $s_{max} = \dots$ mm	61	61	62		
Lever length = \dots mm Hebellänge = \dots mm	80	80	80		