

Aqua Misting Pumps Product catalog 2023



| Item nr. | AMP 21x-2 2,2 kW, 540 l/h | AMP 22x-2 2,2 kW, 1200 l/h | AMP 42x-2 4 kW, 1200 l/h | AMP 43x-2 4 kW, 1800 l/h |
|-----------------------------|------------------------------|-------------------------------|-----------------------------|-----------------------------|
| Max. pressure [bar] | 70 | 70 | 70 | 70 |
| Water flow max [l/h(l/min)] | 1:1 - 540 (9) | 1:1,5 - 800 (13,3) | 1:1 - 1200 (20) | 1:1,2 - 1500 (25) |
| Different speed | 1:1 - 1:1,5 - 1:2 - 1:3 | 1,5 - 1:2 - 1:3 | 1:1 - 1:1,2 | 1:1,2 - 1:1,5 - 1:2 - 1:3 |
| Different capacity [l/h] | 540 360 270 180 | 800 600 400 | 1200 1000 | 1500 1200 900 600 |
| Voltage [Vac] | 3 x 400 | 3 x 400 | 3 x 400 | 3 x 400 |
| Current [Amp] | 4,5 | 4,5 | 7,95 | 7,95 |
| Oil type | SAE 15/40 | SAE 15/40 | SAE 15/40 | SAE 15/40 |
| Standard filter type | 10" – 5 My | 10" – 5 My | 20" – 5 My | 20" – 5 My |
| Dimension wall -T [cm] | W70xH90xD42 | W70xH90xD42 | W70xH120xD42 | W70xH120xD46 |
| Dimension wall -W [cm] | W65xH90xD42 | W65xH90xD42 | W60xH120xD42 | W60xH120xD46 |
| Weight (all incl. approx.) | 51 kg | 55 kg | 65 kg | 72 kg |
| Dimension shipment | 80x60xH55 [cm] | 80x60xH55 [cm] | 80x60xH55 [cm] | 80x60xH55 [cm] |
| Noise level (approx.) | 70-75 dB(A) | 70-75 dB(A) | 75-80 dB(A) | 75-80 dB(A) |

The AMP pump series is a modular construction solution where the same basic elements are used in "infinitely" many different combinations and with a high level of customer service and easy to use interface.

The basic program is with a 1200 liters pump and IE3 motors 2,2 or 4 kW.

All units have V-belt drive, where we provide a 10-year warranty.

Info:

AMP xxx-2 Pump type (*see page 9 for better understanding*)

AMP 15 & AMP-16 Mounting sets

AMP 2x High pressure control

AMP 3x - 10" and 20" Low pressure filter

AMP 4x Cabinet/controller

AMP 5x Connection type for different situations.

Total number of combinations with just a few parts equals several thousand combinations.

Guide for easy ordering:

Order the pump AMP xxx-2

Order the cabinet/power connection type AMP 4x

Order the connection type AMP 5x

Ask for the solution and combination **you** need.

We recommend the use of 1200 liters pumps which covers most areas in just 4 different capacities.

AMP systems are available in other sizes (pumps, motors etc.), but these are not stock items and therefore time of delivery can be extended.


Keep your stock value low with easy AMP combinations.





If you order a pump AMP 54 "Universal for all sections" you can optimize the system for one or multiple sections with just small adjustments to what you need.





Disclaimer:






Photographic or typographic errors are subject to correction when ordering. We reserve the right to change prices without notice.










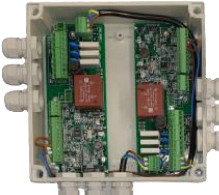
For more information about AMP product series, please contact: sales@amn-misting.com





| Order no. | Description | Price [Dkr] | Price [Euro] | |
|-----------|---|-------------|--------------|--|
| AMP 215-2 | 2,2kW 540 l/h 1:3 Basic pump (180 l/h) | | |  |
| AMP 223-2 | 2,2kW 1200 l/h 1:1,5 Basic pump (800 l/h) | | | |
| AMP 224-2 | 2,2kW 1200 l/h 1:2 Basic pump (600 l/h) | | | |
| AMP 225-2 | 2,2kW 1200 l/h 1:3 Basic pump (400 l/h) | | | |
| AMP 421-2 | 4kW 1200 l/h 1:1 Basic pump (1200 lh) | | | |
| AMP 432-2 | 4kW 1800 l/h 1:1,2 Basic pump (1500 l/h) | | | |
| | | | | |

| Order no. | Description | Price [Dkr] | Price [Euro] | |
|-----------|---|-------------|--------------|---|
| Shipment | <p>Shipment in a strong ½-pallet for safe worldwide transportation.</p> <p>80 x 60 x 55 cm. (LxWxH) Can be stacked into 4 layers - total 220 cm height</p> <p><i>Content of course depends on what is ordered, but all necessities and hardcopy user guides are included in the pallet.</i></p> | | |  |
| AMP 15 | <p>Mounting set</p> <p>Parts for water connecting (3/4")</p> <p>Ball valve and 10 bar pressure gauge.</p> <p>Parts for wall mounting</p> | | |  |
| AMP 16 | <p>Polymer pipe for HP connection</p> <p>AMN 302 Pipe 12 mm Polymer – 2 meters</p> <p>AMN 330 Screw fitting equal 12 mm A4</p> <p>AMN 306x Press inside bushing – Brass (2 pcs)</p> | | |  |
| AMP 17 | <p>High pressure accumulator</p> <p>AMN 813 screw to ½" conical</p> <p>AMN 332 Screw fitting equal tee 12 mm A4</p> <p>No pipes</p> <p><i>To remove the worst vibrations from pipe system</i></p> | | |  |

| Order no. | Description | Price [Dkr] | Price [Euro] | |
|-----------|---|-------------|--------------|--|
| AMP 20 | High pressure regulator - basic Pressure regulation 60 bar +/- 10 bar – performance from 0 to 2520 l/h. – SS union for pump mounting. Incl. SS elbow, AMN 331. ½” connection for by-pass water. | | |  |
| AMP 21 | High pressure regulator – single section AMP 20 + Bleed-off solenoid valve (anti-drip) – with 2 meters ½” drain-hose and hose clamps. | | |  |
| AMP 22 | High pressure regulator – multiple sections AMP 20 + non return valve for stationary pressure in feed tube. (Quick build-up of pressure at start up.) Handles down to 20% of maximum capacity. | | |  |
| AMP 23 | High pressure regulator - temperature protection AMP 22 + Expanded for temperature protection of pump. Handles performance down to 0 liter/min. With 2 meters ½” drain-hose and hose clamps. | | |  |

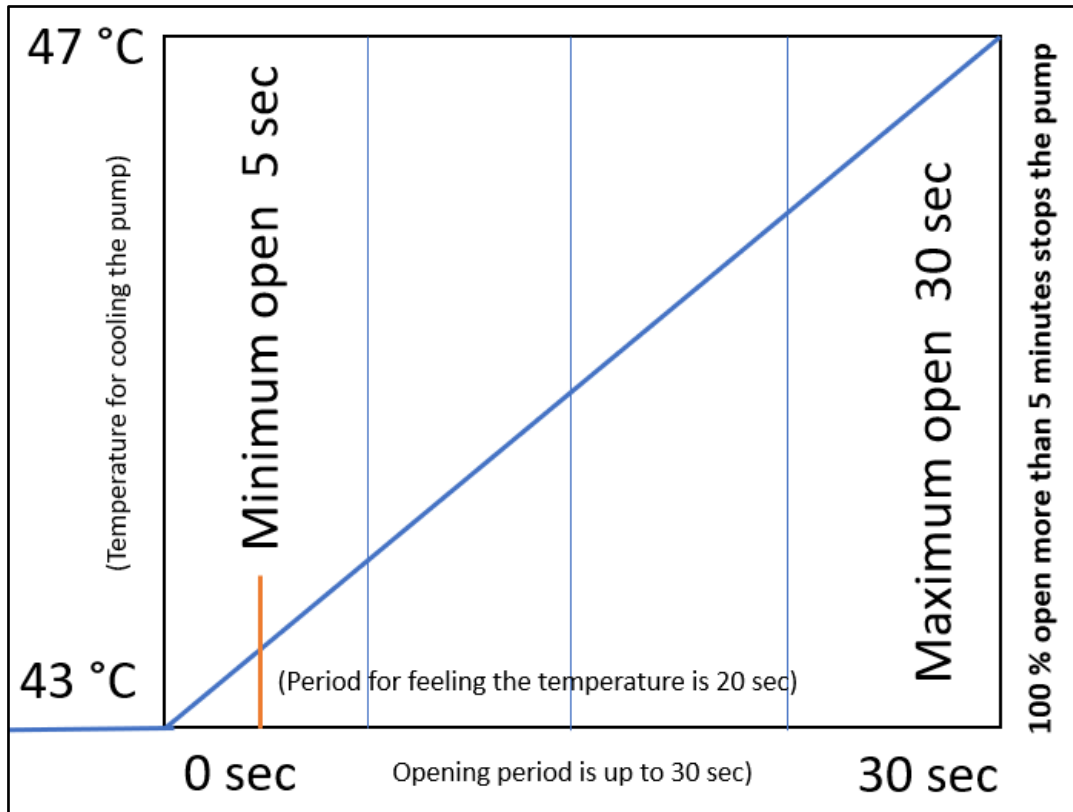
| Order No. | Description | Price [Dkr] | Price [Euro] | |
|--|---|-------------|--------------|---|
| AMP 31-10 AMP 31-20 | Filter set 5 my simple With solenoid valve and hose for by-pass water and ¾” hose connection. | | |  |
| AMP 32-10 AMP 32-20 | Filter set 5 my normal – single section AMP 31 + low pressure accumulator (Avoids negative pressure at start-up) Union for connection to pump. (Simple service and more reliable) | | |  |
| AMP 33-10 AMP 33-20 | Filter set 5 my normal – multiple sections AMP 32 Excl. solenoid valve. | | |  |
| AMP 34-10 AMP 34-20 | Filter set 5 my separate For extra filtration. Can be extended with up to 3 different filter inserts. (e.g. 1 my, 5 my & 20 my) Incl. wall bracket, clamps, and hose connections. Possible purchase: AMN 891 - ¾” hose Ask for additional info and prices. | | |  |
| AMP 10-1my AMP 10-5my AMP 10-20my AMP 20-1my AMP 20-5my AMP 20-20my | Filter inserts Normal delivery and filtration with 1 filter 5 my. (0.2 mm nozzle has a hole of 200 my) After filtration - nozzles preferably block when lime dries in. Can be supplemented with multiple filters but can give increased pressure drop in front of the pump. | | |  |

| Order No | Description | Price [Dkr] | Price [Euro] | |
|--|---|-------------|--------------|---|
| AMP 40  | Cabinet with contactor etc. Without security systems. 230 Vac NO signal for start/stop. Incl. 1.5 meter wire and CEE Plug. <i>Note:</i> Can be supplied with timer and pressure switch. | | |  |
| AMP 42  | Cabinet with PCB Automatic With intelligent timer for pressure switch, special programs for single and multiple sections incl. temperature control for capacity down to zero liter/min. (see diagram page 10) 24 Vdc NO signal for start/stop. Incl. blue front when PCB inside Incl. 1.5 meter wire and CEE Plug. | | |  |
| AMP 43  | Cabinet SAFE Misting® - Pump AMP 42 + Stand-Alone solution complete with display. Ready for ON/OFF Without temperature/humidity sensor. Ready for AMP 46 sensor – then complete humidity and temperature control. | | |  |
| AMP 44  | SAFE Misting® - single section Single section decentralized – input 230 Vac Complete with display Ready for ON/OFF Incl. bleed-off control Without temperature/humidity sensor. Ready for AMP 46 sensor – then complete humidity and temperature control. | | |  |
| AMP 45  | SAFE Misting®-Multiple sections Multiple sections decentralized – input 230 Vac Complete with display Ready for ON/OFF Incl. bleed-off control Ready for tandem control. Reduced start/stop and able to handle double amount of nozzle from the same pump. Without temperature/humidity sensor. Ready for AMP 46 sensor – then complete humidity and temperature control. | | |  |

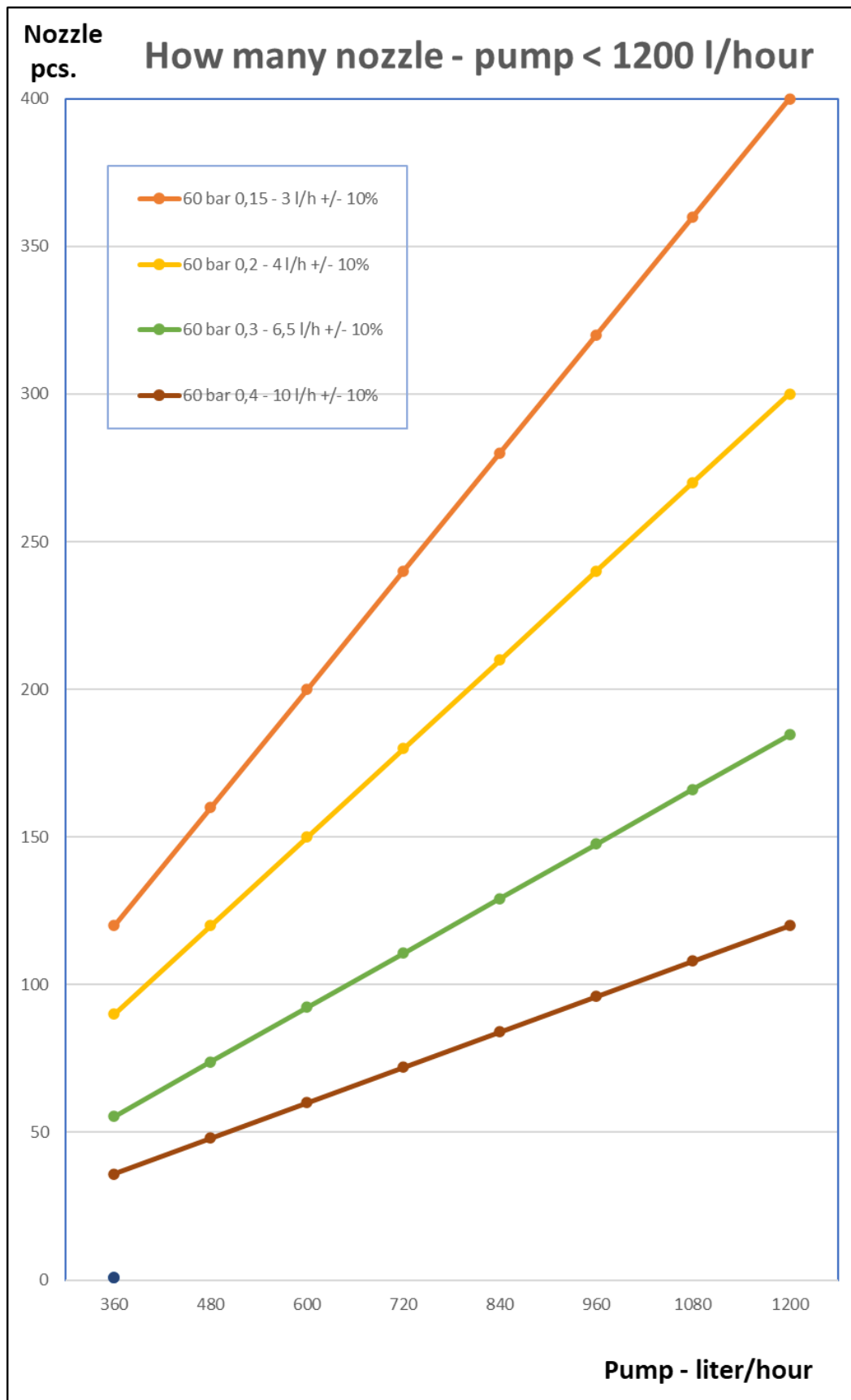
| Order No. | Description | Price [Dkr] | Price [Euro] | |
|-----------|---|-------------|--------------|--|
| AMP 46 | Humidity/temperature sensor Complete with 3 meters wire. (available with extra wire length) Used for SAFE Misting controllers | | |  |
| AMP 47 | Auto bleed-off valve controller For one section – input 230 Vac. Input signal: Close signal from climate computer. Operate separate section with solenoid valve and bleed-off + start signal to the pump. The way of making anti-drip in multiple sections. Solenoid valve bleed-off AMN 880 or AMN 881. <i>Box size: 100x100x50 mm</i> | | |  |
| AMP 48 | Remote wi-fi control Connect your cell phone via 2.4 Ghz wi-fi => Programming and communication. From long distance you can make start/stop of the pump. | | |  |
| AMP 49-1 | Contactor & overload relay 4-6 For 2,2 kW motor | | |  |
| AMP 42-2 | Contactor & overload relay 6-9A For 4 kW motor DIN mounting inside your own switch board | | | |

| Order no. | Description | Price [Dkr] | Price [Euro] | |
|-----------|--|-------------|--------------|--|
| AMP 51 | Complete for single section AMP 15 Mounting set AMP 21 H/P regulator 1 section AMP 32 Filter set 5 my normal – single section | | | |
| AMP 52 | Complete, multiple sections, temp. AMP 15 Mounting set AMP 23 H/P temperature security AMP 33 Filter set 5 my – multiple sections | | | |
| AMP 53 | Complete for multiple sections AMP 15 Mounting set AMP 22 H/P regulator for multiple sections AMP 33 Filter set 5 my – multiple sections | | | |
| AMP 54 | Universal for all sections AMP 15 Mounting set AMP 23 H/P temperature security AMP 32 Filter set 5 my normal – single section | | | |
| AMP 55 | Complete for single section, simple AMP 15 Mounting set AMP 20 High pressure regulator - basic AMP 32 Filter set 5 my normal – single section | | | |

Temperature security system for pumps – AMP 23



Nozzles vs. liters per hour



Motor size and capacity vs. performance list

| Motor size kW | Motor size | Motor Axle diameter | Motor OK - 50 Hz (and 60 Hz) Security factor = +20% 1,6 kW/600 liter | Pump type - liter/hour Max. capacity | | | Gearing | | | | | |
|---|------------|---------------------------|--|--|----------|----------|--|----------|-----------|----------|----------|-------|
| | | | | 1 to 1 | 1 to 1,2 | 1 to 1,5 | | | | | | |
| 0,75 kW | 80 | 19 | 4,70 liter | 540 | 450 | 360 | 1 to 1 | 1 to 1,2 | 1 to 1,5 | 1 to 2 | 1 to 3 | |
| 2,2 kW | 90 | 24 | 13,75 liter | 540 | 450 | 360 | 211-2 | 212-2 | 213-2 | 214-2 | 215-2 | |
| 2,2 kW | 90 | 24 | 13,75 liter | 1200 | 1000 | 800 | | | 223-2 | 224-2 | 225-2 | |
| 3 kW | 100 | 28 | 18,75 liter | 1200 | 1000 | 800 | | | | | | |
| 4 kW | 100 | 28 | 25,00 liter | 1200 | 1000 | 800 | 421-2 | 422-2 | | | | |
| 4 kW | 100 | 28 | 25,00 liter | 1800 | 1500 | 1200 | | 432-2 | 433-2 | 434-2 | 435-2 | |
| 4 kW | 100 | 28 | 25,00 liter | 2520 | 2100 | 1680 | | | | 444-2 | 445-2 | |
| 5,5 kW | 112 | 28 | 34,50 liter | 1800 | | 900 | | | | | 534-2 | |
| 7,5 kW | 132 | 38 | 46,90 liter | 2520 | | 1260 | | | | | | 744-2 |
| Normal - stock item Non-typical - minimal stock Special - not stock items | | | | Belt size = XPZ 1250 Up to 2,2 kW motor - 1 belt 3 and 4 kW motor - 2 belts 5,5 kW motor - 3 belts 7,5 kW motor - 3 belts size XPZ 1320 (Special size) | | | Art. number translation 1XX Motor size X2X Pump size XX3 Gearing XXX-1 Version | | | | | |
| 0,75 kW motor - 1 phase 230 Vac | | | | | | | 1 = 0,75 | | | 1 = 1:1 | -1 <2021 | |
| Motor - normal 3 x 400 Vac - 4 pole (ask for other voltage etc.) | | | | | | | 2 = 2,2 | 1 = 9 | 2 = 1:1,2 | 2 = 2021 | | |
| Motor size 5,5 kW and 7,5 kW = 2 pole 2900 o/min | | | | | | | 3 = 3 | 2 = 20 | 3 = 1:1,5 | | | |
| Motor size 132 = special belt size XPZ 1320 | | | | | | | 4 = 4 | 3 = 30 | 4 = 1:2 | | | |
| Motor size 5,5 kW and 7,5 kW = special heavy bracket | | | | | | | 5 = 5,5 | 4 = 42 | 5 = 1:3 | | | |
| Pump shaft = 24 mm (all sizes) | | | | | | | 7 = 7,5 | | | | | |

Detailed AMP pump controller PCB board explanation

| AMP Pump controller PCB board 01.01.2021 | Stop |
|---|---|
| Start | |
| General functions for the controller | |
| Condition 1 Selector switch set to A/uto | |
| Terminal 29;30: External input for start-up. | |
| Condition 2 Main contactor start | |
| Terminal 13,14,15: activates relay for starting main contactor to the motor - 1 sec. after start signal 29;30. | |
| Condition 3 Ensuring water pressure | |
| Terminal 25;26: Input signal from external pressure sensor must be activated before 20 s. | |
| If no input signal received, the selector switch on box front must be set to OFF to create a reset. | |
| Note 1: More small cyclus without pressure - and total 20sec. Stops the pump too. | |
| Note 2: The first 2 sec. is outside the calculation because of pressure "chocks". | |
| Single section - pump | |
| Condition 4 Valve 10 bar) | Valve stops 1 s after pump stops (main contactor, terminal 15) |
| Terminal 7,8,9: activate low pressure solenoid valve - when terminal 29;30 is activated | |
| Condition 5 Bleed-off pressure from pipes | |
| Terminal 10,11,12: solenoid valve for high pressure bleed-off opens for 10 s first time. | |
| | After first 10 s, the solenoid valve opens for 2 s every 2 minutes, 8 times total |
| Multiple section - pump | |
| Short in terminal 23;24 - Then the pump - terminal 13,14,15 - start together with startsignal 29;30. Temperature control activated. | |
| Condition 6 | A timer keeps the main contactor STOP-signal active for 5 s |
| Terminal 23;24: A timer keeps the main contactor start-signal active for 5 s | |
| Timer for start/stop signal => no short pulse for the pump running | |
| Note 3: When manual switch from stop to auto - the pump start immediately | |
| Note 4: From the factory the short - terminal 21,22 is in position. The short can be demounted. (just for cyclus below of 5 sec. ON and OFF). | |
| Note 5: From factory the short - terminal 29;30 is in position. Demount this for signal from decentral climate computer in terminal 29;30 | |

SAFE Misting® display overview

Program B and C needs the humidity/temperature sensor AMP 46.

| | | | | | |
|-----------------------|-----------------------------|--------------------------------|--------------------------------|-------------------------------|---------------------------------|
| LEVEL 1 - User | A ON/OFF Reg. 25°C 65% | B Temp. reg. 25°C 65% | C Humidity reg. 25°C 65% | D Timer | X Service |
| | A01 ON Time 10 sec | B01 Min. temp. 20°C | C01 Min. Humidity 60% | D01 Timer 1 ON/OFF OFF, ON | X01 Level select 1 2, 3 |
| | A02 OFF Time 10 sec | B02 Max. Temp. 30 °C | C02 Max. Humidity 75% | D02 Timer 1 ON Time 08.00 | X02 Show Date/Time Date Time |
| | A03 Wetting OFF, ON | B03 Fixed On Time 10 sec | C03 Fixed On Time 10 sec | D03 Timer 1 OFF Time 20.00 | X03 SW version Just info |
| LEVEL 2 | A11 Dust - manuel 60 sec | B11 OFF various 120 sec max | C11 OFF various 120 sec max | D11 Timer 2 ON/OFF OFF, ON | X11 ON Time |
| | A12 Disinfection OFF, ON | B12 Off Time Min 0 | C12 Off Time Min 0 | D12 Timer 2 ON Time 08.00 | X12 Reset To Default No Yes |
| | A13 Smartphone OFF, ON | B13 Max. Humidity 75% | C13 Min. temp 18°C | D13 Timer 2 OFF Time 20.00 | X13 Temp unit °C F |
| LEVEL 3 | A21 Dust - Auto OFF, ON | B14 Temp. Fault Adj 0 +/-°C | C14 %rh fault Adj. 0 +/- % | D14 Timer 3 ON/OFF OFF, ON | |
| | A22 ON time 15 sec | | C21 Various %rh OFF, ON | D15 Timer 3 ON Time 08.00 | |
| | A23 OFF time 60 min | | C22 Var. Min. temp. 20°C | D16 Timer 3 OFF Time 20.00 | |
| | A24 Drain - auto OFF, ON | | C23 Var. Max. Temp. 25°C | | X21 Tandem ON/OFF OFF, ON |
| | A25 ON time 30 sec | | C24 Var. Change %rh 10% | | X22 Max. ON time 120 sec |
| | A26 OFF time 6 hour | | | | |
| | | | | | |



Ask for more detailed information.