

ENG

DWater

Electronics for dispensers and water treatment



Electronic solutions for water and juice dispensers

The DWater product range has been designed to meet the needs of the world of water and juice dispensers.

DTI provides standard electronics which can be fully customized in design and functions.

Every DWater unit can connect with:

- MDB interface for cash and contactless payment
- DConnect Wi-Fi and NB modules for remote and cloud connectivity



BEVERAGE DISPENSING MACHINES

WIRING

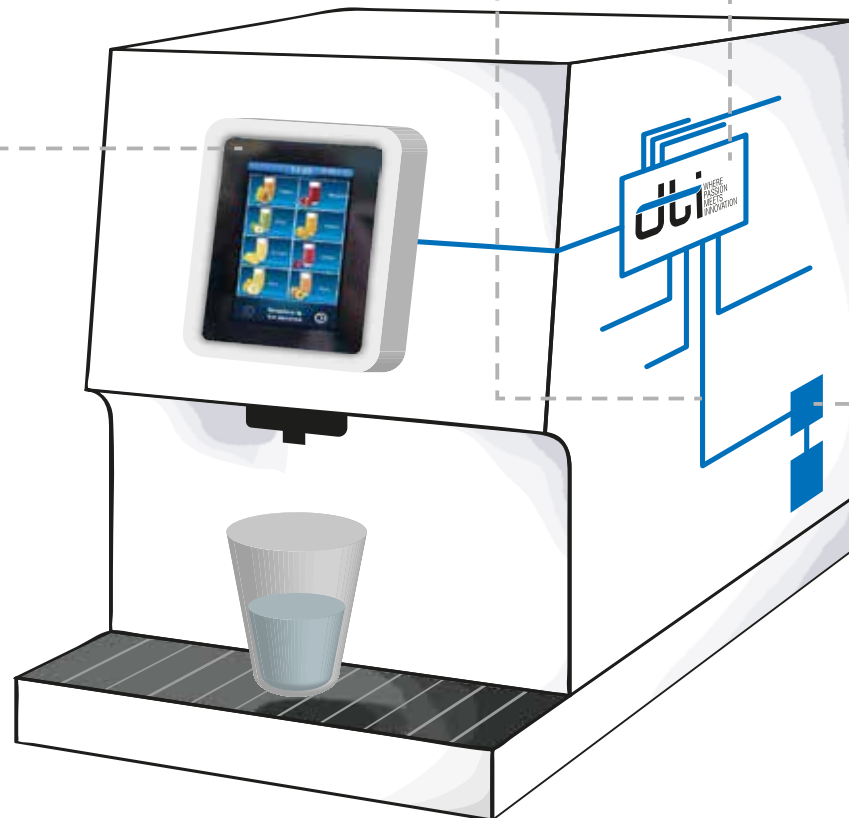
UL certificated cables, multicore cables for power supply, electrical panels.

POWER BOARD

Level regulator, refrigeration controllers, volumetric and timed dosing, water quality systems.

USER INTERFACE

Display, touch screen and capacitive keyboard.



IOT

Wi-Fi interface/ethernet/BLE for remote control and parameter setting, webserver in cloud and app.



DWater SOLUTIONS

■ DWater-XS

■ Control electronics for water coolers with 3 types of water: cold, room temperature and sparkling. Backlit capacitive keyboard management and cooling system temperature setting.

■ DWater-M

■ Electronic kit for three-water dispenser with volumetric dosing and possibility of simultaneous dispensing. Five and seven-inch touch display control.

■ DWater-XL

■ Advanced electronic for three-water dispensers. Water detector, double temperature probe, CO₂ cylinder level monitoring, and optional IoT features.

■ DUvc

■ LED driver board with pulsed controller (PWM) for surface disinfection with UV radiation.

■ Level Regulators

■ Level controllers for boiler and tank, with pump and solenoid valve activation. Resistance saving function with safety timeout.

■ Dwater-0

■ Control unit for osmosis filtering systems, which regulates the correct water flow inside a water purifier.



DWater-XS FEATURES



■ Power supply	230Vac ±10% 50/60Hz
	110Vac ±10% 50/60Hz
■ Outputs	1 relay 16A 250Vac resistive
	4 relays 5A 250Vac resistive
	SSR for compressor
■ Inputs	Carbonator level
	2 volumetric counters
	BLE / WI-FI module interfacing
	Capacitive button panel management
	NTC for cold
	Potentiometer
■ Type of communication	RS485 Modbus



Proposed interface 3,5" capacitive display

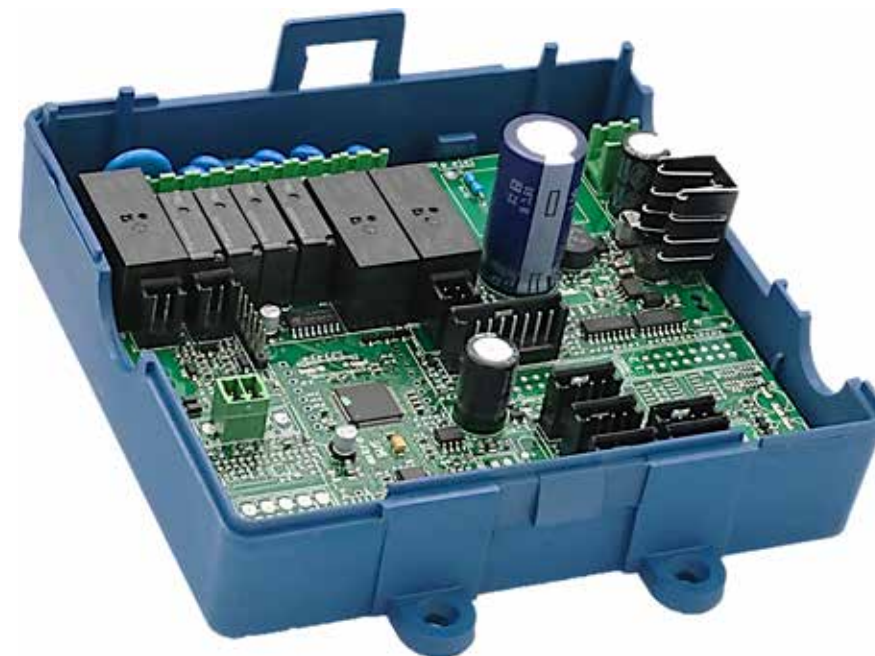




DWater-M FEATURES



■ Power supply	230Vac ± 10% 50/60 Hz
	115Vac ± 10% 50/60 Hz
■ High voltage outputs	3 relays 16A 250Vac resistive
	5 relays 5A 250Vac resistive
■ Low voltage outputs	2 LED
	Audible alarm
■ Low voltage inputs	3 level probes (conductive detection)
	1 analog for potentiometer
	5 voltage 0÷5V
	2 digital for flow meter
■ Dispensing	timed
	volumetric
■ Communication	TTL RS232
	RS485 Modbus



Proposed interface 5"– 7" capacitive display





DWater-XL FEATURES



■ Power supply	230Vac ±10% 50/60Hz
	115Vac ±10% 50/60Hz
	12-24Vac
■ High voltage outputs	3 relays 16A 250Vac resistive
	4 relays 5A 250Vac resistive
■ Low voltage inputs	2 level probes with conductivity detection
	5 clean contacts
	3 pulses for volumetric sensor control
	2 NTC temperature probes (10k 3435)
■ Type of communication	RS485 Modbus



Proposed interface 10" capacitive display





DUvc FEATURES

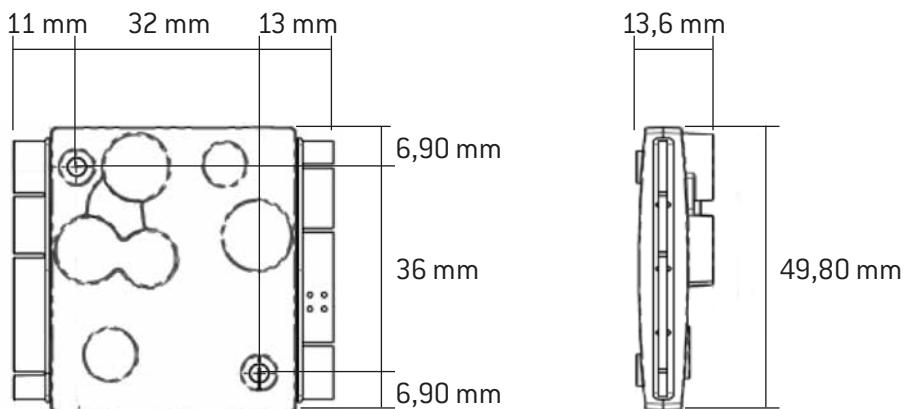
- Constant current driver
- LED output with the following features

$80\text{mA} < I_F < 500\text{mA}$
$1\text{V} < V_F < 7\text{V}$
- PWM pulsed driving of the UVC LED
- PWM: duty cycle 50%, frequency $f_{\text{pwm}} = 10\text{Hz}$
- LED V_{in} Range: $12 \div 24\text{Vdc}$ or $12 \div 24\text{Vac}$
- I_F from 80mA up to 500mA and V_F from 1V up to 7V
- LED fault indication
- Input sensing voltage detection 24Vac/dc or 230Vac
- Digital inputs for configuring LED activation times

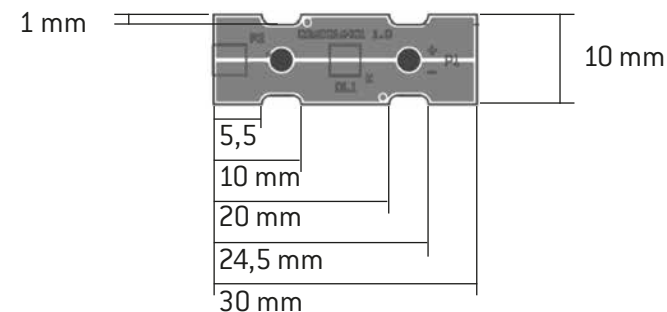


Dimensions

Driver



LED



Level Regulators FEATURES

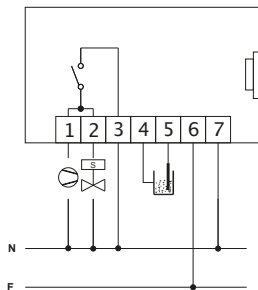
Technical features	Description	DCLDD1	DCLDD2	DCLDD3
Power supply	230 Vac ± 10% 50/60 Hz	■	■	■
	115 Vac ± 10% 50/60 Hz	■	■	■
High voltage inputs	NP			
High voltage outputs	Main output 16A / 250 VAC Resistive	■	■	■
	Secondary output 5 A/250 Vac Resistive		■	■
	Secondary output 5 A /250 VAC Resistive			■
Low voltage inputs	Conductivity level probe	■	■	■
	Minimum/security level probe with conductivity detection			■
Low voltage outputs	Audible alarm		■	■
Box size	73,5 mm x 45,4 mm x 75 mm	■	■	■
Working temperature	0 ... +50°C with Relative humidity: 30 ... 85 % (non-condensing)	■	■	■
Storage temperature	- 20 ... + 80 °C, Relative humidity: 30 ... 85 % (non-condensing)	■	■	■
Box material	PVC V0	■	■	■
Connections type	Male Faston 6,3	■	■	■
	5 mm pitch male connector	■	■	■
	2.54 mm pitch male connector	■	■	■
Fixing type	Panel fixing by screw with a maximum diameter of Ø 3.8mm	■	■	■



Available configurations

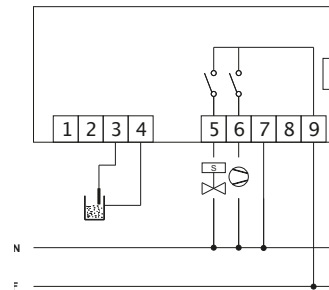
DCLDD1

- 1- Pump
- 2- Solenoid Valve
- 3- Com
- 4- GND
- 5- Level
- 6- F
- 7- N



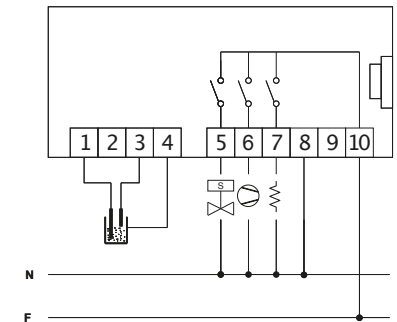
DCLDD2

- 1- NC
- 2- NC
- 3- Max Level
- 4- GND
- 5- Solenoid Valve
- 6- Pump
- 7- N
- 8- NC
- 9- F



DCLDD3

- 1- Min Level
- 2- NC
- 3- Max Level
- 4- GND
- 5- Solenoid Valve 1
- 6- Pump
- 7- Resistance
- 8- N
- 9- NC
- 10- F





DWater-O FEATURES (Osmosis)

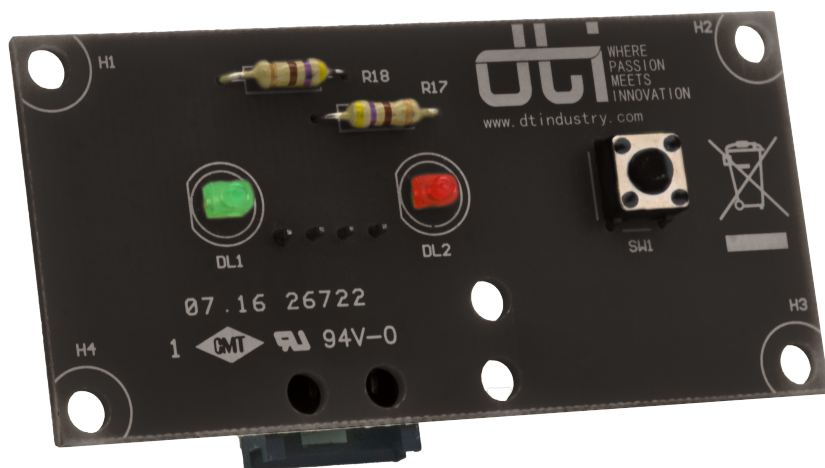


■ Power supply	230Vac ± 10% 50/60 Hz
	115Vac ± 10% 50/60 Hz
■ Inputs	Anti-flooding probe
	PS1: pressure switch
	PS2: pressure switch
	Parameter selection jumper
■ Outputs	Motor 250Vac 16A resistive
	Solenoid valve 250Vac 5A resistive
	Buzzer
	LED

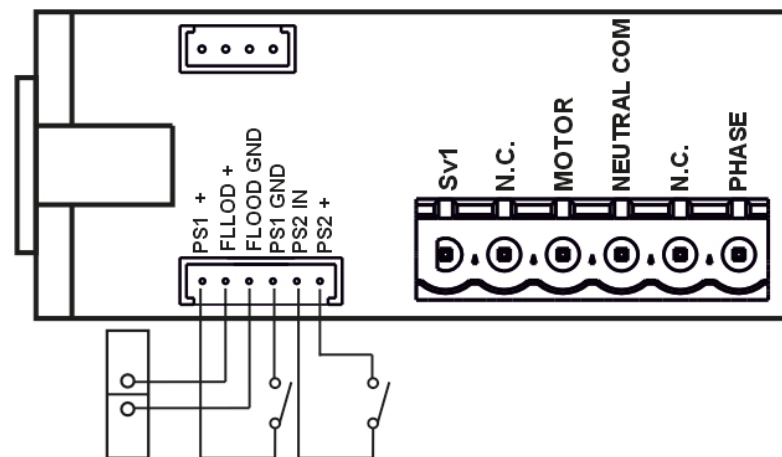


Keyboard

Connections







KEYBOARD

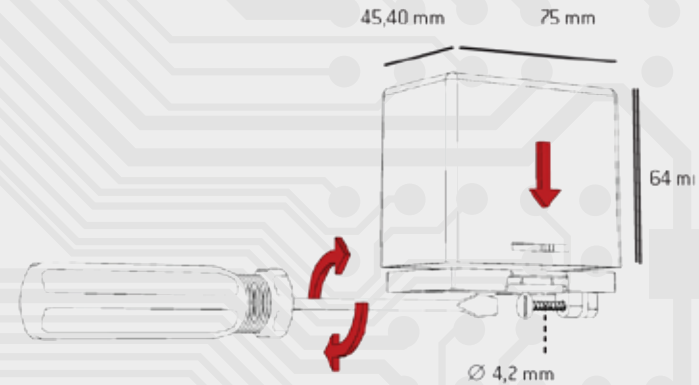




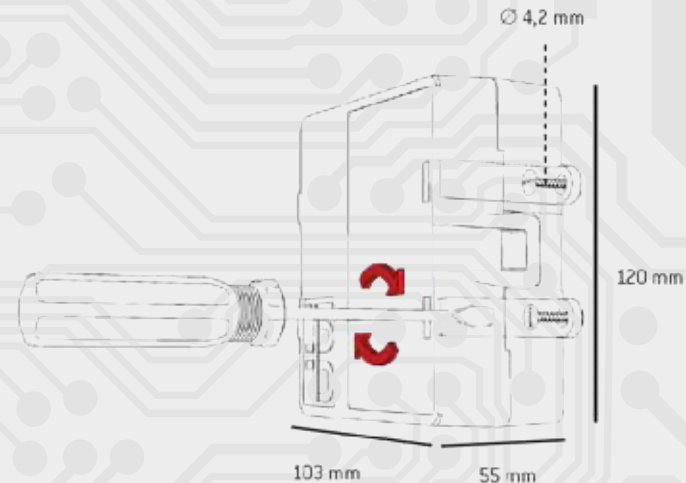
FUNCTIONS DESCRIPTION

-  Loading cycle with one level probe
-  Temperature regulation with on/off activation
-  Web platform
-  Volumetric dispensing management
-  BLE interfacing
-  Timed dispensing
-  Advanced scheduling and calendar
-  Anti-flooding probe
-  Buzzer
-  Pressure switch

EXTERNAL BOX DIMENSIONS



DTI COMPACT



DTI XL



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