



-10°C | +40°C

# PLATINUM

PROFESSIONAL PROGRAMMED  
RETARDER PROOFING ROOMS



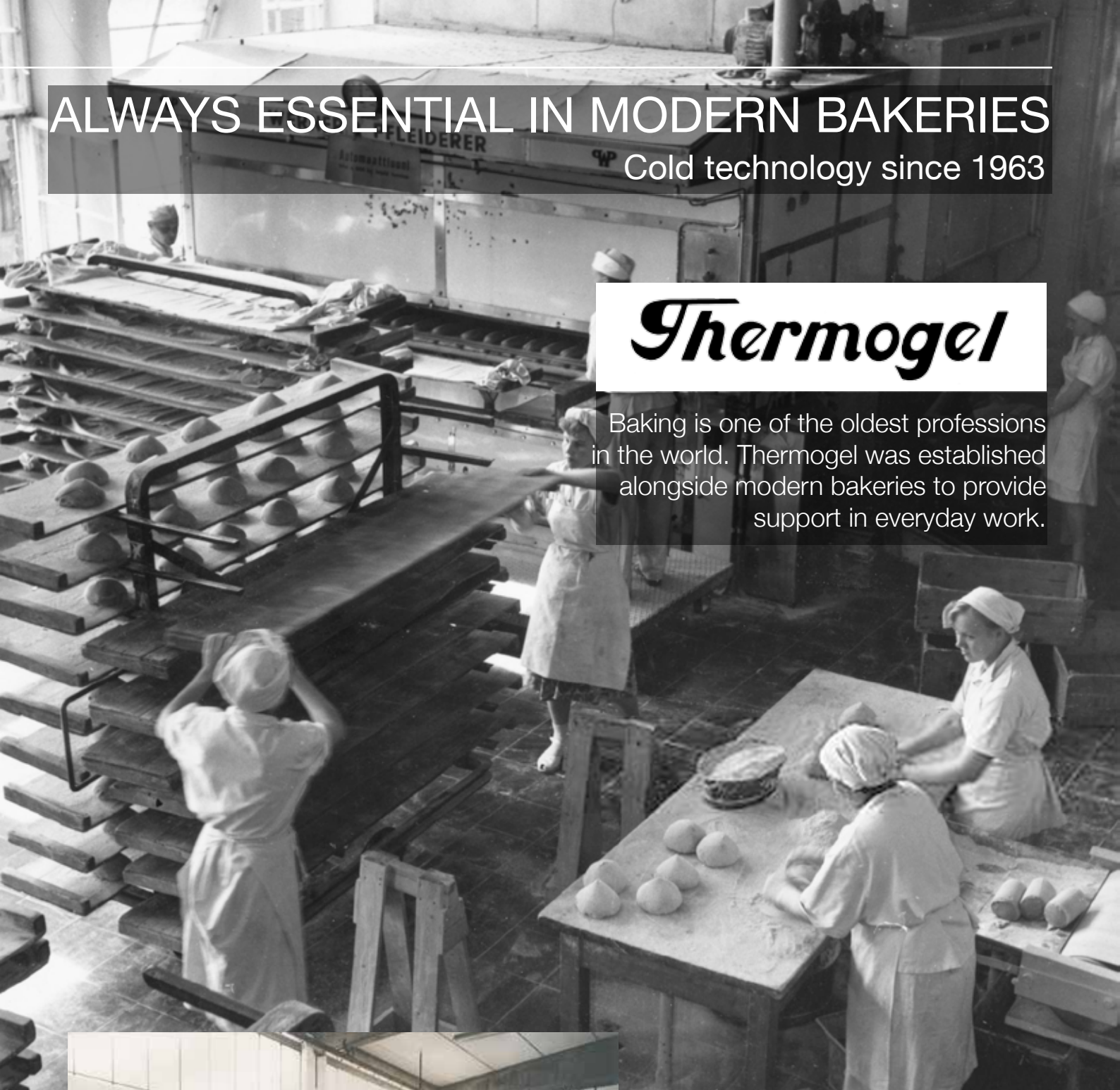
**THERMOGEL**

# ALWAYS ESSENTIAL IN MODERN BAKERIES

Cold technology since 1963

## *Thermogel*

Baking is one of the oldest professions in the world. Thermogel was established alongside modern bakeries to provide support in everyday work.



## 1970

In 1970, following careful research into bakers' work, a machine was designed to simplify the work and give bakers more flexibility.

This is how retarder proofing came about.



---

## SPACE FOR YOUR PROJECTS

Limitless design.

The PLATINUM retarder proofing rooms came about thanks to the need to offer bakers a machine that offers endless use possibilities and large capacity. The design has always been developed and perfected to always offer a top level machine.



LARGE ROOMS FOR  
CONTINUOUS WORKING.

# FULL CONFIGURATION FREEDOM

## Configurations to best meet needs.

PLATINUM rooms were designed to adapt to various types of work. Each configuration corresponds to a different type of use and different type of processing.



1200

### PLATINUM

12

Configuration with a 900 single door to allow entry of 600x800 or 800x1000 trolleys.



2000

### PLATINUM

20

The room has a double-door opening giving a total clearance of 1700 mm that allows entry of any trolley size and it adapts to various loading logistics.



2400 / 2600

## PLATINUM

24/26

Configuration suitable for anyone requiring arrangement of a double line of trolleys and precise loading requirements and different loading times.



2900

## PLATINUM

29

This room was designed for entry and loading of 3 trolley lines, allowing continuous rotation and correct loading and unloading management. No central door saves considerable space.



3900

## PLATINUM

39

Large room designed to manage requirements for 3 trolley lines in complete loading and unloading autonomy. Perfect also for rack entry.

# TOTAL CONTROL

Specific retarder proofing function for every type of work.

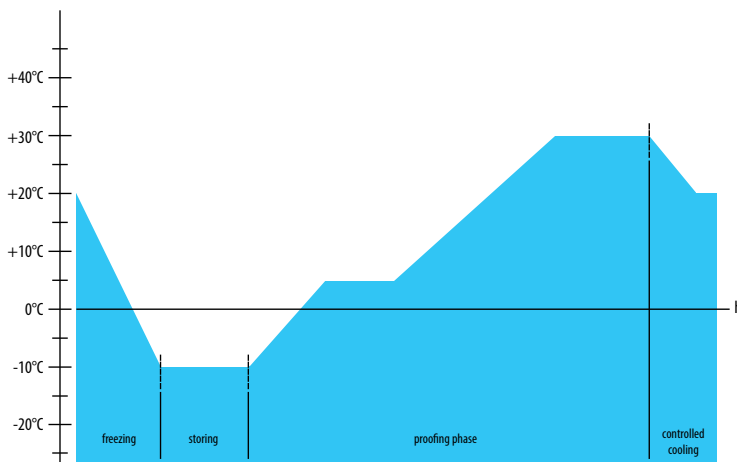
The PLATINUM retarder proofing line adapts to any type of work allowing the user to choose the type of work according to production needs.

## TCA

### “CLASSIC” RETARDER PROOFER

▼ -10°C | +40°C ▲

The TCA series was designed for a laboratory seeking leavened bread at a precise time ready for baking and then using the room for final leavening of another product.

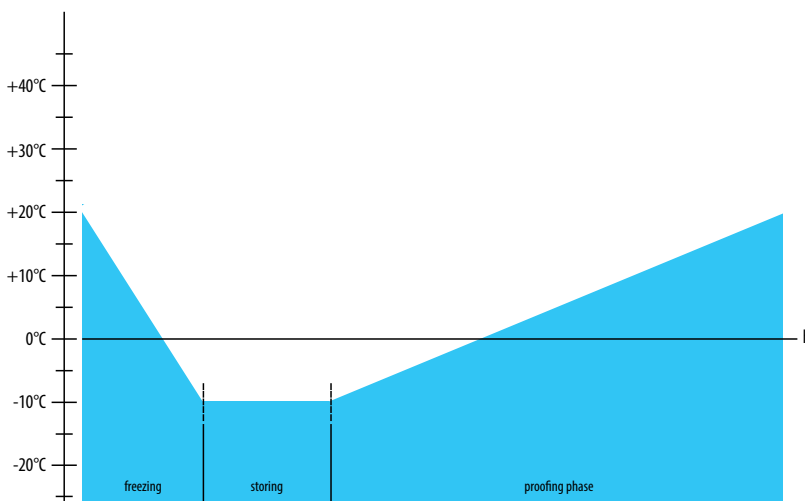


## TTN

### NATURAL LEAVENING - SLOW LEAVENING

▼ -10°C | +25°C ▲

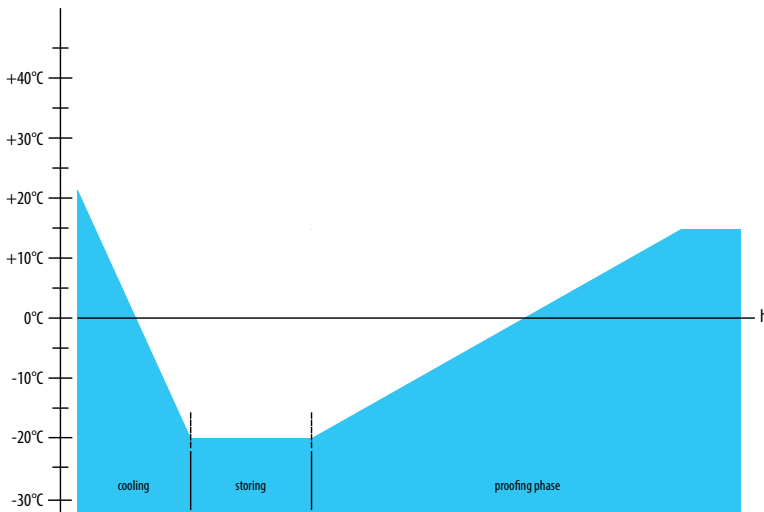
The TTN series was designed for those organising production with the baking phase distributed throughout the day; the dough is progressively leavened at natural temperatures and maintained for a long time. This process allows freshly baked bread to be achieved throughout the day.



## LOW TEMPERATURE LEAVENING

▼ -20°C | +15°C ▲

The TBT series is a retarder proper at low temperature for special, heavy weight bread where bacterial contamination must be stopped and then proceed with natural proofing.



## RELATIVE HUMIDITY 60-95%

In the retarder proofing process, other than temperature, humidity plays a fundamental role for a correct leavening process, avoiding skin forming on the surface of the product.

The relative humidity of the environment must always be under control with values between 60 and 95% according to the type of leavening and the product you want to achieve.



TOTAL PHASE CONTROL TO ACHIEVE  
PERFECT LEAVENING



# OPTIMISING PRODUCTION PROCESSES...

## Improving your work, day by day.

The PLATINUM rooms are designed to offer the best service to the operator. The simple use and high precision allow improved quality by controlling the individual processes and reducing variability to a minimum.



### 1. IMPROVE PRECISION

The baker gains the benefit of this technology by obtaining a constant quality product and a timing precision over the entire process.

### 2. SAVE TIME

Professional retarder proofing saves time thanks to better organisation.

### 3. PLAN YOUR WORK

Perfect retarder proofing enables your precise organisation to plan production for the full week.

#### 4. INCREASED PRODUCTIVITY

Retarder proofing also allows greater product rotation to allow the baker to best manage baking phases, optimising production organisation in the laboratory.

#### 5. LESS WORK

Retarder proofing allows bakers to work less, avoiding night shifts and strenuous waking up in the middle of the night.

#### 6. LESS INGREDIENTS

Perfect leavening allows guaranteed calibration of the quantity of ingredients, yeast in particular, lowering product costs.

#### 7. HIGHER QUALITY

The balance between the ingredients, the correct temperature and humidity during leavening allow the best end product to be obtained.



#### YOUR PRODUCT

Our objective is not just to “automate” the work, but help bakers optimise the production process and best enhance the properties of the product.



...PRESERVING THE WORKMANSHIP OF  
THE PRODUCT

# HIGHER QUALITY

Built to work, all the time.

Our rooms are built according to strict quality criteria to allow continuous work, each day, always guaranteeing maximum performance.

## STRUCTURAL DETAILS

---



- Modular structure with 80mm thick hook panel
- Internal structure in aisi 304 stainless steel
- 80mm thick door with airtight seal.
- Sanitary profiles in aisi 304 stainless steel
- Mechanical components resistant to heavy stress.
- 30mm thick phenolic resin plywood floor.

## SYSTEM DETAILS

---



- Large surface evaporator.
- Ultra-tropicalised condenser unit to also work in ambient temperatures up to +45°C
- Electrical defrosting.
- Heating resistors in stainless steel.
- Immersed electrodes instantaneous humidifier.



Maximum performance for 24h,  
non-stop working day.



- Electric box easily accessible and equipped with every safety device according to standards.
- 7" mod. touchscreen control card DIGITH LED
- Humidity and temperature probe.
- Internal led light.

# UNIFORM AND BALANCED

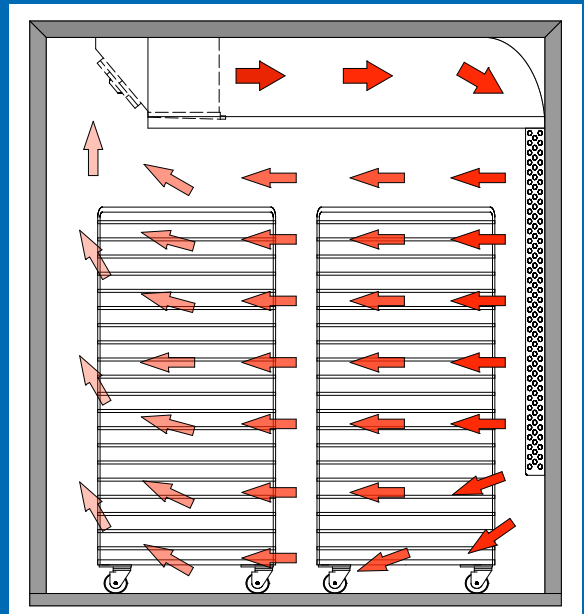
Perfect balance to guarantee no skin formation.

Each room is created using a principle of balance among the various elements composing it: evaporator, condenser and motor. This correct balance allows all “skin” issues to be avoided, as well as dehydration on the surface of the product, respecting the natural relative humidity.

## VENTILATION SYSTEM

Air volume and ventilation are always designed to obtain perfect distribution and uniformity of the temperatures without ever being aggressive on the product, but always constant and delicate.

- $\pm 1^{\circ}\text{C}$  temperature and  $\pm 1.5\%$  humidity precision
- Uniform temperature and humidity in every room
- Perfect balance of mildness and volume of the air
- No skin and dehydration on the surface of the product





## ALL WITHIN A HAND'S REACH

**DIGITH LCD - a user electronic control with utmost user freedom.**

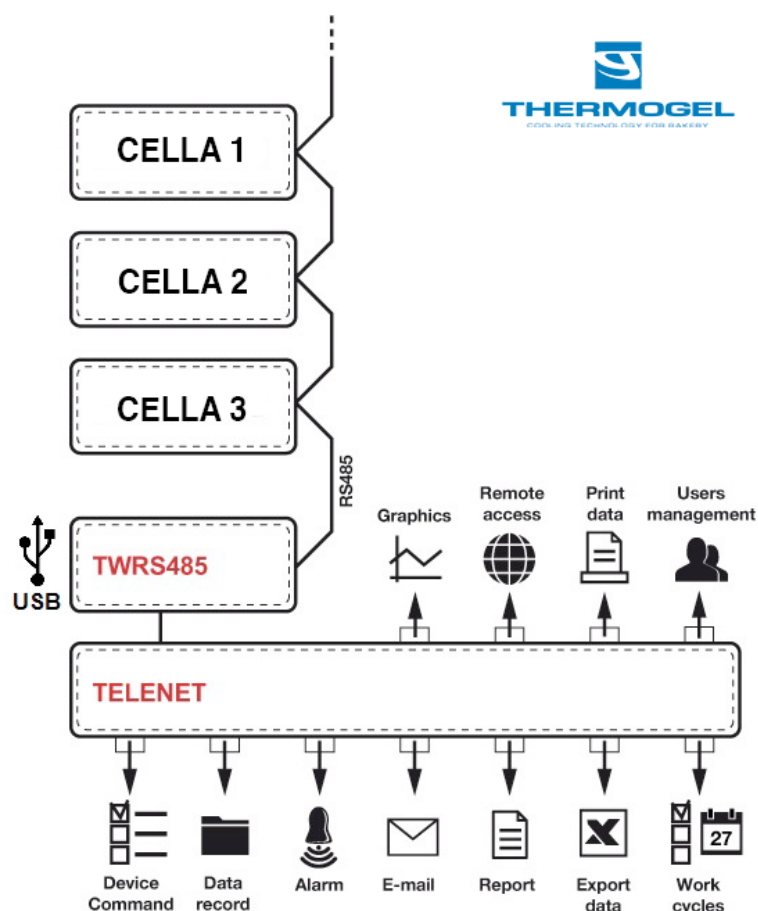
- Manual operation for heat (leavening).
- Manual operation for cold (accumulation).
- Automatic program management of customisable leavening retarder composed of a maximum of 9 settable phases (2 accumulation phases, 3 storage phases, 3 leavening phases and 1 rest phase); in particular, the following is possible for each phase:
  - Enable its operation (except for Storage phase 3, which is always present);
  - Set the functions to enable in the phase (Cold, Hot, Humidify, Dehumidify);
  - Set the duration of the phase, the temperature setpoint and the humidity setpoint;
  - Select the speed of the evaporation fans and enable fan forcing in continuous operation;
  - Enable the temperature threshold under which humidity management is inhibited;
  - Enable defrosting for the various accumulation and storage phases (when leavening starts, defrosting is launched, if enabled and then in the leavening and rest phases defrosting is always disabled);
  - Enable progressive reaching of the temperature setpoint (only for the leavening phases).
- Possibility of enabling a warning at the end of the program and oven advance command contact.
- Saving up to 12 programs in the entire memory and the possibility of exporting and importing them on USB media or microSD.
- Program in progress diagram with progress status display (phases already executed, phase in progress and phases to execute) and graphic representation of all the values set and the remaining time.

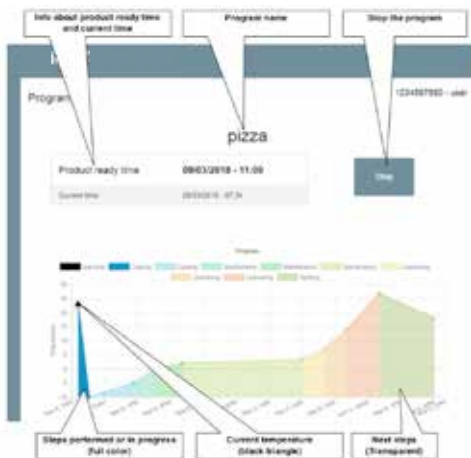
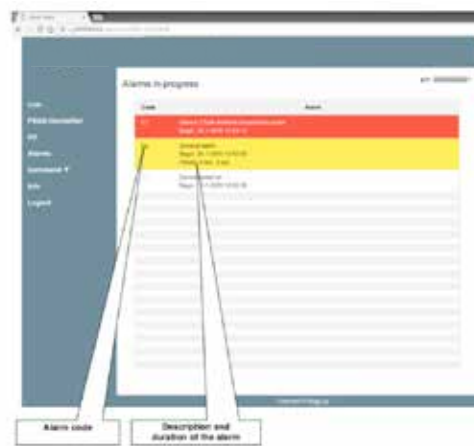
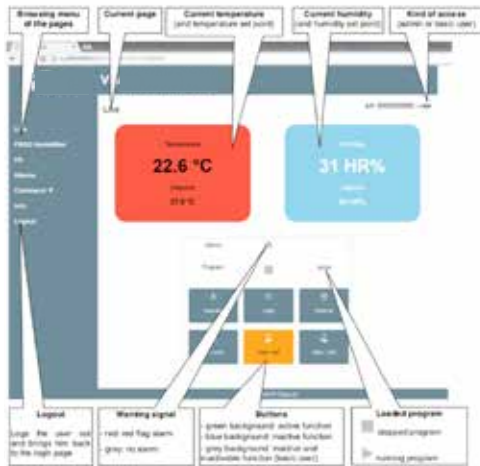


## COMPLETELY CONNECTED

TRC, an entirely new technology. Also monitors the work from remote.

TRC is a monitoring and supervision application of the refrigeration systems controlled by DIGITH LCD electronic instrumentation. The instrumentation network sends data to personal computers where you can view and print reports, manage alarms, edit operating parameters and monitor the entire system.





With appropriate safety measures relating to access and data, the system provides the possibility of enabling one or more users to operate from remote on the unit to configure parameters, display HACCP data (also in graphic form) and download records in multiple formats such as XLSX, CSV and PDF. Key functionalities include alarm notifications, which the system automatically sends to the selected e-mail addresses.

Remote control can be implemented in two different ways:

#### • DIRECT CONNECTION TO THE PC

The computer network card must be configured to enable allocation of the DHCP address. A browser page must be opened to connect to the device.



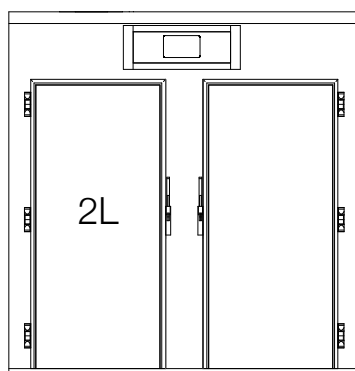
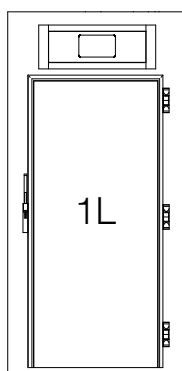
#### • LAN CONNECTION

If connected to a LAN with a DHCP server present, the DIGITH LCD card will acquire a free IP address. In this case, you can consult the acquired IP address using the "Info Page" found in the "Web server" menu of the Digith LCD.

# TECHNICAL TABLE

**TCA** ▼ -10°C | +40°C ▲

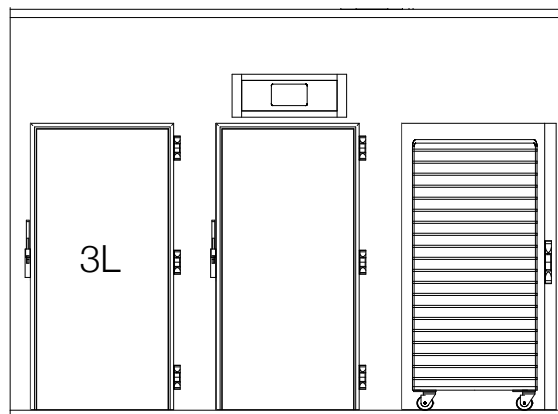
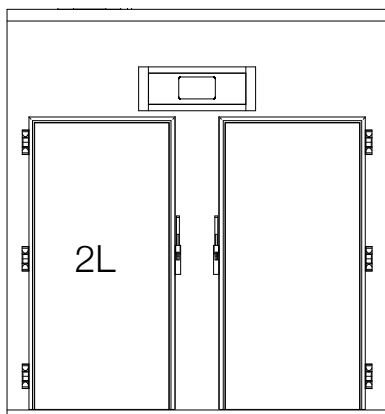
**TTN** ▼ -10°C | +25°C ▲



| Code<br>TCA - TTN | Trolleys<br>670x800 | Trolleys<br>800x1000 | (WxDxH) External<br>2500 H | (WxDxH) Internal | Door<br>900 x 1950 | Volts/<br>Kw |
|-------------------|---------------------|----------------------|----------------------------|------------------|--------------------|--------------|
| 1224/1L           | 3                   | 2                    | 1200x2400x2500             | 900x2180x1950    | 1                  | 400/5        |
| 1233/1L           | 4                   | 3                    | 1200x3300x2500             | 900x3100x1950    | 1                  | 400/6        |
| 1239/1L           | 5                   | 3                    | 1200x3900x2500             | 900x3680x1950    | 1                  | 400/6,5      |
| 2417/2L           | 4                   | 3                    | 2400x1700x2500             | 2100x1550x1950   | 2                  | 400/4,5      |
| 2424/2L           | 6                   | 4                    | 2400x2400x2500             | 2100x2050x1950   | 2                  | 400/6,5      |
| 2432/2L           | 8                   | 6                    | 2400x3200x2500             | 2100x2950x1950   | 2                  | 400/8        |
| 2439/2L           | 10                  | 8                    | 2400x3900x2500             | 2100x3550x1950   | 2                  | 400/9,3      |
| 2918/3L           | 6                   | 4                    | 2900x1800x2500             | 2600x1450x1950   | 2                  | 400/4,5      |
| 2924/3L           | 9                   | 6                    | 2900X2400X2500             | 2600X2150X1950   | 2                  | 400/6,5      |

TCA

TTN

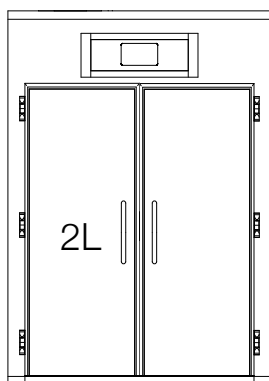


| Code<br>TCA - TTN | Trolleys<br>670x800 | Trolleys<br>800x1000 | (WxDxH) External<br>2800 H | (WxDxH) Internal | Door<br>1000 x 2000 | Volts/<br>Kw |
|-------------------|---------------------|----------------------|----------------------------|------------------|---------------------|--------------|
| 2645/2L           | 12                  | 8                    | 2600x4500x2800             | 2300x4300x2000   | 2+2                 | 400/15       |
| 2655/2L           | 14                  | 10                   | 2600x5500x2800             | 2300x5300x2000   | 2+2                 | 400/16       |
| 2665/2L           | 18                  | 12                   | 2600x6500x2800             | 2300x6300x2000   | 2+2                 | 400/18       |
| 3935/3L           | 12                  | 9                    | 3900x3500x2800             | 3600x3300x2000   | 3+3                 | 400/15       |
| 3945/3L           | 18                  | 12                   | 3900x4500x2800             | 3600x4300x2000   | 3+3                 | 400/18       |
| 3955/3L           | 21                  | 15                   | 3900x5500x2800             | 3600x5300x2000   | 3+3                 | 400/20       |
| 3965/3L           | 27                  | 18                   | 3900x6500x2800             | 3600x6300x2000   | 3+3                 | 400/22       |
| 3975/3L           | 30                  | 21                   | 3900x7500x2800             | 3600x7300x2000   | 3+3                 | 400/24       |

# TECHNICAL TABLE

TCA

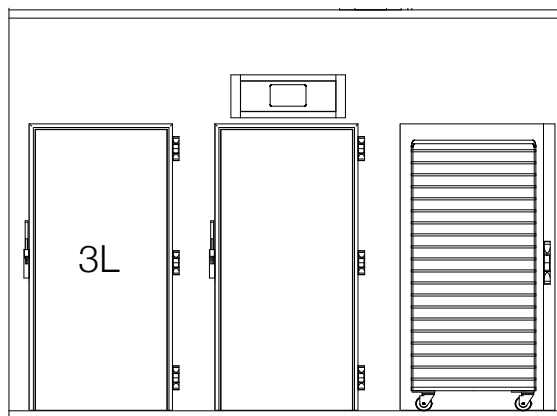
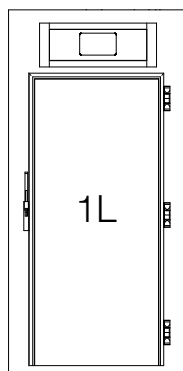
TTN



| Code<br>TCA - TTN | Trolleys<br>670x800 | Trolleys<br>800x1000 | (WxDxH) External<br>2500 H | (WxDxH) Internal | Swing door<br>1700 x 1950 | Volts/<br>Kw |
|-------------------|---------------------|----------------------|----------------------------|------------------|---------------------------|--------------|
| 2020/2L           | 4                   | -                    | 2000x2000x2500             | 1700x1800x1950   | 1                         | 400/6        |
| 2024/2L           | 6                   | -                    | 2000x2400x2500             | 1700x2200x1950   | 1                         | 400/6,5      |
| 2030/2L           | 8                   | -                    | 2000x3000x2500             | 1700x2800x1950   | 1                         | 400/7        |

TBT

▼ -20°C | +15°C ▲



| Code       | Trolleys<br>670x800 | Trolleys<br>800x1000 | (WxDxH) External | (WxDxH) Internal | Door<br>900 x 1950 | Volts/Kw |
|------------|---------------------|----------------------|------------------|------------------|--------------------|----------|
| TBT1224/1L | 3                   | 2                    | 1200x2400x2500   | 900x2180x1950    | 1                  | 400/5    |
| TBT1233/1L | 4                   | 3                    | 1200x3300x2500   | 900x3100x1950    | 1                  | 400/6    |
| TBT1239/1L | 5                   | 3                    | 1200x3900x2500   | 900x3680x1950    | 1                  | 400/6,5  |
| TBT2918/3L | 6                   | 4                    | 2900x1800x2800   | 2600x1450x1950   | 2                  | 400/15   |
| TBT2924/3L | 9                   | 6                    | 2900x2400x2800   | 2600x2150x1950   | 2                  | 400/16   |

50 YEARS  
OF EXPERIENCE  
 *made in Italy*



**THERMOBAKE SRL**

Via A. Volta 62B - 21010 | Tel. +39 0331 1835350  
Cardano al Campo (VA) | Fax. +39 0331 1835364

Email: [info@thermogel.it](mailto:info@thermogel.it)  
[www.thermogel.it](http://www.thermogel.it)