

Spare part list:

BioCompact II 210

Item number: 765042574 Rev. 003

Release date: 13-02-2025

Released by: John Lund

Approved by: John B. S. Petersen

Gram Scientific ApS
Aage Grams Vej
6500 Vojens, Danmark
Tel: +45 73 20 13 00
Fax: +45 73 20 12 01
www.gram-bioline.com

GRAM

Biostorage you can depend on

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Introduction and important notes

Introduction to BioCompact II

This spare part document is intended for the **BioCompact II 210** product series.

This is a compact refrigerator or freezer cabinet for a wide range of biostorage purposes where the prime focus is on dependability. The BioCompact II provides you with significantly better performance than any other cabinets in this segment for storing ordinary biomaterial under stable conditions.

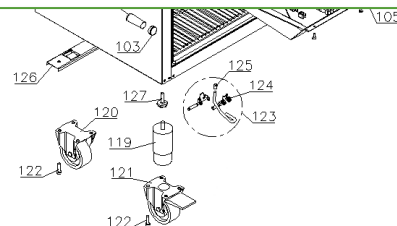
If you need to store different biomaterials at different times, this design gives you lots of ways to deal with individual storage needs, thanks to the versatile interior layout and a comprehensive selection of fixtures and fittings. The small footprint of this design also makes it the perfect biostorage unit for use in confined spaces.

The BioCompact II range comes in sizes between 125 litres and 600 litres, as regular refrigerator with massive or with glass door +2 °C / +20 °C, or as regular freezer -25 °C / -5 °C.

Important note concerning understanding spare list

Please note that when ordering a spare part, the item number only applies to ordering one single spare part!

For this reason, there is a column in the tables with name “**Orig. used [pcs]**” that shows the amount of the spare parts that is originally used on the product. Perhaps when ordering new legs, the item number only applies to one single piece, but the column informs that 4 pieces have been used. In columns with “**Introduced**” and “**Terminated**”, a six-digit number is given, which means product release year and week (YYYY-WW).



Item no.	Description	Orig. used (pcs)	Gram part no.	Introduced	Terminated
117	Fan motor gasket	1	761223110	2022-02	
118	Screw for fan motor (polyamide)	2	420790001	2022-02	
119	Leg H=100-130 mm	4	765080118	2022-02	
119	Leg H=134-200 mm	4	765080115	2022-02	
119	Leg H=180-250 mm	4	765080116	2022-02	
120	Fixed castor ø80/H=110 mm	2	480270521	2022-02	
120	Fixed castor ø100/H=128 mm	2	480270520	2022-02	
121	Swivel castor ø80/H=110 mm	2	480270522	2022-02	

NOTE: In this document is used abbreviations or abbreviated type designations like **RR**, **RR*** and **RF**.

BioCompact II comes as a refrigerator with a solid door or with a glass door. The freezer always has a solid door. When looking for the right spare parts, some parts are common to all and the abbreviations are not shown. But if the spare parts are specifically used for perhaps freezers, or perhaps specifically used for refrigerators with glass doors, the abbreviations will be used to help ordering the right part.

The type designated abbreviations are:

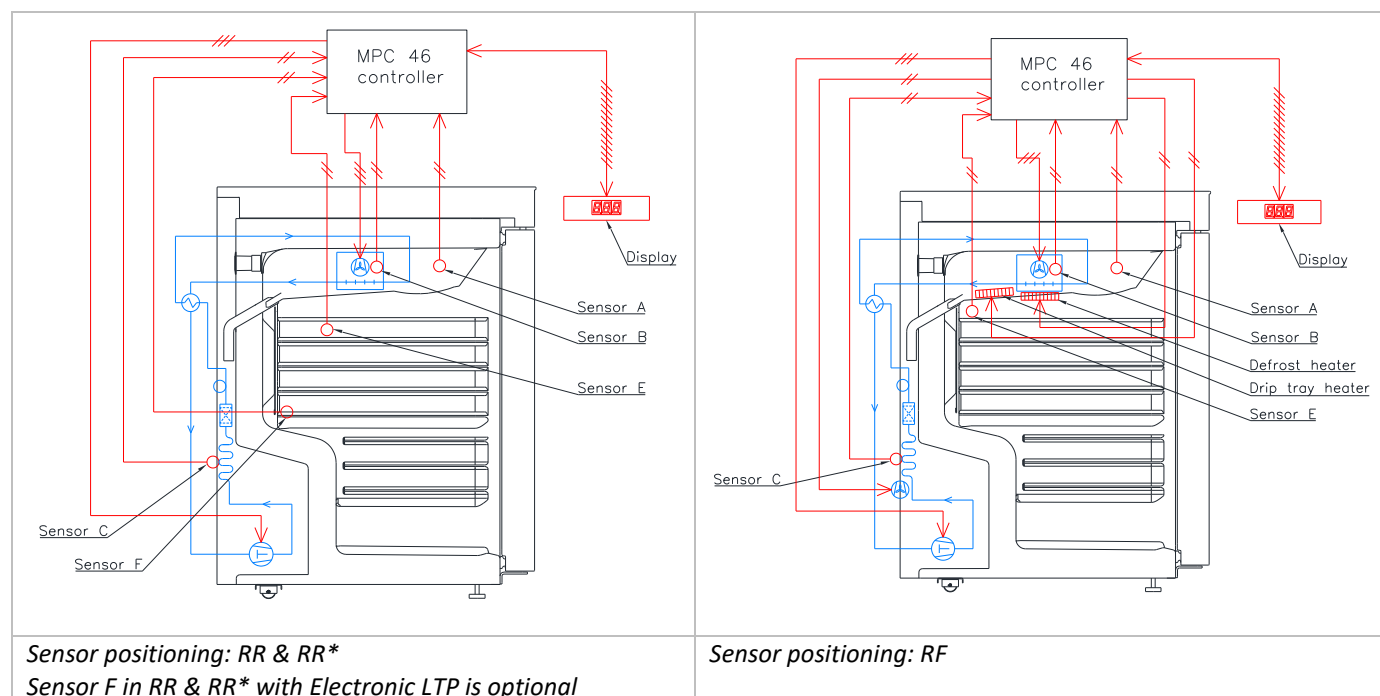
RR indicates BioCompact II RR210 refrigerator with massive door

RR* indicates BioCompact II RR210 refrigerator with glass door

RF indicates BioCompact II RF210 freezer with massive door

Overall drawing of BioCompact II 210

Sectional drawing of BioCompact II RR/RR*/RF cabinet with Electrical and Piping system represented.



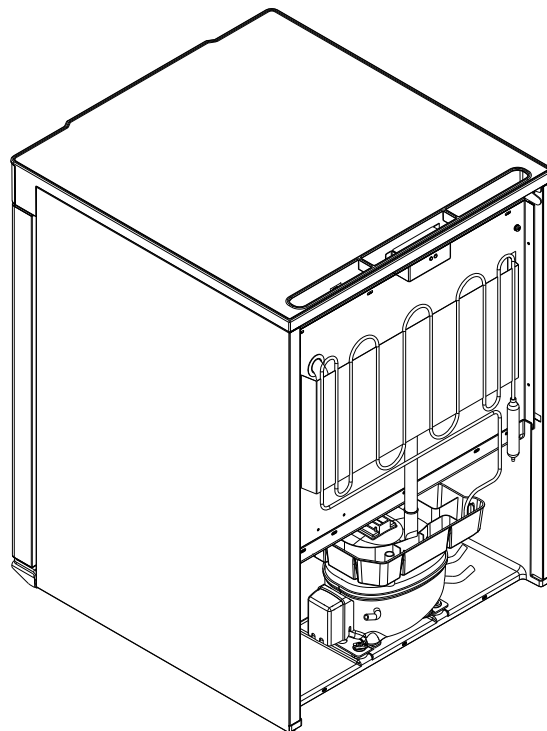
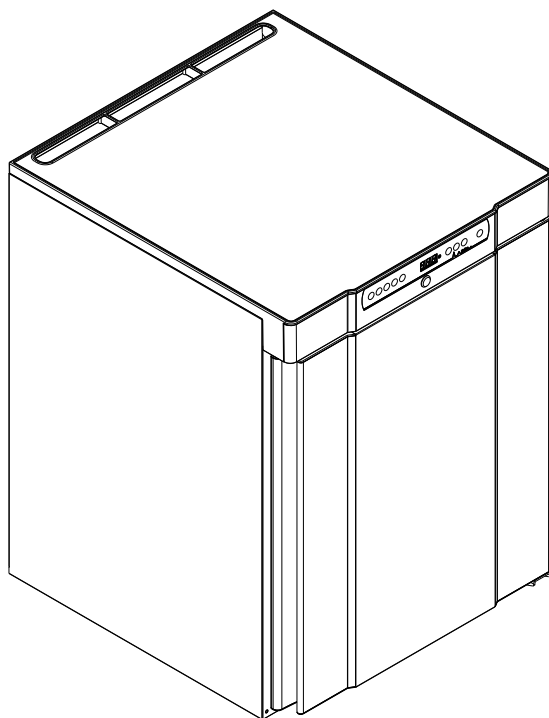
Sensors and sensor positioning

Item no.	Description	Orig. used (pcs)	Gram part no.	Introduced	Terminated
A	Room sensor (2500 mm)	1	453531504	2022-02	
B	Defrost sensor (1500 mm)	1	453531501	2022-02	
C	Condenser sensor (1000 mm)	1	453531500	2022-02	
E	Reference sensor (2500 mm)	1	453531504	2022-02	
F	Electronic LTP sensor (Optional 1040 mm)	1	453531539	2022-02	

Note: For A-, E-, F-sensor, see section for Mechanical parts. For B- and C-sensor see section for Refrigeration parts.

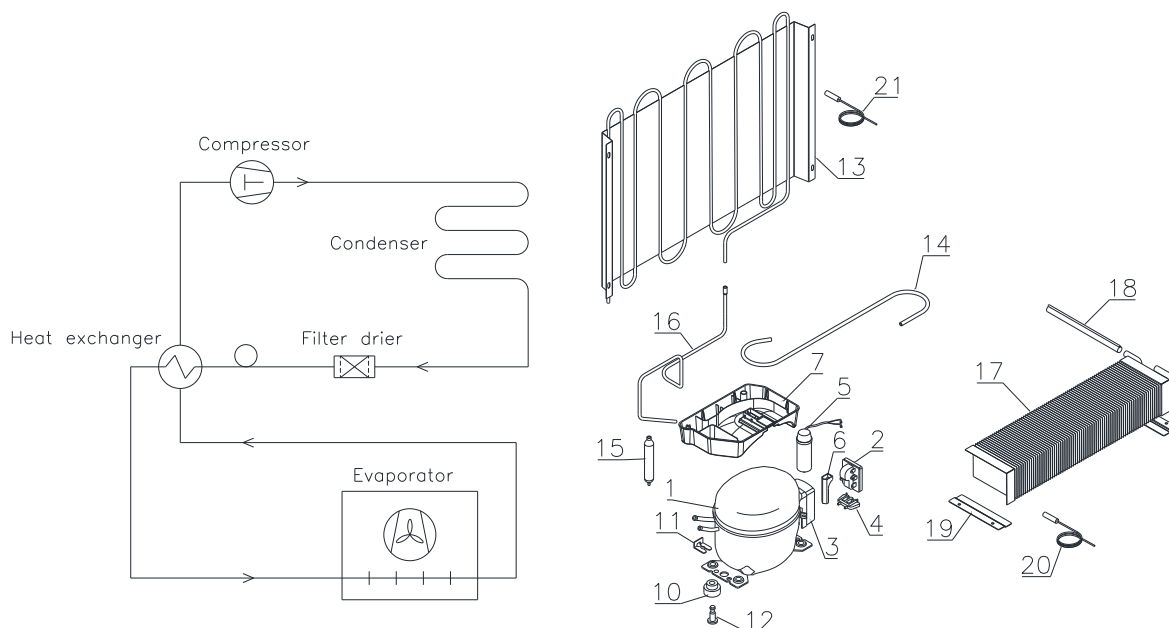
Front and back view of BioCompact II 210 cabinet

Front of cabinet (left) seen from left upper corner and down. Back of cabinet (right) seen from right upper corner and down.



Cooling parts and refrigeration diagram

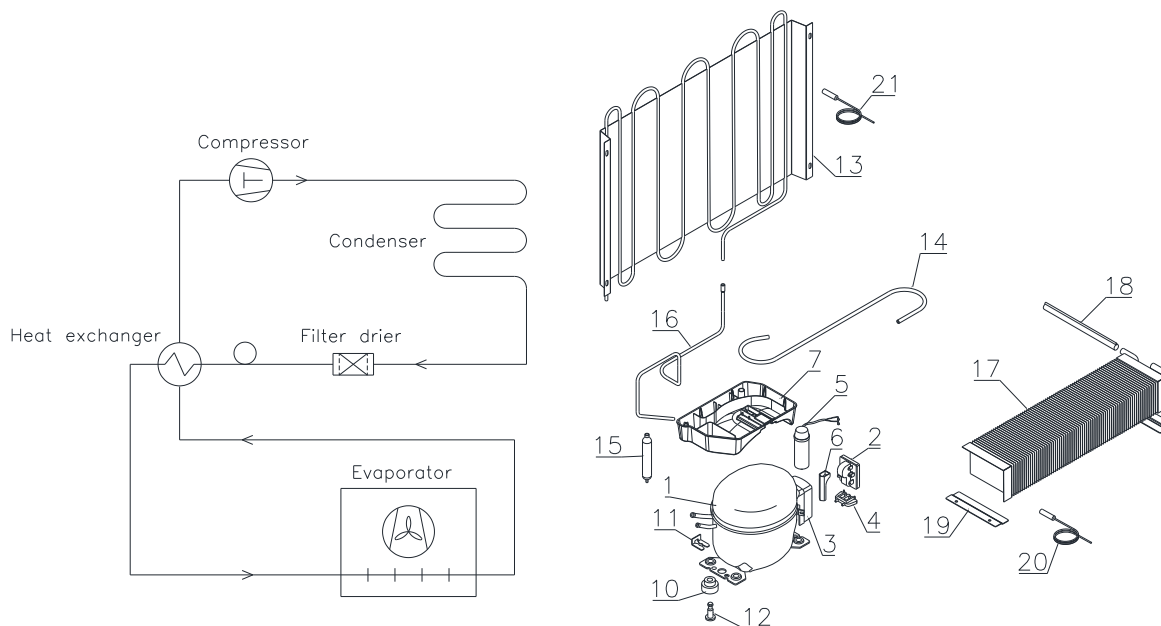
BioCompact II RR



Item no.	Description HC (R600a)	Orig. used (pcs)	Gram part no.	Introduced	Terminated
1	Compressor TLES5KTK	1	500550090	2022-02	
2	Starting device	1	453050178	2022-02	
3	Cover	1	452440293	2022-02	
4	Cord relief	1	452440300	2022-02	
5	Run capacitor 4 μ F	1	451723513	2022-02	
6	PTC cover	1	452440290	2022-02	
7	Re-evaporation tray	1	410820001	2022-02	

Item no.	Description HFC 50 Hz (R134a)	Orig. used (pcs)	Gram part no.	Introduced	Terminated
1	Compressor TLES3F	1	500550012	2022-02	
2	PTC Starting device	1	453050178	2022-02	
3	Cover	1	452440293	2022-02	
4	Cord relief	1	452440300	2022-02	
5	Run capacitor 4 μ F	1	451723513	2022-02	
6	PTC cover	1	452440290	2022-02	
7	Re-evaporation tray	1	410820001	2022-02	

Item no.	Description HFC 60 Hz (R134a)	Orig. used (pcs)	Gram part no.	Introduced	Terminated
1	Compressor TL3G	1	500550006	2022-02	
2	PTC Starting device	1	453050151	2022-02	
3	Cover	1	452440293	2022-02	
4	Cord relief	1	452440300	2022-02	
6	PTC cover	1	452440290	2022-02	
7	Re-evaporation tray	1	410820001	2022-02	



Item no.	Description HC (R600a)	Orig. used (pcs)	Gram part no.	Introduced	Terminated
1	Compressor TLES5KTK	1	500550090	2022-02	
2	Starting device	1	453050178	2022-02	
3	Cover	1	452440293	2022-02	
4	Cord relief	1	452440300	2022-02	
5	Run capacitor 4 µF	1	451723513	2022-02	
6	PTC cover	1	452440290	2022-02	
7	Re-evaporation tray	1	410820001	2022-02	

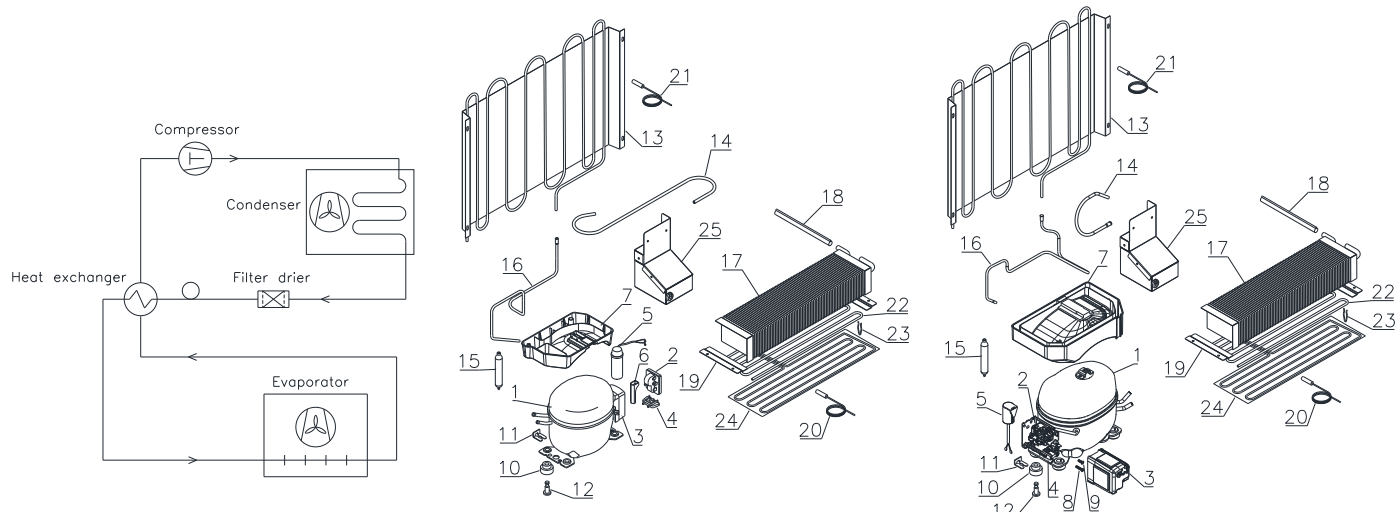
Item no.	Description HFC 50 Hz (R134a)	Orig. used (pcs)	Gram part no.	Introduced	Terminated
1	Compressor TL5G	1	500521100	2022-02	
2	PTC Starting device	1	453050151	2022-02	
3	Cover	1	452440293	2022-02	
4	Cord relief	1	452440300	2022-02	
6	PTC cover	1	452440290	2022-02	
7	Re-evaporation tray	1	410820001	2022-02	

Item no.	Description HFC 60 Hz (R134a)	Orig. used (pcs)	Gram part no.	Introduced	Terminated
1	Compressor TL5G	1	500521100	2022-02	
2	PTC Starting device	1	453050151	2022-02	
3	Cover	1	452440293	2022-02	
4	Cord relief	1	452440300	2022-02	
6	PTC cover	1	452440290	2022-02	
7	Re-evaporation tray	1	410820001	2022-02	

BioCompact II RF

RF 210 HC: 2022-02 → 2022-39
RF 210 HFC: 2022-02 →

RF 210 HC: 2022-40 →



Item no.	Description HC (R600a)	Orig. used (pcs)	Gram part no.	Introduced	Terminated
1	Compressor TLY10.KK.3	1	500550091	2022-02	2022-39
1	Compressor spare parts kit RF210 HC	1	761234163	2025-03	
2	Starting device	1	453050178	2022-02	2022-39
3	Cover	1	452440293	2022-02	2022-39
4	Cord relief	1	452440297	2022-02	2022-39
5	Run capacitor 4 µF	1	451723513	2022-02	2022-39
6	PTC cover	1	452440290	2022-02	2022-39
7	Re-evaporation tray	1	410820001	2022-02	2022-39

Item no.	Description HC (R600a)	Orig. used (pcs)	Gram part no.	Introduced	Terminated
1	Compressor HXK95AT	1	506000012	2022-40	
2	Starting device	1	453050184	2022-40	
3	Cover	1	452440307	2022-40	
4	Cord relief	1	452440306	2022-40	
5	Run capacitor 4 µF	1	451723523	2022-40	
7	Re-evaporation tray – RF (HXK95AT)	1	410820018	2022-40	
8	Screw 3.9 L9.5	1	452440308	2022-40	
9	Screw 3.9 L19	1	452440309	2022-40	

Item no.	Description HFC 50 Hz (R134a)	Orig. used (pcs)	Gram part no.	Introduced	Terminated
1	Compressor TLES5,7.FT.3	1	500550094	2022-02	
2	PTC Starting device	1	453050178	2022-02	
3	Cover	1	452440293	2022-02	
4	Cord relief	1	452440297	2022-02	
5	Run capacitor 4 µF	1	451723513	2022-02	
6	PTC cover	1	452440290	2022-02	
7	Re-evaporation tray	1	410820001	2022-02	

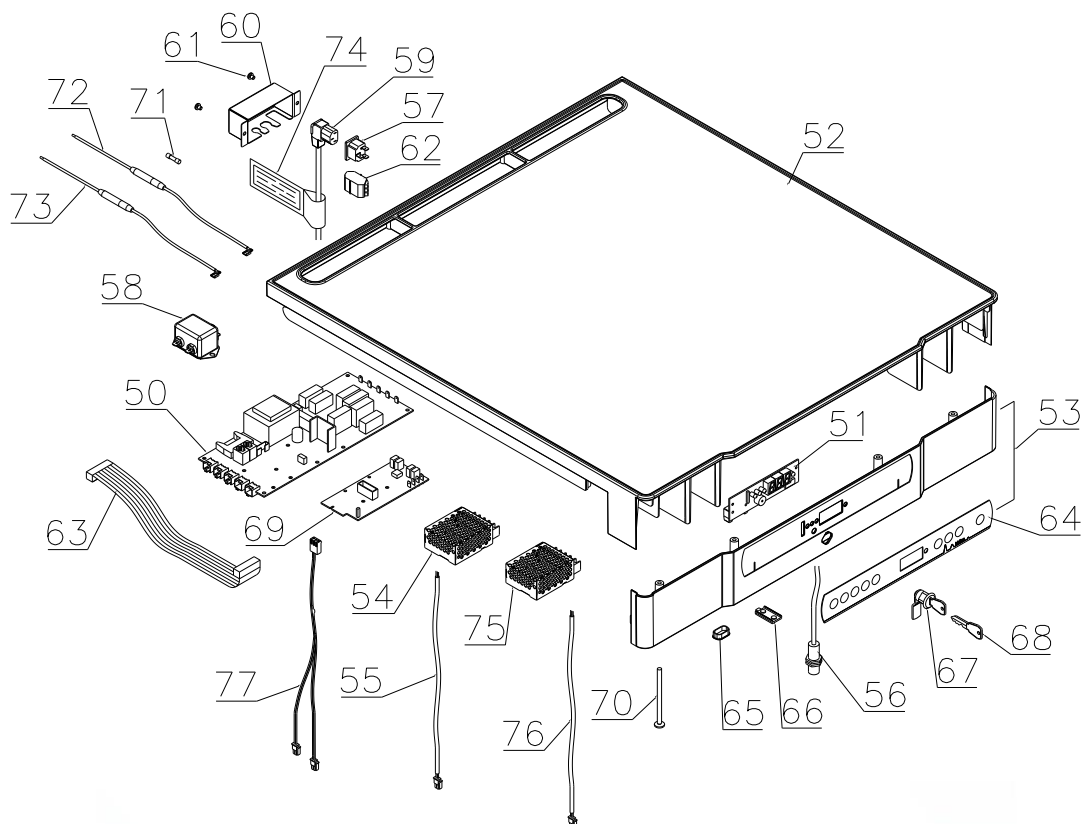
Item no.	Description HFC 60 Hz (R134a)	Orig. used (pcs)	Gram part no.	Introduced	Terminated
1	Compressor NL7.3MF	1	500550532	2022-02	
2	PTC Starting device	1	453050151	2022-02	
3	Cover	1	452440294	2022-02	
4	Cord relief	1	452440300	2022-02	
6	PTC cover	1	452440290	2022-02	
7	Re-evaporation tray	1	410820001	2022-02	

BioCompact II – other common parts

Item no.	Description	Orig. used (pcs)	Gram part no.	Introduced	Terminated
10	Rubber bush	4	760080519	2022-02	
11	Compressor clip	2	760082367	2022-02	
12	Compressor screw	2	760082711	2022-02	
13	Condenser	1	761223010	2022-02	2022-39
13	Condenser	1	761223014	2022-40	
14	Suction tube Ø6 – RR/RR*/RF	1	760000317	2022-02	2022-39
14	Suction tube Ø6 – RR/RR*	1	760000317	2022-02	
14	Suction tube Ø6 x 0,62 – RF (HXK95AT)	1	760000464	2022-40	
15	Filter drier 7,5 gr. Ø2,1/5,1 mm – RR/RR*	1	761221321	2022-02	
15	Filter drier 15 gr. Ø2,1/5,1 mm – RF	1	761221322	2022-02	
16	Hot gas re-evaporation pipe – RF	1	760000323	2022-02	2022-39
16	Hot gas re-evaporation pipe – RR/RR*	1	760000323	2022-02	
16	Hot gas re-evaporation pipe – RF (HXK95AT)	1	760000462	2022-40	
17	Evaporator – RR	1	765080411	2022-02	
17	Evaporator – RR*/RF	1	765080412	2022-02	
18	Heat exchanger – RR	1	761221410	2022-02	
18	Heat exchanger – RR*	1	761221411	2022-02	
18	Heat exchanger – RF	1	761221412	2022-02	2022-39
18	Heat exchanger – RF (HXK95AT)	1	762231401	2022-40	
19	Evaporator suspension bracket	2	761223070	2022-02	
20	Defrost sensor (B-sensor, 1500 mm)	1	453531501	2022-02	
21	Condenser sensor (C-sensor, 1000 mm)	1	453531500	2022-02	
22	Defrost heater – RF	1	765072163	2022-02	
23	Clip for heater – RF	8	761222779	2022-02	
24	Drip tray heater – RF	1	765071199	2022-02	
25	Condenser fan complete – RF	1	761221780	2022-02	

Electrical parts

Controllers and tabletop

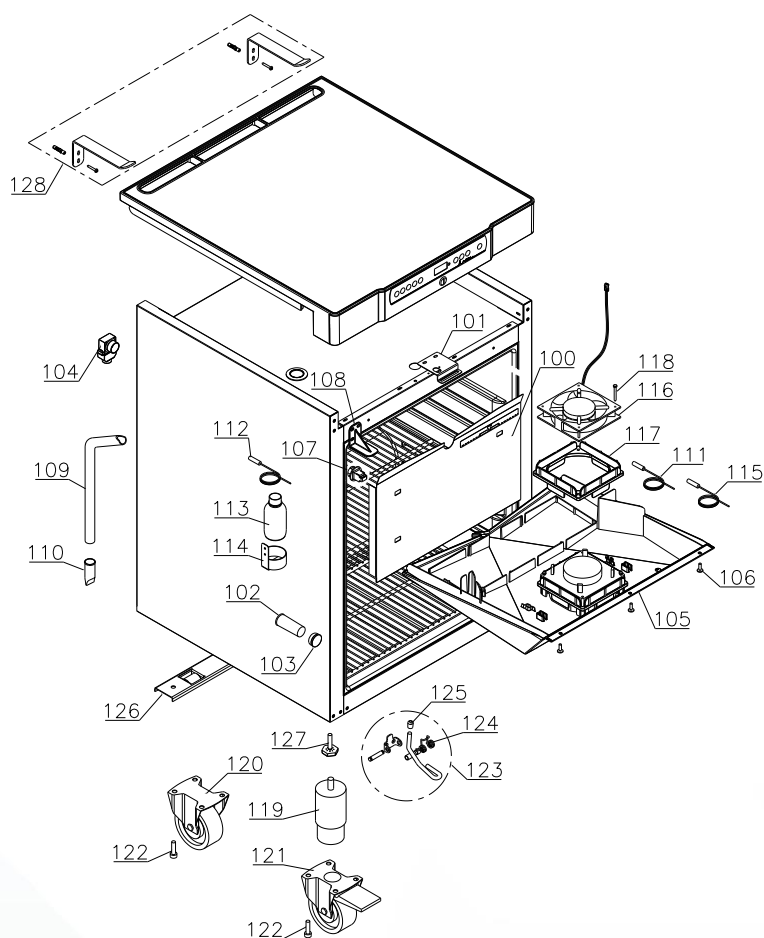


Item no.	Description	Orig. used (pcs)	Gram part no.	Introduced	Terminated
50	Electronic controller K82 – RR	1	761256168	2022-02	
50	Electronic controller K92 – RR*	1	761256169	2022-02	
50	Electronic controller F52 – RF	1	761256170	2022-02	
51	Display PCB	1	612900059	2022-02	
52	Table top upper part, grey	1	761234132	2022-02	
52	Table top upper part, white	1	761234133	2022-02	
53	Table top front, grey	1	761230454	2022-02	
53	Table top front, white	1	761230455	2022-02	
54	Power Supply Unit for fan motor	1	765072987	2022-02	
55	Fan wire	1	765072656	2022-02	
56	Door switch	1	450400111	2022-02	
57	Appliance inlet	1	451022002	2022-02	
58	EMI/EMC filter	1	451022004	2022-02	
59	Power cord, EU	1	765072566	2022-02	
59	Power cord, UK	1	765072567	2022-02	
59	Power cord, DK	1	765072568	2022-02	
60	Cover for power connection	1	762232110	2022-02	
61	Screw M4x10	2	420340070	2022-02	
62	Alarm terminal block	1	765070705	2022-02	

Item no.	Description	Orig. used (pcs)	Gram part no.	Introduced	Terminated
63	Ribbon cable (500 mm)	1	765072661	2022-02	
64	Keypad – 9 buttons – RR/RF	1	765041889	2022-02	
64	Keypad – 9 buttons – RR*	1	765042520	2022-02	
65	Cap for programming cable	1	765080566	2022-02	
66	Cover plug, white	1	765081247	2022-02	
66	Cover plug, grey	1	765081248	2022-02	
67	Door lock	1	765080093	2022-02	
68	Key	1	761220166	2022-02	
69	Electronic LTP	1	453580515	2022-02	
70	Screw M4x70	4	420178125	2022-02	
71	10 A Time-delay fuses 5 x 20 mm	2	765070719	2022-02	
72	Wire incl. time-delay fuse, phase	1	765073355	2022-02	
73	Wire incl. time-delay fuse, neutral	1	765073356	2022-02	
74	Hangtag	1	765040288	2022-02	
75	Power Supply Unit to LED light in glass door – RR*	1	765073350	2022-02	
76	Wire to LED light in glass door – RR*	1	765072682	2022-02	
77	Heater wire incl. thermal limiter – RF	1	765073327	2022-02	

Mechanical parts

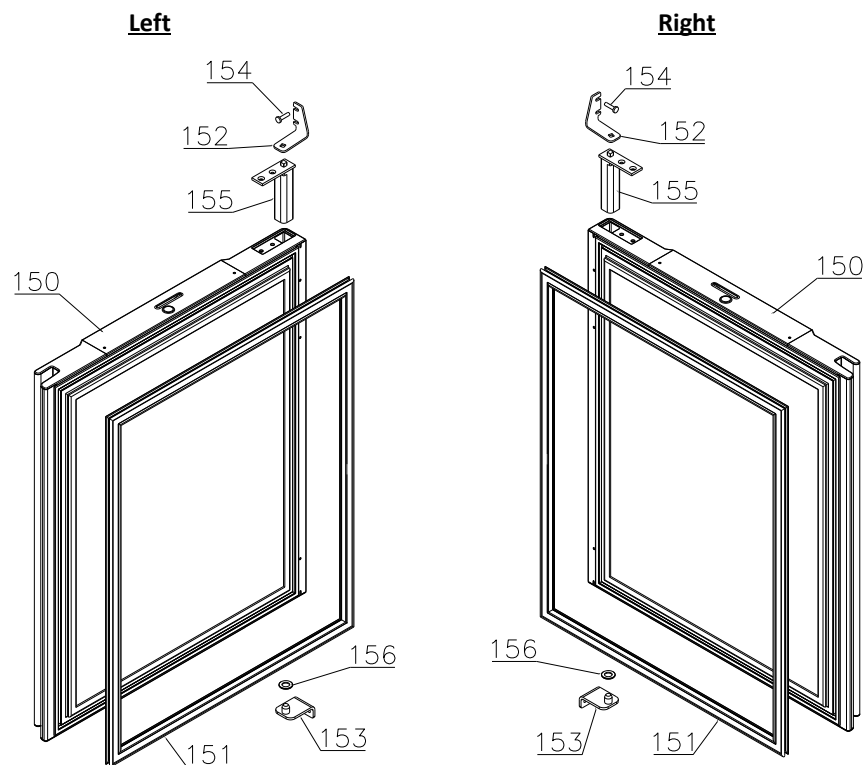
Cabinet



Item no.	Description	Orig. used (pcs)	Gram part no.	Introduced	Terminated
100	Air distribution plate	1	761234135	2022-02	
101	Lock bracket	1	761222761	2022-02	
102	Insulation plug for access port	1	765080563	2022-02	
103	Plastic cap	1	501020023	2022-02	
104	Air relief valve	1	765081206	2022-02	
105	Drip tray complete incl. fan, gasket and screws	1	762223098	2022-02	
106	Screw M4x16	3	422701019	2022-02	
107	Suspension plug	4	765081213	2022-02	
108	Cover bracket, grey	1	761222759	2022-02	
108	Cover bracket, white	1	761222758	2022-02	
109	Drain pipe	1	761221755	2022-02	
109	Drain pipe – RF (HXK95AT)	1	762230400	2022-40	
110	Water trap	1	760082891	2022-02	

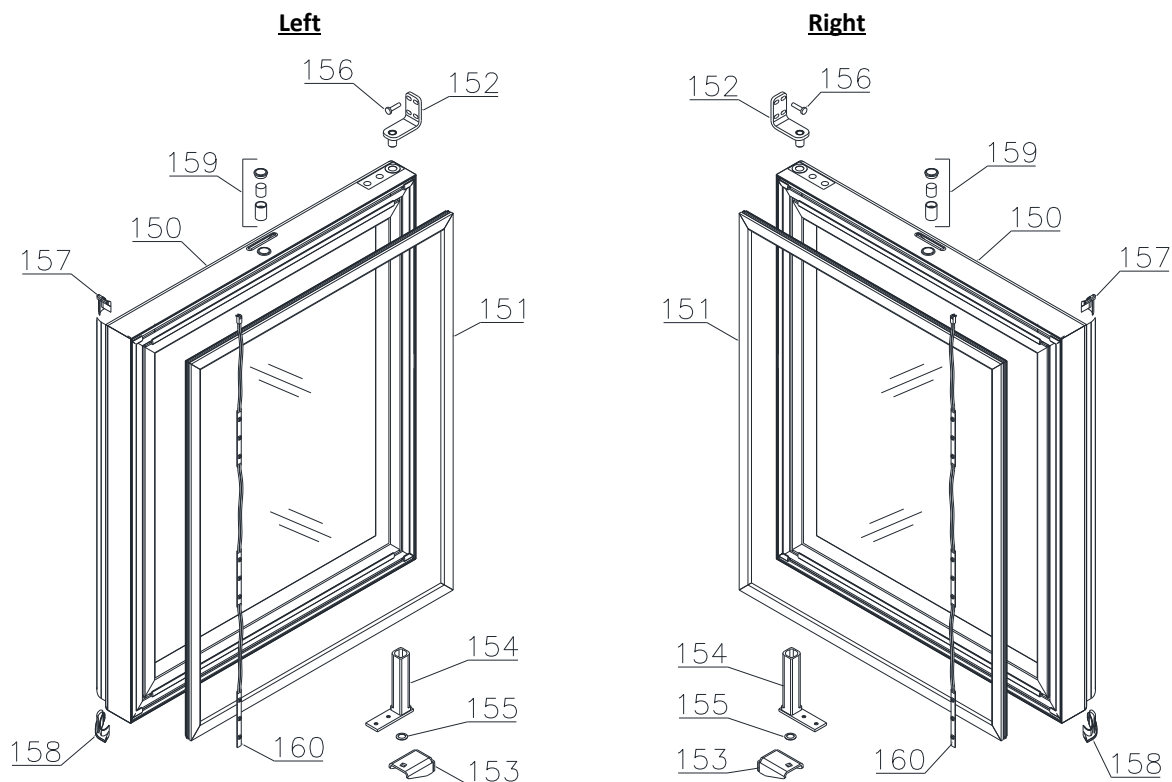
Item no.	Description	Orig. used (pcs)	Gram part no.	Introduced	Terminated
111	Room sensor (A-sensor, 2500 mm)	1	453531504	2022-02	
112	Reference sensor (E-sensor, 2500 mm)	1	453531504	2022-02	
113	Liquid container	1	765080384	2022-02	
114	Holder for liquid container	1	761256451	2022-02	
115	LTP sensor (F-sensor, 1040 mm)	1	453531539	2022-02	
116	Evaporator fan	1	765071446	2022-02	
117	Fan motor gasket	1	761223110	2022-02	
118	Screw for fan motor (polyamide)	2	420790001	2022-02	
119	Leg H=100-130 mm	4	765080118	2022-02	
119	Leg H=134-200 mm	4	765080115	2022-02	
119	Leg H=180-250 mm	4	765080116	2022-02	
120	Fixed castor ø80/H=110 mm	2	480270521	2022-02	
120	Fixed castor ø100/H=128 mm	2	480270520	2022-02	
121	Swivel castor ø80/H=110 mm	2	480270522	2022-02	
121	Swivel castor ø100/H=128 mm	2	480260050	2022-02	
122	Screw M8x12	8 (4x2)	422715000	2022-02	
123	Foot pedal complete	1	819581052	2022-02	
124	Spring	1	761224005	2022-02	
125	Plastic cap	1	581400019	2022-02	
126	Wheel bracket complete	1	761223051	2022-02	
127	Adjustable screw leg	2	761223073	2022-02	
128	Cabinet anti-tilt set	1	819581051	2022-02	

Solid door – RR/RF



Item no.	Description	Orig. used (pcs)	Gram part no.	Introduced	Terminated
150	Door complete, stainless - right	1	761232902	2022-02	2024-40
150	Door complete, stainless - right	1	762234002	2024-41	
150	Door complete, stainless – left	1	761232912	2022-02	2024-40
150	Door complete, stainless – left	1	762234003	2024-41	
150	Door complete, white - right	1	761232905	2022-02	2024-40
150	Door complete, white - right	1	762234000	2024-41	
150	Door complete, white - left	1	761232915	2022-02	2024-40
150	Door complete, white - left	1	762234001	2024-41	
151	Gasket	1	761222727	2022-02	
152	Top hinge, right	1	762222806	2022-02	
152	Top hinge, left	1	762222808	2022-02	
153	Bottom hinge	1	762222805	2022-02	
154	Screw M5x12	4	420182000	2022-02	
155	Self-closing device	1	763251779	2022-02	
156	Washer	1	760250524	2022-02	

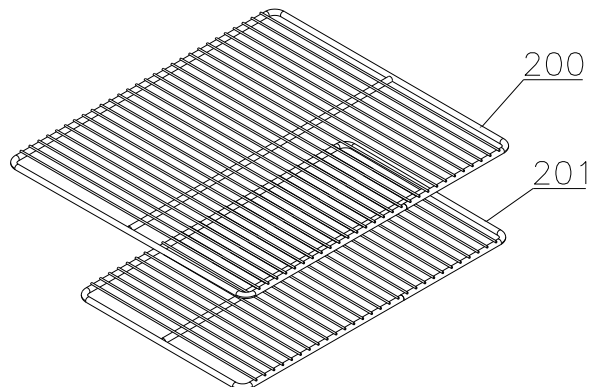
Glass door – RR*



Item no.	Description	Orig. used (pcs)	Gram part no.	Introduced	Terminated
150	Glass door, right	1	761232962	2022-02	
150	Glass door, left	1	761234116	2022-02	
151	Gasket	1	761222704	2022-02	
152	Top hinge	1	761222906	2022-02	
153	Bottom hinge, right	1	762222829	2022-02	
153	Bottom hinge, left	1	762222830	2022-02	
154	Self-closing device	1	763251745	2022-02	
155	Washer	1	420178003	2022-02	
156	Screw M5x12	4	420182000	2022-02	
157	Top plastic end fitting	1	761222724	2022-02	
158	Bottom plastic end fitting	1	761222725	2022-02	
159	Door magnet complete	1	761250786	2022-02	
160	LED light strip	1	761222706	2022-02	

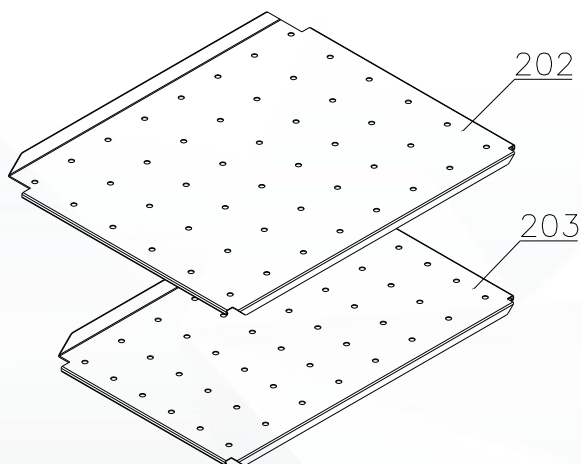
Accessories

Wire shelves



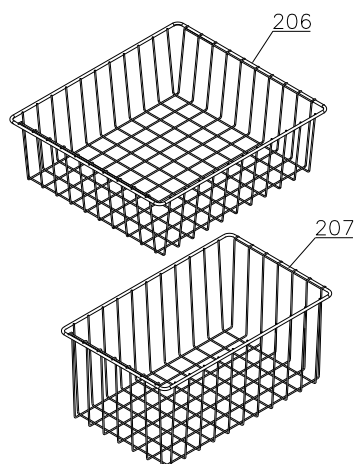
Item no.	Description	Orig. used (pcs)	Gram part no.	Introduced	Terminated
200	Wire shelf, large – white	-	818721001	2022-02	
200	Wire shelf, large – stainless	-	818721006	2022-02	
201	Wire shelf, small – white	-	818721019	2022-02	
201	Wire shelf, small – stainless	-	818721007	2022-02	

Perforated shelves



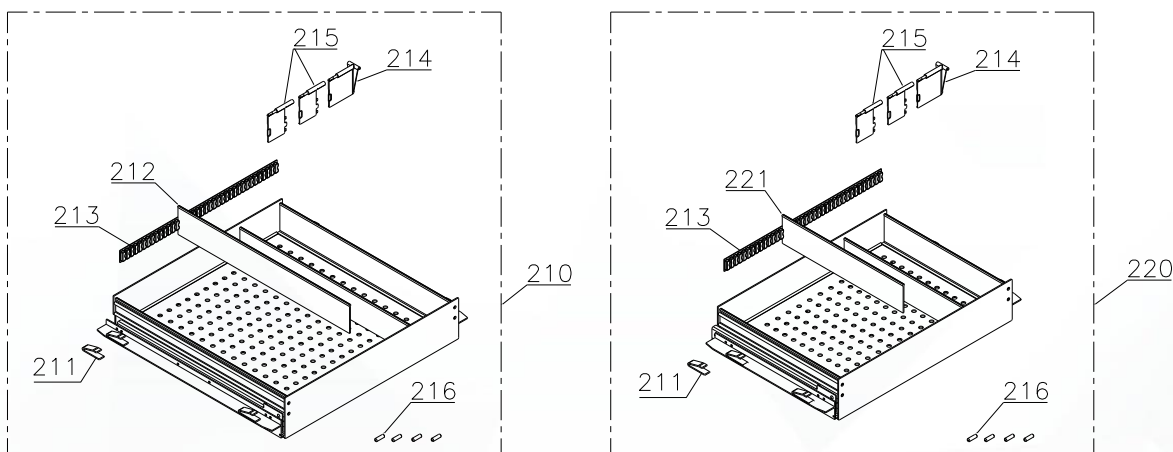
Item no.	Description	Orig. used (pcs)	Gram part no.	Introduced	Terminated
202	Perforated shelf, large	-	761230416	2022-02	
203	Perforated shelf, small	-	761230417	2022-02	

Wire baskets



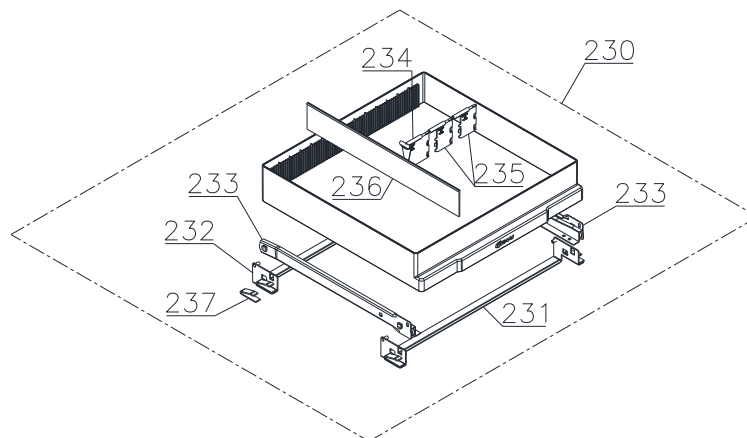
Item no.	Description	Orig. used (pcs)	Gram part no.	Introduced	Terminated
206	Wire basket, large	-	818721022	2022-02	
207	Wire basket, small	-	818721029	2022-02	

Alu drawers



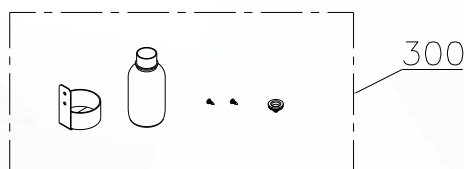
Item no.	Description	Orig. used (pcs)	Gram part no.	Introduced	Terminated
210	Alu drawer complete, large	1	761230456	2022-02	
211	Plastic clip	4	761230044	2022-02	
212	Divider rail	2	761230435	2022-02	
213	Holder for divider rail	2	761230436	2022-02	
214	Plastic divider 1	15	761230021	2022-02	
215	Plastic divider 2	30	761230022	2022-02	
216	Centre screw M6x20 (polyamide)	4	420788200	2022-02	
220	Alu drawer complete, small	1	761230457	2022-02	
221	Divider rail	2	761230448	2022-02	

Plastic drawers



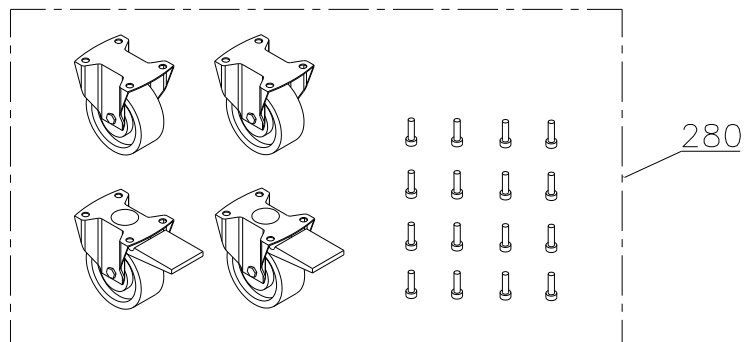
Item no.	Description	Orig. used (pcs)	Gram part no.	Introduced	Terminated
230	Plastic drawer complete	1	761230972	2022-02	
231	Bracket for drawer, front	1	761230957	2022-02	
232	Bracket for drawer, back	1	761233290	2022-02	
233	Set of sliding rails	1	761230428	2022-02	
234	Plastic divider 1	10	761230021	2022-02	
235	Plastic divider 2	30	761230022	2022-02	
236	Divider rail	2	761230088	2022-02	
237	Plastic clip	4	761230044	2022-02	

Reference container



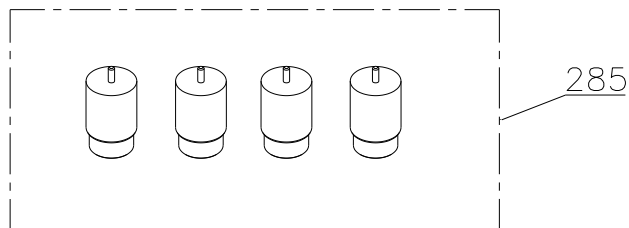
Item no.	Description	Orig. used (pcs)	Gram part no.	Introduced	Terminated
300	Reference container kit	1	761231931	2022-02	

Set of castors



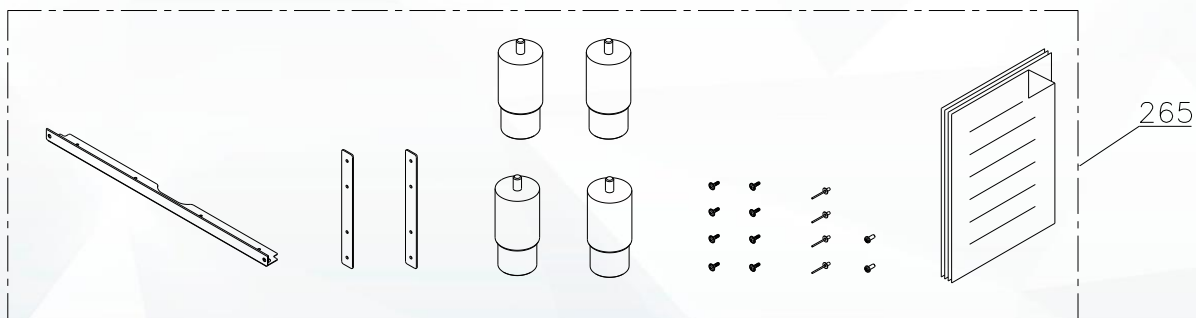
Item no.	Description	Orig. used (pcs)	Gram part no.	Introduced	Terminated
280	Set of castors 125 mm	1	819581004	2022-02	
280	Set of castors 4x360° 125 mm	1	816851006	2022-02	

Set of legs



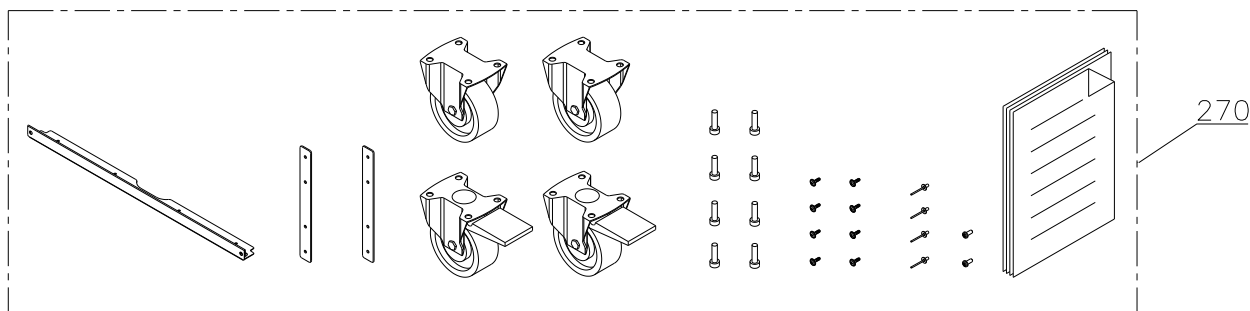
Item no.	Description	Orig. used (pcs)	Gram part no.	Introduced	Terminated
285	Set of legs 100-130 mm	1	819581011	2022-02	

Stacking kit with legs



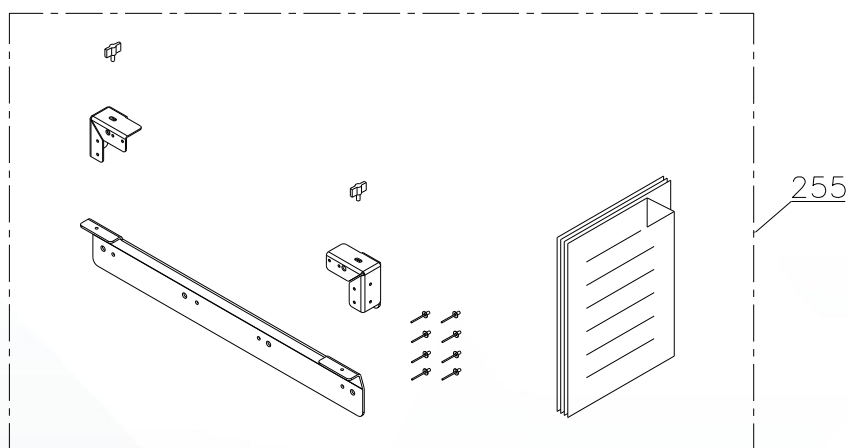
Item no.	Description	Orig. used (pcs)	Gram part no.	Introduced	Terminated
265	Stacking kit with legs	1	819581000	2022-02	

Stacking kit with castors



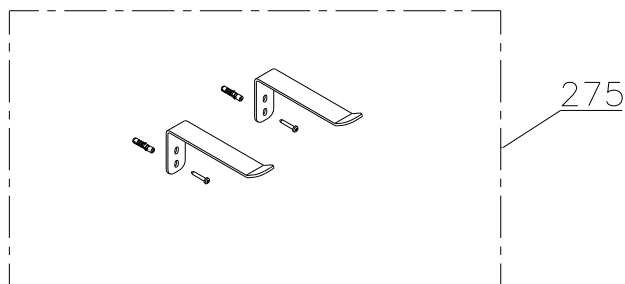
Item no.	Description	Orig. used (pcs)	Gram part no.	Introduced	Terminated
270	Stacking kit with castors	1	819581002	2022-02	

Wall mounting kit



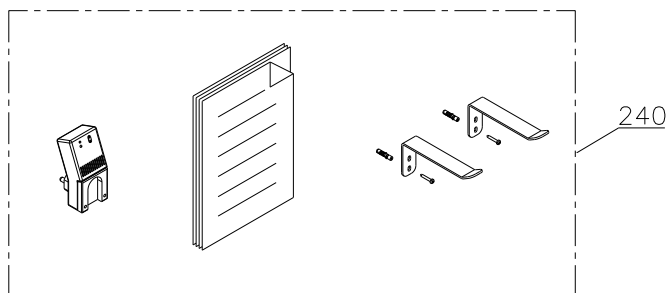
Item no.	Description	Orig. used (pcs)	Gram part no.	Introduced	Terminated
255	Wall mounting kit	1	819581003	2022-02	

Anti-tilt kit



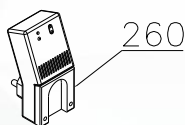
Item no.	Description	Orig. used (pcs)	Gram part no.	Introduced	Terminated
275	Anti-tilt kit	1	819581051	2022-02	

DIN kit 58345



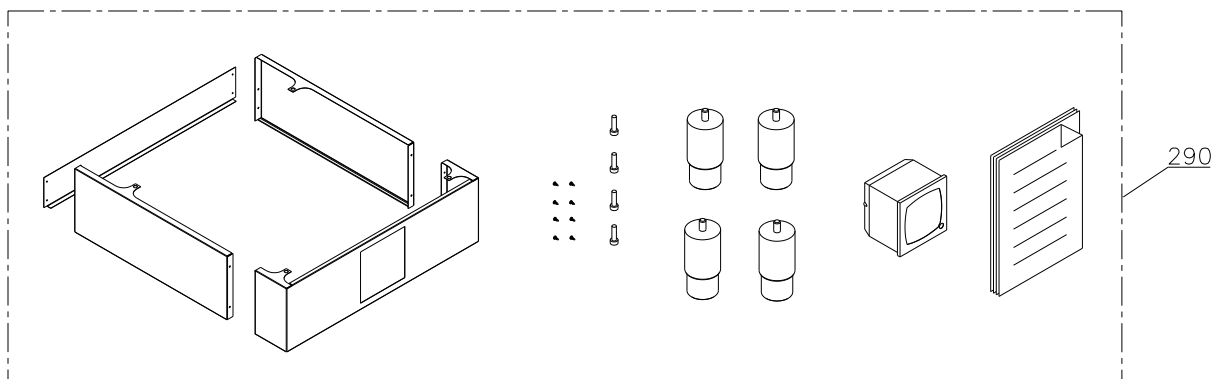
Item no.	Description	Orig. used (pcs)	Gram part no.	Introduced	Terminated
240	DIN kit complete (only for RR, DIN 58345 is not complete without low temp. protection).	1	761234040	2022-02	

Power failure detector (Stromausfall-Melder)



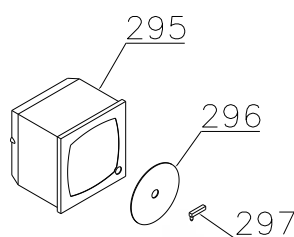
Item no.	Description	Orig. used (pcs)	Gram part no.	Introduced	Terminated
260	Stromausfallmelder SAM-1000	1	765072733	2022-02	

Chart recorder kit



Item no.	Description	Orig. used (pcs)	Gram part no.	Introduced	Terminated
290	Chart recorder kit, stainless	1	819980028	2022-02	
290	Chart recorder kit, white	1	819980029	2022-02	

Chart recorder parts



Item no.	Description	Orig. used (pcs)	Gram part no.	Introduced	Terminated
295	Chart recorder	1	761256438	2022-02	
296	Chart recorder paper disc	1	765080324	2022-02	
297	Chart recorder pen	1	765080325	2022-02	



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Log book

Continuous changes are introduced in the log book.

Version 003

- **13. February 2025:** Cooling parts BioCompact II RF – Compressor spare parts kit RF210 HC added.

Version 002:

- **28. October 2024:** Pos 150 – new door added.

Version 001:

- **10. November 2022:** First release of this Spare Part document.

Compressor spare parts kit RF210 HC



Gram Scientific ApS

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John Lund

John B. S. Petersen

13-02-2025

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Notes
