

## A NEW ERA

















### **FEATURES**







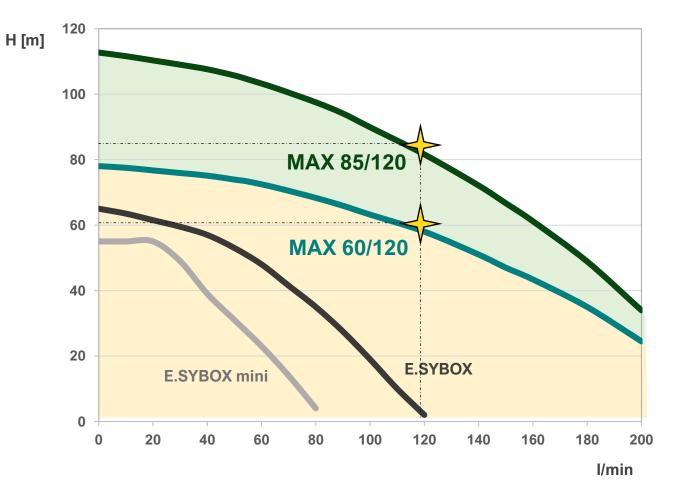




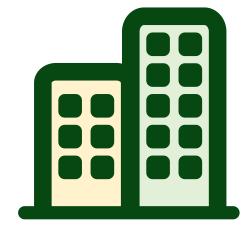
**NRV** 



### **PERFORMANCE**







**60/120 M/T**Up to 8 floors and 20 apartments

**85/120 T**Up to14 floors and 20 apartments



### **MODULARITY**





2





3





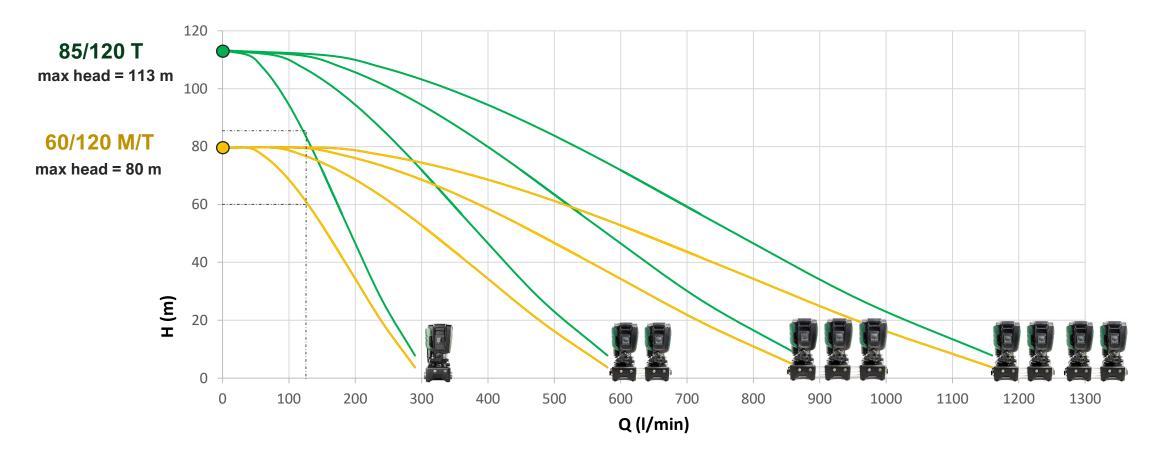






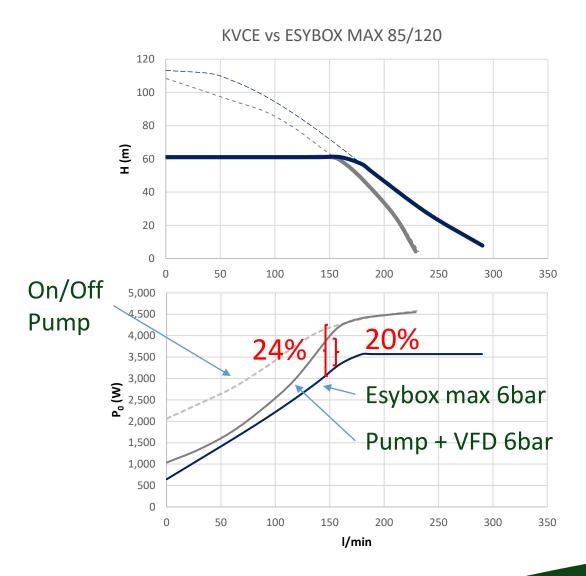


### **PERFORMANCE**





# **Comfort Energy Saving**









HIGH EFFICIENCY HYDRAULICS

energy saving	vs Pump+ VFD	Vs On/Off Pump
DAILY	2.8 kWh	12.2 kWh
ANNUAL	1.038 kWh	4.461 kWh

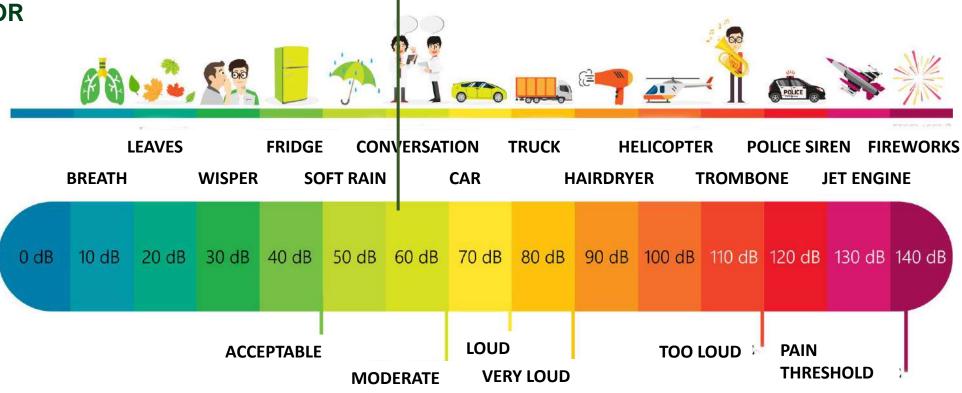




## ESybox max

A little more than a conversation

**63 dB** (50 l/min @ 6 bar)





### **ENGINEER**



Modular

### **WHOLESALER**



Space-saving





Lightweight, on site assembly

### **MAINTEINER**



Connected

### **CUSTOMER**



Adjustable

### **ENVIRONMENT**



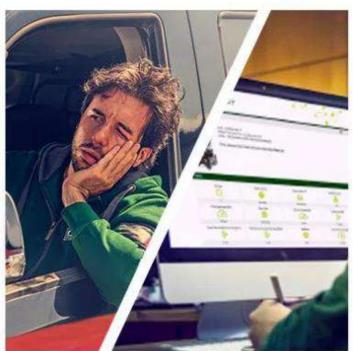
Recycled materials

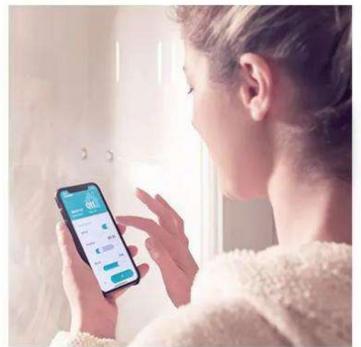












#### SIMPLER MAINTAINANCE

Modular and functional construction. The modular components of the pump make it easier to perform maintenance. The parts can be removed, repaired and replaced separately, simplifying the resolution of any issues and reducing maintenance costs.

## **EASY TO STORE**



### **OUR PROPOSAL**

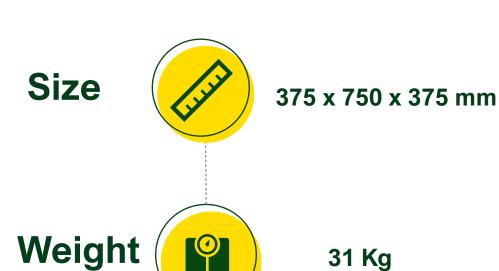
















6 PCs/pallet





ESybox DIVER



Esybox Max is an integrated pumping system for water pressurization in commercial building service. It is composed of modular elements that allow different configurations: single, double, triple or quadruple system are possible, to cover the needs of medium/large condominiums and high buildings. The innovative support base of the pumping unit and the wireless communication between the pumps make it possible to assemble the unit directly at the installation site even by one person.

MAC Design, DAB Pumps, style, innovation, quality and technology: ritght ingredients to win the IF design award in 2021!



EACH UNIT CONSISTS OF THE HYDRAULIC CONNECTION BASE AND THE PUMPING UNIT WHICH INCLUDES:

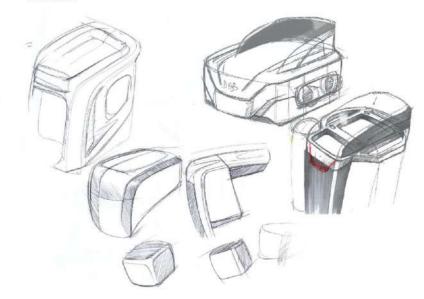
- ELECTRONIC VERTICAL MULTI-IMPELLER PUMP
- DISPLAY
- > WI-FI MODULE
- PRESSURE SENSORS
- NON-RETURN VALVE ON DELIVERY
- > EXPANSION TANK

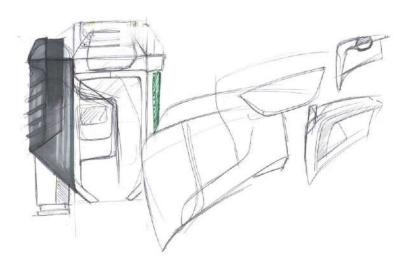


Sketches

DESIGN AWARD

2021

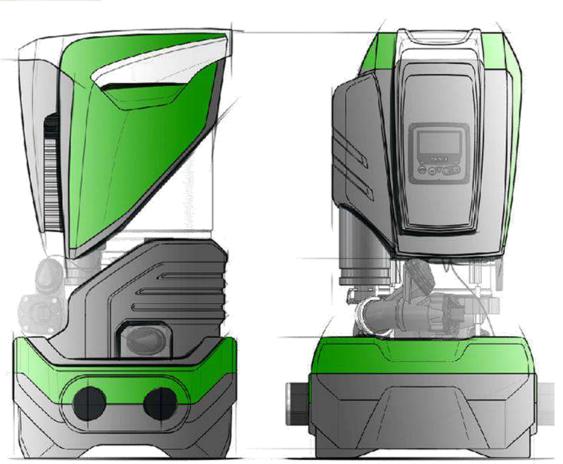


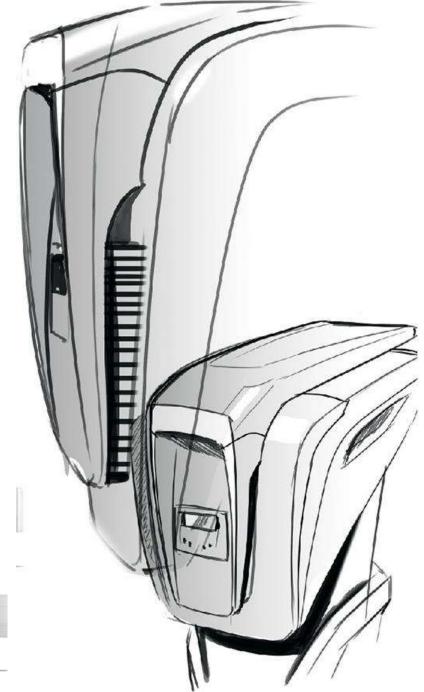




### CONCEPT DESIGN Moodboard Inspiration





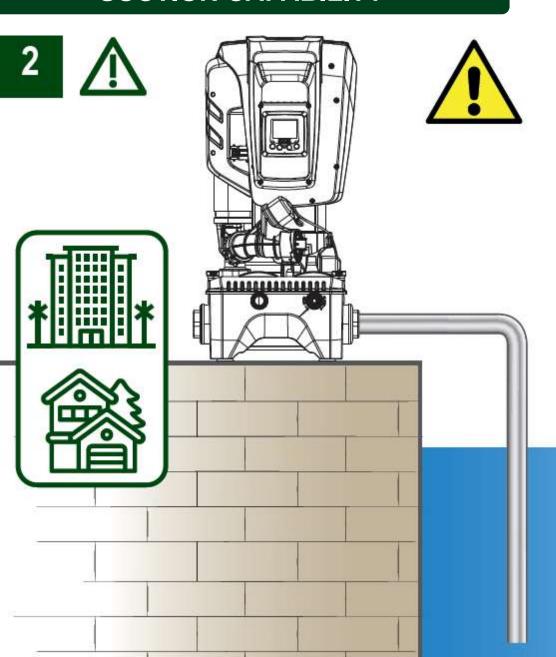


## TECHNICAL FEATURES



## TECHNICAL SHEET

Text	Parameter		ESYBOX MAX 60/120M	ESYBOX MAX 60/120T	ESYBOX MAX 85/120T
	Voltage		208-240	380/480	380/480
ELECTRIC POWER SUPPLY	Phases		1	3	3
	Frequency		50/60		
	Maximum current		11,8 A	4,2 A	5,5 A
	Maximum power		2,68 KW	2,65 KW	3,5 KW
	Leakage current to earth		<2 mA	<4 mA	<4 mA
CONSTRUCTION CHARACTERISTICS	Overall dimensions		766x375x384		
	Empty weight (excluding packaging)	PUMP	29	29	30
		ESYDOCK	9		
		2 ESYDOCK	18		
		3 ESYDOCK	27		
	Protection class		IPX5		
	Motor insulation class		F		
HYDRAULIC PERFORMANCE	Maximum head		7,7bar	7,7bar	10bar
	Maximum pressure at intake		5 bar		
	Maximum working pressure (PN)		12 bar		
	Maximum flow rate		300 l/min		





Max 55°C - 131°F

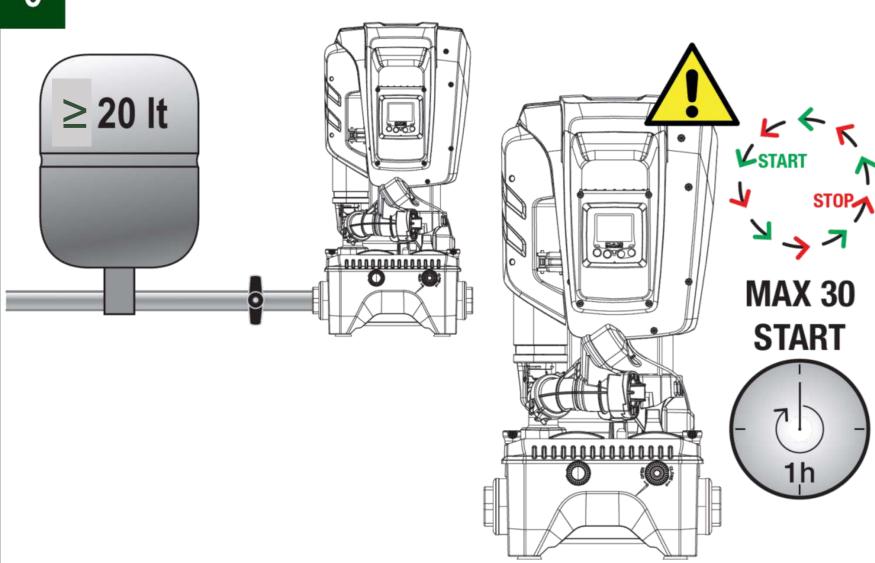




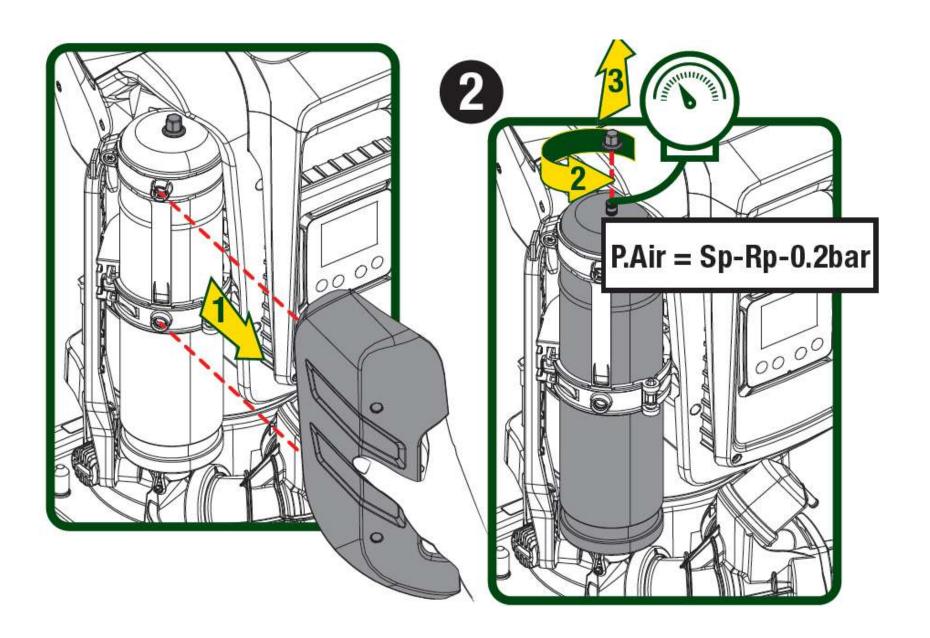




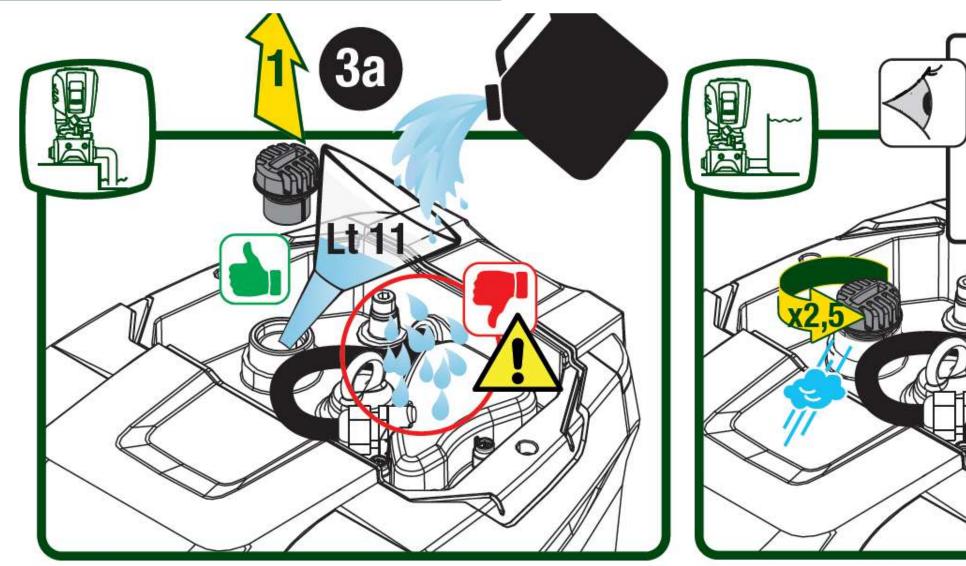


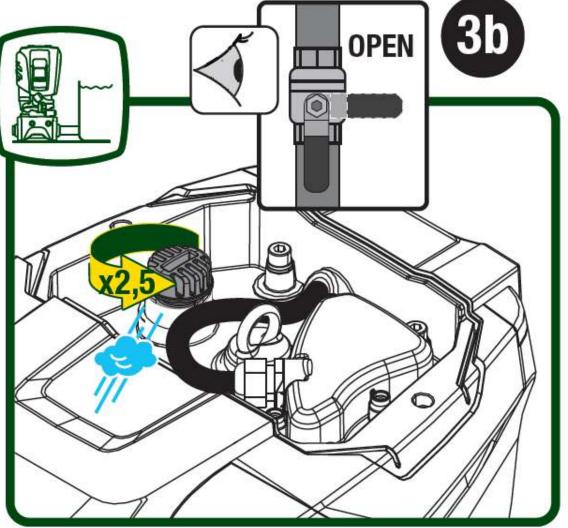


## **EXPANSION VESSEL**



## PRIMING THE PUMP







### **DISPLAY**



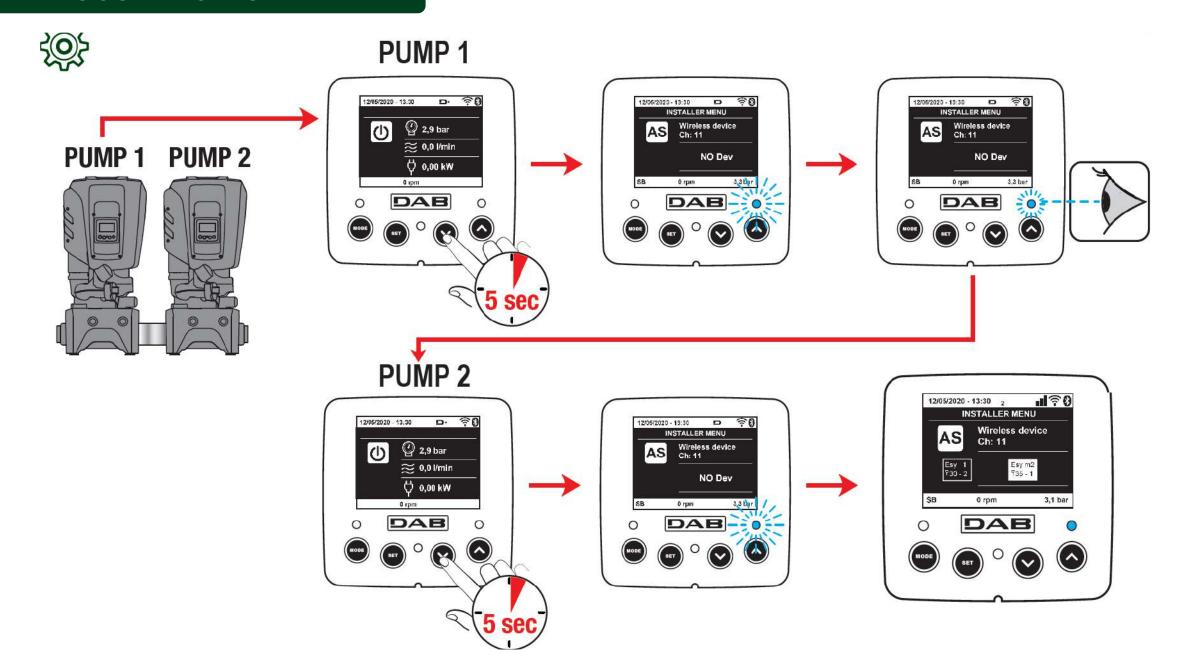
MENU NAME	DIRECT ACCESS KEYS	HOLD-DOWN TIME
User	MODE	On releasing the button
Monitor	SET V	2 Sec
Setpoint	MODE SET	2 Sec
Manual	SET O	5 Sec
Installer	MODE SET	5 Sec
Technical assistance	MODE SET	5 Sec
Reset factory values	SET A	2 sec after switching on appliance
Reset	MODE SET O	2 Sec



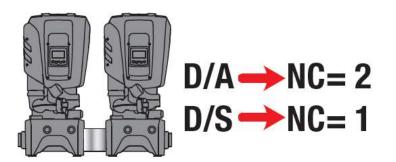
### DISPLAY

Reduced menu (visible)		Extended menu (direct access or password)				
Main Menu	User Menu mode	Monitor Menu set-minus	Setpoint Menu mode-set	Manual Menu set-minus-plus	Installer Menu mode-set-minus	Tech. Assist. Menu mode-set-plus
MAIN (Main Page)	STATUS	<b>BK</b> Back lighting	SP Setpoint pressure	STATUS	RP Decrease pressure for restart	<b>TB</b> Block time for water lack
Menu Selection	RS Revs per minute	TK Backlighting switch-on time		RI Speed setting	OD Type of plant	T1 Low pressure delay
	<b>VP</b> Pressure	<b>LA</b> Language		<b>VP</b> Pressure	AD Address Configuration	T2 Delay in switching off
	<b>VF</b> Display of flow	<b>TE</b> Heat sink temperature		<b>VF</b> Display of flow	MS Measuring system	<b>GP</b> Proportional gain
	PO Power absorbed by pump	<b>BT</b> Card temperature		PO Power delivered to the pump	AS Wireless devices	<b>GI</b> Integral gain
	C1 Pump phase current			C1 Pump phase current	PR Remote pressure sensor	<b>RM</b> Maximum speed
	TE Heat sink temperature			RS Revs per minute	EK Low pressure function on suction	NA Active devices
	Pin Pressure at intake			TE Heat sink temperature	PK Low pressure threshold on suction	NC Max. simultaneous devices

### **BOOSTER SETS**



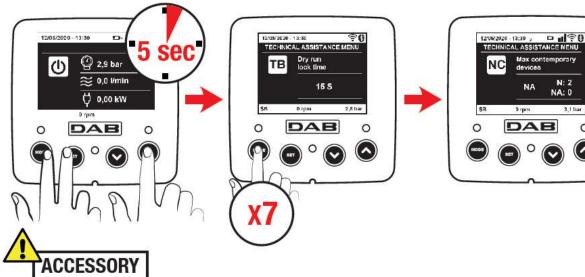
### **BOOSTER SETS**

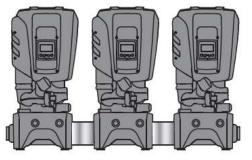


D = DUTY

A = ASSIST

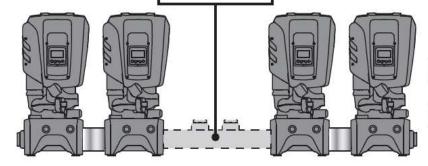
S = STANDBY





 $D/A/A \rightarrow NC = 3$ 

 $D/A/S \rightarrow NC = 2$ 



 $D/A/A/A \rightarrow NC = 4$ 

N: 2 NA: 0

 $D/A/A/S \rightarrow NC = 3$ 



### **BOOSTER SETS**



"MODE" and "SET" and "PLUS"
FOR 3 SECONDS
"MODE" TO SCROLL PARAMETERS
ADJUSTTHE VALUE WITH "+" OR "-"
"SET" TO CONFIRM

### **WIRELESS**

ON BOARD





TOTAL NUMBER OF PUMPS

# pumps

TOTAL NUMBER OF PUMPS CONNECTED IN THE SAME BOOSTER SET. N IS AUTOMATICALLY DETECTED BY ESYBOX.



**ACTIVE PUMPS** 

1 ... N

TOTAL NUMBER OF PUMPS INVOLVED IN THE PUMPING SYSTEM (ACTIVE + STANDBY + RESERVE)

IF NA < N, ONE OR MORE PUMP ARE EXCLUDED: THEY

WILL BE CONSIDERED AGAIN ONLY IN CASE OF FAULT

ON ESYBOX. DEFAULT: NA = N.

NC

**SIMULTANEOUS PUMPS** 

1 ... N

MAX NUMBER OF SIMULTANEOUS OPERATIONAL PUMPS, WHICH SPLITTHE WATER FLOW DEMAND. IF NC < NA, ONE OR MORE PUMP ARE IN STAND-BY. STAND-BY PUMPS CICLICALLY ENTER INTO OPERATION (FUNCTION ROTATION). DEAFULT: NC = NA.

IC

**RESERVE PUMPS** 

1 or 2

ANY SINGLE PUMP CAN BE CONFIGURED AS ACTIVE (IC = 1) OR RESERVE (IC = 2). WHEN A PUMP IS SETTO RESERVE, IT IS THE LOWEST IN FUNCTION PRIORITY. DEFAULT: IC = 1.

ET

**EXCHANGE TIME** 

10s ... 9h

EXCHANGETIME TO BALANCE THE OPERATIONAL TIME
BETWEEN THE DIFFERENT PUMPS OF THE BOOSTER SET.
EXCHANGE CAN HAPPEN ON STAND-BY OR DURING
OPERATION. IF ET = 0, AT ANY START A NEW PUMP IS
FUNCTIONING. DEFAULT: 2 HOURS.



## **Networking**

## **Wireless Communication**







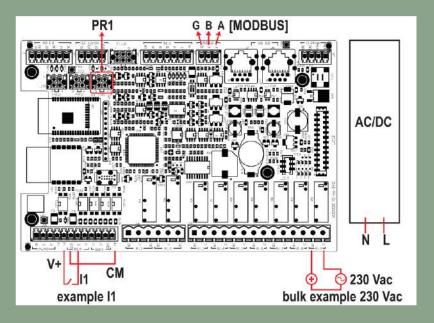


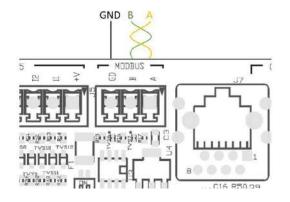
extension module

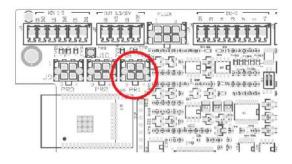


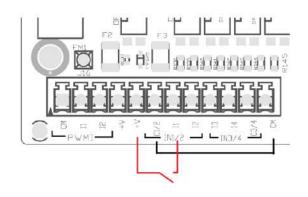
### **ESY I&O**











## Serial Communication *MODBUS RS485*

Additional Set-Point PRESSURE SENSORS HUBA

Inputs / ouputs

DIGITAL CONTACTS

#### **PROTECTION PANELS**





Electrical breaker panels are available as accessory for 2/3 pump sets.

The panels are supplied with a mains power lead and a feeding cable for each pump.

They can be delivered together with a support pillar kit, that's fixed on the stainless steel manifolds of the dock.



www.dabpumps.com

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