

Instructions for the BASIC

BCLA Air heater for hot water, Sizes 004–055

1. General

The BCLA Air heater for hot water is a finned-tube heat exchanger with copper tubes and profiled aluminium fins. The headers and water connections are made of steel. The connections have male threads.

The BCLA is designed for an operating pressure of max. 1 MPa.

The size 004–020 air heaters for hot water are available in two output variants and the size 027–055 air heaters in five output variants. These are referred to as output variant 1, 2, 3, 4 and 5. Output variant 1 generates the lowest output, whereas output variant 5 generates the highest.

All the air heaters are equipped with special plugged tapplings for venting and draining. The air heater has a separate plugged tapping for the probe of the anti-frosting monitor.

1.1 Specification

The version, size, etc. are specified in the delivery documents.

2. Installation

The coil must be purged of air before the unit is operated for the first time, hence an air purging valve must be fitted on the venting connection.

The coil should be installed for horizontal air flow. The air heaters for the size 004–014 units can also be installed for a vertical air flow. The tubes in the coil must always be horizontal to enable venting and drainage.

Connecting the water connections

The BCLA air heater should be connected to the piping as indicated by the arrows on the water connection pipes. Improper connection may give rise to lower output. Keep in mind that the connected pipework must not obstruct access to other unit sections for inspection. The deadweight and/or expansion forces of the connected pipework must also not be applied to the air heater. Every air heater should be equipped with its own pump to ensure proper circulation under all conditions and to minimise the risk of the coil bursting due to freezing.

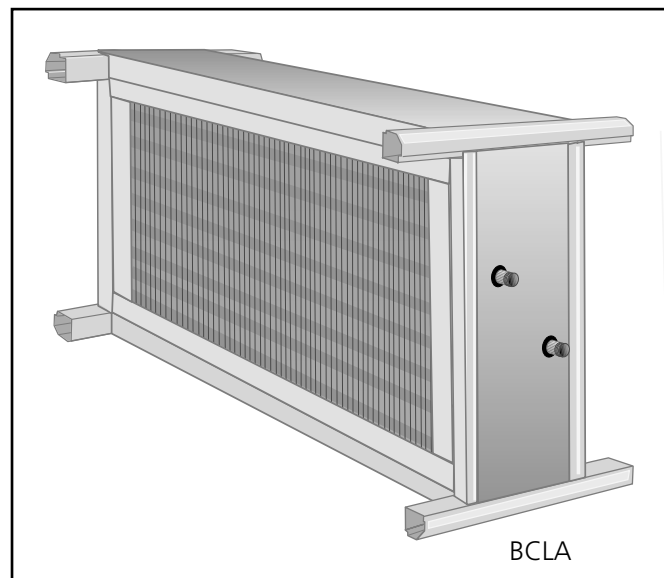
Connection to the pipework

Check that the deadweight and expansion forces of the piping are not applied to the liquid connections.

Suitable sealing tape or compound should be applied to the thread of the coil connections.

Risk of freezing

The BCLA air heater is equipped with an outlet for an insertion-type sensor. If a plant sensor is utilised, it should be located where it will sense the lowest water temperature, as a rule on the circuit tube where it runs into the header at the bottom.



The following recommendations for cleaning are applicable to the BCLA air heater:

The air heater should be checked every six months to determine whether cleaning is necessary.

The coil may only be cleaned by carefully blowing with compressed air in the direction parallel with the fins and against the ordinary direction of air flow, by vacuum-cleaning with a soft nozzle or by wet cleaning with water and/or cleaning solvent.

If a solvent is used, it must not contain ingredients that will corrode aluminium or copper. Swegon cleaning compound is recommended. This cleaning compound is sold by Swegon representatives and Swegon Service.

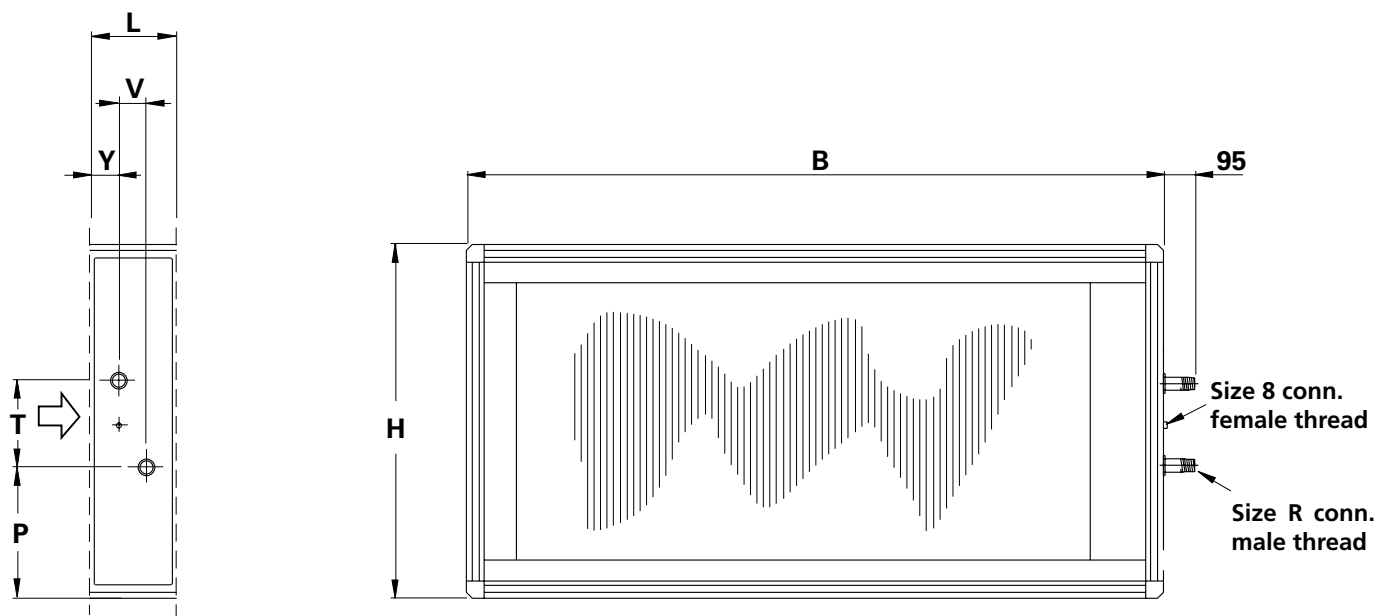
Adjacent unit sections should be protected before the cleaning work is begun.

While cleaning the coil, check whether the coil needs to be vented.

3. Maintenance

4. Technical data

Dimensions



BCLA 004-020

BCLA	B	H	L	Output variant 1						Output variant 2							
				P	R	T	V	Y	Wgt.*Std.	Wgt.*EI30	P	R	T	V	Y	Wgt.*Std.	Wgt.*EI30
004	1039	546	253	170	15	200	22	80	26	31	170	20	200	43	85	30	35
006	1259	656	253	225	15	200	22	80	33	39	225	25	200	43	85	41	47
009	1459	756	253	275	20	200	38	85	40	46	275	25	200	43	90	51	57
014	1759	906	253	350	25	200	45	90	55	63	350	32	200	45	90	68	76
020	1946	1026	253	410	25	200	45	90	67	75	410	40	200	60	95	85	93

BCLA 027-055

BCLA	B	H	L	Output variant 1						Output variant 2							
				P	R	T	V	Y	Wgt.*Std.	Wgt.*EI30	P	R	T	V	Y	Wgt.*Std.	Wgt.*EI30
027	2306	1206	353	450	25	300	50	95	87	101	450	30	300	60	100	107	121
035	2706	1406	353	500	30	300	60	135	113	129	500	40	300	65	140	136	152
055	3206	1656	353	675	50	300	75	105	153	173	675	50	300	75	105	186	206

Output variant 3							Output variant 4							Output variant 5						
P	R	T	V	Y	Wgt.*Std.	Wgt.*EI30	P	R	T	V	Y	Wgt.*Std.	Wgt.*EI30	P	R	T	V	Y	Wgt.*Std.	Wgt.*EI30
450	50	300	75	105	114	128	450	50	300	60	105	131	145	450	65	300	90	115	135	149
500	65	300	90	115	147	163	500	65	300	90	115	174	190	500	65	300	90	115	175	191
675	65	300	90	115	193	213	675	65	300	90	115	226	246	675	80	300	105	120	236	256

*) Weight excl. water.