



Service Information

Freestanding Cooling

ARC 4178 IX

8501 417 11120

Last Modification: 06/07/08

Creation Date: 06/07/08

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This document is only intended for qualified technicians who are aware of the respective safety regulations.
Subject to modifications

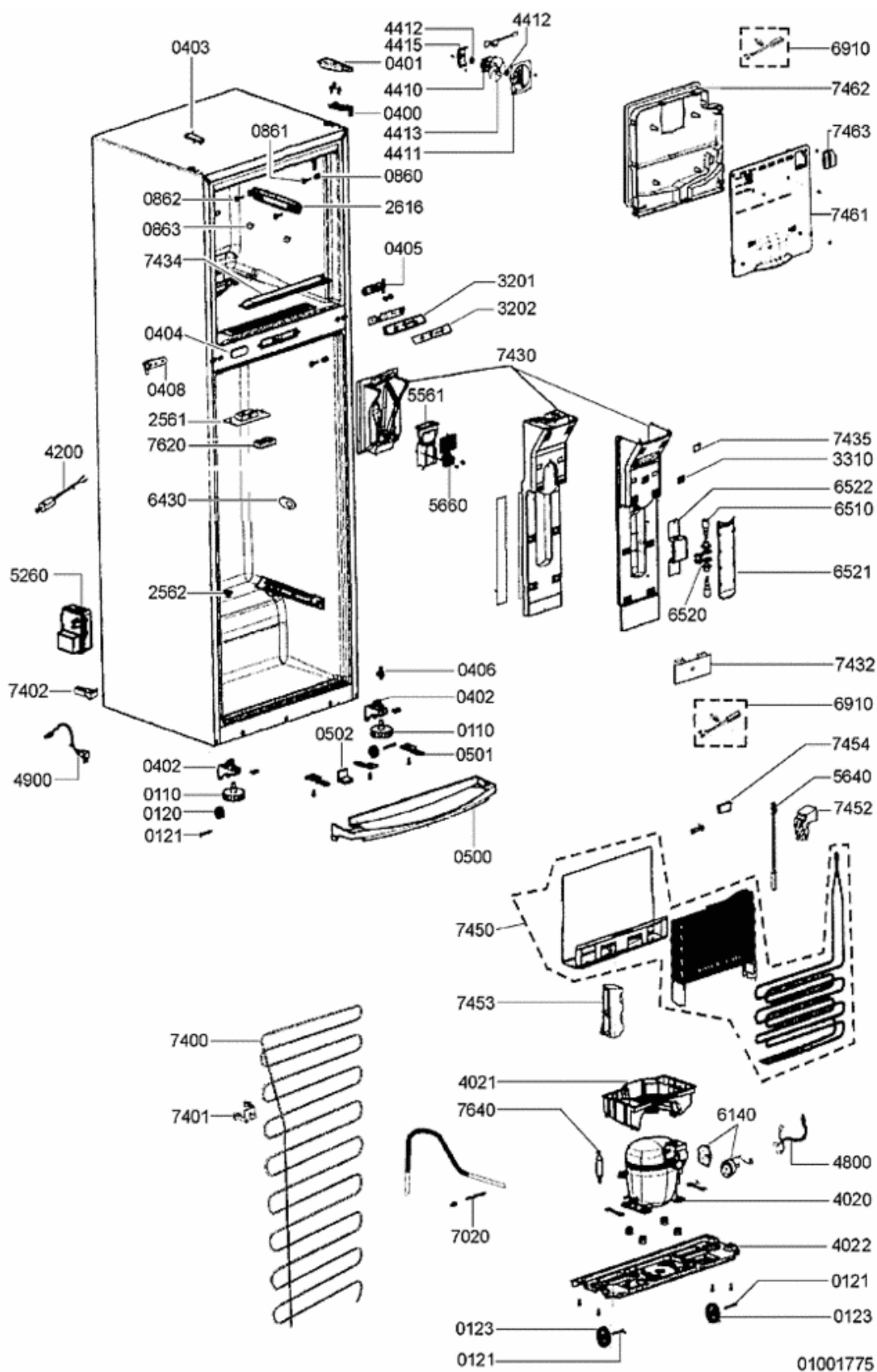
Spare Part List

Pos	12NC	Description
011 0	4812 462 18246	Foot
012 0	4812 528 78071	Roller
012 1	4812 535 48034	Shaft roller
012 3	4812 528 78072	Roller
040 0	4812 417 19286	Hinge upper
040 1	4812 462 79929	Cover hinge
040 2	4812 417 19284	Hinge
040 3	4812 462 79931	Cover IN
040 4	4812 462 79928	Cover IN
040 5	4812 417 19277	Hinge
040 6	4812 417 19278	Pin hinge lower
040 7	4812 446 88148	Door revers.Kit left
040 8	4812 417 19331	Hinge left
047 2	4812 446 88153	Bushing
050 0	4812 440 29498	Plinth IN
050 1	4812 435 18111	Clamp
050 2	4812 440 29499	Cover IN
086 0	4812 404 48923	Support
086 1	4812 535 38083	Pin
086 2	4812 226 08021	Pin rail
086 3	4812 226 08024	Pin rail
101 0	4812 416 10526	Door freezer IN
101 1	4812 532 88051	Bushing IN
101 2	4812 532 88052	Cover AL
101 3	4812 262 78029	Cover
103 0	4812 262 78016	Front cover Drawer
103 1	4812 440 29481	Front cover Drawer
104 0	4812 416 10482	Door refriger. IN
110 0	4812 498 18745	Handle freezer door assembly
110 1	4812 498 18746	Handle refrigerator door assy.
111 7	4812 459 18218	Nameplate WHIRLPOOL
152 0	4812 418 48729	Door dairy freezer
152 1	4812 418 48731	Door dairy
152 5	4812 418 28728	Separator bottles
152 6	4812 418 28817	Bottle shelf door
156 0	4812 460 88297	Rack egg
191 0	4812 468 18329	Gasket.fre.door; fray color
191 1	4812 468 18331	Gasket ref.door
239 0	4812 690 28035	Ice maker
239 1	4812 418 28731	Tank
239 2	4812 404 38733	Support ice maker
239 3	4812 418 28733	Tray icecube
241 0	4812 418 29953	Drawer freezer
241 1	4812 418 48799	Drawer
242 0	4812 418 29954	Crisper
242 1	4812 418 28812	Front cover crisper
255 0	4812 450 88481	Glass shelf
255 1	4812 450 88487	Cover vegetable drawer
255 2	4812 450 88479	Shelf freezer
256 1	4812 460 49848	SUPPORT

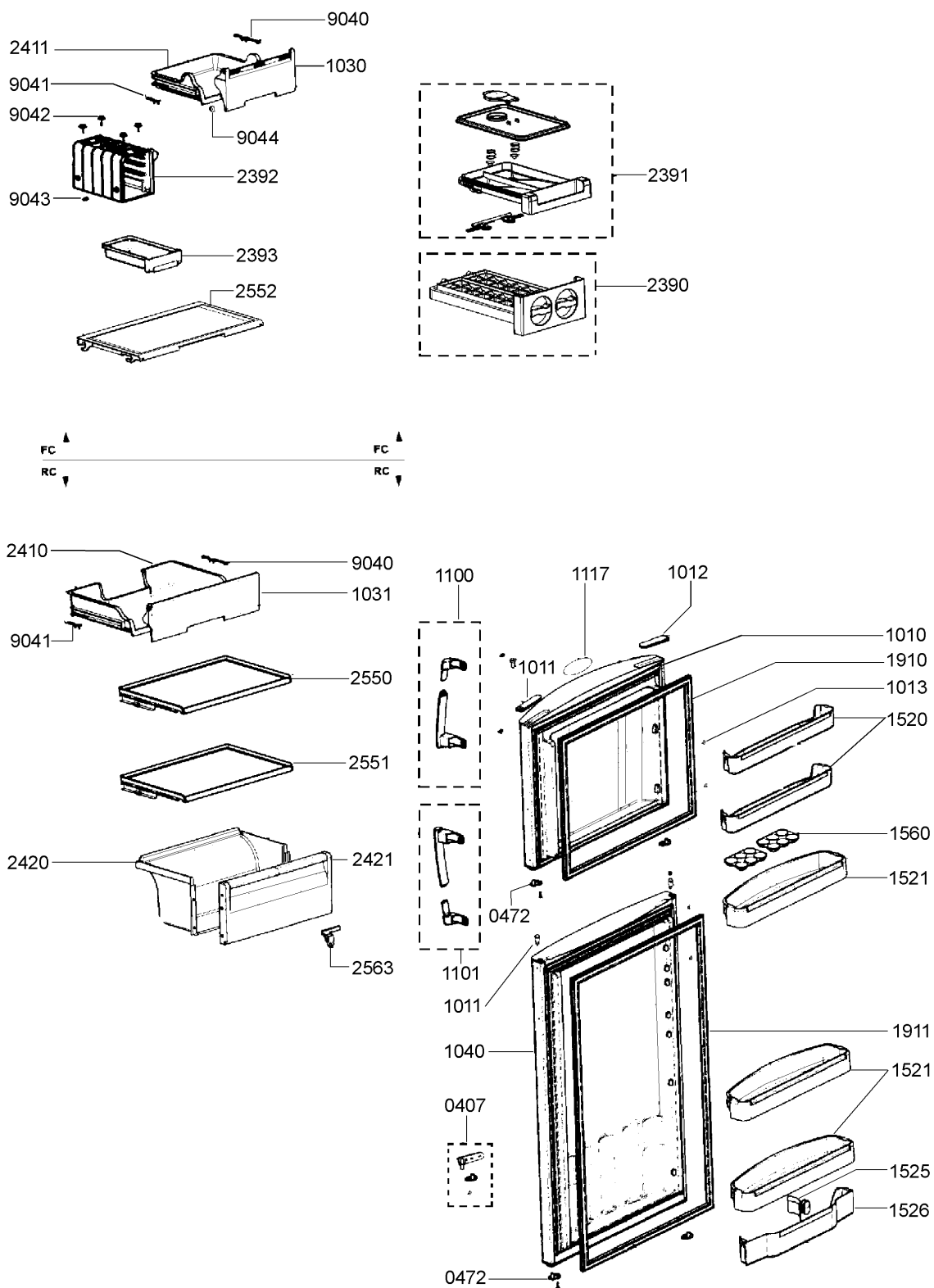
Pos	12NC	Description
256 2	4812 460 48886	Cover
256 3	4812 411 68012	Slide
261 6	4812 462 38333	Rail
320 1	4812 464 69325	Control panel IX
320 2	4812 464 69327	Control panel reflector
331 0	4812 412 79206	Knob
402 0	4812 360 39073	Compressor EMX 70 CLC S P
402 1	4812 418 18667	Tray compressor
402 2	4812 466 99005	Base compressor
420 0	4812 121 08251	Capacitor 5E $\bar{f}$ 380V
441 0	4812 361 18635	Motor fan 220-240V/50-60Hz
441 1	4812 404 18458	Support motor freezer
441 2	4812 466 38021	Damper fan
441 3	4812 361 18282	Fan
441 5	4812 404 18482	Support motor fan
480 0	4812 019 78857	Cable harness
490 0	4812 019 78858	Cable mains
526 0	4812 236 78536	Control board
556 1	4812 224 38027	Cabinet thermostat
564 0	4812 252 28045	Thermal fuse
566 0	4812 282 68064	Thermostat flap
614 0	4812 218 38622	Relay
643 0	4812 215 38022	Thermometer SPACE 4
651 0	4812 134 88061	Lamp 220V-15W
652 0	4812 255 18277	Holder lamp
652 1	4812 462 28624	Protector lamp
652 2	4812 404 68044	Support lamp
691 0	4812 134 28075	Sensor temper.
702 0	4812 526 48253	Tube
740 0	4812 511 48336	condenser
740 1	4812 462 28394	Holder Condenser
740 2	4812 462 28625	Spacer cabinet
743 0	4812 480 28124	Air diffuser assembly
743 2	4812 462 28641	Cover air diffuser
743 4	4812 442 29294	Air guide
743 5	4812 462 28626	Cover air diffuser
745 0	4812 511 38326	Evaporator
745 2	4812 440 29472	Spacebar right
745 3	4812 440 29473	Spacebar left
745 4	4812 404 38735	Support sensor
746 1	4812 440 29557	Cover evaporator front
746 2	4812 462 28945	Cover Evaporator rear
746 3	4812 404 18457	Support sensor
762 0	4812 580 38016	Filter air
764 0	4812 480 28051	Dryer
904 0	4812 404 49842	Clamp right
904 1	4812 404 49843	Clamp left
904 2	4812 526 48192	Bushing
904 3	4812 226 08023	Pin
904 4	4812 526 48257	Stopper

Pos	12NC	Description
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Exploded View

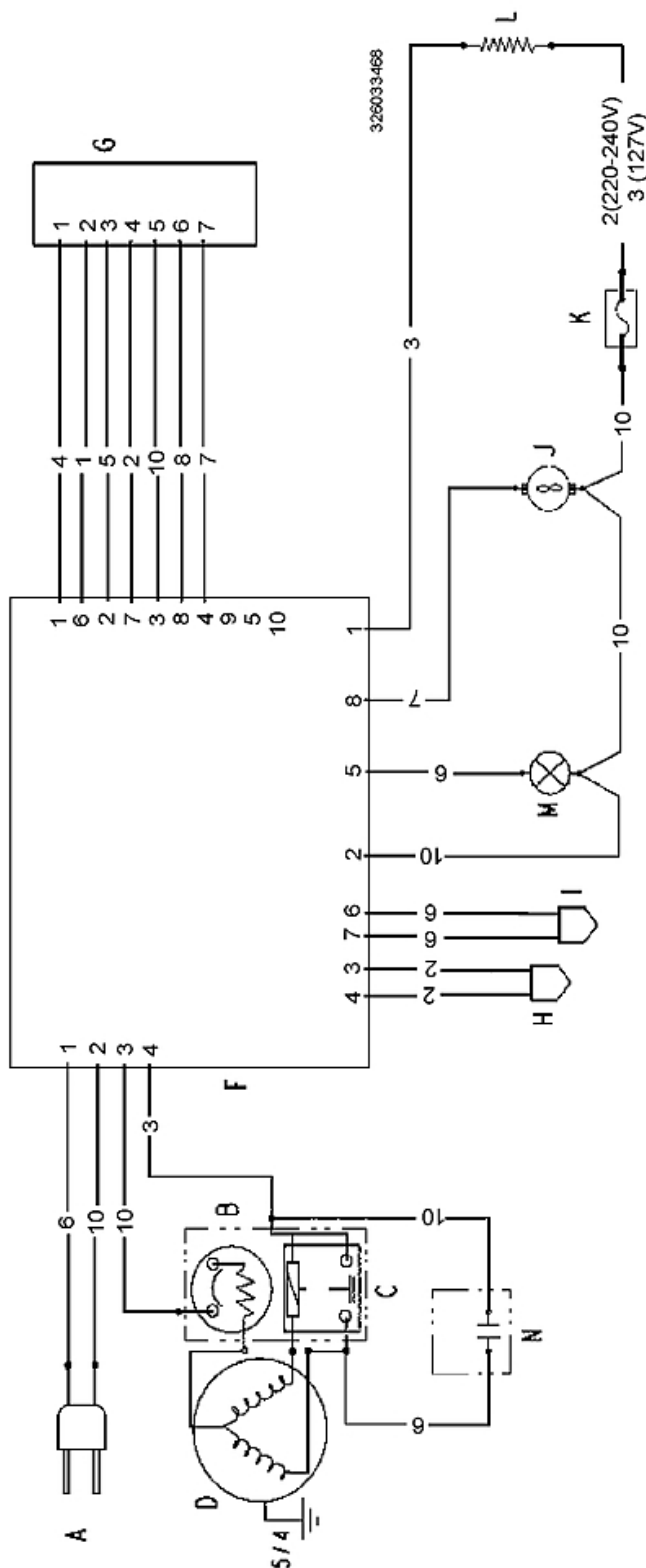


Exploded View



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Circuit Diagram



NOMINAL RATED	MINIMUM	MAXIMUM
127V	104V	140V
220V	198V	242V
220V/230V	198V	253V
220V/240V	198V	264V
230V (INDIA)	160V	260V

OPTIONAL	A	E

4812 711 78133

- 1 BLACK
2 RED
3 WHITE
4 YELLOW
5 GREEN
6 BROWN
7 ORANGE
8 PINK
9 GREY
10 BLUE
- A POWER CORD
B OVERLOAD PROTECTOR
C RELAY
D COMPRESSOR
E PTC
F ELECTRONIC BOARD
G INTERFACE BOARD
H DEFROST TEMP. SENSOR
I FREEZER TEMP. SENSOR
J FREEZER FAN MOTOR
- K THERMOFUSE
L DEFROST HEATER
M REFRIGERATOR LAMP
N RUNNING CAPACITOR

NTC/PTC Chart

Temperature (°C)	NTC Resistance (ohm)	Accuracy	
		(± °C)	(± Ω)
50	967,42	0,5	
40	1429,27	0,5	
30	2160,92	0,5	
20	3350,00	0,5	
10	5335	0,5	137
9,5	5464	0,5	139
9	5598	0,5	142
8,5	5735	0,5	144
8	5876	0,5	147
7,5	6021	0,5	150
7	6170	0,5	153
6,5	6323	0,5	155
6	6480	0,5	159
5,5	6642	0,5	162
5	6808	0,5	165
4,5	6979	0,5	168
4	7155	0,5	172
3,5	7335	0,5	175
3	7521	0,5	179
2,5	7713	0,5	183
2	7909	0,5	187
1,5	8112	0,5	191
1	8320	0,5	196
0,5	8534	0,5	200
0	8755	0,5	205
-0,5	8982	0,5	210
-1	9215	0,5	215
-1,5	9456	0,5	220
-2	9703	0,5	226
-2,5	9958	0,5	231
-3	10221	0,5	237
-3,5	10491	0,4	243
-4	10769	0,4	250
-4,5	11055	0,4	256
-5	11350	0,4	263
-5,5	11654	0,4	271
-6	11967	0,4	278
-6,5	12290	0,4	286
-7	12622	0,4	295
-7,5	12965	0,4	303
-8	13318	0,4	312
-8,5	13681	0,4	322
-9	14056	0,4	332
-9,5	14442	0,4	342
-10	14841	0,4	353
-10,5	15251	0,4	364
-11	15675	0,4	376
-11,5	16111	0,4	388
-12	16561	0,4	401

Temperature (°C)	NTC Resistance (ohm)	Accuracy	
		(± °C)	(± Ω)
-12,5	17026	0,4	415
-13	17505	0,4	429
-13,5	17999	0,5	444
-14	18508	0,5	460
-14,5	19034	0,5	476
-15	19577	0,5	493
-15,5	20137	0,5	511
-16	20715	0,5	530
-16,5	21311	0,5	550
-17	21927	0,5	571
-17,5	22562	0,5	592
-18	23218	0,5	615
-18,5	23896	0,5	640
-19	24596	0,5	664
-19,5	25318	0,5	691
-20	26065	0,5	718
-20,5	26835	0,5	748
-21	27632	0,5	778
-21,5	28455	0,5	811
-22	29305	0,5	844
-22,5	30183	0,5	880
-23	31091	0,5	918
-23,5	32030	0,5	957
-24	33000	0,5	998
-24,5	34003	0,5	1042
-25	35040	0,5	1088
-25,5	36112	0,5	1136
-26	37221	0,5	1187
-26,5	38368	0,5	1240
-27	39554	0,5	1296
-27,5	40781	0,6	1355
-28	42050	0,6	1418
-28,5	43364	0,6	1483
-29	44723	0,6	1552
-29,5	46130	0,6	1625
-30	47586	0,6	1702
-30,5	49093	0,6	1783
-31	50653	0,6	1868
-31,5	52268	0,6	1958
-32	53941	0,6	2052
-32,5	55673	0,6	2152
-33	57467	0,6	2257
-33,5	59326	0,6	2368
-34	61251	0,6	2484
-34,5	63245	0,7	2608

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Technical Data

Product dimensions

Height	187.4 cm
Width	70.9 cm
Depth	72.8 cm

Capacity

Total	
Gross	440 l
net	436 l
Cooling	
Gross	330 l
net	328 l
Freezing	
Gross	110 l
net	108 l

Electrical base data

Voltage	220 V - 240 V
Frequency	50 Hz

Power Consumption

in 24 hours	1.24 kWh
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Rated current

.....	1.3 A
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Rated power

.....	120 W
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Freezing capacity

in 24 hours	7.5 kg
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Compressor

Type	EMX 70 CLC
Capacity(CECOMAF)	191 W

Refrigerant

Type	R 600 a
Quantity	44 g

Thermostat

Cooling
Thermo-Mechanic (Damper)
Freezing
Electronic

Thermostat switching value

Cooling

Switch on temperature

MIN + 11.0 °C
MED + 7.0 °C
MAX + 4.0 °C

Switch off temperature

MIN + 5.0 °C
MED + 0.0 °C
MAX - 5.0 °C

Freezing

Switch on temperature

MIN - 15.0 °C
MED - 18.0 °C
MAX - 20.0 °C

Switch off temperature

MIN - 21.0 °C
MED - 24.0 °C
MAX - 26.0 °C

Service Bulletin 4812 711 40238

AUTHOR: Jochen Hohl

Last Update: 06/30/09

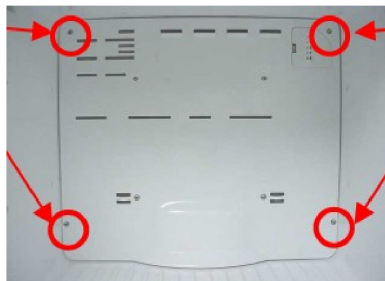
VERSION: 1.0

TITLE: No Cooling or not enough cooling at the refrigerator compartment

CAUSE

- 1 Door alignment: The gaskets must be in perfect contact with cabinet front face to avoid air entrance between the gasket and the cabinet.
- 2 Gasket condition: Deformation due to a door reversion should be checked
- 3 Evaporator blocked by ice. Defrosting hose through drip tray blocked by ice.
- 4 Ice formation in the air ducts.

1. Remove all internal components of the freezer compartment.
2. Release the freezer temperature sensor and disconnect the fan motor connector.
3. Remove all 4 screws that are attaching evaporator cover and pull it out.



4. Dry the internal compartment freezer well, even the air ducts return.
5. If necessary incline the product backwards, that all water is able to leave the air ducts.
6. Finally reorganize the internal components.
7. Remove the electronic control board of the product.
8. Replace the electronic control board with the new one, which is mentioned in the following charts.

For the following models please use this Control Board:

Service 12 NC: 4812 236 78533

Factory code: 326034906

Model	12NC	Model	12NC
WBM451	8501 413 82000	WBM501	8501 417 82000
WBM451	8501 413 82002	WBM501	8501 417 82002
WBM451	8501 413 82003	WBM501	8501 417 82003
WBM451	8501 413 82003	WBM502	8501 417 82100
WBM452	8501 413 82100		

For the following models please use this Control Board:

Service 12 NC: 4801 311 00001

Factory code: W10172114

Model	12NC	Model	12NC
ARC4130AL	850141301030	ARC4170	850141710000
ARC4130AL	850141301032	ARC4170	850141710002
ARC4130AL	850141301033	ARC4170	850141710003
ARC4130AL	850141301033	ARC4170	850141710003
ARC4130AL	850141201030	WBM501IX	850141742040
ARC4120AL-1	850141201040	WBM501IX	850141742043
ARC4120AL-1	850141201042	WBM501IX	850141742044
ARC4120AL-1	850141201043	WBM502	850141780100
ARC4170AL	850141701030	WBM502	850141765100

ARC4170AL	850141701032	ARC4178	850141711100
ARC4170AL	850141701033	WBM502	850141786100
ARC4170AL	850141710030	WBM502IX	850141765140
ARC4170AL	850141710032	ARC4178IX	850141715120
ARC4170AL	850141710033	ARC4178IX	850141711120
WBM451	850141380000	WBM502IX	850141786140
WBM451	850141380002	ARC4178AL	850141711150
WBM451	850141380003	WBM451IX	850141365040
WBM451	850141380003	WBM451IX	850141365042
ARC4130	850141336000	WBM451IX	850141365043
ARC4130	850141336001	WBM451IX	850141365044
WBM451	850141365000	WBM451IX	850141365044
WBM451	850141365002	CFS710S	850348715000
WBM451	850141365003	CFS710S	850348715002
WBM451	850141365003	CFS710S	850348715003
ARC4130	850141301000	CFS710S	850348715004
ARC4130	850141301002	CFS710S	850348715004
ARC4130	850141301003	CFS700S	850348711000
ARC4130	850141301003	CFS700S	850348711002
WBM451	850141386000	CFS700S	850348711003
WBM451	850141386002	CFS700S	850348711004
WBM451	850141386003	CFS740S	850348716000
WBM451	850141386003	ARC4130IX	850141301040
ARC4130	850141310000	ARC4130IX	850141301042
ARC4130	850141310002	ARC4130/2/I X	850141301052
ARC4130	850141310003	ARC4130/2/I X	850141301053
ARC4130	850141310003	ARC4130/2/I X	850141301053
WBM452	850141380100	ARC4130IX	850141310040
WBM452	850141365100	ARC4130IX	850141310042
ARC4138	850141311100	ARC4130/2/I X	850141310052
WBM452	850141386100	ARC4130/2/I X	850141310053
WBM452IX	850141365140	ARC4130/2/I X	850141310053
CFS700S	850348711005	WBM501IX	850141765040
ARC4138IX	850141311120	WBM501IX	850141765042
ARC4138AL	850141311150	WBM501IX	850141765043
WBM501	850141780000	WBM501IX	850141765044
WBM501	850141780002	ARC4170IX	850141715040
WBM501	850141780003	ARC4170IX	850141715042
ARC4170	850141736000	ARC4170/2/I X	850141715052
ARC4170	850141736001	ARC4170/2/I X	850141715053
WBM501	850141765000	ARC4170IX	850141701042
WBM501	850141765002	ARC4170IX	850141701042
WBM501	850141765003	ARC4170/2/I X	850141701052

ARC4170	850141715000	ARC4170/2/I X	850141701053
ARC4170	850141715001	WBM501IX	850141786040
ARC4170	850141715003	WBM501IX	850141786042
ARC4170	850141701000	WBM501IX	850141786043
ARC4170	850141701002	WBM501IX	850141786044
ARC4170	850141701003	ARC4170IX	850141710040
WBM501WH	850141742000	ARC4170IX	850141710042
WBM501WH	850141742001	ARC4170/2/I X	850141710052
WBM501	850141786000	ARC4170/2/I X	850141710053
WBM501	850141786002	ARC4170/2/I X	850141710053
WBM501	850141786003		

For the following models please use this Control Board:

Service 12 NC: 4812 236 78543

Factory code: 32606241

Model	12NC	Model	12NC
WBM452	8501 413 80101	ARC4178	8501 417 36100
ARC4138	8501 413 36100	WBM502	8501 417 65101
WBM452	8501 413 65101	WBM502	8501 417 86101
WBM452	8501 413 86101	WBM502IX	8501 417 65141
WBM452IX	8501 413 65141	WBM502IX	8501 417 86141
WBM502	8501 417 80101		

For the following models please use this Control Board:

Service 12 NC: 4812 466 68657

Factory code: 326064407

Model	12NC	Model	12NC
WBM452	8501 413 82101	WBM502	8501 417 82101

For the following models please use this Control Board:

Service 12 NC: 4812 236 78548

Factory code: 326065997

Model	12NC	Model	12NC
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ARC 4138	8501 413 11101	ARC4188/IX/A +	8501 418 01121
CFS 700 S	8503 487 11006	ARC 4178 IX	8501 417 15121
ARC 4138 IX	8501 413 11121	ARC 4178 IX	8501 417 11121
ARC 4138 AL	8501 413 11151	ARC4188/AL/A +	8501 418 01150
ARC 4178	8501 417 11101	ARC4188/AL/A +	8501 418 01151
ARC4188/IX/A +	8501 418 01120	ARC 4178 AL	8501 417 11151

For the following models please use this Control Board:

Service 12 NC: 4812 236 78536

Factory code: 326053850

Model	12NC	Model	12NC
KDNA 4000	8550 850 01000	KDNA 4001	8550 850 01120
KDNA 4000	8550 850 01002	VS 350 AL	8501 238 84050
KDNA 4000	8550 850 01003	VS 400 IX	8501 237 84020

Service Bulletin 4812 711 40347

AUTHOR: Robert Zimmermann

Last Update: 03/25/11

VERSION: 1.0

TITLE: Unsticking push-in door gaskets.

SUBJECT: In some cases it can happen, that the customer claims loosen door gaskets.

REMEDIAL ACTION

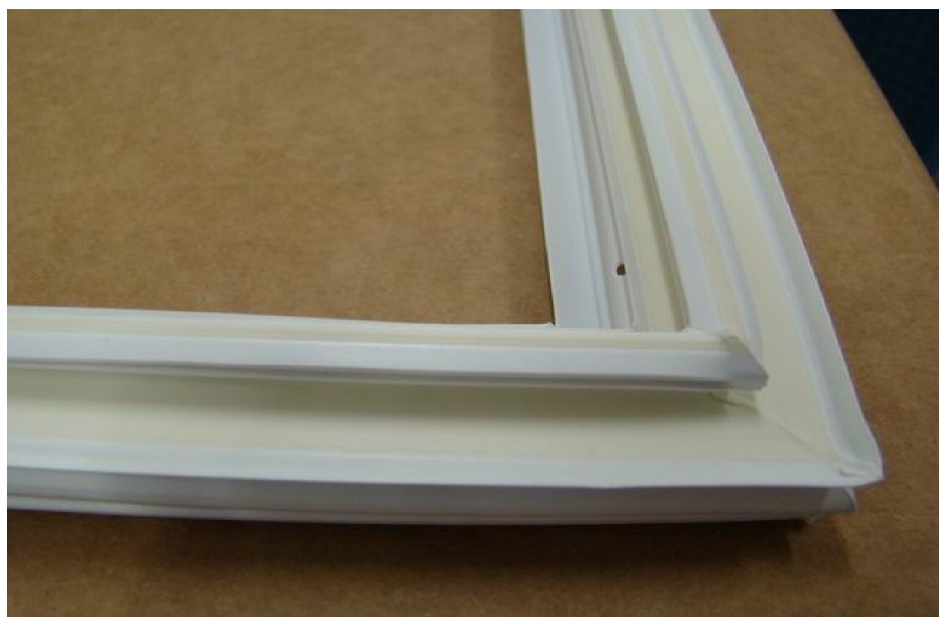
In case of loosen or unsticking push-in door gaskets, the technician can solve the problem by using a double adhesive tape from Tesa (15mm) with the order number 4812 291 08122. The estimated availability date in SPC is week 24/2010. See below the repair instruction.

Repair Instruction for not sticking “push-in” gaskets:

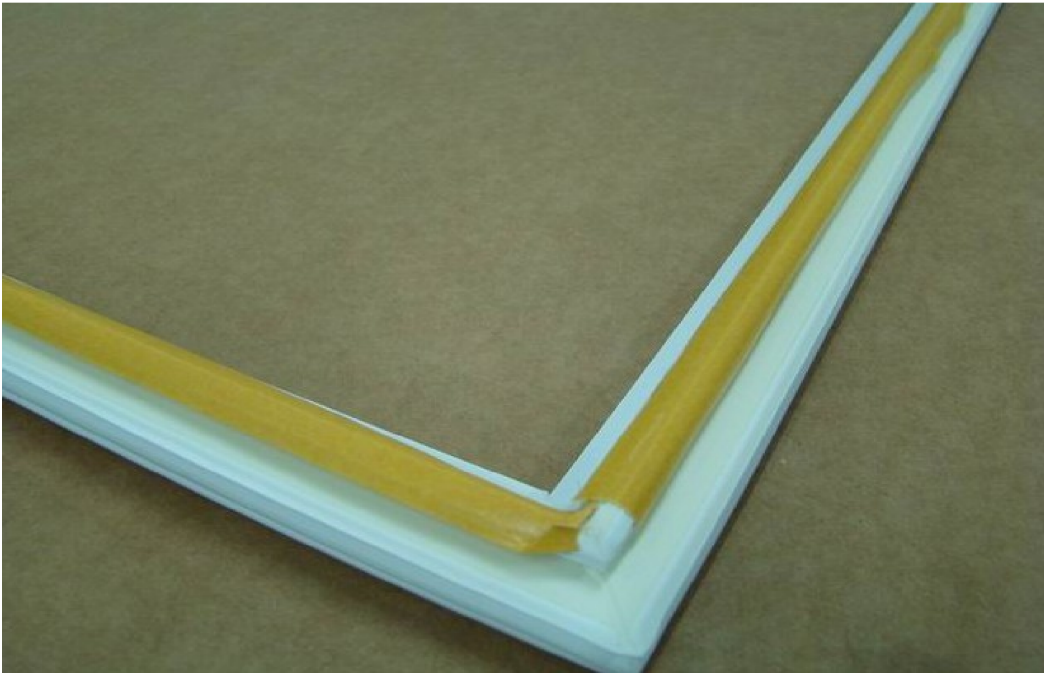


Step 1:

Pull out the gasket from the door and place the gasket with the anker body side towards to the top on a base.



Step 2: Paste up the double adhesive tape on the anker body as shown below.



Step 3: Remove the second protection film from the adhesive tape.



Step 4: Press in the gasket to the gasket channel at the door.
Start always from the corner side.



Service Bulletin 4812 711 40310

AUTHOR: Robert Zimmermann

Last Update: 09/19/08

VERSION: 1.0

TITLE: Running change of capillary tube in production.

CAUSE

due to the fact that the Whirlpool cooling factories will implement step by step the running change from copper capillary tube into aluminum capillary tube, it is necessary for a service intervention to use the correct LOKRING connector. The relevant connection point is on the filter dryer to the capillary tube. The conclusion is valid for both refrigerants, R134a and R600a.

The order number for the LOKRING connector 5/1,8NR MS 00 is: 4801 331 00001