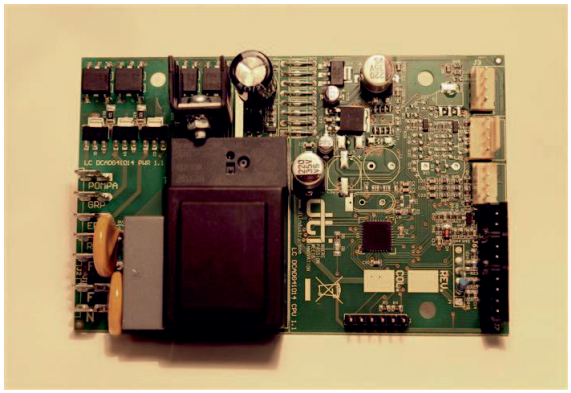
DCMD serie

dispenser single serve controller

DCMDs are some product built in order to manage a single serve machine and its dispenser. It's able to make several functions like steam erogation, hot water erogation and stand-by managment.



FUNCTIONS

Temperature regulation through PID algorithm:
The regulation of the temperature, in particular during the hot function, may cause a high hysteresis effect. Moreover in the classic ON-OFF systems, the maintenance of the fixed temperature is not always guaranteed.
The temperature regulation through PID algorithm is instead characterized by 3 variables. This allows a more precise regulation and a quicker reaction of the machine to external solicitations.

Dispenser management with Flow sensor ingress:
This function allows to analyse entering impulses and therefore communicates with all Flow sensors on the market.
It is moreover possible to accurately set the volume of the desired quantity to dispense. In fact once the impulses are memorized by the Flow sensor system, the following doses maintain the same volume.

Time dispenser management:
This function allows to memorize and dispense a time-dose with a accuracy of tenth of a second. Programmation is managed through "self-learning", therefore the setted dosage is maintained also for the following doses.

Hot water management:
The hot water function allows to have a dedicated set-point temperature and a dedicated output for hot water erogation. By the way this dose is easily settable.

Steam management:
The steam function allows to have a dedicated output for steam.
The exit can work intermittently on the pump in order to reduce the water flow in the boiler. It is also possible to increase the temperature of the boiler in order to have a more dry steam.

Stand-by management:
Consumes of electronic appliances and coffee machine when in stand-by now find regulation in the Eup Directive.
The Stand-by function allows to set the desired time after that the consumes of the machine are reduced.

Other functions:
There are other functions like a signal led that indicates the states of the machine (temperature not corect, no water in the tank, programming mode, ect.), an input for the absence of water in the tank, 3 auxiliar leds, 3 push-buttons inputs and a level control input.

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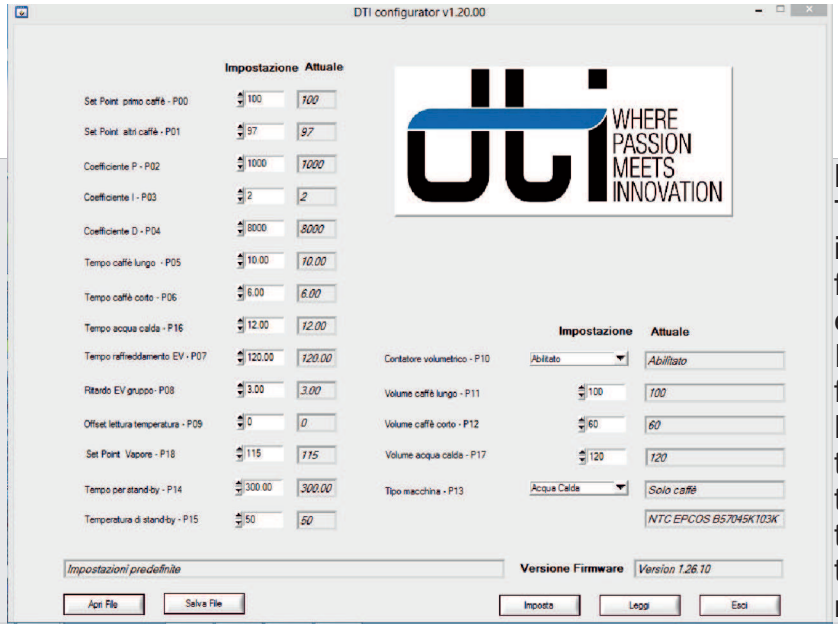

Parameter setting DTICONFIGURATOR:
Thanks to the program «DTICONFIGURATOR» is possible to set-up the parameters directly from your PC. You have to conect the electronic device with a USB port.
It's also possible set the following parameters: first coffee set-point, second coffee set-point, PID parameters, timing/volume short coffee, timing/volume long coffee, temperature/timing/volume hot water, temperature/timing steam, timing and temperature stand-by and selections for diffent machine versions.

TECHNICAL FEATURES

TECHNICAL FEATURES	DETAILs
Power Supply	230 Vac ± 10% 50/60 Hz
	115 Vac ± 10% 50/60 Hz
High voltage Input	NP
High voltage Output	Principal single output - 16A / 250 VAC Resistive
	Secondary single outputs for pumps and solenoid valves 1A /250 Vac
Low voltage input	Level probe with conductivity detection
	Low voltage inputs 0-5V
	3 push-buttons inputs
Low voltage output	3 Led outputs
	audible allarm
Bow dimensions	73,5 mm x 45,4 mm x 75 mm
Box dimensions	110 mm x 70 mm
Operating Conditions	0 ... +50°C with relative ambient humidity: 30 ... 85 % (no condensing)
Storage Conditions	- 20 ... + 80 °C, with relative ambient humidity: 30 ... 85 % (no condensing)
Box material	PVC V0
Connection type	male faston connector 6,3
	male connector 2.54mm pitch
Assembly type	Panel fixing trought the pcb holes with diamter 3mm
	Panel fixing with a maximum diameter Ø 3,8mm

CONFIGURATIONS

DCMD | G | 4 | 1 | 0 | 0 | 0

MOUNTING
G - panel mounting through PCB holes
D - DTI Box 73,5x45,4x75 mm

TYPE OF POWER SUPPLY
1= 230 Vac 50/60Hz
2= 115 Vac 50/60Hz

VERSION

OUTPUTS:
1. Pump output dispenser
2. Pump output dispenser + Resistence
3. Pump output dispenser + solenoide valve + Resistence
4. Pump output dispenser + solenoide valve + Resistence + solenoide valve for steam