blutree INNOVATIONS
A Division of Indoor Energy Solutions 144 Inc.

Submittal Data Sheet
SAM Q-LARR Fan Coil

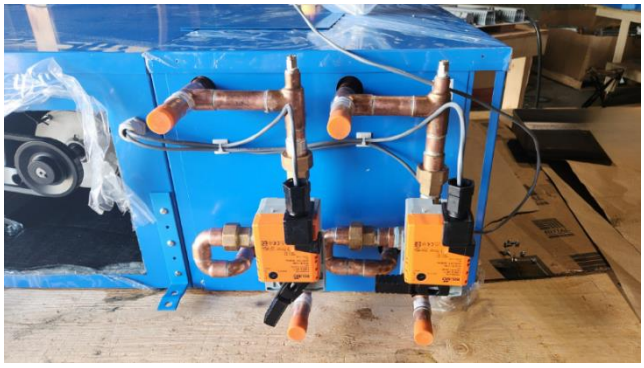
OVERVIEW AND FEATURES

The BluTree Q-Larr series can be supplied with 1 or 2 coils and has an inline fan for a maximum airflow of up to 250 cfm.

Cabinet:	20-gauge G90 cold rolled steel with durable powder-coated blue paint.
Orientation:	Left-handed or right-handed units available.
Controls:	The Q-LARR units are available with the following 3 options: • DDC box mounted on the fan coil and connected to a central system, • A localized DDC system through a wall-mounted MACH ProView, • A programmable wall-mounted thermostat. The DDC system will allow for modulating control on the factory-installed Belimo valve(s) controlling the flow to the coil(s). The programmable thermostat option will only provide ON/OFF control of the valves. All three control options allow for ON/OFF control of the blower(s). The fan motor includes a speed controller to be used for the initial setup of the unit.
Motor Drive:	Motor contained within a silencing case with a 6” diameter supply air feed.
Coils:	Coils are factory-sized individually to meet the specific load of the area served by the fan coil. Typical: 3/8” copper tubing, with 8 fins per inch aluminum fins.
Filter:	3-way accessible filter rack at bottom or either side of unit.
Condensate Pump: (site optional)	Externally mounted. Alternatively, the units can be gravity-drained into nearby drainage piping using a P-trap near the unit (within 1’).
UV Light:	Air-purifying UV light is available with an onboard electrical outlet inside the control box. UV lights are field mounted in the return air ducting according to the UV manufacturer's specifications.
Mounting:	Fan coils can be mounted close to the ceiling. The optional mounting brackets are low to allow for vibration isolators. The mounting brackets installed on the sides can be used to support the unit or Unistrut channels can be used under the unit.
Drain Pan:	The internal drain pan slopes to a central point directly through the bottom to a barbed fitting directed towards the coil access side of the unit.
Serviceability:	Q-Larr units are built with maintenance access from the bottom only.
CSA Certification:	CSA inspected and certified.
Warranty:	All BluTree Innovation products come with a 5-year warranty.

COIL PIPING ASSEMBLY

Factory-installed piping and valves are available for 2-pipe and 4-pipe assembly options. Factory-installed piping assemblies are factory-tested. Field piping connections face the front of the unit, as shown in the photos below, which show a 2-coil, 4-pipe arrangement. Labels will be included to clearly identify the supply/return hot/cold water connections.



PERFORMANCE & SPECIFICATIONS

Data provided is a range sample based on the conditions indicated.

Q-LARR Series Nominal Performance Data: Site CFM tuned for maximum performance within spaces up to 450 sq. ft.

Electrical Data						Weight
Electrical Supply	**Current (A)**	**Power (W)**				**45**
120/1/60	0.54	36				
CFM	**Air static (“)**	**Ent air (F) DB / WB**	**Cool Cap @ (45F) (7.2C) (MBH)**	**leaving air (F) DB / WB**	**Water Flow (GPM)**	**Water Static (ft WG)**
150	0.07”	80 / 67	3.0	63.3/60.9	0.5	0.08
150	0.07”	80 / 67	4.16	60.3/58.6	1.5	0.63
200	0.14”	80 / 67	3.3	65.5/62.0	0.5	0.08
200	0.14”	80 / 67	4.5	62.3/60.1	1.5	0.63
CFM	**Air static (“)**	**Ent Air (F)**	**Cool Cap @ (37F) (2.8C) (MBH)**	**Leaving air (F)**	**Water Flow (GPM)**	**Water Static (ft WG)**
150	0.05”	80/67	3.9	60.9/59	0.5	0.07
150	0.05”	80/67	5.4	51/55.6	1.5	0.60
200	0.07”	80/67	4.2	63/60	0.5	0.07
200	0.07”	80/67	5.9	59.6/57.7	1.5	0.60
CFM	**Air static (“)**	**Ent Air (F)**	**Heat Cap @ (115F) (46.1C) (MBH)**	**Leaving air (F)**	**Water Flow (GPM)**	**Water Static (ft WG)**
150	0.04”	55	4.9	85.9	0.5	0.07
150	0.04”	55	6.1	92	1.5	0.60
200	0.07”	55	5.4	79.9	0.5	0.07
200	0.07”	55	7.1	87.7	1.5	0.60

Decibel Levels			
CFM	**Db next to fan**	**Db @ 6’**	**Sones @ 6’**
150	48	24	<1
200	55	32	1.3

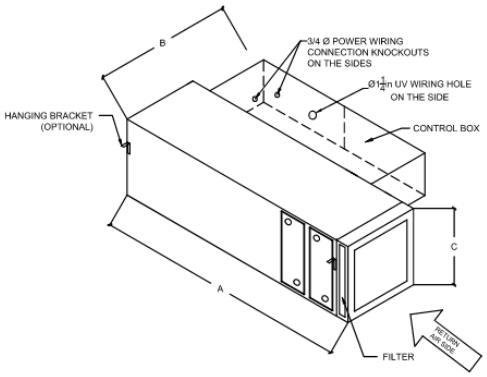
Coil performance for heating or cooling is dependent on the relationship between airflow, water temp and GPM.

Options		
Coils – 1 or 2	Right-Handed	UV lights
Factory attached brackets	Left-Handed (Default)	Coil piping assembly with 3-way diversion valve(s)

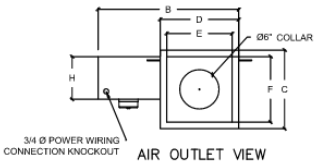
DIMENSIONS

Unit	A		B		C		D		E		F	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
Qlarr	36.0	914	21.5	546	12.0	305	12.0	305	10.0	254	10.0	254
	G		H		J		Weight (No Coils)		Single Coil Weight			
	in	mm	in	mm			Lbs	kG	Lbs	kG		
	28.8	732	6.5	165	18.0	457	35.0	15.9	10.0	4.5		

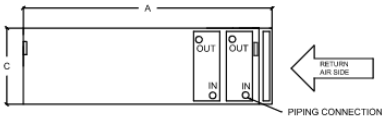
Q-LARR



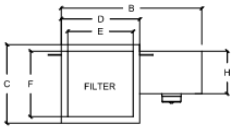
LEFT HANDED ISOMETRIC VIEW



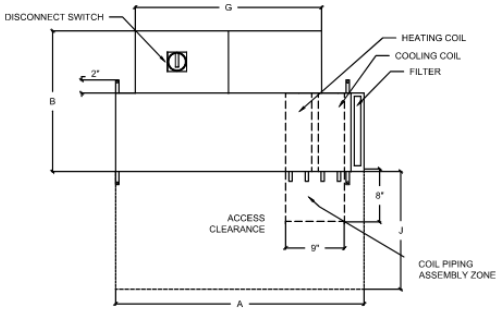
AIR OUTLET VIEW



SIDE VIEW

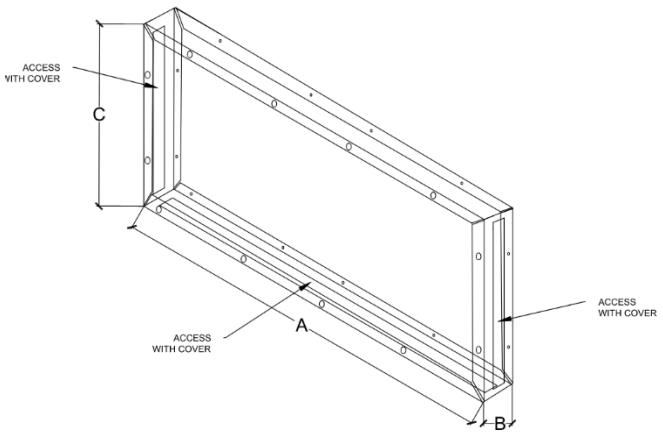


AIR INLET VIEW



BOTTOM VIEW

NOTE: LOOKING AT THE FACE OF THE FILTER A RIGHT HANDED UNIT WOULD HAVE THE CONTROL BOX AND PIPING TO THE RIGHT OF THE FILTER



FILTER RACK DETAIL

The 3-way filter rack provides flexibility for filter replacement, allowing filters to be replaced from the bottom or either side of the fan coil.

Unit	A		B		C	
	in	mm	in	mm	in	mm
Q-LARR	12.0	305	2.5	64	12.0	305