DWater

Electronics for dispensers and water treatment

dci WHERE
PASSION
MEETS
INNOVATION

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

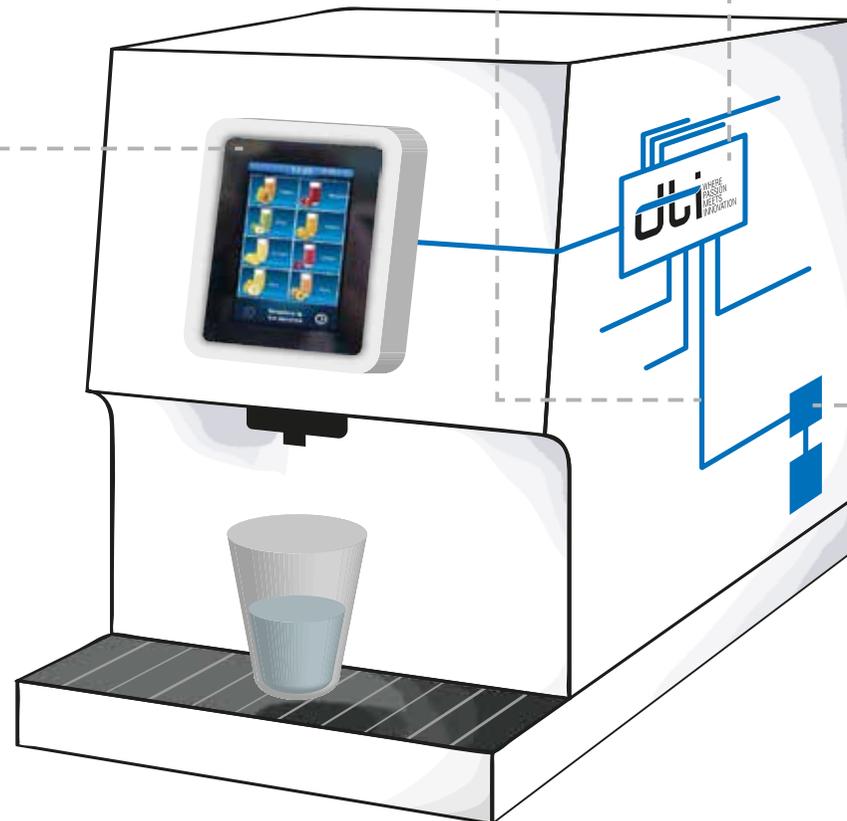# BEVERAGE DISPENSING MACHINES

WIRING
UL certified 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, CO_2 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-O

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

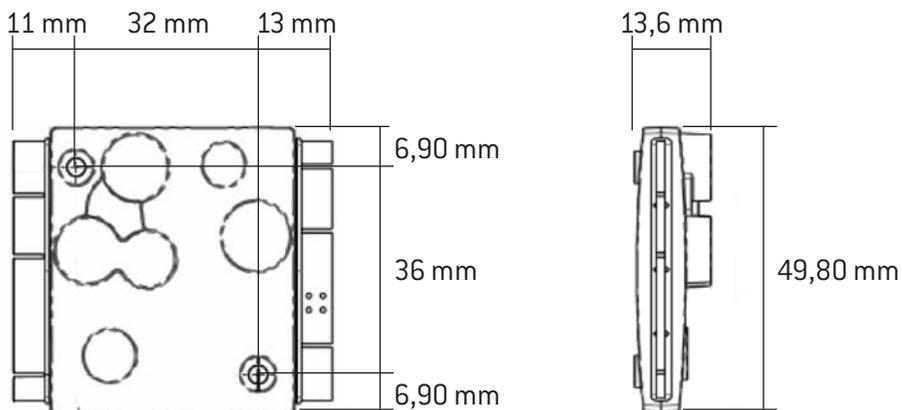| Power supply	230Vac ±10% 50/60Hz
	115Vac ±10% 50/60Hz
	12-24Vac
High voltage outputs	3 relays 16A 250Vac resistive
	4 relays 5A 250Vac resistive
Low voltage inputs	2 level probes with conductivity detection
	5 clean contacts
	3 pulses for volumetric sensor control
	2 NTC temperature probes (10k 3435)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

Proposed interface 10" capacitive display

DUvc FEATURES

- Constant current driver

LED output with the following features	80mA < IF < 500mA
	1V < VF < 7V

- PWM pulsed driving of the UVC LED
- PWM: duty cycle 50%, frequency fpwm = 10Hz
- LED Vin Range: 12÷24Vdc or 12÷24Vac
- IF from 80mA up to 500mA and VF from 1V up to 7V
- LED fault indication
- Input sensing voltage detection 24Vac/dc or 230Vac
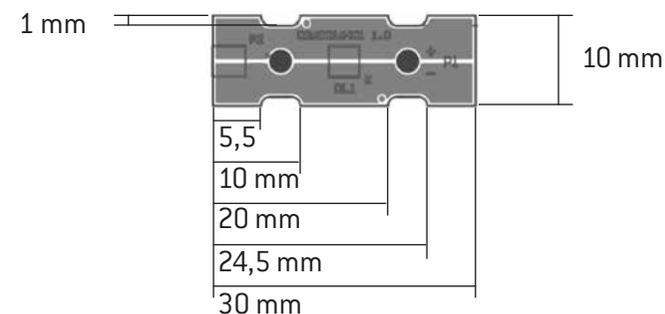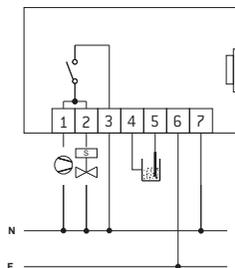- Digital inputs for configuring LED activation times

Dimensions

Driver

11 mm   32 mm   13 mm

6,90 mm

36 mm

6,90 mm

13,6 mm

49,80 mm

LED

1 mm

10 mm

5,5

10 mm

20 mm

24,5 mm

30 mm

Level Regulators FEATURES

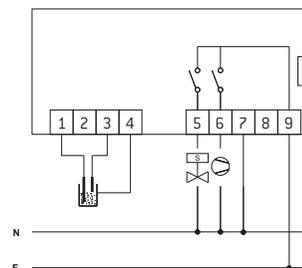| Technical features	Description	DCLDD1	DCLDD2	DCLDD3
Power supply	230 Vac ± 10% 50/60 Hz	■	■	■
	115 Vac ± 10% 50/60 Hz	■	■	■
High voltage inputs	NP			
High voltage outputs	Main output 16A / 250 VAC Resistive	■	■	■
	Secondary output 5 A/250 Vac Resistive		■	■
	Secondary output 5 A /250 VAC Resistive			■
Low voltage inputs	Conductivity level probe	■	■	■
	Capacitive level probe			■
	Low voltage clean contact input			■
Low voltage outputs	Signaling LED			■
	Sound 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
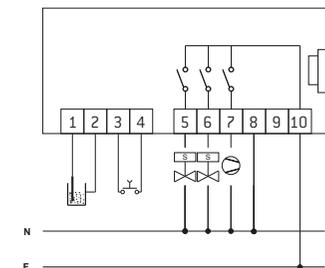1- Pump
2- Solenoid Valve
3- Com
4- GND
5- Level
6- F
7- N

DCLDD2
1- Min Level
2- NC
3- Max Level
4- GND
5- Solenoid Valve
6- Pump
7- N
8- NC
9- F

DCLDD3
1- Level
2- GND
3- Tank switch
4- Tank switch
5- OK dispenser
6- Load Valve
7- Pump
8- N
9- NC
10- F

DWater-0 FEATURES (Osmosis)

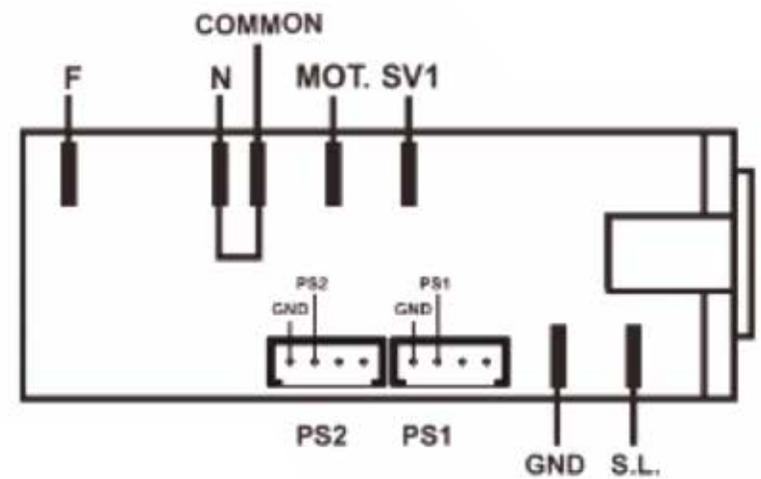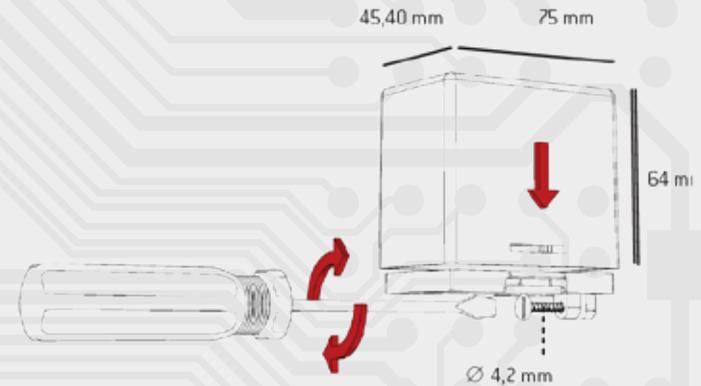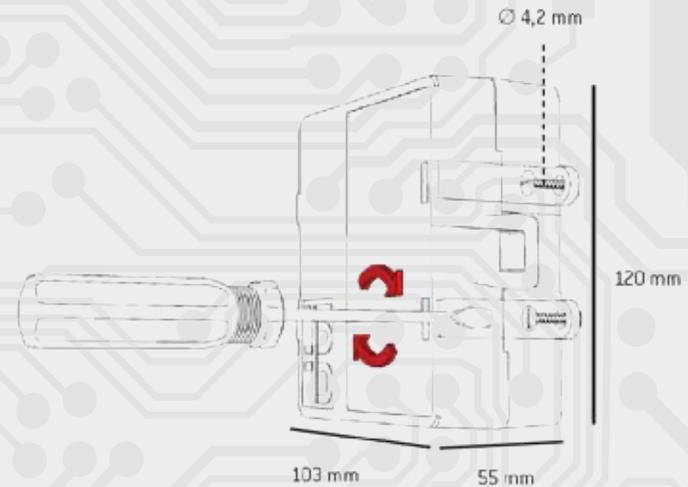|	
Power supply	230Vac ± 10% 50/60 Hz
	115Vac ± 10% 50/60 Hz
Inputs	Anti-flooding probe
	PS1: pressure switch
	Button input
	Parameter selection jumper
Outputs	Pump/motor 250Vac 8A resistive
	Solenoid valve 250Vac 8A resistive
	Buzzer
	LED

Display

Connections

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

45,40 mm   75 mm

64 mm

∅ 4,2 mm

DTI COMPACT

∅ 4,2 mm

120 mm

103 mm   55 mm

DTI XL

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