

Pump Catalog 2025



Item nr.	AMP 21x-3 2.2 kW, 540 l/h	AMP 22x-3 2.2 kW, 1200 l/h	AMP 42x-3 4 kW, 1200 l/h	AMP 43x-3 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 - 1:1.2 - 1:1.5 - 1:2
Different capacity [l/h]	540 360 270 180	800 600 400	1200 1000	1800 1500 1200 900
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 – Direct	W100xH65xD35	W100xH65xD35	W100xH90xD35	W100xH90xD37
Dimension wall – V-Belt	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.

The basic program includes a 1200-liter pump and IE3 motors of 2,2 or 4 kW.

For the V-belt driven pumps, we provide a 10-year warranty for the belts.

Direct-drive pump systems use the same motors and same pumps as belt-driven ones.

Info:

AMP xxx-3 Pump type (*see page 10 for more information*)

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-x

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 5 different capacities.


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

To maintain a low stock value, use simple AMP combinations:


If you purchase a pump AMP 52-1, you can optimize the system for one or multiple sections. To optimize for a single section, disassemble the check valve and remove the short circuit in terminal 23,24.

Disclaimer:





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

Order no.	Description			
AMP 215-3	2.2kW 540 l/h 1:3 Basic pump (180 l/h)			
AMP 223-3	2.2kW 1200 l/h 1:1.5 Basic pump (800 l/h)			
AMP 224-3	2.2kW 1200 l/h 1:2 Basic pump (600 l/h)			
AMP 225-3	2.2kW 1200 l/h 1:3 Basic pump (400 l/h)			
AMP 421-3	4kW 1200 l/h 1:1 Basic pump (1200 lh)			
AMP 432-3	4kW 1800 l/h 1:1.2 Basic pump (1500 l/h)			





Pump system with direct drive




Order no.	Description			
AMP 210-1	2.2 kW 540 l/h Basic pump			 <p><i>Direct-driven pump setup shown with AMP 42 controller and AMP 51 High- and low-pressure connection. Must be ordered separately!</i></p>
AMP 250-1	2.2kW 780 l/h Basic pump			
AMP 420-1	4kW 1200 l/h Basic pump			

* = Price per piece if the order is less than 7 pcs.











Order no.	Description			
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 depends on what is ordered, but all necessities and hardcopy user guides are included in the pallet.</i></p> <p><i>This picture show pump incl. AMP 42 controller</i></p>			
AMP 15	<p>Mounting set Parts for water connecting (3/4") Ball valve and 10 bar pressure gauge. Parts for wall mounting</p>			
AMP 16	<p>Polymer pipe for HP connection AMN 302 Pipe 12 mm Polymer – 2 meters AMN 330 Screw fitting equal 12 mm A4 AMN 306x Press inside bushing – Brass (2 pcs)</p>			

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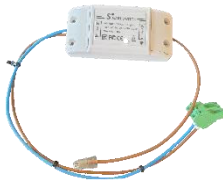

Order no.	Description			
AMP 20	High pressure regulator - basic Pressure regulation 60 bar +/- 10 bar – performance from 0 to 2520 l/h. – SS union for pump mounting. Incl. SS elbow, AMN 331. ½” connection for by-pass water.			
AMP 21	High pressure regulator – single section AMP 20 + Bleed-off solenoid 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			
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 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) 20 my can be needed for bad water quality. Incl. wall bracket, clamps, and hose connections. Possible purchase: AMN 891 - ¾” hose			
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) 20 my filter can be needed for bad water quality.			

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Order No	Description			
AMP 40 	Cabinet with contactor etc. Without security systems. 230 Vac NO signal for start/stop. Incl. 1.5-meter wire and CEE Plug.			
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.			

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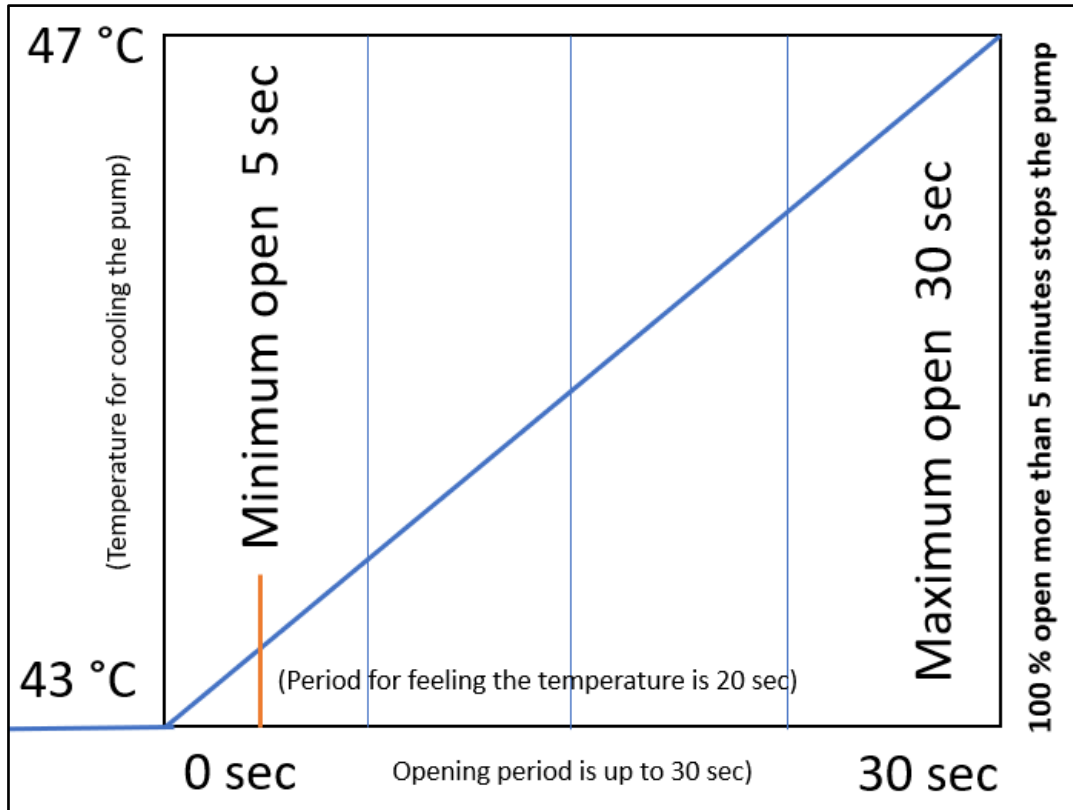
Order No.	Description			
AMP 46	Humidity/temperature sensor Complete with 3-meter wire. (available with extra wire length) Used for SAFE Misting controllers			
AMP 47	Auto bleed-off valve controller For one section – input 230 Vac. Input signal: Close signal from climate computer. Operate separate section 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 a start/stop of the pump.			
AMP 49-1	Contactor & overload relay 4-6A For 2.2 kW motor			
AMP 49-2	Contactor & overload relay 6-9A For 4 kW motor DIN mounting inside your own switch board			

Order no.	Description			
AMP 51	Complete for single section AMP 15 Mounting set AMP 32 Filter set 5 my AMP 21 H/P regulator 1 section			
AMP 52-1	Complete, multiple sections, temp. AMP 15 Mounting set AMP 32 Filter set 5 my AMP 23 H/P temperature security			
AMP 53-1	Complete for multiple sections AMP 15 Mounting set AMP 32 Filter set 5 my AMP 22 H/P regulator for multiple sections			
AMP 55	Complete for single section, simple AMP 15 Mounting set AMP 32 Filter set 5 my AMP 20 High pressure regulator - basic			

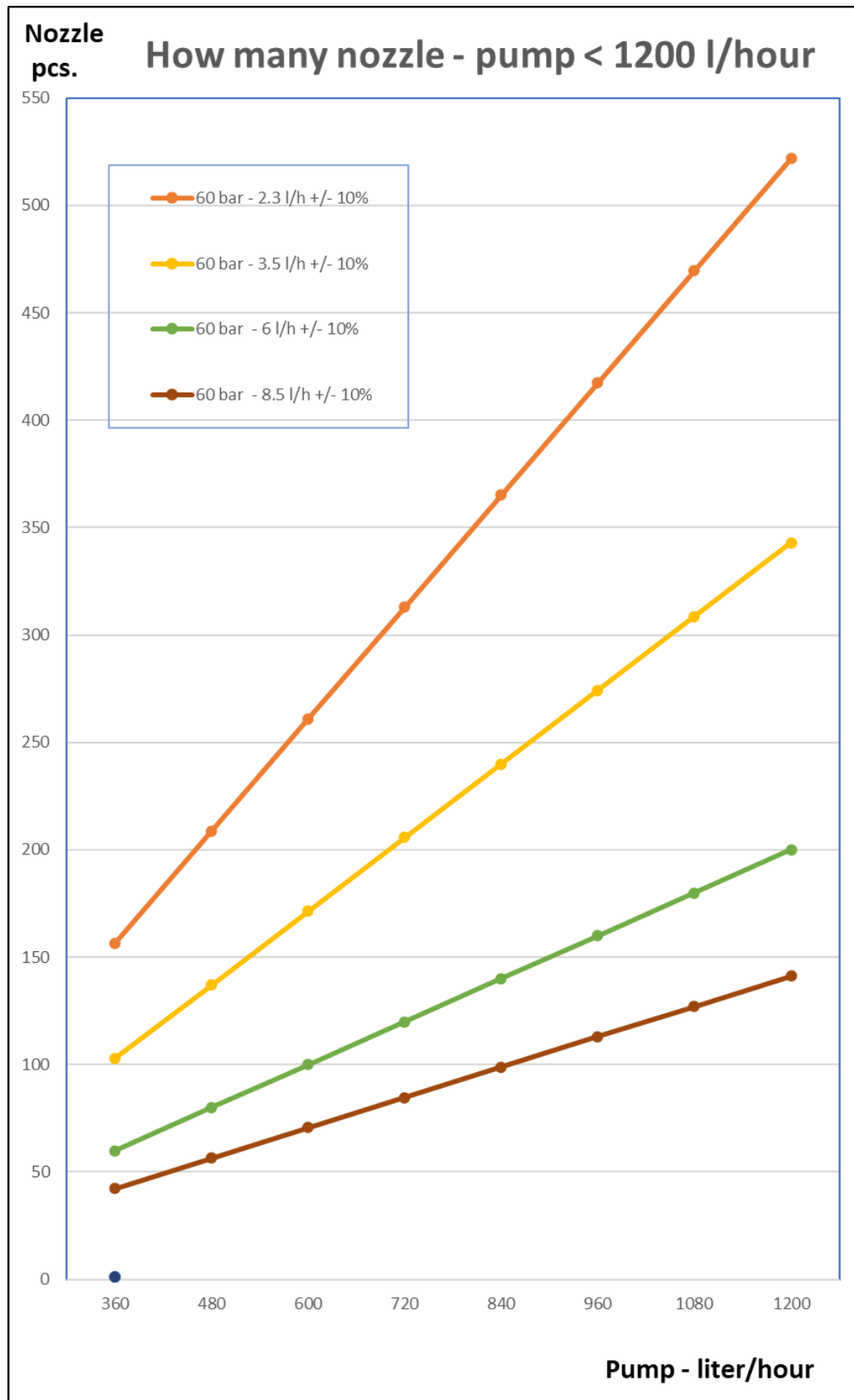
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Temperature security system for pumps – AMP 23

On the PCB: Short circuit in terminal 23,24



Nozzles vs. liters per hour



Motor size and capacity vs. performance list

Motor size kW	Axle height mm	Axle diameter mm	50 Hz (and 60 Hz) Security factor +20%	Pump type - liter/hour			Gearing	Frame = not possible for 60 Hz		
				1 to 1,1	1 to 1,2	1 to 1,5			1 to 1,5	1 to 2
0,75 kW	80	19	282 l/h	540	450	360	180	114-3	115-3	
2,2 kW	90	24	825 l/h	540	450	360	270	180	215-3	
2,2 kW	90	24	825 l/h	780						
2,2 kW	90	24	825 l/h	1200	1000	800	600	400	225-3	
3 kW	100	28	1125 l/h	1200	1000	800	600	400		
4 kW	100	28	1500 l/h	1200	1000	800	600	400		
4 kW	100	28	1500 l/h	1800	1500	1200	900	600		
4 kW	100	28	1500 l/h	2520	2100	1680	1260	840		
Normal stock item				Motor size vs. Belt				Art. number translation		
Non-typical - minimal stock				Up to 2,2 kW = 1 XPZ 1250 belt				1XX		
Special - not stock item				3 - 5,5 kW = 2 XPZ 1250 belts				Motor kW		
Motor information:				7,5 kW = 3 XPZ 1320 belts				Pump size		
3 x 400 Vac - 4 pole (ask for other voltage etc.)								1 = 540		
0,37 and 0,75 kW motor = can be 1 phase 230 Va								2 = 1200		
Motor size 5,5 kW and 7,5 kW = 2 pole 2900 o/ml								3 = 1800		
Motor size 132 = special belt size XPZ 1320								4 = 2520		
Motor size 7,5 kW = special heavy bracket								5 = 780		
()* => without 20% security factor								6 = 120		
								7 = 7,5		
								8 = 0,37		
								Gearing		
								0 = Direct		
								1 = 1:1		
								2 = 1:1,2		
								3 = 1:1,5		
								4 = 1:2		
								5 = 1:3		
								Version (V-Belt)		
								-1 <2021		
								-2 ≥2021 ≈2024		
								-3 ≈2024		
								Version (Direct)		
								-1 ≥2024		

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 Auto	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 Note 1: More small cyclus without pressure - and total 20 sec. Stops the pump too. Note 2: The first 2 sec. is outside the calculation because of pressure "chocks".	Terminal 25,26: input signal from external pressure sensor must be activated before 20s. If no input signal received, the selector switch on box front must be set to OFF to create a reset.
Single section - pump	
Condition 4 Valve 10 bar)	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.
Multiple section - pump	
Short in terminal 23,24 - Then the pump - terminal 13,14,15 - start together with start signal 29,30. Temperature control activated.	Valve stops 1 s after pump stops (main contactor, terminal 15)
Condition 6	After first 10 s, the solenoid valve opens for 2 s every 2 minutes, 8 times total
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).	A timer keeps the main contactor STOP-signal active for 5 s
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

Programs B and C need 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.