

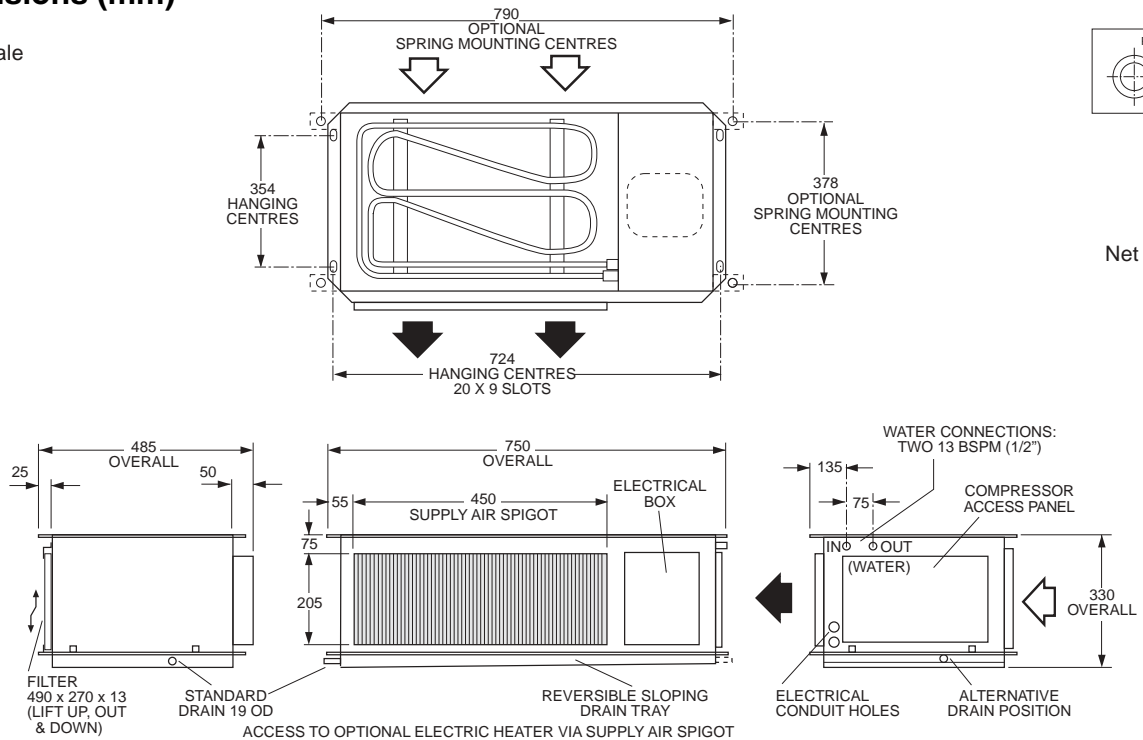
HWP 33

DATA SHEET

Ducted Water Cooled Packaged Air Conditioners

Dimensions (mm)

Not to Scale



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				
180	17	23	3.3	2.2	0.16	4.0	3.1	2.1	0.16	3.9	3.0	2.1	0.15	3.8	2.9	2.0	0.15	3.8	2.8	2.0	0.15	3.8	2.7	2.0	0.15	3.8
	19	27	3.5	2.5	0.17	4.3	3.4	2.5	0.17	4.2	3.3	2.4	0.16	4.1	3.1	2.3	0.16	4.0	3.0	2.3	0.16	4.0	2.9	2.3	0.16	4.0
	21	31	3.8	2.8	0.18	4.5	3.6	2.8	0.18	4.4	3.5	2.7	0.17	4.4	3.3	2.7	0.17	4.2	3.2	2.6	0.17	4.2	3.1	2.6	0.17	4.2

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 5.5 °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 33R	0.16	18	3.2	2.5	16.2	0.8	3.5	2.7	19.5	0.85	3.8	2.9	22.8	0.9
		21	3.2	2.4	16.1	0.8	3.5	2.6	19.4	0.89	3.8	2.8	22.7	1.0
		25	3.2	2.4	16.0	0.9	3.5	2.6	19.3	0.95	3.8	2.8	22.6	1.0

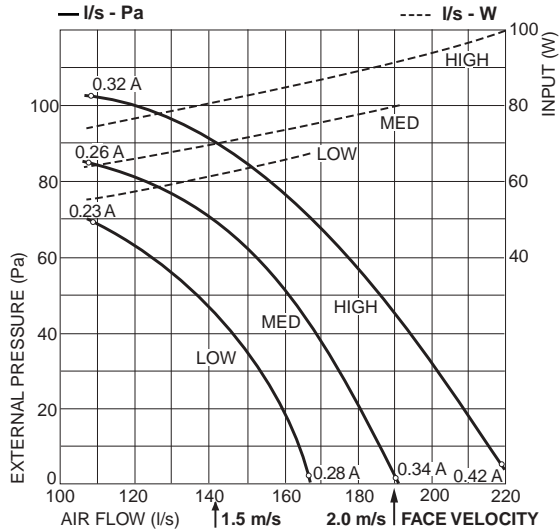
HC = Heating Capacity (kW)
HAb = Heat Absorbed (kW)

EWT = Entering Water Temperature (°C) (Minimum required 17°C)
INPT = Compressor Input (kW)
E.A.T. = Entering Air Temperature (°C)

○ = Nominal Capacity (kW)

AIR HANDLING PERFORMANCE

Without Filter



EU2 rated Filter	Coil Face Velocity	1.5 m/s	2.0 m/s
	Pressure Loss	18 Pa	30 Pa

QUICK REFERENCE

HWP 33

Electrical Input (Cooling)	0.9 kW
E.E.R. / C.O.P. (Cooling)	12.5 / 3.7
Running Amps (Total)	4.0
Fan Motor Full Load Amps	0.45
Electrical Supply Required	1 ph. 200-252V ±10% a.c. 50 Hz
Recom'd External Fuse Size	15 A
Refrigerant	HCFC-22 (R22)
Nominal (Minimum) Water Flow	0.16 l/s
Water Pressure Drop (nom./+15%)	20 kPa / 25 kPa
Filter (EU2 rated)	supplied
Electric Heat Option	2 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 dB(A)	OCTAVE BAND FREQ. Hz					
					125	250	500	1 k	2 k	4 k
HWP 33	LOW	140	27	37	42	39	36	28	24	19
	MED	155	29	39	41	43	39	30	24	17
	HIGH	180	32	37	37	46	42	34	28	19

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

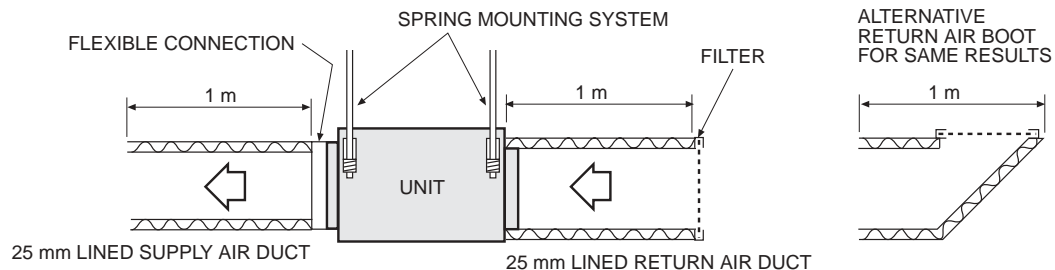
MODEL	FAN SPEED	AIR FLOW l/s	SOUND PRESSURE LEVELS (SPL) dB(A)	SOUND POWER LEVELS (SWL) dB						
				SWL dB(A)	OCTAVE BAND FREQ. Hz					
					125	250	500	1 k	2 k	4 k
HWP 33	LOW	140	41	51	57	52	46	45	41	41
	MED	155	42	51	59	54	47	45	41	40
	HIGH	180	43	53	60	56	48	46	41	40

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 33	LOW	140	42	52	53	52	48	45	45	39
	MED	155	43	53	53	50	47	46	41	
	HIGH	180	45	55	57	55	52	48	48	44

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 33	LOW	140	43	53	55	54	50	47	44	41
	MED	155	44	54	57	56	52	49	44	41
	HIGH	180	46	56	57	58	54	51	45	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.