



**Blue Star
Top**

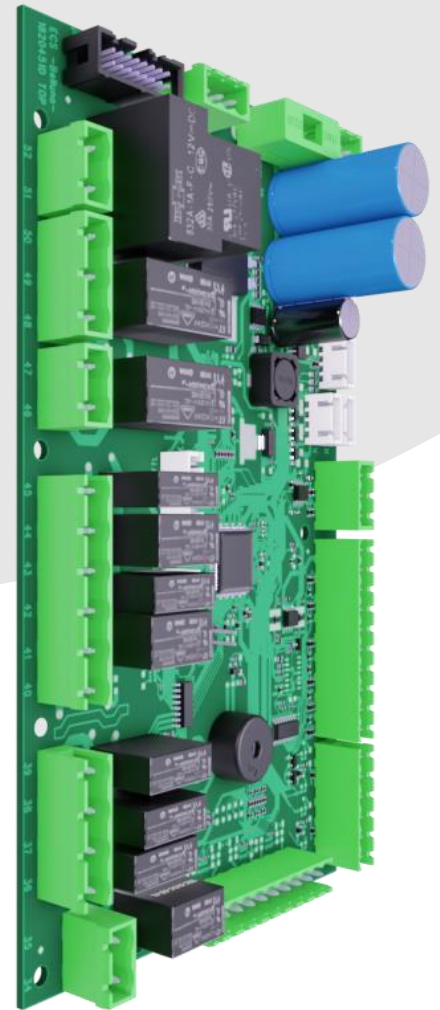


Product presentation

Blue Star

Electronics for refrigeration

Electronics for retarder proofer, performance without any compromises.



Blue Star

The product line dedicated to blast chilling, temperature maintenance and proofing. Over 20 years of experience in the sector have allowed ECS to develop complete and reliable products.

Modular

The board is designed to be connected to a number of expansions increasing its potential. The modular approach allows to meet all needs while optimizing costs.

Connected

All the products of the Blue Star line come with a Wi-Fi module. The Connecty.cloud platform is available immediately and allows you to exploit all the opportunities offered by the IoT.



Cloud service



The final user can:
manage the recipe-book,
monitor the machine,
browse the log HACCP.



Servicing can:
monitor I/O section, locate
the machines in order to
perform an accurate service.



Manufacturer can:
collect data regarding
customer habits usage in
order to arrange servicing
or promotional campaign,
update board software.

connecty.cloud

Company

- ✓ Connecty.cloud
- ✓ User functions
- ✓ Service functions
- ✓ Manufacturer functions

Free

- ✓ All free functions
- ✓ Access to all machines
- ✓ Platform and branding customizations

Fee

Quick and intuitive
interface made available
for technology.



Touch screen display

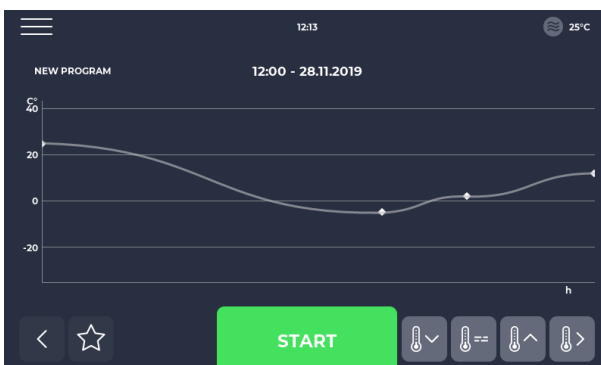
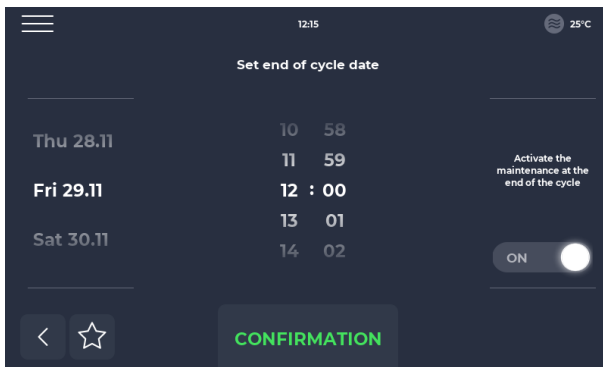
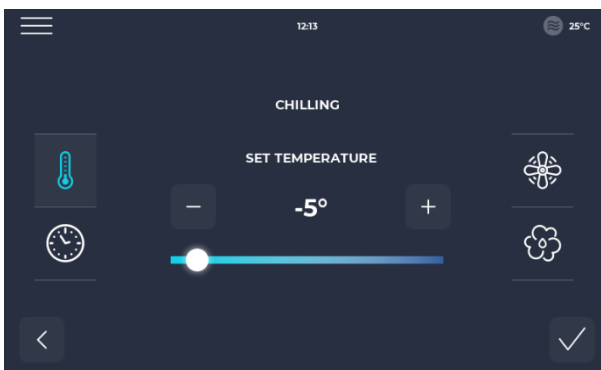
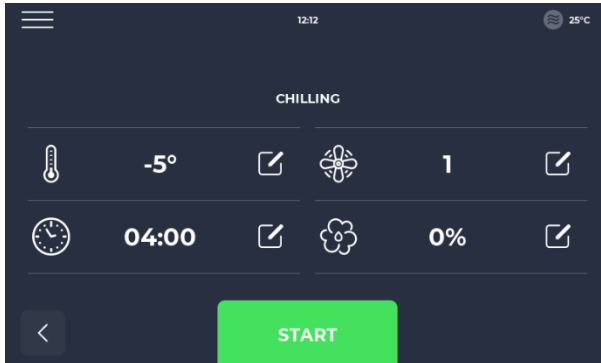
User interface



Homepage

The user interface is designed to pinpoint the most used functions in the fast way possible. On the home page you find easily the chilling, the storage and the proofing main programs. There is also room for the most used recipes scheduled pages.

Procedure



Quick edit

The main page enables all the most important functions setting: temperature, timing, probe temperature, humidity and ventilation. Any adjustment is automatically saved with no confirmation needed in order to optimize timing and use.

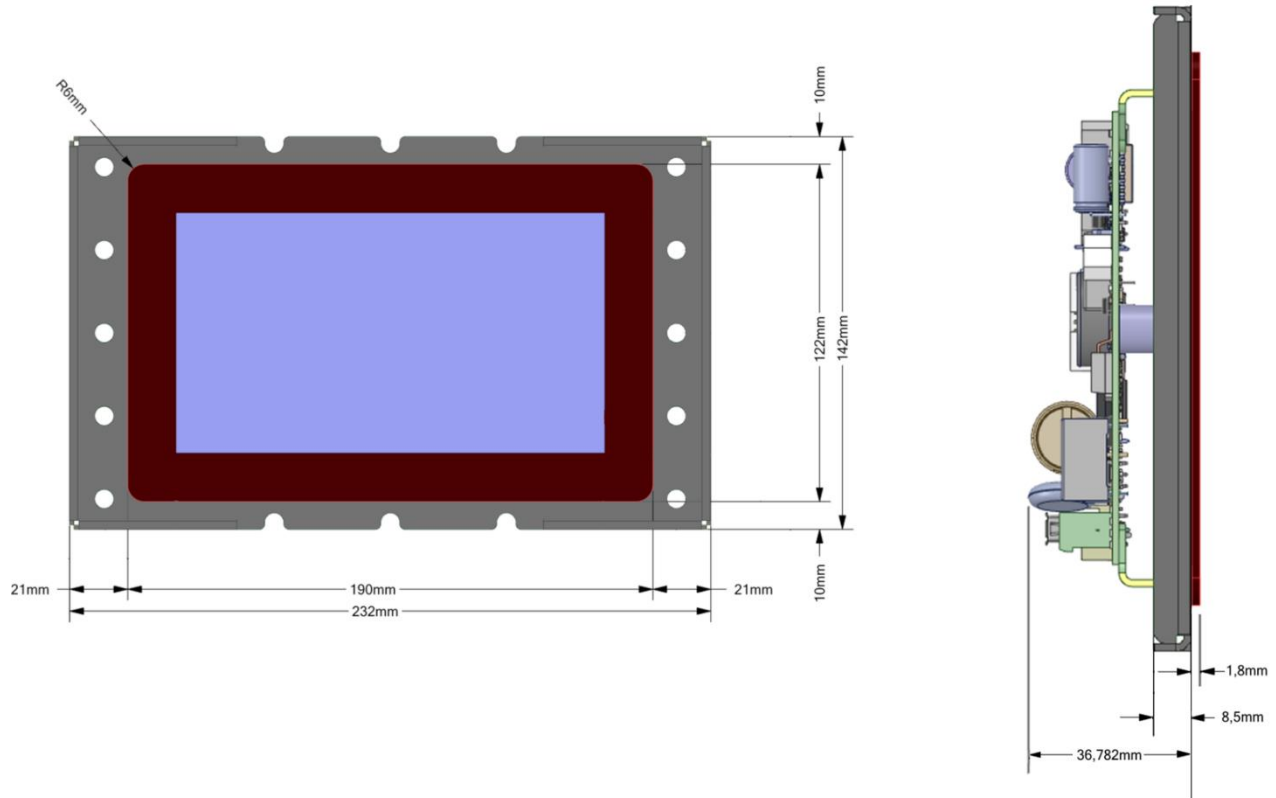
Scheduling

Once the stop time program is set, the machine arranges automatically cycles duration in order for the dough to be risen on time.

Visualisation

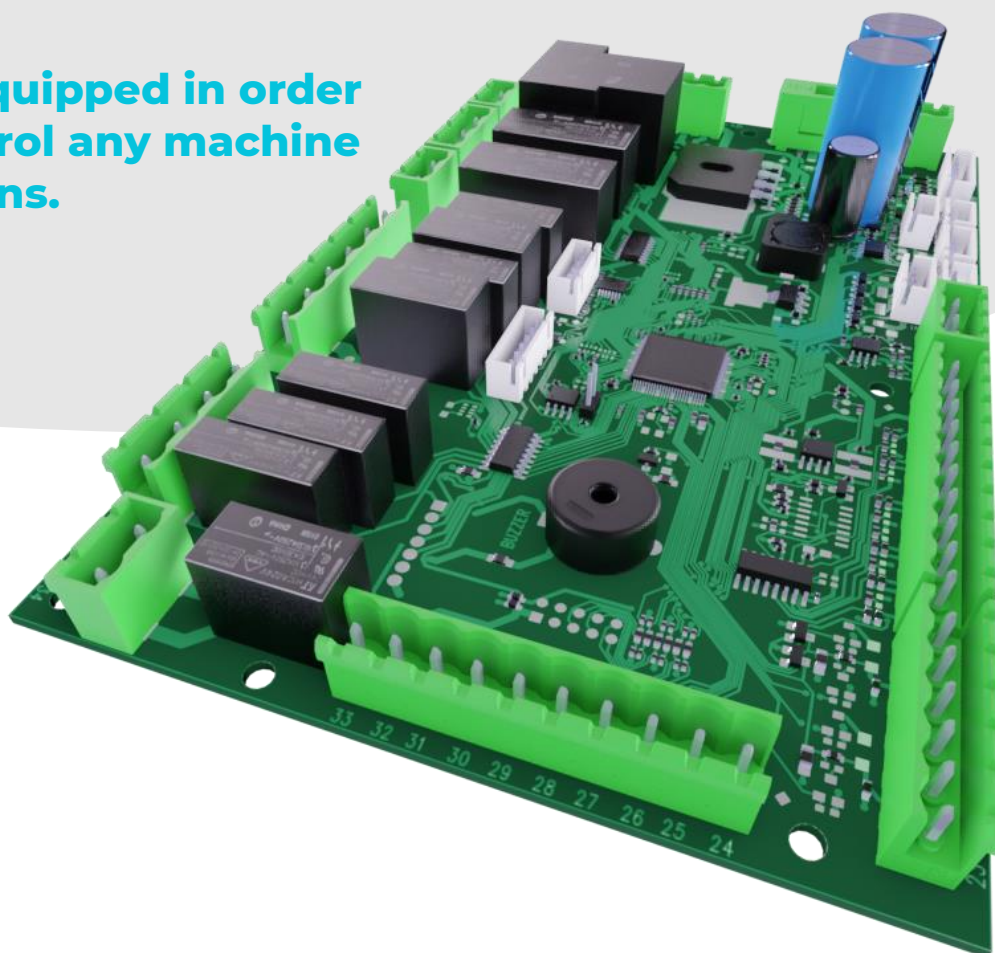
Proofing program provides four cycles: chilling, storage, proofing and conservation functions. A diagram shows the chamber temperature performance throughout the program.

Display 7"



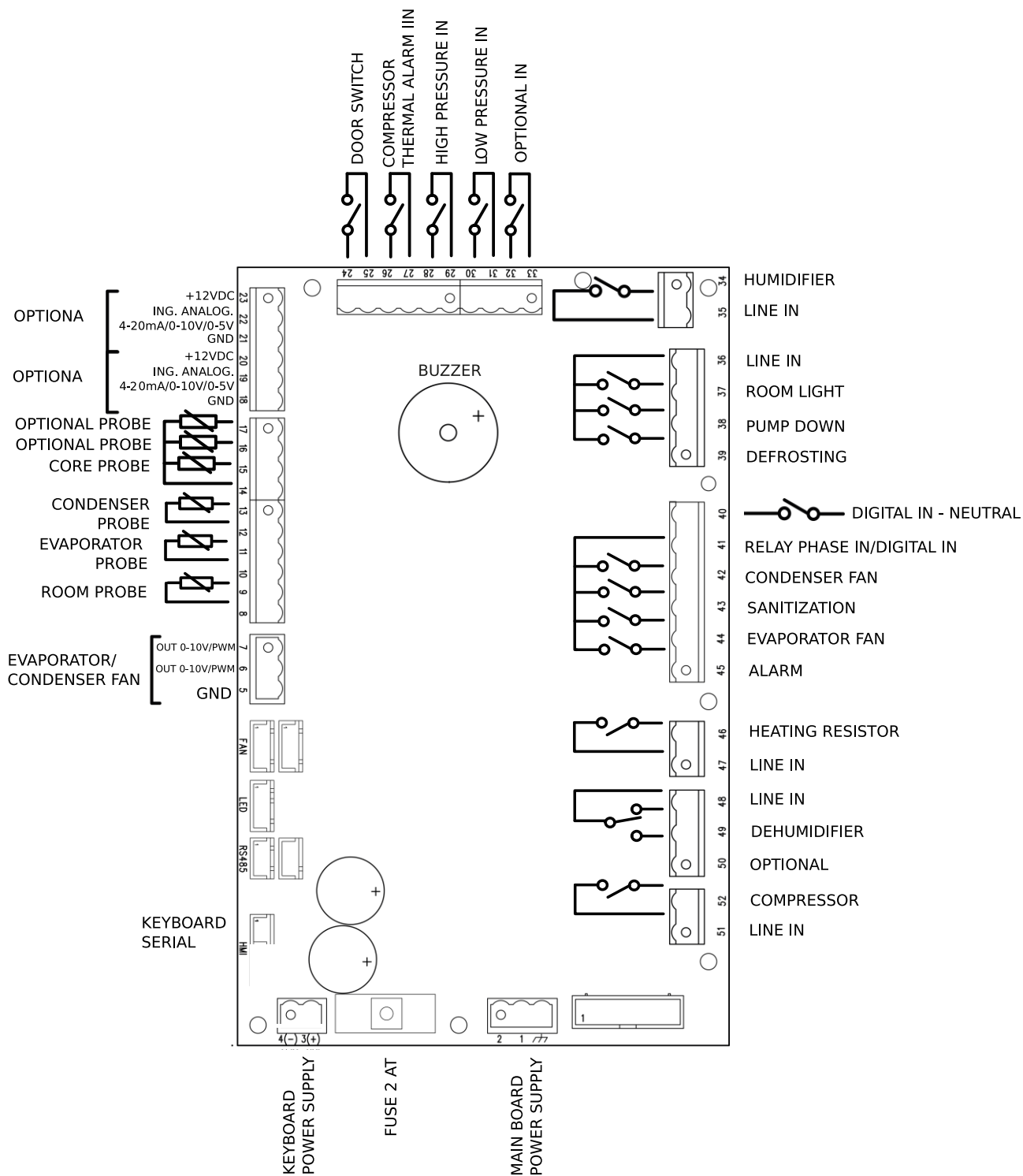
| Equipment 7" | Description |
|-----------------|--|
| Resolution | Resolution 1024x600 Touch Capacitive |
| Dimensions | 100mm x 160mm (PCB) 122mm x 190mm (Outline Panel Capacitive) |
| Power supply | 12 ÷ 18Vdc provided by main board |
| Power requested | 10W rated output |
| Inputs/Outputs | 1 Removable connector 3 ways p. 5mm 2 Connectors 3 ways for analogue inputs (optional) 1 Connector JST 4 ways for encoder/digital inputs (optional) 1 Connector 14 ways for keys board (optional) |
| Communication | 1 serial RS485 1 serial CAN (optional) 1 serial ECS Bus for connection with main board 1 USB A type Software updating 1 Connector for Micro SD card for mass-storage |
| Connectivity | Integrated WiFi module |
| Container | Not provided |

**Fully equipped in order
to control any machine
functions.**



BS11 control board

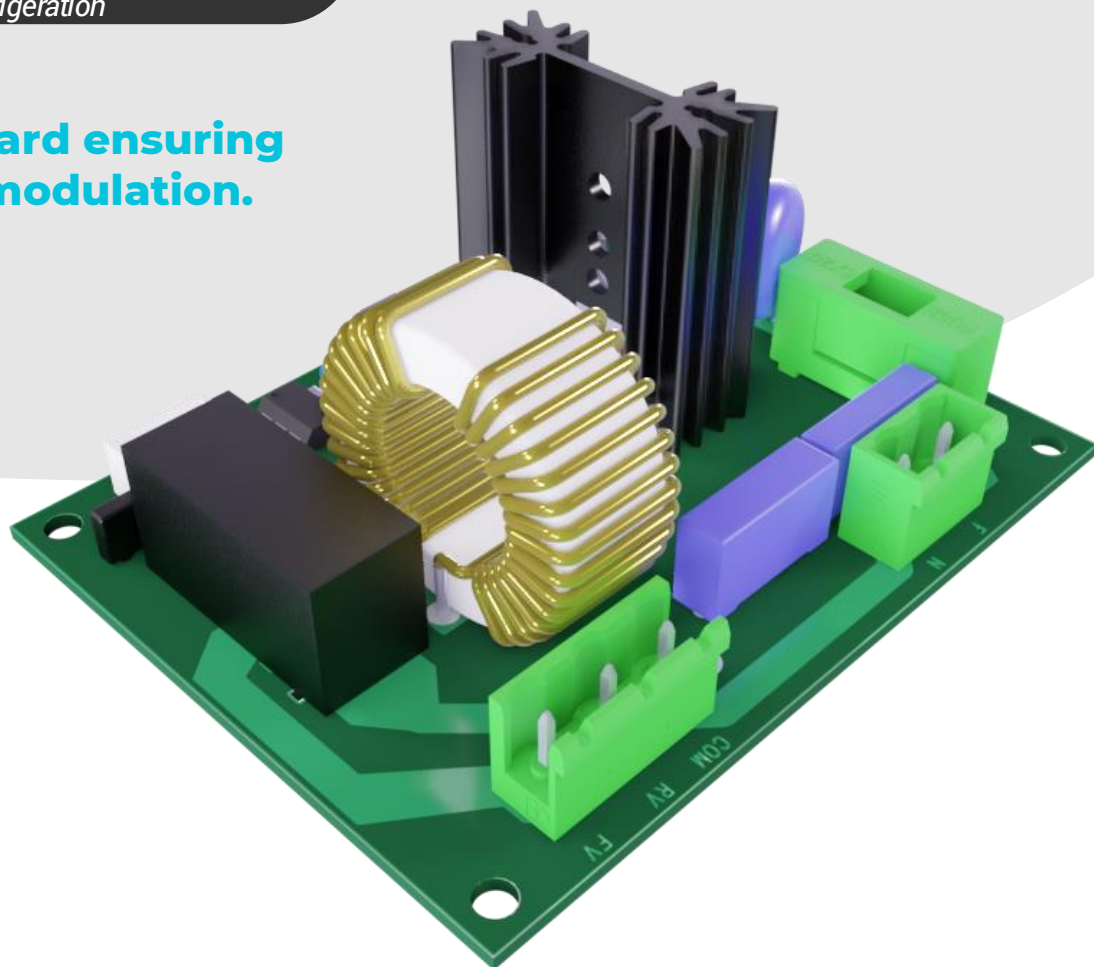
BS11 Connections



BS11 Equipment

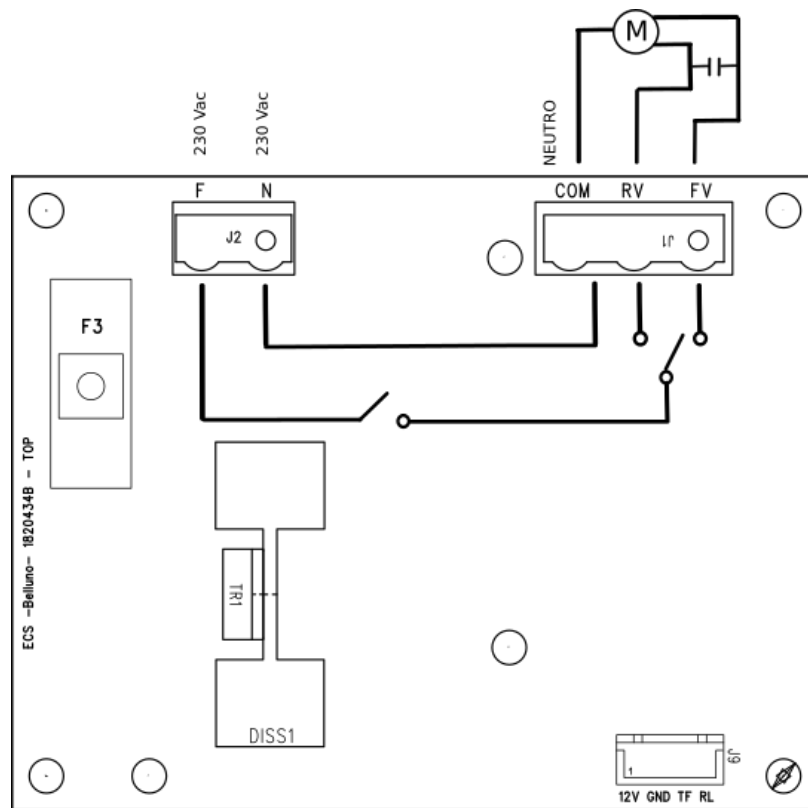
| Equipment | Description | Characteristics |
|---|--------------------------|-----------------------|
| Max. overall dimensions | 190 x 120 mm | |
| Weight | | |
| Power supply | External transformer | 12 VAC |
| 11 Digital outputs (*) | Humidifier relay | 5 A (AC1 @250VAC) |
| | Room light relay | 5 A (AC1 @250VAC) |
| | Pump down relay | 5 A (AC1 @250VAC) |
| | Defrosting relay | 5 A (AC1 @250VAC) |
| | Alarm relay | 5 A (AC1 @250VAC) |
| | Sanitization relay | 5 A (AC1 @250VAC) |
| | Condenser fan relay | 10 A (AC1 @250VAC) |
| | Evaporator fan relay | 10 A (AC1 @250VAC) |
| | Auxiliary relay | 16 A (AC1 @250VAC) |
| | Door frame heating relay | 16 A (AC1 @250VAC) |
| | Compressor relay | 30 A (AC1 @250VAC) |
| (*) max power range of the terminals is 12 A for each one | | |
| 6 Digital inputs | Door switch | Clean contact |
| | Compressor thermal alarm | Clean contact |
| | High pressure | Clean contact |
| | Low pressure | Clean contact |
| | Free | Clean contact |
| | Free | 115-230 VAC |
| 8 Analogue inputs | Room probe | PT1000 o NTC |
| | Evaporator probe | PT1000 o NTC |
| | Condenser probe | PT1000 o NTC |
| | Core probe multipoint | PT1000 o NTC |
| | Optional core probe | PT1000 o NTC |
| | Optional core probe | PT1000 o NTC |
| | Humidity probe | 4-20mA / 0-10V / 0-5V |
| | Free | 4-20mA / 0-10V / 0-5V |

Compact board ensuring fans speed modulation.



BSFAN 700 Phase cut

BSFAN700 Connections



COLLEGAMENTO VERSO BASE

BSFAN700 Equipment

| Equipment | Description |
|--------------------------|--|
| Max. overall dimensions | 94 x 74 mm |
| Analogue inputs | TRIAC output phase cut motor control |
| Control | Triac starting pulse Reverse gear control |
| Relay changover contacts | Reverse gear control |
| Container | Not provided |

Product codes

| Display touch 7" | |
|------------------|----------------|
| Assembly | Code |
| Flange | TBS07RVF-0.0.0 |
| Adhesive | TBS07RVA-0.0.0 |

| BS11 | |
|--------|--------------|
| Probes | Code |
| PT1000 | BBS11P-0.0.0 |
| NTC | BBS11N-0.0.0 |

| Accessories | Code |
|---------------|--------------|
| BSFAN 700 | FAN700-0.0.0 |
| Terminals kit | BS11K |



ecsproject.com

ECS srl
Via dell'Artigianato, 24
32100 Belluno (BL) ITALY
info@ecsproject.com
+39 0437 33101