

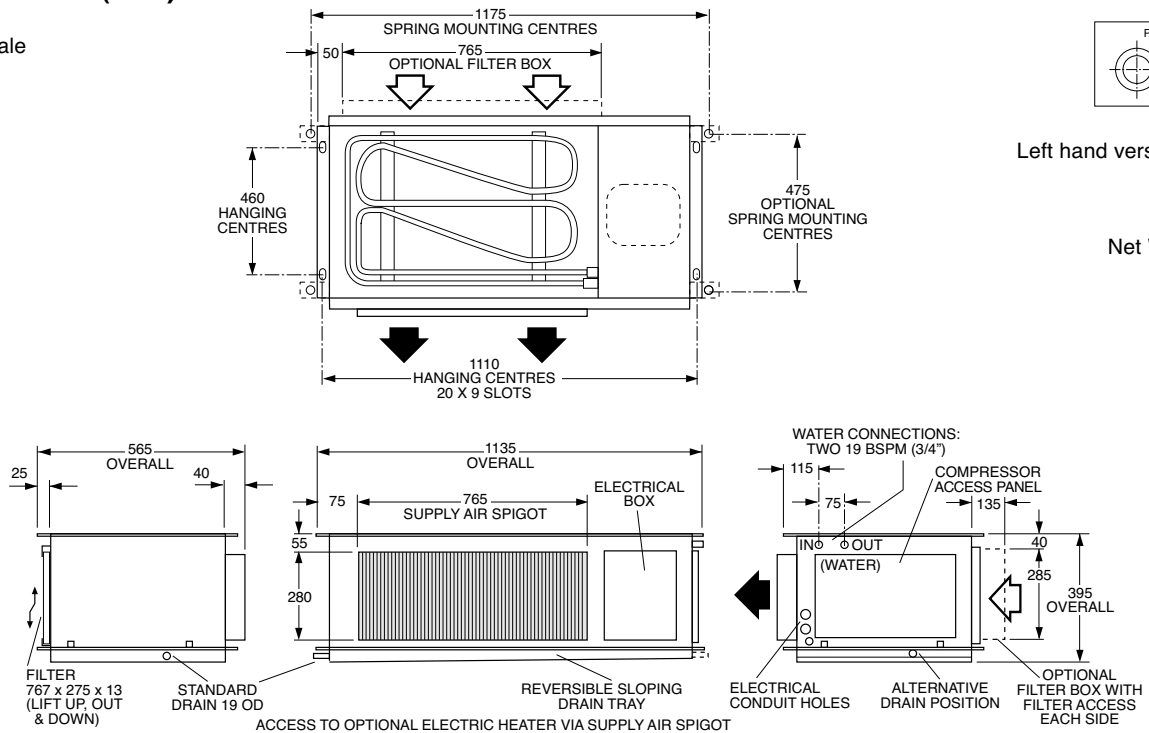
HWP 78

DATA SHEET

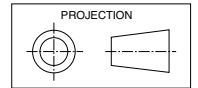
Ducted Water Cooled Packaged Air Conditioners

Dimensions (mm)

Not to Scale



HWP 78



Left hand version available

Net Weight 97 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				
470	17	23	7.8	5.6	0.38	9.1	7.5	5.5	0.37	9.2	7.1	5.4	0.36	9.0	6.8	5.2	0.34	8.7	6.6	5.1	0.35	8.7	6.5	5.1	0.35	8.7
	19	27	8.4	6.6	0.41	10.1	8.1	6.4	0.40	9.9	7.8	6.3	0.39	9.6	7.3	6.1	0.38	9.4	7.2	6.1	0.38	9.3	7.0	6.0	0.38	9.3
	21	31	9.1	7.5	0.43	10.8	8.7	7.3	0.42	10.5	8.3	7.2	0.41	10.3	7.9	7.0	0.40	10.0	7.8	7.0	0.40	10.0	7.6	6.9	0.40	10.0

T = Total Capacity (kW)

S = Sensible Capacity (kW)

HR = Heat Rejection (kW)

FL = Water Flow (l/s)

E.A.T. = Entering Air Temperature (°C)

○ = 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 5.5 °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 78R	0.39	18	7.1	5.6	15.9	1.5	7.8	6.1	19.3	1.6	8.4	6.7	22.6	1.7
		21	6.9	5.5	15.8	1.5	7.8	6.1	19.2	1.6	8.3	6.6	22.6	1.7
		25	6.9	5.4	15.8	1.6	7.6	5.9	19.1	1.7	8.3	6.5	22.5	1.8

HC = Heating Capacity (kW)

EWT = Entering Water Temperature (°C) (Minimum required 17°C)

HAb = Heat Absorbed (kW)

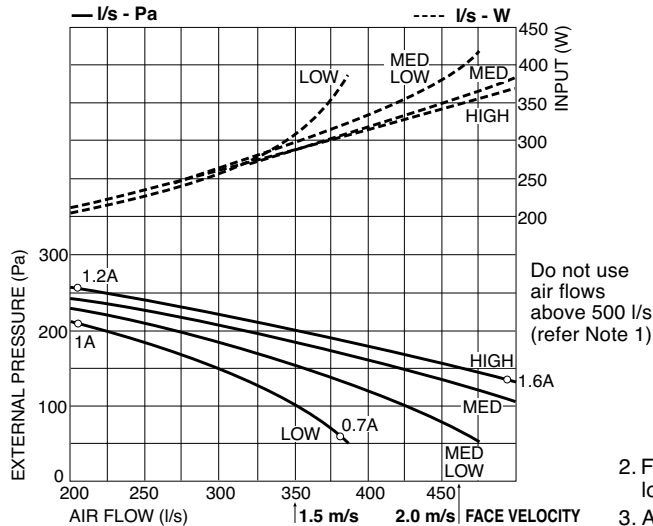
INPT = Compressor Input (kW)

○ = Nominal Capacity (kW)

E.A.T. = Entering Air Temperature (°C)

AIR HANDLING PERFORMANCE

Without Filter



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.

QUICK REFERENCE

HWP 78

Electrical Input (Cooling)	2.3 kW
E.E.R. (at AS/NZS 3823)	3.25
Running Amps (Total)	11
Fan Motor Full Load Amps	3
Electrical Supply Required	1 ph. 200-252V ±10% a.c. 50 Hz
Recom'd External Fuse Size	25 A
Refrigerant	HCFC-22 (R22)
Nominal (Minimum) Water Flow	0.39 l/s
Water Pressure Drop (nom./+15%)	35 kPa / 46 kPa
Filter (EU2 rated)	supplied
Electric Heat Option	4 kW

- For applications with low resistance be sure not to exceed the fan motor full load amps.
- Applications using full or high proportions of fresh air should be referred to **temperzone** engineering office to establish the correct selection of units.
- Ideally, air filters should be located in the ceiling return air grille/s and not on the unit, thereby reducing resistance and improving access. The total filter area should be twice the cross sectional area of the HWP return air spigot.

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
HWP 78	LOW	390
	MED LOW	390
	MED	460
	HIGH	480

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	
46	56	60	61	54	49	43	37	
49	59	60	62	57	52	47	42	
50	60	61	63	58	54	48	45	
51	61	61	64	59	54	49	46	

CASE B/OUT + RET. AIR + INS. DUCT

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	
53	62	70	68	57	55	48	45	
53	62	70	68	57	55	48	45	
54	63	71	68	59	56	49	45	
54	63	71	68	59	56	49	45	

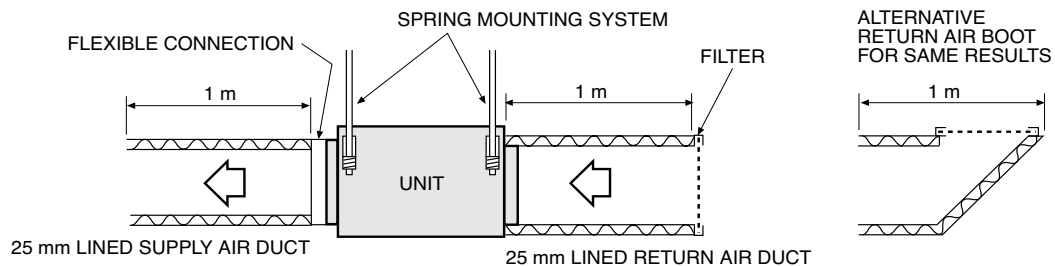
SUPPLY AIR OUTLET

MODEL	FAN SPEED	AIR FLOW l/s
HWP 78	LOW	390
	MED LOW	390
	MED	460
	HIGH	480

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	
54	64	66	65	61	59	56	50	
57	67	68	67	64	62	59	55	
59	69	69	69	65	64	61	57	
59	69	69	70	66	63	61	56	

CASE BREAKOUT + RETURN AIR

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	
55	64	68	68	61	59	53	50	
55	64	68	68	61	59	53	50	
56	65	69	68	62	60	54	51	
56	65	69	68	62	60	54	51	



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.