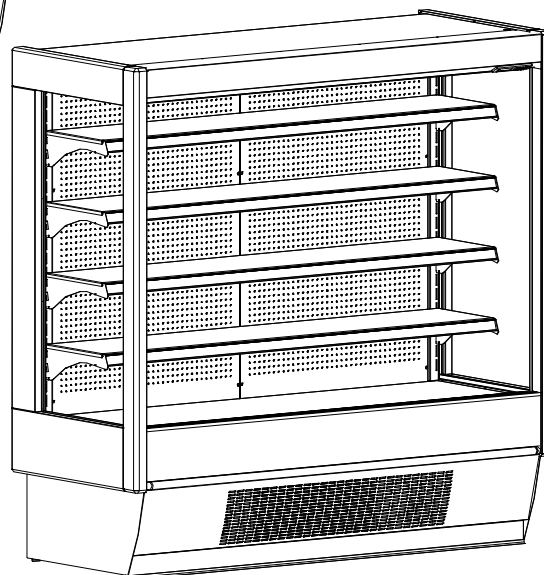
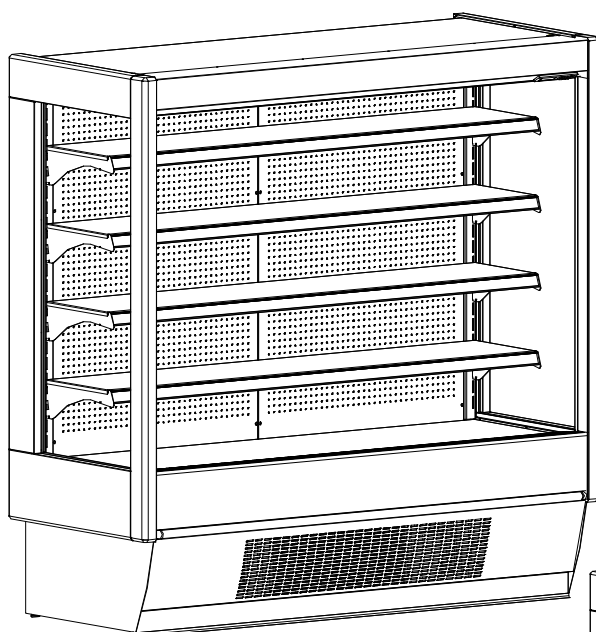


# INSTALLATION MANUAL

## MURAL PRIMUS AND PRIMUS SLIM



Elaborated by:

Approved by:

Edition: 1

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## 1. INTRODUCTION

Our Quality Policy is orientated towards the ***“creation of products that satisfy the customers' real needs, providing an excellent service.”***

We have created installation manuals for all our products, in which our customers will find useful information that is indispensable for the correct installation and maintenance of these appliances. Therefore we recommend that you read this manual carefully so as to assimilate all the information it contains correctly. **Whenever you receive any alteration/update** immediately substitute the manual, totally or partially, according to our instructions. Keep the original and any copies up to date. **Do not forget that the manuals are indispensable for proper installation and maintenance of the equipment.**

***For technical assistance always request the components you need by their respective code and designation*** (consult from point 11 onwards).

## 2. GENERAL CONCEPTS

### Installation

- Install the appliance(s) in **unimpeded areas**, far away from sources of heat, draughts, radiators, the sun's rays, ovens, outlets of air-conditioning, fans, etc. and protected from rain. Never install in an environment with temperatures above **30 °C**. The relative humidity of the air should be equal to or lower than 60%. For higher temperatures the appliances will have to be equipped with compressor groups suitable for the tropics.
- Install appliance(s) far away from **dangerous environments** where there is risk of fire, radiation or explosion.
- Maintain the surrounding **areas unimpeded** and verify that the ventilation grills are not obstructed.
- Any adverse conditions will **affect** the performance of the appliance and they will provoke a significant **increase** in **energy** consumption.
- Connect the appliance in accordance with the specific instructions for each (**230 V and 50 Hz**). Verify that the power socket has an **earth wire** because it is compulsory by law.
- Before placing products in the appliance(s) the equipment should have been **running** for at least **one hour** with the curtains lowered, lights out, closed doors, etc. according to each product.
- Our products carry the CE mark, which guarantees that all the safety norms have been taken in consideration.

### Useful hints for the User

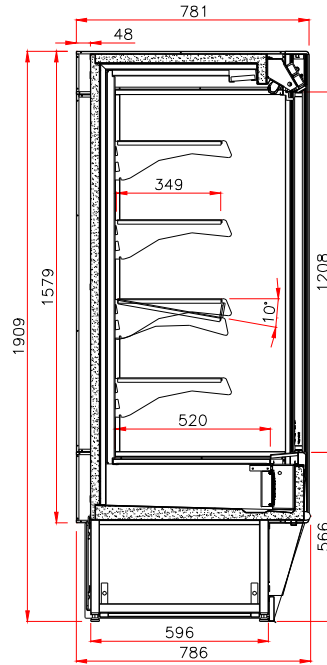
- **Regularly restock** the appliance(s) with products so as to avoid their large-scale entrance at any time. Do not place products beyond the defined **load limits** for each case. Remember that the products should be placed at a **temperature close** to that of use and that the appliances are for conservation and not for cooling. Do **not obstruct** air outlet grills next to the evaporating unit or suction grills.
- Check periodically that the **power fans**, when equipped, are all fully **working**. Call for technical assistance in the event of these not working because they are essential for a good circulation of air inside the appliance. Do not obstruct the power fans when restocking with products.
- Conduct a periodic **cleaning** of the **condensing unit** (at least once a month) because the performance is greatly improved and the energy consumption reduced. Always keep the ventilation grills and the space surrounding the compressor groups unimpeded.
- Check that the **power fans** are working. In the event of them non-functioning, disconnect the appliance from the current immediately to avoid burning-out the compressor, and call technical assistance to solve the problem.
- Check regularly if the **evaporating unit** is blocked or not. If it is, proceed with a manual defrost. If the problem persists call technical assistance.
- Check the state of conservation of the **plug and power socket** regularly, paying attention to any excessive heating.
- When doing any cleaning, **disconnect** the appliance from the electrical power supply.

- **Always** keep the appliance(s) **clean and dry**, both inside and out. Only clean it with water and a **neutral detergent** and do not wet the electric or electronic parts. Apart from having a more hygienic appearance, it will guarantee better operation and durability.
- Do not use **abrasive** products (e.g. chlorine based solvents and scotch-brite cleaning pads). The use of these can damage the protective coating of the appliance(s) and contribute to a more rapid corrosion.
- Do not use **steam** or **high pressure** water for cleaning.
- Regularly **clean** the **run-off channels** for melt water. Do not allow residues, particularly blood, pieces of meat and milk, to remain for a long time in its inside, since these will provoke smells and will contribute to **corrosion**.

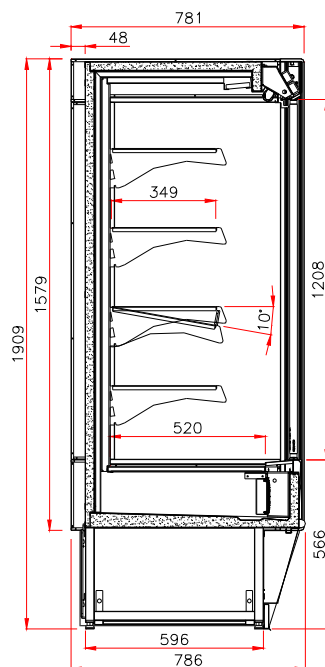
**3. MODELS**

**3.1. MURAL PRIMUS**

**3.1.1. DAIRY PRODUCTS**

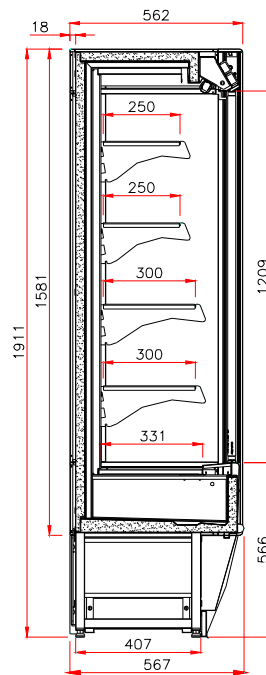


**3.1.2. MEAT AND POULTRY**

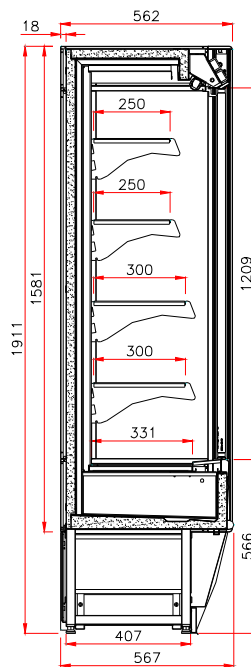


**3.2. MURAL PRIMUS SLIM**

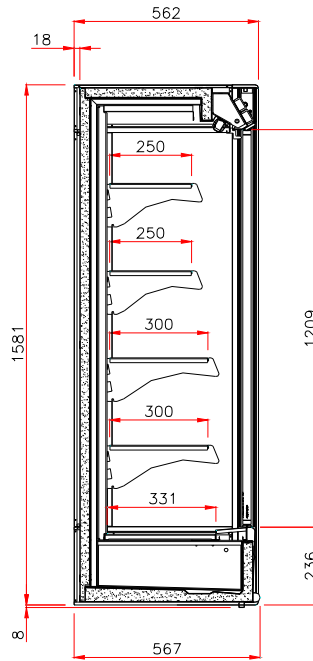
**3.2.1. DAIRY PRODUCTS**



**3.2.2. MEAT AND POULTRY**

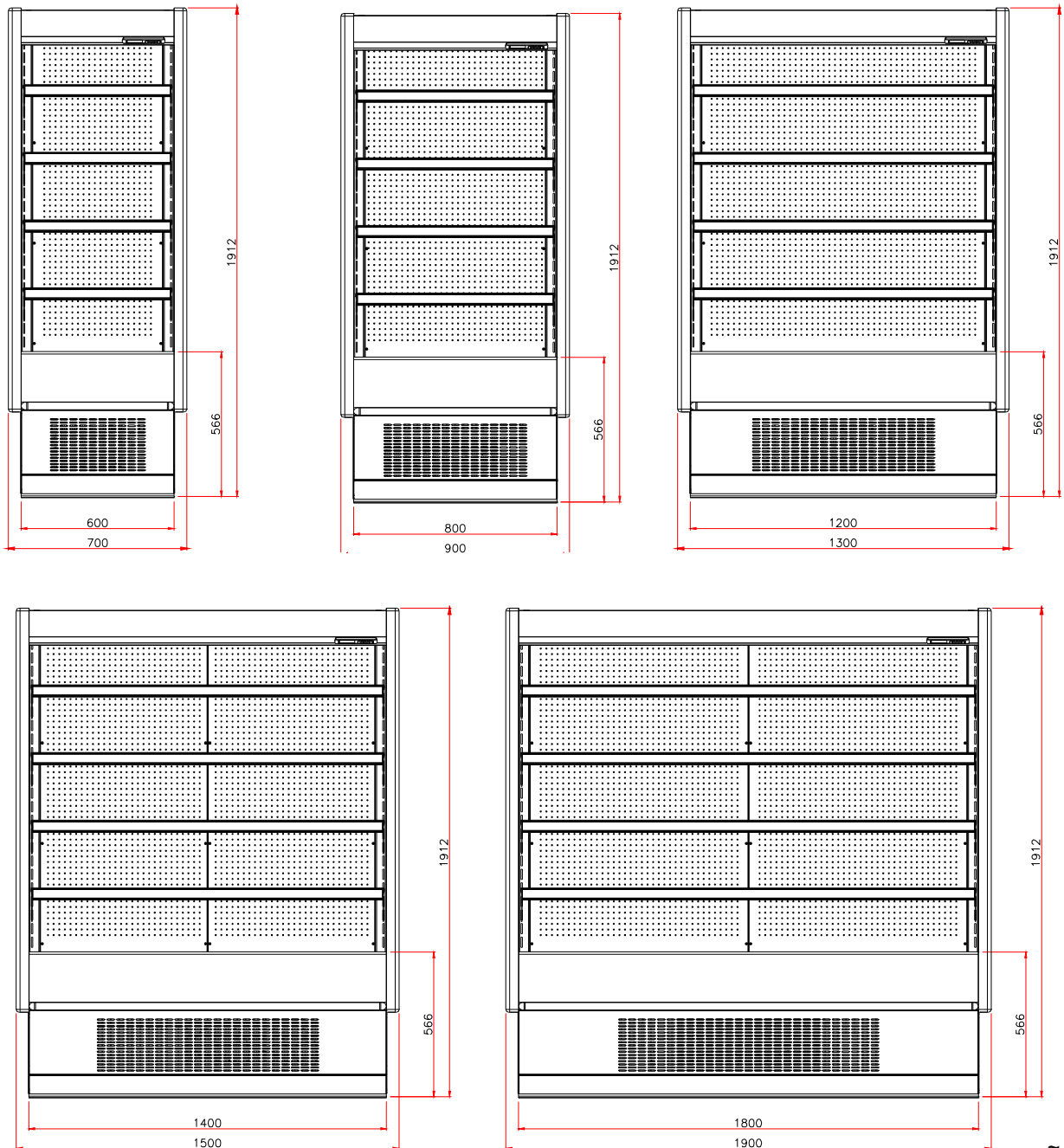


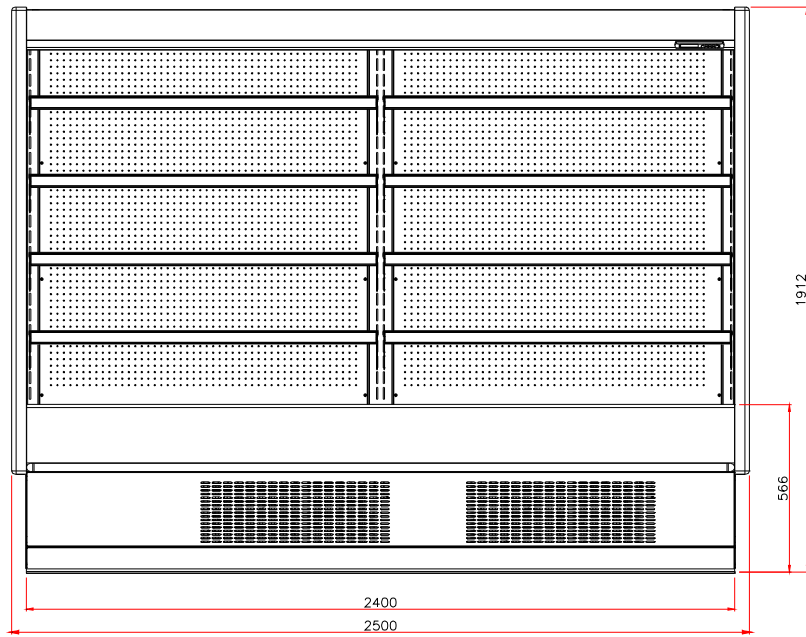
**3.2.3. WITHOUT BASE**



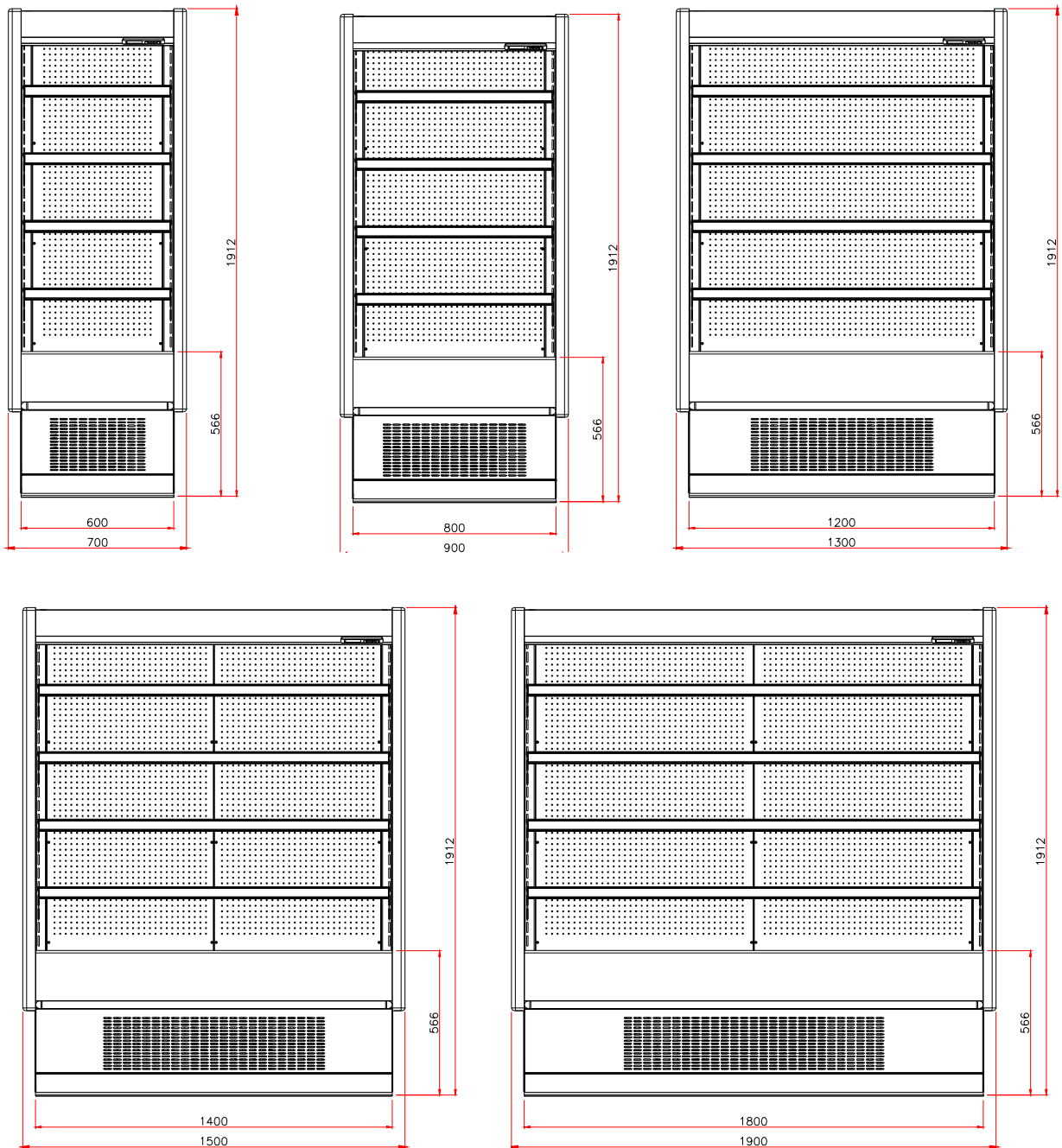
**3.3. DIMENSIONS**

**3.3.1. MURAL PRIMUS**





**3.3.2. MURAL PRIMUS SLIM**



#### **4. GENERAL CHARACTERISTICS**

The refrigeration system uses forced air.

The drainage of the condensed water is directed to the collector.

As an option, we suggest an automatic evaporating system for the condensed water, by means of an electrical resistor and a sound level (commonly known as an evaporation kit), not supplied with Slim without Base version.

The 250 models have two incorporated groups, in which the compressor's start is phased out by a temporiser in order to avoid current peaks, avoiding as such all kinds of problems which they might cause, too.

All appliances are equipped with upper and lateral illumination. As an alternative there is the possibility of illuminating all the shelves and the upper publicity panel.

The inner backs are made of galvanized metal-sheet, the plastic bumper strips are grey.

The baskets, the product divisions and the front gridirons are of grey plastic, too.

##### **4.1. DAIRY PRODUCTS**

- The appliance is ready to receive drinks and dairy products. It works at a temperature of between 3 and 6 degrees Celsius.
- Its working is controlled by an electrical device with digital display, either what temperature is concerned as well as the defrosting cycles.

##### **4.2. MEAT AND POULTRY**

- The appliance is ready to receive meat and charcuterie. It works at a temperature of between 0 and 3 degrees Celsius.
- Its working is controlled by an electrical device with digital display, either what temperature is concerned as well as the defrosting cycles.
- Electrical resistances help defrosting (only in this version).

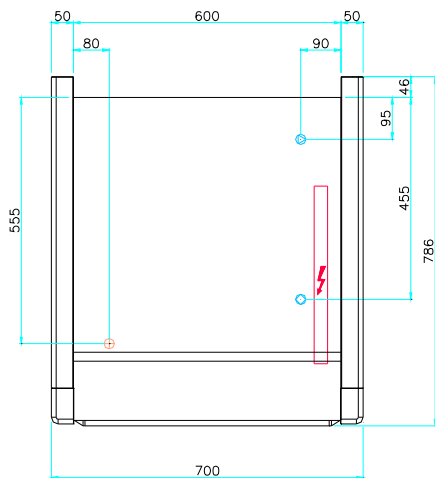
**5. CLIMATE CLASS TABLE**

Appliance	Temperature (°C)	Climate Class	Relative Humidity
MPLA - Mural Primus Dairy Products 70/90/130/150/190/250	3 / 6	3M2	60
MPSLA – Mural Primus Slim Dairy Products 70/90/130/150/190			
MPSSBLA – Mural Primus Slim without Base Dairy Products 90/130/190			
MPLA - Mural Primus Meat and Poultry 70/90/130/150/190/250	0 / 3	3M1	60
MPSLA – Mural Primus Slim Meat and Poultry 70/90/130/150/190			

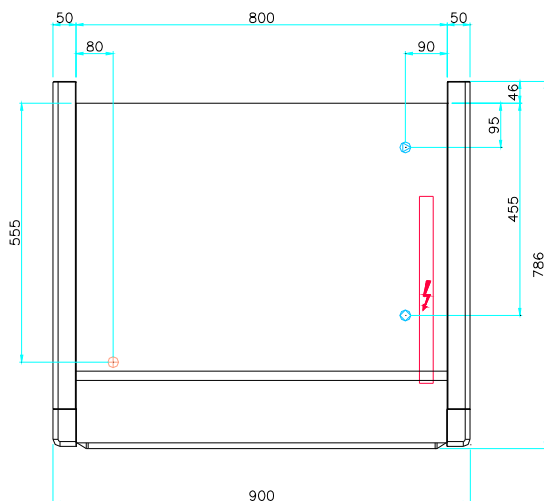
**6. CONDENSED WATER DRAINING AND ELECTRICAL CONNECTION POINTS**

**6.1. MURAL PRIMUS**

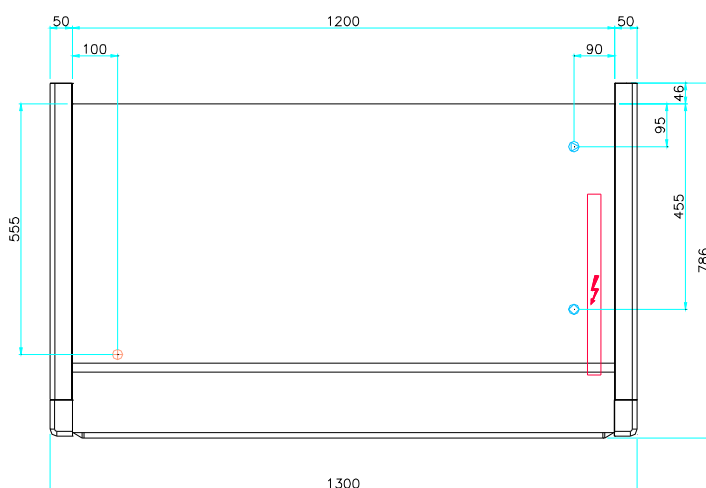
**6.1.1. 70**



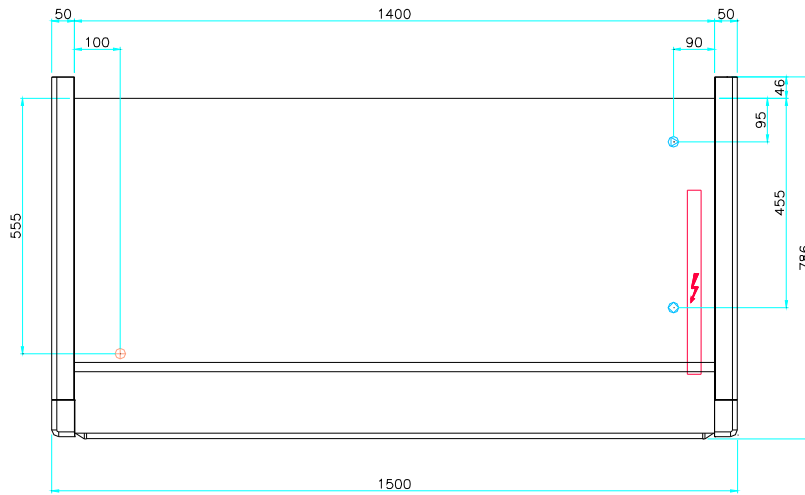
**6.1.2. 90**



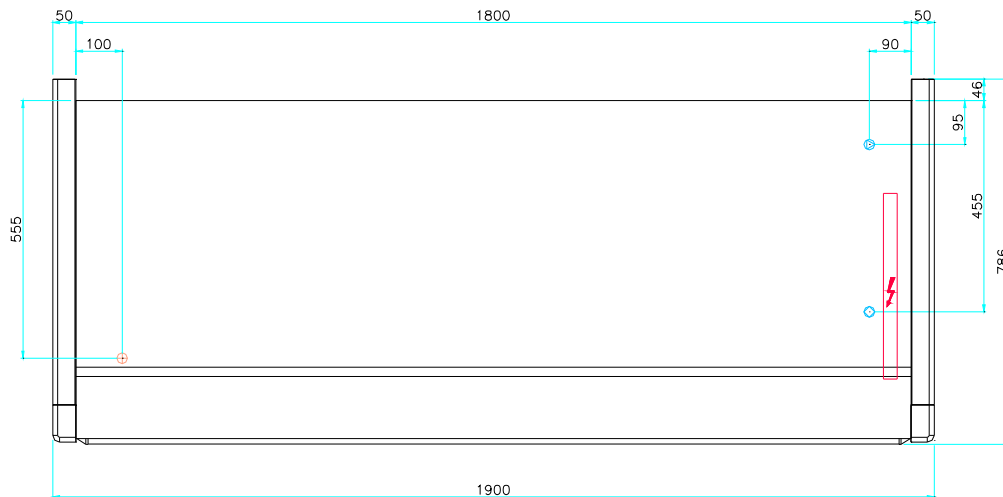
**6.1.3. 130**



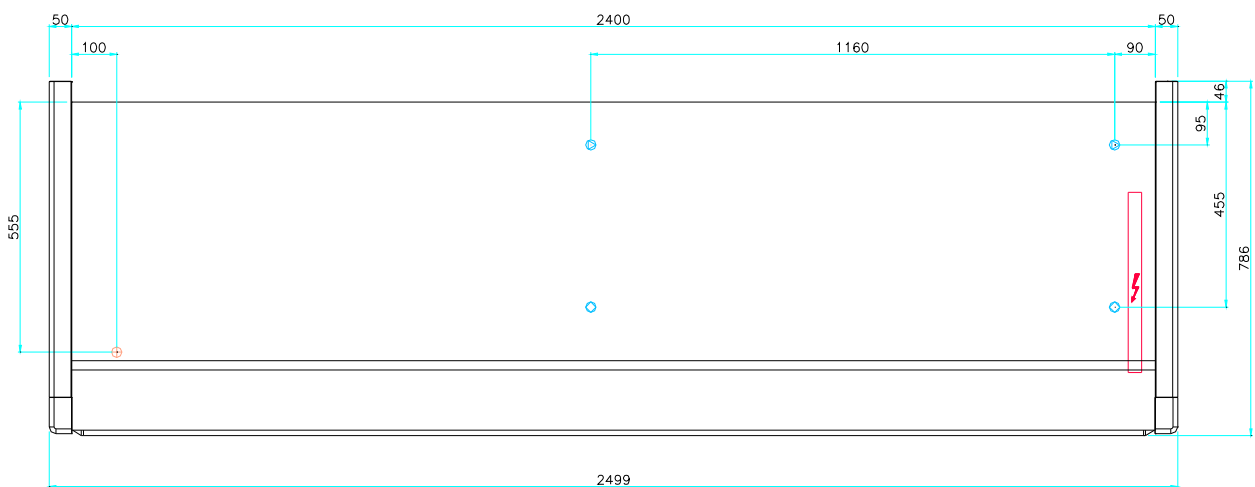
**6.1.4. 150**



**6.1.5. 190**

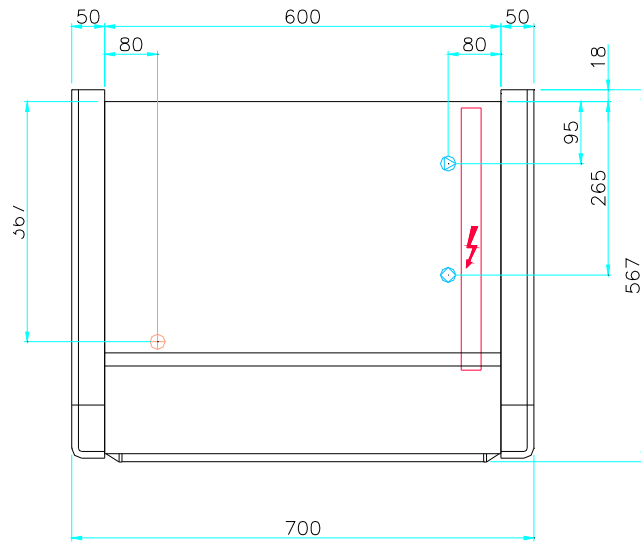


**6.1.6. 250**

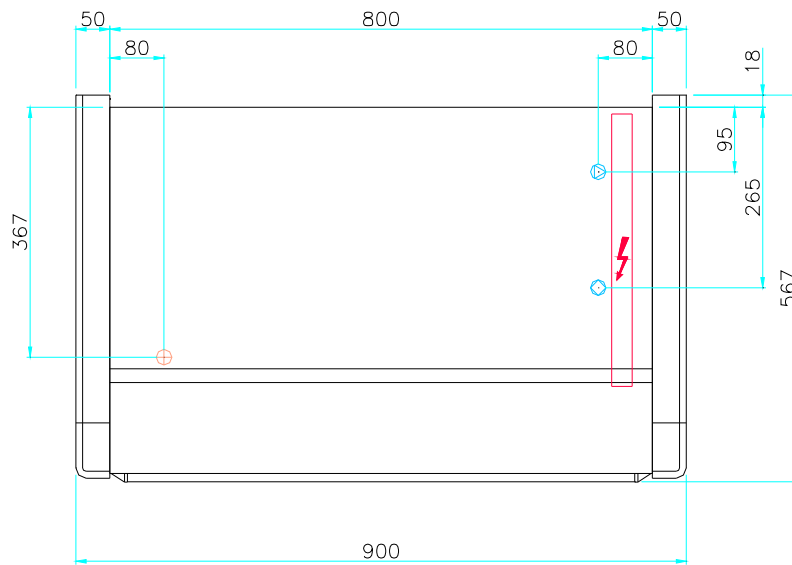


**6.2. MURAL PRIMUS SLIM**

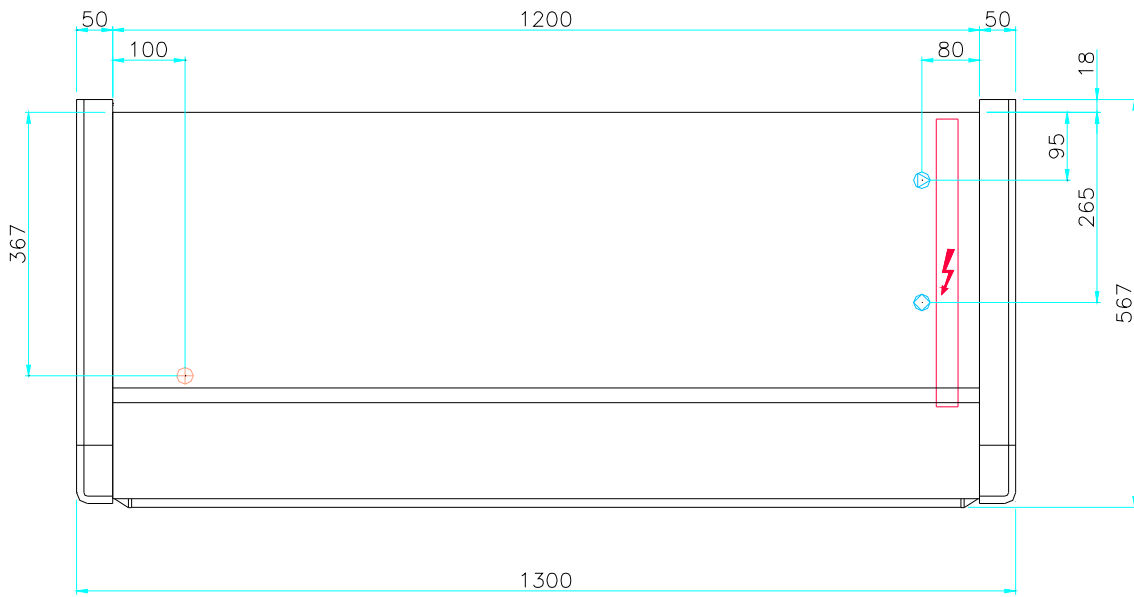
**6.2.1. 70**



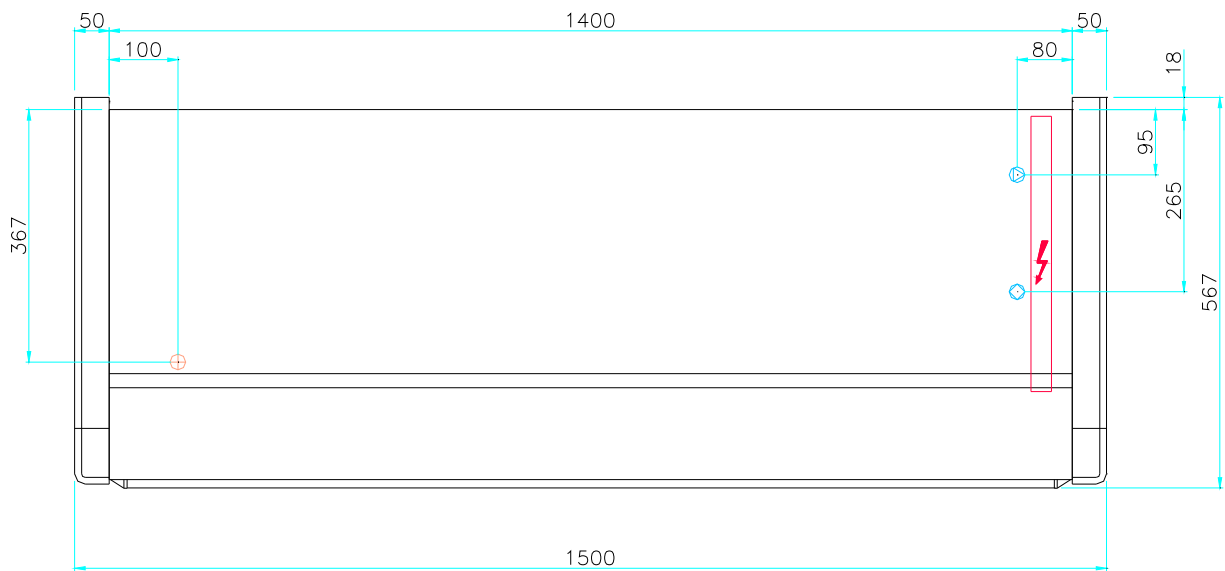
**6.2.2. 90**



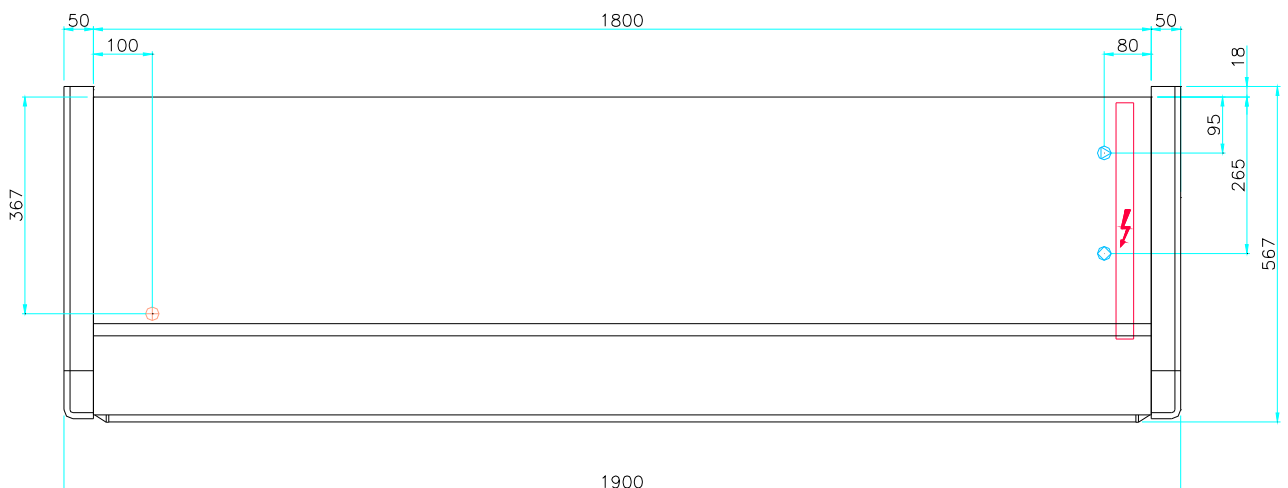
**6.2.3. 130**



**6.2.4. 150**

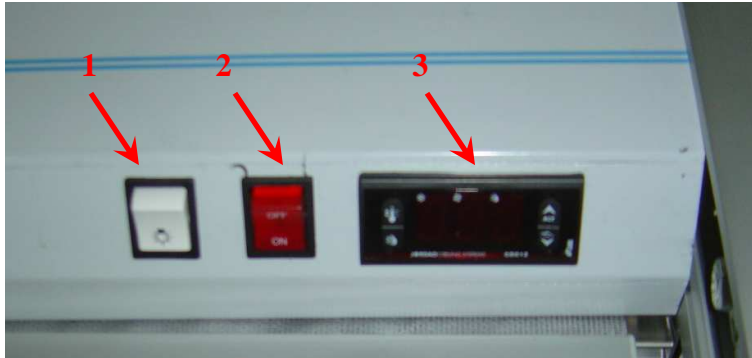


**6.2.5. 190**



**7. CONTROL PANEL**

**7.1. STANDARD**



Key

- 1 – Illumination switch
- 2 – General switch/signal
- 3 – Controller CDC122

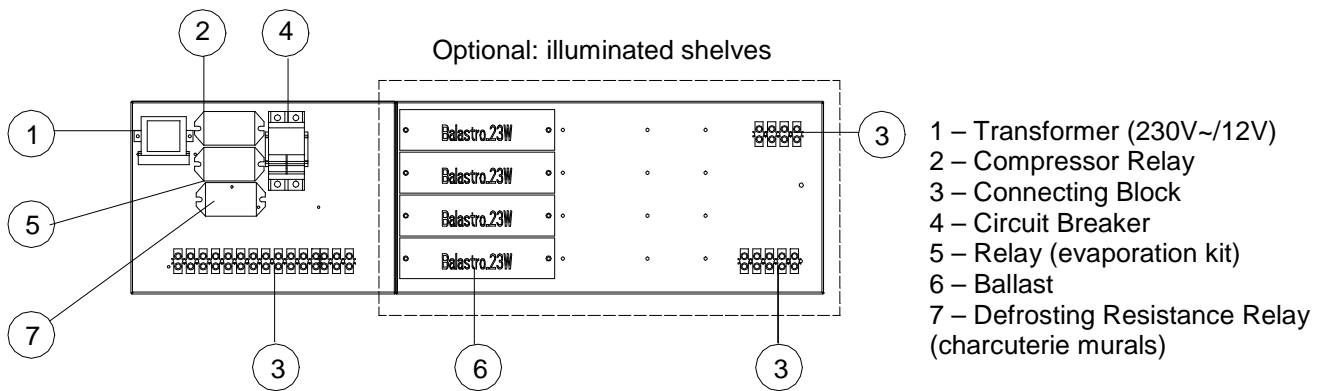
**7.2. HACCP**



Key

Controller Carel

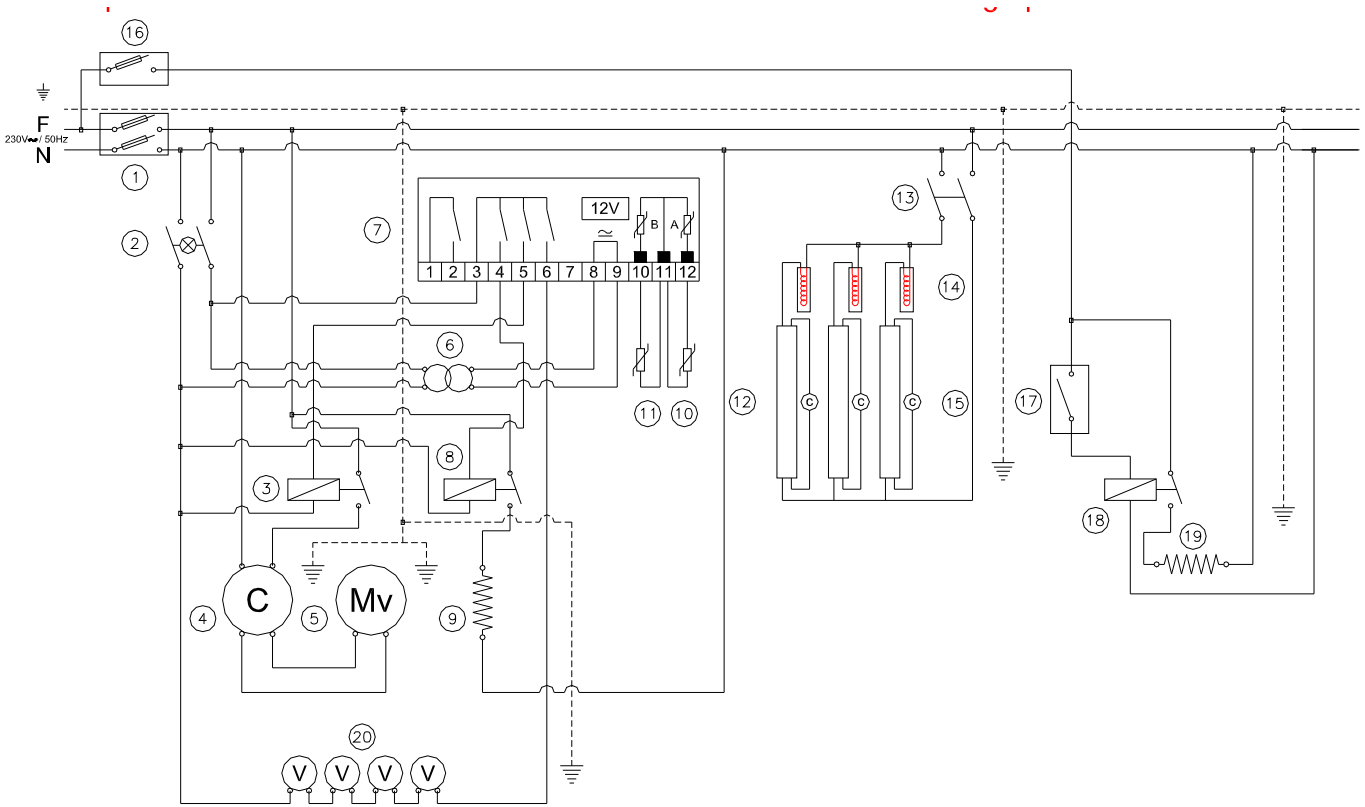
**8. ELECTRICAL CIRCUIT BOARD**



**9. ELECTRICAL WIRING DIAGRAM**

**9.1. 70, 90, 130, 150 E 190 - BUILT IN GROUP**

**Wiring Diagram for Mural Fundador Plus and Fundador Plus Slim with group – MFPCG and MFPSCG**



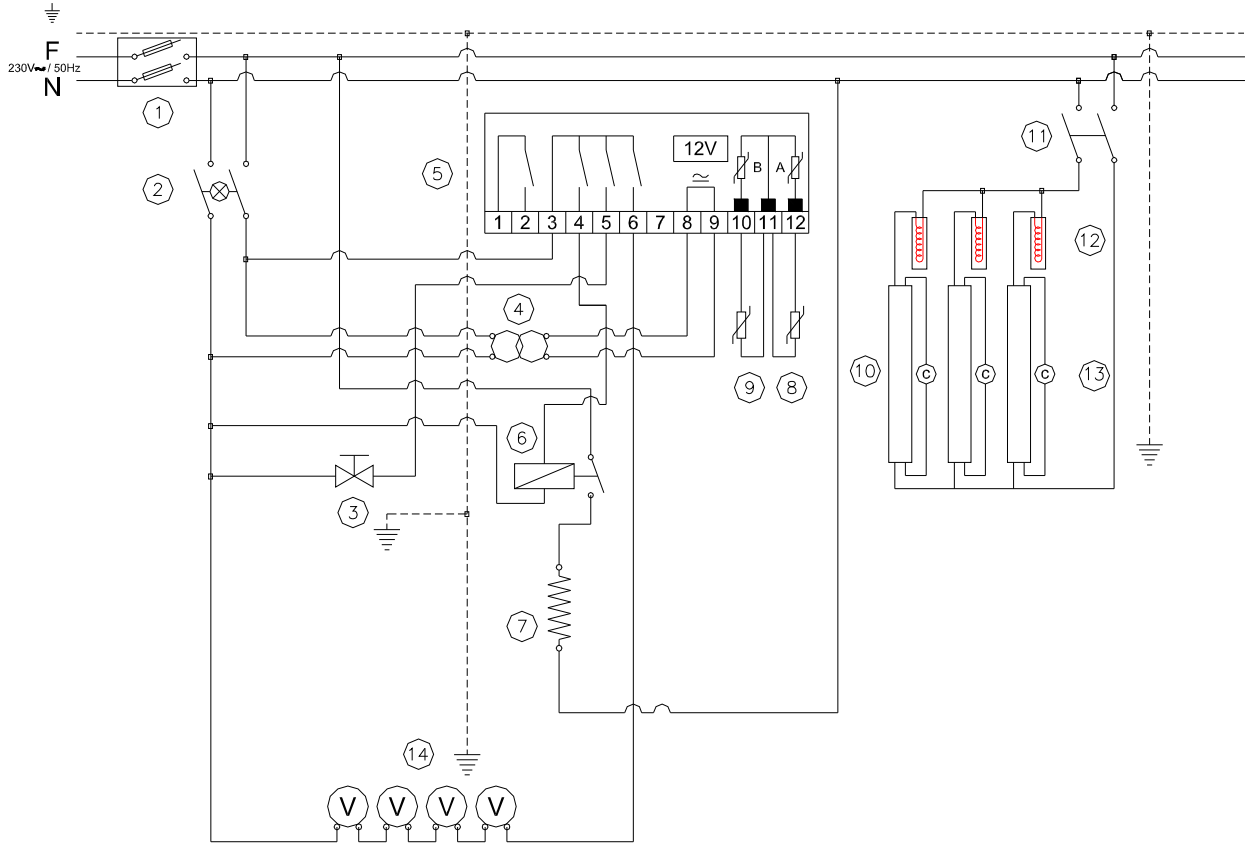
**Key**

- |  |                                   |   |
|--|-----------------------------------|---|
| 1 – Fused circuit breaker                | 8 – Defrost resistance relay *    | 15 – Starter  |
| 2 – General On/Off switch with Indicator | 9 – Defrosting relay *            | 16 – Fused circuit breaker (evaporation kit)          |
| 3 – Compressor Relay                     | 10 – Environment PTC sensor       | 17 – Level sensor (optional)                          |
| 4 – Compressor                           | 11 – Defrosting limit PTC sensor  | 18 – Automatic condenser evaporation relay (optional) |
| 5 – Condenser fan                        | 12 – Lamps                        | 19 – Condenser evaporation resistor (optional)        |
| 6 – 230V / 12 V Transformer              | 13 – Top and side lighting switch | 20 – Evaporator fans                                  |
| 7 – Digital control unit LAE CDC 12      | 14 – Ballast                      |   |

\* available with Meat and Poultry models only

**9.2. 70, 90, 130, 150 E 190 – REMOTE GROUP**

**Wiring Diagram for Mural Fundador Plus Slim and Fundador Plus without group – MFPSSG\_ MFPCG**

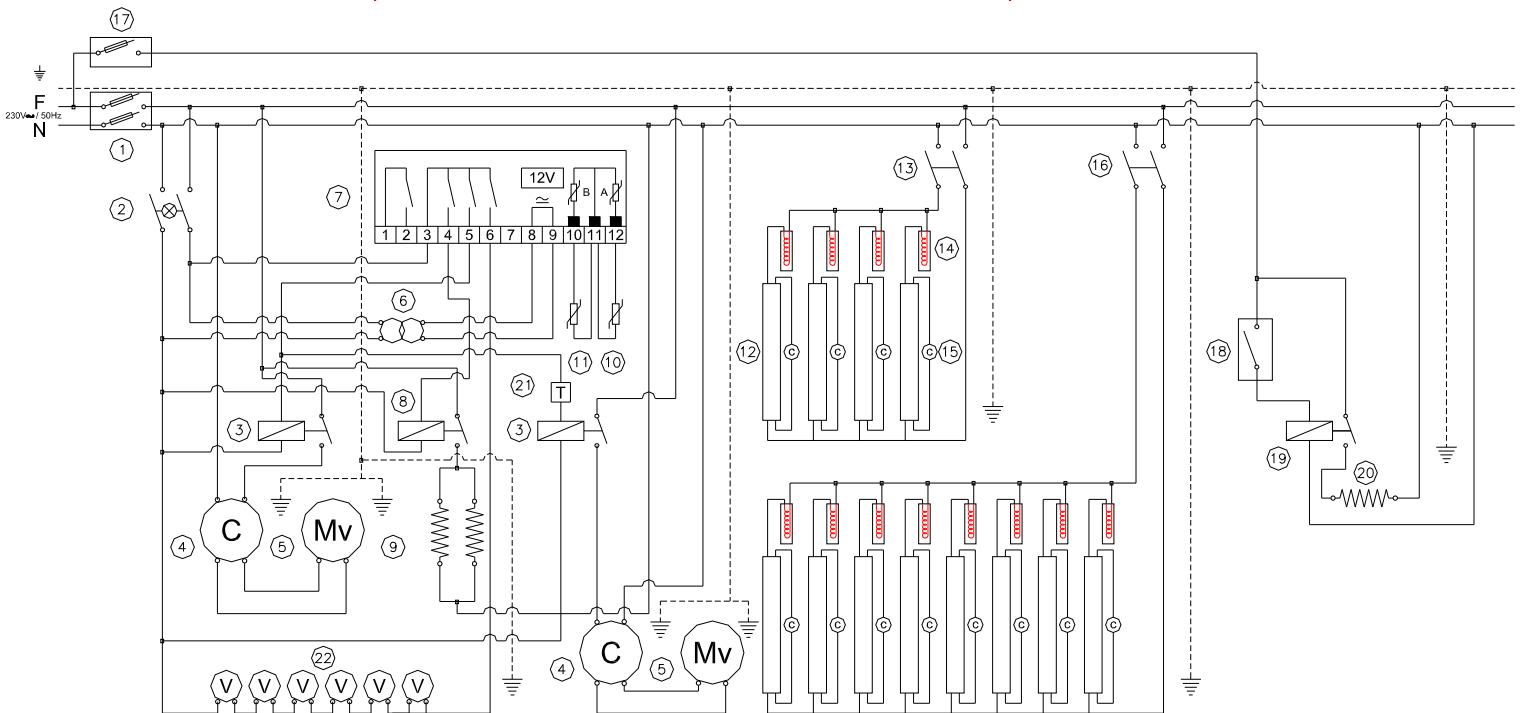


**Key**

- |  |                                 |   |
|--|---------------------------------|---|
| 1 – Fused circuit breaker                | 6 – Defrost resistance relay *  | 11 – Top and side lighting switch           |
| 2 – General On/Off switch with Indicator | 7 – Defrost resistor *          | 12 – Ballast                                |
| 3 – Solenoid Valve                       | 8 – Environment PTC sensor      | 13 – Starter                                |
| 4 – 230V / 12V Transformer               | 9 – Defrosting limit PTC sensor | 14 – Evaporator fans                        |
| 5 – Digital control unit LAE CDC 12      | 10 – Lamps                      | * available on meat and poultry models only |

**9.3. 250 – BUILT IN GROUPS**

**Wiring Diagram for Mural Fundador Plus 250 with group – MFPCG**



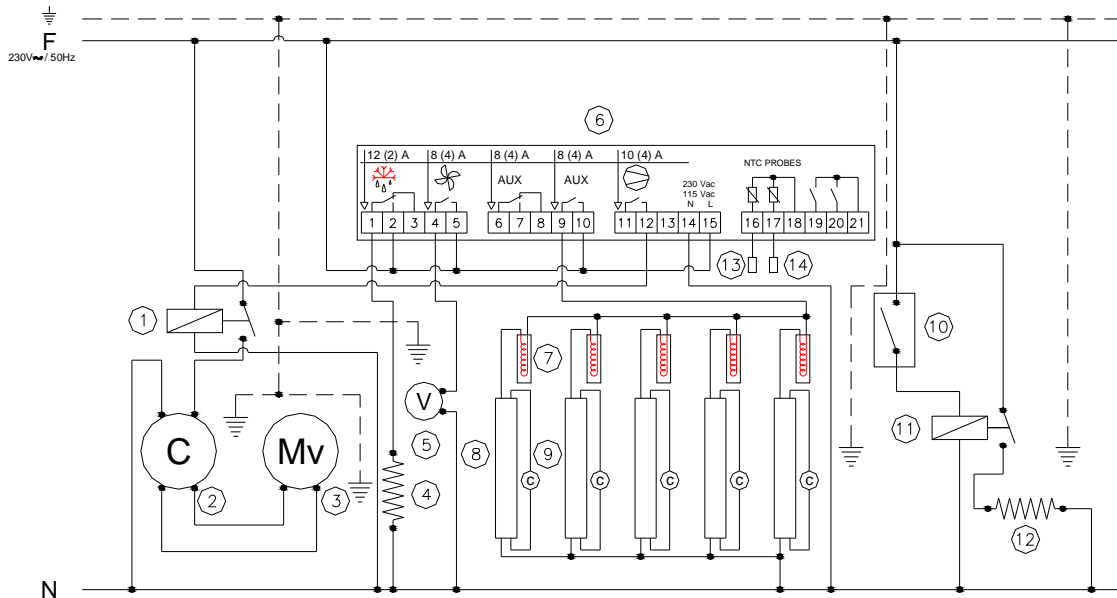
**Key**

- |  |                                   |   |
|--|-----------------------------------|---|
| 1 – Fused circuit breaker                | 8 – Defrost resistance relay *    | 15 – Starter  |
| 2 – General On/Off switch with Indicator | 9 – Defrosting relay *            | 16 – Shelf lighting switch                            |
| 3 – Compressor Relay                     | 10 – Environment PTC sensor       | 17 – Fused circuit breaker (evaporation kit)          |
| 4 – Compressor                           | 11 – Defrosting limit PTC sensor  | 18 – Level sensor (optional)                          |
| 5 – Condenser fan                        | 12 – Lamps                        | 19 – Automatic condenser evaporation relay (optional) |
| 6 – 230V / 12 V Transformer              | 13 – Top and side lighting switch | 20 – Condenser evaporation resistor (optional)        |
| 7 – Digital control unit LAE CDC 12      | 14 – Ballast                      | 21 – Compressor Relay TempORIZER                      |
|  |                                   | 22 – Evaporator fans                                  |

\* available with Meat and Poultry models only

**9.4. WITH CAREL CONTROLLER**

**Wiring Diagram for Mural Fundador Plus and Fundador Plus Slim with group**



**Key**

- |                        |   |   |
|------------------------|---|---|
| 1 – Compressor Relay   | 6 – Digital Controller CAREL PB00CDHB00 | 11 – Automatic condenser evaporation relay (optional) |
| 2 – Compressor         | 7 – Ballast                             | 12 – Condenser evaporation resistor (optional)        |
| 3 – Compressor Fan     | 8 – Lamp                                | 13 – Environment sensor                               |
| 4 – Defrost Resistance | 9 – Starter                             | 14 – Defrost sensor                                   |
| 5 – Fan                | 10 – Level sensor (option)              |   |

10. PROGRAMMING THE THERMOSTAT

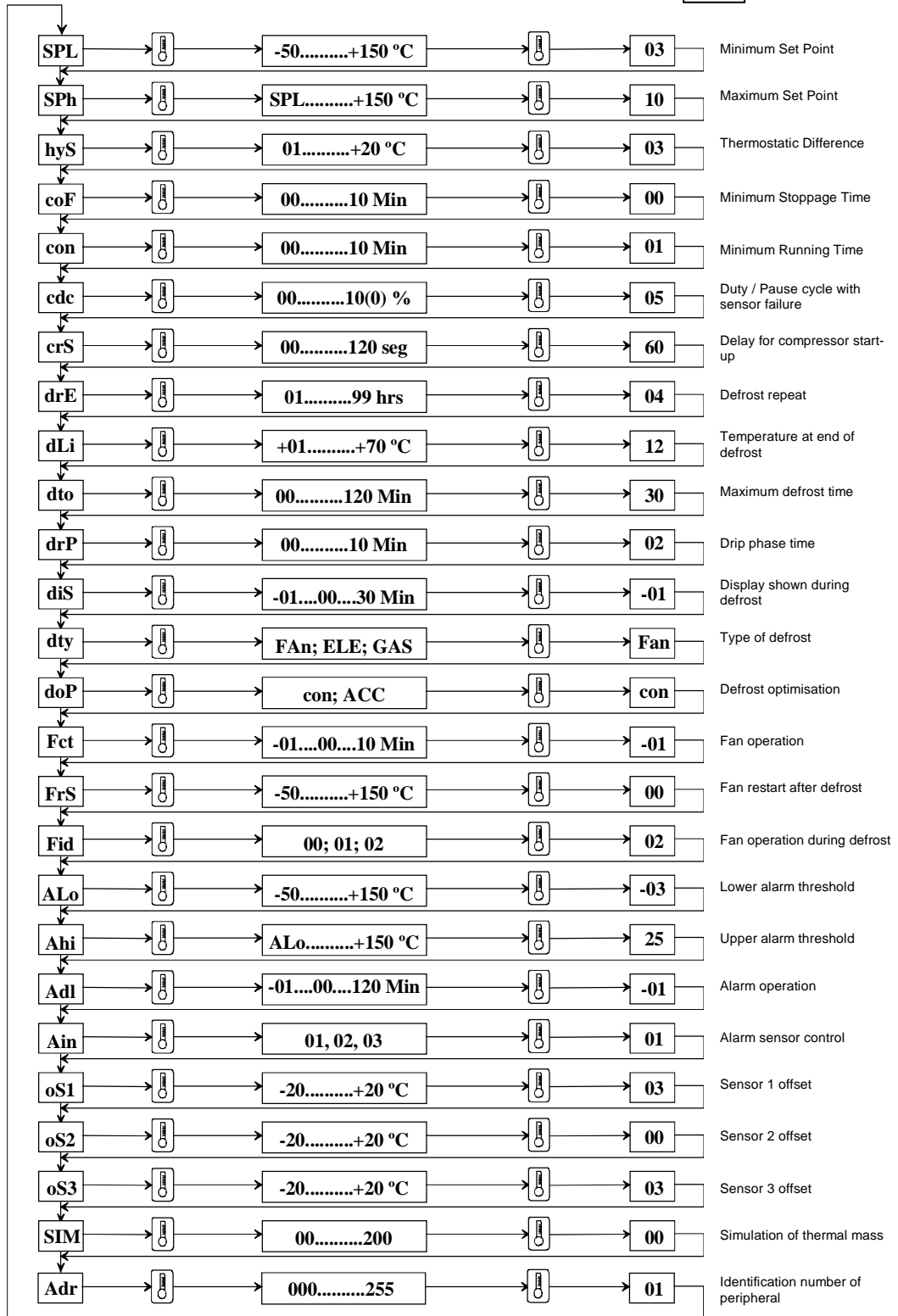
10.1. MURAL PRIMUS DAIRY PRODUCTS – CDC122

**CONTROL UNIT LAE CDC 12**

CONFIGURATION

MPrimus Dairy Products 70 ... 250 Vale / Normal CDC 12

CUT-OUT TEMPERATURE 03



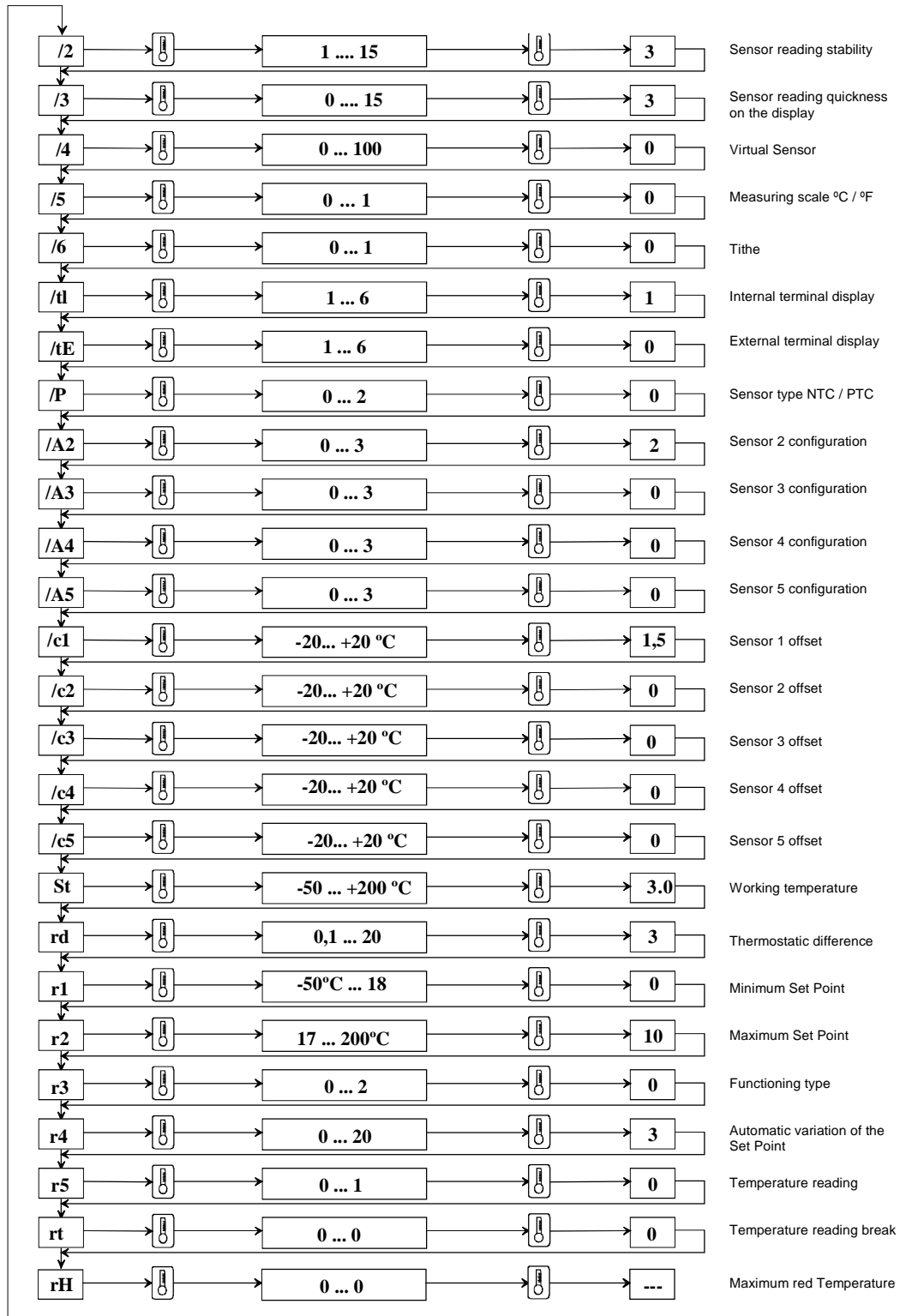
**10.2. MURAL PRIMUS DAIRY PRODUCTS – CAREL**

**CONTROL UNIT CAREL**

CONFIGURATION

MPrimus Dairy Products 70 ... 250 CAREL

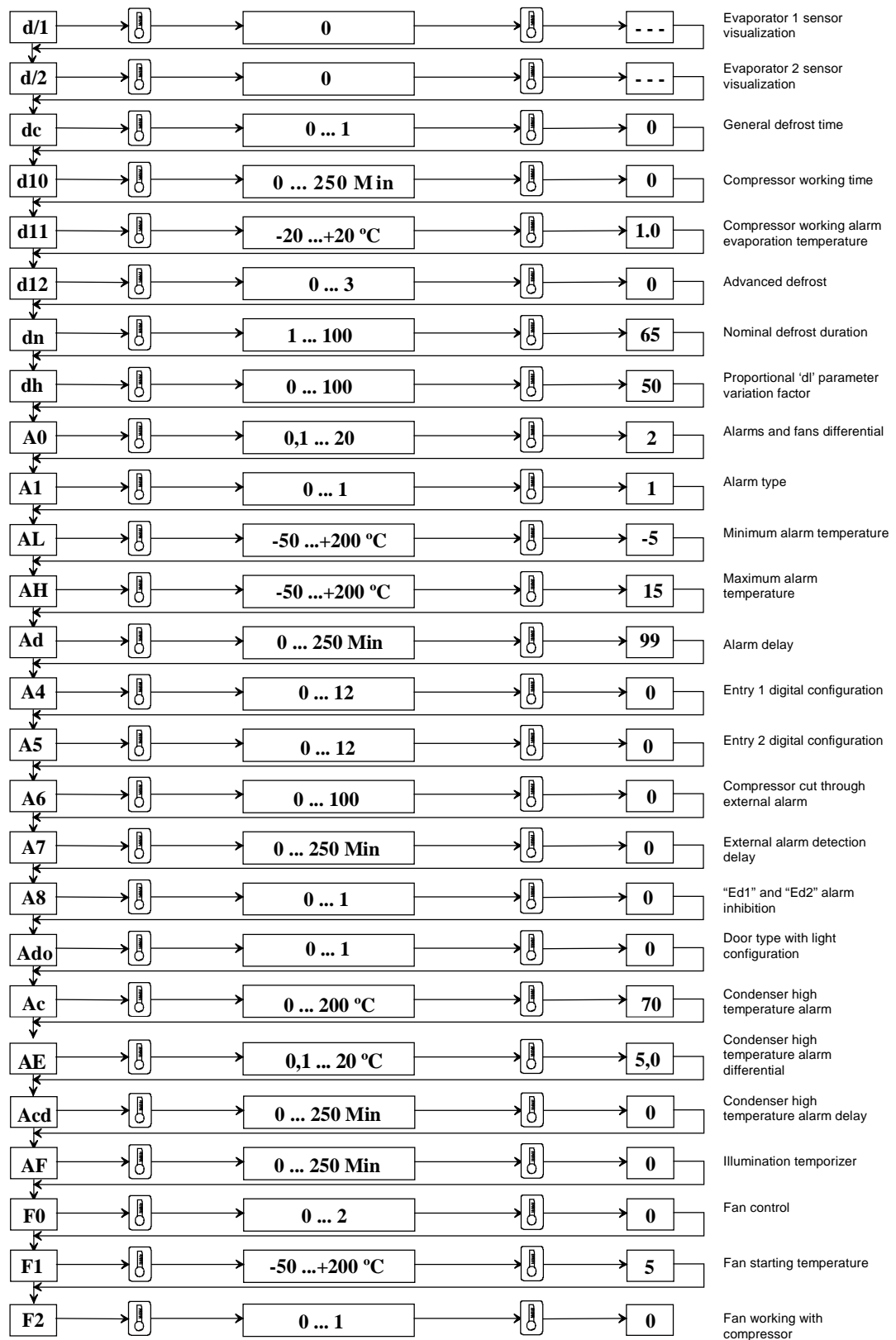
CUT-OUT TEMPERATURE 3.0

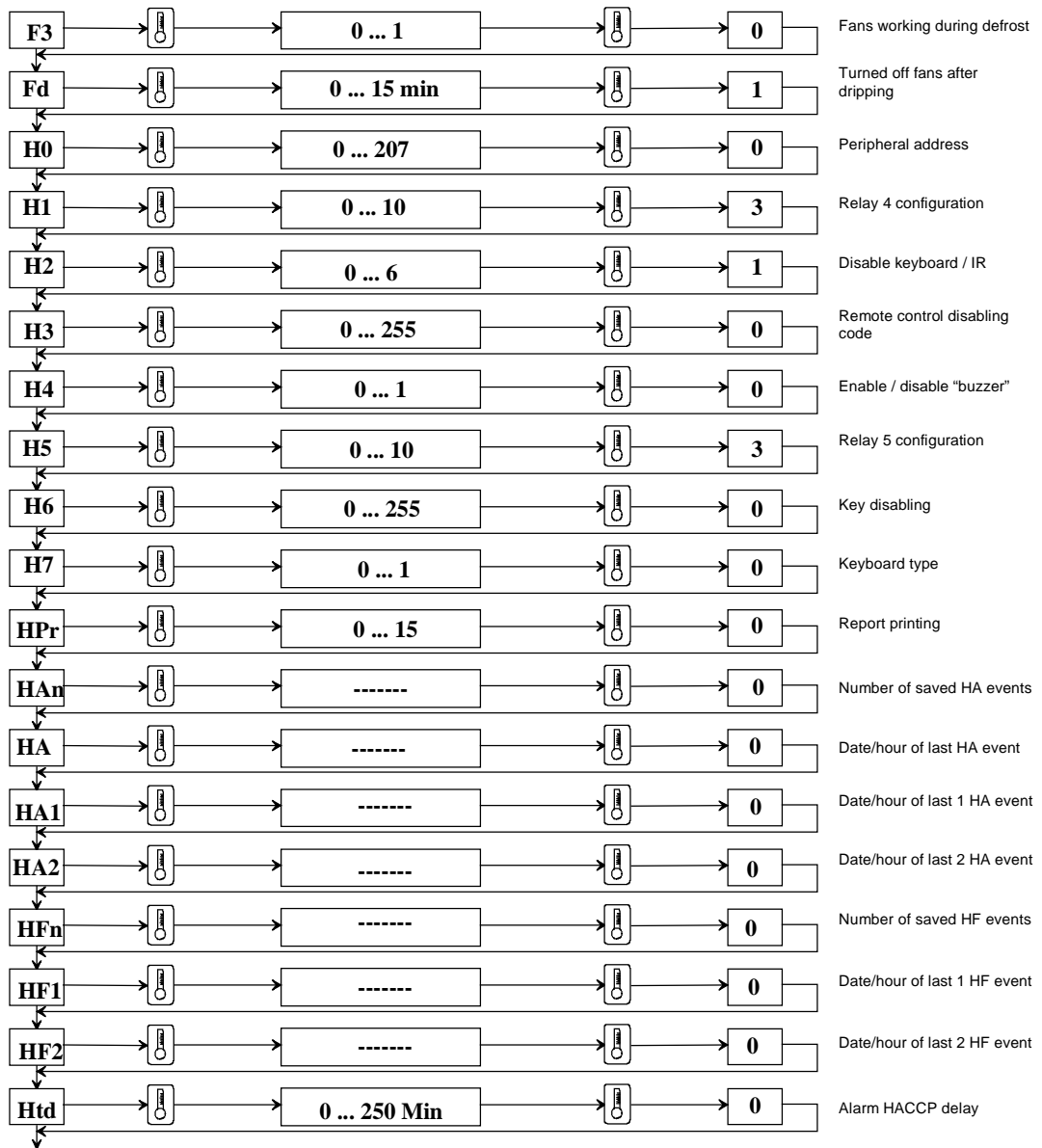


Continuation

rL		0 ... 0		---	Minimum red temperature
c0		0 ... 15 min		2	Compressor and Fans' start delay
c1		0 ... 15 min		2	Minimum time between two following starts
c2		0 ... 15 min		2	Minimum compressor break time
c3		0 ... 15 min		2	Minimum compressor work time
c4		0 ... 100 min		20	Cycle time
cc		0 ... 15 H		1	Duration of the continuous cycle
c6		0 ... 15 H		2	Cut alarm after 'cc' cycle
c7		0 .. 30 Min		0	Maximum time for gas gathering
c8		1 ... 60 Min		5	Compressor start delay after gas gathering beginning
c9		0 ... 1		0	Disable automatic gas gathering start
c10		0 ... 1		0	PD selection time / pressure
c11		0 ... 250		4	Compressor 2 start delay
d0		0.. 3		0	Defrost type
d1		0 ... 250 H		4	Break between defrosts
dt1		-50 ... 200 °C		12	Final defrost temperature (evap1)
dt2		-50 ... 200 °C		12	Final defrost temperature (evap2)
dP1		1 ... 250 Min		30	Maximum defrost time (evap1)
dP2		1 ... 250 Min		30	Maximum defrost time (evap2)
d3		0 ... 250 Min		0	Defrost start delay
d4		0 ... 1		0	Dripping time
d5		0 ... 250 Min		0	Defrost delay after start
d6		0 ... 2		1	Blocked display during defrost
dd		0 ... 15		2	Dripping time after defrost
d8		0 ... 15		1	Alarm duration
d9		0 ... 1		0	Compressor working during sensor failure

Continuation





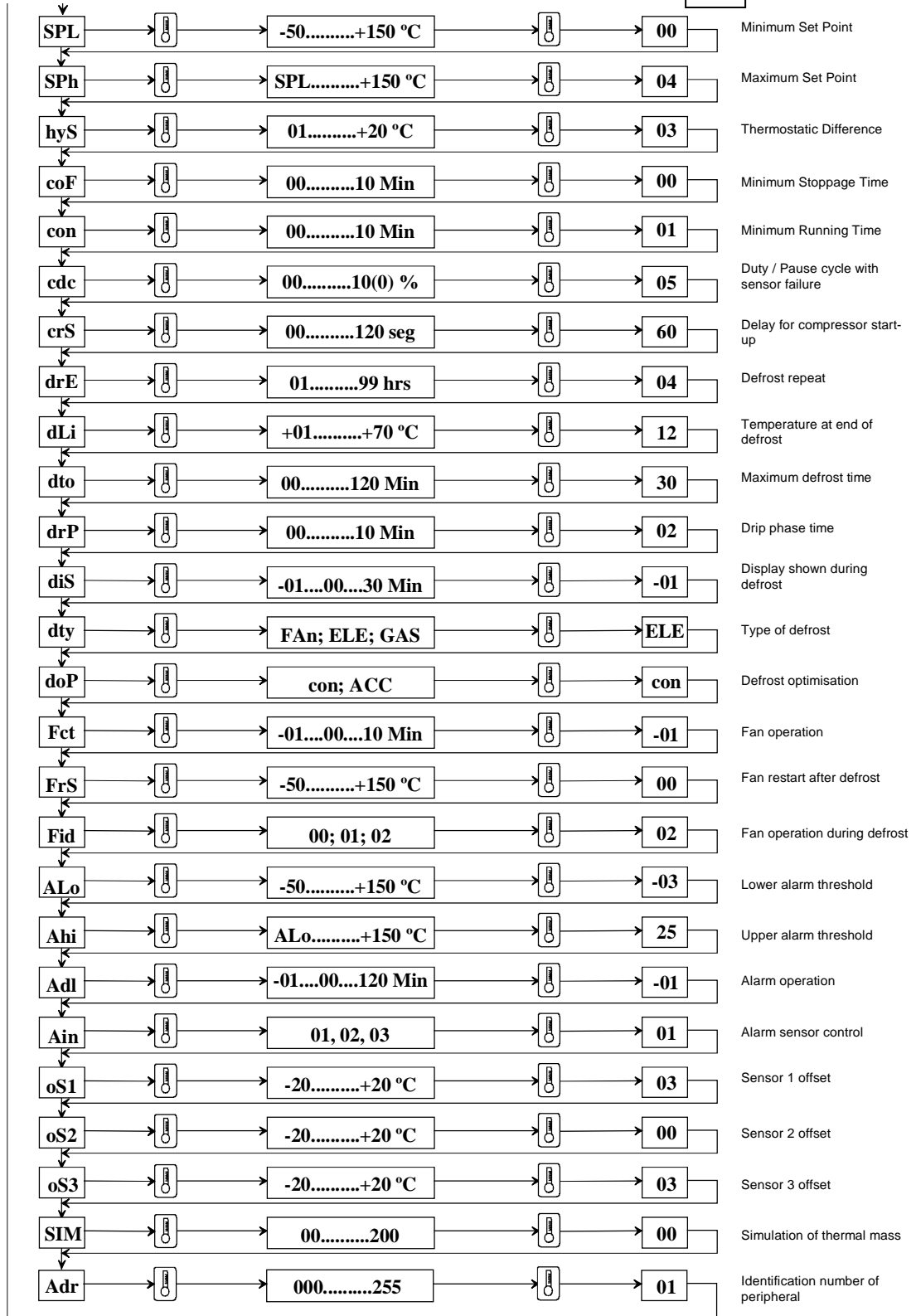
**10.3. MURAL PRIMUS MEAT AND POULTRY – CDC122**

**CONTROL UNIT LAE CDC 12**

CONFIGURATION

MPrimus Dairy Products 70 ... 250 Vale / Normal CDC 12

CUT-OUT TEMPERATURE 00



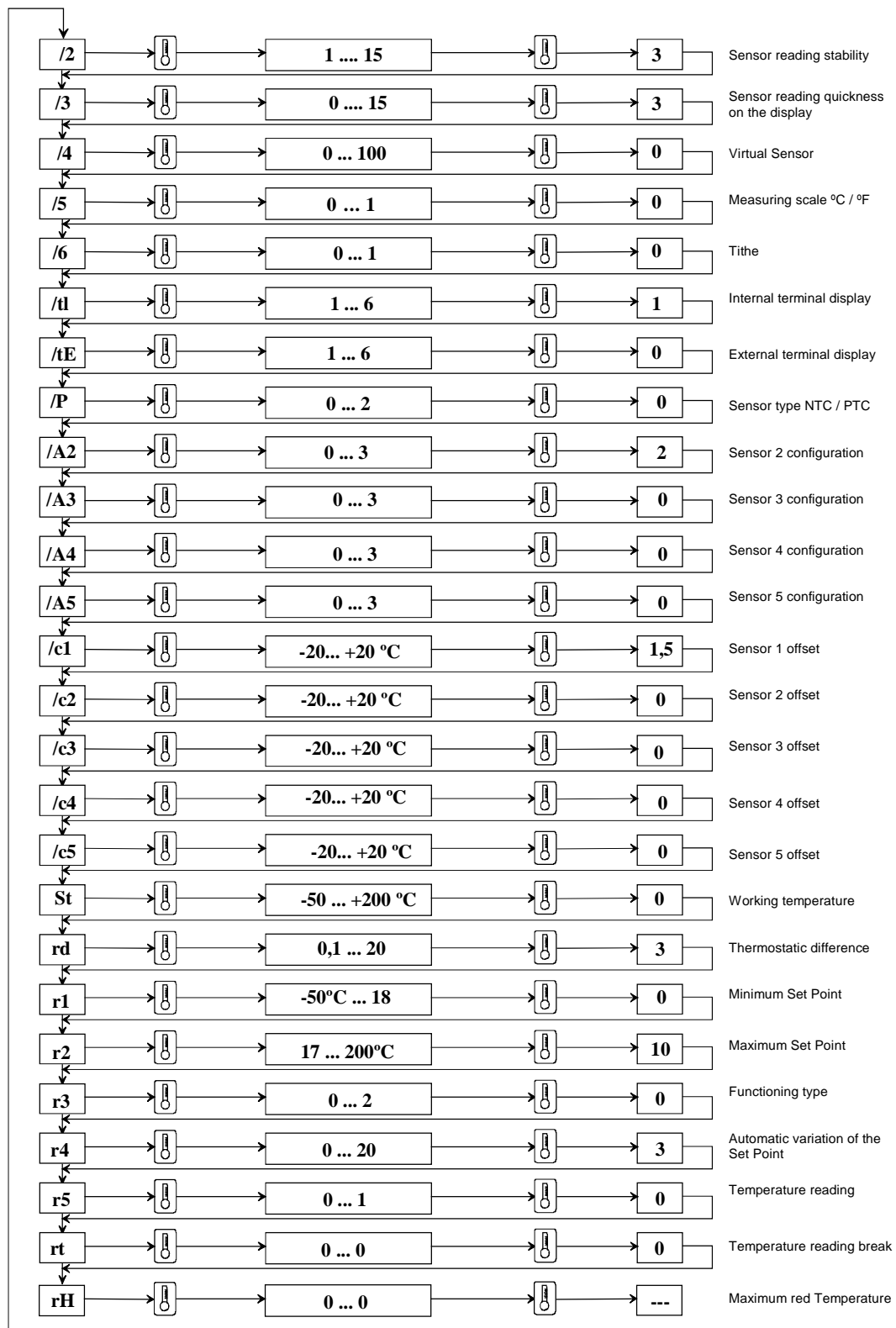
**10.4. MURAL PRIMUS MEAT AND POULTRY – CAREL**

**CONTROL UNIT CAREL**

CONFIGURATION

MPrimus Dairy Products 70 ... 250 CAREL

CUT-OUT TEMPERATURE 0.0

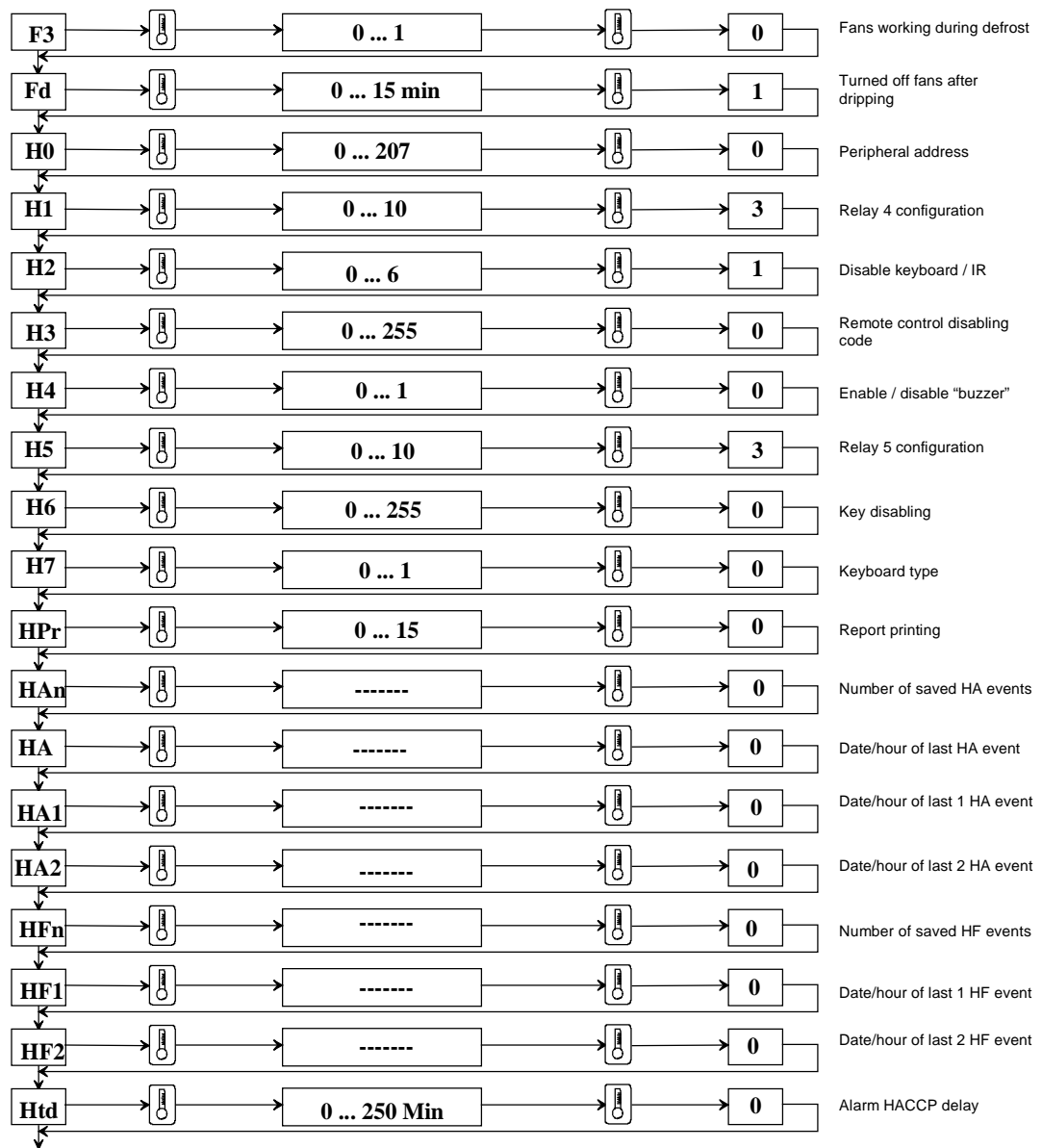


Continuation

rL		0 ... 0		---	Minimum red temperature
c0		0 ... 15 min		2	Compressor and Fans' start delay
c1		0 ... 15 min		2	Minimum time between two following starts
c2		0 ... 15 min		2	Minimum compressor break time
c3		0 ... 15 min		2	Minimum compressor work time
c4		0 ... 100 min		20	Cycle time
cc		0 ... 15 H		1	Duration of the continuous cycle
c6		0 ... 15 H		2	Cut alarm after 'cc' cycle
c7		0 .. 30 Min		0	Maximum time for gas gathering
c8		1 ... 60 Min		5	Compressor start delay after gas gathering beginning
c9		0 ... 1		0	Disable automatic gas gathering start
c10		0 ... 1		0	PD selection time / pressure
c11		0 ... 250		4	Compressor 2 start delay
d0		0.. 3		0	Defrost type
d1		0 ... 250 H		4	Break between defrosts
dt1		-50 ... 200 °C		12	Final defrost temperature (evap1)
dt2		-50 ... 200 °C		12	Final defrost temperature (evap2)
dP1		1 ... 250 Min		30	Maximum defrost time (evap1)
dP2		1 ... 250 Min		30	Maximum defrost time (evap2)
d3		0 ... 250 Min		0	Defrost start delay
d4		0 ... 1		0	Dripping time
d5		0 ... 250 Min		0	Defrost delay after start
d6		0 ... 2		1	Blocked display during defrost
dd		0 ... 15		2	Dripping time after defrost
d8		0 ... 15		1	Alarm duration
d9		0 ... 1		0	Compressor working during sensor failure

Continuation

d/1		0		...	Evaporator 1 sensor visualization
d/2		0		...	Evaporator 2 sensor visualization
dc		0 ... 1		0	General defrost time
d10		0 ... 250 Min		0	Compressor working time
d11		-20 ... +20 °C		1.0	Compressor working alarm evaporation temperature
d12		0 ... 3		0	Advanced defrost
dn		1 ... 100		65	Nominal defrost duration
dh		0 ... 100		50	Proportional 'dl' parameter variation factor
A0		0,1 ... 20		2	Alarms and fans differential
A1		0 ... 1		1	Alarm type
AL		-50 ... +200 °C		-5	Minimum alarm temperature
AH		-50 ... +200 °C		15	Maximum alarm temperature
Ad		0 ... 250 Min		99	Alarm delay
A4		0 ... 12		0	Entry 1 digital configuration
A5		0 ... 12		0	Entry 2 digital configuration
A6		0 ... 100		0	Compressor cut through external alarm
A7		0 ... 250 Min		0	External alarm detection delay
A8		0 ... 1		0	"Ed1" and "Ed2" alarm inhibition
Ado		0 ... 1		0	Door type with light configuration
Ac		0 ... 200 °C		70	Condenser high temperature alarm
AE		0,1 ... 20 °C		5,0	Condenser high temperature alarm differential
Acd		0 ... 250 Min		0	Condenser high temperature alarm delay
AF		0 ... 250 Min		0	Illumination temporizer
F0		0 ... 2		0	Fan control
F1		-50 ... +200 °C		5	Fan starting temperature
F2		0 ... 1		0	Fan working with compressor



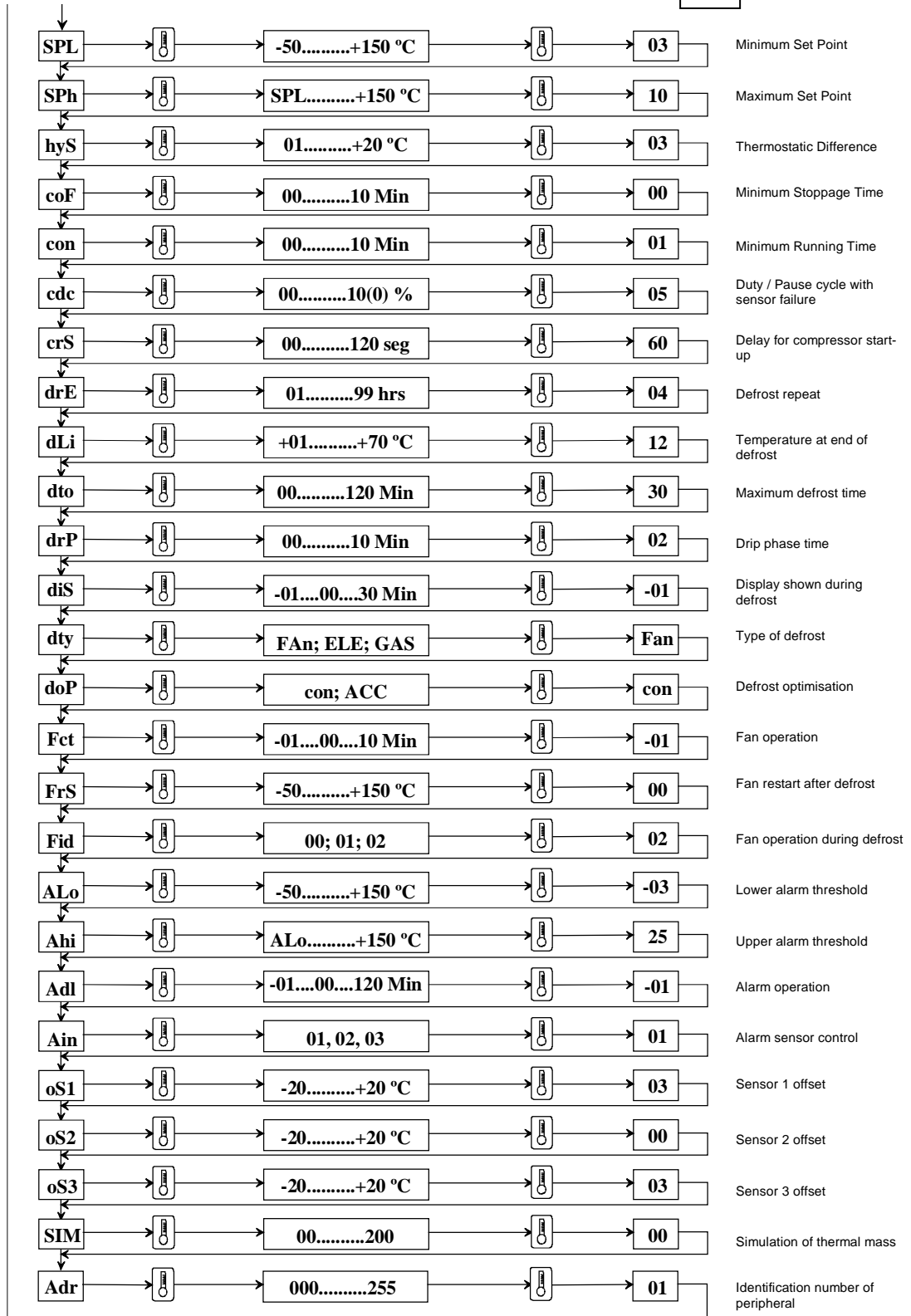
**10.5. MURAL PRIMUS SLIM DAIRY PRODUCTS – CDC122**

**CONTROL UNIT LAE CDC 12**

CONFIGURATION

MPrimus Dairy Products 70 ... 190 Vale / Normal CDC 12

CUT-OUT TEMPERATURE **03**



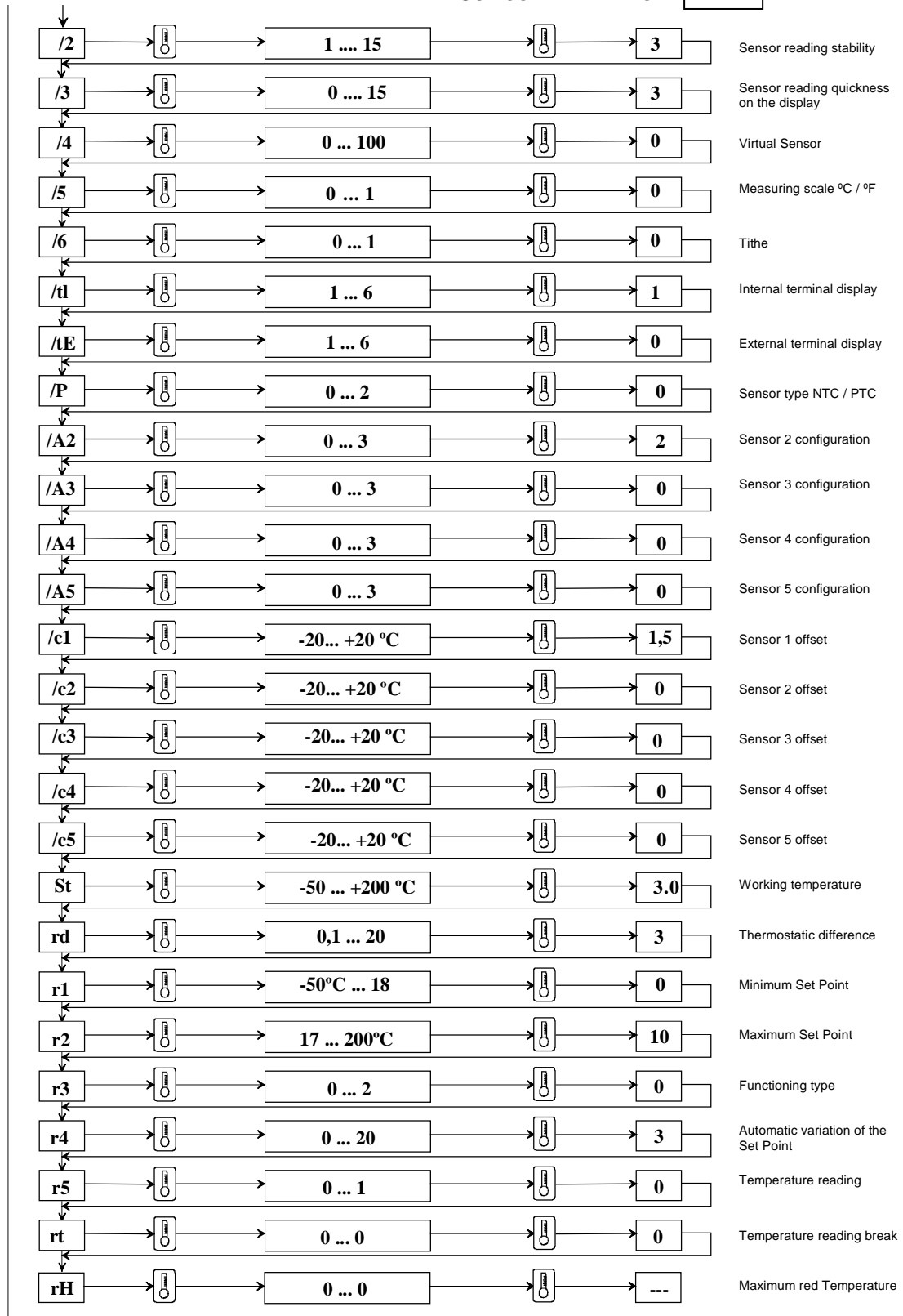
**10.6. MURAL PRIMUS SLIM DAIRY PRODUCTS – CAREL**

**CONTROL UNIT CAREL**

CONFIGURATION

MPrimus Dairy Products 70 ... 190 CAREL

CUT-OUT TEMPERATURE 3.0



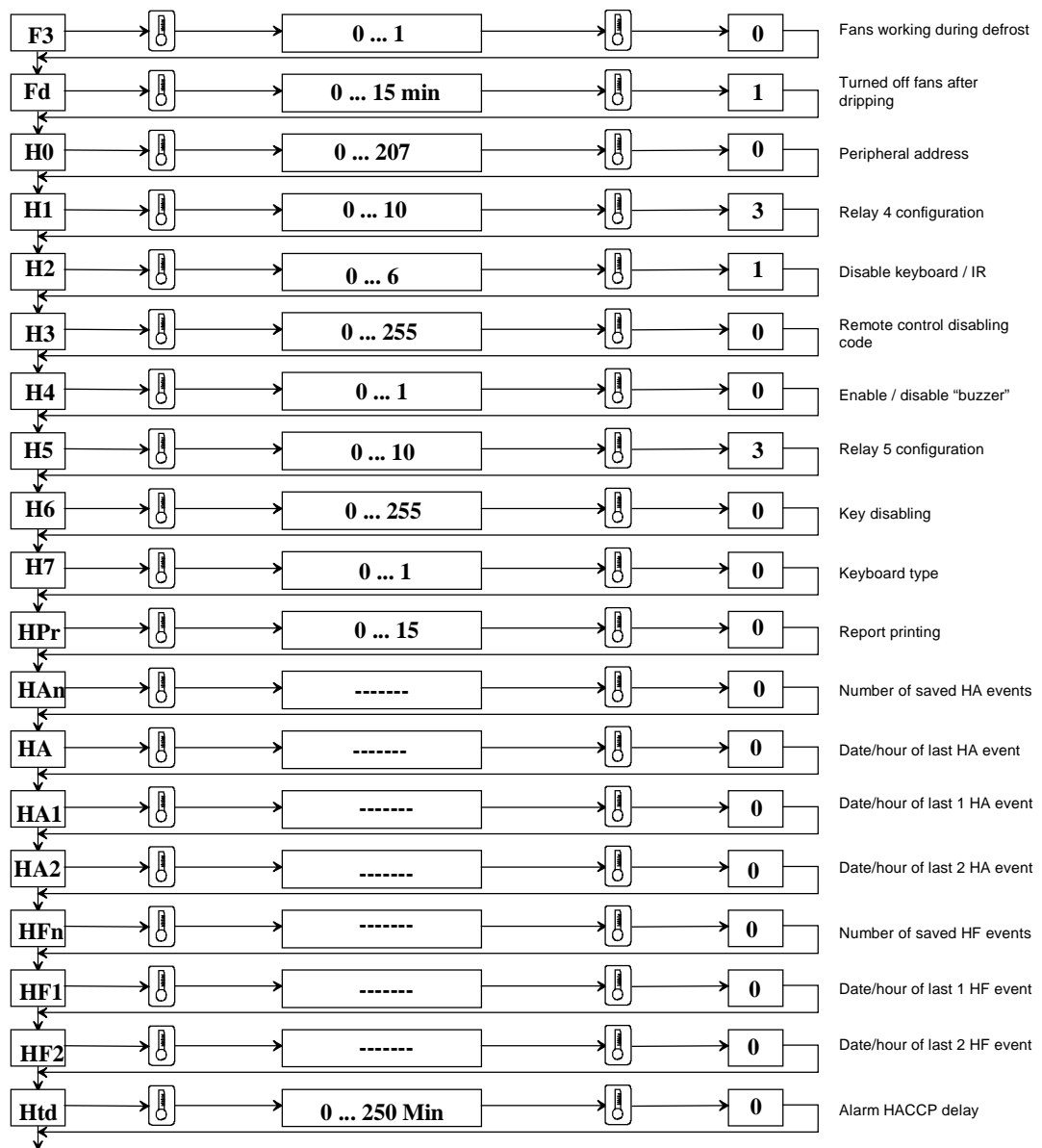
Continuation

rL	→	0 ... 0	→	...	Minimum red temperature
c0	→	0 ... 15 min	→	2	Compressor and Fans' start delay
c1	→	0 ... 15 min	→	2	Minimum time between two following starts
c2	→	0 ... 15 min	→	2	Minimum compressor break time
c3	→	0 ... 15 min	→	2	Minimum compressor work time
c4	→	0 ... 100 min	→	20	Cycle time
cc	→	0 ... 15 H	→	1	Duration of the continuous cycle
c6	→	0 ... 15 H	→	2	Cut alarm after 'cc' cycle
c7	→	0 .. 30 Min	→	0	Maximum time for gas gathering
c8	→	1 ... 60 Min	→	5	Compressor start delay after gas gathering beginning
c9	→	0 ... 1	→	0	Disable automatic gas gathering start
c10	→	0 ... 1	→	0	PD selection time / pressure
c11	→	0 ... 250	→	4	Compressor 2 start delay
d0	→	0... 3	→	0	Defrost type
d1	→	0 ... 250 H	→	4	Break between defrosts
dt1	→	-50 ... 200 °C	→	12	Final defrost temperature (evap1)
dt2	→	-50 ... 200 °C	→	12	Final defrost temperature (evap2)
dP1	→	1 ... 250 Min	→	30	Maximum defrost time (evap1)
dP2	→	1 ... 250 Min	→	30	Maximum defrost time (evap2)
d3	→	0 ... 250 Min	→	0	Defrost start delay
d4	→	0 ... 1	→	0	Dripping time
d5	→	0 ... 250 Min	→	0	Defrost delay after start
d6	→	0 ... 2	→	1	Blocked display during defrost
dd	→	0 ... 15	→	2	Dripping time after defrost
d8	→	0 ... 15	→	1	Alarm duration
d9	→	0 ... 1	→	0	Compressor working during sensor failure

Continuation

d/1		0		...	Evaporator 1 sensor visualization
d/2		0		...	Evaporator 2 sensor visualization
dc		0 ... 1		0	General defrost time
d10		0 ... 250 Min		0	Compressor working time
d11		-20 ... +20 °C		1.0	Compressor working alarm evaporation temperature
d12		0 ... 3		0	Advanced defrost
dn		1 ... 100		65	Nominal defrost duration
dh		0 ... 100		50	Proportional 'dl' parameter variation factor
A0		0,1 ... 20		2	Alarms and fans differential
A1		0 ... 1		1	Alarm type
AL		-50 ... +200 °C		-5	Minimum alarm temperature
AH		-50 ... +200 °C		15	Maximum alarm temperature
Ad		0 ... 250 Min		99	Alarm delay
A4		0 ... 12		0	Entry 1 digital configuration
A5		0 ... 12		0	Entry 2 digital configuration
A6		0 ... 100		0	Compressor cut through external alarm
A7		0 ... 250 Min		0	External alarm detection delay
A8		0 ... 1		0	"Ed1" and "Ed2" alarm inhibition
Ado		0 ... 1		0	Door type with light configuration
Ac		0 ... 200 °C		70	Condenser high temperature alarm
AE		0,1 ... 20 °C		5,0	Condenser high temperature alarm differential
Acd		0 ... 250 Min		0	Condenser high temperature alarm delay
AF		0 ... 250 Min		0	Illumination temporizer
F0		0 ... 2		0	Fan control
F1		-50 ... +200 °C		5	Fan starting temperature
F2		0 ... 1		0	Fan working with compressor

Continuation



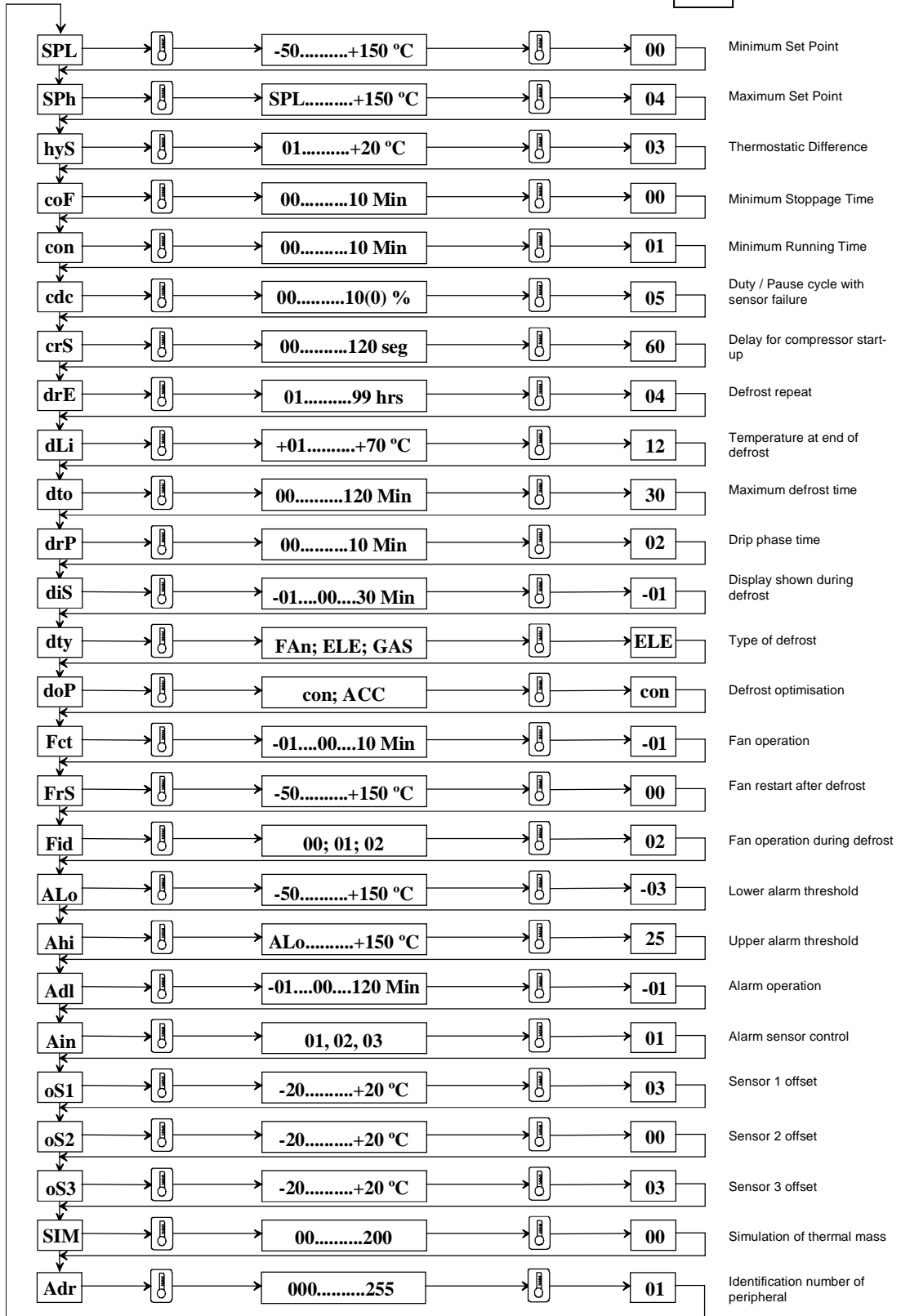
**10.7. MURAL PRIMUS SLIM MEAT AND POULTRY – CDC12**

**CONTROL UNIT LAE CDC 12**

CONFIGURATION

MPrimus Dairy Products 70 ... 190 Vale / Normal CDC 12

CUT-OUT TEMPERATURE 00



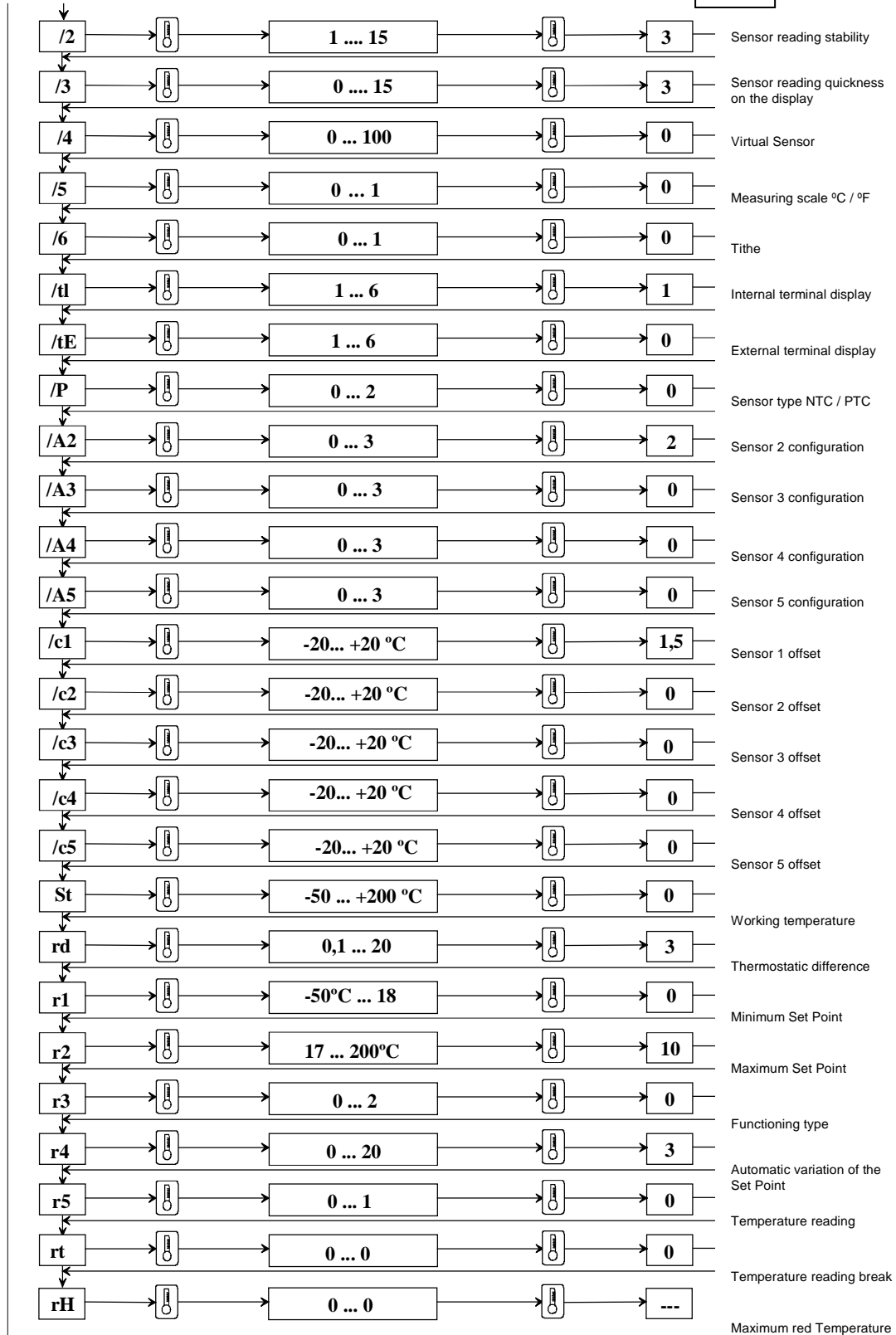
**10.8. MURAL PRIMUS SLIM MEAT AND POULTRY – CAREL**

**CONTROL UNIT CAREL**

CONFIGURATION

MPrimus Dairy Products 70 ... 190 CAREL

CUT-OUT TEMPERATURE 0.0



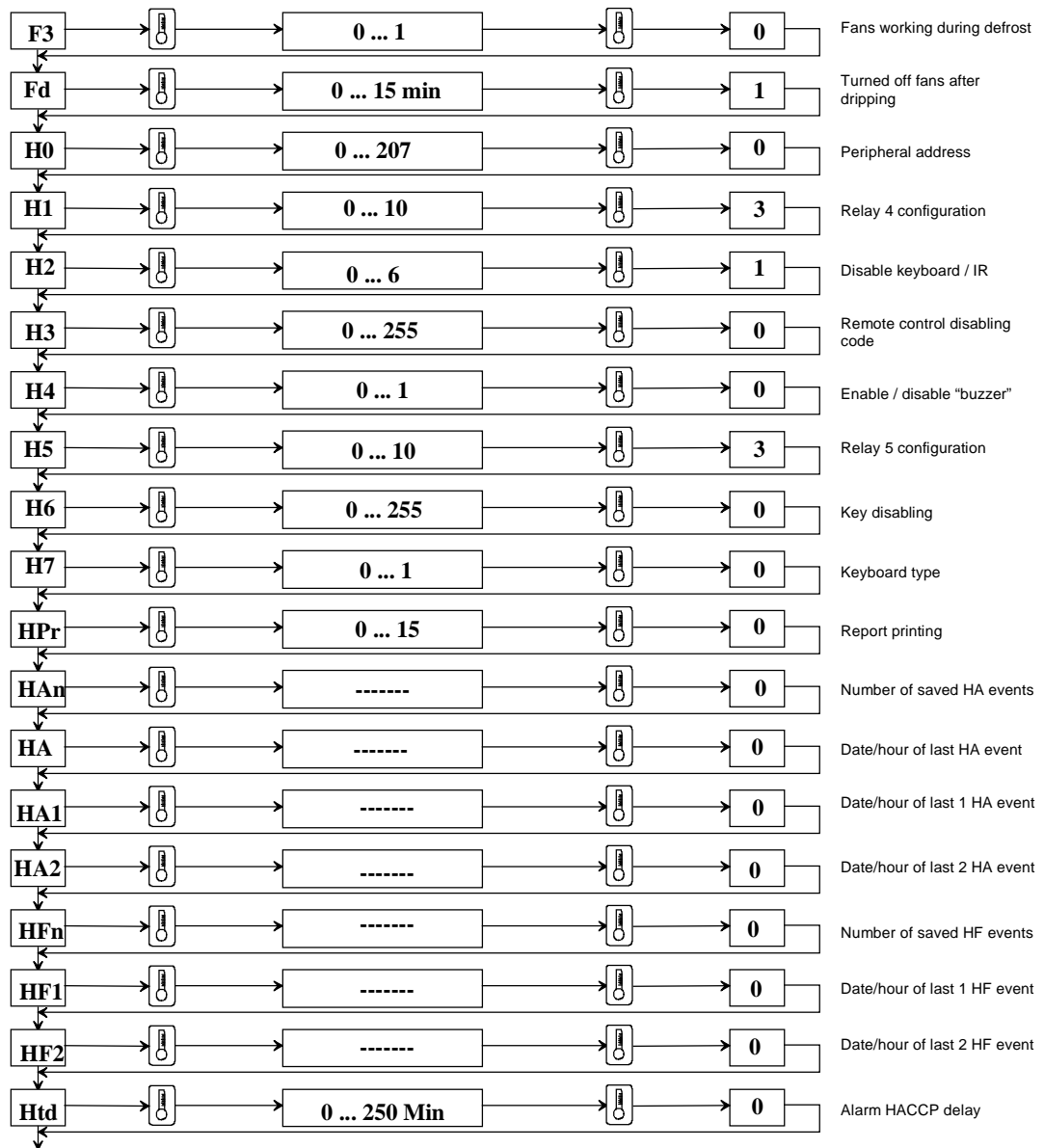
Continuation

rL		0 ... 0		---	Minimum red temperature
c0		0 ... 15 min		2	Compressor and Fans' start delay
c1		0 ... 15 min		2	Minimum time between two following starts
c2		0 ... 15 min		2	Minimum compressor break time
c3		0 ... 15 min		2	Minimum compressor work time
c4		0 ... 100 min		20	Cycle time
cc		0 ... 15 H		1	Duration of the continuous cycle
c6		0 ... 15 H		2	Cut alarm after 'cc' cycle
c7		0 .. 30 Min		0	Maximum time for gas gathering
c8		1 ... 60 Min		5	Compressor start delay after gas gathering beginning
c9		0 ... 1		0	Disable automatic gas gathering start
c10		0 ... 1		0	PD selection time / pressure
c11		0 ... 250		4	Compressor 2 start delay
d0		0.. 3		0	Defrost type
d1		0 ... 250 H		4	Break between defrosts
dt1		-50 ... 200 °C		12	Final defrost temperature (evap1)
dt2		-50 ... 200 °C		12	Final defrost temperature (evap2)
dP1		1 ... 250 Min		30	Maximum defrost time (evap1)
dP2		1 ... 250 Min		30	Maximum defrost time (evap2)
d3		0 ... 250 Min		0	Defrost start delay
d4		0 ... 1		0	Dripping time
d5		0 ... 250 Min		0	Defrost delay after start
d6		0 ... 2		1	Blocked display during defrost
dd		0 ... 15		2	Dripping time after defrost
d8		0 ... 15		1	Alarm duration
d9		0 ... 1		0	Compressor working during sensor failure

Continuation

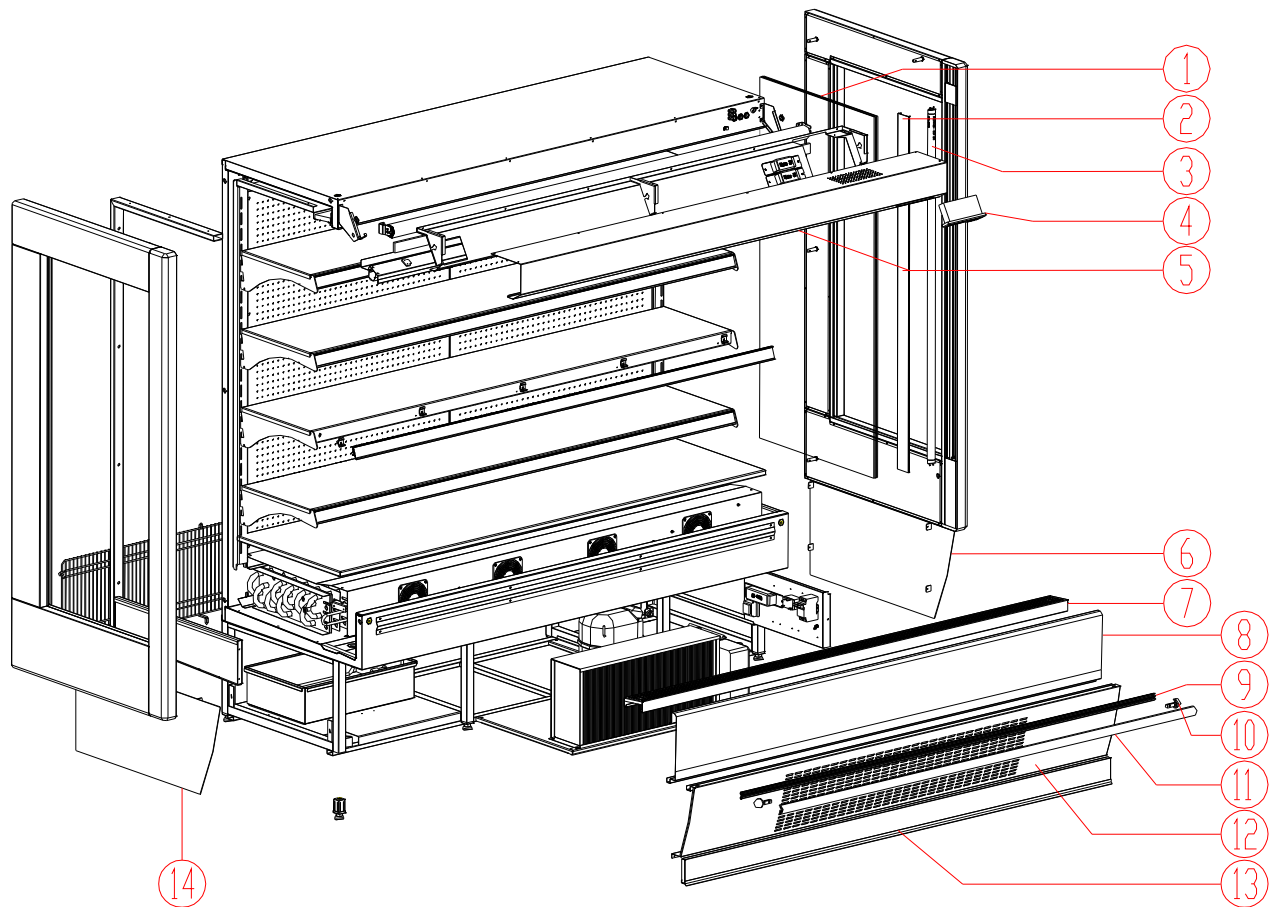
d/1		0		...	Evaporator 1 sensor visualization
d/2		0		...	Evaporator 2 sensor visualization
dc		0 ... 1		0	General defrost time
d10		0 ... 250 Min		0	Compressor working time
d11		-20 ... +20 °C		1.0	Compressor working alarm evaporation temperature
d12		0 ... 3		0	Advanced defrost
dn		1 ... 100		65	Nominal defrost duration
dh		0 ... 100		50	Proportional 'dl' parameter variation factor
A0		0,1 ... 20		2	Alarms and fans differential
A1		0 ... 1		1	Alarm type
AL		-50 ... +200 °C		-5	Minimum alarm temperature
AH		-50 ... +200 °C		15	Maximum alarm temperature
Ad		0 ... 250 Min		99	Alarm delay
A4		0 ... 12		0	Entry 1 digital configuration
A5		0 ... 12		0	Entry 2 digital configuration
A6		0 ... 100		0	Compressor cut through external alarm
A7		0 ... 250 Min		0	External alarm detection delay
A8		0 ... 1		0	"Ed1" and "Ed2" alarm inhibition
Ado		0 ... 1		0	Door type with light configuration
Ac		0 ... 200 °C		70	Condenser high temperature alarm
AE		0,1 ... 20 °C		5,0	Condenser high temperature alarm differential
Acd		0 ... 250 Min		0	Condenser high temperature alarm delay
AF		0 ... 250 Min		0	Illumination temporizer
F0		0 ... 2		0	Fan control
F1		-50 ... +200 °C		5	Fan starting temperature
F2		0 ... 1		0	Fan working with compressor

Continuation



**11. MAIN REPLACEABLE PARTS**

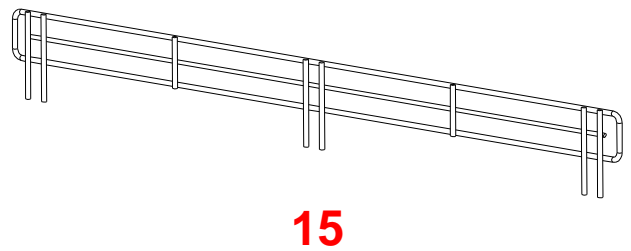
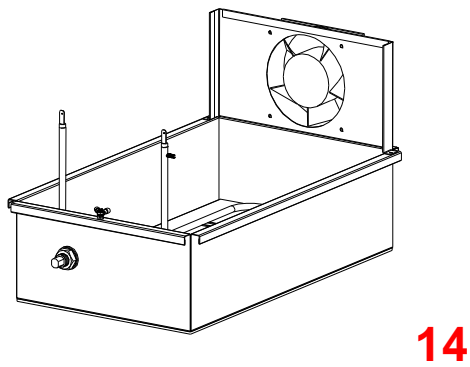
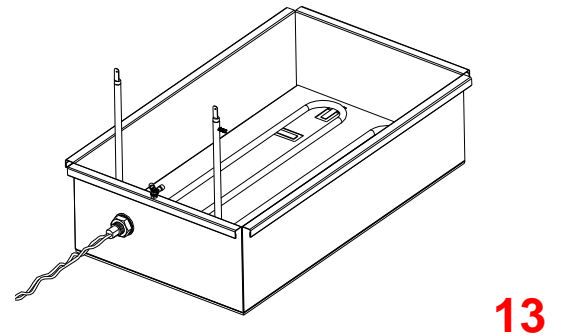
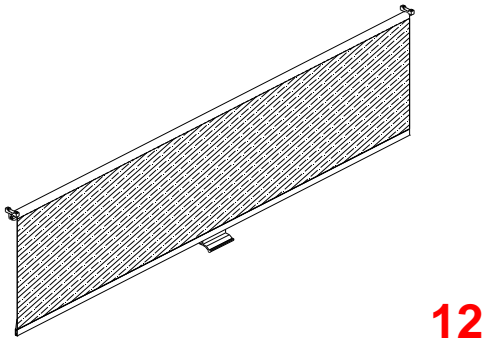
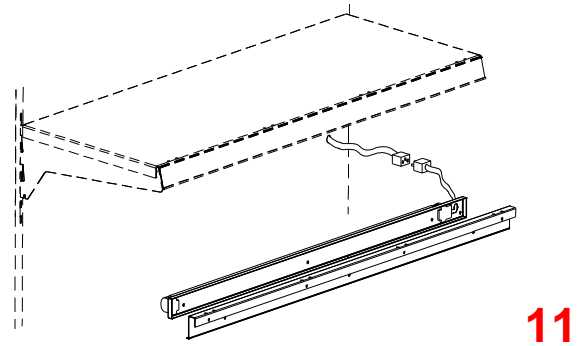
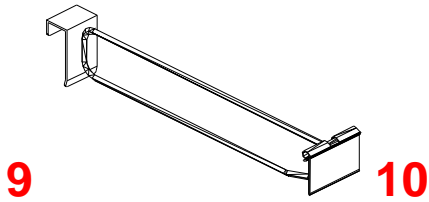
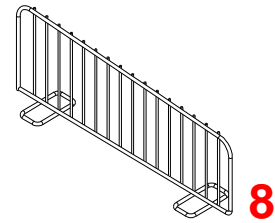
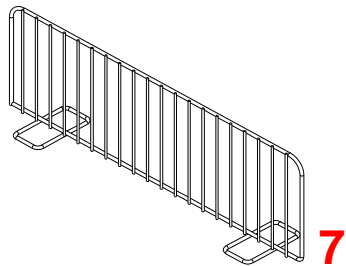
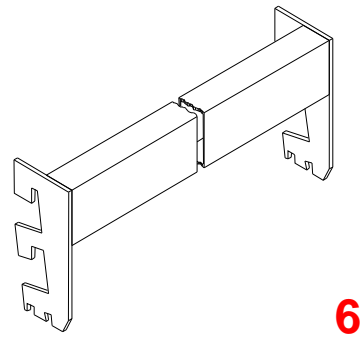
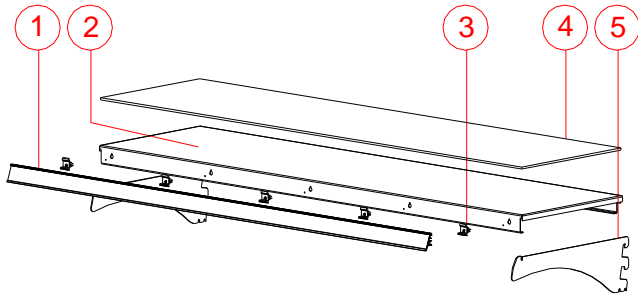
**11.1. PRIMUS**

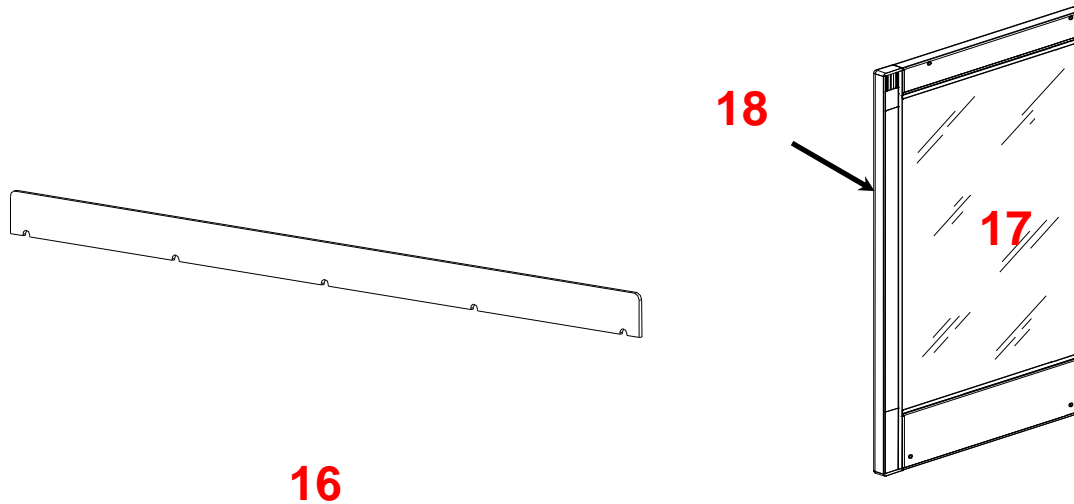


Nr	Code	Designation	70	90	130	150	190	250
1	MS60007130	DOUBLE SIDE GLASS S/LESS STEEL MURAL PRIMUS				•		
	MS60007131	DOUBLE SIDE GLASS MURAL PRIMUS SLIM				•		
	MS60007146	DOUBLE SIDE GLASS REFLECTIVE MURAL PRIMUS				•		
	MS60007147	DOUBLE SIDE GLASS REFLECTIVE MURAL PRIMUS SLIM				•		
2	SJ19680700	LIGHTNING ARRAY CENTRAL PROTECTION M. PRIMUS				•		
3	MS10000043	FLUORESCENT LAMP L36W/20-640				•		
4	MS40000032	DIGITAL CONTROL UNIT CDC122 T1R2				•		
	MS40000124	SENSOR F/CONTROLLER LAE CDC122 ST1K3P1 C/3M				•		
	MS40000125	SENSOR F/CONTROLLER LAE CDC122 ST1K3P2 C/3M				•		
	MS40000097	DIGITAL CONTROL UNIT CAREL COMPRESS.2HP				•		
	MS40000109	SENSOR F/CONTROLLER COMP.2HP				•		
	MS40000123	SENSOR F/CONTROLLER COMP.2HP MARCA VERM.				•		
5	SJ80180170	UPPER DEC. S/LESS STEEL MURAL PRIMUS 70 HACCP	•					
	SJ80180109	UPPER DEC. S/LESS STEEL MURAL PRIMUS 90 HACCP		•				
	SJ80180113	UPPER DEC. S/LESS STEEL MURAL PRIMUS 130 HACCP			•			
	SJ80180115	UPPER DEC. S/LESS STEEL MURAL PRIMUS 150 HACCP				•		
	SJ80180119	UPPER DEC. S/LESS STEEL MURAL PRIMUS 190 HACCP					•	
	SJ80180125	UPPER DEC. S/LESS STEEL MURAL PRIMUS 250 HACCP						•

Nr	Code	Designation	70	90	130	150	190	250
5	SJ80280170	UPPER DEC. S/LESS STEEL MURAL PRIMUS 70 STD	•					
	SJ80280109	UPPER DEC. S/LESS STEEL MURAL PRIMUS 90 STD		•				
	SJ80280113	UPPER DEC. S/LESS STEEL MURAL PRIMUS 130 STD			•			
	SJ80280115	UPPER DEC. S/LESS STEEL MURAL PRIMUS 150 STD				•		
	SJ80280119	UPPER DEC. S/LESS STEEL MURAL PRIMUS 190 STD					•	
	SJ80180125	UPP. DEC. S/LESS STEEL MURAL PRIMUS 250 HACCP						•
6	MS35000014	LAT.EXT.LOW.RIGHT LAT.S/LESS ST. MURAL PRIMUS				•		
7	SJ90661170	SUCTION GRID M.FUND.PLUS 70 S/LESS STEEL	•					
	SJ90661109	SUCTION GRID M.FUND.PLUS 90 S/LESS STEEL		•				
	SJ90661113	SUCTION GRID M.FUND.PLUS 130 S/LESS STEEL			•			
	SJ90661115	SUCTION GRID M.FUND.PLUS 150 S/LESS STEEL				•		
	SJ90661119	SUCTION GRID M.FUND.PLUS 190 S/LESS STEEL					•	
	SJ90661125	SUCTION GRID M.FUND.PLUS 250 S/LESS STEEL						•
8	SJ85161170	INTERMED. DEC.M.FUNDADOR PLUS 70-S.BRITE	•					
	SJ85161109	INTERMED. DEC..M.FUNDADOR PLUS 90-S.BRITE		•				
	SJ85161113	INTERMED. DEC..M.FUNDADOR PLUS 130-S.BRITE			•			
	SJ85161115	INTERMED. DEC..M.FUNDADOR PLUS 150-S.BRITE				•		
	SJ85161119	INTERMED. DEC..M.FUNDADOR PLUS 190-S.BRITE					•	
	SJ85161125	INTERMED. DEC..M.FUNDADOR PLUS 250-S.BRITE						•
9	SJ85460070	BUMPER PROFILE FIX.PROFILE MF PLUS 70	•					
	SJ85460009	BUMPER PROFILE FIX.PROFILE MF PLUS 90		•				
	SJ85460013	BUMPER PROFILE FIX.PROFILE MF PLUS 130			•			
	SJ85460015	BUMPER PROFILE FIX.PROFILE MF PLUS 150				•		
	SJ85460019	BUMPER PROFILE FIX.PROFILE MF PLUS 190					•	
	SJ85460025	BUMPER PROFILE FIX.PROFILE MF PLUS 250						•
10	MS20000115	BUMPER PROFILE TOP RAL 9007-SILVER				•		
11	SJ85360070	BUMPER PROFILE MF PLUS 70- SILVER	•					
	SJ85360009	BUMPER PROFILE MF PLUS 90- SILVER		•				
	SJ85360013	BUMPER PROFILE MF PLUS 130- SILVER			•			
	SJ85360015	BUMPER PROFILE MF PLUS 150- SILVER				•		
	SJ85360019	BUMPER PROFILE MF PLUS 190- SILVER					•	
	SJ85360025	BUMPER PROFILE MF PLUS 250- SILVER						•
12	SJ85261170	LOW.DEC. MURAL FUNDADOR PLUS 70-S.BRITE	•					
	SJ85261109	LOW.DEC.MURAL FUNDADOR PLUS 90-S.BRITE		•				
	SJ85261113	LOW.DEC.MURAL FUNDADOR PLUS 130-S.BRITE			•			
	SJ85261115	LOW.DEC.MURAL FUNDADOR PLUS 150-S.BRITE				•		
	SJ85261119	LOW.DEC.MURAL FUNDADOR PLUS 190-S.BRITE					•	
	SJ85261125	LOW.DEC.MURAL FUNDADOR PLUS 250-S.BRITE						•
12	SJ85361170	LOW.DEC.M.FUNDADOR PLUS 70 S/GP-S.BRITE	•					
	SJ85361109	LOW.DEC.M.FUNDADOR PLUS 90 S/GP-S.BRITE		•				
	SJ85361113	LOW.DEC.M.FUNDADOR PLUS 130 S/GP-S.BRITE			•			
	SJ85361115	LOW.DEC.M.FUNDADOR PLUS 150 S/GP-S.BRITE				•		
	SJ85361119	LOW.DEC.M.FUNDADOR PLUS 190 S/GP-S.BRITE					•	
	SJ85361125	LOW.DEC.M.FUNDADOR PLUS 250 S/GP-S.BRITE						•
12	IJ85461113	LOW. DEC.W/AB.DRAIN BASKET MFP 130-S.BRIT			•			
	IJ85461115	LOW. DEC.W/AB.DRAIN BASKET MFP 150-S.BRIT				•		
	IJ85461119	LOW. DEC.W/AB.DRAIN BASKET MFP 190-S.BRIT					•	
	IJ85461125	LOW. DEC.W/AB.DRAIN BASKET MFP 250-S.BRIT						•
13	IJ42060070	SKIRT BOARD MURAL FUNDADOR PLUS 70	•					
	IJ42060009	SKIRT BOARD MURAL FUNDADOR PLUS 90		•				
	IJ42060013	SKIRT BOARD MURAL FUNDADOR PLUS 130			•			
	IJ42060015	SKIRT BOARD MURAL FUNDADOR PLUS 150				•		
	IJ42060019	SKIRT BOARD MURAL FUNDADOR PLUS 190					•	
	IJ42060025	SKIRT BOARD MURAL FUNDADOR PLUS 250						•
14	MS35000013	LAT.EXT.LOW.LEFT LAT.S/LESS STEEL MURAL PRIMUS				•		

11.2. EXTRA PARTS SET





Nr	Code	Designation	70	90	130	150	190	250
1	MS20000922	GRAY PRICE STRIP PROFILE MFP 70-570MM	•					
	MS20000923	GRAY PRICE STRIP PROFILE MFP 90-770MM		•				
	MS20000924	GRAY PRICE STRIP PROFILE MFP 130-1170MM			•			•
	MS20000925	GRAY PRICE STRIP PROFILE MFP 150-1370MM				•		
	MS20000926	GRAY PRICE STRIP PROFILE MFP 190-1770MM					•	
2	SJ40261170	SHELF MURAL FUNDADOR PLUS 70 S/LESS STEEL	•					
	SJ40261109	SHELF M.FUND.PLUS 90 S/LESS STEEL		•				
	SJ40261113	SHELF MURAL FUNDADOR PLUS 130 S/LESS STEEL			•			•
	SJ40261115	SHELF MURAL FUNDADOR PLUS 150 S/LESS STEEL				•		
	SJ40261119	SHELF MURAL FUNDADOR PLUS 190 S/LESS STEEL					•	
2	IJ40071170	SMALL SHELF MURAL FUN.PLUS SLIM 70 S/LESS STEEL	•					
	IJ40071109	SMALL SHELF MFP SLIM 90 S/LESS STEEL		•				
	IJ40071113	SMALL SHELF MFP SLIM 130 S/LESS STEEL			•			
	IJ40071115	SMALL SHELF MFP SLIM 150 S/LESS STEEL				•		
	IJ40071119	SMALL SHELF MFP SLIM 190 S/LESS STEEL					•	
2	IJ40071070	BIG SHELF MURAL FUN.PLUS SLIM 70 S/LESS STEEL	•					
	IJ40071009	BIG SHELF MFP SLIM 90 S/LESS STEEL		•				
	IJ40071013	BIG SHELF MFP SLIM 130 S/LESS STEEL			•			
	IJ40071015	BIG SHELF MFP SLIM 150 S/LESS STEEL				•		
	IJ40071019	BIG SHELF MFP SLIM 190 S/LESS STEEL					•	
3	MS20000920	FIX.+SUPPORT PART F/PRICE STRIP MF PLUS				•		
4	MP22200153	RUBBER BAND ENDING W/TRANSP.STICKER	0,58	0,78	1,2	1,4	1,8	2x1,2
5	MS35000010	SHELF BRACKET MURAL FUNDADOR PLUS S/LESS ST.				•		
6	IJ40162170	MEAT+POULTRY BAR MURAL FUNDADOR PLUS 70	•					
	IJ40162109	MEAT+POULTRY BAR MURAL FUNDADOR PLUS 90		•				
	IJ40162113	MEAT+POULTRY BAR MURAL FUNDADOR PLUS 130			•			•
	IJ40162115	MEAT+POULTRY BAR MURAL FUNDADOR PLUS 150				•		
	IJ40162119	MEAT+POULTRY BAR MURAL FUNDADOR PLUS 190					•	
7	MX30010605	BOTTOM DIV. GRAY PLAST. WIRE M.FUNDADOR				•		
	MX30010634	EXP.BOTTOM DIV.M.FUND.PLUS SLIM-GRAY				•		
8	MX30010606	DIV.PRAT.ARAMÉ PLAST.CINZA M.FUNDADOR				•		
	MX30010635	BIG SHELF DIV. M.FUND.PLUS SLIM- GRAY				•		
	MX30010636	BIG SHELF DIV. M.FUND.PLUS SLIM- GRAY				•		
9	MX30010567	MEAT&POULTRY HOOK GRAY PLAST. WIRE M.FUNDAD.				•		
10	MS20000905	PRICE STRIP TRANSP. HOOKS 9.0X5.5CM				•		

Nr	Code	Designation	70	90	130	150	190	250
11	IJ27160170	SHELF LIGHTNING ARRAY MURAL FUNDADOR PLUS 70	•					
	IJ27160109	SHELF LIGHTNING ARRAY MURAL FUNDADOR PLUS 90		•				
	IJ27160113	SHELF LIGHTNING ARRAY MURAL FUNDADOR PLUS 130			•			•
	IJ27160115	SHELF LIGHTNING ARRAY MURAL FUNDADOR PLUS 150				•		
	IJ27160119	SHELF LIGHTNING ARRAY MURAL FUNDADOR PLUS 190					•	
12	MS30000607	NIGHT CURTAIN MURAL FUNDADOR PLUS 70	•					
	MS30000602	NIGHT CURTAIN MU.FUNDADOR/CASTELO 87		•				
	MS30000603	NIGHT CURTAIN MU.FUNDADOR/CASTELO 120			•			•
	MS30000609	NIGHT CURTAIN MU.FUNDADOR/CASTELO 150				•		
	MS30000604	NIGHT CURTAIN MU.FUNDADOR/CASTELO 180					•	
13	IJ45170170	EVAP. RESIS. KIT M.FUND.PLUS SLIM 70						
	IJ45170109	EVAP. RESIS. KIT MF.PLUS 70/90/SLIM 90/130						
	IJ45170115	EVAP. RESIS. KIT MF.PLUS 130/150 SLIM 150						
	IJ45170119	EVAP. RESIS. KIT MF PLUS 190/250/SLIM 190						
14	IJ45270109	FAN ASSISTET EVAP.RESIS.KIT MFP70/90/SLIM 90/130						
	IJ45260115	FAN ASSISTET EVAP.RESIS.KIT MFP130/150/SLIM 150						
	IJ45260119	FAN ASSISTET EVAP.RESIS.KIT MFP190/250/SLIM 190						
15	MX30010650	FRONT SHELF GRID M.FUND.PLUS 70 SILVER PA20	•					
	MX30010651	FRONT SHELF GRID MF PLUS 90-GRAY		•				
	MX30010652	FRONT SHELF GRID MF PLUS 130- GRAY			•			•
	MX30010653	FRONT SHELF GRID MF PLUS 150- GRAY				•		
	MX30010654	FRONT SHELF GRID M.FUN.PLUS 190- GRAY					•	
16	MS61000060	ACRYL. SHELF DAMPER M.FUNDADOR PL 70	•					
	MS61000061	ACRYL. SHELF DAMPER M.FUNDADOR PL 90		•				
	MS61000062	ACRYL. SHELF DAMPER M.FUNDADOR PL 130			•			•
	MS61000063	ACRYL. SHELF DAMPER M.FUNDADOR PL 150				•		
	MS61000064	ACRYL. SHELF DAMPER M.FUNDADOR PL 190					•	
17	IJ19080000	RIGHT LAT. S/LESS STEEL MURAL PRIMUS GLASS				•		
	IJ19080001	LEFT LAT. S/LESS STEEL MURAL PRIMUS GLASS				•		
	IJ19180000	RIGHT LAT. S/LESS STEEL MURAL PRIMUS MIRROR				•		
	IJ19180001	LEFT LAT. S/LESS STEEL MURAL PRIMUS MIRROR				•		
	IJ19085000	RIGHT LAT. S/LESS STEEL MURAL PRIMUS SLIM GLASS				•		
	IJ19085001	LEFT LAT. S/LESS STEEL MURAL PRIMUS SLIM GLASS				•		
	IJ19185000	RIGHT LAT. S/LESS ST. MURAL PRIMUS SLIM MIRROR				•		
	IJ19185001	LEFT LAT. S/LESS STEEL MURAL PRIMUS SLIM MIRROR				•		
18	MS60007130	DOUBLE LAT. GLASS S/LESS STEEL MURAL PRIMUS				•		
	MS60007131	DOUBLE LAT. GLASS MURAL PRIMUS SLIM				•		
	MS60007146	DOUBLE LAT. GLASS MIRRORRED MURAL PRIMUS				•		
	MS60007147	DOUBLE LAT. GLASS MIRRORRED MURAL PRIMUS SLIM				•		

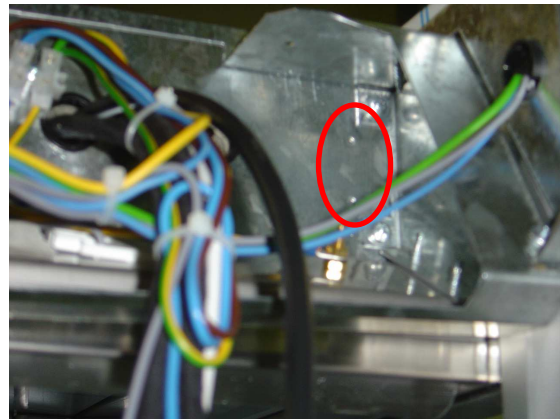
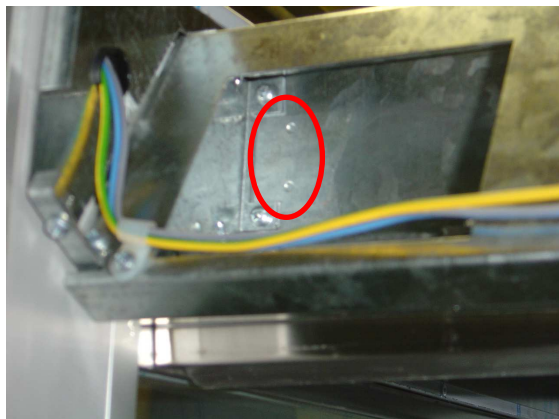
**12. ATTACHMENTS**

**12.1. NIGHT BLIND ASSEMBLY**

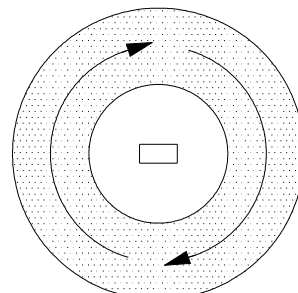
1. Remove de armour.
2. Remove the support metal-sheet from the vertical lamp ballasts.



3. Locate the supports of the blind in the holes and fix it with rivets.

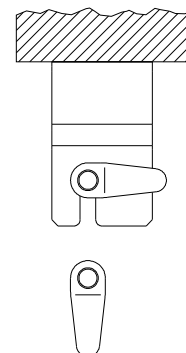


4. Hold the blind and turn 15 times in a clockwise direction using the tool provided by us (detail A).



Detail: A

5. Hold the spring with the tool and insert the blind into the square hole so that it remains fixed.
6. Insert the plastic accessory into the left support (detail B)
7. Turn the plastic in a counter clockwise and stop in the correct position, as shown in the picture (detail C).



Detail: C

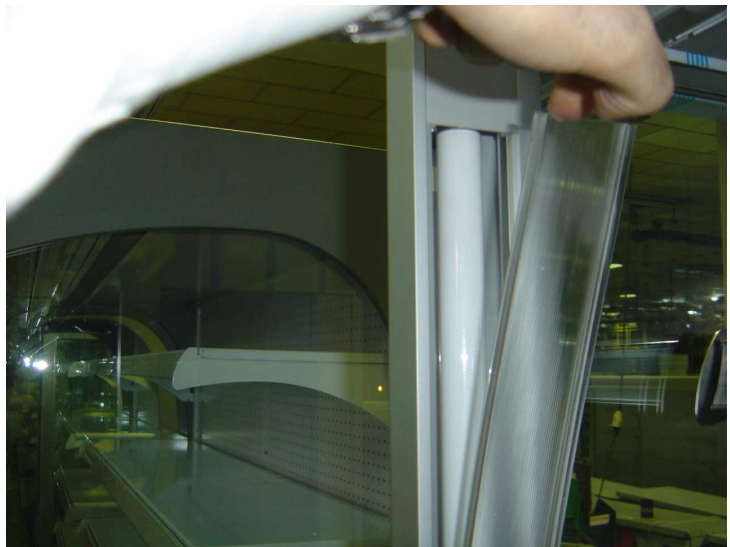
Detail: B

8. In the end, set up the whole upper structure again, so that this task is finished properly.

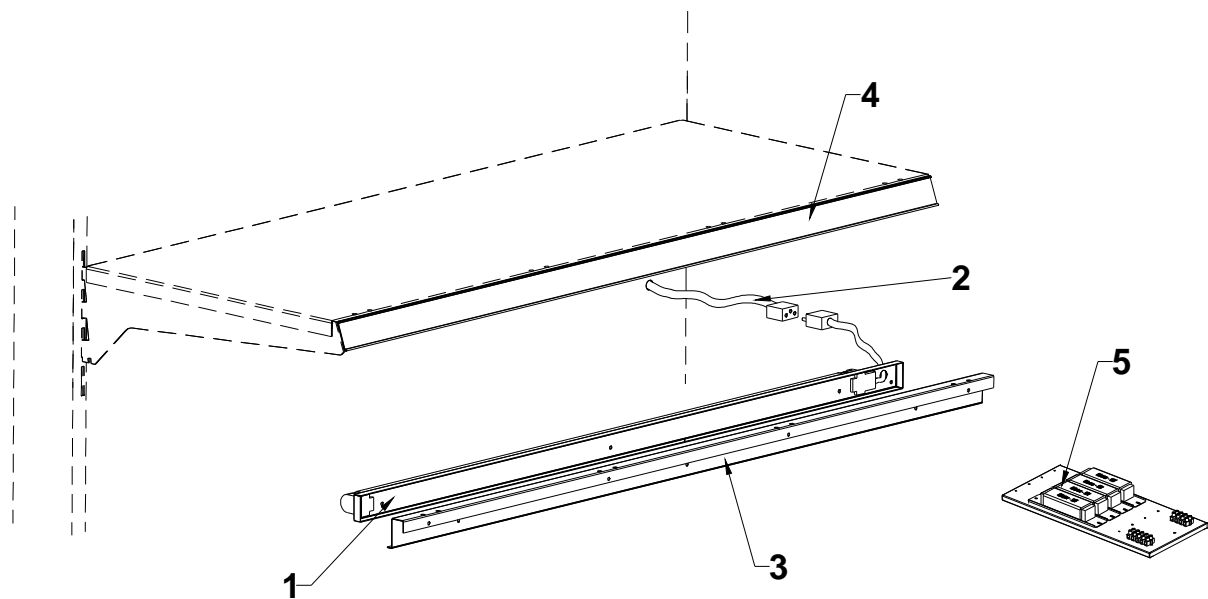


## 12.2. REPLACING LAMPS

1. Disconnect the appliance from its power supply.
2. Remove the acrylic protection with the help of a screw driver (as shown in the attached picture).
3. Remove the lamp from its support and replace it. The switch is located on the control panel, on the right upper part of the appliance.



**12.3. ILLUMINATED SHELVES SET ASSEMBLY**



- 1<sup>st</sup> – Fix the electrical circuit board (5) on the base of the Mural, next to the already existing electrical circuit board.
- 2<sup>nd</sup> – Fix part (3) on the lightning array (1) with rivets.
- 3<sup>rd</sup> – Rivet the previously assembled set (lightning array (1) + part (3)) on the shelf (4).
- 4<sup>th</sup> – Connect the lightning array (1) with the cable (2) through the existing hermetic connections.
- 5<sup>th</sup> – Connect the cable (2) with the electrical circuit board (5).