

SERVICE MANUAL

MODULAR COUNTER HOT AND COLD MERCHANDISERS

Models

MC 75 and 100 Hot Full Service

MC 75 and 100 Hot Self Service

MC 75 and 100 Cold Full Service

MC 75 and 100 Cold Self Service

Curved and Cube version



MC 100 Hot Self Service

- NOTICE -

This manual is prepared for the use of trained Service Technicians and should not be used by those not properly qualified. If you have attended a training for this product, you may be qualified to perform all the procedures in this manual.

This manual is not intended to be all encompassing. If you have not attended training for this product, you should read, in its entirety, the repair procedure you wish to perform to determine if you have the necessary tools, instruments and skills required to perform the procedure. Procedures for which you do not have the necessary tools, instruments and skills should be performed by a trained technician.

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Versions		
Version	Issue date dd/mm/yy	Remarks
01/2010	01/01/2010	First release.
12/2014	01/12/2014	Model MC 100 updated. Model MC 75 added. Various updates.

INDEX

Index	4
General technical data.....	6
Removal and replacement of parts in hot version	8
Side Panels.....	8
Front Panel	8
Sliding wheel on door	9
Thermostat (Danfoss)	9
Sensor Danfoss thermostat	10
Tumble switch light and heating	10
Top Shelves.....	11
Bottom Shelf	11
Lamp holder	12
Relay	12
Electronic ballast.....	12
Curved glass (Self service).....	13
Safety thermostat (self service).....	13
Heating element in top (self service).....	14
Blower (self service)	14
Removal and replacement of parts in cold version	15
Side Panels.....	15
Front Panel	15
Sliding wheel on door	16
Thermostat (Danfoss)	16
Temperature Sensor.....	17
Defrost sensor	18
Tumble switch light and cooling.....	19
Lamp holder	19
Relay	20
Electronic ballast.....	20
Curved glass (Self service).....	21
Blower(S)	21
Electrical tests and service procedures hot version.....	22
Heating element test.....	22
TL lamp test.....	22
Adjusting Danfoss EKC 102A thermostat	23
Adjusting Danfoss EKC 102A thermostat (continued).....	24
Control locations full and self serve hot	25
Electrical tests and service procedures cold version.....	26
Heating element test Evaporation tray	26
TL lamp test.....	26
Adjusting Danfoss EKC 102C thermostat	27
Adjusting Danfoss EKC 102C thermostat (continued)	28
Adjusting Danfoss EKC 102C thermostat (continued)	29
Control locations full and self serve cold	30

Troubleshooting	31
Troubleshooting Modular counter 75 and 100 Hot.....	31
Analytic troubleshooting Modular counter 75 and 100 Hot	32
Troubleshooting Modular counter 75 and 100 Cold	33
Analytic troubleshooting Modular counter 75 and 100 Cold	34
Exploded views & Part lists	36
Modular counter 75 Hot full service (cube)	36
Modular counter 75 Hot self service (cube)	38
Modular counter 75 Cold full service (cube)	40
Modular counter 75 Cold self service (cube)	42
Modular counter 100 Hot full service (cube)	46
Modular counter 100 Hot full service (curved front).....	48
Modular counter 100 Hot self service (cube)	50
Modular counter 100 Hot self service (curved front)	52
Modular counter 100 Cold full service (cube)	54
Modular counter 100 Cold full service (curved front)	56
Modular counter 100 Cold self service (cube).....	60
Modular counter 100 Cold self service (curved front).....	64
Electrical diagrams	67
Circuit Diagram Modular counter 75 -100 Hot full and self service	67
Circuit Diagram Modular counter 75 - 100 Cold full and self service	68

GENERAL TECHNICAL DATA

This manual covers the Modular Counter Hot and Cold Merchandisers. The Merchandisers come in 4 versions and 2 sizes of 750 and 1000 mm.

- MC 75 and 100 Hot Full Service.
- MC 75 and 100 Hot Self Service.
- MC 75 and 100 Cold Full Service.
- MC 75 and 100 Cold Self Service.

All of the information, illustrations and specifications contained in this manual are based on the latest product information available at the time of printing.

TECHNICAL DATA

Type	MC 75 Hot Full Service	MC 75 Hot Self Service	MC 75 Cold Full Service	MC 75 Cold Self Service
Power (W)	2600	3000	1300	1300
Fuses needed with power connection 230V, 1N ~ 50Hz (1 phase with zero)	1x 16 A	1x 16 A	1x 10 A	1x 10 A
Standard plug from factory single pole	Two-pole earthed plug 16 A	Two-pole earthed plug 16 A	Two-pole earthed plug 16 A	Two-pole earthed plug 16 A
Sound pressure	-	-	< 70 dB(A)	< 70 dB(A)
Temp. class Full and Self service*	-	-	3M2	3M2
Net weight (kg)	161	156	161	163
Gross weight (kg)	188	182	188	190
Height (mm)	1516	1516	1516	1516
Width (mm)	750	750	750	750
Depth (mm)	771	771	771	771
Maximum loading height			10 cm	10 cm
Temperature class*	-	-	3M2	3M2
Refrigerant**	-	-	R134A	R134A
Amount of refrigerant	-	-	0.450 kg	0.450 kg

* Product temperature class according to NEN-EN 441-6

** The refrigerant complies with the environmental requirements applicable at the time of manufacturing of the unit.

Tools

- Standard set of tools.
- Metric wrenches, sockets and hex socket key wrenches.
- Multi-meter and AC current clamp meter.
- Insulation value tester (Megger)
- Temperature tester.

TECHNICAL DATA

Type	MC 100 Hot Full Service	MC 100 Hot Self Service	MC 100 Cold Full Service	MC 100 Cold Self Service
Power (W)	2800	3000	1300	1300
Fuses needed with power connection 230V, 1N ~ 50Hz (1 phase with zero)	1x 16 A	1x 16 A	1x 10 A	1x 10 A
Standard plug from factory single pole	Two-pole earthed plug 16 A	Two-pole earthed plug 16 A	Two-pole earthed plug 16 A	Two-pole earthed plug 16 A
Sound pressure	-	-	< 70 dB(A)	< 70 dB(A)
Temp. class Full and Self service*	-	-	3M2	3M2
Net weight (kg)	180	175	190	185
Gross weight (kg)	212	206	224	218
Height (mm)	1516	1516	1516	1516
Width (mm)	1000	1000	1000	1000
Depth (mm)	771	771	771	771
Maximum loading height			10 cm	10 cm
Temperature class*	-	-	3M2	3M2
Refrigerant**	-	-	R134A	R134A
Amount of refrigerant	-	-	0.580 kg	0.580 kg

* Product temperature class according to NEN-EN 441-6

** The refrigerant complies with the environmental requirements applicable at the time of manufacturing of the unit.

Tools

- Standard set of tools.
- Metric wrenches, sockets and hex socket key wrenches.
- Multi-meter and AC current clamp meter.
- Insulation value tester (Megger)
- Temperature tester.

REMOVAL AND REPLACEMENT OF PARTS IN **HOT VERSION**

WARNING: Disconnect the electrical power to the machine at the main circuit box. Place a tag on the circuit box indicating the circuit is being serviced.

SIDE PANELS



1. Remove the 3 screws on the backside that hold the panel.
2. Slide the side panel backwards and remove the panel.
3. Reverse the procedure to install.

Note: When placing the plate back lift the plate against the top side and pull the plate on the bottom side to guide it past the side.

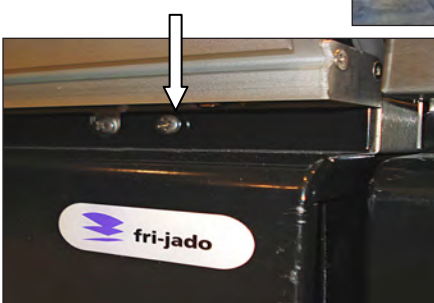


FRONT PANEL



1. Loosen the 2 screws on the bottom front-side.
2. Remove the 2 screws on the top side and remove the panel.
3. Reverse the procedure to install.

Note: When placing the front back see to it that it fits over the side panels.



SLIDING WHEEL ON DOOR



Old version with
separate handles



New version with
integrated handles

1. Remove the door by lifting this out of the runner and bring it towards yourself.
2. Use a drill of 4.2 mm to drill out the 2 pop rivets.
3. Fix the new wheel again with pop rivets of 4.2 mm.
4. Place the door back again.



THERMOSTAT (DANFOSS)

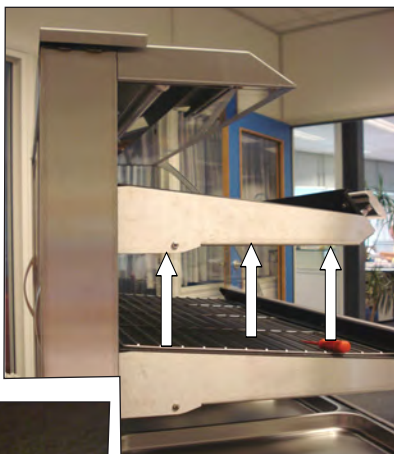


1. Remove the 3 screws that secure the operation panel and open the panel.
2. Loosen the blocking clips on the sides of the thermostat and remove thermostat from housing.
4. Remove the wiring from the thermostat.
5. Reverse the procedure to install.

Note: When changing the thermostat for the hot versions, first always change parameter 07 to heating HE.



SENSOR DANFOSS THERMOSTAT



1. Open the operation panel according prior procedure.
2. Remove the wiring of the sensor on the thermostat.
3. Remove the front glass and both side glasses.
5. Remove the screws that secure the cover profile on the left backside and remove the profile.
6. Remove the screws that secure the top shelf on both sides on the shelf support.
7. Slide the top shelf carefully for 10 cm. to the customer side.
8. Remove the screws that secure the sensor holder and remove the sensor from the holder.
9. Lead the wiring of the sensor to the front and remove the wiring.
10. Reverse the procedure to install.

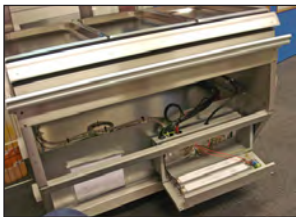
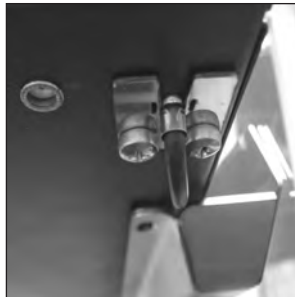
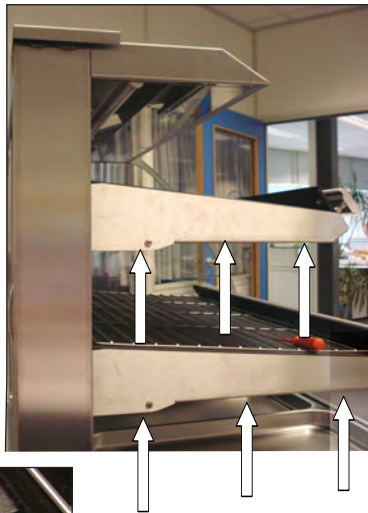
Note: See to it that the sensor is placed straight inside the shelf.

TUMBLE SWITCH LIGHT AND HEATING



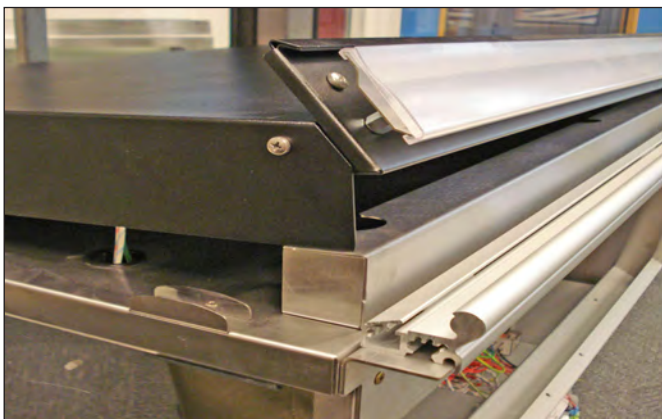
1. Open the operation panel according prior procedure.
2. Disconnect the wiring.
3. Remove the switch by pushing the clamps on both sides.
4. Reverse the procedure to install.

TOP SHELVES



1. Remove the front panel, operation panel, side and front glass according prior procedures.
2. Remove the screws that secure the cover profile on the right hand backside and remove the profile.
3. Remove the screws that secure the shelf on both sides on the shelf support. For top shelf remove the sensor according prior procedure.
4. Remove the screws that secure the cover on the electric box and lower the cover.
5. Disconnect the wiring of the heating element.
6. Remove the shelf by sliding it to the front side and guide the wiring outside.
7. Remove the price rail and holder from the shelf.
8. Reverse the procedure to install.

BOTTOM SHELF



1. Remove the front panel, side and front glass and the gastronorm trays according prior procedures.
2. Remove the screws that secure the shelf on the backside.
3. Remove the screws that secure the cover on the electric box and lower the cover.
4. Disconnect the wiring of the heating element.
5. Remove the shelf by lifting it out of the bottom side and guide the wiring outside.
6. Remove the price rail and holder from the shelf.
7. Reverse the procedure to install.

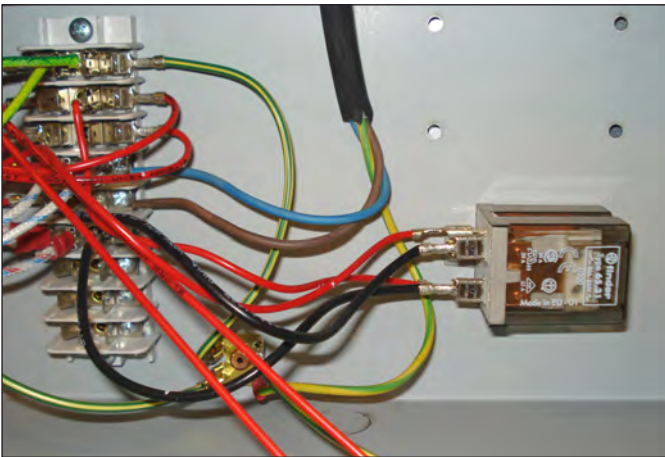
LAMP HOLDER



1. Remove the front glass (only full service) and the lamp.
2. Remove the holder out of the clipped fixation and pull the wiring outside for about 5 cm.
3. Disconnect the wiring by turning and pulling of the wire.
4. Reverse the procedure to install.

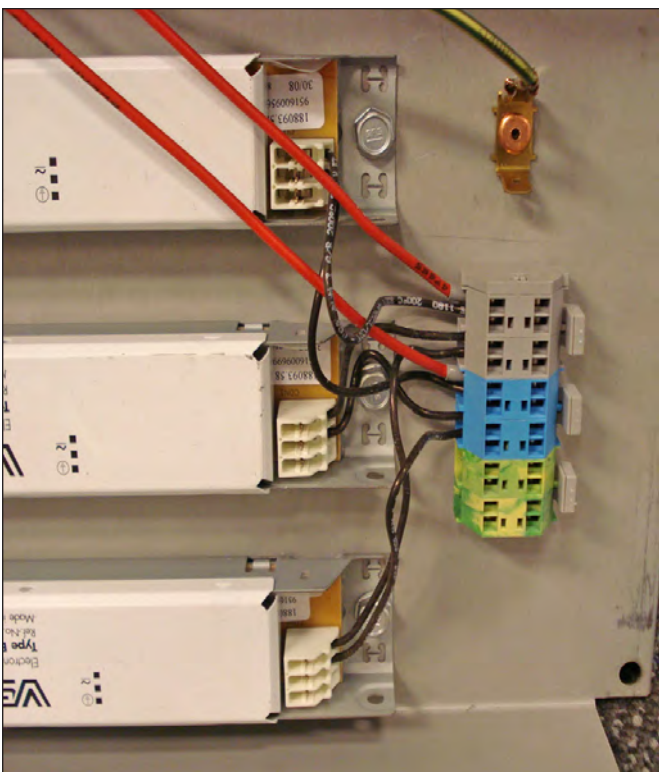
For New type lamp holder, see last page

RELAY



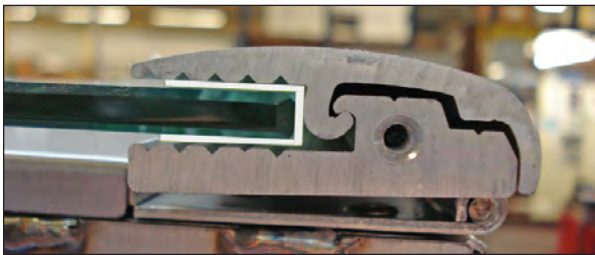
1. Remove the front panel according prior procedure.
2. Remove the screws that secure the cover on the electric box and lower the cover.
3. Remove the wiring from the relay.
4. Remove the screws that secure the relay and remove the relay.
5. Reverse the procedure to install.

ELECTRONIC BALLAST



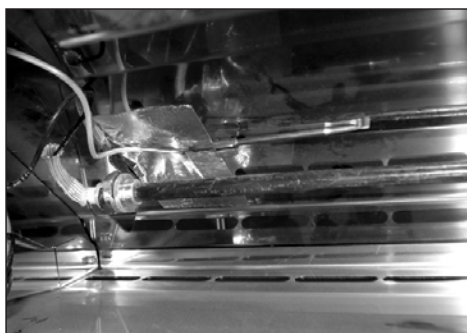
1. Remove the front panel according prior procedure.
2. Remove the screws that secure the cover on the electric box and lower the cover.
3. Remove the wiring from the Ballast.
4. Remove the screws that secure the ballast and remove the ballast.
5. Reverse the procedure to install.

CURVED GLASS (SELF SERVICE)



1. Turn the curved glass to the top position.
2. Remove the cover plates on the mounting profile (if necessary).
3. Loosen the adjusting screws that secure the glass with the a torques key TX15.
4. Remove the curved glass.
5. Place the new glass with the plastic protection profile.
6. Reverse the procedure to install.

SAFETY THERMOSTAT (MC 100 HOT SELF SERVICE)



1. Remove the screws that secure the cover profile on the left backside and remove the profile.
2. Remove, on the top side, the screws that secure the light fixture and turn the light fixture downwards.
3. Remove the sensor from the clip and lead the sensor outside.
4. Remove the screws that secure the thermostat and remove the thermostat.
5. Remove the wiring from the thermostat.
6. Reverse the procedure to install.

Note: Set the thermostat on 175°C.

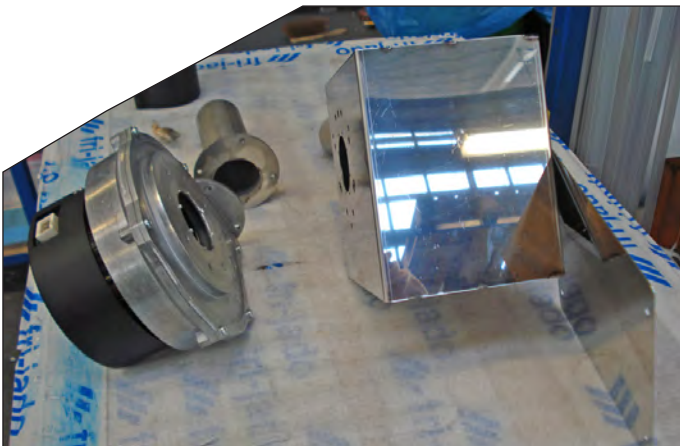
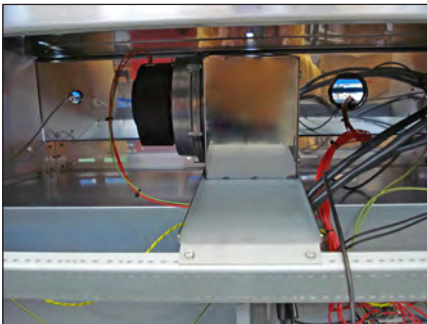
HEATING ELEMENT IN TOP (MC 100 HOT SELF SERVICE)



1. Remove the side glass and the cover profile on the left and right hand side on the backside according prior procedures.
2. Remove, on the top side, the screws that secure the light fixture and turn the light fixture downwards.
3. Slide the insulation sleeve backwards on both sides of the element en remove the wiring.
4. Remove the nuts on both ends on the heating element and remove the element.
5. Reverse the procedure to install.

Note: Don't forget to put the sleeves back on there places.

BLOWER (SELF SERVICE)

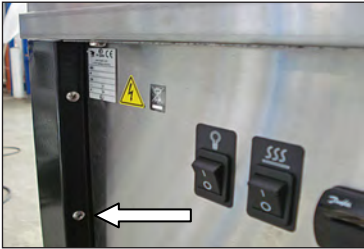


1. Remove the front panel according prior procedure.
2. Remove the bolts that secure the mounting plate of the blower assembly and move the assembly towards yourselves.
3. Remove the wiring from the blower.
4. Remove the screws that secure the cover plate on the blower housing and remove the plate.
5. Remove the screws that secure the blower and remove the blower.
6. Remove the screws that secure the tube with flange and remove the flange.
7. Reverse the procedure to install.

Note: See to it that the steel tubes of the blower are fitted back again inside the PVC tubing.

REMOVAL AND REPLACEMENT OF PARTS IN **COLD VERSION**

WARNING: Disconnect the electrical power to the machine at the main circuit box. Place a tag on the circuit box indicating the circuit is being serviced.

SIDE PANELS

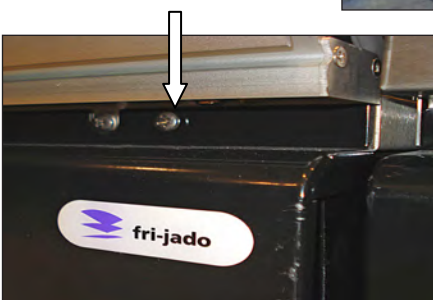
1. Remove the 3 screws on the backside that hold the panel.
2. Slide the side panel backwards and remove the panel.
3. Reverse the procedure to install.

Note: When placing the plate back lift the plate against the top side and pull the plate on the bottom side to guide it past the side.

**FRONT PANEL**

1. Loosen the 2 screws on the bottom front-side.
2. Remove the 2 screws on the top side and remove the panel.
3. Reverse the procedure to install.

Note: When placing the front back see to it that it fits over the side panels.



SLIDING WHEEL ON DOOR



Old version with
separate handles



New version with
integrated handles

1. Remove the door by lifting this out of the runner and bring it towards yourself.
2. Use a drill of 4.2 mm to drill out the 2 pop rivets.
3. Fix the new wheel again with pop rivets of 4.2 mm.
4. Place the door back again.

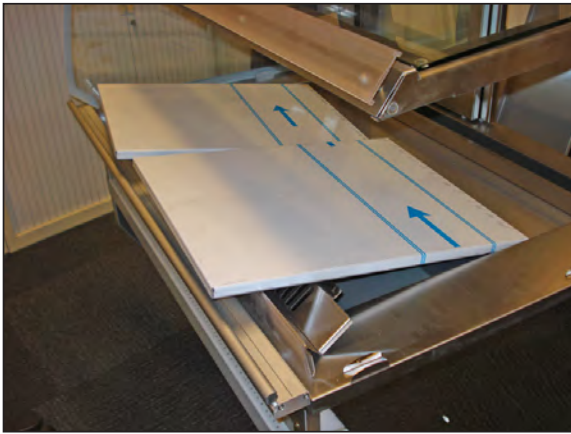


THERMOSTAT (DANFOSS)

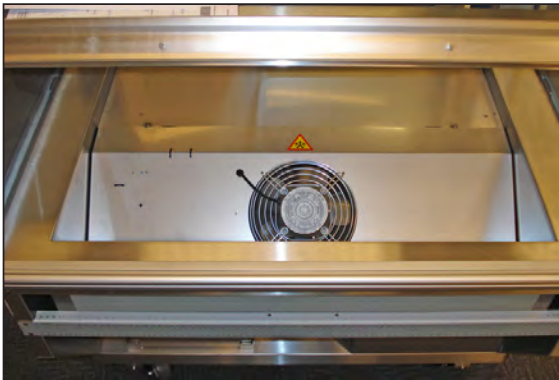


1. Remove the 3 screws that secure the cover panel and remove the panel.
2. Remove the 2 screws that secure the operation panel and remove the panel.
3. Loosen the blocking clips on the sides of the thermostat and remove thermostat from housing.
4. Remove the wiring from the thermostat.
5. Reverse the procedure to install.

TEMPERATURE SENSOR



1. (Full service only) Remove the front glass.
2. Remove the suction grid and the 2 flat plates on the bottom side inside the cabinet.
3. Remove the 2 screws that secure the blower plate and turn the blower plate.
5. Cut the tyrap that holds the sensor and remove the sensor.
6. Remove the operation panel according prior procedure and disconnect the wiring of the sensor on the thermostat.
7. Remove the sensor.
8. Reverse the procedure to install.



Note 1: When refitting the sensor it is easiest to guide the wiring of the sensor through the hole starting on the bottom side.

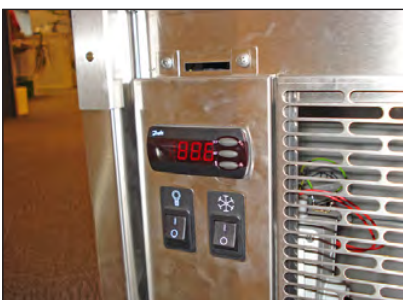
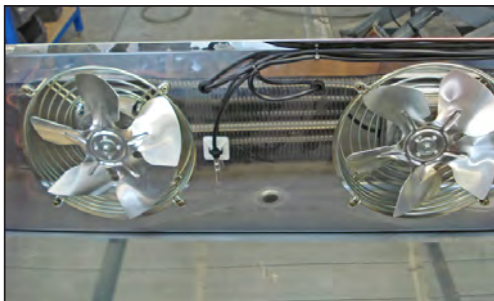
Note 2: The sensor wiring will pass through the polyurethane foam. When installing the new sensor some extra sealant should be applied to recreate a watertight fit.



Full service
older model
1 blower



Full and
Self service
2 blowers



DEFROST SENSOR



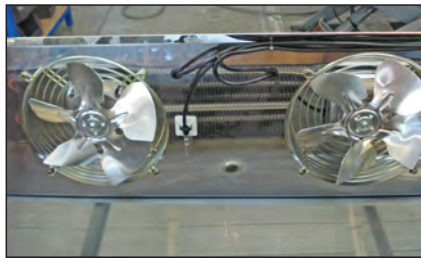
1. Remove the front glass (full service only), suction grid, the 2 flat plates, blower plate and operation panel according prior procedures.
2. Lift out the holder with the honeycomb profile.
3. Measure the distance and place where the sensor is placed inside the evaporator. Remove the sensor from between the segments of the evaporator.
4. Disconnect the wiring on the thermostat and remove the sensor.
5. Reverse the procedure to install.

Note 1: When refitting the sensor it is easiest to guide the wiring of the sensor through the hole starting on the bottom side.

Note 2: The sensor wiring will pass through the polyurethane foam. When installing the new sensor some extra sealant should be applied to recreate a watertight fit.



Full service
older model
1 blower



Full and
Self service
2 blowers



TUMBLE SWITCH LIGHT AND COOLING



1. Open the operation panel according prior procedure.
2. Disconnect the wiring.
3. Remove the switch by pushing the clamps on both sides.
4. Reverse the procedure to install.



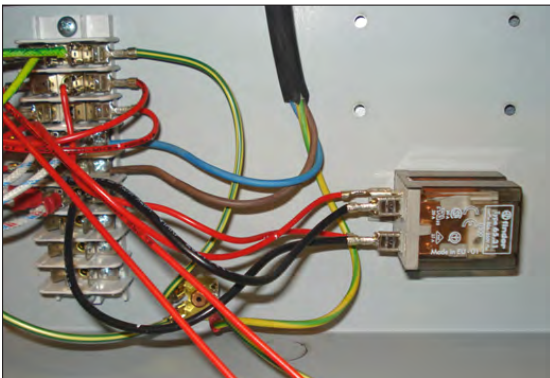
LAMP HOLDER



1. Remove the front glass (only full service) and the lamp.
2. Remove the holder out of the clipped fixation and pull the wiring outside for about 5 cm.
3. Disconnect the wiring by turning and pulling of the wire.
4. Reverse the procedure to install.

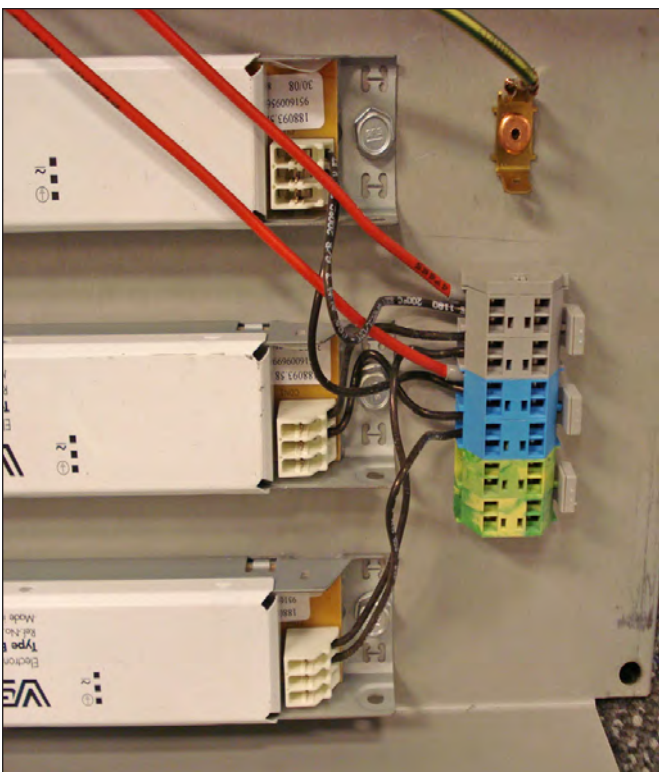


RELAY



1. Remove the cover panel according prior procedure.
2. Remove the screw that secures the ventilation backpanel and remove the panel.
3. Remove the screws that secure the cover on the electric box and lower the cover.
3. Remove the wiring from the relay.
4. Remove the screws that secure the relay and remove the relay.
5. Reverse the procedure to install.

ELECTRONIC BALLAST



1. Remove the cover panel and the ventilation back panel according prior procedures.
2. Remove the screws that secure the cover on the electric box and lower the cover.
3. Remove the wiring from the ballast.
4. Remove the screws that secure the ballast and remove the ballast.
5. Reverse the procedure to install.

CURVED GLASS (SELF SERVICE)



1. Turn the curved glass to the top position.
2. Remove the cover plates on the mounting profile (if necessary).
3. Loosen the adjusting screws that secure the glass with the a torques key TX15.
4. Remove the curved glass.
5. Place the new glass with the plastic protection profile.
6. Reverse the procedure to install.

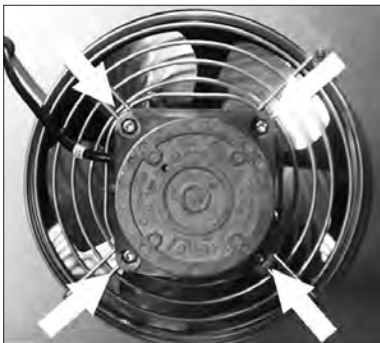


BLOWER(S)



1. Remove the blower plate according prior procedure.
2. Disconnect the wiring of the blower.
3. Remove the bolt that secures the fan blade and remove the fan blade.
4. Remove the 4 screws that secure the the motor to the grill and remove the motor.
5. Reverse the procedure to install.

Note: The blower blade may be sharp.



ELECTRICAL TESTS AND SERVICE PROCEDURES **HOT VERSION**

WARNING: Disconnect the electrical power to the machine at the main circuit box. Place a tag on the circuit box indicating the circuit is being serviced.

HEATING ELEMENT TEST

Note: When testing the resistance of the element remove the wiring.

Type	Wattage/ Voltage	Resistance Ω -5% + 10%	Current A
MC 10 full and self service	900 / 230	58.8	3.9
MC 10 self service	150 / 230	352.8	0.6

TL LAMP TEST

Type	Wattage/ Voltage	Resistance Ω -5% + 10%	Current A
TL lamp 21 W/830	24 / 230	8-10	3.9

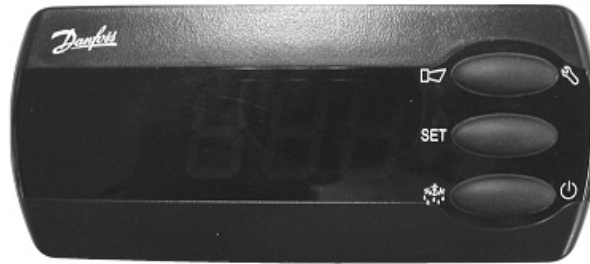
Note: When the resistance is ∞ than the lamp is broken.

PTC 1K SENSOR TEST

1. Remove the front glass (full service only), the side glasses, the screws on the shelf support and the sensor holder according to prior procedures.
2. Remove the wiring from the sensor.
3. Connect a temperature tester to the probe of the sensor for comparison.
4. Test the probe with an Ohmmeter.

Temperature		Resistance Ω
°F	°C	± 5 Ohms
50	10	885
68	20	961
77	25	1000
86	30	1040
104	40	1123
122	50	1210
140	60	1300
158	70	1394
176	80	1492
194	90	1594
212	100	1700

ADJUSTING DANFOSS EKC 102A THERMOSTAT



Changing set point

1. Press the middle button until the temperature value is shown.
2. Change value with upper or lower button.
3. Press the middle button to confirm.

Setting internal parameters

1. Press the upper button for 3 seconds. In display the first parameter appears (ro1).
2. Press the middle button to read out value.
3. Change value with upper or lower button.
4. Press the middle button to confirm.
5. Press the lower button for the next parameter. Follow instructions 2 to 4.

When no key is pressed after last confirmation, system goes back to normal operation mode after 20 seconds.

Replacing of thermostat

When you install a new thermostat, then always change parameter r05 first to 0 (°C) and change parameter o07 to HE. Otherwise some other parameters cannot be changed to the desired value. You can run through the parameters with the up or down keys, once you are inside the parameter settings.

Options

1. Return to factory settings. Turn the power off. Press and hold the upper and lower button and switch the power on at the same time.
2. Actual temperature of sensor 1 (Thermostat). Press up key shortly 2 times.

Error codes on display

E1: Fault in controller.

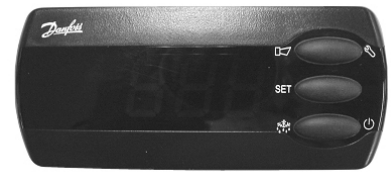
E29: Cabinet sensor broken or wiring problem sensor.

ADJUSTING DANFOSS EKC 102A THERMOSTAT (CONTINUED)

Parameters Danfoss EKC 102A thermostat

			MC 75 - 100 Full service hot	MC 75 - 100 Self service hot
	Setpoint	°C	75	85
r01	Differential	°C	1	00,1
r02	Higher setpoint limit	°C	90	90
r03	Lower setpoint limit	°C	55	55
r04	Off-set temperature indication	°C	0	0
r05	Temperature unit (°C / °F)	°C	°C	°C
r09	Correction of signal from air output	°C	0	0
r12	Start / stop of temperature control		1	1
c01	Minimum "ON" time compressor	min	0	0
c02	Minimum "OFF" time compressor	min	0	0
c30	Reversed function of relay contact		OFF	OFF
d01	Defrost method (Off=none / 1= natural)		OFF	Off
d02	Defrost end temperature	°C	6	6
d03	Defrost interval	hour	8	8
d04	Maximum defrost time	min	45	45
d05	"ON" delay after defrost	min	0	0
d10	Defrost sensor (0=time, 1=air)		0	0
d13	Defrost at start up		no	no
o01	Output delay after start up	sec	0	0
o05	Access code all settings		0	0
o06	Sensor type		ptc	ptc
o07	Warm (HE) / cold (rE)		HE	HE
o15	Step value display (yes = 0.5°C / no = 1°C)		no	no
o65	Save the controllers present settings to the programming key. Select your own number.	0-25	0	0
o66	Load a set of settings from the programming key (previously saved via o65 function) (Can only be set when regulation is stopped r12=0)	0-25	0	0
o67	Store current parameter as factory default		OFF	OFF
u58	Status relay 1		-	-

CONTROL LOCATIONS FULL AND SELF SERVE HOT



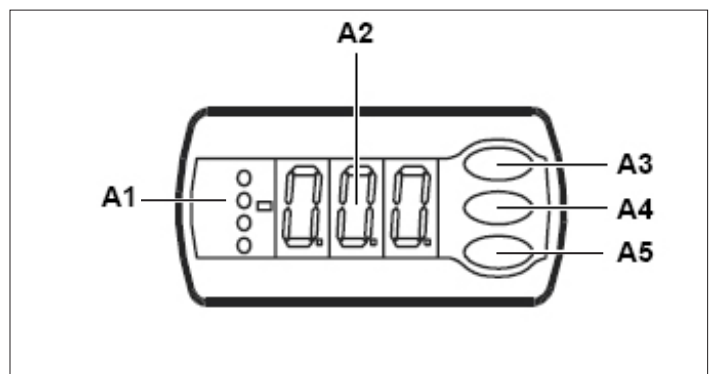
light switch

heating switch

thermostat EKC 102A

- A1 Indicator ON
- A2 Display temperature
- A3 Up key
- A4 SET key
- A5 DOWN key

If the elements are switched on, the indicator lamp A1 will go on.



ELECTRICAL TESTS AND SERVICE PROCEDURES **COLD VERSION**

WARNING: Disconnect the electrical power to the machine at the main circuit box. Place a tag on the circuit box indicating the circuit is being serviced.

PTC 1K SENSOR TEST

1. Remove the front glass (full service only), suction grid, the 2 flat plates and the blower plate according to prior procedures.
2. Remove the wiring from the sensor.
3. Connect a temperature tester to the probe of the sensor for comparison.
4. Test the probe with an Ohmmeter.

Temperature		Resistance Ω
$^{\circ}\text{F}$	$^{\circ}\text{C}$	$\pm 5 \text{ Ohms}$
-4	-20	683
14	-10	747
32	0	814
50	10	885
68	20	961
77	25	1000

HEATING ELEMENT TEST EVAPORATION TRAY

Note 1: When testing the resistance of the element remove the wiring.

Note 2: This element is self regulating and works with a PTC (positive temperature coefficient). It has a maximum power absorption when the evaporator tray is filled with water and a minimum power absorption in dry conditions (without water in evaporator tray). Depending on the water temperature in the water tray and the water level the power absorption varies.

Type	Wattage/ Voltage	Resistance Ω -5% + 10%	Current A
MC 75 and 100 full and self service	270 / 230	self regulating 200 - 400	1.17

TL LAMP TEST

Type	Wattage/ Voltage	Resistance Ω -5% + 10%	Current A
TL lamp 21 W/830	24 / 230	8-10	3.9

TEMPERATURE STANDARD COMPLIANCE

The cold deli merchandisers complies with the NEN-EN-ISO 23953-2:2005 standard, this standard specifies requirements for the construction, characteristics and performance of refrigerated display cabinets used in the sale and display of foodstuffs.

ADJUSTING DANFOSS EKC 102C THERMOSTAT

Changing the set point

1. Press the middle button until the temperature value is shown.
2. Change value with upper or lower button.
3. Press the middle button to confirm.



Setting internal parameters

1. Press the upper button for 3 seconds. In the display the first parameter will now appear (r01).
 2. Press the middle button to display the value of the parameter.
 3. Change the value with the upper or lower buttons.
 4. Press the middle button to confirm.
 5. Press the lower button for the next parameter. Follow instructions 2 to 4 to change it.
- When no button is pressed after last confirmation, the system will go back to normal operation mode after 20 seconds.

Replacing of the thermostat

When installing a new thermostat always change parameter r05 to 0 (°C), otherwise some parameters cannot be changed to their desired value. Once inside the parameter settings menu the up or down buttons can be used to navigate through the parameters.

Options

1. Return to factory settings. Turn the power off. Press and hold the upper and lower button and switch the power on at the same time.
2. Manual start or stop of the defrost cycle. Press the lower button for 4 seconds.
3. Actual temperature of sensor 2 (Evaporator). Shortly press the down key 2 times.

Alarm codes on display

The LED's indicating refrigeration and defrost will flash when there is an alarm. To read out the alarm code, press the upper button briefly.

A1: High temperature alarm.

A2: Low temperature alarm.

Error codes on display

E1: Fault in controller.

E27: Evaporator temperature sensor broken or wiring problem

E29: Cabinet sensor broken or wiring problem sensor.

ADJUSTING DANFOSS EKC 102C THERMOSTAT (CONTINUED)

Parameters Danfoss EKC 102C thermostat (part 1)

Parameters		MC 75 - 100 Full Service Cold	MC 75 - 100 Self Service Cold	Standard value from supplier
Codes	Function			
Normal Operation				
-	Temperature (set point)	2,5°C	0°C	2°C
Thermostat				
r01	Differential	2 K	2 K	2 K
r02	Higher setpoint limit	2,5°C	3°C	50°C
r03	Lower setpoint limit	-2,5°C	-3°C	-50°C
r04	Off-set temperature indication	0 K	0 K	0 K
r05	Temperature unit (°C/°F)	°C	°C	°C
r09	Correction of the signal from air output	0 K	-3 K	0 K
r12	start/stop regulation (1/0)	1	1	1
r13	Night setback value	0 K	0 K	0 K
Alarm				
A03	Delay temperature alarm	30 min	30 min	30 min
A04	Delay door alarm	60 min	60 min	60 min
A12	Delay temperature alarm after defrost	90 min	90 min	90 min
A13	High alarm limit	10°C	10°C	10°C
A14	Low alarm limit	-30°C	-30°C	-30°C
A37	High alarm limit for condenser	50°C	50°C	50°C
Compressor				
c01	Min. ON-time compressor	0 min	0 min	0 min
c02	Min. OFF-time compressor	3 min	3 min	0 min
c05	Time delay second compressor	5 sec	5 sec	5 sec
c30	Reversed function compressor relay	OFF	OFF	OFF
Defrost				
d01	Defrost method (0=none / 1=natural)	1	1	1
d02	Defrost end temperature	4°C	4°C	6°C
d03	Defrost interval	3 hours	3 hours	8 hours
d04	Maximal defrost duration	45 min	45 min	45 min
d05	Time delay defrost at start-up	0 min	0 min	0 min

ADJUSTING DANFOSS EKC 102C THERMOSTAT (CONTINUED)

Parameters Danfoss EKC 102C thermostat (part 2)

Parameters		MC 75 - 100 Full Service Cold	MC 75 - 100 Self Service Cold	Standard value from supplier
Codes	Function			
d10	Defrost sensor (1=S5, 2=Sair)	1	1	0
d13	Defrost at start-up	no	no	no
d18	Max. refrigeration time between two defrosts	3 hours	3 hours	8 hours
d19	Defrost on demand (20=off)	20 K	20 K	2 K
Miscellaneous				
o01	Delay of output signals after start-up	5s	5s	5s
o02	Digital input signal (0=not used)	0	0	0
o05	Access code 1 (0 = not used)	0	0	0
o06	Sensor type (Pt /PTC/NTC)	PTC	PTC	Pt
o15	Display step (yes= 0.5 / no= 0.1)	no	no	no
o64	Access code (0= not used)	0	0	0
o65	Copy parameter settings (0 = not used)	0	0	0
o66	Loading parameter settings	0	0	0
o67	Replacing factory settings with the present settings	OFF	OFF	OFF
o69	Function Saux sensor (0=not used)	0	0	0
o70	Function S5 sensor (0=defrost, 1= product)	0	0	0
o71	Function relay 2 (1=compr./defrost, 2 = alarm relay)	1	1	1
Service				
u03	Temperature measured with Saux sensor	-	-	-
u09	Temperature measured with S5 sensor	-	-	-
u10	Status on DI 1 input.	-	-	-
u58	Status on relay for cooling	-	-	-
u70	Status on relay 2	-	-	-

CONTROL LOCATIONS FULL AND SELF SERVE COLD



thermostat EKC 102C



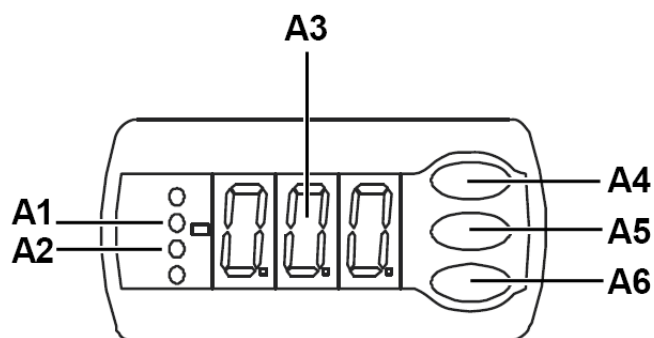
light switch



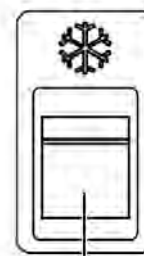
refrigeration switch

- A1 Indicator (refrigeration) ON
- A2 Indicator defrost ON
- A3 Display temperature
- A4 Up key
- A5 Set key
- A6 Down key
- A7 Cooling switch
- A8 Lighting switch

If the merchandiser is switched on, the indicator lamp A1 will switch on.



A8



A7

TROUBLESHOOTING

TROUBLESHOOTING MODULAR COUNTER 75 AND 100 HOT

Symptom	Possible causes
No power to cabinet controls.	1. Main breaker open. 2. Safety thermostat tripped (self service only). 3. Wiring loose.
Main fuse or breaker blows.	1. Wiring incorrectly. 2. Heating element shorted. 3. Blower shorted (self service only). 3. Wiring shorted.
Illumination does not work.	1. Lamp malfunction. 2. Tumble switch malfunction. 3. Electronic ballast malfunction. 4. Wiring loose.
No heating.	1. Heating element malfunction. 2. Relay K1 malfunction. 3. Safety thermostat tripped (self service only). 4. Wiring loose. 5. Thermostat malfunction. 6. Sensor wiring loose/ sensor malfunction. 7. Blower for heating malfunction (self service only).
Heating stays in.	1. Relay K1 malfunction. 2. Sensor not in right position. 3. Sensor malfunction. 4. Thermostat malfunction.
Safety thermostat tripped (self service).	1. Blower for heating malfunction. 2. Setting of thermostat. 3. Thermostat malfunction.
No indication on electronic thermostat.	1. Electronic thermostat malfunction. 2. Tumble switch malfunction. 3. Wiring loose.

ANALYTIC TROUBLESHOOTING MODULAR COUNTER 75 AND 100 HOT

This is an analytic description for servicing and repairing all major parts of the Modular Counter Hot. It consists of 4 basic steps to recognize and solve the problems:

1. Symptoms.
2. Possible causes.
3. Solving of the problem: checking/action.
4. Replacing of parts and testing:
 - a. Replacing is described in this service manual.
 - b. For testing see control locations on page 22 of this manual.

Description of part	Symptoms	Possible causes	Solving: checking / action
Relay K1	Relay does not come in.	Wiring	Check the wiring
		Coil malfunction	Check resistance of coil. This should be $\pm 7.0K\Omega$
		Contact burned	Check the contacts
Heating element	The cabinet is not reaching the adjusted temperature.	Wiring	Check the wiring
		Element malfunction	Check the power on the element
Tumble switch	Light or heating does not switch on.	Wiring	Check the wiring
		Contact burned	Check the voltage on "in"- and "output".
Electronic ballast	Light does not switch on.	Wiring	Check the wiring
		Ballast malfunction	Replace ballast
lamp(s)	Light does not switch on.	Wiring	Check the wiring
		Lamp(s) broken	Replace lamp(s)
Safety thermostat (self service only)	No illumination and no indication on electronic thermostat.	Wiring	Check the wiring
		Safety thermostat switched off	Reset thermostat
		Safety thermostat malfunction	Replace thermostat
Electronic thermostat	Display does not light up.	Wiring	Check the wiring
	The cabinet is not reaching the adjusted temperature or does not heat up at all.	Loose sensor/sensor malfunction	Check sensor
		Thermostat malfunction	Replace thermostat
PTC 1k sensor	The cabinet is not reaching the adjusted temperature or does not heat up at all.	Broken sensor	Replace sensor
		Loose sensor wiring	Check wiring
	The cabinet becomes too hot.	Broken sensor	Replace sensor
		Sensor shorted	Check wiring

TROUBLESHOOTING MODULAR COUNTER 75 AND 100 COLD

Symptom	Possible causes
No power to cabinet controls.	1. Main breaker open. 2. Tumble switch malfunction. 3. Wiring loose.
Main fuse or breaker blows.	1. Wiring incorrectly. 2. Heating element in drip tray shorted. 3. Blower shorted. 4. Wiring shorted.
Illumination does not work.	1. Lamp malfunction. 2. Tumble switch malfunction. 3. Electronic ballast malfunction. 4. Wiring loose.
Display does not reach set temperature.	1. PTC 1k temperature sensor malfunction. 2. Cooling system inoperative or malfunction. 3. Relay malfunction. 4. Defrosting sensor malfunction. 5. Incorrectly programmed thermostat. 6. One or more blowers malfunction. 7. Unit is positioned in direct sunlight or near a heat source. 8. Products are stacked too high. 9. Unit is wrongly installed and cannot dispose of heat.
Cooling system does not initiate (compressor does not run)	1. PTC 1k temperature sensor malfunction. 2. Compressor defective or parts associated with it. 3. Relay K1 malfunction. 4. Incorrectly programmed thermostat. 5. Defrosting sensor malfunction. 6. Wiring loose.
Evaporation drip tray overflowing.	1. Heater(s) inoperative or malfunction. 2. Wiring loose. 3. Relative humidity of the surrounding area too high.
No indication on electronic thermostat, but lighting functions.	1. Tumble switch malfunction. 2. Electronic thermostat malfunction. 3. Wiring loose.
Blower motor does not run.	1. Tumble switch malfunction. 2. Blower motor malfunction. 3. Wiring loose.
No air circulation within the merchandiser.	1. Obstruction of one or more ventilation openings in the rear. 2. One or more blowers inoperative or malfunction. Evaporator frosted or clogged with dirt.
Evaporator full of ice.	1. Setpoint too low. 2. Humidity too high. 3. Defrost sensor not in right position. 4. Defrost sensor malfunction. 4. Parameters not according to specified values. 5. Electronic thermostat malfunction.

ANALYTIC TROUBLESHOOTING MODULAR COUNTER 75 AND 100 COLD

This is an analytic description for servicing and repairing all major parts of the Modular Counter Cold. It consists of 4 basic steps to recognize and solve the problems:

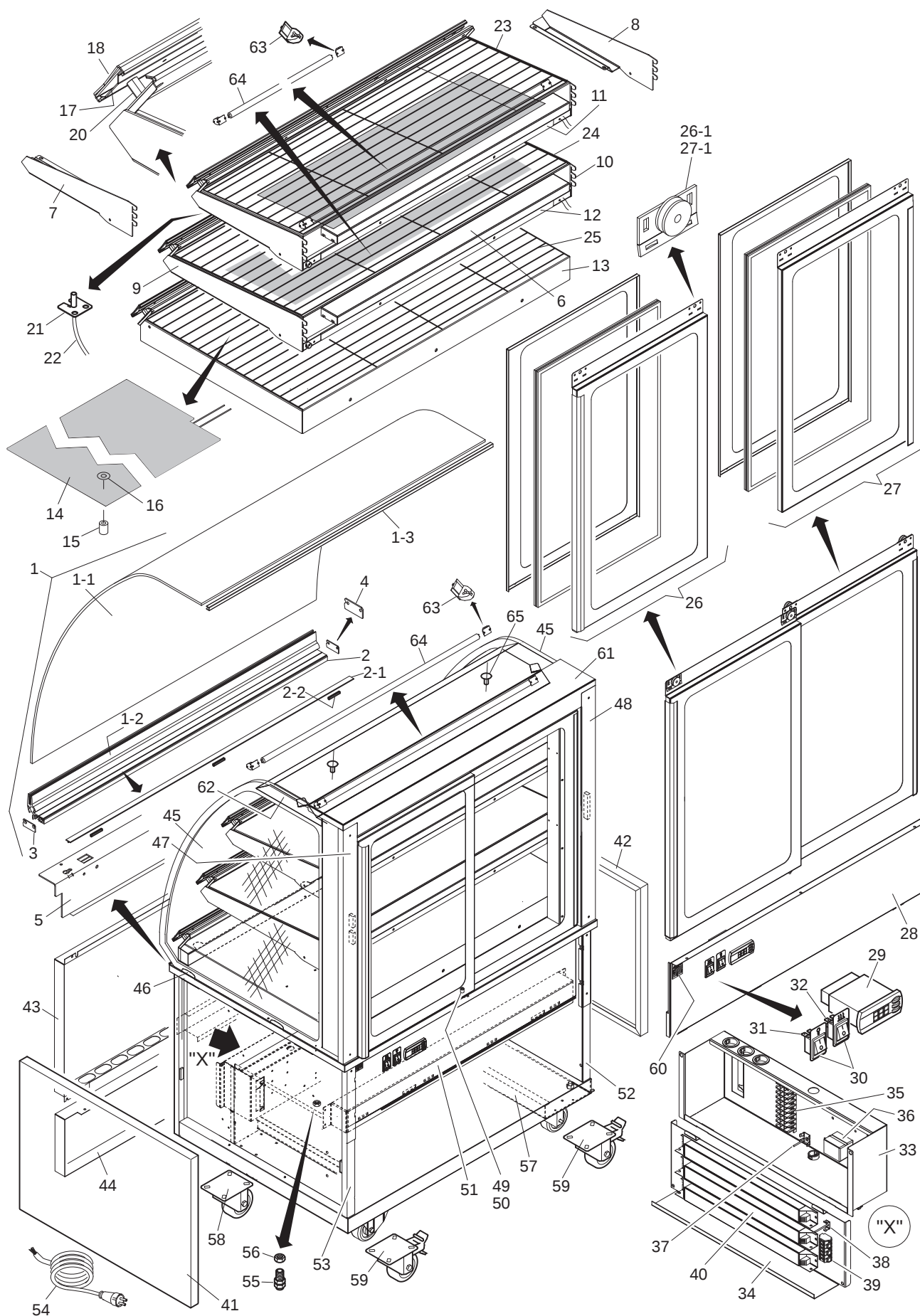
1. Symptoms.
2. Possible causes.
3. Solving of the problem: checking/action.
4. Replacing of parts and testing:
 - a. Replacing is described in this service manual.
 - b. For testing see control locations on page 24 of this manual.

Description of part	Symptoms	Possible causes	Solving: checking / action
Relay K1	Relay does not come in.	Wiring	Check the wiring
		Coil malfunction	Check resistance of coil. This should be $\pm 7.0K\Omega$
		Contact burned	Check the contacts
Heating element evaporator tray	Evaporator tray overflowing.	Wiring	Check the wiring
			Check the power on the element
		Element malfunction	Check current with AC current tester. See table on page 23
Tumble switch	Light or cooling does not switch on.	Wiring	Check the wiring
		Contact burned	Check the voltage on "in"- and "output".
Electronic ballast	Light does not switch on.	Wiring	Check the wiring
		Ballast malfunction	Replace ballast
lamp(s)	Light does not switch on.	Wiring	Check the wiring
		Lamp(s) broken	Replace lamp(s)
Electronic thermostat	Display does not light up	Wiring	Check the wiring
	The cabinet is not reaching the adjusted temperature or does not cool at all.	Loose sensor/sensor malfunction	Check sensor
		Thermostat malfunction	Replace thermostat
PTC 1k sensor	The cabinet is not reaching the adjusted temperature or does not heat up at all.	Broken sensor	Replace sensor
		Loose sensor wiring	Check wiring
	The cabinet becomes too hot.	Broken sensor	Replace sensor
		Sensor shorted	Check wiring
Blower	Blower doesn't run.	Wiring	Check wiring
			Check voltage on blower
		Coil malfunction	Check resistance of coil. This should be $\pm 330\Omega$
	Main fuse burned.	Short circuit in coil to earth	Check insulation value of coil with a Megger on max. 500V Minimum value is 0.5M Ω

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EXPLODED VIEWS & PART LISTS

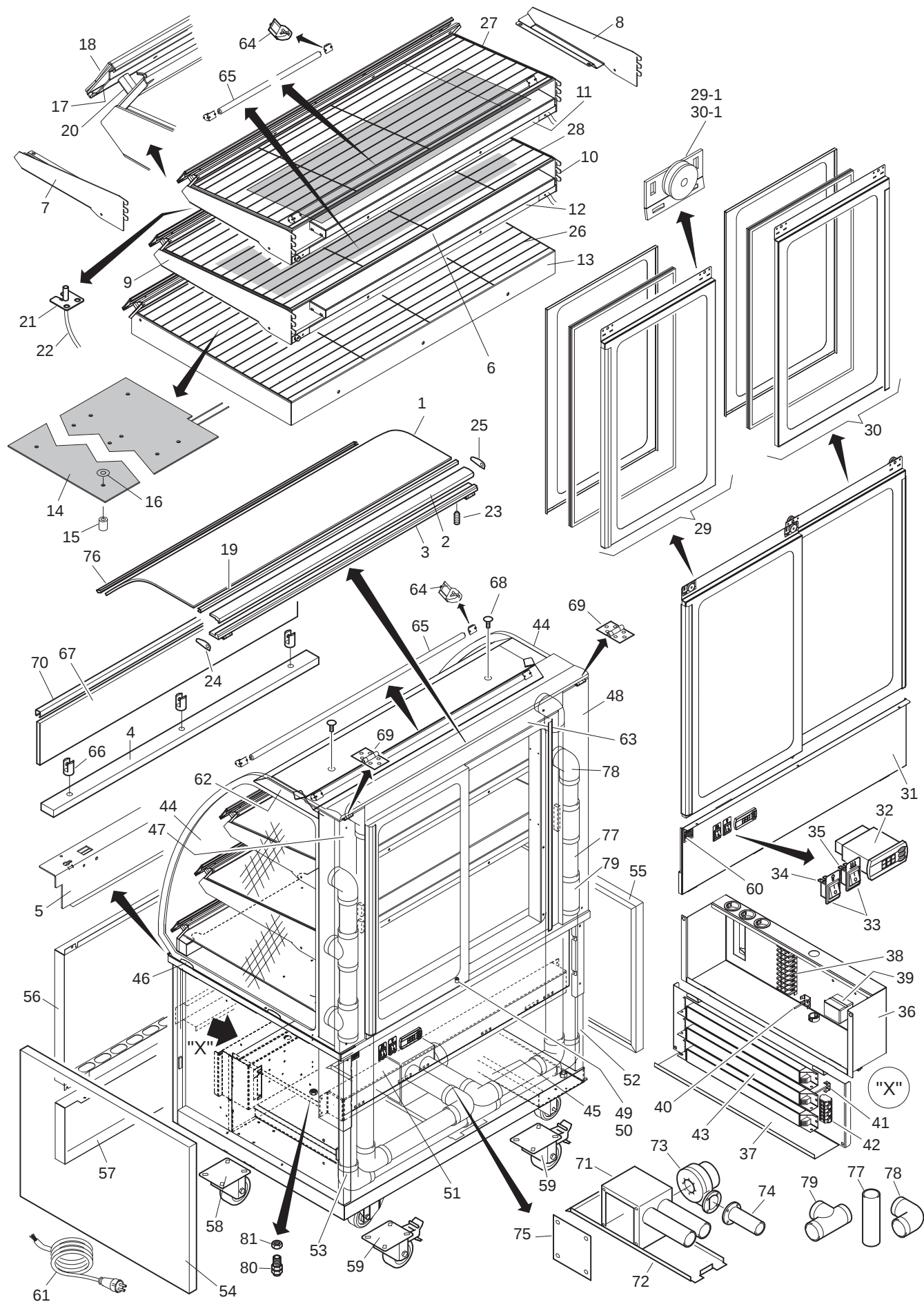
MODULAR COUNTER 75 HOT FULL SERVICE (CUBE)



Item	Part number	Qty	Description
1	9282088S	1	Glass, bended, complete with profiles
1-1	9282088	1	Glass, bended, without profiles
1-2	9283033	1	Glassholder profile
1-3	3102632	0.8 mtr	Protection profile (plastic)
2	9283032	1	Base profile glassholder
2-1	9283031	1	Cover profile
2-2	9281019	2	Plastic clip
3	9284097	1	Cover plate, left
4	9284098	1	Cover plate, right
5	9284599	1	Mounting profile, glassholder
6	9284792	2	Airblock profile
7	9284719	1	Shelf support, left, top
8	9284720	1	Shelf support, right, top
9	9284723	1	Shelf support, left, middle
10	9284724	1	Shelf support, right, middle
11	9280084S	1	Top shelf ass., incl. heating element
12	9280085S	1	Middle shelf ass., incl. heating element
13	9280086S	1	Bottom shelf ass., incl. heating element
14	9282091	3	Heating element, 900 W
15	9282052	45	Spacer
16	4310070	45	Clamp
17	9284763	3	Holder, price rail
18	9283030	3	Price rail, transparent
21	9284114	1	Sensor holder
22	9221011	1	Temperature sensor
23	9282102	1	Display rack, top
24	9282103	1	Display rack, middle
25	9282104	1	Display rack, bottom
26	9280072S	1	Sliding door ass., left
26-1	9281010	2	Sliding wheel
27	9280073S	1	Sliding door ass., right
27-1	9281010	2	Sliding wheel
28	9284750	1	Operating panel
29	9221009	1	Thermostat, Danfoss
30	9181008	2	Tumble switch
31	9181071	1	Sticker, lighting
32	9181072	1	Sticker, heating
33	9284133	1	Connection box
34	9284134	1	Cover, box
35	8033659	1	Connecting block, 9-pole
36	3500187	1	Relay
37	8071061	1	Earth connection, 4-pole
38	8071060	4	Earth connection, 2-pole
39	8072071	1	Connecting block, mains
40	9221029	3	Ballast, 14 W

Item	Part number	Qty	Description
41	9284449	1	Side panel, left. RAL 7022
41	9284195	1	Side panel, left. RAL 7006 SHELL GB
42	9284450	1	Side panel, right. RAL 7022
42	9284196	1	Side panel, right. RAL 7006 SHELL GB
43	9284446	1	Front panel, top. RAL 7022
43	9284194	1	Front panel, top. RAL 7006 SHELL GB
44	9284451	1	Skirting, front. RAL 7022
44	9284764	1	Skirting, front. RAL 7022 SHELL GB
45	9282000	2	Side glass
46	9284064	4	Glass holder
47	9284015	1	Cover profile, left
48	9284035	1	Cover profile, right
49	9040659	2	Nylon bush
50	0141149	2	Screw M5x16
51	9284581	1	Mounting bracket, back side
52	9284424	1	Stand, right
53	9284423	1	Stand, left
54	9091383	1	Connecting cable with plug
55	9222076	1	Strain relief
56	9222077	1	Nut, strain relief
57	9284420	2	Mounting profile, castors
58	9172065	2	Swivel caster
59	9172066	2	Swivel caster with break
60	9110917	1	Indication plate
61	9284771	1	Counter profile
62	9284617	1	Light fixture
63	6511627	6	Lamp holder
64	9271000	3	TL lamp 14 W / 830
65	9281038	2	Bumper

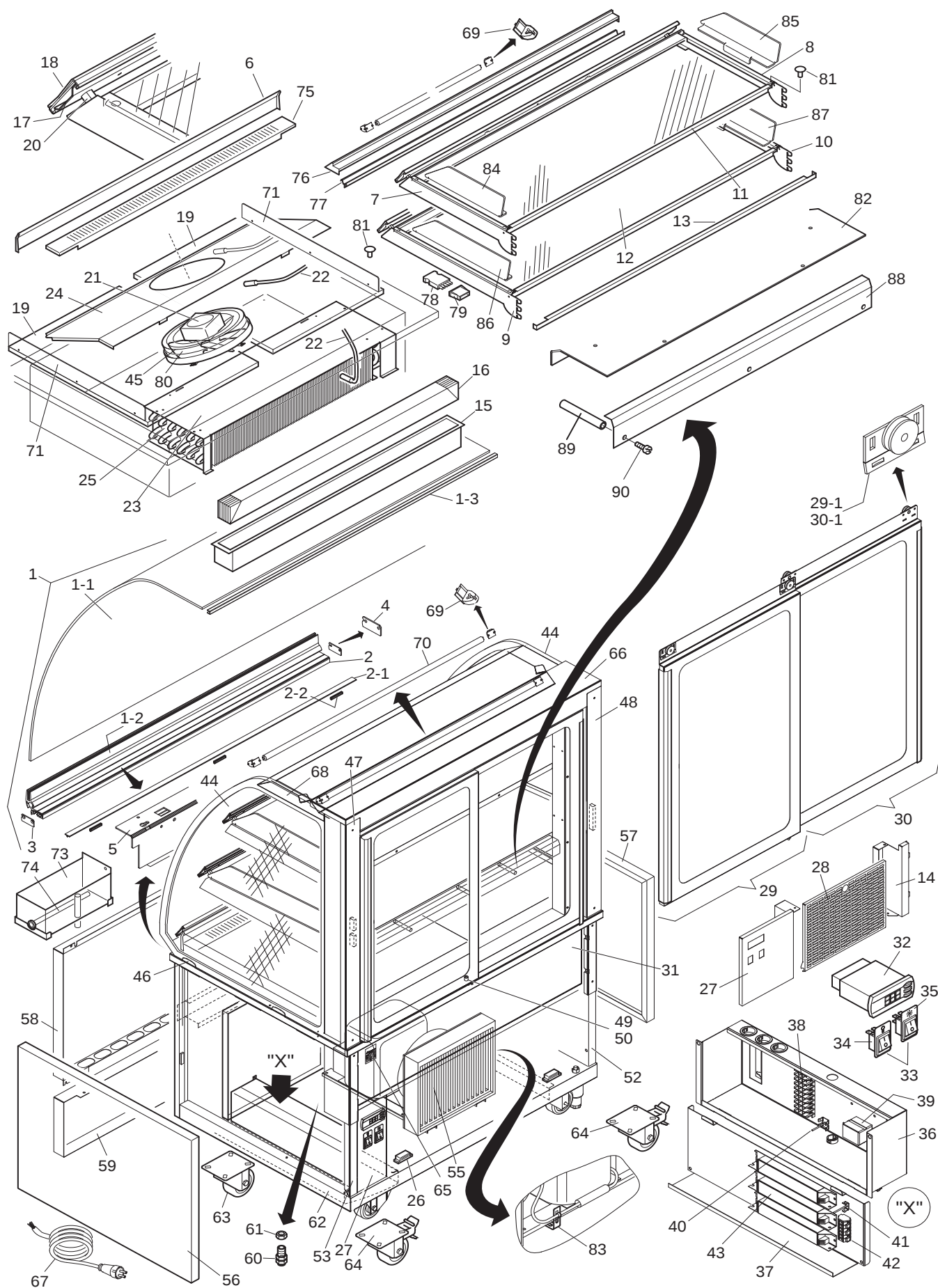
MODULAR COUNTER 75 HOT SELF SERVICE (CUBE)



Item	Part number	Qty	Description
1	9282078	1	Glass, top
2	9283028	1	Clamp, glassholder
3	9283007	1	Base profile, glassholder
4	9284253	1	Support profile
5	9284599	1	Mounting profile, glassholder
6	9284753	2	Airblock profile
7	9284719	1	Shelf support, left, top
8	9284720	1	Shelf support, right, top
9	9284723	1	Shelf support, left, middle
10	9284724	1	Shelf support, right, middle
11	9280081S	1	Top shelf ass., Stainless steel top plate, incl. heating element
12	9280082S	1	Middle shelf ass., Stainless steel top plate, incl. heating element
13	9280083S	1	Bottom shelf ass., Stainless steel top plate, incl. heating element
14	9282091	3	Heating element, 900 W
15	9282052	45	Spacer
16	4310070	45	Clamp
17	9284763	3	Holder, price rail
18	9283030	3	Price rail, transparent
19	9261024	0.8 mtr	Protection profile (plastic)
21	9284114	1	Sensor holder
22	9221011	1	Temperature sensor
23	9261027	5	Socket set screw M6x8 mm, Torx
24	9284095	1	Cover plate, left
25	9284096	1	Cover plate, right
26	9282104	1	Display rack, bottom
27	9282102	1	Display rack, top
28	9282103	1	Display rack, middle
29	9280132S	1	Sliding door ass., left
29-1	9281010	2	Sliding wheel
30	9280133S	1	Sliding door ass., right
30-1	9281010	2	Sliding wheel
31	9284750	1	Operating panel
32	9221009	1	Thermostat, Danfoss
33	9181008	2	Tumble switch
34	9181071	1	Sticker, lighting
35	9181072	1	Sticker, heating
36	9284133	1	Connection box
37	9284134	1	Cover, box
38	8033659	1	Connecting block, 9-pole
39	3500187	1	Relay
40	8071061	1	Earth connection, 4-pole
41	8071060	4	Earth connection, 2-pole
42	8072071	1	Connecting block, mains
43	9221029	3	Ballast, 14 / 21 W, 230 V, 50...60Hz

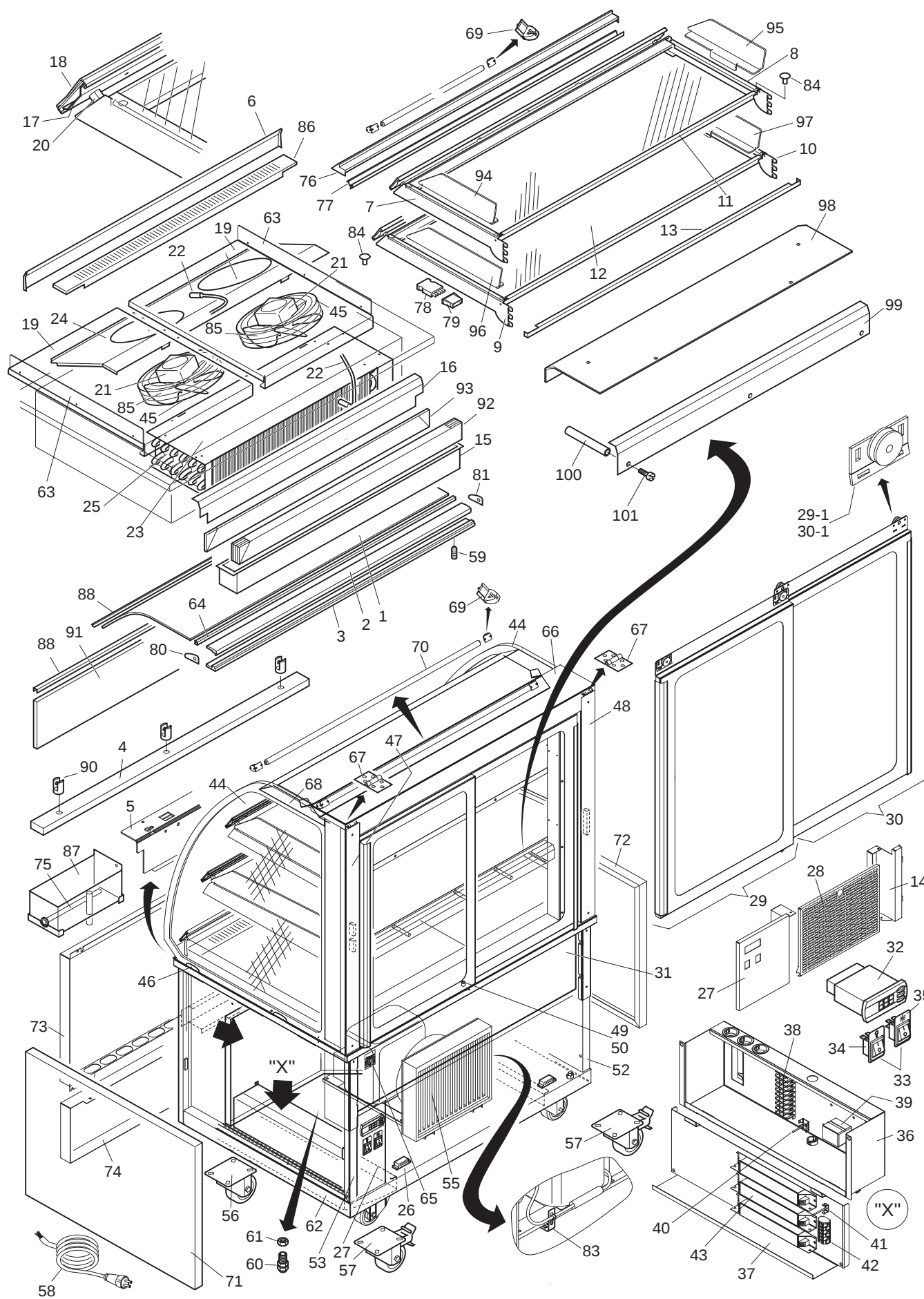
Item	Part number	Qty	Description
44	9282000	2	Side glass
45	9284420	2	Mounting profile, castors
46	9284064	4	Glass holder
47	9284714	1	Cover profile, left
48	9284713	1	Cover profile, right
49	9040659	2	Nylon bush
50	0141149	2	Screw M5x16 mm.
51	9284581	1	Mounting bracket, back side
52	9284424	1	Stand, right
53	9284423	1	Stand, left
54	9284449	1	Side panel, left. RAL 7022
54	9284195	1	Side panel, left. RAL 7006 SHELL GB
55	9284450	1	Side panel, right. RAL 7022
55	9284196	1	Side panel, right. RAL 7006 SHELL GB
56	9284446	1	Front panel, top. RAL 7022
56	9284194	1	Front panel, top. RAL 7006 SHELL GB
57	9284451	1	Skirting, front. RAL 7022
57	9284764	1	Skirting, front. RAL 7022 SHELL GB
58	9172065	2	Swivel caster
59	9172066	2	Swivel caster with break
60	9110917	1	Indication plate
61	9091383	1	Connecting cable with plug
62	9284751	1	Light fixture
63	9284742	1	Counter profile
64	6511627	6	Lamp holder
65	9271000	3	TL lamp 14 W / 830
66	9262076	3	Glass holder
67	9282077	1	Front glass
68	9281038	2	Support cap
69	9283013	2	Hinge
70	3102632	0.8 mtr	Protection profile (plastic)
71	9280405	1	Blower housing
72	9284706	1	Fastening plate
73	9281034	1	Blower, 230 V, 50...60Hz
74	9280406	1	Tube with flange
75	9284705	1	Cover plate
76	9283042	1	Protection profile (plastic)
77	9281035	4 mtr	PVC tube Ø 50 x 3.7 mm
78	9281032	10	PVC elbow 50 mm
79	9281033	5	PVC T-joint 50 mm
80	9222076	1	Strain relief
81	9222077	1	Nut, strain relief

MODULAR COUNTER 75 COLD FULL SERVICE (CUBE)



Item	Part number	Qty	Description	Item	Part number	Qty	Description
1	92820885	1	Glass, bended, complete with profiles	42	8072071	1	Connecting block, mains
1-1	9282088	1	Glass, bended, without profiles	43	9221029	3	Ballast, 14 / 21 W, 230 V, 50...60Hz
1-2	9283033	1	Glassholder profile	44	9282000	2	Side glass
1-3	3102632	0.8 mtr	Protection profile (plastic)	45	8071070	1	Fan cover
2	9283032	1	Base profile glassholder	46	9284064	4	Glass holder
2-1	9283031	1	Cover profile	47	9284015	1	Cover profile, left
2-2	9281019	2	Plastic clip	48	9284035	1	Cover profile, right
3	9284097	1	Cover plate, left	49	9040659	2	Nylon bush
4	9284098	1	Cover plate, right	50	0141149	2	Screw M5x16
5	9284065	1	Mounting profile, glassholder	52	9284424	1	Frame, right
6	9284584	1	Mounting profile for holder price rail	53	9284423	1	Frame, left
7	9284501	1	Shelf support, left, top	55	8092006	1	Condensingunit, Unek R-404A
8	9284500	1	Shelf support, right, top	56	9284449	1	Side panel, left. RAL 7022
9	9284503	1	Shelf support, left, middle	56	9284195	1	Side panel, left. RAL 7006 SHELL GB
10	9284502	1	Shelf support, right, middle	57	9284450	1	Side panel, right. RAL 7022
11	9282080	1	Glass plate, top	57	9284196	1	Side panel, right. RAL 7006 SHELL GB
12	9282081	1	Glass plate, middle	58	9284446	1	Front panel, top. RAL 7022
13	9284245	2	Support, glass plate, top	58	9284194	1	Front panel, top. RAL 7006 SHELL GB
14	9284184	1	Side panel	59	9284447	1	Skirting, front. RAL 7022
15	9284256	1	Holder, honeycomb divider	59	9284193	1	Skirting, front. RAL 7022 SHELL GB
16	9282096	1	Air divider, honeycomb	60	9222076	1	Strain relief
17	9284583	3	Holder, price rail	61	9222077	1	Nut, strain relief
18	9283030	3	Price rail, transparent	62	9284420	2	Mounting profile, castors
19	9284170	2	Bottom plate without product stopper	63	9172065	2	Swivel caster
20	9221008	8	Spacing pin, 3D nut M6	64	9172066	2	Swivel caster with brake
21	8071071	1	Blower, without fanblade	65	9110917	1	Indication plate
22	9221011	2	Temperature sensor	66	9284771	1	Counter profile
23	9284172	1	Evaporator plate	67	9091383	1	Connecting cable with plug
24	9284191	1	Fan plate	68	9284617	1	Light fixture, top side
25	9282062	1	Evaporator	69	6511627	6	Lamp holder
26	9231004	2	Magnetic bar	70	9271000	3	TL lamp 14 W / 830
27	9284183	1	Operation panel	71	9282056	2	Product stopper
28	9284185	1	Ventilation panel, backside	73	9228013	1	Evaporator tray
29	92800725	1	Sliding door ass., left	74	8030961	1	Heating element, 270 W
29A	9280022	1	Sliding door ass., left (till serial number 100059322)	75	9284255	1	Grid
29-1	9281010	2	Sliding wheel	76	9284585	2	Light fixture, outside
30	92800735	1	Sliding door ass., right	77	9284586	2	Light fixture, inside
30A	9280023	1	Sliding door ass., right (till serial number 100059322)	78	9281012	2	Plug, light, 5-pole
30-1	9281010	2	Sliding wheel	79	9281009	2	Socket, light, 5-pole
31	9284181	1	Panel, backside	80	9281045	1	Fanblade
32	9261010	1	Thermostat, Danfoss	81	9281038	20	Bumper
33	9181008	2	Tumble switch	82	9282082	1	Air guide, plastic, top
34	9181071	1	Sticker, lighting	83	9284544	1	Bracket, tubing
35	9261005	1	Sticker, cooling	84	9282105	1	Side shelf top left
36	9284133	1	Connection box	85	9282106	1	Side shelf top right
37	9284134	1	Cover, box	86	9282107	1	Side shelf center left
38	8033659	1	Connecting block, 9-pole	87	9282108	1	Side shelf center right
39	3500187	1	Relay	88	9282073	1	Air guide, plastic, shelf
40	8071061	2	Earth connection, 4-pole	89	9281027	3	Spacing pin, plastic
41	8071060	2	Earth connection, 2-pole	90	0141084	3	Screw , Philips, M4x12

MODULAR COUNTER 75 COLD SELF SERVICE (CUBE)

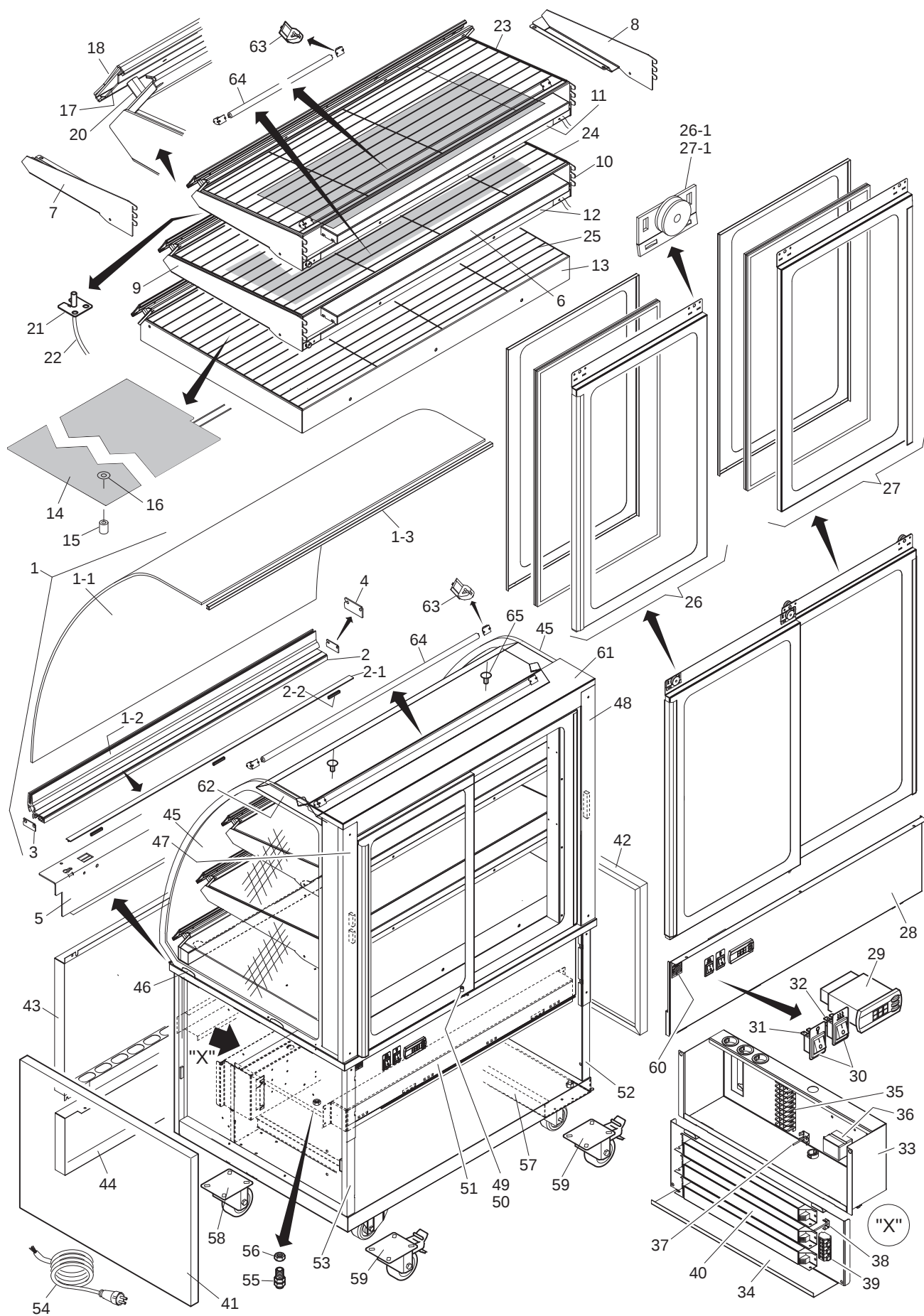


Item	Part number	Qty	Description	Item	Part number	Qty	Description
1	9282078	1	Glass, top	47	9284015	1	Cover profile, left
2	9283027	1	Clamp, glassholder	48	9284035	1	Cover profile, right
3	9283028	1	Base profile, glassholder	49	9040659	2	Nylon bush
4	9284253	1	Support profile	50	0141149	2	Screw M5x16
5	9284599	1	Mounting profile, glassholder	52	9284424	1	Frame, right
6	9284584	1	Mounting profile for holder price rail	53	9284423	1	Frame, left
7	9284501	1	Shelf support, left, top	55	8092006	1	Condensing unit, Unek R-404A
8	9284500	1	Shelf support, right, top	56	9172065	2	Swivel caster
9	9284503	1	Shelf support, left, middle	57	9172066	2	Swivel caster with brake
10	9284502	1	Shelf support, right, middle	58	9091383	1	Connecting cable with plug
11	9282080	1	Glass plate, top	59	9261027	6	Socket set screw M6x8 mm, Torx
12	9282081	1	Glass plate, middle	60	9222076	1	Strain relief
13	9284245	2	Support, glass plate, top	61	9222077	1	Nut, strain relief
14	9284184	1	Side panel	62	9284420	2	Mounting profile, castors
15	9284167	1	Holder, honeycomb divider	63	9282056	2	Product stopper
16	9282094	1	Air guide, honeycomb	64	9261024	0.8 mtr	Protection profile (plastic)
17	9284583	3	Holder, price rail	65	9110917	1	Indication plate
18	9283030	3	Price rail, transparent	66	9284254	1	Cover profile
19	9284170	2	Bottom plate without side strip	67	9283013	2	Hinge
20	9221008	8	Spacing pin, 3D nut M6	68	9284617	1	Light fixture, top side
21	8071071	2	Blower	69	6511627	6	Lamp holder
22	9221011	2	Temperature sensor	70	9271000	3	TL lamp 14 W / 830
23	9284172	1	Evaporator plate	71	9284449	1	Side panel, left. RAL 7022
24	9284171	1	Fan plate	71	9284195	1	Side panel, left. RAL 7006 SHELL GB
25	9282062	1	Evaporator	72	9284450	1	Side panel, right. RAL 7022
26	9231004	2	Magnetic bar	72	9284196	1	Side panel, right. RAL 7006 SHELL GB
27	9284183	1	Operation panel	73	9284446	1	Front panel, top. RAL 7022
28	9284185	1	Ventilation panel, backside	73	9284194	1	Front panel, top. RAL 7006 SHELL GB
29	9280072S	1	Sliding door ass., left	74	9284447	1	Skirting, front. RAL 7022
29-1	9281010	2	Sliding wheel	74	9284193	1	Skirting, front. RAL 7022 SHELL GB
30	9280073S	1	Sliding door ass., right	75	8030961	2	Heating element, 270 W
30-1	9281010	2	Sliding wheel	76	9284584	2	Light fixture, outside
31	9284181	1	Panel, backside	77	9284585	2	Light fixture, inside
32	9261010	1	Thermostat, Danfoss	78	9281012	2	Plug, light
33	9181008	2	Tumble switch	79	9281009	2	Socket, light
34	9181071	1	Sticker, lighting	80	9284095	1	Cover plate, left
35	9261005	1	Sticker, cooling	81	9284096	1	Cover plate, right
36	9284133	1	Connection box	83	9284544	1	Bracket, tubing
37	9284134	1	Cover, box	84	9281038	24	Bumper
38	8033659	1	Connecting block, 9-pole	85	9281045	2	Fanblade
39	3500187	1	Relay	86	9284166	1	Grid
40	8071061	2	Earth connection, 4-pole	87	9228054	1	Evaporator tray
41	8071060	2	Earth connection, 2-pole	88	3102632	0.8 mtr	Protection profile (plastic)
42	8072071	1	Connecting block, mains	90	9262076	3	Glass holder
43	9221029	3	Ballast, 14 / 21 W, 230 V, 50...60Hz	91	9282077	1	Front glass
44	9282000	2	Side glass	92	9282068	1	Air divider, honeycomb
45	8071070	2	Fan cover				
46	9284064	4	Glass holder				

Item	Part number	Qty	Description
93	9282067	1	Air divider, small, honeycomb
94	9282105	1	Side shelf top left
95	9282106	1	Side shelf top right
96	9282107	1	Side shelf center left
97	9282108	1	Side shelf center right
98	9282082	1	Air guide panel, top shelf
99	9282073	1	Air guide, plastic, shelf
100	9281027	3	Spacing pin, plastic
101	0141084	3	Screw , Philips, M4x12

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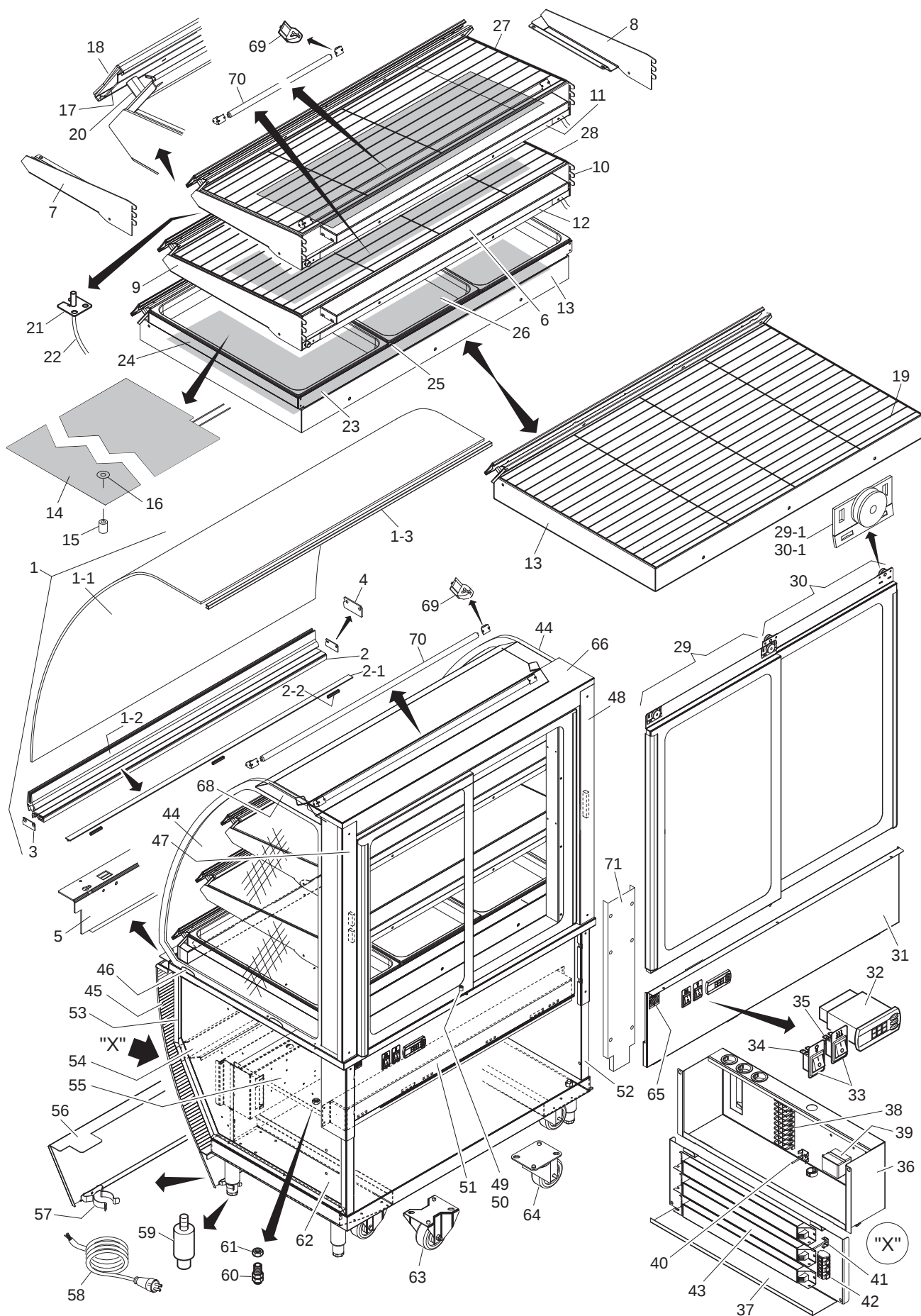
MODULAR COUNTER 100 HOT FULL SERVICE (CUBE)



Item	Part number	Qty	Description
1	9280025S	1	Glass, bended, complete with profiles
1-1	9282001	1	Glass, bended, without profiles
1-2	9283008	1	Glassholder profile
1-3	9283009	1	Protection profile (plastic)
2	9283019	1	Base profile glassholder
2-1	9283018	1	Cover profile
2-2	9281019	3	Plastic clip
3	9284097	1	Cover plate, left
4	9284098	1	Cover plate, right
5	9284065	1	Mounting profile, glassholder
6	9284135	2	Airblock profile
7	9284719	1	Shelf support, left, top
8	9284720	1	Shelf support, right, top
9	9284723	1	Shelf support, left, middle
10	9284724	1	Shelf support, right, middle
11	9280034S	1	Top shelf ass., Stainless steel top plate, incl. heating element
12	9280035S	1	Middle shelf ass., Stainless steel top plate, incl. heating element
13	9280036S	1	Bottom shelf ass., Stainless steel top plate, incl. heating element
14	9282047	3	Heating element, 900 W
15	9282052	45	Spacer
16	4310070	45	Clamp
17	9284050	3	Holder, price rail
18	9283012	3	Price rail, transparent
20	9221008	12	Spacing pin, 3D nut M6
21	9284114	1	Sensor holder
22	9221011	1	Temperature sensor
23	9282044	1	Display rack, top
24	9282045	1	Display rack, middle
25	9282046	1	Display rack, bottom
26	9280028S	1	Sliding door ass., left
26A	9280022	1	Sliding door ass., left (till serial nr. 100059322)
26-1	9281010	2	Sliding wheel
27	9280029S	1	Sliding door ass., right
27A	9280023	1	Sliding door ass., right (till serial nr. 100059322)
27-1	9281010	2	Sliding wheel
28	9284101	1	Operating panel
29	9221009	1	Thermostat, Danfoss
30	9181008	2	Tumble switch
31	9181071	1	Sticker, lighting
32	9181072	1	Sticker, heating
33	9284133	1	Connection box
34	9284134	1	Cover, box
35	8033659	1	Connecting block, 9-pole
36	3500187	1	Relay
37	8071061	1	Earth connection, 4-pole
38	8071060	4	Earth connection, 2-pole
39	8072071	1	Connecting block, mains

Item	Part number	Qty	Description
40	9221029	3	Ballast, 14 W
41	9284449	1	Side panel, left. RAL 7022
41	9284425	1	Side panel, left. RAL 7006 SHELL GB
42	9284450	1	Side panel, right. RAL 7022
42	9284426	1	Side panel, right. RAL 7006 SHELL GB
43	9284452	1	Front panel, top. RAL 7022
43	9284427	1	Front panel, top. RAL 7006 SHELL GB
44	9284455	1	Skirting, front. RAL 7022
44	9284428	1	Skirting, front. RAL 7022 SHELL GB
45	9282000	2	Side glass
46	9284064	4	Glass holder
47	9284015	1	Cover profile, left
48	9284035	1	Cover profile, right
49	9040659	2	Nylon bush
50	0141149	2	Screw M5x16
51	9284061	1	Mounting bracket, back side
52	9284424	1	Stand, right
53	9284423	1	Stand, left
54	9091383	1	Connecting cable with plug
55	9222076	1	Strain relief
56	9222077	1	Nut, strain relief
57	9284420	2	Mounting profile, castors
58	9172065	2	Swivel caster
59	9172066	2	Swivel caster with break
60	9110917	1	Indication plate
61	9284046	1	Counter profile
62	9284711	1	Light fixture
63	6511627	6	Lamp holder
64	9221027	3	TL lamp 21 W / 830
65	9281038	2	Bumper

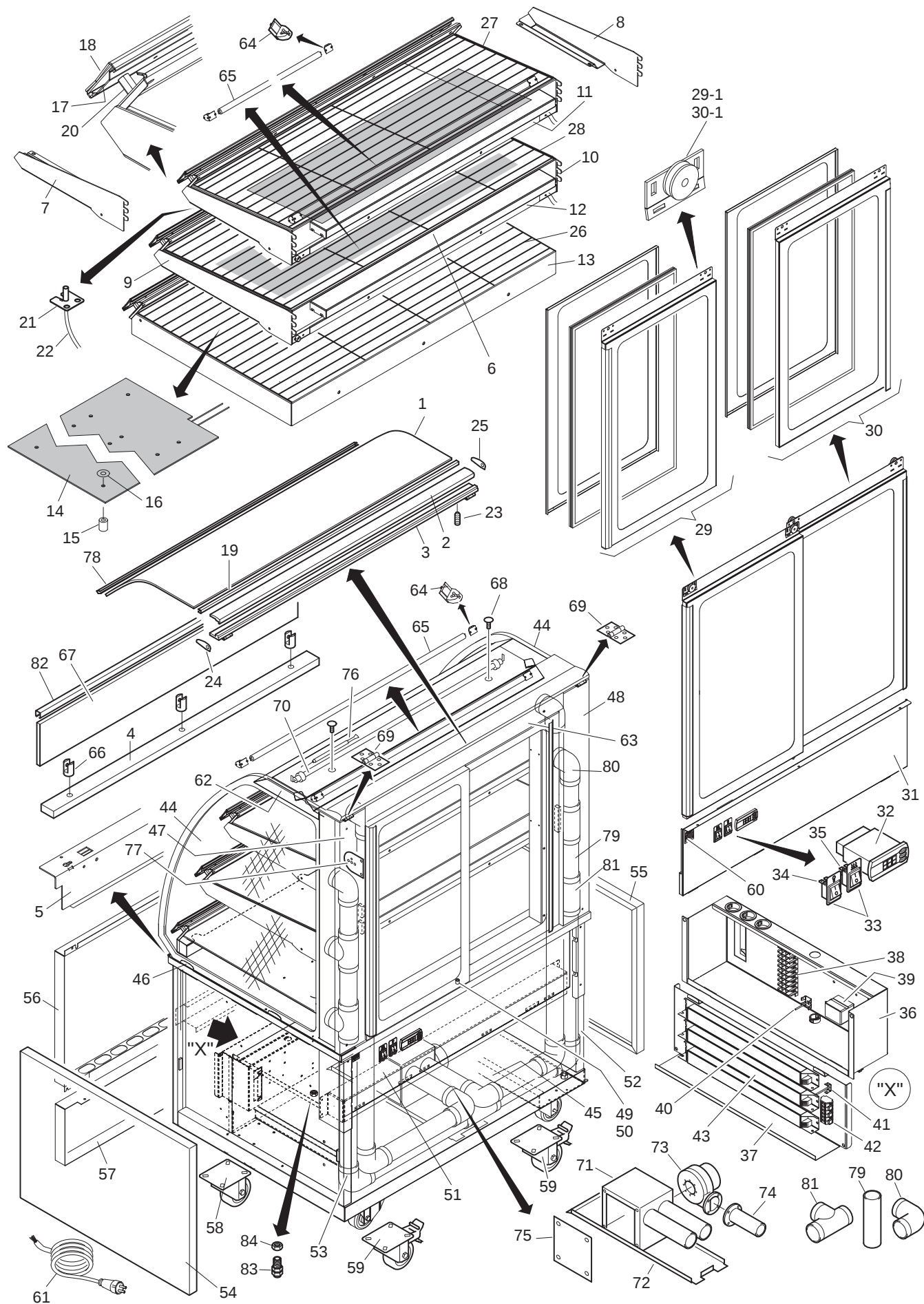
MODULAR COUNTER 100 HOT FULL SERVICE (CURVED FRONT)



Item	Part number	Qty	Description
1	92800255	1	Glass, bended, complete with profiles
1-1	9282001	1	Glass, bended, without profiles
1-2	9283008	1	Glassholder profile
1-3	9283009	1	Protection profile (plastic)
2	9283019	1	Base profile glassholder
2-1	9283018	1	Cover profile
2-2	9281019	3	Plastic clip
3	9284097	1	Cover plate, left
4	9284098	1	Cover plate, right
5	9284065	1	Mounting profile, glassholder
6	9284135	2	Airblock profile
7	9284719	1	Shelf support, left, top
8	9284720	1	Shelf support, right, top
9	9284723	1	Shelf support, left, middle
10	9284724	1	Shelf support, right, middle
11	92800345	1	Top shelf ass., Stainless steel top plate, incl. heating element
12	92800355	1	Middle shelf ass., Stainless steel top plate, incl. heating element
13	92800365	1	Bottom shelf ass., Stainless steel top plate, incl. heating element
14	9282047	3	Heating element, 900 W
15	9282052	45	Spacer
16	4310070	45	Clamp
17	9284050	3	Holder, price rail
18	9283012	3	Price rail, transparent
20	9221008	12	Spacing pin, 3D nut M6
21	9284114	1	Sensor holder
22	9221011	1	Temperature sensor
23	9284082	2	Front and back profile, tray rack
24	9284083	2	Side profile, tray rack
25	9284081	2	Divider, tray rack
26	6900232	3	Gastronorm tray GN 1/1 40 mm
27	9282044	1	Display rack, top
28	9282045	1	Display rack, middle
29	92800285	1	Sliding door ass., left
29A	9280022	1	Sliding door ass., left (till serial nr. 100059322)
29-1	9281010	2	Sliding wheel
30	92800295	1	Sliding door ass., right
30A	9280023	1	Sliding door ass., right (till serial nr. 100059322)
30-1	9281010	2	Sliding wheel
31	9284101	1	Operating panel
32	9221009	1	Thermostat, Danfoss
33	9181008	2	Tumble switch
34	9181071	1	Sticker, lighting
35	9181072	1	Sticker, heating
36	9284133	1	Connection box
37	9284134	1	Cover, box
38	8033659	1	Connecting block, 9-pole
39	3500187	1	Relay

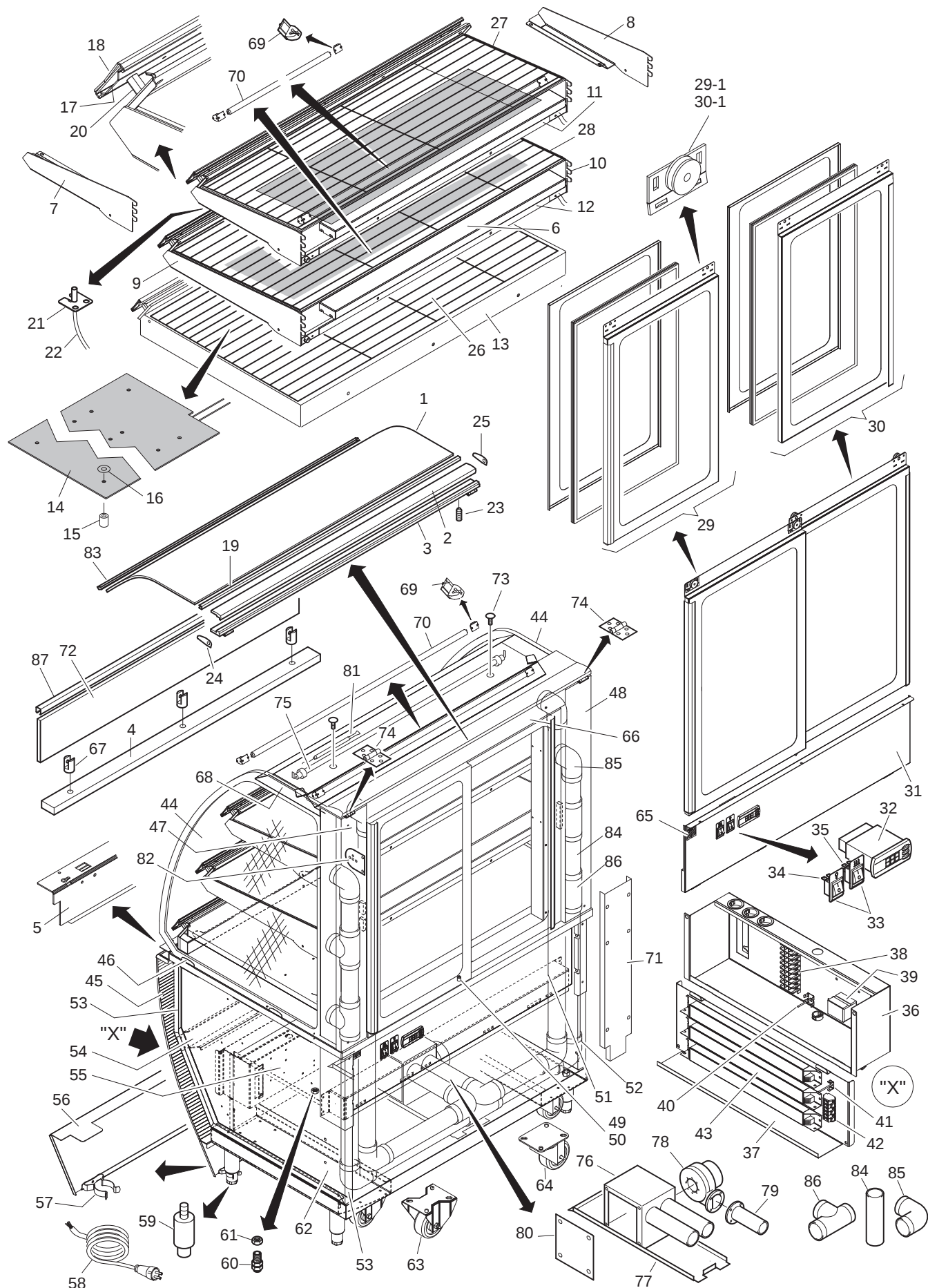
Item	Part number	Qty	Description
40	8071061	1	Earth connection, 4-pole
41	8071060	4	Earth connection, 2-pole
42	8072071	1	Connecting block, mains
43	9221029	3	Ballast, 14 / 21 W, 230 V, 50...60Hz
44	9282000	2	Side glass
45	9284000	1	Front panel
46	9284064	4	Glass holder
47	9284015	1	Cover profile, left
48	9284035	1	Cover profile, right
49	9040659	2	Nylon bush
50	0141149	2	Screw M5x16
51	9284061	1	Mounting bracket, back side
52	9284058	1	Frame, right
53	9284057	1	Frame, left
54	9284537	1	Mounting bracket, front side
55	9284116	1	Cover plate, electric parts
56	9284209	1	Plinth
57	9281025	2	Clamp for plinth
58	9091383	1	Connecting cable with plug
59	9181030	4	Adjustable leg
60	9222076	1	Strain relief
61	9222077	1	Nut, strain relief
62	9284060	2	Mounting profile, castors
63	9172125	2	Ridget caster
64	9172065	2	Swivel caster
65	9110917	1	Indication plate
66	9284046	1	Counter profile
68	9284711	1	Light fixture
69	6511627	6	Lamp holder
70	9221027	3	TL lamp 21 W / 830
70A	9281007	3	TL lamp 21 W / 840 (till 01-01-2013)
71	9284102	1	Coupling plate

MODULAR COUNTER 100 HOT SELF SERVICE (CUBE)



Item	Part number	Qty	Description	Item	Part number	Qty	Description
1	9282002	1	Glass, top	45	9284420	2	Mounting profile, castors
2	9283006	1	Clamp, glassholder	46	9284064	4	Glass holder
3	9283007	1	Base profile, glassholder	47	9284714	1	Cover profile, left
4	9284063	1	Support profile	48	9284713	1	Cover profile, right
5	9284065	1	Mounting profile, glassholder	49	9040659	2	Nylon bush
6	9284131	2	Airblock profile	50	0141149	2	Screw M5x16 mm.
7	9284719	1	Shelf support, left, top	51	9284061	1	Mounting bracket, back side
8	9284720	1	Shelf support, right, top	52	9284424	1	Stand, right
9	9284723	1	Shelf support, left, middle	53	9284423	1	Stand, left
10	9284724	1	Shelf support, right, middle	54	9284449	1	Side panel, left. RAL 7022
11	9280031S	1	Top shelf ass., Stainless steel top plate, incl. heating element	54	9284425	1	Side panel, left. RAL 7006 SHELL GB
12	9280032S	1	Middle shelf ass., Stainless steel top plate, incl. heating element	55	9284450	1	Side panel, right. RAL 7022
13	9280033S	1	Bottom shelf ass., Stainless steel top plate, incl. heating element	55	9284426	1	Side panel, right. RAL 7006 SHELL GB
14	9282047	3	Heating element, 900 W	56	9284452	1	Front panel, top. RAL 7022
15	9282052	45	Spacer	56	9284427	1	Front panel, top. RAL 7006 SHELL GB
16	4310070	45	Clamp	57	9284455	1	Skirting, front. RAL 7022
17	9284050	3	Holder, price rail	57	9284428	1	Skirting, front. RAL 7022 SHELL GB
18	9283012	3	Price rail, transparent	58	9172065	2	Swivel icaster
19	9261024	1 mtr	Protection profile (plastic)	59	9172066	2	Swivel icaster with break
20	9221008	12	Spacing pin, 3D nut M6	60	9110917	1	Indication plate
21	9284114	1	Sensor holder	61	9091383	1	Connecting cable with plug
22	9221011	1	Temperature sensor	62	9284711	1	Light fixture
23	9261027	6	Socket set screw M6x8 mm, Torx	63	9284731	1	Counter profile
24	9284095	1	Cover plate, left	64	6511627	6	Lamp holder
25	9284096	1	Cover plate, right	65	9221027	3	TL lamp 21 W / 830
26	9282046	1	Display rack, bottom	66	9262076	3	Glass holder
27	9282044	1	Display rack, top	67	9282008	1	Front glass
28	9282045	1	Display rack, middle	68	9281038	2	Support cap
29	9280126S	1	Sliding door ass., left	69	9283013	2	Hinge
29A	9280122	1	Sliding door ass., left (till serial nr. 100059322)	70	9282040	1	Heating element 150 W
29-1	9281010	2	Sliding wheel	71	9280405	1	Blower housing
30	9280127S	1	Sliding door ass., right	72	9284706	1	Fastening plate
30A	9280123	1	Sliding door ass., right (till serial nr. 100059322)	73	9281034	1	Blower
30-1	9281010	2	Sliding wheel	74	9280406	1	Tube with flange
31	9284101	1	Operating panel	75	9284705	1	Cover plate
32	9221009	1	Thermostat, Danfoss	76	3500037	1	Thermostat with reset, 100-320°C
33	9181008	2	Tumble switch	77		1	Mounting plate, thermostat
34	9181071	1	Sticker, lighting	78	9283009	1	Protection profile (plastic)
35	9181072	1	Sticker, heating	79	9281035	4 mtr	PVC tube Ø 50 x 3.7 mm
36	9284133	1	Connection box	80	9281032	10	PVC elbow 50 mm
37	9284134	1	Cover, box	81	9281033	5	PVC T-joint 50 mm
38	8033659	1	Connecting block, 9-pole	82	9283004	1	Protection profile (plastic)
39	3500187	1	Relay	83	9222076	1	Strain relief
40	8071061	1	Earth connection, 4-pole	84	9222077	1	Nut, strain relief
41	8071060	4	Earth connection, 2-pole				
42	8072071	1	Connecting block, mains				
43	9221029	3	Ballast, 14 / 21 W, 230 V, 50...60Hz				
44	9282000	2	Side glass				

MODULAR COUNTER 100 HOT SELF SERVICE (CURVED FRONT)



Item	Part number	Qty	Description
1	9282002	1	Glass, top
2	9283006	1	Clamp, glassholder
3	9283007	1	Base profile, glassholder
4	9284063	1	Support profile
5	9284065	1	Mounting profile, glassholder
6	9284131	2	Airblock profile
7	9284719	1	Shelf support, left, top
8	9284720	1	Shelf support, right, top
9	9284723	1	Shelf support, left, middle
10	9284724	1	Shelf support, right, middle
11	92800315	1	Top shelf ass., Stainless steel top plate, incl. heating element
12	92800325	1	Middle shelf ass., Stainless steel top plate, incl. heating element
13	92800335	1	Bottom shelf ass., Stainless steel top plate, incl. heating element
14	9282047	3	Heating element, 900 W
15	9282052	45	Spacer
16	4310070	45	Clamp
17	9284050	3	Holder, price rail
18	9283012	3	Price rail, transparent
19	9261024	1 mtr	Protection profile (plastic)
20	9221008	12	Spacing pin, 3D nut M6
21	9284114	1	Sensor holder
22	9221011	1	Temperature sensor
23	9261027	6	Socket set screw M6x8 mm, Torx
24	9284095	1	Cover plate, left
25	9284096	1	Cover plate, right
26	9282046	1	Display rack, bottom
27	9282044	1	Display rack, top
28	9282045	1	Display rack, middle
29	92801265	1	Sliding door ass., left
29A	9280122	1	Sliding door ass., left (till serial nr. 100059322)
29-1	9281010	2	Sliding wheel
30	92801275	1	Sliding door ass., right
30A	9280123	1	Sliding door ass., right (till serial nr. 100059322)
30-1	9281010	2	Sliding wheel
31	9284101	1	Operating panel
32	9221009	1	Thermostat, Danfoss
33	9181008	2	Tumble switch
34	9181071	1	Sticker, lighting
35	9181072	1	Sticker, heating
36	9284133	1	Connection box
37	9284134	1	Cover, box
38	8033659	1	Connecting block, 9-pole
39	3500187	1	Relay
40	8071061	1	Earth connection, 4-pole
41	8071060	4	Earth connection, 2-pole
42	8072071	1	Connecting block, mains
43	9221029	3	Ballast, 14 / 21 W, 230 V, 50...60Hz
44	9282000	2	Side glass

Item	Part number	Qty	Description
45	9284000	1	Front panel
46	9284064	4	Glass holder
47	9284714	1	Cover profile, left
48	9284713	1	Cover profile, right
49	9040659	2	Nylon bush
50	0141149	2	Screw M5x16 mm.
51	9284061	1	Mounting bracket, back side
52	9284058	1	Frame, right
53	9284057	1	Frame, left
54	9284537	1	Mounting bracket, front side
55	9284116	1	Cover plate, electric parts
56	9284209	1	Plinth
57	9281025	2	Clamp for plinth
58	9091383	1	Connecting cable with plug
59	9181030	4	Adjustable leg
60	9222076	1	Strain relief
61	9222077	1	Nut, strain relief
62	9284060	2	Mounting profile, castors
63	9172125	2	Ridget caster
64	9172065	2	Swivel caster
65	9110917	1	Indication plate
66	9284731	1	Counter profile
67	9262076	3	Glass holder
68	9284711	1	Light fixture
69	6511627	6	Lamp holder
70	9221027	3	TL lamp 21 W / 830
70A	9281007	3	TL lamp 21 W / 840 (till 01-01-2013)
71	9284102	1	Coupling plate
72	9282008	1	Front glass
73	9281038	2	Glass holder
74	9283013	2	Hinge
75	9282040	1	Heating element 150 W
76	9280405	1	Blower housing
77	9284706	1	Fastening plate
78	9281034	1	Blower
79	9280406	1	Tube with flange
80	9284705	1	Cover plate
81	3500037	1	Thermostat with reset, 100-320°C
82		1	Mounting plate, thermostat
83	9283009	1	Protection profile (plastic)
84	9281035	4 mtr	PVC tube Ø 50 x 3.7 mm
85	9281032	10	PVC elbow 50 mm
86	9281033	5	PVC T-joint 50 mm
87	9283004	1	Protection profile (plastic)

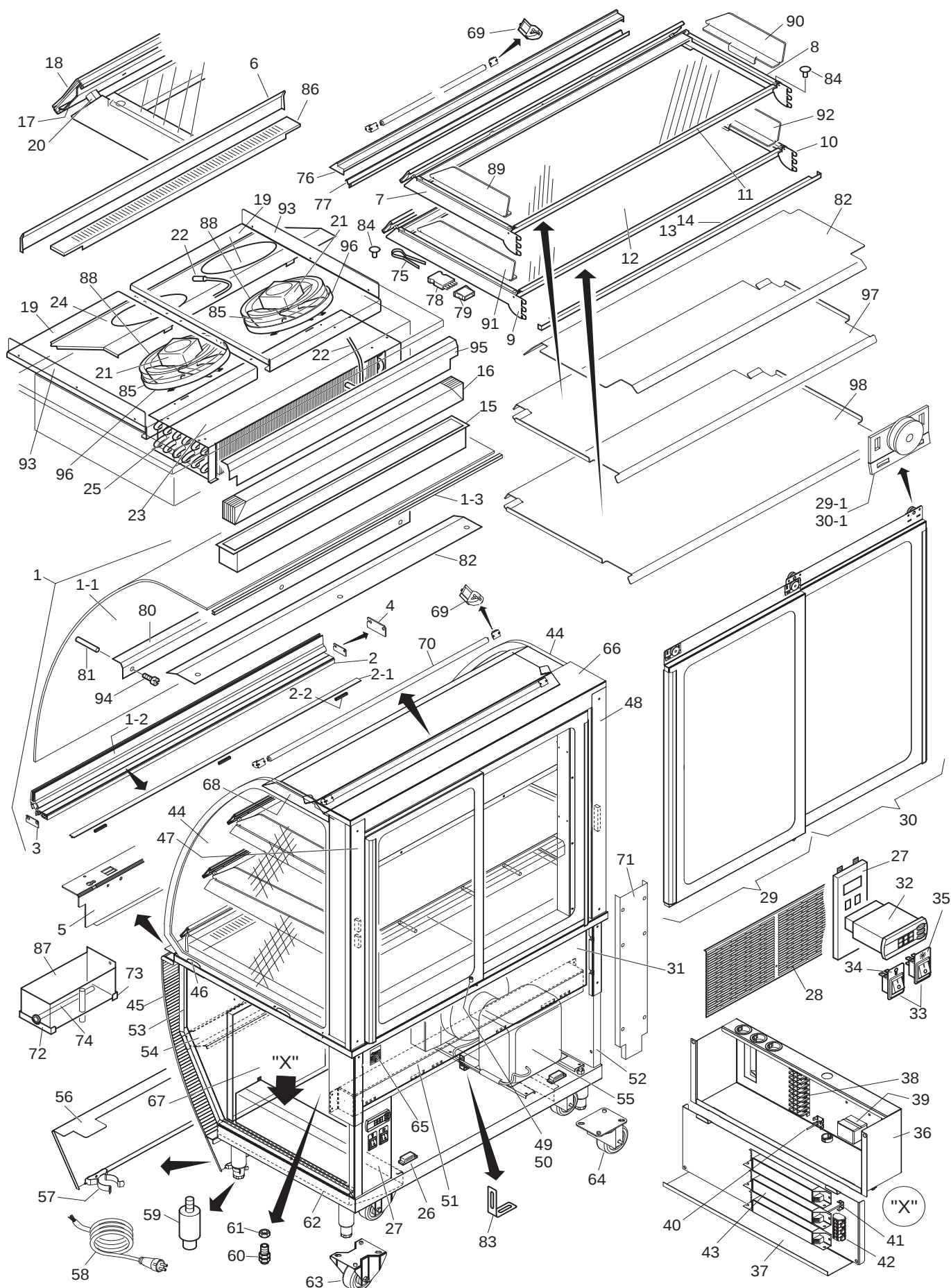
This exploded view diagram illustrates the assembly of a refrigerator. The components are numbered as follows:

- Top Section (Freezer):** Includes the top cover (1), inner panel (1-1), and various internal components like the evaporator fan (80), fan motor (81), and wiring (72, 71, 77, 76, 75, 74, 73, 70, 69, 68, 66, 65, 64, 63, 62, 61, 60).
- Middle Section (Refrigerator Compartment):** Shows the main body (15, 16, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1-2, 2-1, 2-2) and the door (30) with its inner panel (31) and outer panel (32).
- Bottom Section (Base):** Includes the base panel (59), base frame (58), and various components like the condenser coils (38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100).
- Control Panel:** Located on the right side, featuring the control panel (27), display (32), and various buttons (33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100).

Arrows indicate the assembly sequence and direction for various components, such as the door (30) being attached to the main body (15, 16, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1-2, 2-1, 2-2) and the base panel (59) being attached to the base frame (58).

Item	Part number	Qty	Description	Item	Part number	Qty	Description
1	9280025S	1	Glass, bended, complete with profiles	43	9221029	3	Ballast, 14 / 21 W, 230 V, 50...60Hz
1-1	9282001	1	Glass, bended, without profiles	44	9282000	2	Side glass
1-2	9283008	1	Glassholder profile	45	9284469	2	Suction fan ring
1-3	9283009	1	Protection profile (plastic)	46	9284064	4	Glass holder
2	9283019	1	Base profile glassholder	47	9284015	1	Cover profile, left
2-1	9283018	1	Cover profile	48	9284035	1	Cover profile, right
2-2	9281019	3	Plastic clip	49	9040659	2	Nylon bush
3	9284097	1	Cover plate, left	50	0141149	2	Screw M5x16
4	9284098	1	Cover plate, right	51	9282121	1	Air guide bottom, honeycomb
5	9284065	1	Mounting profile, glassholder	52	9284424	1	Frame, right
6	9284637	1	Mounting profile for holder price rail	53	9284423	1	Frame, left
7	9284501	1	Shelf support, left, top	54	9284537	1	Mounting bracket, front side
8	9284500	1	Shelf support, right, top	55	9281061	1	Condensing unit, Embraco
9	9284503	1	Shelf support, left, middle	55A		1	Condensing unit (till serial number 100065275)
10	9284502	1	Shelf support, right, middle	56	9284449	1	Side panel, left. RAL 7022
11	9282009	1	Glass plate, top	56	9284425	1	Side panel, left. RAL 7006 SHELL GB
12	9282007	1	Glass plate, middle	57	9284450	1	Side panel, right. RAL 7022
13	9284524	2	Support, glass plate, top	57	9284426	1	Side panel, right. RAL 7006 SHELL GB
15	9280440	1	Holder, honeycomb divider	58	9284452	1	Front panel, top. RAL 7022
16	9282120	1	Air divider, honeycomb	58	9284427	1	Front panel, top. RAL 7006 SHELL GB
17	9284050	3	Holder, price rail	59	9284453	1	Skirting, front. RAL 7022
18	9283012	3	Price rail, transparent	59	9284453	1	Skirting, front. RAL 7022 SHELL GB
19	9284636	2	Bottom plate without product stopper	60	9222076	1	Strain relief
20	9221008	8	Spacing pin, 3D nut M6	61	9222077	1	Nut, strain relief
21	8071071	2	Blower, without fanblade	62	9284420	2	Mounting profile, castors
22	9221011	2	Temperature sensor	63	9172065	2	Swivel caster
23	9284545	1	Evaporator plate	64	9172066	2	Swivel caster with brake
24	9284546	1	Fan plate	65	9110917	1	Indication plate
25	9282031	1	Evaporator	66	9284046	1	Counter profile
26	9231004	2	Magnetic bar	67	9091383	1	Connecting cable with plug
27	9284648	1	Operation panel	68	9284711	1	Light fixture, top side
28	9284514	1	Ventilation panel, backside	69	6511627	6	Lamp holder
29	9280028S	1	Sliding door ass., left	70	9221027	3	TL lamp 21 W / 830
29A	9280022	1	Sliding door ass., left (till serial number 100059322)	71	9282116	2	Product stopper
29-1	9281010	2	Sliding wheel	72	8071070	2	Fan cover
30	9280029S	1	Sliding door ass., right	73	9228054	1	Evaporator tray
30A	9280023	1	Sliding door ass., right (till serial number 100059322)	74	8030961	1	Heating element, 270 W
30-1	9281010	2	Sliding wheel	75	9284638	1	Grid
31	9284067	1	Panel, backside	76	9284505	2	Light fixture, outside
32	9261010	1	Thermostat, Danfoss	77	9284504	2	Light fixture, inside
33	9181008	2	Tumble switch	78	9281012	2	Plug, light, 5-pole
34	9181071	1	Sticker, lighting	79	9281009	2	Socket, light, 5-pole
35	9261005	1	Sticker, cooling	80	9281029	2	Fanblade
36	9284133	1	Connection box	81	9281038	22	Bumper
37	9284134	1	Cover, box	82	9282111	1	Air guide, plastic, top
38	8033659	1	Connecting block, 9-pole	83	9284544	1	Bracket, tubing
39	3500187	1	Relay	84	9282105	1	Side shelf top left
40	8071061	2	Earth connection, 4-pole	85	9282106	1	Side shelf top right
41	8071060	2	Earth connection, 2-pole	86	9282107	1	Side shelf center left
42	8072071	1	Connecting block, mains	87	9282108	1	Side shelf center right
				88	9282112	1	Air guide panel, top shelf
				89	9282119	1	Air guide panel, middle shelf

MODULAR COUNTER 100 COLD FULL SERVICE (CURVED FRONT)



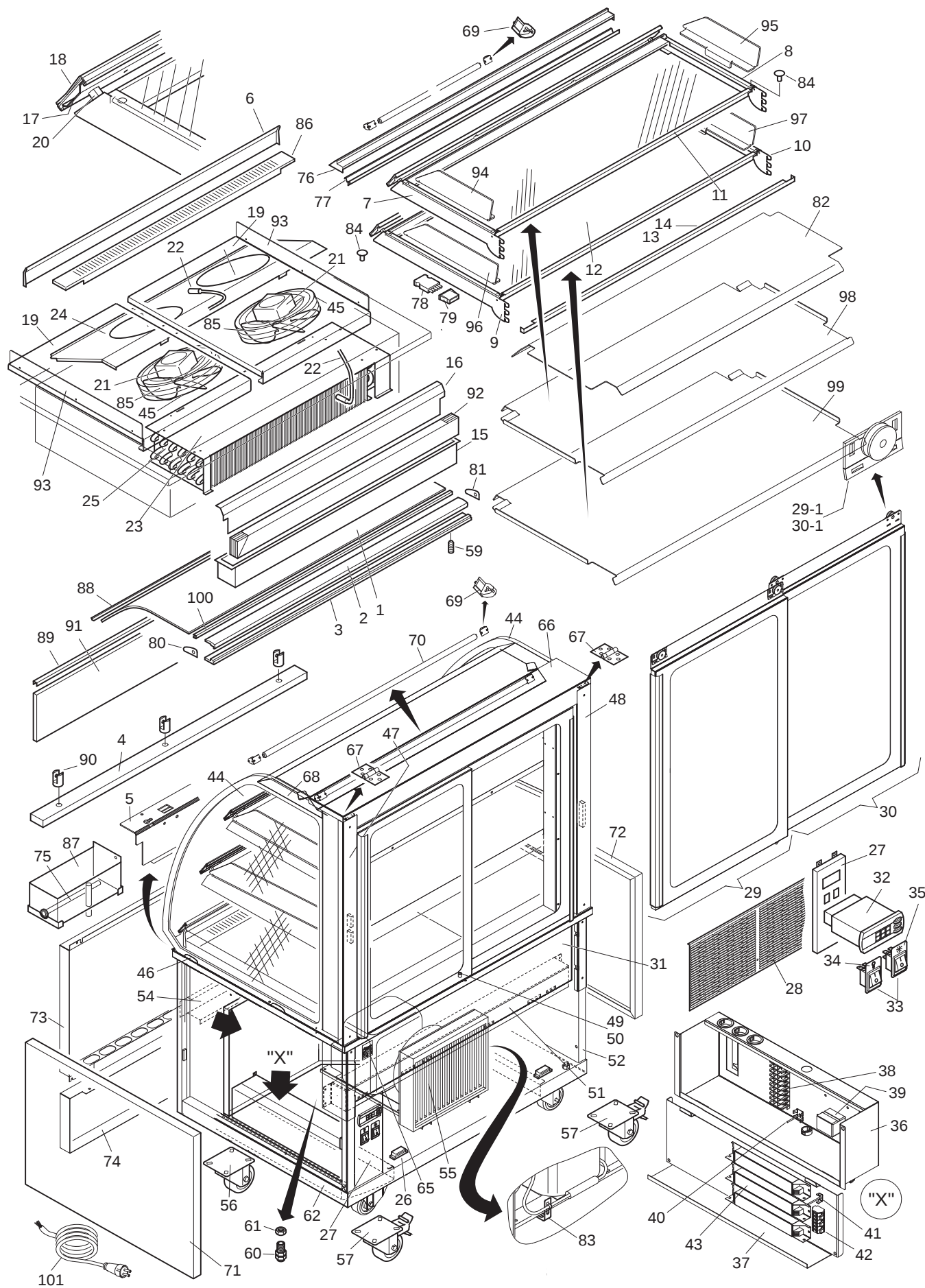
Item	Part number	Qty	Description
1	9280025	1	Glass, bended, complete with profiles
1-1	9282001	1	Glass, bended, without profiles
1-2	9283008	1	Glassholder profile
1-3	9283009	1	Protection profile (plastic)
2	9283019	1	Base profile glassholder
2-1	9283018	1	Cover profile
2-2	9281019	3	Plastic clip
3	9284097	1	Cover plate, left
4	9284098	1	Cover plate, right
5	9284065	1	Mounting profile, glassholder
6	9284637	1	Mounting profile for holder price rail
6A	9284590	1	Mounting profile for holder price rail (till serial number 100065275)
7	9284501	1	Shelf support, left, top
8	9284500	1	Shelf support, right, top
9	9284503	1	Shelf support, left, middle
10	9284502	1	Shelf support, right, middle
11	9282009	1	Glass plate, top
12	9282007	1	Glass plate, middle
13	9284524	2	Support, glass plate, top
14A	9284543	1	Support, glass plate, middle (till serial nr. 100065275)
15	9280440	1	Holder, honeycomb divider
15A	9284511	1	Holder, honeycomb divider (till serial nr. 100065275)
16	9282120	1	Air divider, honeycomb
16A	9282014	1	Air divider, honeycomb (till serial number 100065275)
17	9284050	3	Holder, price rail
18	9283012	3	Price rail, transparent
19	9284636	2	Bottom plate without side strip
19A	9284548	2	Bottom plate without side strip (till serial number 100065275)
20	9221008	8	Spacing pin, 3D nut M6
21	8071071	2	Blower, without fanblade
21A	8071071	1	Blower, without fanblade (till serial number 100065275)
22	9221011	2	Temperature sensor
23	9284545	1	Evaporator plate
23A	9284510	1	Evaporator plate (till serial number 100065275)
24	9284546	1	Fan plate
24A	9284509	1	Fan plate (till serial number 100065275)
25	9282031	1	Evaporator
25A	9282021	1	Evaporator (till serial number 100065275)
26	9231004	2	Magnetic bar
27	9284648	1	Operation panel
27A	9284536	1	Operation panel (till serial number 100065275)
28	9284514	1	Ventilation panel, backside

Item	Part number	Qty	Description
29	9280028S	1	Sliding door ass., left
29A	9280022	1	Sliding door ass., left (till serial number 100059322)
29-1	9281010	2	Sliding wheel
30	9280029S	1	Sliding door ass., right
30A	9280023	1	Sliding door ass., right (till serial number 100059322)
30-1	9281010	2	Sliding wheel
31	9284067	1	Panel, backside
32	9261010	1	Thermostat, Danfoss
33	9181008	2	Tumble switch
34	9181071	1	Sticker, lighting
35	9261005	1	Sticker, cooling
36	9284133	1	Connection box
37	9284134	1	Cover, box
38	8033659	1	Connecting block, 9-pole
39	3500187	1	Relay
40	8071061	2	Earth connection, 4-pole
41	8071060	2	Earth connection, 2-pole
42	8072071	1	Connecting block, mains
43	9221029	3	Ballast, 14 / 21 W, 230 V, 50...60Hz
44	9282000	2	Side glass
45	9284565	1	Front panel with air ventilation opening
45A	9284000	1	Front panel (till serial nr. 100065275)
46	9284064	4	Glass holder
47	9284015	1	Cover profile, left
48	9284035	1	Cover profile, right
49	9040659	2	Nylon bush
50	0141149	2	Screw M5x16
51	9284277	1	Mounting bracket, back side
51A	9284061	1	Mounting bracket, back side (till serial number 100065275)
52	9284058	1	Frame, right
53	9284057	1	Frame, left
54	9284537	1	Mounting bracket, front side
55	9281061	1	Condensing unit, Embraco
55A		1	Condensing unit. 90° turned ccw. (till serial number 100065275)
56	9284209	1	Plinth
57	9281025	2	Clamp for plinth
58	9091383	1	Connecting cable with plug
59	9181030	4	Adjustable leg
60	9222076	1	Strain relief
61	9222077	1	Nut, strain relief
62	9284060	2	Mounting profile, castors
63	9172125	2	Ridget caster
64	9172065	2	Swivel caster
65	9110917	1	Indication plate
66	9284046	1	Counter profile
67		1	Suction panel
68	9284711	1	Light fixture, top side

Item	Part number	Qty	Description
69	6511627	6	Lamp holder
70	9221027	3	TL lamp 21 W / 830
70A	9281007	3	TL lamp 21 W / 840 (till 01-01-2013)
71	9284102	1	Coupling plate
72	9228111	1	Bracket, right side
72A	9228105	1	Bracket, left side (till serial nr. 100065275)
73	9228110	1	Bracket, right side
74	8030961	2	Heating element, 270 W
74A	8030961	1	Heating element, 270 W (till serial nr. 100065275)
75A	9284132	4	Locking profile (till serial nr. 100065275)
76	9284505	2	Light fixture, outside
77	9284504	2	Light fixture, inside
78	9281012	2	Plug, light, 5-pole
79	9281009	2	Socket, light, 5-pole
80A	9282022	1	Air guide, plastic, shelf (till serial nr. 100065275)
81A	9281027	3	Spacing pin, plastic, threaded M4 (till serial nr. 100065275)
82	9282111	1	Air guide, plastic, top
82A	9282030	1	Air guide, plastic, top (till serial nr. 100065275)
83	9284544	1	Bracket, tubing
84	9281038	22	Bumper
85	9281029	2	Fanblade
85	9281029	1	Fanblade (till serial nr. 100065275)
86	9284638	1	Grid
86A	9284539	1	Grid (till serial nr. 100065275)
87	9228054	1	Evaporator tray
87A	9228013	1	Evaporator tray (till serial nr. 100065275)
88	8071070	2	Fan cover
88A	8071070	1	Fan cover (till serial nr. 100065275)
89	9282105	1	Side shelf top left
90	9282106	1	Side shelf top right
91	9282107	1	Side shelf center left
92	9282108	1	Side shelf center right
93	9282116	2	Product stopper
93A	9282056	2	Product stopper (till serial nr. 100065275)
94A	0141084	6	Screw , Philips, M4x12 (till serial nr. 100065275)
95	9282121	1	Air guide bottom, honeycomb
96	9284469	2	Suction fan ring
97	9282112	1	Air guide panel, top shelf
98	9282119	1	Air guide panel, middle shelf

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MODULAR COUNTER 100 COLD SELF SERVICE (CUBE)



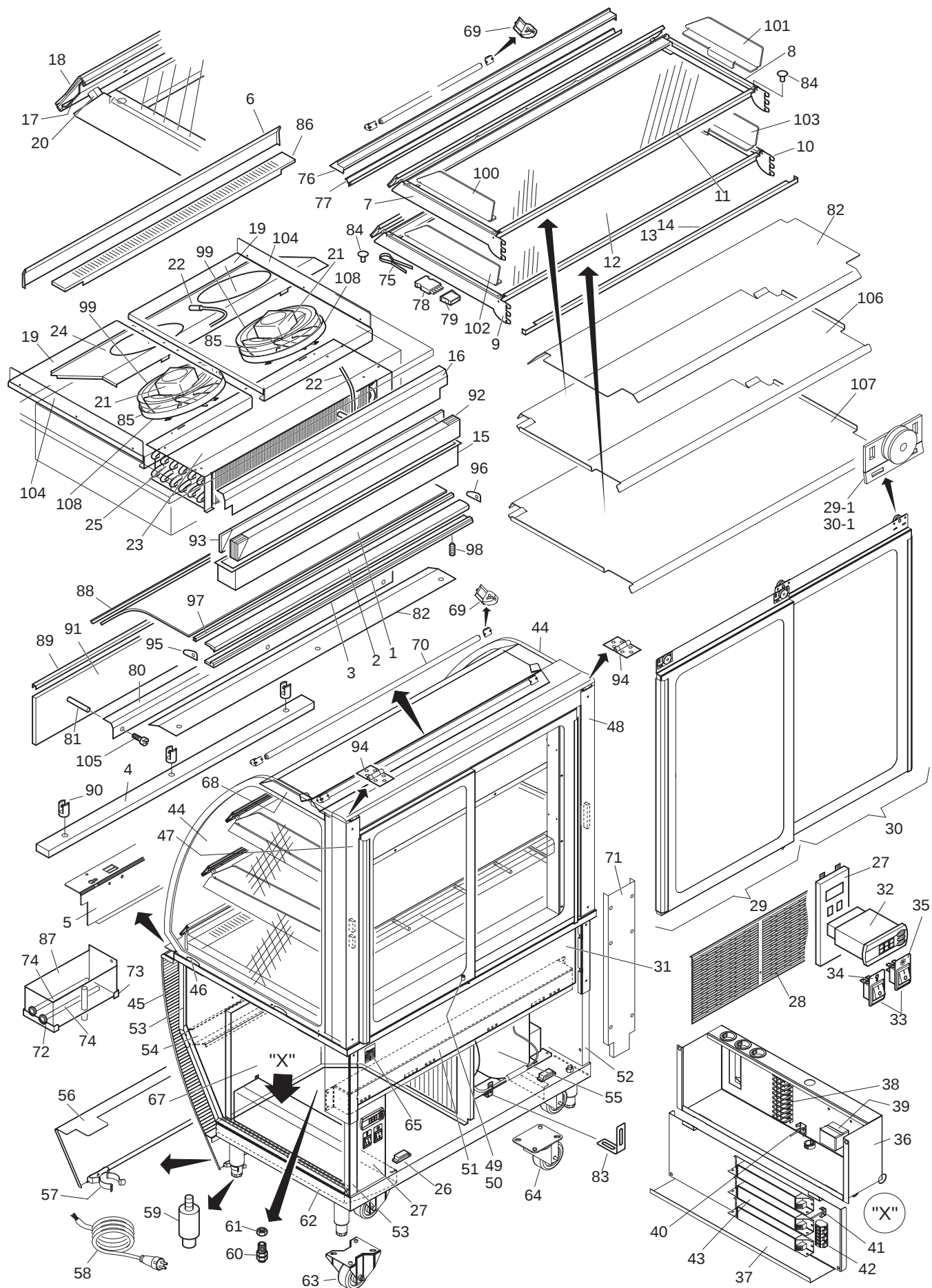
Item	Part number	Qty	Description
1	9282002	1	Glass, top
2	9283006	1	Clamp, glassholder
3	9283007	1	Base profile, glassholder
4	9284063	1	Support profile
5	9284065	1	Mounting profile, glassholder
6	9284637	1	Mounting profile for holder price rail
7	9284501	1	Shelf support, left, top
8	9284500	1	Shelf support, right, top
9	9284503	1	Shelf support, left, middle
10	9284502	1	Shelf support, right, middle
11	9282009	1	Glass plate, top
12	9282007	1	Glass plate, middle
13	9284524	2	Support, glass plate, top
14A	9284543	1	Support, glass plate, middle (till ser.number 100065275)
15	9280440	1	Holder, honeycomb divider
16	9282121	1	Air guide, honeycomb
17	9284050	3	Holder, price rail
18	9283012	3	Price rail, transparent
19	9284636	2	Bottom plate without side strip
20	9221008	8	Spacing pin, 3D nut M6
21	8071071	2	Blower
22	9221011	2	Temperature sensor
23	9284545	1	Evaporator plate
24	9284546	1	Fan plate
25	9282031	1	Evaporator
26	9231004	2	Magnetic bar
27	9284648	1	Operation panel
28	9284514	1	Ventilation panel, backside
29	92800285	1	Sliding door ass., left
29-1	9281010	2	Sliding wheel
30	92800295	1	Sliding door ass., right
30-1	9281010	2	Sliding wheel
31	9284067	1	Panel, backside
32	9261010	1	Thermostat, Danfoss
33	9181008	2	Tumble switch
34	9181071	1	Sticker, lighting
35	9261005	1	Sticker, cooling
36	9284133	1	Connection box
37	9284134	1	Cover, box
38	8033659	1	Connecting block, 9-pole
39	3500187	1	Relay
40	8071061	2	Earth connection, 4-pole
41	8071060	2	Earth connection, 2-pole
42	8072071	1	Connecting block, mains
43	9221029	3	Ballast, 14 / 21 W, 230 V, 50...60Hz
44	9282000	2	Side glass
45	8071070	2	Fan cover
46	9284064	4	Glass holder

Item	Part number	Qty	Description
47	9284015	1	Cover profile, left
48	9284035	1	Cover profile, right
49	9040659	2	Nylon bush
50	0141149	2	Screw M5x16
51	9284061	1	Mounting bracket, back side
52	9284424	1	Frame, right
53	9284423	1	Frame, left
54	9284537	1	Mounting bracket, front side
55	9281060	1	Condensing unit
56	9172065	2	Swivel caster
57	9172066	2	Swivel caster with brake
58	9091383	1	Connecting cable with plug
59	9261027	6	Socket set screw M6x8 mm, Torx
60	9222076	1	Strain relief
61	9222077	1	Nut, strain relief
62	9284420	2	Mounting profile, castors
63	9172125	2	Ridget caster
64	9172065	2	Swivel caster
65	9110917	1	Indication plate
66	9284047	1	Cover profile
67	9283013	2	Hinge
68	9284711	1	Light fixture, top side
69	6511627	6	Lamp holder
70	9221027	3	TL lamp 21 W / 830
71	9284449	1	Side panel, left. RAL 7022
71	9284425	1	Side panel, left. RAL 7006 SHELL GB
72	9284450	1	Side panel, right. RAL 7022
72	9284426	1	Side panel, right. RAL 7006 SHELL GB
73	9284452	1	Front panel, top. RAL 7022
73	9284427	1	Front panel, top. RAL 7006 SHELL GB
74	9284453	1	Skirting, front. RAL 7022
74	9284453	1	Skirting, front. RAL 7022 SHELL GB
75	8030961	2	Heating element, 270 W
76	9284505	2	Light fixture, outside
77	9284504	2	Light fixture, inside
78	9281012	2	Plug, light
79	9281009	2	Socket, light
80	9284095	1	Cover plate, left
81	9284096	1	Cover plate, right
82	9282111	1	Air guide, top
83	9284544	1	Bracket, tubing
84	9281038	24	Bumper
85	9281029	2	Fanblade
86	9284539	1	Grid
87	9228054	1	Evaporator tray
88	9283009	1	Protection profile (plastic)

Item	Part number	Qty	Description
89	9283004	1	Protection profile (plastic)
90	9262076	3	Glass holder
91	9282008	1	Front glass
92	9282033	1	Air divider, honeycomb
93	9282032	1	Air divider, small, honeycomb
94	9282105	1	Side shelf top left
95	9282106	1	Side shelf top right
96	9282107	1	Side shelf center left
97	9282108	1	Side shelf center right
98	9282112	1	Air guide panel, top shelf
99	9282119	1	Air guide panel, middle shelf
100	9261024	1 mtr	Protection profile (plastic)
101	9091383	1	Connecting cable with plug

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MODULAR COUNTER 100 COLD SELF SERVICE (CURVED FRONT)



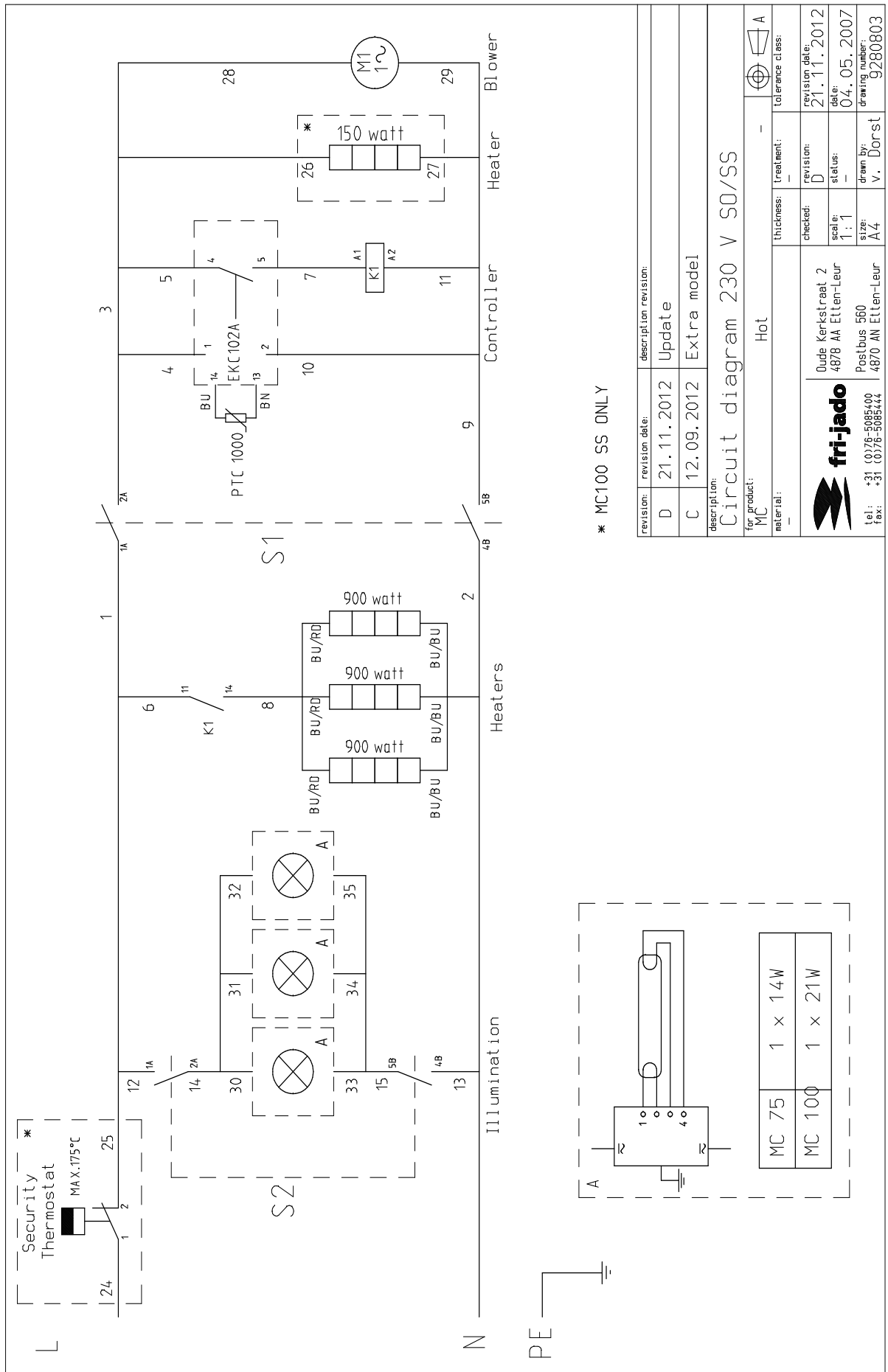
Item	Part number	Qty	Description
1	9282002	1	Glass, top
2	9283006	1	Clamp, glassholder
3	9283007	1	Base profile, glassholder
4	9284063	1	Support profile
5	9284065	1	Mounting profile, glassholder
6	9284637	1	Mounting profile for holder price rail
6A	9284590	1	Mounting profile for holder price rail (till serial number 100065275)
7	9284501	1	Shelf support, left, top
8	9284500	1	Shelf support, right, top
9	9284503	1	Shelf support, left, middle
10	9284502	1	Shelf support, right, middle
11	9282009	1	Glass plate, top
12	9282007	1	Glass plate, middle
13	9284524	2	Support, glass plate, top
14A	9284543	1	Support, glass plate, middle (till serial nr. 100065275)
15	9280440	1	Holder, honeycomb divider
15A	9284511	1	Holder, honeycomb divider (till serial nr. 100065275)
16	9282121	1	Air guide, honeycomb
16A	9282023	1	Air guide, honeycomb (till serial nr. 100065275)
17	9284050	3	Holder, price rail
18	9283012	3	Price rail, transparent
19	9284636	2	Bottom plate without side strip
19A	9284512	2	Bottom plate without side strip (till serial number 100065275)
20	9221008	8	Spacing pin, 3D nut M6
21	8071071	2	Blower
21A	8071071	1	Blower (till ser.number 100037744)
22	9221011	2	Temperature sensor
23	9284545	1	Evaporator plate
23A	9284510	1	Evaporator plate (till ser.number 100037744)
24	9284546	1	Fan plate
24A	9284509	1	Fan plate (till ser.number 100037744)
25	9282031	1	Evaporator
25A	9282021	1	Evaporator (till ser.number 100037744)
26	9231004	2	Magnetic bar
27	9284648	1	Operation panel
27A	9284536	1	Operation panel (till serial number 100065275)
28	9284514	1	Ventilation panel, backside
29	92800285	1	Sliding door ass., left
29A	9280022	1	Sliding door ass., left (till serial number 100059322)
29-1	9281010	2	Sliding wheel
30	92800295	1	Sliding door ass., right
30A	9280023	1	Sliding door ass., right (till serial number 100059322)
30-1	9281010	2	Sliding wheel

Item	Part number	Qty	Description
31	9284067	1	Panel, backside
32	9261010	1	Thermostat, Danfoss
33	9181008	2	Tumble switch
34	9181071	1	Sticker, lighting
35	9261005	1	Sticker, cooling
36	9284133	1	Connection box
37	9284134	1	Cover, box
38	8033659	1	Connecting block, 9-pole
39	3500187	1	Relay
40	8071061	2	Earth connection, 4-pole
41	8071060	2	Earth connection, 2-pole
42	8072071	1	Connecting block, mains
43	9221029	3	Ballast, 14 / 21 W, 230 V, 50...60Hz
44	9282000	2	Side glass
45	9284565	1	Front panel with air ventilation opening
45A	9284000	1	Front panel (till serial nr. 100065275)
46	9284064	4	Glass holder
47	9284015	1	Cover profile, left
48	9284035	1	Cover profile, right
49	9040659	2	Nylon bush
50	0141149	2	Screw M5x16
51	9284277	1	Mounting bracket, back side
51A	9284061	1	Mounting bracket, back side (till serial number 100065275)
52	9284058	1	Frame, right
53	9284057	1	Frame, left
54	9284537	1	Mounting bracket, front side
55	9281060	1	Condensing unit, Embraco
55A	9281042	1	Condensing unit, Asperia (till ser.number 100065275)
55B	2541212	1	Condensing unit (till ser.number 100057253)
55C	9261015	1	Condensing unit (till ser.number 100037744)
56	9284209	1	Plinth
57	9281025	2	Clamp for plinth
58	9091383	1	Connecting cable with plug
59	9181030	4	Adjustable leg
60	9222076	1	Strain relief
61	9222077	1	Nut, strain relief
62	9284060	2	Mounting profile, castors
63	9172125	2	Ridget caster
64	9172065	2	Swivel caster
65	9110917	1	Indication plate
67	9284516	1	Suction panel
68	9284711	1	Light fixture, top side
69	6511627	6	Lamp holder
70	9221027	3	TL lamp 21 W / 830
70A	9281007	3	TL lamp 21 W (till 01-02-2013)
71	9284102	1	Coupling plate
72	9228111	1	Bracket, left side
73	9228110	1	Bracket, right side

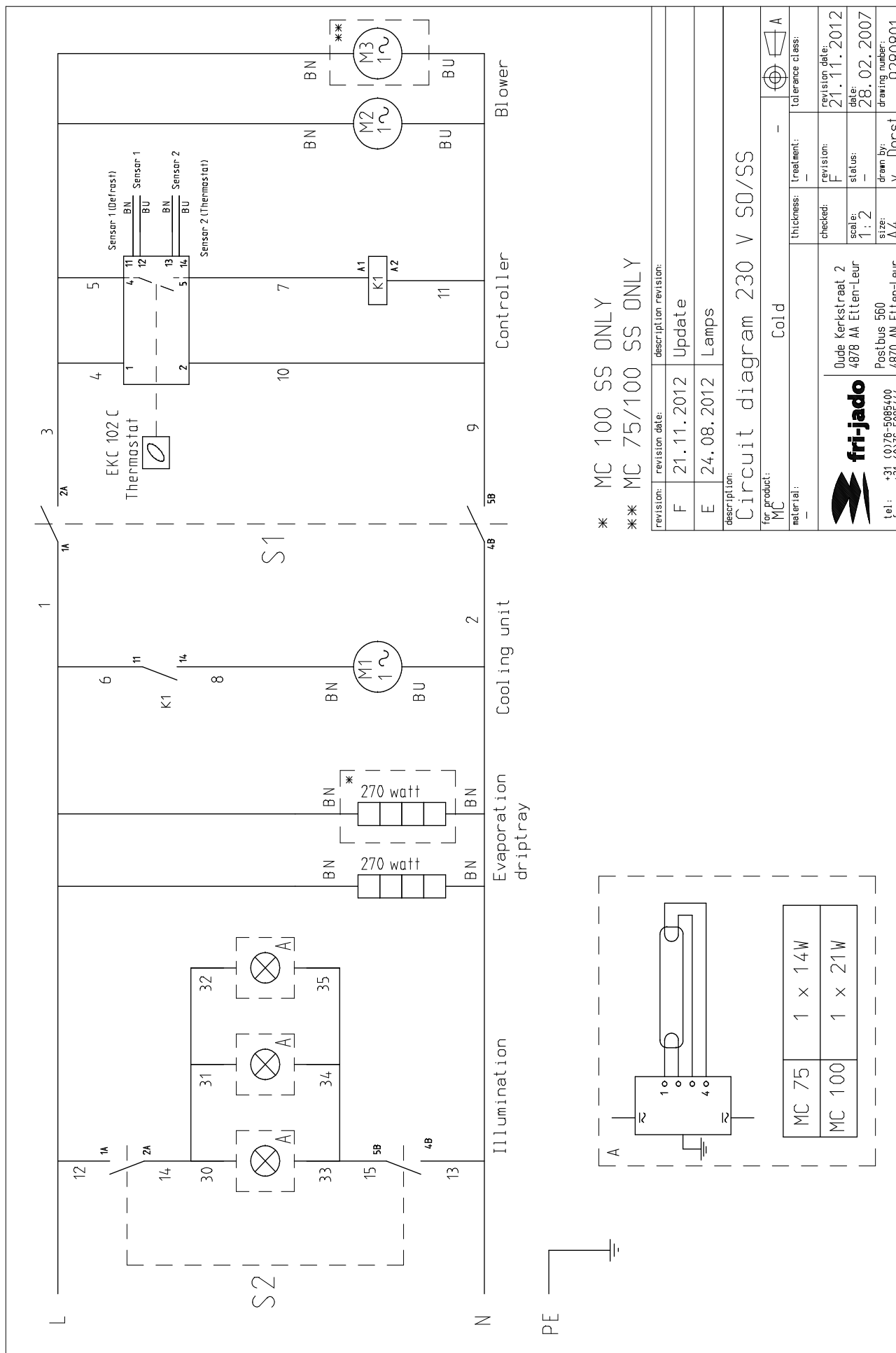
Item	Part number	Qty	Description
74	8030961	2	Heating element, 270 W
75	9284132	4	Locking profile
76	9284505	2	Light fixture, outside
77	9284504	2	Light fixture, inside
78	9281012	2	Plug, light
79	9281009	2	Socket, light
80A	9282022	1	Air guide, plastic, shelf (till serial nr. 100065275)
81A	9281027	3	Spacing pin, plastic, threaded M4 (till serial nr. 100065275)
82	9282111	1	Air guide, plastic, top
82A	9282030	1	Air guide, plastic, top (till serial nr. 100065275)
81	9281027	3	Spacing pin, plastic
82	9282111	1	Air guide, plastic, top
82A	9282030	1	Air guide, plastic, top (till serial nr. 100065275)
83	9284544	1	Bracket, tubing
84	9281038	24	Bumper
85	9281029	2	Fanblade
85A	9281029	1	Fanblade (till ser.number 100037744)
86	9284638	1	Grid
86A	9284539	1	Grid (till serial nr. 100065275)
87	9228054	1	Evaporator tray
88	9283009	1	Protection profile (plastic)
89	9283004	1	Protection profile (plastic)
90	9262076	3	Glass holder
91	9282008	1	Front glass
92	9282120	1	Air divider, honeycomb
92A	9282033	1	Air divider, honeycomb (till serial number 100065275)
93A	9282032	1	Air divider, small, honeycomb (till serial number 100065275)
94	9283013	2	Hinge
95	9284095	1	Cover plate, left
96	9284096	1	Cover plate, right
97	9261024	1 mtr	Protection profile (plastic)
98	9261027	6	Socket set screw M6x8 mm, Torx
99	8071070	2	Fan cover
99A	8071070	1	Fan cover (till ser.number 100037744)
100	9282105	1	Side shelf top left
101	9282106	1	Side shelf top right
102	9282107	1	Side shelf center left
103	9282108	1	Side shelf center right
104	9282116	2	Product stopper
104A	9282056	2	Product stopper (till serial nr. 100065275)
106	9282112	1	Air guide panel, top shelf
107	9282119	1	Air guide panel, middle shelf
108	9284469	2	Suction fan ring

ELECTRICAL DIAGRAMS

CIRCUIT DIAGRAM MODULAR COUNTER 75 -100 HOT FULL AND SELF SERVICE



CIRCUIT DIAGRAM MODULAR COUNTER 75 - 100 COLD FULL AND SELF SERVICE



LAMP HOLDER



1. Remove the transparent price rail. Lift this up on the edge and remove this from the holder. Now slide the rail out to the side.
2. Remove the screws on top of the lamp holder.
3. Bend the lamp holder profile open. This is a special construction that enables you to open and close this profile.
4. Loosen the blocking clips on the sides of the lamp holder and lift the holder out.
5. Remove the wiring from the holder.
6. Reverse the procedure to install.

Note: If the lamp holder profile breaks, just screw it back on again.

