

AL-KO

QUALITY FOR LIFE

AL-KO HYDRAULIC STATIONS

HYDRO-OPT[®] S and AL-KO HYDRO-OPT[®] M



SMART
ENERGY
SAVING.

HYDROOPT[®]

SIMPLE – INGENUOUS – QUALITY

AL-KO HYDROOPT® S **MAKES SAVING ENERGY A PIECE OF CAKE**

Whether for structural reasons or due to the quality of exhaust air: wherever supply air and exhaust air must be kept separate, a hydraulic station is necessary in terms of energy.

The AL-KO **HYDROOPT® S** hydraulic station impresses with its simple, compact design and technical ingenuity. You can connect AL-KO **HYDROOPT® S** from all sides – without specialist knowledge. Simply direct the brine flow directly to the station. Operation occurs with set volume flow via the Danfoss-branded frequency inverter. No complex instrumentation and control. Factory-fitted for installation and commissioning. Without compromising quality.





BENEFITS:

AL-KO HYDROOPT® S

- | Ideal price-to-performance ratio
- | Compact, small footprint of 0.5 m²
- | Can be installed from internal height of the ventilation system of 918 mm
- | No I&C system; controlled via brand frequency converter
- | Can be connected with multiple functions
- | Quick and easy commissioning without expert knowledge
- | Identical in look and feel to **AL-KO AT EASY®** and **AT FLEX®**

THE SUM OF INGENUOUS DETAILS

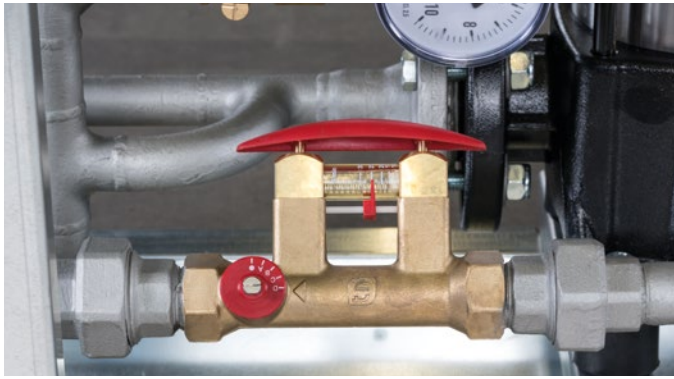
AL-KO HYDROOPT® S ROBUST, INGENUOUS AND ECONOMICAL

AL-KO **HYDRO OPT® S** provides everything you need to save energy where supply air and exhaust air units are installed separately. AL-KO **HYDRO OPT® S** is ingeniously designed. For you this means: no elaborate I&C connection, no expensive skilled personnel, no complex maintenance.

- | Compact design
- | All models have the same outer dimensions
- | Can be installed in the ventilation system from internal height of 918 mm
- | Flexible planning of the installation location



- | Runs with set volume flow thanks to the Danfoss-branded frequency converter
- | Works without complex instrumentation and control system
- | External control via 0-10 V setpoint signal possible
- | Simple commissioning without specialist personnel



- | Rapid inspection and commissioning
- | Display the brine flow by pressing the handle



- | Multifunctional connection options from front, back, top and bottom
- | Complete decoupling of the air conditioning and ventilation system as needed by simply moving a lever



- | Secure screw connection of all components
- | Quick and easy maintenance

AL-KO HYDROOPT® S

TECHNICAL DATA

Model	Media volume flow		Connections		dp tot. vol _{min}	dp tot. vol _{max}	Pump D/380-415 YV		Danfoss FU 102 frequency converter
	from vol _{min}	to vol _{max}	Exhaust air DN (IG)	Supply air DN (IG)	kPA max.*	kPA max.*	P2 (in kW)	Rated current (A)	kW
S 0.5	0.35 m³/h	0.55 m³/h	20	20	275	248	0.37	1.00	1.1
S 1.5	0.56 m³/h	1.50 m³/h	20	20	415	235	0.37	1.00	1.1
S 3.5	1.51 m³/h	3.50 m³/h	32	25	593	347	1.1	2.50	1.1
S 6.5	3.51 m³/h	6.50 m³/h	40	32	488	307	1.5	3.15	1.5
S 11	6.51 m³/h	11.0 m³/h	50	40	500	322	2.2	4.45	2.2

THE PERFECT SOLUTION FOR EVERY NEED

AL-KO HYDROOPT® S AND AL-KO HYDROOPT® M

AL-KO **HYDROOPT® S** is the simply ingenious solution if you need a hydraulic station in the region of 0.35 to 11 m³/h that is simple to operate and install and that works reliably with the desired volume flow.

AL-KO **HYDROOPT® M** is the right choice if you need a hydraulic station that dynamically and autonomously optimises the brine flow rate and thus the efficiency. (Fig. right)



AL-KO HYDROOPT® M

TECHNICAL DATA

Model	Media volume flow		Connections	
	from vol _{min}	to vol _{max}	Exhaust air DN (IG)	Supply air DN (IG)
M 2	0.5 m³/h	1.9 m³/h	32	32
M 5	2.0 m³/h	4.9 m³/h	40	40
M 10	5.0 m³/h	9.9 m³/h	50	50
M 15	10.0 m³/h	14.9 m³/h	65	65
M 25	15.0 m³/h	25.0 m³/h	80	80

COMPARISON OF AL-KO HYDRO OPT® S AND AL-KO HYDRO OPT® M

Feature	AL-KO HYDRO OPT® S	AL-KO HYDRO OPT® M
Number of supply air units	1	1
Number of exhaust air units	1	3
Control system	Integrated in frequency converter (FC)	Switch cabinet with controller and FC
Power control with pump and valve	√	√
Power control dependent on air volume	Externally via central ventilation control system	Control via separate pressure sensor on the supply air fan
Enabling and trouble signal	√	√
Control 0-10 V	√	√
System pressure monitoring	Shutdown	Warning and shutdown
Anti-frosting control system	√	√
Bus connection	Modbus RTU, extra Bacnet MSTP card	Extra cards Bacnet IP, Modbus RTU, LON
Pump	Controllable, with air bleed valve	Controllable, with blockage protection and air bleed valve. Optional dual pump
Feed and return temperature indicator	√	√
Flow rate measurement	Mechanical	Electrical
Temperature display and antifreeze warning in feed		√
Pressure gauge	√	√
Dirt filter		√
Expansion vessel and safety valve	√	√
Filling and draining device	√	√

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Figures show configuration examples which are not available in every market.
Please ask your AL-KO advisor.

Provided by your AL-KO partner:

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