

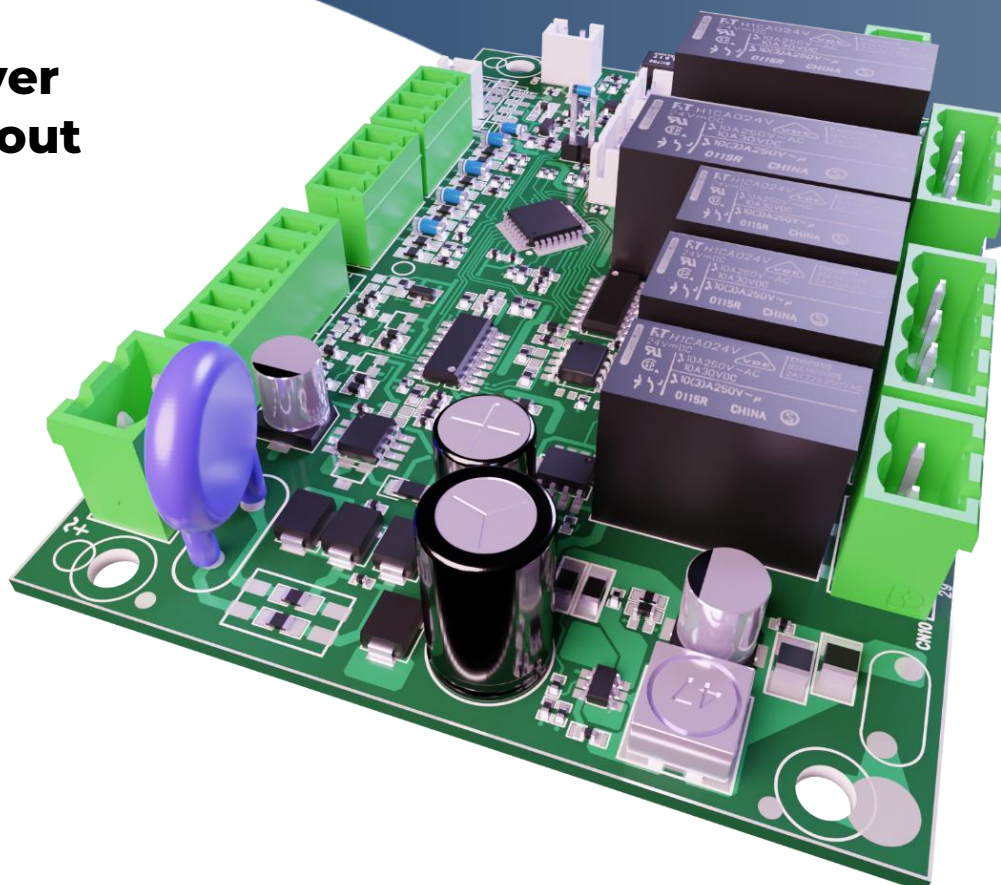


Red Star Fryer Entry



Product Presentation

Red Star 4.3 Cutting-edge fryer electronics without compromise



■ Red Star

The product line dedicated to horizontal cooking and professional ovens. Over 30 years of experience in the sector have allowed ECS to develop advanced electronic controls for all fryer functions.

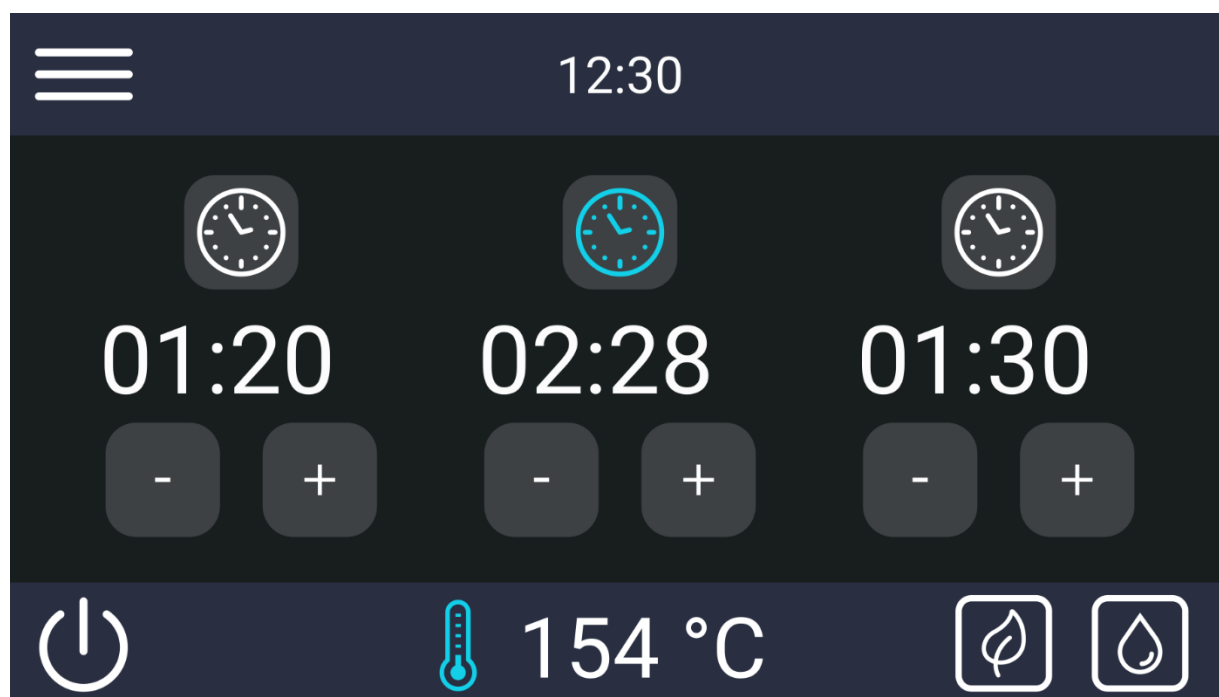
■ Entry level

The ideal product for going beyond electromechanical control and enjoying a custom-designed touch interface. The easy-to-use 4.3" touch display, combined with the 5-relay base board, ensures intuitive operation and efficiency.

■ Technology

The 5-relay base ensures control of all the fryer's main functions, and connectivity with our Connecty.cloud platform allows you to exploit all the potential offered by the IoT.

Interface



Quick start

In multi-recipe mode, three saved presets are easily accessible from the main screen. The setpoint and timer are saved within the preferred program, which can be recalled on the screen by tapping the 1, 2, and 3 icons. In multi-timer mode, three different timers can be saved and activated independently.

Quick edit

Temperature and time can be quickly adjusted with the + and – buttons, and the eco and melt functions can be activated with a touch. Settings are automatically saved, allowing you to quickly switch between settings without further confirmation.

Quick design

Using the "import skin" option, you can easily modify the UI for a customized product. The skin file changes the text and interface colors. The icons folder allows you to upload icons and the startup logo. The languages file allows you to change texts, translations, and add languages from those available.

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

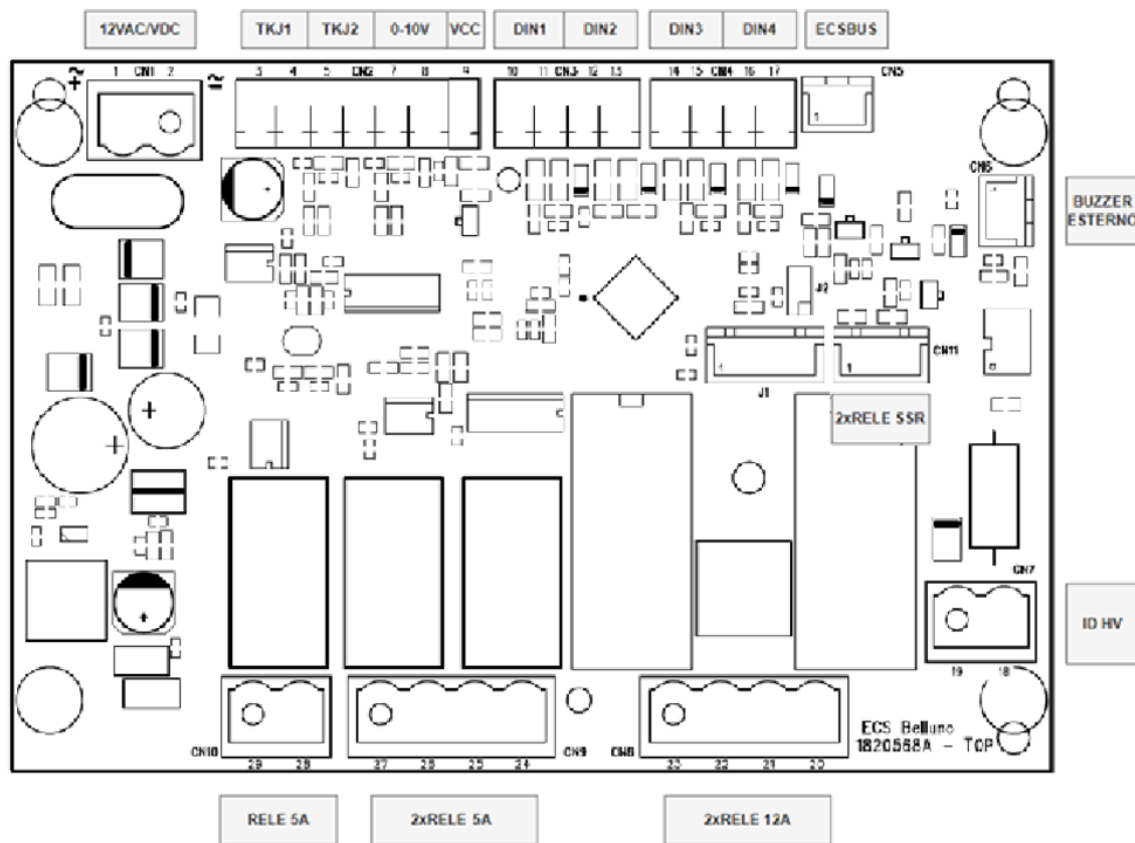
connecty.cloud

Company

- ✓ Every free plan function
- ✓ Access to all machines
- ✓ Customizable platform and branding

Fee

RS05 power board



Analog input	Characteristics
TEMPERATURE PROBE 1	Probe TC J (-20°C, +450°C balanced)
TEMPERATURE PROBE 2 (Libera)	Probe TC J (-20°C, +450°C balanced)
0-10V / NTC	Input 0-10V or NTC
BOARD NTC	NTC 103AT Cold Junction TCJ and board temperature alarm

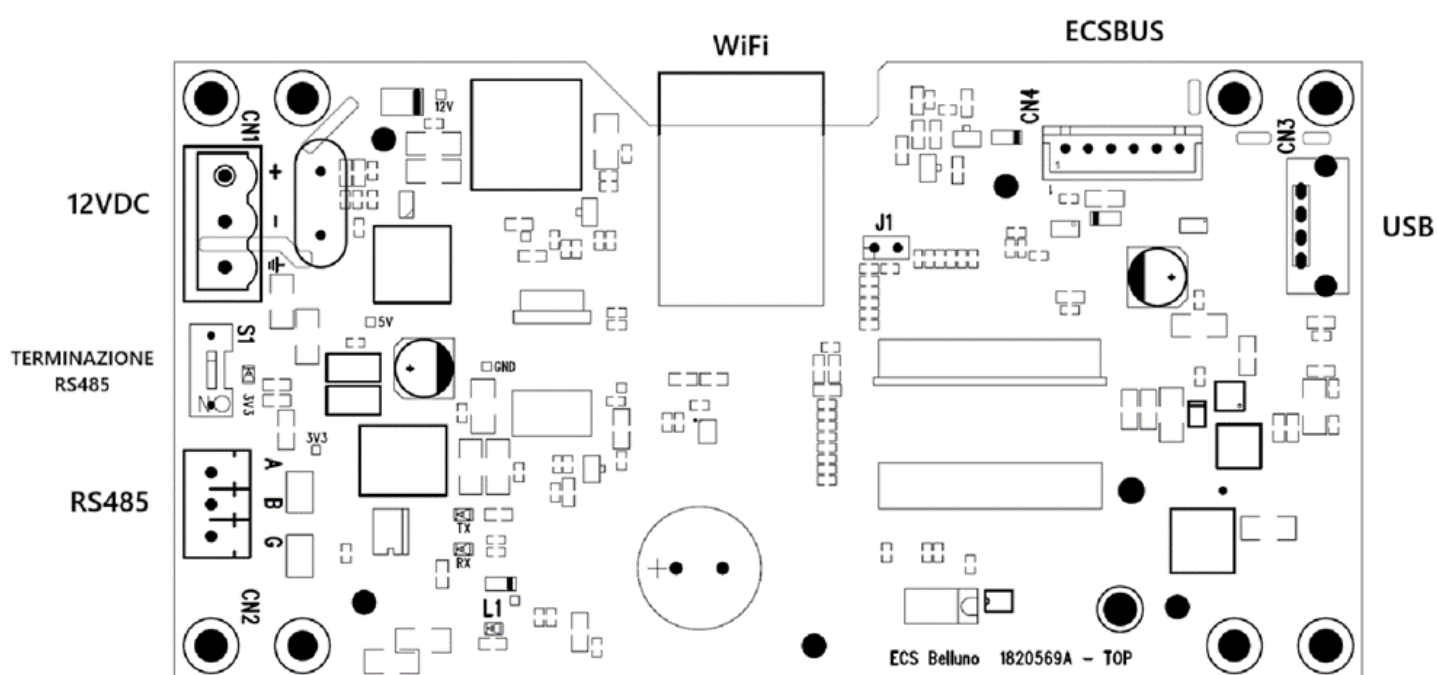
TCJ ±1% of full scale; NTC ±1°C between 0 and 70°C

Digital input	Characteristics
INPUT 1	digital input for clear contacts
INPUT 2	digital input for clear contacts
INPUT 3	digital input for clear contacts
INPUT 4	digital input for clear contacts
INPUT HV	230Vac input

Digital output	Characteristics
REL1 – HEATING	Relay 16A – N.O.
REL2 – EXTERNAL BUZZER	Relay 16A – N.O.
REL3 – BASKET 1	Relay 5A – N.O.
REL4 – BASKET 2	Relay 5A – N.O.
REL5 – BASKET 3	Relay 5A – N.O.

Note: if REL1 is used directly to control the resistor (without contactor) pay attention to the number of guaranteed switching operations of the RELAY.

4.3" Display



Conn.	Description	Serial type	Connector type
CN2	MODBUS	RS485	3-way F-type removable connector, pitch 3.5
CN3	USB	USB	USB A connector
CN4	ECSBUS 6ways	ECSBus	6ways JST connector
\	WiFi Module	WiFi	On board

RS05 Features

Feature	Description	Characteristics
Dimensions	L 155x H 114x P 39.7 mm - Display L 110x H 76x P 20.6 mm - Base	
Weight	215 gr	
Power supply	External transformer ¹	12 VAC – 10VA
User interface	Display	TFT 4.3" 480x272 IPS
Orientation	Horizontal	
5 relay output	Heating relay	16 A (AC1 @250VAC) *
	Buzzer relay	16 A (AC1 @250VAC) *
	Basket relay 1	5 A (AC1 @250VAC)
	Basket relay 2	5 A (AC1 @250VAC)
	Basket relay 3	5 A (AC1 @250VAC)
(*)The maximum current carrying capacity of the power terminals is 12 A for each way.		
5 digital input	Free	Clear contact (not used)
	Free	Clear contact (not used)
	Free	Clear contact (not used)
	Free	Clear contact (not used)
	Free	115-230VAC (not used)
4 analog input	Temperature probe	Thermocouples J
	Free probe	Thermocouples J (not used)
	Free probe	NTC (not used)
	On-board probe	NTC cold junction
SSR output	REL1 parallel	+Vradd (12VDC, max 17VDC)
	Free	
Comunication protocol	Wi-Fi	
	USB	Host for mass storage
Buzzer	4kHz / 85dB @ 10cm	On-board or external
Clock	With backup	



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