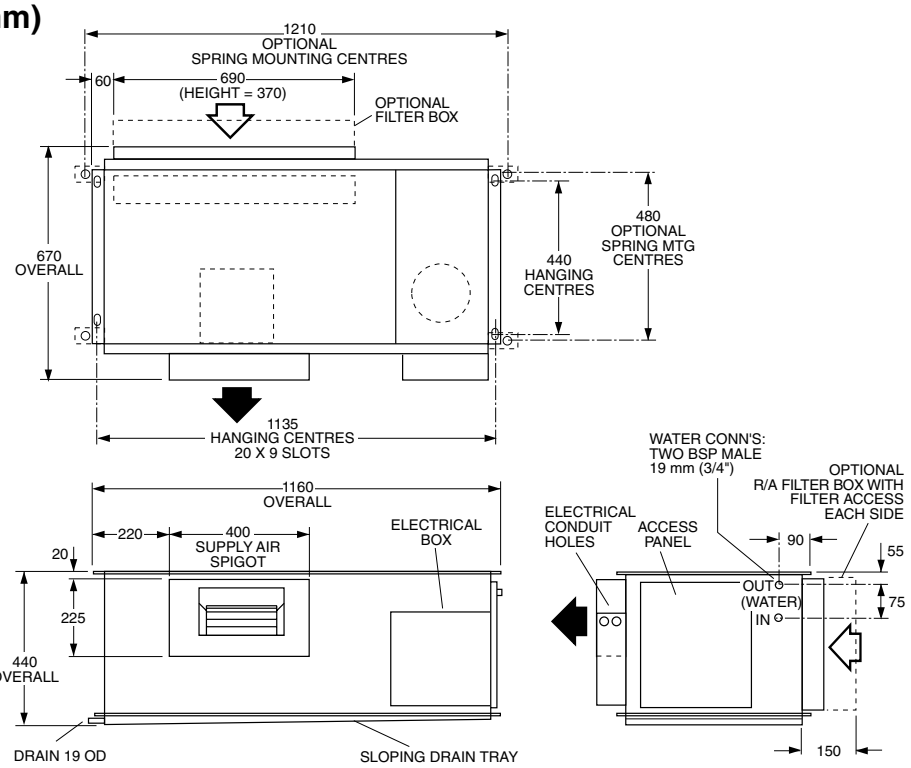
HWP 117

DATA SHEET

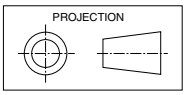
Ducted Water Cooled R410A Packaged Air Conditioners

Dimensions (mm)

Not to Scale



HWP 117



Net Weight 105 kg

COOLING CAPACITY (kW)

AIR FLOW RATE l/s	COIL E.A.T. W.B. °C	COIL E.A.T. D.B. °C	LEAVING WATER TEMPERATURE (L.W.T.) °C																							
			25				30				35				40				45				50			
			T	S	FL	HR	T	S	FL	HR	T	S	FL	HR	T	S	FL	HR	T	S	FL	HR	T	S	FL	HR
600	17	23	12.2	9.4	0.66	14.1	11.6	8.8	0.66	13.7	11.1	8.3	0.66	13.5	10.6	8.1	0.66	13.1	10.4	7.8	0.66	13.0	10.3	7.1	0.66	13.0
	19	27	13.0	9.5	0.66	15.0	12.9	9.3	0.66	15.1	(11.8)	9.2	0.66	14.1	11.5	8.8	0.66	14.1	10.6	8.6	0.66	13.1	10.4	8.5	0.66	13.1
	21	31	13.9	10.9	0.66	15.6	13.8	10.9	0.66	15.9	13.7	10.8	0.66	16.1	12.5	10.7	0.66	15.0	12.0	10.5	0.66	14.6	11.3	10.5	0.66	14.0

T = Total Capacity (kW)
FL = Water Flow (l/s)
S = Sensible Capacity (kW)
E.A.T. = Entering Air Temperature (°C)
HR = Heat Rejection (kW)
( ) = Nominal Capacity (kW)

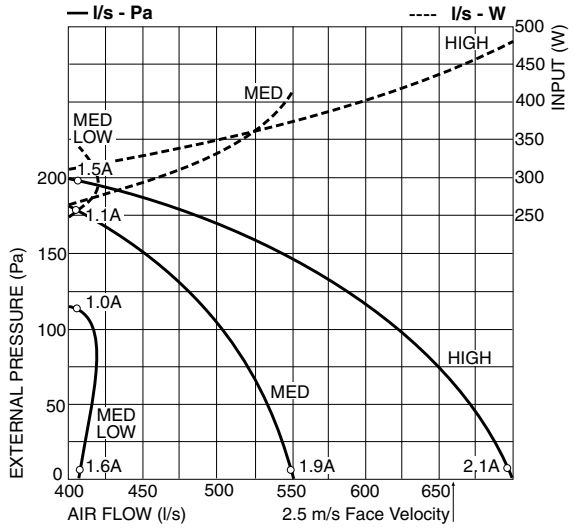
NOTE: Capacities are **gross** and do not include allowance for fan motor heat loss. For fan motor heat loss refer to Air Handling Performance. Water flow and cooling capacity based on 5 °C water temp. difference.

HEATING CAPACITY (kW)
HW✳R Reverse Cycle version

MODEL	WATER FLOW RATE l/s	COIL E.A.T. D.B. °C	LEAVING WATER TEMPERATURE (L.W.T.) °C											
			12.5				15.5				18.5			
			HC	HAb	EWT	INPT	HC	HAb	EWT	INPT	HC	HAb	EWT	INPT
HWP 117R	0.65	18	10.5	7.8	16.2	2.3	11.3	8.4	19.5	2.4	12.1	9.1	22.8	2.5
		21	10.5	7.6	16.2	2.5	(11.2)	8.2	19.5	2.6	12.1	8.9	22.8	2.7
		25	10.4	7.3	16.2	2.7	11.2	8.0	19.5	2.8	12.0	8.7	22.8	2.9

HC = Heating Capacity (kW)
HAb = Heat Absorbed (kW)
( ) = Nominal Capacity (kW)
EWT = Entering Water Temperature (°C) (Minimum required 17°C)
INPT = Compressor Input (kW)
E.A.T. = Entering Air Temperature (°C)

AIR HANDLING PERFORMANCE
Without Filter



FILTER (clean)	Coil Face Velocity (m/s)	1.5	2.0	2.5
	Pressure Loss (Pa)	5	9	13

QUICK REFERENCE HWP 117

Electrical Input (Cooling)	3.08 kW
E.E.R. (Cooling)	3.69
Running Amps/ph. (Total)	7.0 / 4.9 / 5.5
Fan Motor Full Load Amps	1.8
Electrical Supply Required	3 ph. 380-415V ±10% a.c. 50 Hz
Recom'd External Fuse Size	20 A
Refrigerant	HFC-410A (R410A)
Minimum Water Flow	0.66 l/s
Water Coil Pressure Drop	62 kPa (9 psi)
Filter (polypropylene net)	optional
Electric Heat Option	9 kW

Note

1. In tropical (high humidity) conditions care must be taken to select an air flow which gives a suitable coil face air velocity, to prevent water carry over.
2. For applications with low resistance be sure not to exceed the fan motor full load amps.
3. Applications using full or high proportions of fresh air should be referred to **temperzone** engineering office to establish the correct selection of units.

SOUND LEVELS

Note: SPL measured to JIS 8616 (1m from source in an anechoic chamber)

SUPPLY AIR + INSULATED DUCT

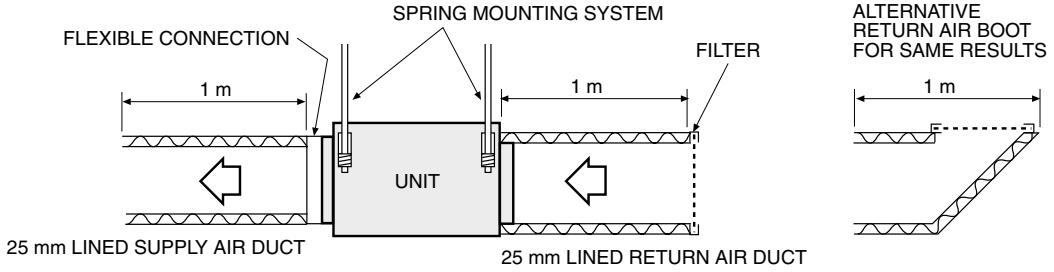
MODEL	FAN SPEED	AIR FLOW l/s	SOUND PRESSURE LEVELS (SPL) dB(A)	SOUND POWER LEVELS (SWL) dB						
				SWL	OCTAVE BAND FREQ. Hz					
				dB(A)	125	250	500	1 k	2 k	4 k
HWP 117	LOW	300	44	55	58	54	55	49	38	28
	MED/LOW	420	46	57	61	54	56	52	41	30
	MED	530	47	58	60	57	57	54	43	32
	HIGH	650	49	60	62	57	59	57	46	35

SUPPLY AIR OUTLET

MODEL	FAN SPEED	AIR FLOW l/s	SOUND PRESSURE LEVELS (SPL) dB(A)	SOUND POWER LEVELS (SWL) dB						
				SWL	OCTAVE BAND FREQ. Hz					
				dB(A)	125	250	500	1 k	2 k	4 k
HWP 117	LOW	300	48	55	63	54	53	50	46	41
	MED/LOW	420	52	60	64	58	58	55	51	47
	MED	530	59	67	68	65	65	61	59	56
	HIGH	650	63	71	72	71	68	66	63	61

CASE BREAKOUT + RETURN AIR

SOUND PRESSURE LEVELS (SPL) dB(A)	SOUND POWER LEVELS (SWL) dB						
	SWL	OCTAVE BAND FREQ. Hz					
	dB(A)	125	250	500	1 k	2 k	4 k
56	62	71	60	62	53	51	49
56	63	70	62	62	56	53	50
59	66	72	65	65	59	57	52
61	68	74	68	67	62	59	55



Sound Pressure Levels (SPL) Within A Room

Deduct the room absorption effect below from the Sound Power Levels (SWL) above to obtain Sound Pressure Levels within a room. Note: Occupant at least 1.5 m from sound source.

ROOM TYPE	OCTAVE BAND FREQ. Hz					
	125	250	500	1k	2k	4k
	ROOM ABSORPTION EFFECT					
SOFT	4	8	11	11	11	11
MEDIUM	3	7	8	9	9	9
HARD	0	1	3	4	4	5

NOTE
The manufacturer reserves the right to change specifications at any time without notice or obligation. Certified data available on request.