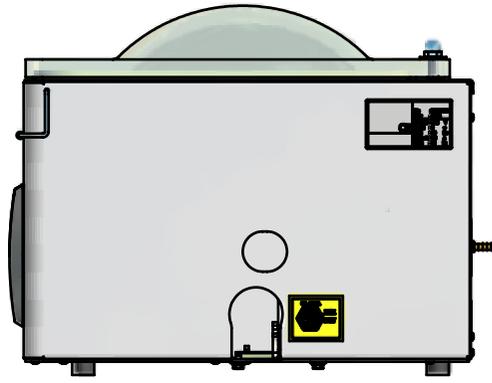
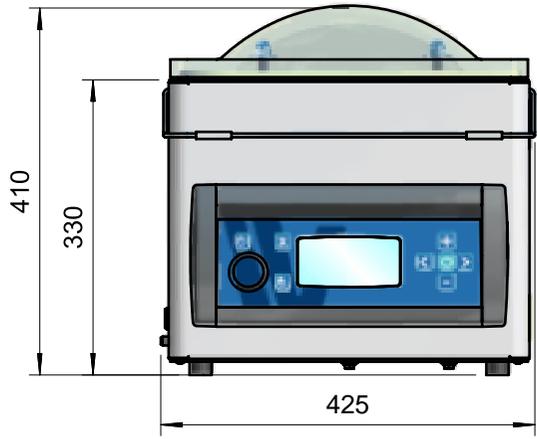
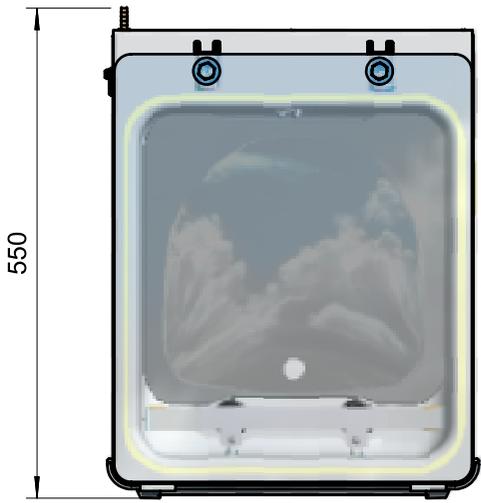


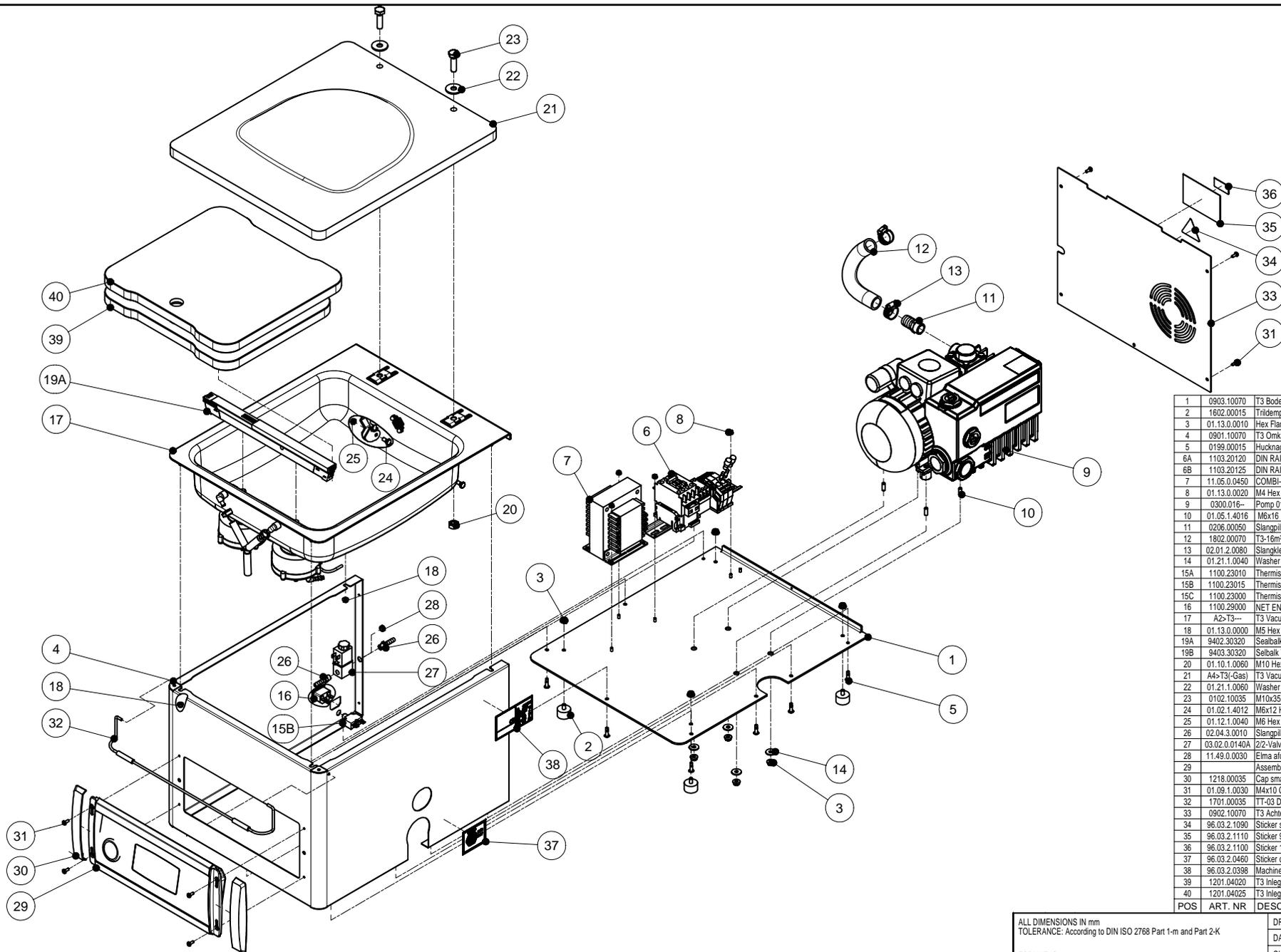
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REV	DATE	DESCRIPTION
REVISION HISTORY		

ALL DIMENSIONS IN mm TOLERANCE: According to DIN ISO 2768 Part 1-m and Part 2-K		DRAWN: P.S.	MAT :		
FORMAT: Oct 2008		DATE : 14-6-2012	DIM :		
NAME T3 Machine		CHECK :	FINISH:		
Outline drawing		REM :			
		REPLACED BY	REPLACES		
HFE VACUUM SYSTEMS PO Box 2261 5202 CG 's-Hertogenbosch Netherlands Phone: +31 (0)73 6 271 271 Fax: +31 (0)73 6 271 200		SCALE 1:6	FORM A3	ART. NR	
				REV	DRW. NR
		13120-1			

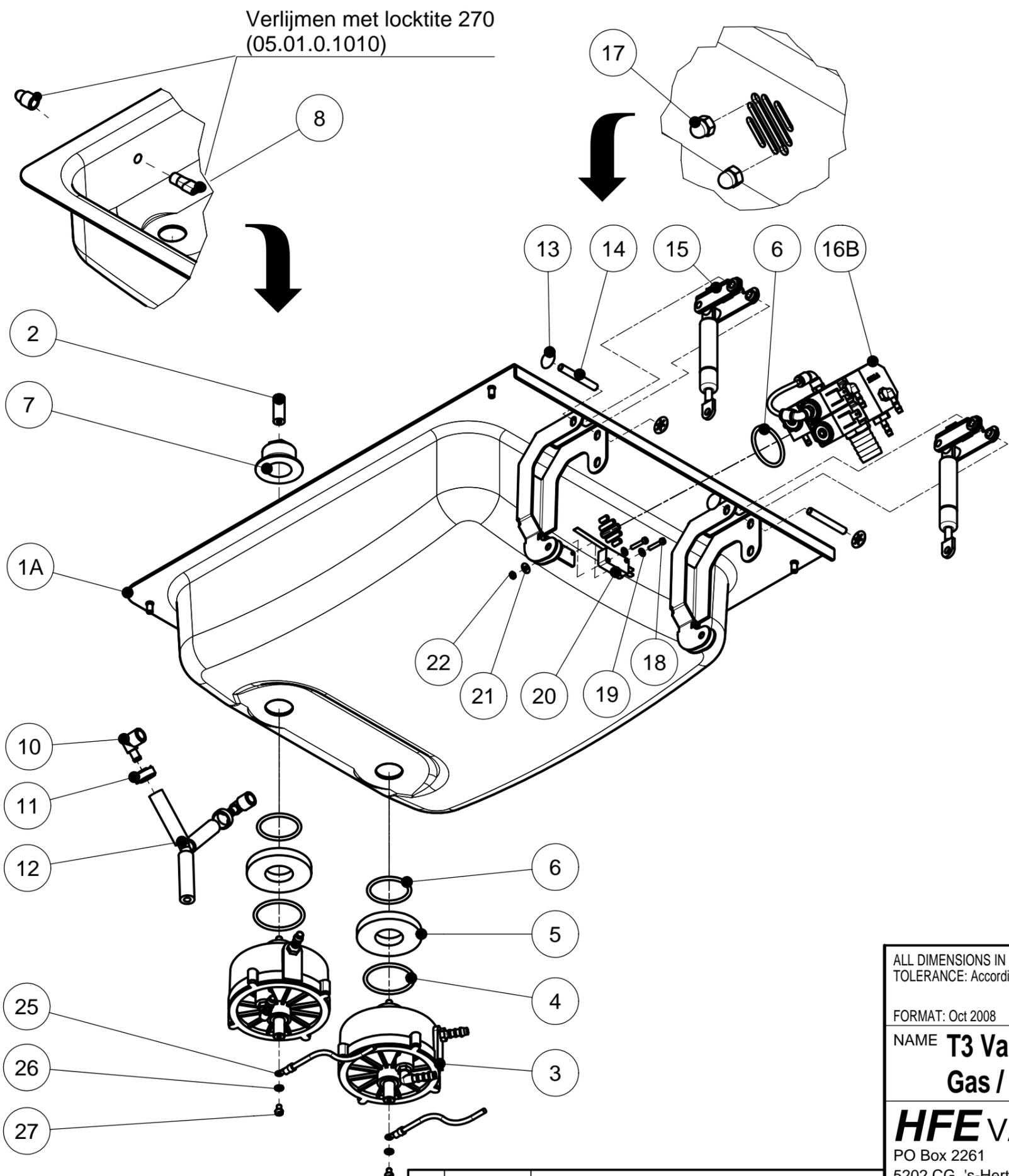
Ownership explicitly reserved to HFE vacuum systems b.v. Multiplication in any form to third parties is not permitted without written permission of the owner.



1	0903.10070	T3 Bodemplaet		
2	1602.00015	Trildemper d=25 h=17 M6x10 utw		
3	01.13.0.0010	Hex Flange Nut DIN 6923 - M6		
4	0901.10070	T3 Omkasting		
5	0199.00015	Hucknagel MAGNA-LOK MGLP-B6-4		
6A	1103.20120	DIN RAIL C 1fase (1-PROGRAM)	13092	
6B	1103.20125	DIN RAIL C 1fase	13093	A
7	11.05.0.0450	COMBI-TRAFO P100/230V-S16/24V		
8	01.13.0.0020	M4 Hex Nut DIN 6923		
9	0300.016--	Pomp 016		
10	01.05.1.4016	M6x16 Hexagon Socket Set Screw DIN 916		
11	0206.00050	Slangpilaar G1-2x19mm Bu		
12	1802.00070	T3-16m³ Pompslang		
13	02.01.2.0080	Slangklem ABA 15-24mm		
14	01.21.1.0040	Washer M6		
15A	1100.23010	Thermische zekering 6A		
15B	1100.23015	Thermische zekering 8A		
15C	1100.23000	Thermische zekering 10A		
16	1100.29000	NET ENTREEE Male Snap-in STF42		
17	A2>T3---	T3 Vacuumbak	13121	
18	01.13.0.0000	M5 Hex Nut DIN 6923		
19A	9402.30320	Sealbak DS-3-320		
19B	9403.30320	Sealbak TS-3-320		
20	01.10.1.0060	M10 Hex Nut DIN 934		
21	A4>T3-(Gas)	T3 Vacuumdeksel	13122	
22	01.21.1.0060	Washer M10		
23	0102.10035	M10x35 Hex-Head Bolt DIN 933		
24	01.02.1.4012	M6x12 Hex-Head Bolt DIN 933		
25	01.12.1.0040	M6 Hex Nut DIN 985		
26	02.04.3.0010	Slangpilaar 1/8"x6mm Bu MS		
27	03.02.0.0140A	Z/2-Valve Gas 24VAC		
28	11.49.0.0030	Elma afdekknop 040-3020 zwart		
29		Assembly 04 besturing	13910	
30	1218.00035	Cap small Holder 04-control		
31	01.09.1.0030	M4x10 Cross recessed raised cheese head screws DIN 7985		
32	1701.00035	ITT-03 Dekselsluiting		
33	0902.10070	T3 Achterwand		
34	96.03.2.1090	Sticker spanning driehoek		
35	96.03.2.1110	Sticker 96 x 66 geel		
36	96.03.2.1100	Sticker 19x38 geel		
37	96.03.2.0460	Sticker oliepeil 021		
38	96.03.2.0398	Machinesticker 97 x 55 zilver		
39	1201.04020	T3 Inlegplaat onder		
40	1201.04025	T3 Inlegplaat boven		
POS	ART. NR	DESCRIPTION		DRW. NR R

ALL DIMENSIONS IN mm TOLERANCE: According to DIN ISO 2768 Part 1-m and Part 2-K		DRAWN: P.S.	MAT:	
FORMAT: Oct 2008		DATE : 14-6-2012	DIM:	
NAME T3 Machine		CHECK :	FINISH:	
Exploded view			REM:	
HFE VACUUM SYSTEMS			REPLACED BY	REPLACES
PO Box 2261		SCALE 1:5	FORM A2	ART. NR
5202 CG 's-Hertogenbosch Netherlands		REV	DRW. NR	SHEET NR
Phone: +31 (0)73 6 271 271				13120-2
Fax: +31 (0)73 6 271 200				

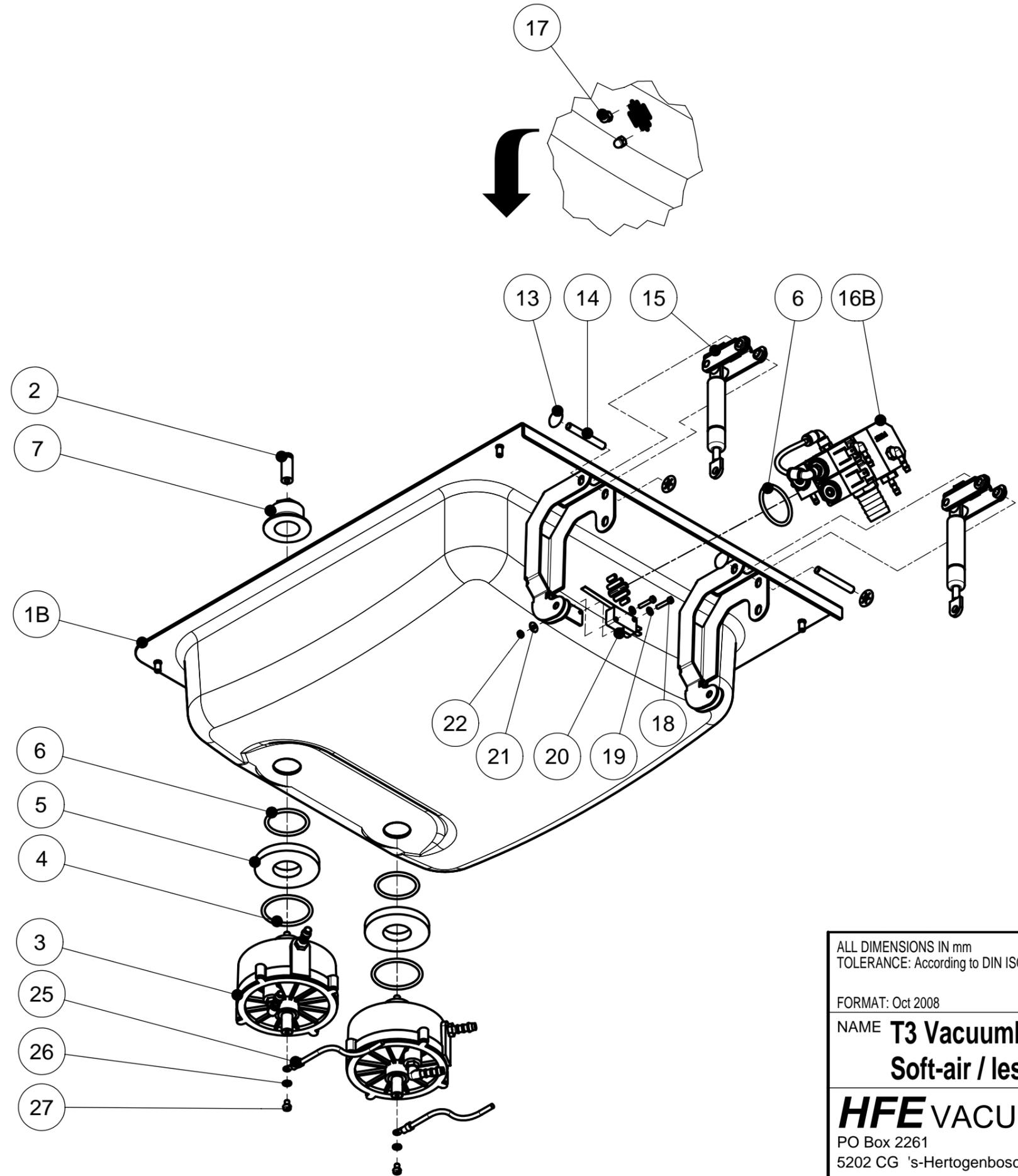
Ownership explicitly reserved to HFE vacuum systems b.v. Multiplication in any form to third parties is not permitted without written permission of the owner.



1A	1001.10095	T3 Vacuumbak Gas	1		
1B	1001.10075	T3 Vacuumbak	1		
2	0803.00010	Verlengstuk sealcilinder 27mm	2		
3	1899.00005	Sealcilinder 90mm doorl as geassembleerd	2		
4	12.07.0.1100	O-ring 40x3 mm	2		
5	03.03.1.0096	Vulschijf 8mm voor sealcil. 90mm	2		
6	12.07.0.1070	O-ring 34x3 mm	3		
7	03.03.1.0090	Hoge moer M24X1,5 - SW20X25	2		
8	1315.00060	Opsteeknippel 1/8"x6mm	2		
10	02.03.3.0090	Knie gasbuis zij montage	2		
11	02.01.2.0030	Slangklem KLEMFA 12.8 - 14.8	2		
12	1802.00005	Slangenboom Gas Table Top-03	1		
13	01.23.1.0015	Asborger met kap 6mm	4		
14	0802.00180	Scharnieras TT-03	2		
15	0401.00055	Scharnierdeel T3 geassembleerd	2	13060	
16A	1805.00005	Combinatieventiel model-I LV	1	13050-1	
16B	1805.00010	Combinatieventiel model-I SA/LV	1	13050-2	
17	01.11.1.0050	M5 Hexagon Domed Cap Nuts DIN 1587	2		
18	01.06.1.1016	M3x16 Slotted Cheese Head Screw DIN 84	2		
19	01.20.1.0010	Washer M3 DIN 125	2		
20	11.02.0.0620	Microschakelaar MV3000L	1		
21	01.21.1.0010	M3 Washer DIN 9021	1		
22	01.10.1.0010	M3 Hex Nut DIN 934 -	1		
25	1103.10025	Sealsnoer C1-12	2		
26	01.22.1.0020	Spring Washer DIN 127 - A 4	2		
27	01.06.1.2006	M4x6 Slotted Cheese Head Screw DIN 84	2		
POS	ART. NR	DESCRIPTION	QTY	DRW. NR	R

ALL DIMENSIONS IN mm TOLERANCE: According to DIN ISO 2768 Part 1-m and Part 2-K		DRAWN: P.S.	MAT:
FORMAT: Oct 2008		DATE : 20-6-2012	DIM:
NAME T3 Vacuumbak Gas / soft-air / less vacuum		CHECK:	FINISH:
HFE VACUUM SYSTEMS PO Box 2261 5202 CG 's-Hertogenbosch Netherlands Phone: +31 (0)73 6 271 271 Fax: +31 (0)73 6 271 200		REM: art.nr: A2>T3 G/SA/LV	REPLACES
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REVISION HISTORY		ART. NR	DRW. NR
		REV	SHEET NR
		13121-1	

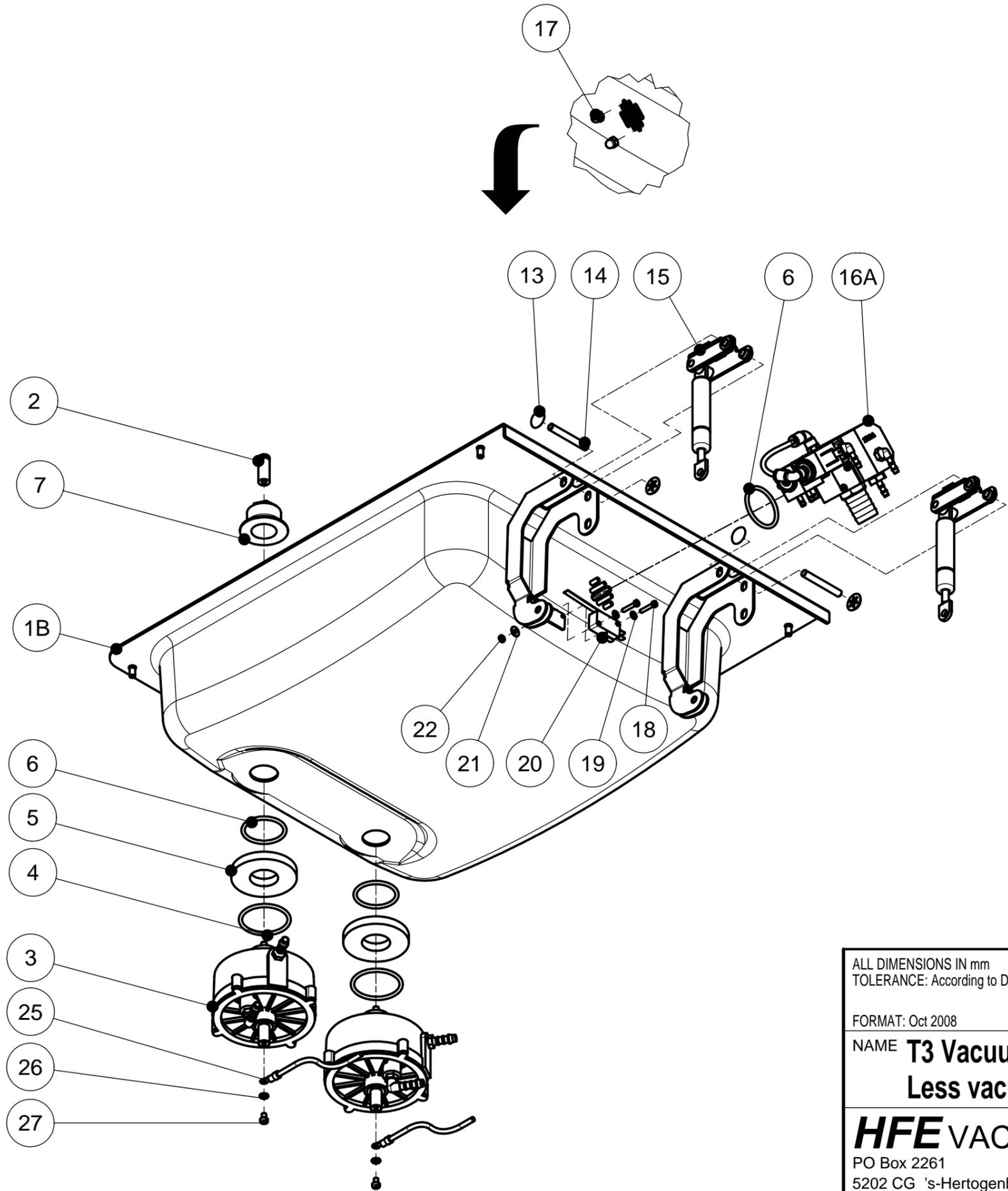
Ownership explicitly reserved to HFE vacuum systems b.v. Multiplication in any form to third parties is not permitted without written permission of the owner.



POS	ART. NR	DESCRIPTION	QTY	DRW. NR	R
1A	1001.10095	T3 Vacuumbak Gas	1		
1B	1001.10075	T3 Vacuumbak	1		
2	0803.00010	Verlengstuk sealcilinder 27mm	2		
3	1899.00005	Sealcilinder 90mm doorl as geassembleerd	2		
4	12.07.0.1100	O-ring 40x3 mm	2		
5	03.03.1.0096	Vulschijf 8mm voor sealcil. 90mm	2		
6	12.07.0.1070	O-ring 34x3 mm	3		
7	03.03.1.0090	Hoge moer M24X1,5 - SW20X25	2		
8	1315.00060	Opsteeknippel 1/8"x6mm	2		
10	02.03.3.0090	Knie gasbuis zij montage	2		
11	02.01.2.0030	Slangklem KLEMFA 12.8 - 14.8	2		
12	1802.00005	Slangenboom Gas Table Top-03	1		
13	01.23.1.0015	Asborger met kap 6mm	4		
14	0802.00180	Scharieras TT-03	2		
15	0401.00055	Scharnierdeel T3 geassembleerd	2	13060	
16A	1805.00005	Combinatieventiel model-I LV	1	13050-1	
16B	1805.00010	Combinatieventiel model-I SA/LV	1	13050-2	
17	01.11.1.0050	M5 Hexagon Domed Cap Nuts DIN 1587	2		
18	01.06.1.1016	M3x16 Slotted Cheese Head Screw DIN 84	2		
19	01.20.1.0010	Washer M3 DIN 125	2		
20	11.02.0.0620	Microschakelaar MV3000L	1		
21	01.21.1.0010	M3 Washer DIN 9021	1		
22	01.10.1.0010	M3 Hex Nut DIN 934 -	1		
25	1103.10025	Sealsnoer C1-12	2		
26	01.22.1.0020	Spring Washer DIN 127 - A 4	2		
27	01.06.1.2006	M4x6 Slotted Cheese Head Screw DIN 84	2		

ALL DIMENSIONS IN mm TOLERANCE: According to DIN ISO 2768 Part 1-m and Part 2-K		DRAWN: P.S.	MAT :
FORMAT: Oct 2008		DATE : 20-6-2012	DIM :
NAME T3 Vacuumbak Soft-air / less vacuum		CHECK :	FINISH:
HFE VACUUM SYSTEMS PO Box 2261 5202 CG 's-Hertogenbosch Netherlands Phone: +31 (0)73 6 271 271 Fax: +31 (0)73 6 271 200		REM : art.nr: A2>T3 SA/LV	REPLACES
		REPLACED BY	REPLACES
SCALE 1:4		FORM A3	ART. NR
		REV	DRW. NR 13121-2 SHEET NR

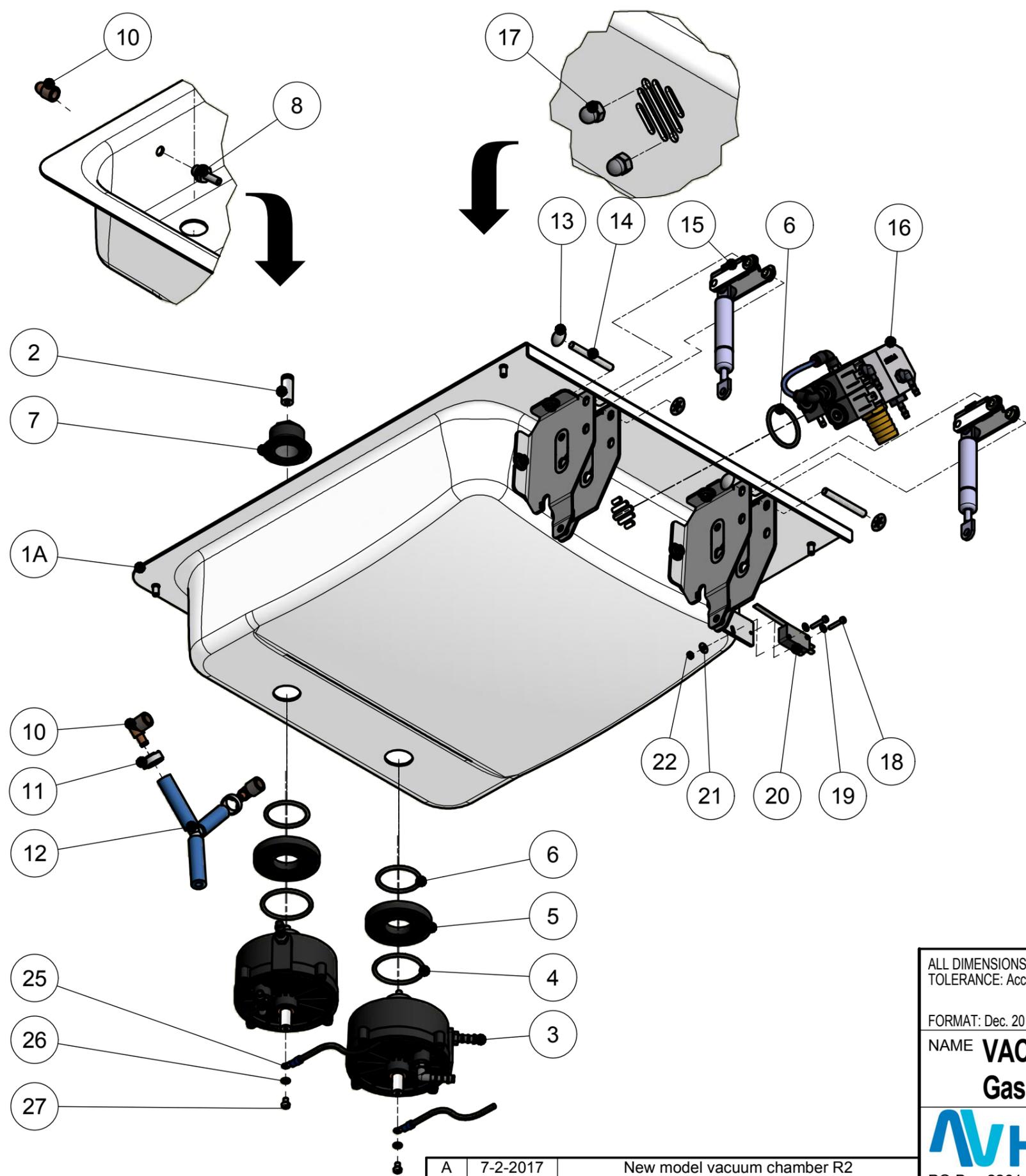
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POS	ART. NR	DESCRIPTION	QTY	DRW. NR	R
1A	1001.10095	T3 Vacuumbak Gas	1		
1B	1001.10075	T3 Vacuumbak	1		
2	0803.00010	Verlengstuk sealcilinder 27mm	2		
3	1899.00005	Sealcilinder 90mm doorl as geassembleerd	2		
4	12.07.0.1100	O-ring 40x3 mm	2		
5	03.03.1.0096	Vulschijf 8mm voor sealcil. 90mm	2		
6	12.07.0.1070	O-ring 34x3 mm	3		
7	03.03.1.0090	Hoge moer M24X1,5 - SW20X25	2		
8	1315.00060	Opsteeknippel 1/8"x6mm	2		
10	02.03.3.0090	Knie gasbuis zij montage	2		
11	02.01.2.0030	Slangklem KLEMFA 12.8 - 14.8	2		
12	1802.00005	Slangenboom Gas Table Top-03	1		
13	01.23.1.0015	Asborger met kap 6mm	4		
14	0802.00180	Scharieras TT-03	2		
15	0401.00055	Scharnierdeel T3 geassembleerd	2	13060	
16A	1805.00005	Combinatieventiel model-I LV	1	13050-1	
16B	1805.00010	Combinatieventiel model-I SA/LV	1	13050-2	
17	01.11.1.0050	M5 Hexagon Domed Cap Nuts DIN 1587	2		
18	01.06.1.1016	M3x16 Slotted Cheese Head Screw DIN 84	2		
19	01.20.1.0010	Washer M3 DIN 125	2		
20	11.02.0.0620	Microschakelaar MV3000L	1		
21	01.21.1.0010	M3 Washer DIN 9021	1		
22	01.10.1.0010	M3 Hex Nut DIN 934 -	1		
25	1103.10025	Sealsnoer C1-12	2		
26	01.22.1.0020	Spring Washer DIN 127 - A 4	2		
27	01.06.1.2006	M4x6 Slotted Cheese Head Screw DIN 84	2		

ALL DIMENSIONS IN mm TOLERANCE: According to DIN ISO 2768 Part 1-m and Part 2-K		DRAWN: P.S.	MAT :
FORMAT: Oct 2008		DATE : 20-6-2012	DIM :
NAME T3 Vacuumbak Less vacuum		CHECK :	FINISH:
HFE VACUUM SYSTEMS PO Box 2261 5202 CG 's-Hertogenbosch Netherlands Phone: +31 (0)73 6 271 271 Fax: +31 (0)73 6 271 200		REM : art.nr: A2>T3 LV	REPLACES
		SCALE 1:4	FORM A3
ART. NR 13121-3		REV	DRW. NR SHEET NR

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POS	ART. NR	DESCRIPTION	QTY	DRW. NR	R
1A	1001.10095A	VACUUM CHAMBER T3-R2 GAS	1		
2	0803.00010	EXTENSION FOR SEAL CYLINDER 27mm	2		
3	1899.00005	SEALCYLINDER 90MM TROUGH SHAFT ASSEMB.	2		
4	12.07.0.1100	O-RING 40X3	2		
5	03.03.1.0096	DISTANCE RING 8MM FOR SEAL CILINDER 90MM	2		
6	12.07.0.1070	O- RING 34X3	3		
7	03.03.1.0090	PLASTIC NUT M24	2		
8	1315.00060	HOSE BARB 1/8 "X6MM	2		
10	02.03.3.0090	ELBOW BRASS FOR GASPIPE	2		
11	02.01.2.0030	Hose clamp	2		
12	1802.00005	HOSE-TREE GAS TABLE-TOP 03/04	1		
13	01.23.1.0015	CAP 6mm	4		
14	0802.00180	PIVOT T3	2		
15	1804.00010	HINGE T3 ASSEMBLED	2	13060	
16	1805.00---	Comb.valve model-I	1	13050	B
17	01.11.1.0050	M5 Hexagon Domed Cap Nuts DIN 1587	2		
18	01.06.1.1016	M3x16 Slotted Cheese Head Screw DIN 84	2		
19	01.20.1.0010	Washer M3 DIN 125	2		
20	11.02.0.0620	Cover switch	1		
21	01.21.1.0010	M3 Washer DIN 9021	1		
22	01.10.1.0010	M3 Hex Nut DIN 934 -	1		
25	1103.10025	SEAL WIRE C1-	2		
26	01.22.1.0020	Spring Washer DIN 127 - A 4	2		
27	01.06.1.2006	M4x6 Slotted Cheese Head Screw DIN 84	2		

REV	DATE	DESCRIPTION
A	7-2-2017	New model vacuum chamber R2
REVISION HISTORY		

ALL DIMENSIONS IN mm
TOLERANCE: According to DIN ISO 2768 Part 1-m and Part 2-K

FORMAT: Dec. 2014

NAME **VACUUM CHAMBER T3**
Gas / soft-air / less vacuum

SCALE **1 : 4** FORM **A3** ART. NR

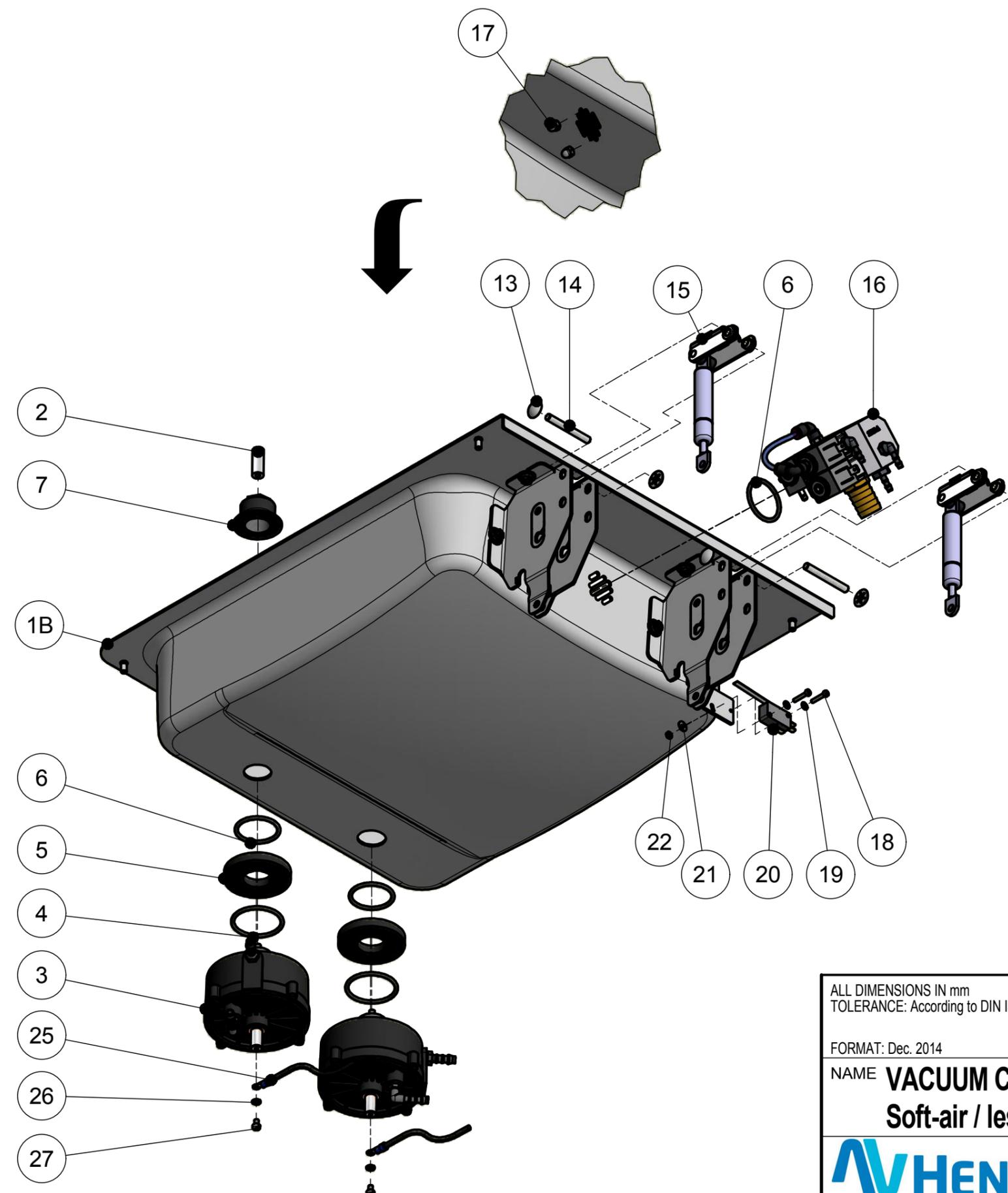
PO Box 2261
5202 CG 's-Hertogenbosch Netherlands
Phone: +31 (0)73 6 271 271

DRAWN: Peter MAT :
DATE : 20-6-2012 DIM :
CHECK : FINISH:

REM: art.nr: A2>T3 G/SA/LV
REPLACED BY REPLACES

REV **A** DRW. NR **13121-1** SHEET NR

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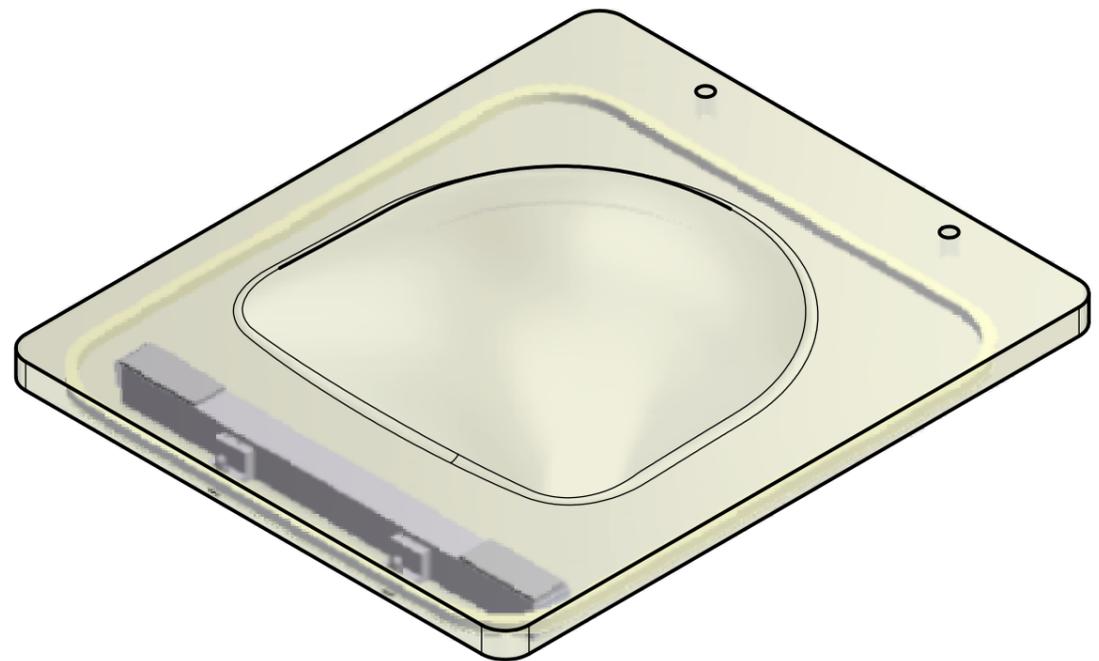
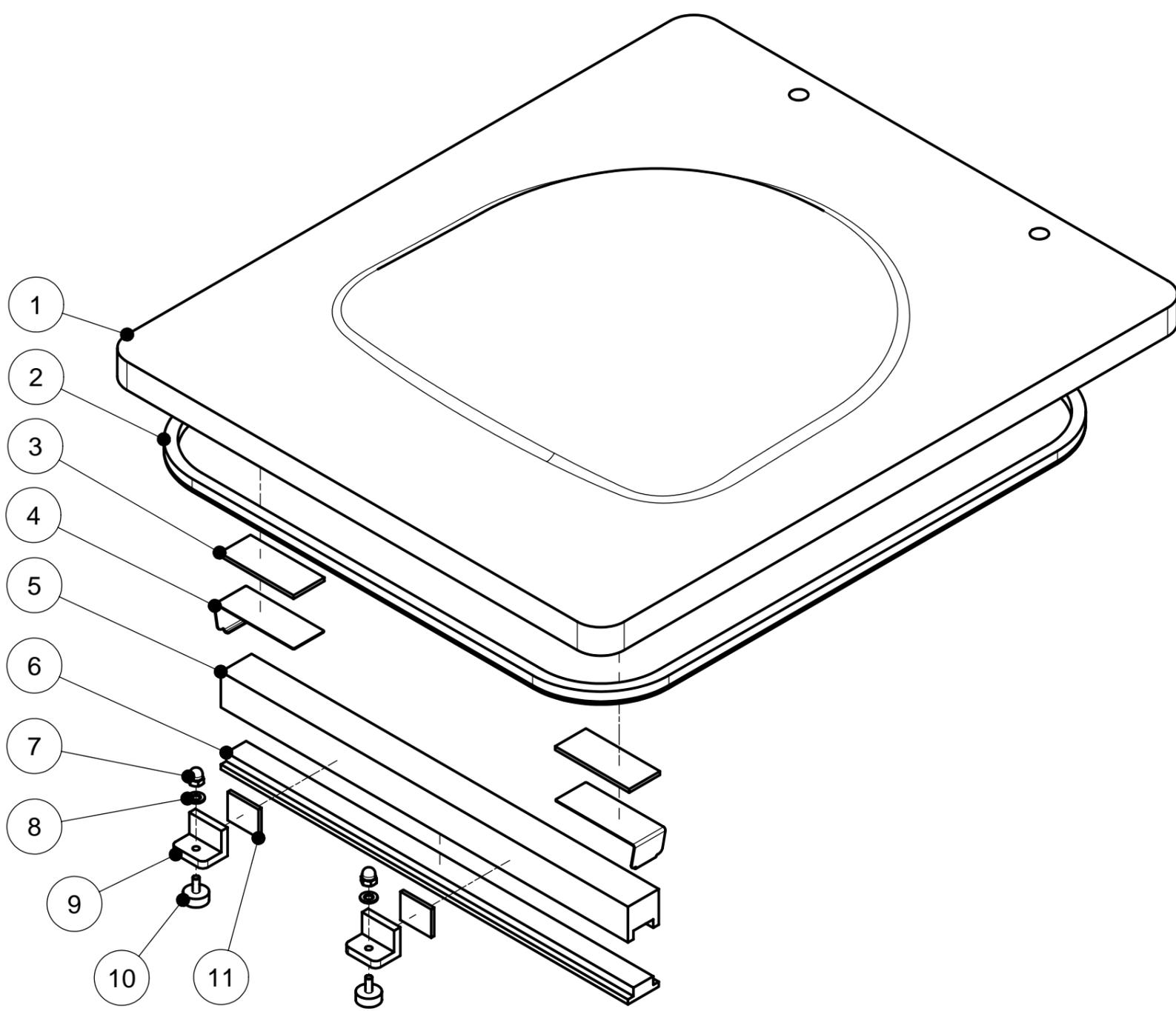


POS	ART. NR	DESCRIPTION	QTY	DRW. NR	R
1A	1001.10095A	VACUUM CHAMBER T3-R2 GAS	1		
1B	1001.10075A	VACUUM CHAMBER T3-R2	1		
2	0803.00010	EXTENSION FOR SEAL CYLINDER 27mm	2		
3	1899.00005	SEALCYLINDER 90MM TROUGH SHAFT ASSEMB.	2		
4	12.07.0.1100	O-RING 40X3	2		
5	03.03.1.0096	DISTANCE RING 8MM FOR SEAL CILINDER 90MM	2		
6	12.07.0.1070	O- RING 34X3	3		
7	03.03.1.0090	PLASTIC NUT M24	2		
8	1315.00060	HOSE BARB 1/8 "X6MM	2		
10	02.03.3.0090	ELBOW BRASS FOR GASPIPE	2		
11	02.01.2.0030	Hose clamp	2		
12	1802.00005	HOSE-TREE GAS TABLE-TOP 03/04	1		
13	01.23.1.0015	CAP 6mm	4		
14	0802.00180	PIVOT T3	2		
15	1804.00010	HINGE T3 ASSEMBLED	2	13060	
16	1805.00---	Comb.valve model-I	1	13050	B
17	01.11.1.0050	M5 Hexagon Domed Cap Nuts DIN 1587	2		
18	01.06.1.1016	M3x16 Slotted Cheese Head Screw DIN 84	2		
19	01.20.1.0010	Washer M3 DIN 125	2		
20	11.02.0.0620	Cover switch	1		
21	01.21.1.0010	M3 Washer DIN 9021	1		
22	01.10.1.0010	M3 Hex Nut DIN 934 -	1		
25	1103.10025	SEAL WIRE C1-	2		
26	01.22.1.0020	Spring Washer DIN 127 - A 4	2		
27	01.06.1.2006	M4x6 Slotted Cheese Head Screw DIN 84	2		

REV	DATE	DESCRIPTION
A	7-2-2017	New model vacuum chamber R2
REVISION HISTORY		

ALL DIMENSIONS IN mm TOLERANCE: According to DIN ISO 2768 Part 1-m and Part 2-K		DRAWN: Peter	MAT :
FORMAT: Dec. 2014		DATE : 20-6-2012	DIM :
NAME VACUUM CHAMBER T3 Soft-air / less vacuum		CHECK :	FINISH:
		REM: art.nr: A2>T3 SA/LV	
		REPLACED BY	REPLACES
		SCALE 1 : 4	FORM A3
		ART. NR	
PO Box 2261 5202 CG 's-Hertogenbosch Netherlands Phone: +31 (0)73 6 271 271			REV A DRW. NR 13121-2 SHEET NR

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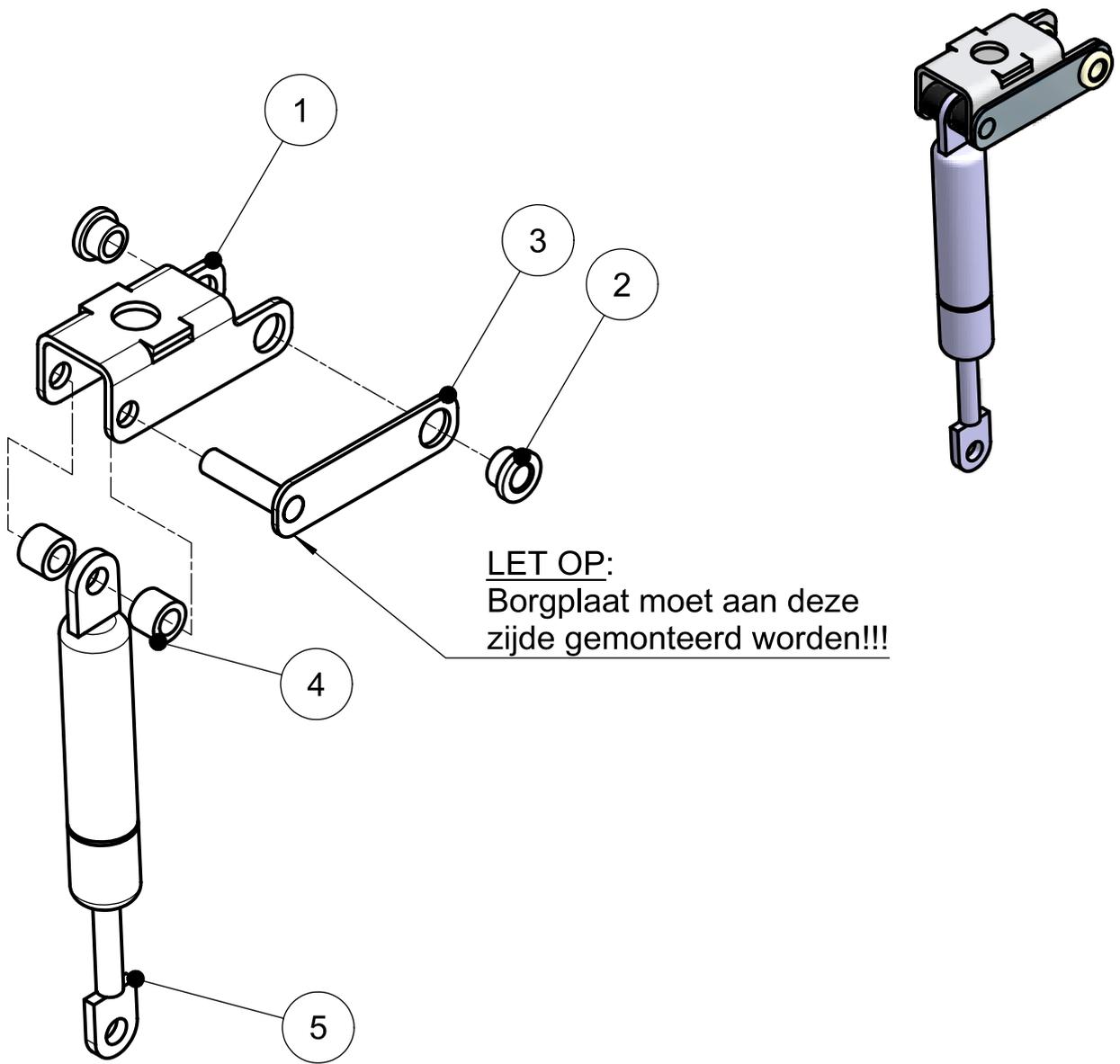


Pos. 7 t/m 11 Only mounting with GAS option

POS	ART. NR	DESCRIPTION	QTY
1	1003.10030	T3 Vacuumdeksel	1
2	12.05.0.5010	Silicoe profiel 8mm - 60°	1,65 mtr
3	0501.10000	Acryltape Dubbelzijdig 25mm, L=60mm	2
4	0605.00025	Klemveer siliconenhouder	2
5	9410.00140	Siliconenhouder T3	1
6	12.05.0.5150	Silicone T-profiel	1
7	01.11.1.0050	M5 Hexagon Domed Cap Nuts DIN 1587	2
8	01.20.1.0030	Washer M5 DIN 125	2
9	08.08.1.7010	Steun trildemper Vacuumzakhouder	2
10	12.08.0.0030	Trildemper d=15 h=6 M5x10	2
11	0501,10000	Acryltape Dubbelzijdig 25mm, L=20mm	2

REV	DATE	DESCRIPTION
A	25-4-2014	Steun trildemper geplakt i.p.v. geschroefd
REVISION HISTORY		

ALL DIMENSIONS IN mm TOLERANCE: According to DIN ISO 2768 Part 1-m and Part 2-K		DRAWN: P.S.	MAT:
FORMAT: Oct 2008		DATE : 17-8-2012	DIM:
NAME T3 Vacuumdeksel		CHECK:	FINISH:
Art.nr std: A4>T3, art.nr gas: A4>T3-GAS		REPLACED BY	REPLACES
HFE VACUUM SYSTEMS		SCALE 1:3	FORM A3
PO Box 2261 5202 CG 's-Hertogenbosch Netherlands Phone: +31 (0)73 6 271 271 Fax: +31 (0)73 6 271 200		ART. NR A4>T3(-Gas)	DRW. NR 13122-1
		REV A	SHEET NR
		13122-1	



1	0401.00055	Scharnierdeel T3	1
2	1500.00005	Glijlager 6x9x6	2
3	0400.00360	Borgplaat scharnierdeel	1
4	0199.00025	Afstandbus skiffy 6,2x10x7,5	2
5	06.01.4.0110	Gasveer 250N DD LOM 0767MV	1
POS	ART. NR	DESCRIPTION	QTY

ALL DIMENSIONS IN mm
TOLERANCE: According to DIN ISO 2768 Part 1-m and Part 2-K

FORMAT: Oct 2008

NAME **Scharnierdeel T3 geassembleerd
250N**

HFE VACUUM SYSTEMS

PO Box 2261
5202 CG 's-Hertogenbosch Netherlands
Phone: +31 (0)73 6 271 271
Fax: +31 (0)73 6 271 200

DRAWN: P.S.

DATE : 2-8-2012

CHECK :

MAT :

DIM :

FINISH:

REM :

REPLACED BY

REPLACES

SCALE

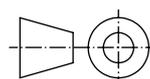
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FORM

A4

ART. NR

1804.00010



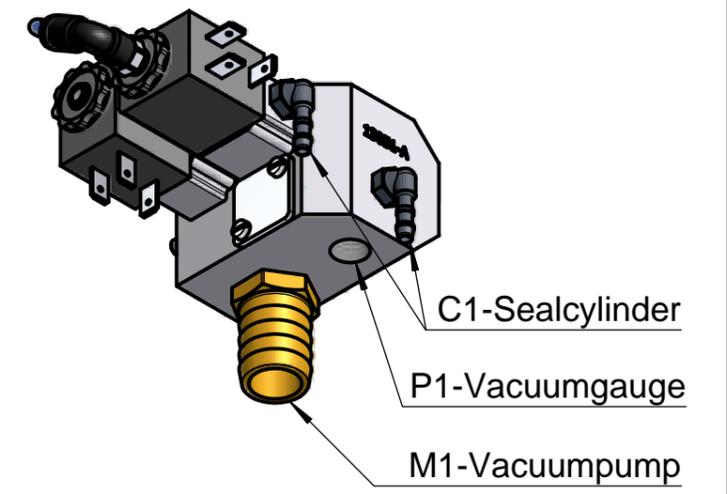
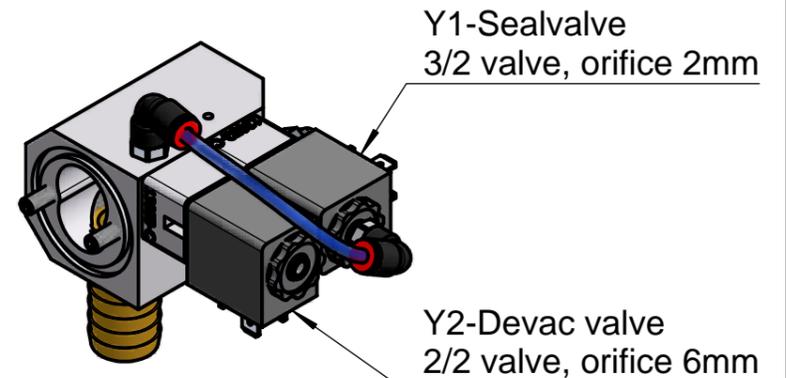
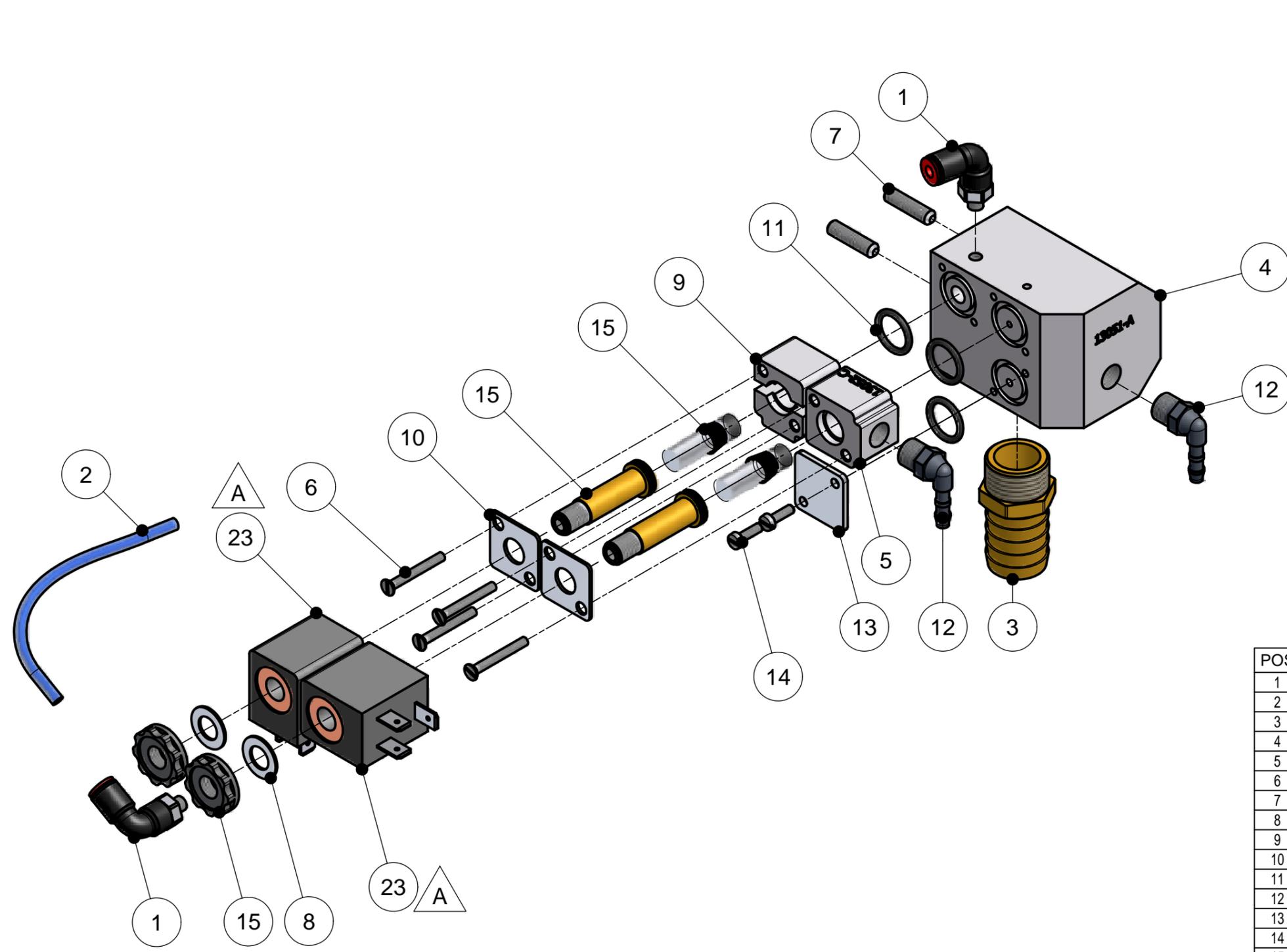
REV

DRW. NR

13060-3

SHEET NR

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POS	ART. NR	DESCRIPTION	DRW. NR	R
1	13.30.0.0270	knie M5 4mm		
2	13.40.0.0480	Perslucht slang 4x2		
3	0206.00050	Slangpilaar G1-2x19mm Bu		
4	0804.00165	Basisblok combinatie ventiel model-I	13051	A
5	0804.00175	2,5mm Adapter ventielenblok	13052	C
6	0107.03025	M3 x 25 Countersunk Screw DIN 963		
7	01.05.1.3020	M5x20 Hexagon Socket Set Screw DIN 916		
8	0122.40050	M8 Crinkle Washer DIN 137		
9	0804.00180	6mm Adapter ventielenblok	13053	C
10	0401.00070	Klemplaat ventiel armatuur	13072	
11	0503.10015	O-ring 12x2mm		
12	02.04.4.0010	Slangpilaar 1/8" x 4 BU H NORMA		
13	0401.00075	Blindplaat combi-ventiel	13073	
14	01.06.1.1010	M3x10 Slotted Cheese Head Screw DIN 84		
15	1304.00030	3-2 armatuur met 8mm seal		
23	1100.40010	Spoel 24VAC 8,5VA		

REV	DATE	DESCRIPTION
A	27-03-2014	Spoel t.b.v. seal- en beluchting ventiel 8,5VA & Soft-air ventiel 5,5VA
REVISION HISTORY		

ALL DIMENSIONS IN mm
TOLERANCE: According to DIN ISO 2768 Part 1-m and Part 2-K

FORMAT: Oct 2008

NAME **Combination valve model-I LV, art.nr: 1805.00005**

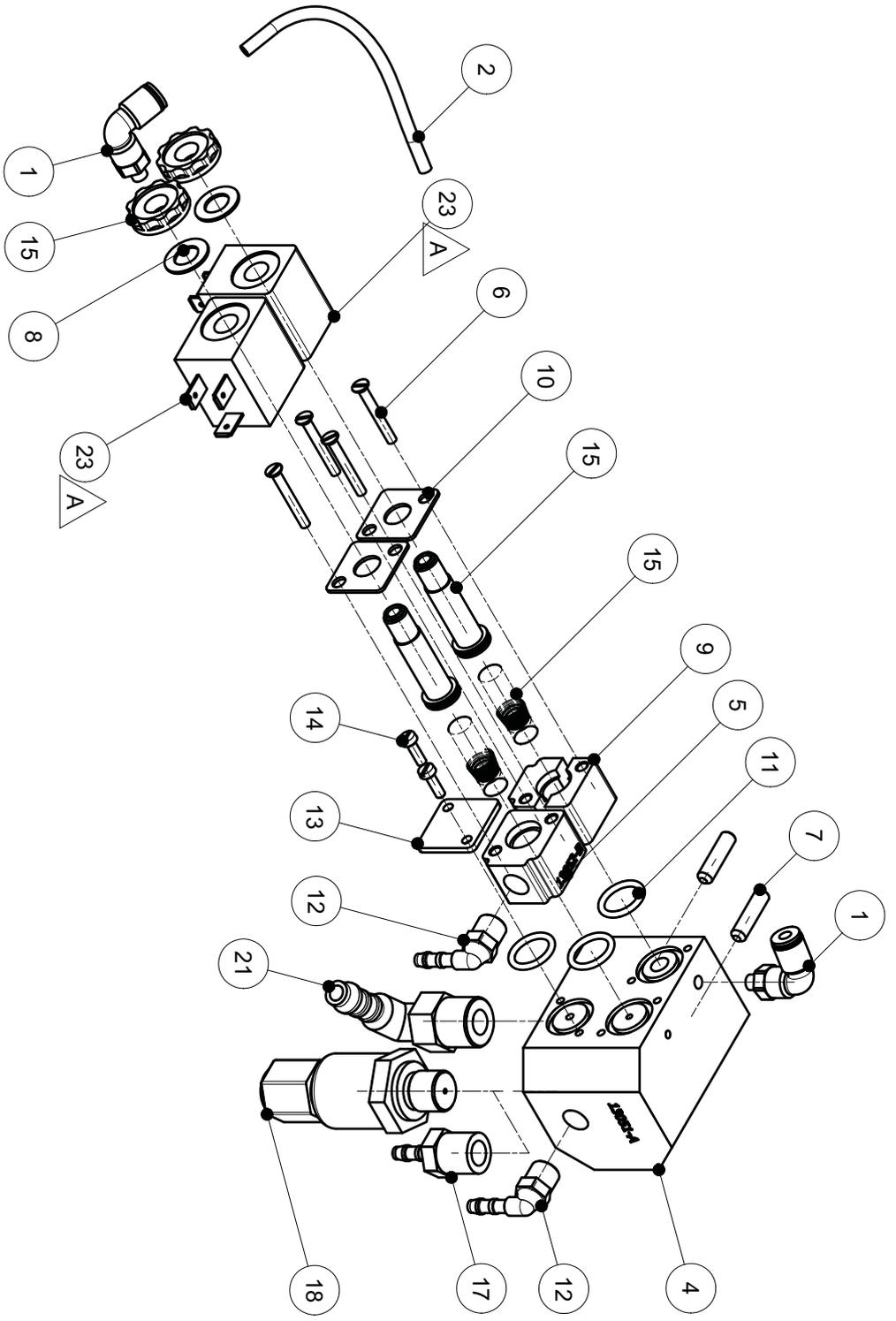
HFE VACUUM SYSTEMS
PO Box 2261
5202 CG 's-Hertogenbosch Netherlands
Phone: +31 (0)73 6 271 271
Fax: +31 (0)73 6 271 200

DRAWN: P.S.
DATE: 23-5-2013
CHECK:

MAT:
DIM:
FINISH:
REM:
REPLACED BY: REPLACES:

SCALE: **1:1,5**
FORM: **A3**
ART. NR: **1805.00---**

REV: **A**
DRW. NR: **13050-1**
SHEET NR:



POS	ART. NR	DESCRIPTION
1	13.300.0270	klein M5 4mm
2	13.400.0480	Peristichsling 4x2
4	0804.00165	Basishok combinatie ventiel model-I
5	0804.00175	2,5mm Adapter ventielblok
6	0107.03025	M3 x 25 Countersink Screw DIN 963
7	01.05.1.3020	M5x20 Hexagon Socket Set Screw DIN 916
8	0122.40050	M8 Circle Washer DIN 137
9	0804.00180	6mm Adapter ventielblok
10	0401.00070	Klemplaat ventiel armatuur
11	0503.10015	O-ring 12x2mm
12	02.04.4.0010	Slangplaat 1/8" x 4 BU H NORMA
13	0401.00075	Blijplaat combi-ventiel
14	01.06.1.1010	M3x10 Slotted Cheese Head Screw DIN 84
15	1304.00030	3-2 armatuur met 8mm seal
17	02.04.4.0065	Slangplaat 1/4x4 BU Rech Norm
18	1102.90015	Vacuum transistor 0-1050mBar
20	02.06.3.0080	Verloopring 1.2 - 1.4
21	02.04.4.0045	Square hose coupling 3/8"x8 Norma
23	1100.40010	Spoel 24VAC 8.5VA

ALL DIMENSIONS IN mm
TOLERANCE: According to DIN ISO 2768 Part 1-m and Part 2-K

FORMAT: Oct 2008

NAME **Combination valve model-I**
LV-8m³ Vac.pump, art.nr: 1805.00006

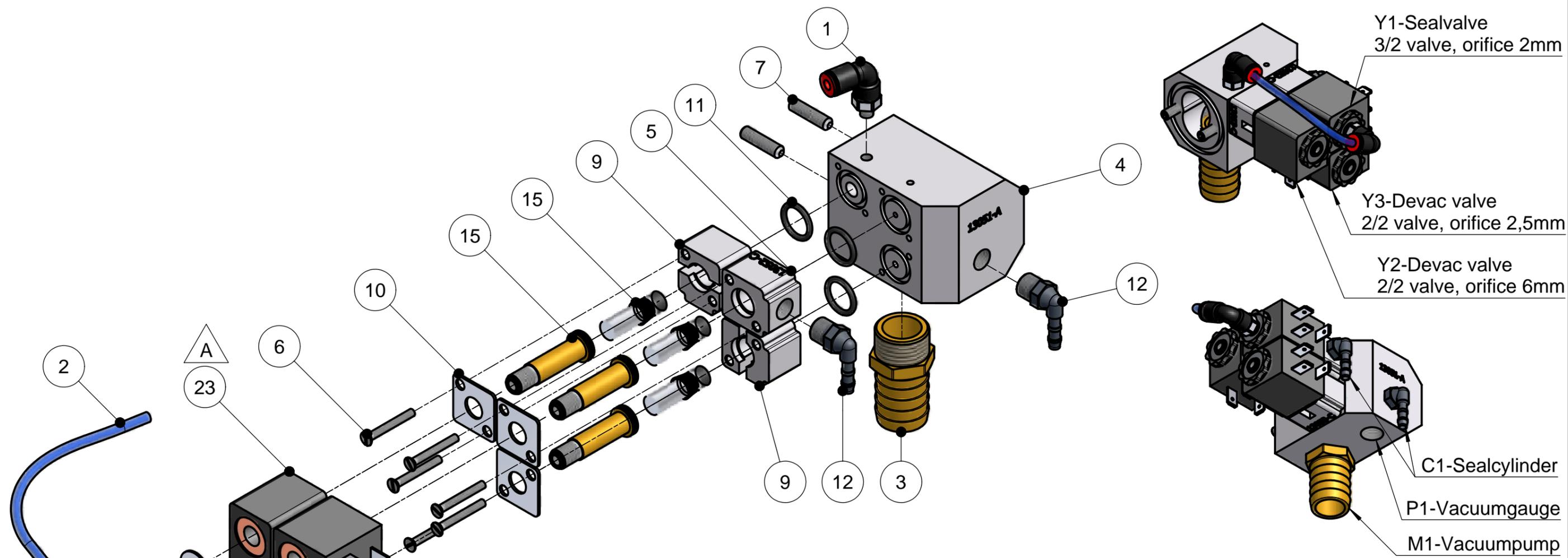
HFE VACUUM SYSTEMS
PO Box 2261
5202 CG 's-Hertogenbosch Netherlands
Phone: +31 (0)73 6 271 271
Fax: +31 (0)73 6 271 200

SCALE	FORM	ART. NR	SHEET NR
1:1,5	A3		
REV	DRW. NR	REPLACED BY	REPLACES
A	13050-3		

REV	DATE	DESCRIPTION
A	27-03-2014	Spoel t.b.v. seal- en beluchting ventiel 8.5VA & Soft-air ventiel 5.5VA

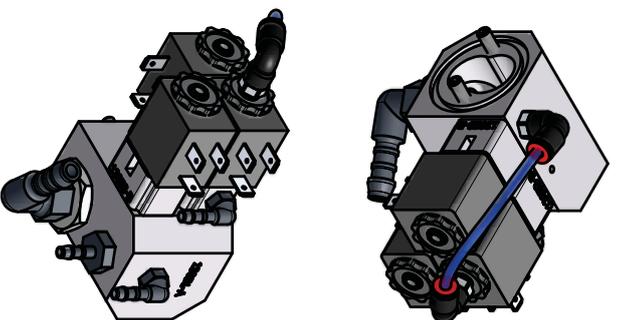
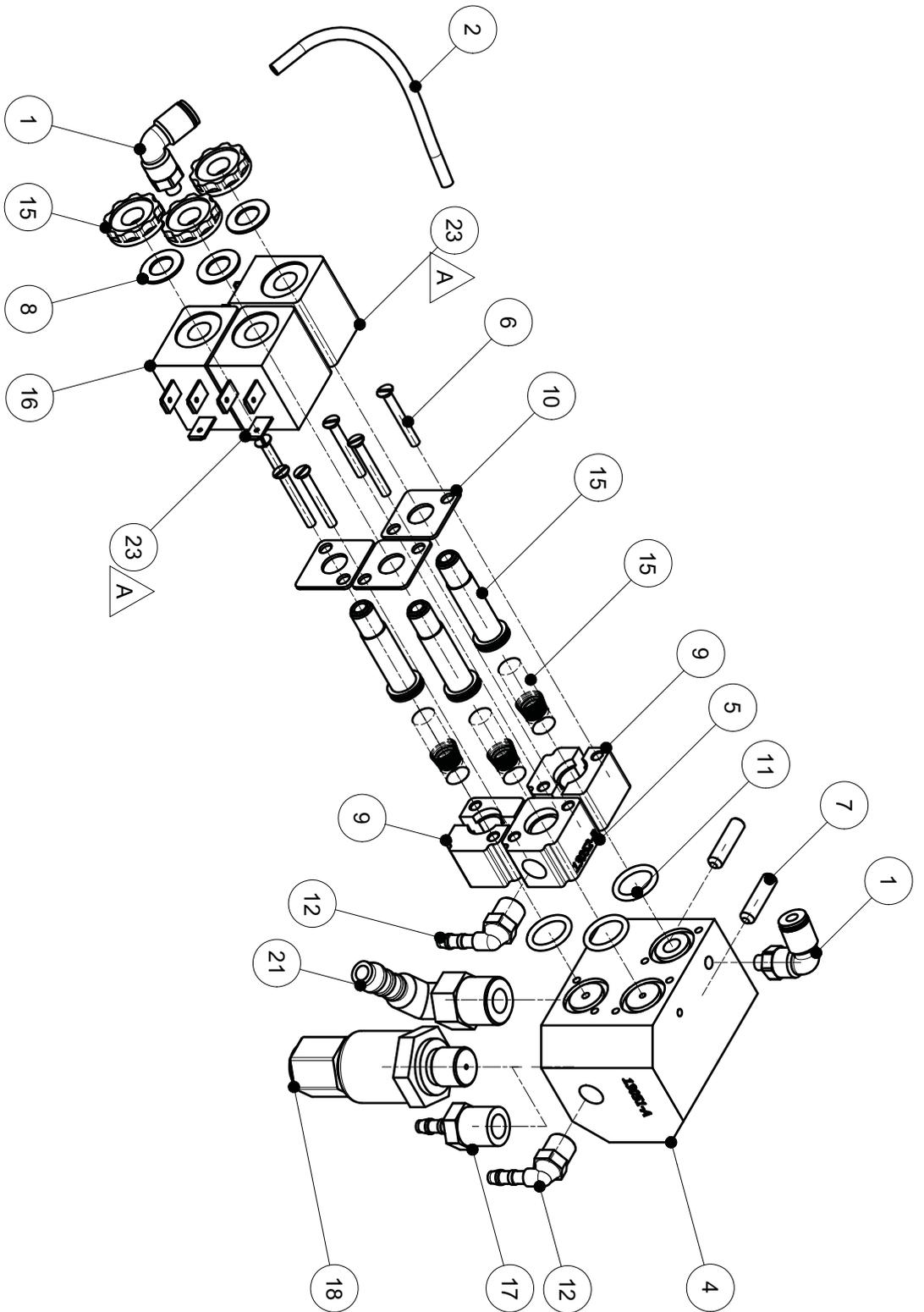
REVISION HISTORY

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POS	ART. NR	DESCRIPTION	DRW. NR	R
1	13.30.0.0270	knie M5 4mm		
2	13.40.0.0480	Persluchtslang 4x2		
3	0206.00050	Slangpilaar G1-2x19mm Bu		
4	0804.00165	Basisblok combinatie ventiel model-I	13051	A
5	0804.00175	2,5mm Adapter ventielenblok	13052	C
6	0107.03025	M3 x 25 Countersunk Screw DIN 963		
7	01.05.1.3020	M5x20 Hexagon Socket Set Screw DIN 916		
8	0122.40050	M8 Crinkle Washer DIN 137		
9	0804.00180	6mm Adapter ventielenblok	13053	C
10	0401.00070	Klemplaat ventiel armatuur	13072	
11	0503.10015	O-ring 12x2mm		
12	02.04.4.0010	Slangpilaar 1/8" x 4 BU H NORMA		
15	1304.00030	3-2 armatuur met 8mm seal		
16	1100.40005	Spoel 24VAC 5,5VA		
23	1100.40010	Spoel 24VAC 8,5VA		

ALL DIMENSIONS IN mm TOLERANCE: According to DIN ISO 2768 Part 1-m and Part 2-K		DRAWN: P.S.	MAT:						
FORMAT: Oct 2008		DATE : 23-5-2013	DIM:						
NAME Combination valve model-I SA/LV, art.nr: 1805.00010		CHECK:	FINISH:						
HFE VACUUM SYSTEMS PO Box 2261 5202 CG 's-Hertogenbosch Netherlands Phone: +31 (0)73 6 271 271 Fax: +31 (0)73 6 271 200		REPLACED BY	REPLACES						
		SCALE 1:1,5	FORM A3	ART. NR 1805.00---					
REVISION HISTORY <table border="1"> <thead> <tr> <th>REV</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>27-03-2014</td> <td>Spoel t.b.v. seal- en beluchting ventiel 8,5VA & Soft-air ventiel 5,5VA</td> </tr> </tbody> </table>		REV	DATE	DESCRIPTION	A	27-03-2014	Spoel t.b.v. seal- en beluchting ventiel 8,5VA & Soft-air ventiel 5,5VA	REV A	DRW. NR 13050-2
REV	DATE	DESCRIPTION							
A	27-03-2014	Spoel t.b.v. seal- en beluchting ventiel 8,5VA & Soft-air ventiel 5,5VA							
			SHEET NR						



POS	ART. NR	DESCRIPTION
1	13.30.0.0270	kitie M5 4mm
2	13.40.0.0480	Perisluchsiang 4x2
4	0804.007165	Basishok combinatie ventiel model-I
5	0804.001715	2.5mm Adapter Ventielhok
6	0107.03025	M3 x 25 Countersink Screw DIN 963
7	01.05.1.3020	M5x20 Hexagon Socket Set Screw DIN 916
8	0122.40050	M8 Crinkle Washer DIN 137
9	0804.007180	6mm Adapter ventielhok
10	0401.00070	Klemmaat ventiel armatuur
11	0503.10015	O-ring 12x2mm
12	02.04.4.0010	Slangpieler 1/8" x 4 BU H NORMA
15	1304.00080	3-2 armatuur met 8mm seal
16	1100.40005	Spoel 2V/VAC 5.5VA
17	02.04.4.0065	Slangpieler 1/4 BU Reecht Norma
18	1102.90015	Vacuüm transmissor 0-1050mBar
20	02.06.3.0080	Verloopring 1.2 - 1.4
21	02.04.4.0045	Square hose coupling 3/8"x8 Norma
23	1100.40010	Spoel 2V/VAC 8.5VA

ALL DIMENSIONS IN mm
TOLERANCE: According to DIN ISO 2768 Part 1-n and Part 2-k

FORMAT: Oct 2008

NAME **Combination valve model-I**
SAL/V-8m³ Vac.pump, art.nr: 1805.00011

PO Box 2261
5202 CG 's-Hertogenbosch Netherlands
Phone: +31 (0)73 6 271 271
Fax: +31 (0)73 6 271 200

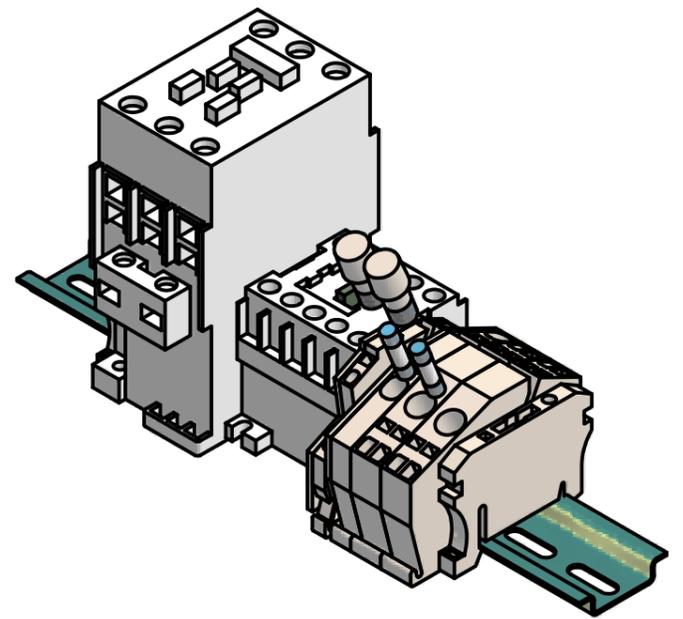
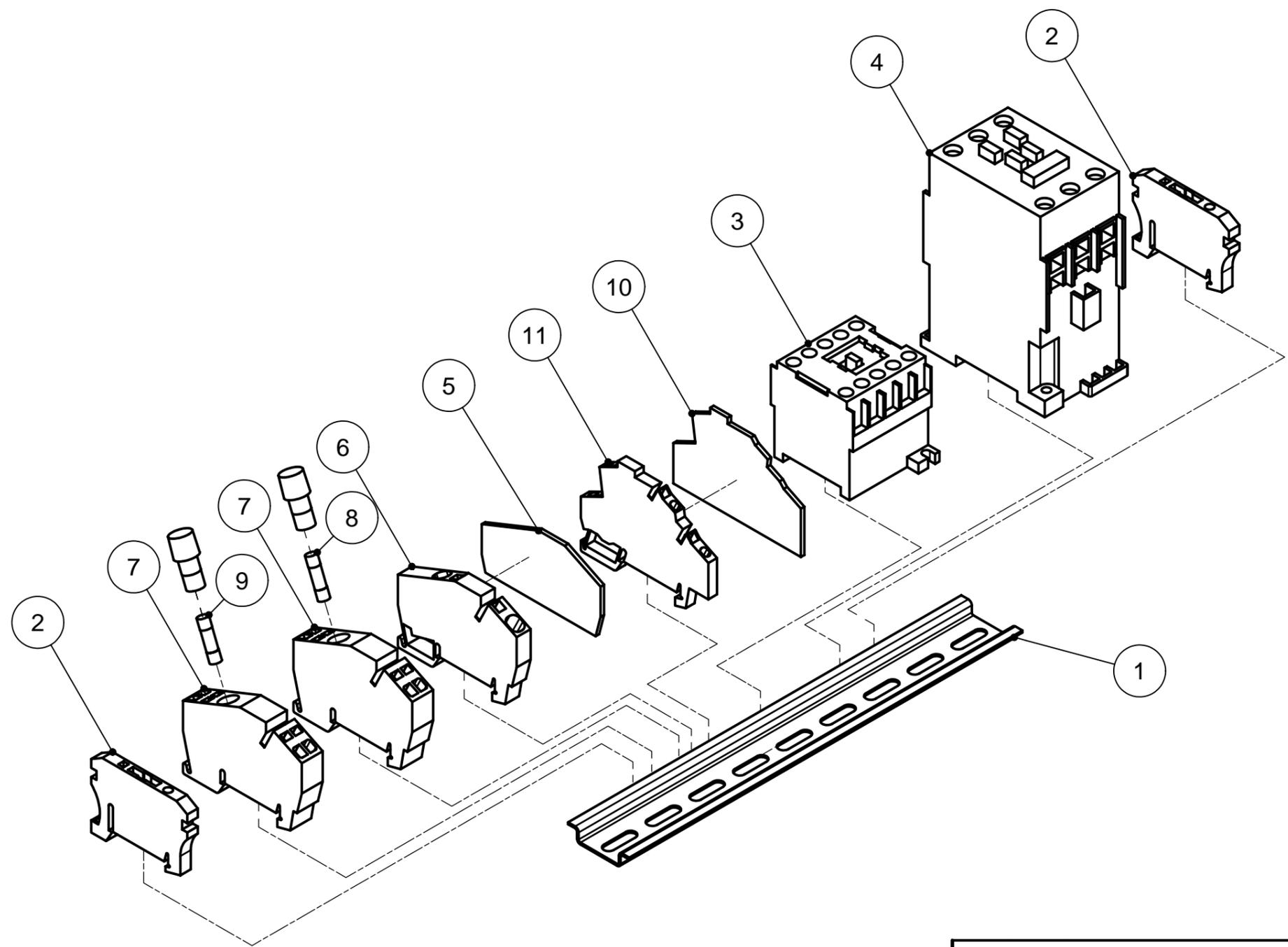
HFE VACUUM SYSTEMS

SCALE	FORM	ART. NR	REPLACES
	A3		
REV	DRW. NR	SHEET NR	
A	13050-4		
CHECK:	FINISH:	REPLACED BY	REPLACES
DATE: 23-5-2013	DIM:		
DRAWN: P.S.	MAT:		

REV	DATE	DESCRIPTION
A	27-03-2014	Spoel t.b.v. seal- en beluchting ventiel 8.5VA & Soft-air ventiel 5.5VA

REVISION HISTORY

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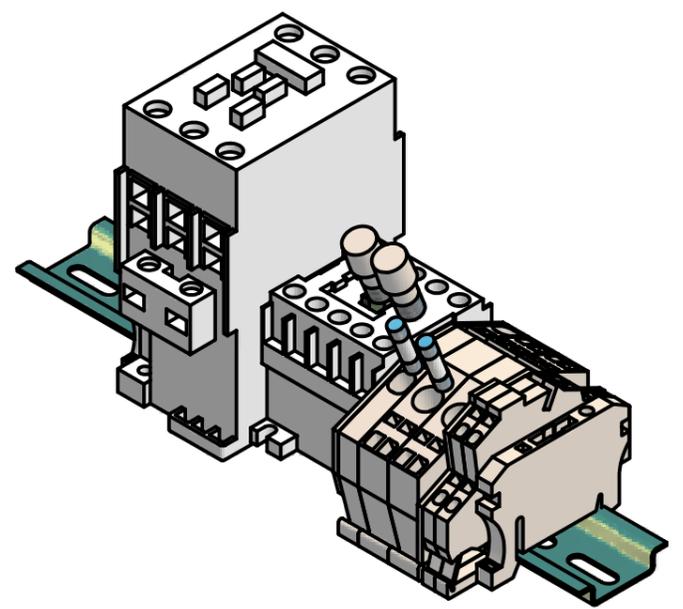
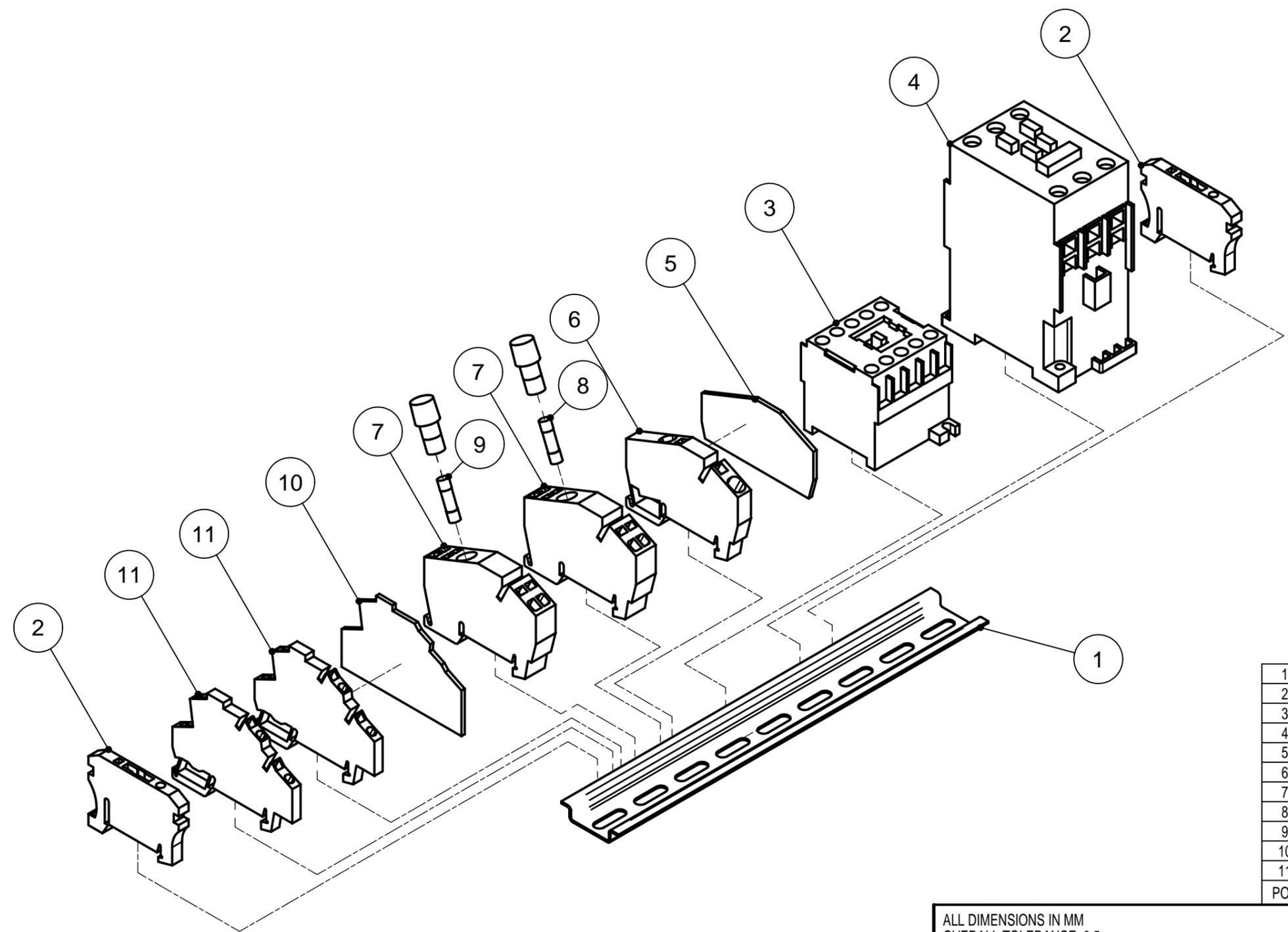


POS	ART. NR	DESCRIPTION	QTY
1	11.06.9.9185	DIN-rail 225mm	1
2	11.06.2.0200	Eindklem ZEW TS 35	2
3	1100.22005	MAS AB100-K09KJ400 MS4P 24V 50/60HZ	1
4	11.02.0.0580	MAS AB100-C30KJ00 24VAC	1
5	11.06.2.0620	Sluitplaat ZAP ZDU 6-2	1
6	11.06.2.0360	Rijgklem ZDU 6-2-2AN	1
7	11.06.2.0125	Zekeringklem ZSI 25-2x2AN-G20	2
8	11.99.0.0340/0330	Zekering 5x20mm 4 Amp Traag / 8 Amp Traag	1
9	11.99.0.0440	Zekering 5x20mm 2,5Amp. Traag	1
10	11.06.2.0630	Sluitplaat ZAP/TW ZDK 2,5-2	1
11	11.06.2.0425	Etagieklem ZDK 2,5-2	1

REV	DATE	DESCRIPTION
A	7-1-2014	11.02.0.0580 toegevoegd & 09.08.0.1120 doorverbinder MAS 100M09 vervallen
REVISION HISTORY		

ALL DIMENSIONS IN MM OVERALL TOLERANCE: 0,5mm		DRAWN: P.S.	MAT:
FORMAT: November 2005		DATE : 15-5-2013	DIM:
NAME DIN RAIL C 1fase (1-PROGRAM) T3 en T4 (8/16/21m³-100/240V)		CHECK:	FINISH:
HFE VACUUM SYSTEMS		REPLACED BY	REPLACES
		REPLACES	
PO Box 2261 5202 CG 's-Hertogenbosch Netherlands Phone: +31 (0)73 6 271 271 Fax: +31 (0)73 6 271 200	SCALE 1:2	FORM A3	ART. NR 1103.20120
		REV A	DRW. NR 13092 -1
			SHEET NR

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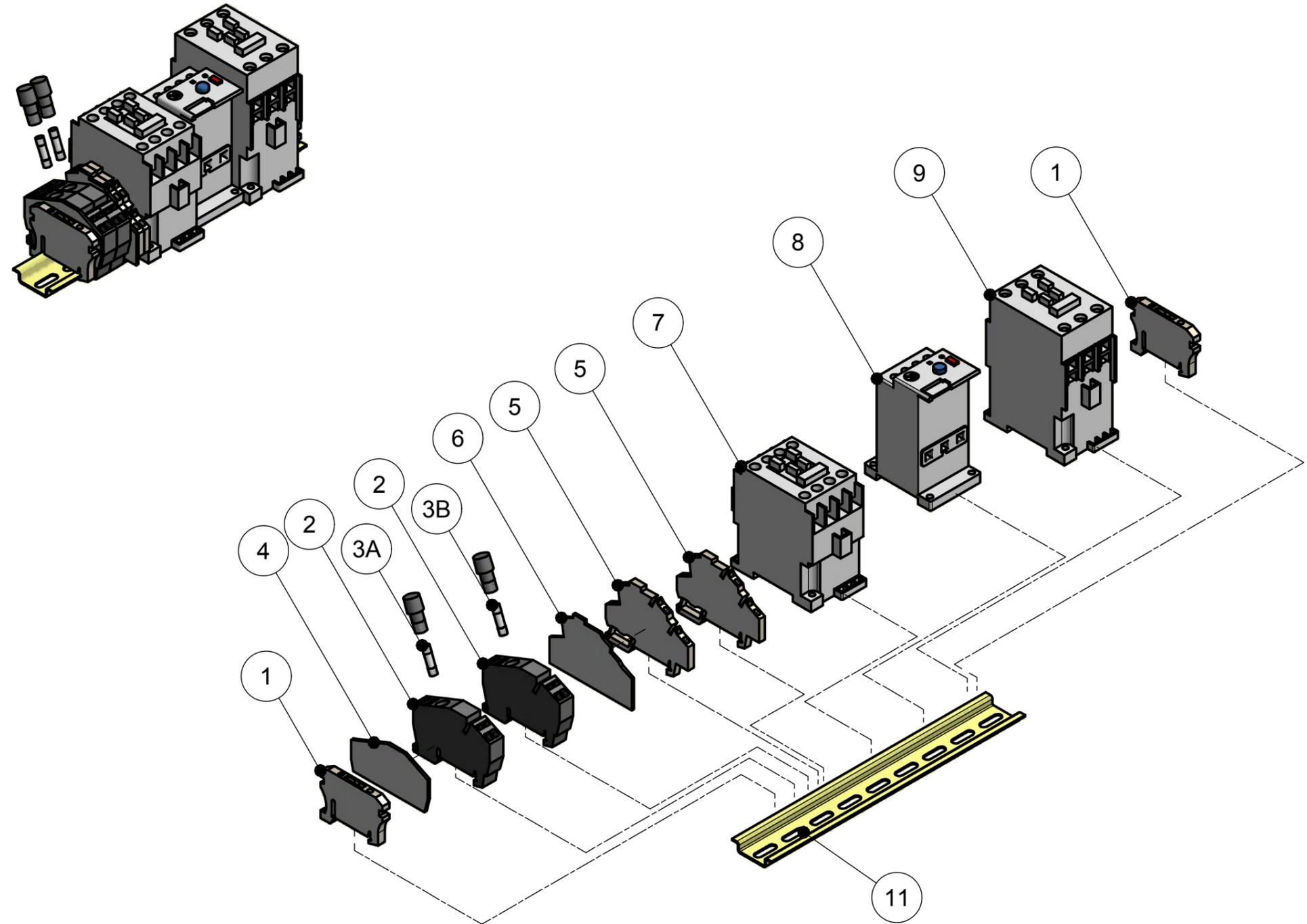
POS	ART. NR	DESCRIPTION	QTY
1	11.06.9.9185	DIN-rail 225mm	1
2	11.06.2.0200	Eindklem ZEW TS 35	2
3	1100.22005	MAS AB100-K09KJ400 MS4P 24V 50/60HZ	1
4	11.02.0.0580	MAS AB100-C30KJ00 24VAC	1
5	11.06.2.0620	Sluitplaat ZAP ZDU 6-2	1
6	11.06.2.0360	Rijgklem ZDU 6-2-2AN	1
7	11.06.2.0125	Zekeringklem ZSI 25-2x2AN-G20	2
8	11.99.0.0340/0330	Zekering 5x20mm 4 Amp Traag / 8 Amp Traag	1
9	11.99.0.0440	Zekering 5x20mm 2,5Amp. Traag	1
10	11.06.2.0630	Sluitplaat ZAP/TW ZDK 2,5-2	1
11	11.06.2.0425	Etageklem ZDK 2,5-2	2

REV	DATE	DESCRIPTION
A	13-11-2013	Positie van Etageklem ZDK 2,5-2 (pos.11) is gewijzigd
B	7-1-2014	11.02.0.0580 toegevoegd & 09.08.0.1120 doorverbinder MAS 100M09 vervallen

REVISION HISTORY

ALL DIMENSIONS IN MM OVERALL TOLERANCE: 0,5mm		DRAWN: P.S.		MAT:	
FORMAT: November 2005		DATE : 15-5-2013		DIM:	
NAME DIN RAIL D 1fase T3 en T4 (8/16/21m³-100/240V)		CHECK:		FINISH:	
HFE VACUUM SYSTEMS PO Box 2261 5202 CG 's-Hertogenbosch Netherlands Phone: +31 (0)73 6 271 271 Fax: +31 (0)73 6 271 200		SCALE 1:2		FORM A3	
		REVISION B		ART. NR 1103.20125	
				DRW. NR 13093 -1 SHEET NR	

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POS	ART. NR	DESCRIPTION	QTY
1	11.06.2.0200	Eindklem ZEW TS 35	2
2	11.06.2.0125	Zekeringklem ZSI 25-2x2AN-G20	2
3A	11.99.0.0440	Zekering 5x20mm 2,5 Amp Traag	1
3B	11.99.0.0340	Zekering 5x20mm 4 Amp.Traag	1
4	11.06.2.0620	Sluitplaat ZAP ZDU 6-2	1
5	11.06.2.0425	Etageklem ZDK 2,5-2	2
6	11.06.2.0630	Sluitplaat ZAP/TW ZDK 2,5-2	1
7	11.02.0.0570	MAS AB100-C09	1
8	11.02.0.1862	EMBR AB193-ED1*P 1,0 - 5,0Amp	1
9	11.02.0.0580	MAS AB100-C30KJ00 24VAC	1
11	11.06.9.9185	DIN-rail 225mm	1

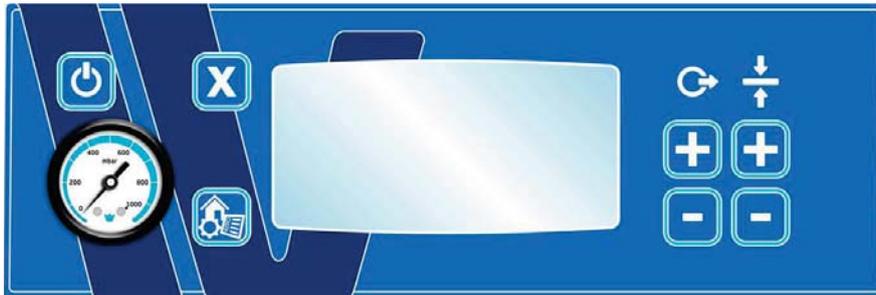
REV	DATE	DESCRIPTION
A	1-2-2015	1x pos.4 (11.06.2.0620) en pos.10 (11.06.1.0360) vervallen
REVISION HISTORY		

ALL DIMENSIONS IN MM OVERALL TOLERANCE: 0,5mm		DRAWN: P.S.	MAT :
FORMAT: May 2006		DATE : 30-5-2013	DIM :
NAME DIN-RAIL F 3fase T3, T4 (200V)		CHECK :	FINISH:
HFE VACUUM SYSTEMS		REM :	
		REPLACED BY	REPLACES
PO Box 2261 5202 CG 's-Hertogenbosch Netherlands Phone: +31 (0)73 6 271 271 Fax: +31 (0)73 6 271 200		SCALE 1:3	FORM A3
		ART. NR 1103.20140	
		REV A	DRW. NR 13095-1
			SHEET NR

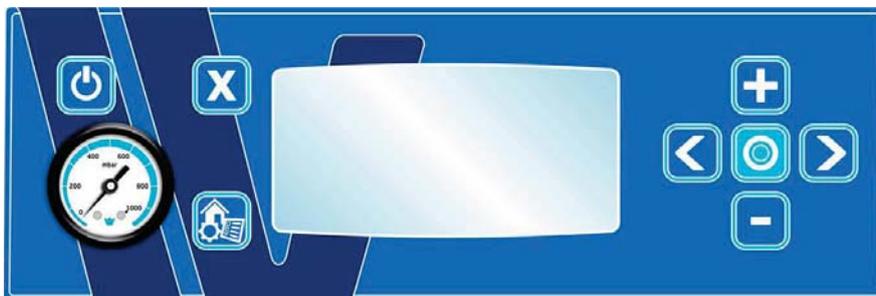
2 PANEL POSSIBILITIES

The 04-control is available in three different versions and can be recognized with the below pictures.

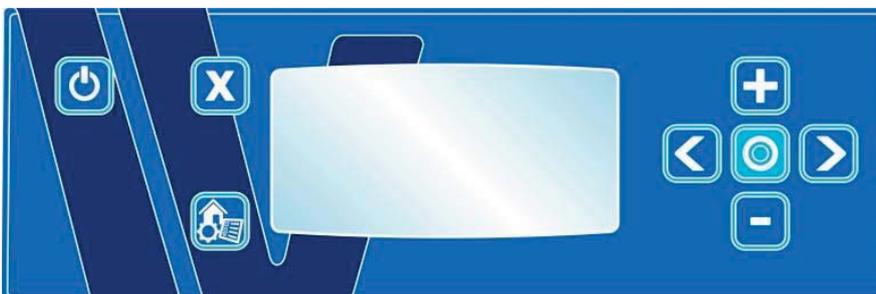
2.1 Henkovac 1-programm control panel.

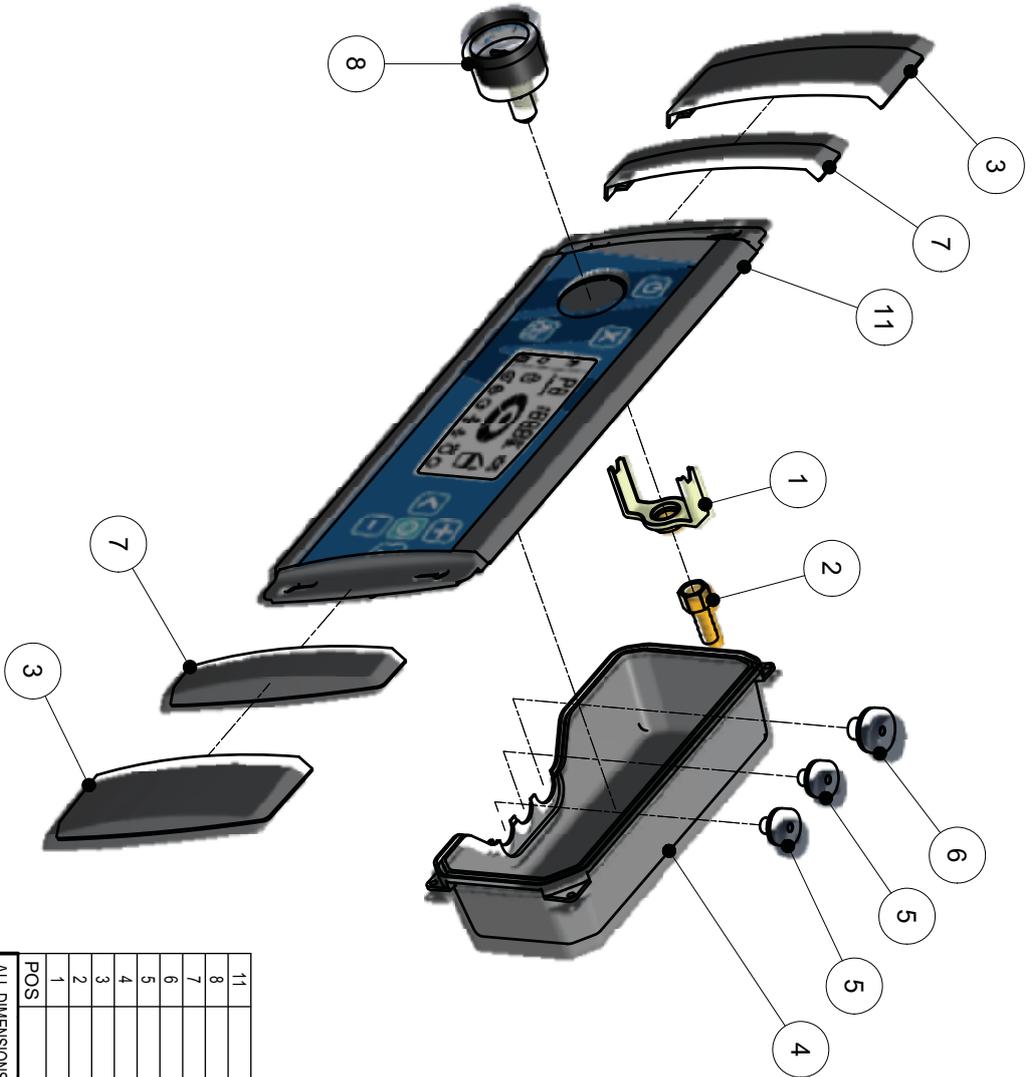


2.2 Henkovac 10-programm control panel with analogue vacuum gauge



2.3 Henkovac 10-programm panel with vacuum sensor





POS	ART. NR	DESCRIPTION	QTY	DRW	R	MATERIAL	DIMENSIONS
11	1107.04040	Holder groot- PCB-HV Time	1				
8	1304.00100	Vacuümmeeter 40mm 04-serie	1			Default	
7	1218.00035	Cap small Holder 04-control	2			ABS (Novodur P2H-AT)	
6	1100.90010	Grommet 20mm (283 2000 599 99)	1			EPDM	
5	1100.90005	Grommet 16mm (283 1600 599 99)	2			EPDM	
4	1218.00030	Cover Protection 04-control	1			ABS (Novodur P2H-AT)	
3	1218.00040	Cap Wide Holder 04-control	2			ABS (Novodur P2H-AT)	
2	02.04.3.0070	Stangplaat 14x8 B1 MS	1			Brass, Soft Yellow	
1	03.09.1.0050A	Vacuümmeeter 40mm	2			*Varies*	

ALL DIMENSIONS IN mm
TOLERANCE: According to DIN ISO 2768 Part 1-m and Part 2-K

FORMAT: Oct 2008

NAME **04 Control Panel**
HV Time Exploded view

DRAWN: A.T.
DATE : 27-7-2012
CHECK :
FINISH:
REPLACES BY

SCALE

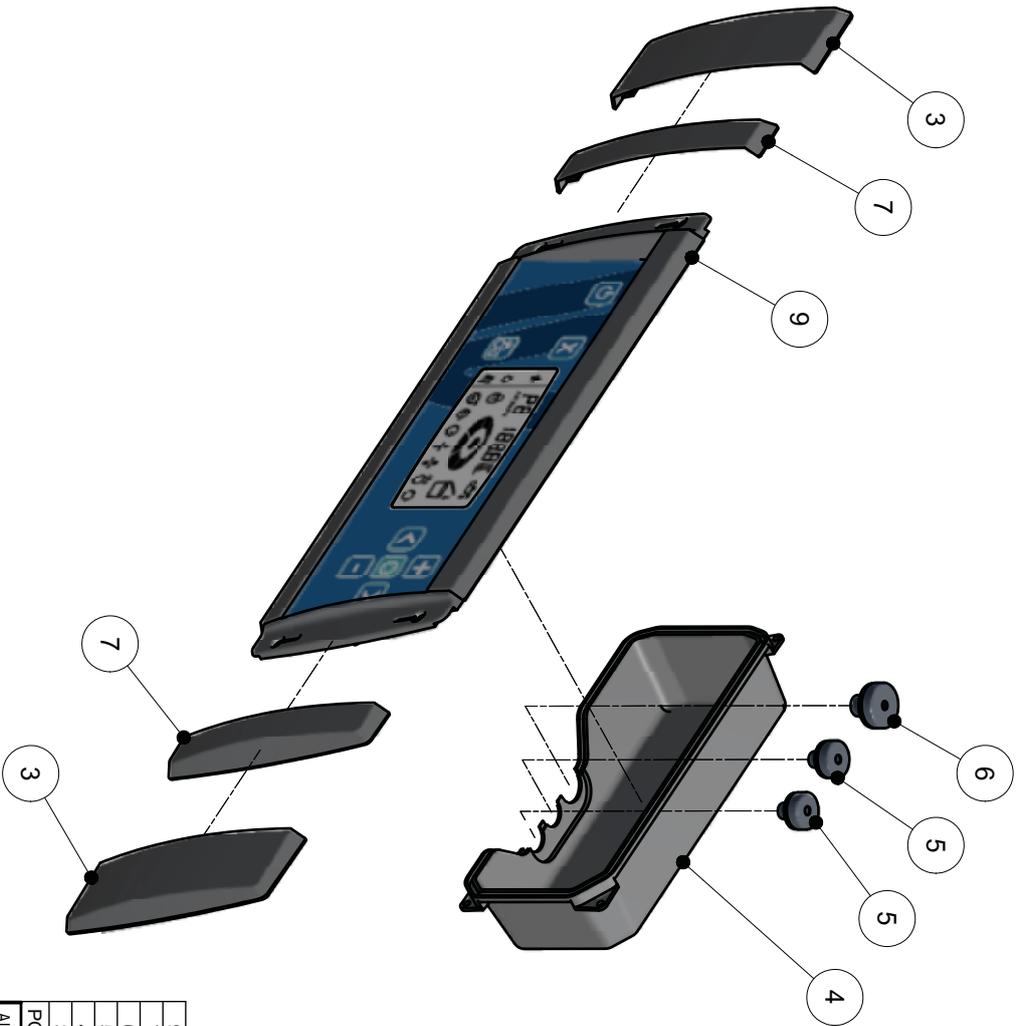
FORM **A3**



ART. NR

PO Box 2261
5202 CG 's-Hertogenbosch Netherlands
Phone: +31 (0)73 6 271 271
Fax: +31 (0)73 6 271 200

REV
DRW. NR **13910-3**
SHEET NR



POS	ART. NR	DESCRIPTION	QTY	DRW	REV	MATERIAL	DIMENSIONS
9	1107.04030	Holder groot- PCB-HV Sensor	1				
7	1218.00035	Cap small Holder 04-control	2	13923		ABS (Novodur P2H-AT)	
6	1100.90010	Grommet 20mm (283.2000.599.99)	1			EPDM	
5	1100.90005	Grommet 16mm (283.1600.599.99)	2			EPDM	
4	1218.00030	Cover Protection 04-control	1	13922		ABS (Novodur P2H-AT)	
3	1218.00040	Cap Wide Holder 04-control	2	13924		ABS (Novodur P2H-AT)	

ALL DIMENSIONS IN mm
TOLERANCE: According to DIN ISO 2768 Part 1-m and Part 2-K

FORMAT: Oct 2008
DRAWN: A.T.
DATE : 27-7-2012
DIM :
CHECK :
FINISH:

NAME **04 Control Panel**
HV Sensor Exploded view
REPLACED BY
REPLACES

REV	DATE	DESCRIPTION
REVISION HISTORY		

HFE VACUUM SYSTEMS
PO Box 2261
5202 CG 's-Hertogenbosch Netherlands
Phone: +31 (0)73 6 271 271
Fax: +31 (0)73 6 271 200

SCALE	FORM	ART. NR
	A3	
REV	DRW. NR	SHEET NR
	13910-1	

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PRIMAIR VOLTAGE, FUSES

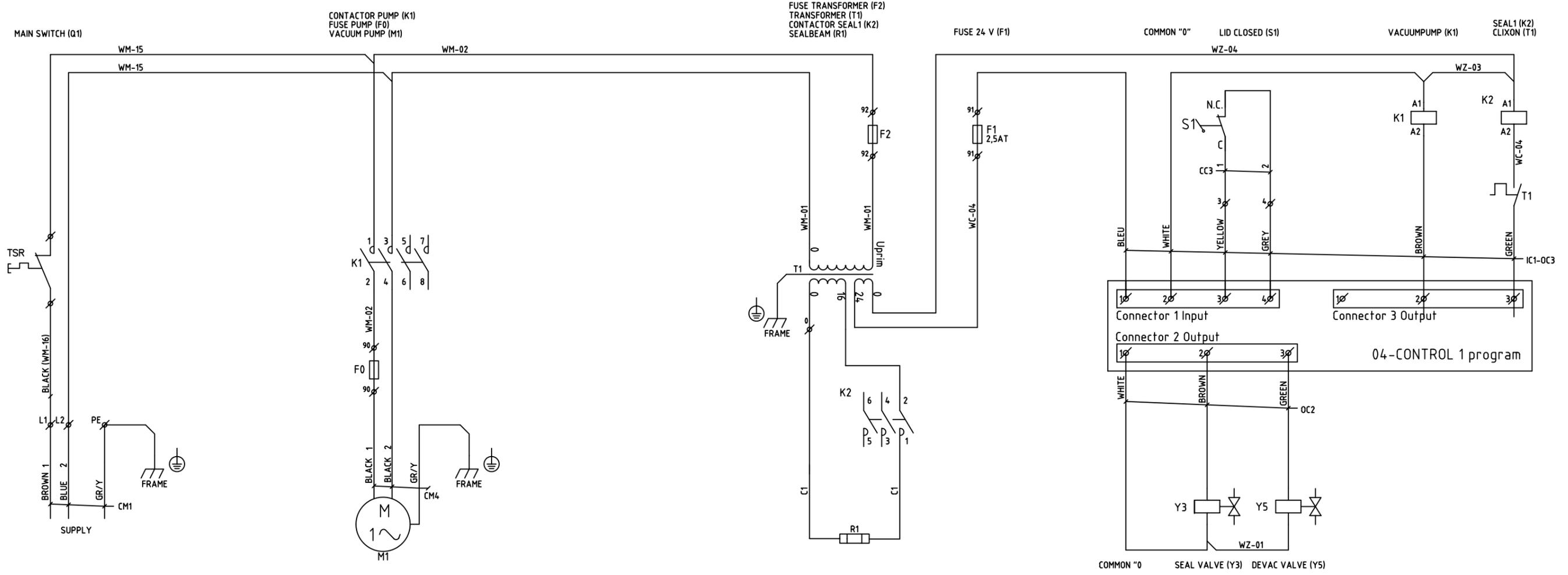
Vacuum pump Capacity m ³ /h	PRIM. VOLTAGE 50/60 Hz (Uprim) [V]	FUSES [A] (SLOW ACTING)			
		TSR	F0	F1	F2
4 m ³ /h	100/120 V	8 A	4 A	2,5 A	-
	200-240 V	4 A	-	2,5 A	-
8 m ³ /h	100/120 V	8 A	-	2,5 A	-
	200-240 V	4 A	-	2,5 A	-
16 m ³ /h	100/120 V	10 A	-	2,5 A	8 A
	200-240 V	6 A	-	2,5 A	4 A
21 m ³ /h	100/120 V	-	13 A	2,5 A	8 A
	200-240 V	8 A	-	2,5 A	4 A

SEC. VOLTAGE SEALTRANSFORMERS

MAX. TOTAL SEALENGTH [mm]	SEC. VOLTAGE [V]
410 - 620	16
500 - 825	24
750 - 1030	32
1000 - 1250	48 (24+24)

CABLE AND WIRE NAMES

CODE	NAME
CM	MAIN CIRCUIT CABLE
CC	CONTROL CIRCUIT CABLE
C	MISCELLANEOUS CABLE
IC	INPUT CABLE CONTROLLER
OC	OUTPUT CABLE CONTROLLER
WE	EARTH WIRE
WM	MAIN CIRCUIT WIRE
WC	CONTROL CIRCUIT WIRE
WZ	COMMON "0" WIRE

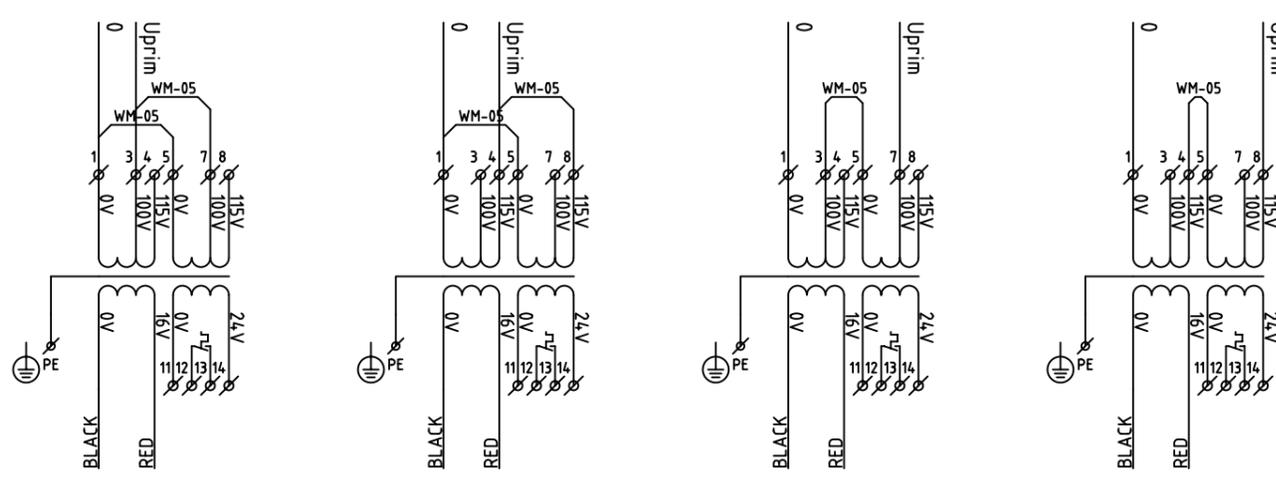


100 V

110-120 V

200 V

220-240 V



POS.	Qty.	NAME	ART.No°	DRW. No°	MATERIAL	DIMENSION
All dimensions in mm General tolerance ±0,5mm			DRAWN: P.S.		MAT. : -	
FORM: February 2002			DATE : 01-08-2013		DIM. : -	
NAME: Circuit diagram 1~ Table Top ES/DS/TS (16 V) 1 program			CHECK : -		REM. : -	
HFE VACUUM SYSTEMS			SCALE: -		FORM. A3	
Po. Box 2261 5202 CG 's-Hertogenbosch Phone : +31 (0)73 6271271 Fax: +31 (0)73 6271200			REV. -		REPLACED BY: -	
			DRW No° 8000-130801		REPLACES: -	

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PRIMAIR VOLTAGE, FUSES

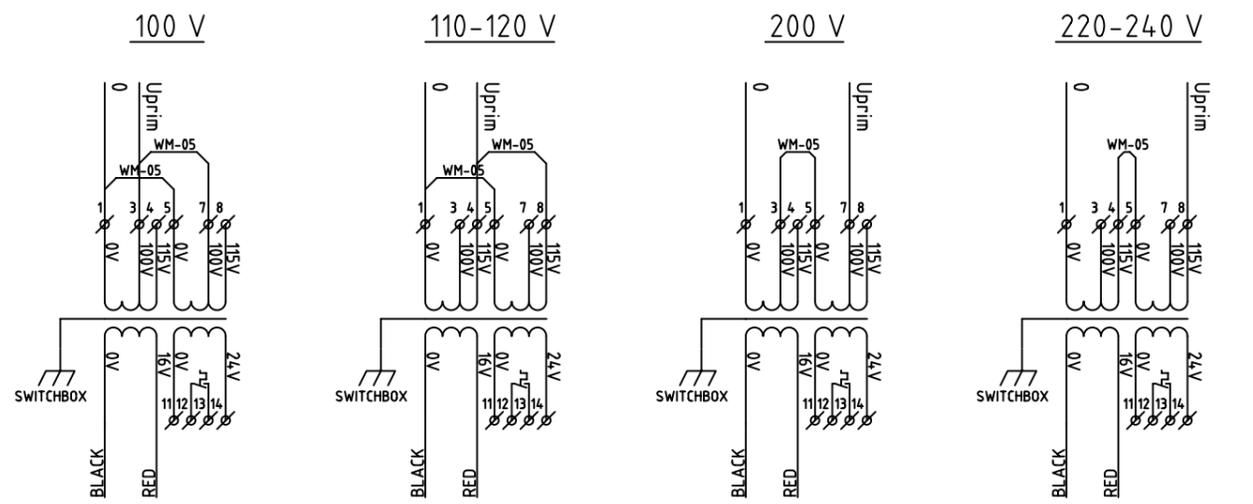
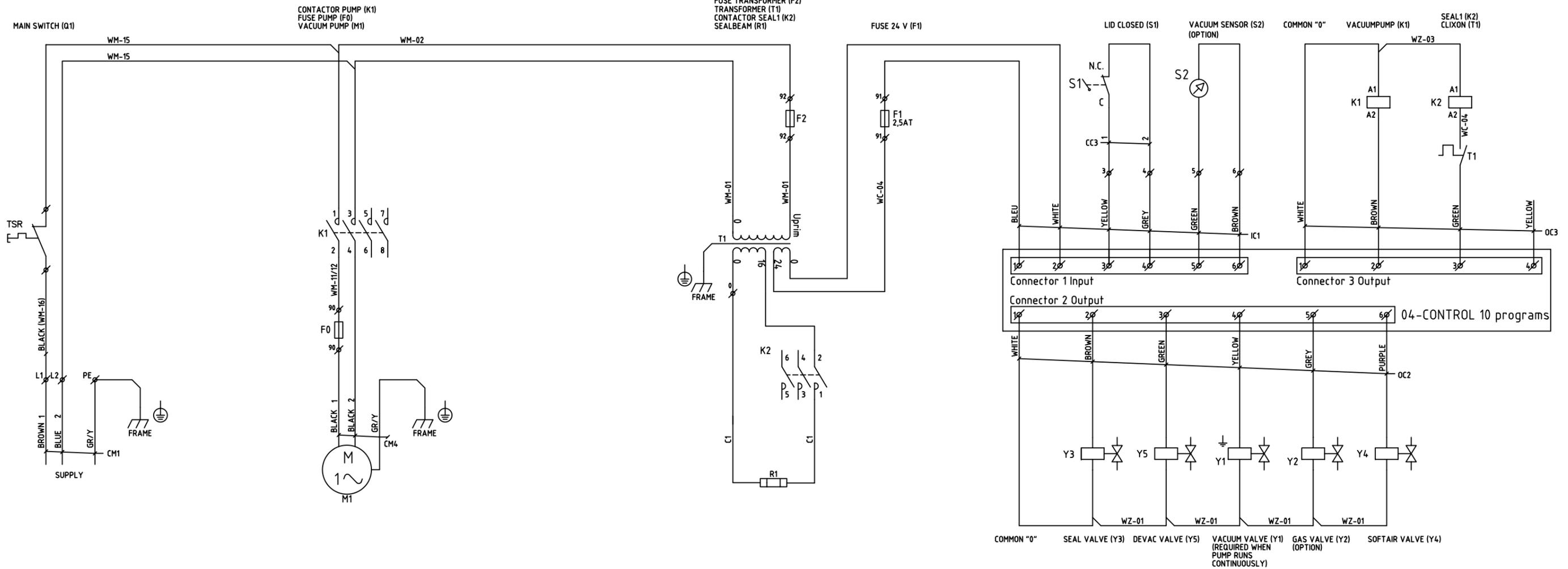
Vacuum pump Capacity m ³ /h	PRIM. VOLTAGE 50/60 Hz (Uprim) [V]	FUSES [A] (SLOW ACTING)			
		TSR	F0	F1	F2
8 m ³ /h	100/120 V	8 A	-	2,5 A	-
	200-240 V	4 A	-	2,5 A	-
16 m ³ /h	100/120 V	10 A	-	2,5 A	8 A
	200-240 V	6 A	-	2,5 A	4 A
21 m ³ /h	100/120 V	-	13 A	2,5 A	8 A
	200-240 V	8 A	-	2,5 A	4 A

SEC. VOLTAGE SEAL TRANSFORMERS

MAX. TOTAL SEALENGTH (mm)	SEC. VOLTAGE [V]
410 - 620	16
500 - 825	24
750 - 1030	32
1000 - 1250	48 (24+24)

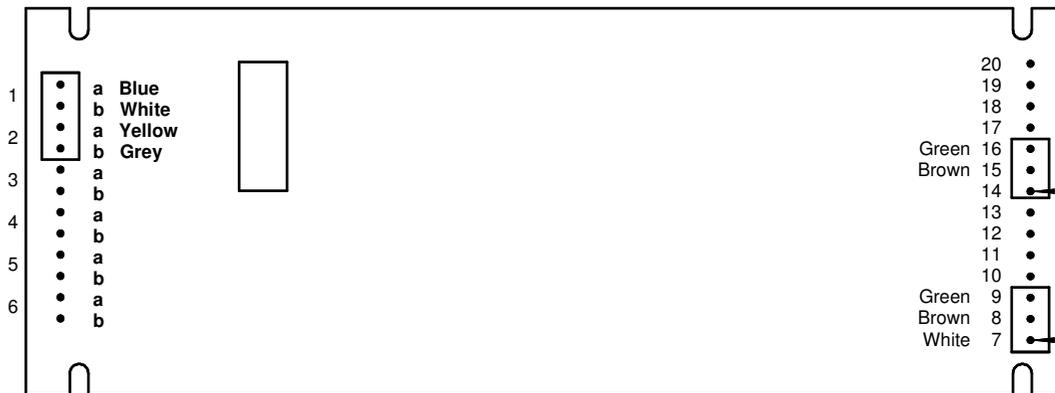
CABLE AND WIRE NAMES

CODE	NAME
CM	MAIN CIRCUIT CABLE
CC	CONTROL CIRCUIT CABLE
C	MISCELLANEOUS CABLE
IC	INPUT CABLE CONTROLLER
OC	OUTPUT CABLE CONTROLLER
WE	EARTH WIRE
WM	MAIN CIRCUIT WIRE
WC	CONTROL CIRCUIT WIRE
WZ	COMMON "0" WIRE



POS.	Qty.	NAME	ART.No°	DRW. No°	MATERIAL	DIMENSION
All dimensions in mm General tolerance ±0,5mm			DRAWN: P.S.		MAT. : -	
FORM: February 2002			DATE : 01-08-2013		DIM. : -	
NAME: Circuit diagram 1~ Table Top DS/TS (16 V)			CHECK : -		REM. : -	
HFE VACUUM SYSTEMS			SCALE: -		FORM. A3	
Po. Box 2261 5202 CG 's-Hertogenbosch Phone : +31 (0)73 6271271 Fax: +31 (0)73 6271200			REPLACED BY: -		REPLACES: -	
			REV. -		DRW No° 8001-130801	

Input Connector 1



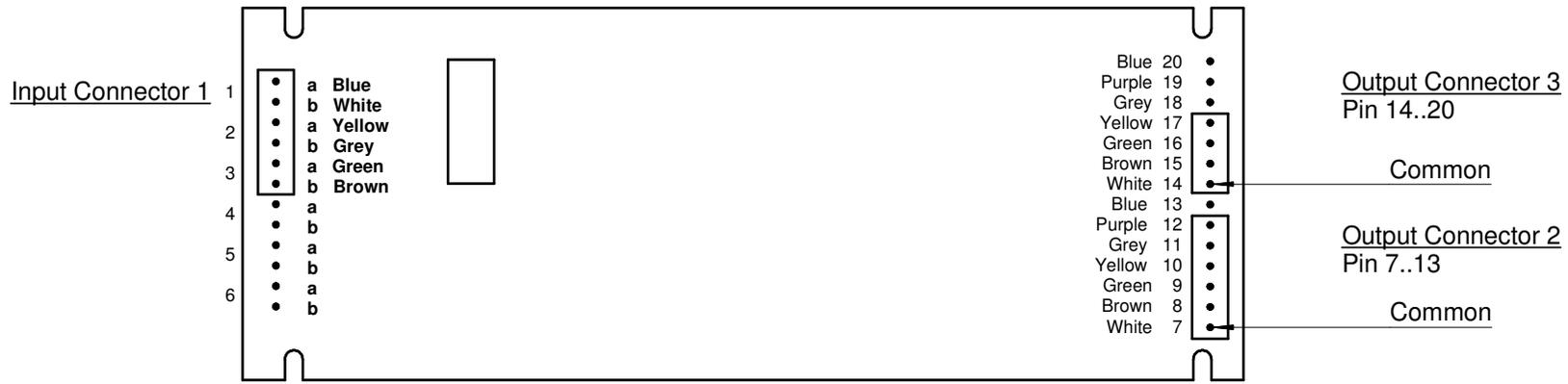
IC1: Input Connector 1		
Contact	Function	Wire/Color
1-a 1-b	Main 24 VAC	Blue White
2-a 2-b	Lid switch	Yellow Grey
3	Spare	-
4	Spare	-
5	Spare	-
6	Spare	-

OC2: Output Connector 2		
Contact	Function	Wire/Color
7	Common	White
8	Seal valve	Brown
9	Devacuum valve	Green
10	Spare	-
11	Spare	-
12	Spare	-
13	Spare	-

OC3: Output Connector 3		
Contact	Function	Wire/Color
14	Common	-
15	Pump contactor	Brown
16	Seal-1 contactor	Green
17	Spare	-
18	Spare	-
19	Spare	-
20	Spare	-

ALL DIMENSIONS IN mm TOLERANCE: According to DIN ISO 2768 Part 1-m and Part 2-K		DRAWN: H.W.	MAT: Default
FORMAT: Oct 2008		DATE: 14-12-2010	DIM:
NAME PCB 04 Version: 1-Program		CHECK:	FINISH:
HFE VACUUM SYSTEMS PO Box 2261 5202 CG 's-Hertogenbosch Netherlands Phone: +31 (0)73 6 271 271 Fax: +31 (0)73 6 271 200		SCALE -	FORM A3
		REV	ART. NR
			DRW. NR PCB 04-1
			SHEET NR

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IC1: Input Connector 1		
Contact	Function	Wire/Color
1-a 1-b	Main 24 VAC	Blue White
2-a 2-b	Lid switch	Yellow Grey
3-a 3-b	Sensor	Green Brown
4	Spare	-
5	Spare	-
6	Spare	-

OC2: Output Connector 2		
Contact	Function	Wire/Color
7	Common	White
8	Seal valve	Brown
9	Devacuum valve	Green
10	Vacuum valve	Yellow
11	Gas valve	Grey
12	SoftAir valve	Purple
13	Spare	Blue

OC3: Output Connector 3		
Contact	Function	Wire/Color
14	Common	White
15	Pump contactor	Brown
16	Seal-1 contactor	Green
17	Seal-2 contactor	Yellow
18	Film transport	Grey
19	Spare	Purple
20	Spare	Blue

ALL DIMENSIONS IN mm TOLERANCE: According to DIN ISO 2768 Part 1-m and Part 2-K		DRAWN: H.W.	MAT: Default
FORMAT: Oct 2008		DATE: 14-12-2010	DIM:
NAME PCB 04		CHECK:	FINISH:
Version: 10-Programs		REM:	
		REPLACED BY	REPLACES
HFE VACUUM SYSTEMS		SCALE: -	FORM: A3
PO Box 2261 5202 CG 's-Hertogenbosch Netherlands		REV	ART. NR
Phone: +31 (0)73 6 271 271 Fax: +31 (0)73 6 271 200			DRW. NR
			SHEET NR
			PCB 04-2