

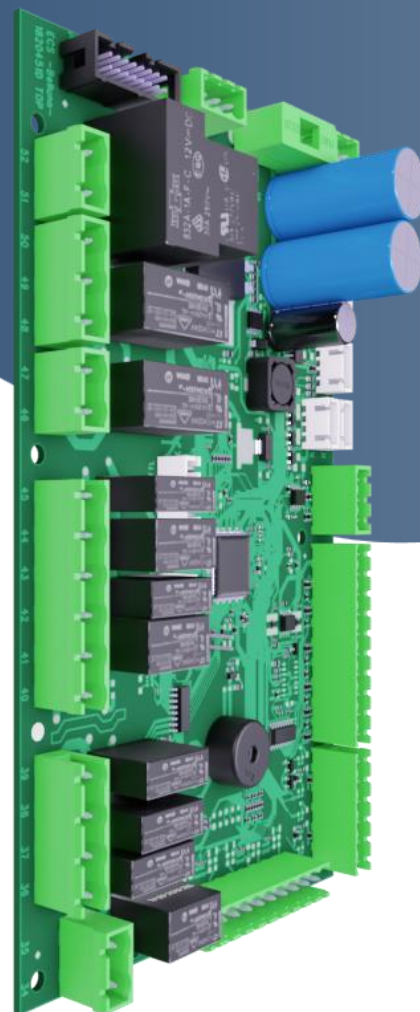


**Blue Star
Top Level**



Product presentation

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

Free

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

Free

connecty.cloud

Company

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

Fee



Touch screen display

User interface



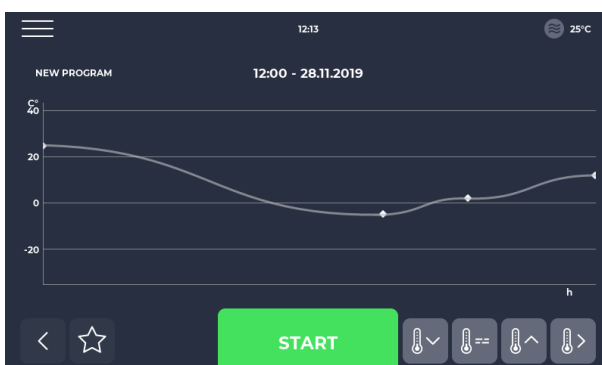
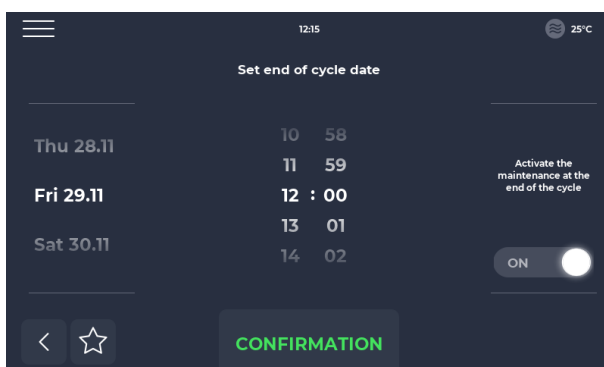
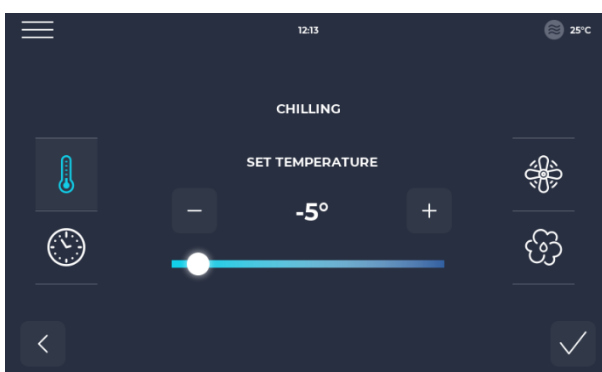
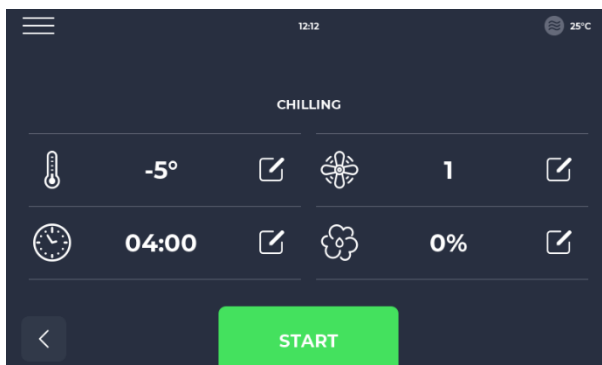
Homepage

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, storage and proofing programs.

To make the frequent use even more efficient there is room also for the most used recipes in already organized 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.

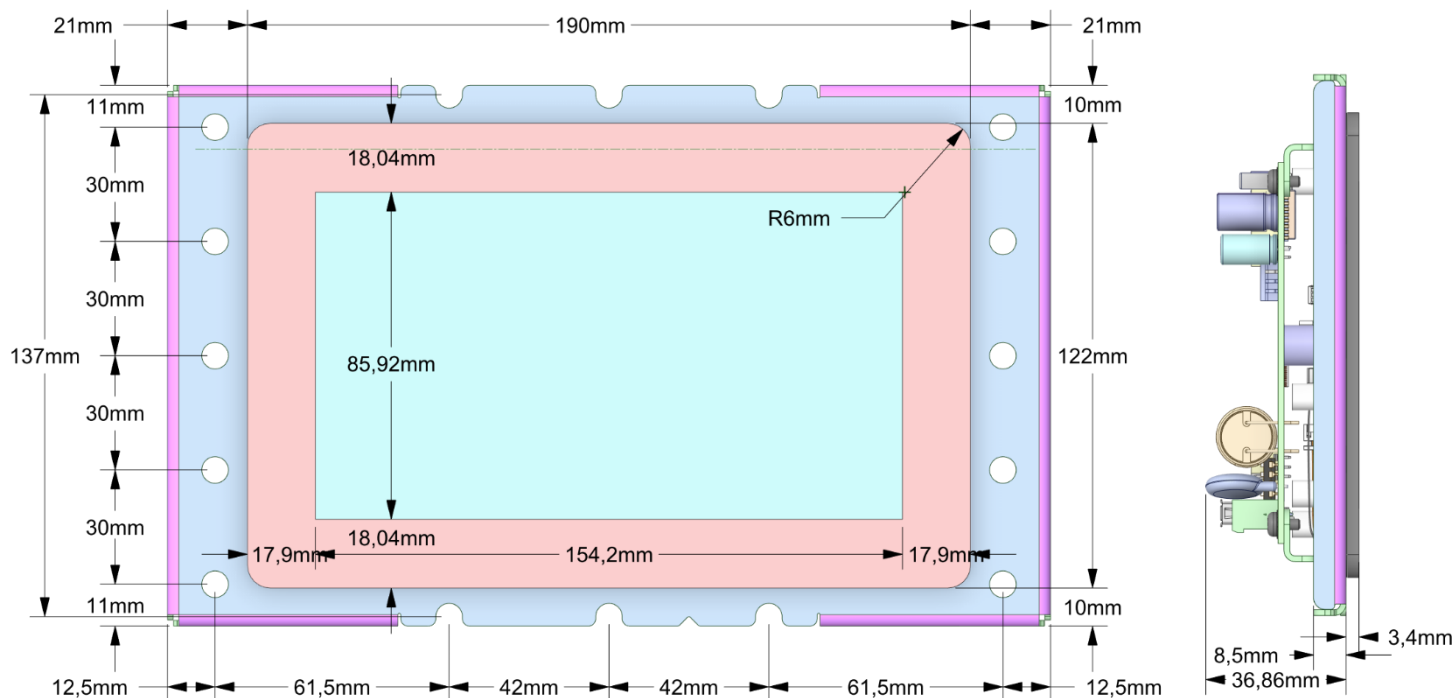
Scheduling

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

Visualisation

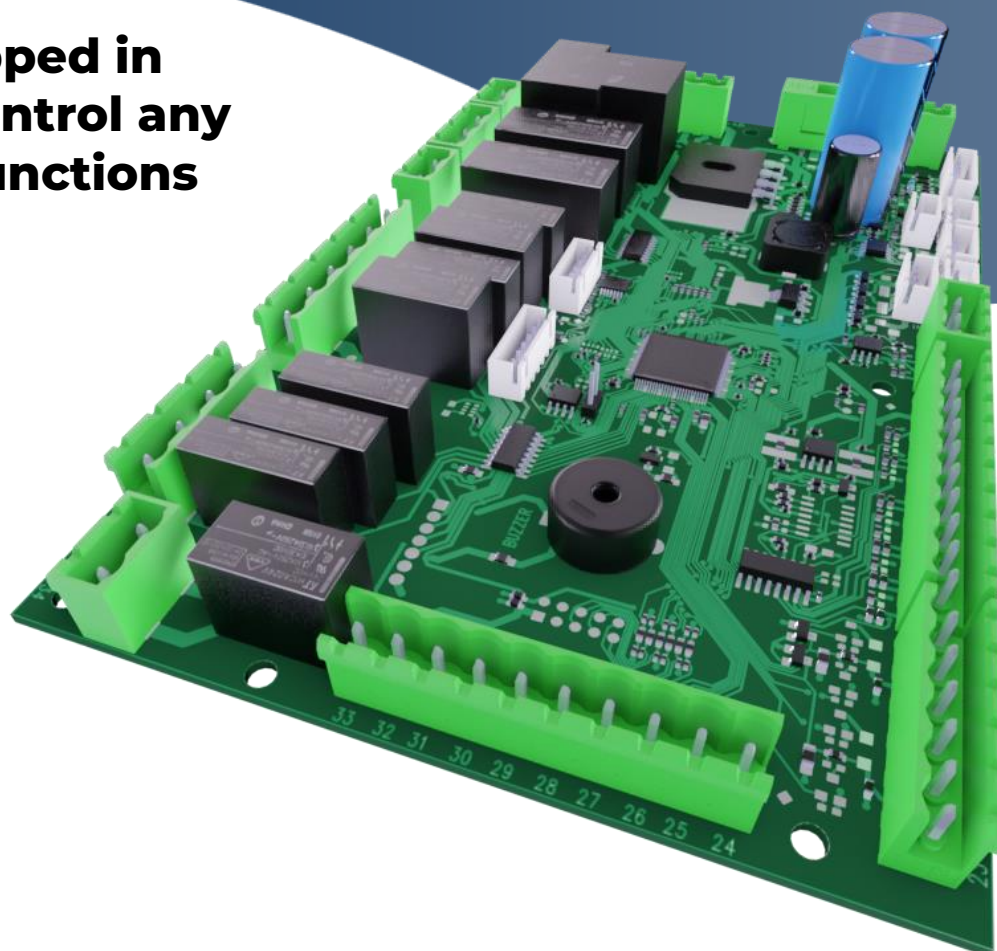
Proofing program provides four cycles: chilling, storage, proofing and conservation functions. A diagram shows the chamber temperature performance throughout the program.

Display 7"



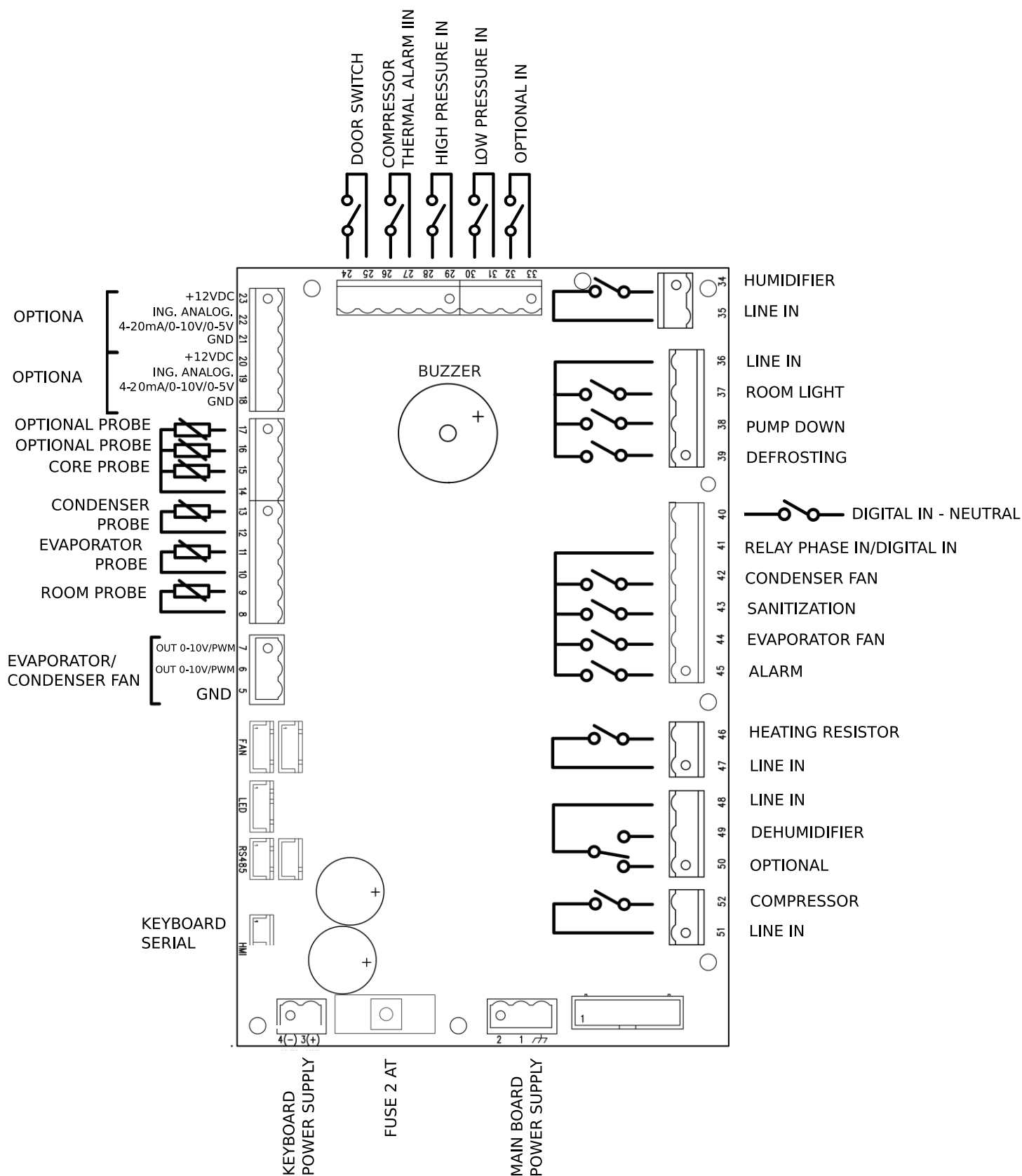
Equipment 7"	Description
Resolution	Resolution 1024x600 Touch Capacitive
Dimensions	232 x 142 x 37 mm
Weight	702 gr
Power supply	12 ÷ 18Vdc provided by main board
Power requested	10W rated output
Inputs/Outputs	1 Removable connector 3 ways p. 5mm 2 Connectors 3 ways for analogue inputs (optional) 1 Connector 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

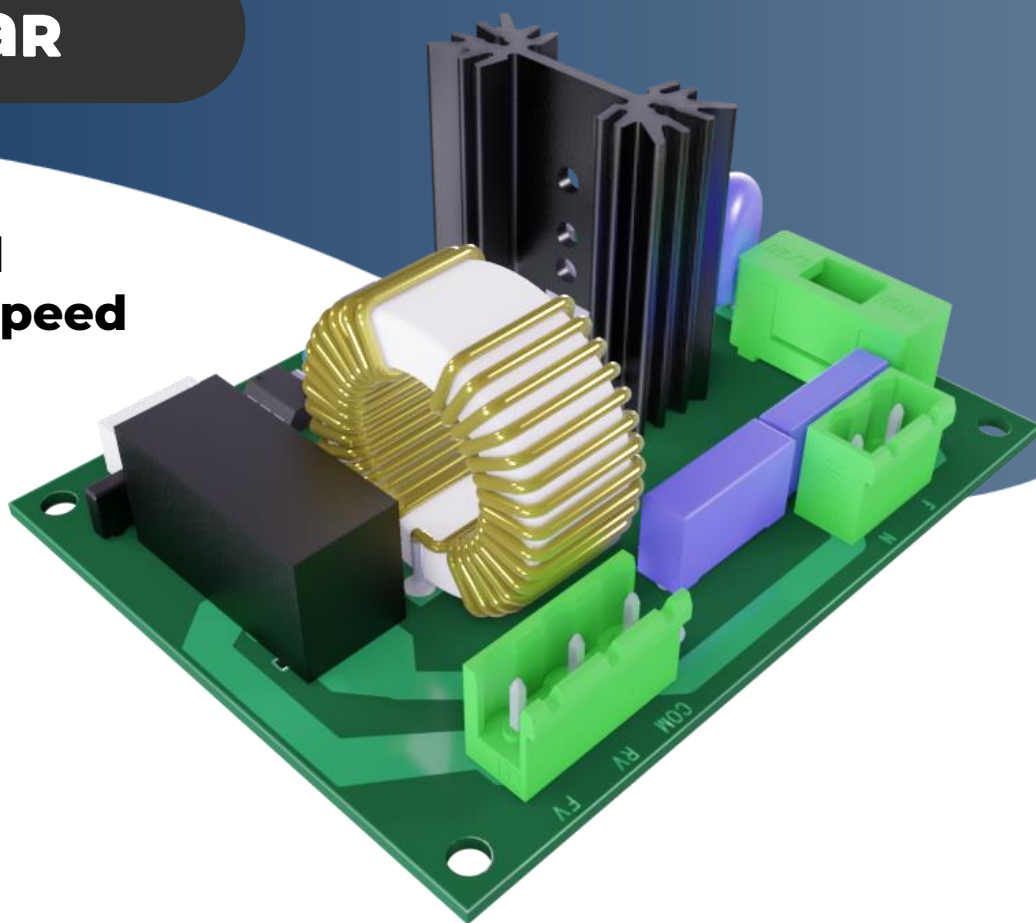
BS11 Connections



BS11 Equipment

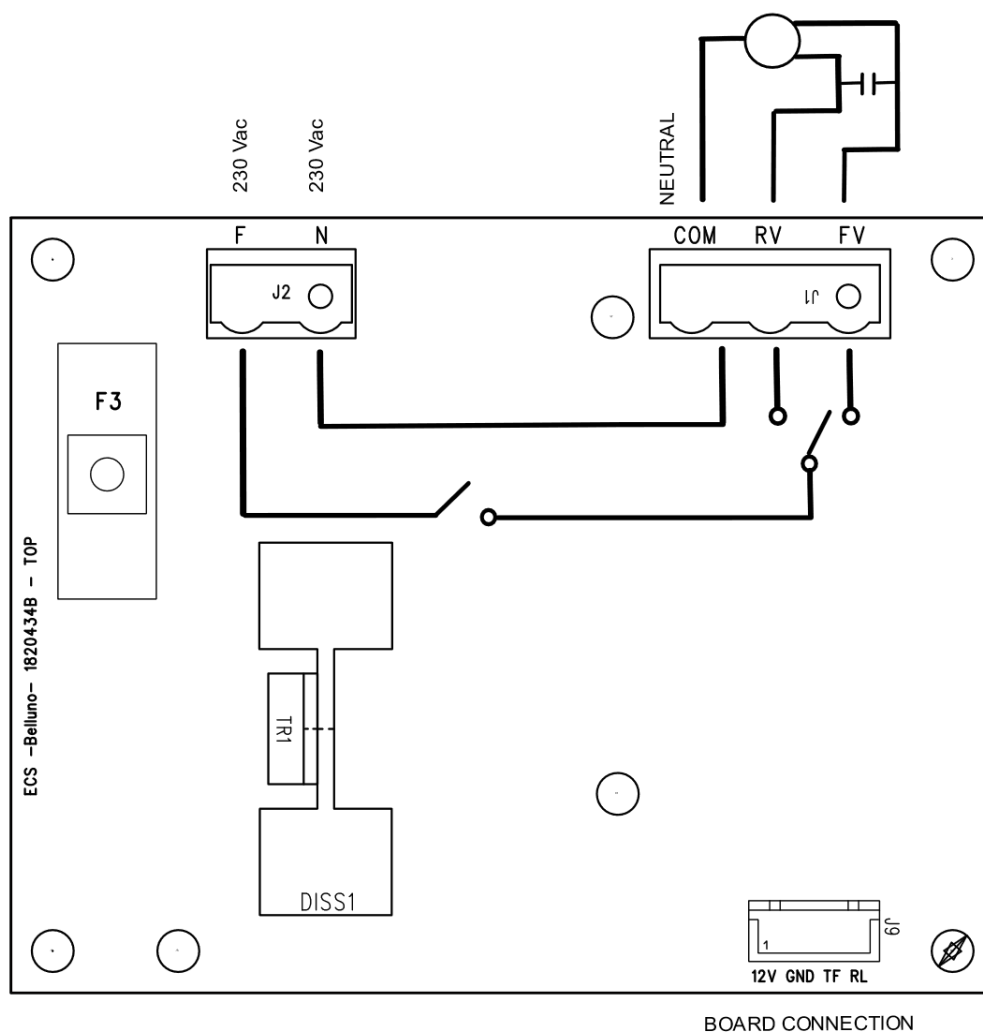
Equipment	Description	Characteristics
Max. overall dimensions	190 x 120 mm	
Weight	335 gr	
Power supply	External transformer	12 VAC
11 Digital outputs (*)	Humidifier relay	5 A (AC1 @250VAC)
	Room light relay	5 A (AC1 @250VAC)
	Pump down relay	5 A (AC1 @250VAC)
	Defrosting relay	5 A (AC1 @250VAC)
	Alarm 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)
	Dehumidifier 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 or NTC (-60°C ÷ +110°C)
	Evaporator probe	PT1000 or NTC (-60°C ÷ +110°C)
	Condenser probe	PT1000 or NTC (-60°C ÷ +110°C)
	Core probe multipoint	PT1000 or NTC (-60°C ÷ +110°C)
	Optional core probe	PT1000 or NTC (-60°C ÷ +110°C)
	Optional core probe	PT1000 or NTC (-60°C ÷ +110°C)
	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



BSFAN700 Equipment

Equipment	Description
Max. overall dimensions	94 x 74 mm
Weight	131 gr
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



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