

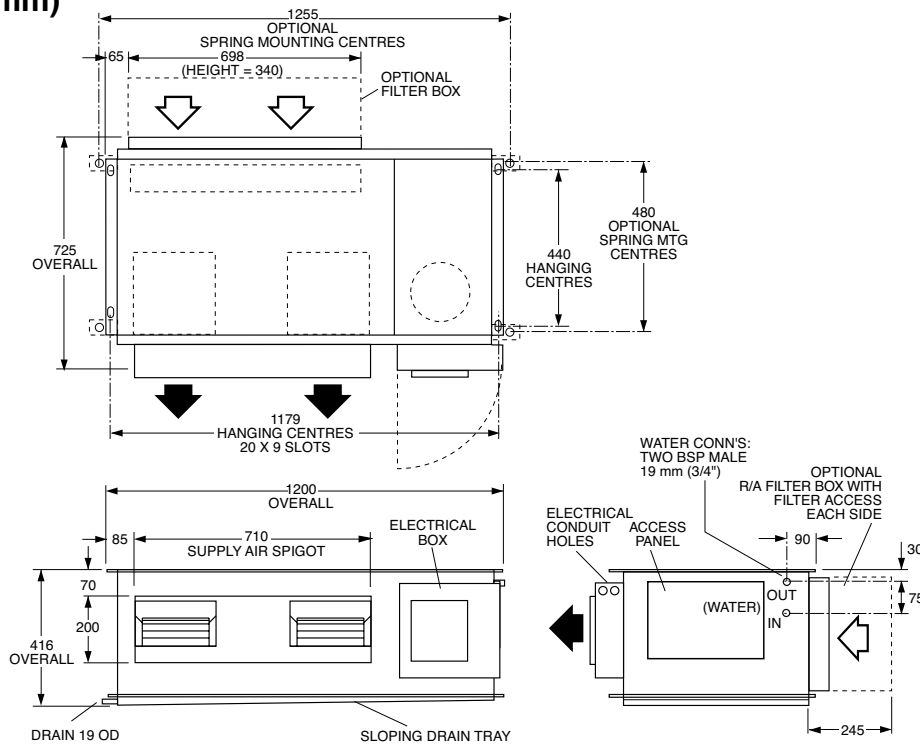
HWP 77KY (c/w EC Motor)

DATA SHEET

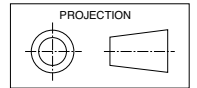
Ducted Water Cooled R410A Packaged Air Conditioners

Dimensions (mm)

Not to Scale



HWP 77KY



Net Weight 117 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				
490	17	23	8.2	6.3	0.50	9.7	7.8	5.9	0.50	9.4	7.4	5.6	0.50	9.2	7.1	5.4	0.50	8.9	7.0	5.2	0.50	8.9	6.9	4.7	0.50	8.9
	19	27	8.7	6.3	0.50	10.3	8.6	6.2	0.50	10.3	7.9	6.2	0.50	9.7	7.7	5.9	0.50	9.6	7.1	5.8	0.50	9.0	7.0	5.7	0.50	9.0
	21	31	9.3	7.3	0.50	10.7	9.2	7.3	0.50	10.9	9.2	7.3	0.50	11.0	8.4	7.2	0.50	10.3	8.0	7.1	0.50	10.0	7.6	7.0	0.50	9.6

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 77R	0.5	18	6.4	4.7	15.5	1.5	6.9	5.1	18.7	1.5	7.4	5.6	21.9	1.6
		21	6.4	4.6	15.4	1.6	6.8	5.0	18.7	1.6	7.3	5.4	21.9	1.7
		25	6.3	4.4	15.4	1.7	6.8	4.8	18.7	1.8	7.3	5.3	21.9	1.8

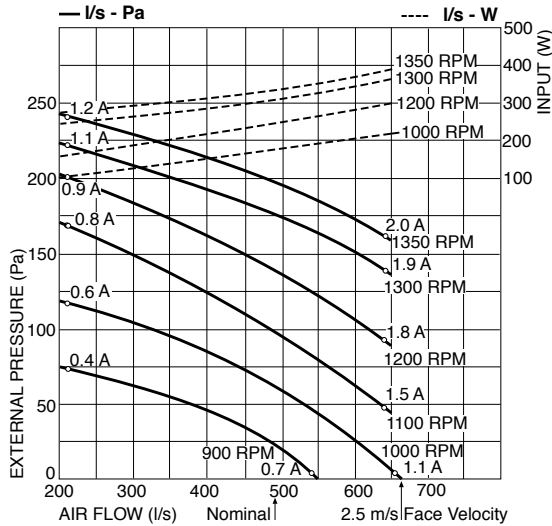
HC = Heating Capacity (kW)
HAb = Heat Absorbed (kW)

EWT = Entering Water Temperature (°C) (Minimum required 12°C)
INPT = Compressor Input (kW)
E.A.T. = Entering Air Temperature (°C)

○ = Nominal Capacity (kW)

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 77KY

Net Cooling Capacity *	7.75 kW
Electrical Input (Cooling)	2.2 kW
E.E.R. (Cooling)	3.52
EC Motor Range (standard)	900–1200 RPM
Max. Fan Speed	1350 RPM
Running Amps (Total) Rating/Max.	9.6 / 13.1 / 22**
Electrical Supply Required	1 ph. 220-240V ±10% a.c. 50 Hz
Refrigerant	HFC-410A (R410A)
Minimum Water Flow	0.5 l/s
Water Coil Pressure Drop	53 kPa (6 psi)
Filter (EU2/G2 rated)	optional
**Electric Heat Option	4 kW

* At AS/NZS 3823 conditions.

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. 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

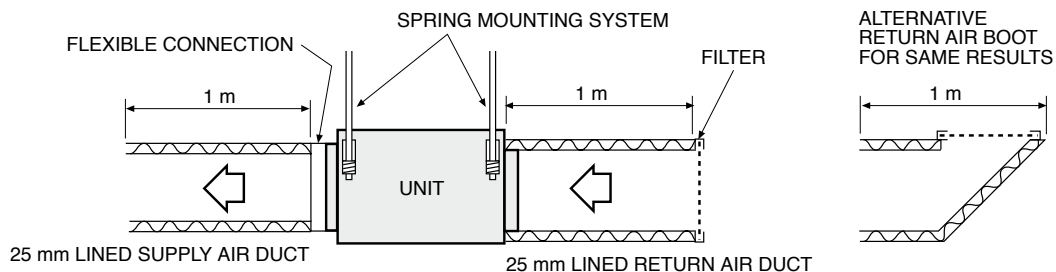
MODEL	FAN SPEED	SOUND PRESSURE LEVELS (SPL) dB(A)	SOUND POWER LEVELS (SWL) dB						
			SWL dB(A)	OCTAVE BAND FREQ. Hz					
				125	250	500	1 k	2 k	4 k
HWP 77	1000 RPM	43	54	58	56	52	48	50	30
	1200 RPM	49	58	63	61	55	52	45	34
	1350 RPM	50	61	68	63	59	56	48	35

SUPPLY AIR OUTLET

MODEL	FAN SPEED	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 77	1000 RPM	49	60	60	58	55	55	55	48
	1200 RPM	57	66	65	63	60	61	60	54
	1350 RPM	59	70	69	67	65	65	64	58

CASE BREAKOUT + RETURN AIR

MODEL	FAN SPEED	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 77	1000 RPM	50	60	62	58	59	54	51	45
	1200 RPM	55	63	64	63	57	58	56	50
	1350 RPM	57	66	68	65	61	62	59	54



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.