

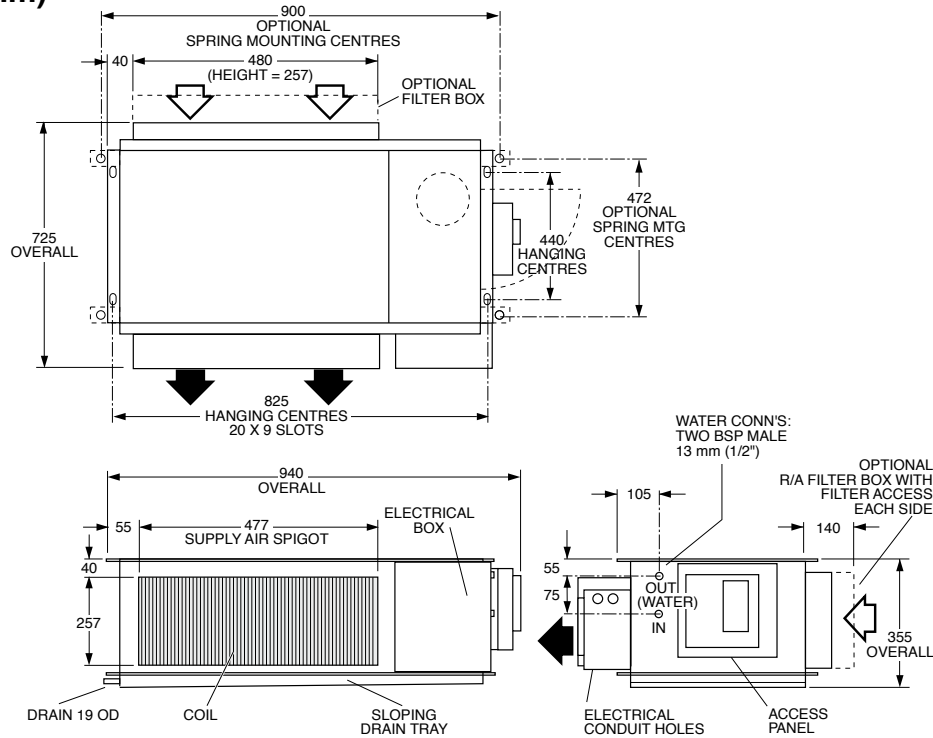
HWP 47KY (c/w EC Motor)

DATA SHEET

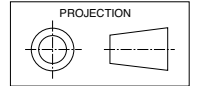
Ducted Water Cooled R410A Packaged Air Conditioners

Dimensions (mm)

Not to Scale



HWP 47KY



Net Weight 72 kg

COOLING CAPACITY (kW)

AIR FLOW RATE l/s	COIL E.A.T.		LEAVING WATER TEMPERATURE (L.W.T.) °C																							
	W.B. °C	D.B. °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				
225	17	23	4.9	3.7	0.27	5.7	4.6	3.5	0.27	5.6	4.4	3.3	0.27	5.4	4.2	3.2	0.27	5.3	4.2	3.1	0.27	5.3	4.1	2.8	0.27	5.2
	19	27	5.2	3.8	0.27	6.1	5.1	3.7	0.27	6.1	4.7	3.7	0.27	5.7	4.6	3.5	0.27	5.7	4.2	3.4	0.27	5.3	4.2	3.4	0.27	5.3
	21	31	5.5	4.4	0.27	6.3	5.5	4.3	0.27	6.4	5.5	4.3	0.27	6.5	5.0	4.3	0.27	6.1	4.8	4.2	0.27	5.9	4.5	4.2	0.27	5.7

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

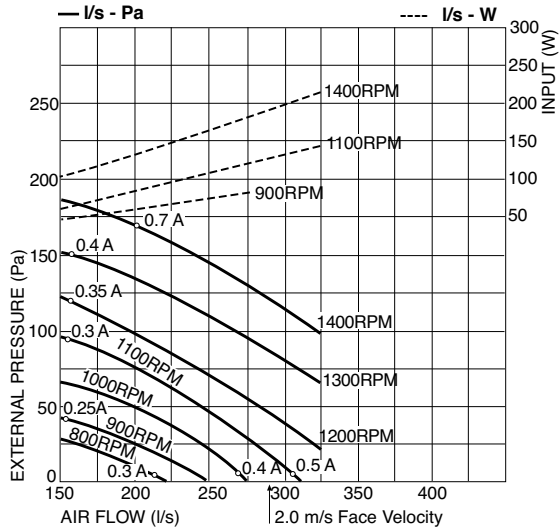
MODEL	WATER FLOW RATE l/s	COIL E.A.T. D.B. °C	LEAVING WATER TEMPERATURE (L.W.T.) °C											
			12.5				15.5				18.5			
			HC	HAb	EWT	INPT	HC	HAb	EWT	INPT	HC	HAb	EWT	INPT
HWP 47R	0.2	18	4.1	3.0	16.0	1.0	4.4	3.2	19.3	1.1	4.7	3.5	22.5	1.1
		21	4.1	2.9	16.0	1.1	4.4	3.1	19.2	1.1	4.7	3.4	22.5	1.2
		25	4.1	2.8	16.0	1.2	4.4	3.0	19.2	1.2	4.7	3.3	22.5	1.3

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)	15	25	40

QUICK REFERENCE

HWP 47KY

Net Cooling Capacity *	4.41 kW
Electrical Input (Cooling)	1.22 kW
E.E.R. (Cooling)	3.61
EC Motor Range (standard)	800–1100 RPM
Max. Fan Speed	1500 RPM
Running Amps (Total) Rating/Max.	5.4 / 8.2
Electrical Supply Required	1 ph. 220-240V ±10% a.c. 50 Hz
Refrigerant	HFC-410A (R410A)
Minimum Water Flow	0.2 l/s
Water Coil Pressure Drop	38 kPa (5.5 psi)
Filter (EU2/G2 rated)	optional
Electric Heat Option	2 kW

* At AS/NZS 3823 conditions.

Note

- 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.
- 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

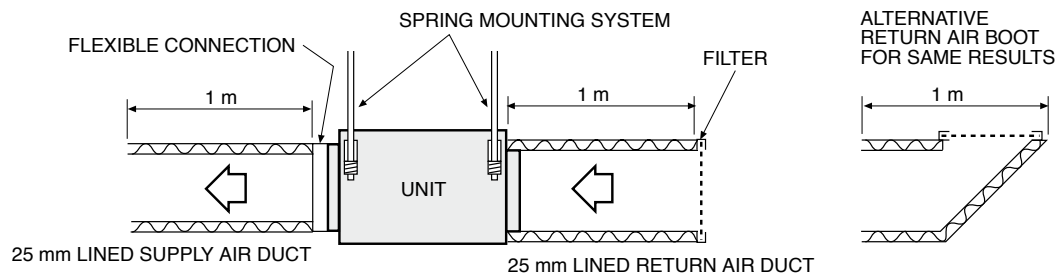
MODEL	FAN SPEED	AIR FLOW l/s	SOUND PRESSURE LEVELS (SPL) dB(A)	SOUND POWER LEVELS (SWL) dB						
				SWL dB(A)	OCTAVE BAND FREQ. Hz					
					125	250	500	1 k	2 k	4 k
HWP 47	800 RPM	160	38	44	54	46	42	38	30	22
	950 RPM	190	39	46	53	49	45	40	31	26
	1100 RPM	230	43	50	55	51	49	45	34	31

SUPPLY AIR OUTLET

MODEL	FAN SPEED	AIR FLOW l/s	SOUND PRESSURE LEVELS (SPL) dB(A)	SOUND POWER LEVELS (SWL) dB						
				SWL dB(A)	OCTAVE BAND FREQ. Hz					
					125	250	500	1 k	2 k	4 k
HWP 47	800 RPM	160	48	51	58	57	55	51	46	39
	950 RPM	190	50	54	59	58	57	53	48	41
	1100 RPM	230	51	58	60	59	58	55	49	42

CASE BREAKOUT + RETURN AIR

MODEL	FAN SPEED	AIR FLOW l/s	SOUND PRESSURE LEVELS (SPL) dB(A)	SOUND POWER LEVELS (SWL) dB						
				SWL dB(A)	OCTAVE BAND FREQ. Hz					
					125	250	500	1 k	2 k	4 k
HWP 47	800 RPM	160	46	54	59	51	49	51	43	39
	950 RPM	190	47	55	59	54	51	51	45	40
	1100 RPM	230	48	56	60	56	53	52	48	42



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.