

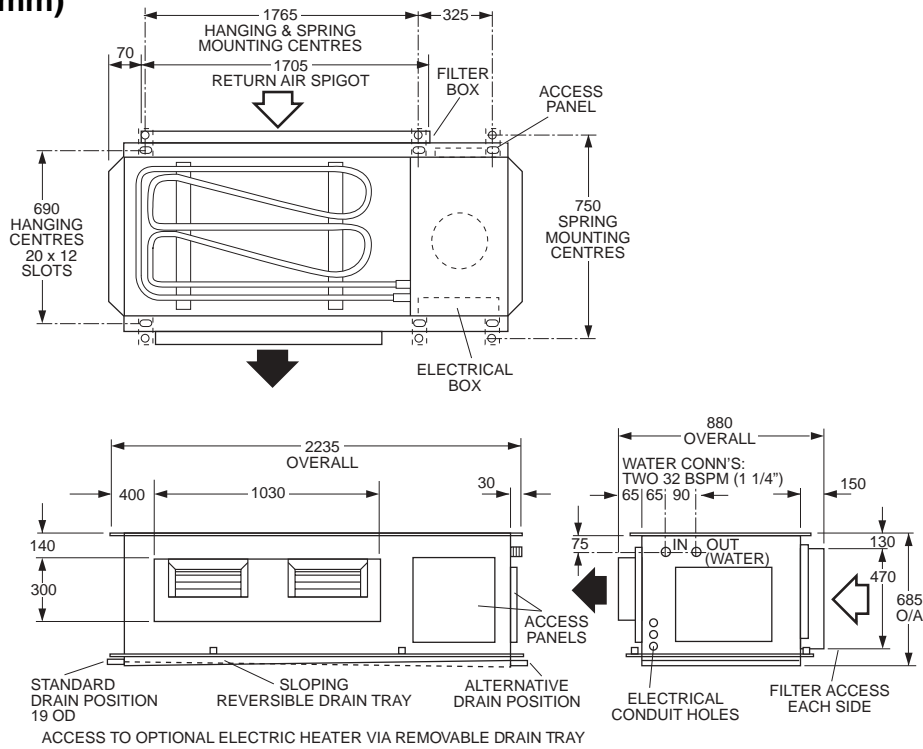
HWP 440

DATA SHEET

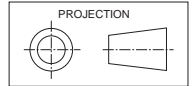
Ducted Water Cooled Packaged Air Conditioners

Dimensions (mm)

Not to Scale



HWP 440



Net Weight 349 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				
2340	17	23	43.7	31.3	2.02	50.8	42.3	30.7	2.00	50.3	41.0	30.1	1.99	49.9	39.6	29.6	1.97	49.5	38.2	29.0	1.96	49.1	35.7	28.0	1.83	45.9
	19	27	46.4	35.9	2.09	52.6	45.0	35.4	2.08	52.1	43.5	34.8	2.06	51.8	42.0	34.3	2.06	51.7	40.6	33.7	2.04	51.3	38.5	33.0	2.04	48.5
	21	31	49.2	40.5	2.23	56.1	47.7	40.0	2.21	55.5	46.2	39.4	2.19	55.0	44.7	38.9	2.17	54.5	43.2	38.4	2.15	54.0	40.4	37.4	2.03	50.9

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 440R	2.06	18	43.3	33.1	16.3	10.5	46.6	35.8	19.6	11.0	50.0	38.6	23.0	11.6
		21	43.3	32.4	16.3	11.2	46.5	35.1	19.6	11.7	49.9	37.9	22.9	12.3
		25	43.4	31.5	16.2	12.1	46.5	34.1	19.5	12.7	49.8	36.8	22.8	13.2

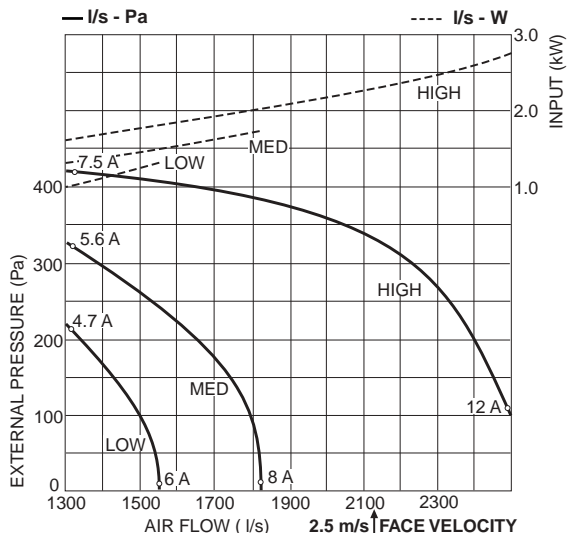
HC = Heating Capacity (kW)
HAb = Heat Absorbed (kW)

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	2.0 m/s	2.5 m/s
	Pressure Loss	25 Pa	35 Pa

QUICK REFERENCE

HWP 440

Electrical Input (Cooling)	11.6 kW
E.E.R. / C.O.P. (Cooling)	12.8 / 3.75
Running Amps/Ph. (Total)	17 / 21 / 21
Fan Motor Full Load Amps	6.3 (x2)
Electrical Supply Required	3 ph. 380-415V ±10% a.c. 50 Hz
Recom'd External Fuse Size	32 A
Refrigerant	HCFC-22 (R22)
Nominal (Minimum) Water Flow	2.0 l/s
Water Pressure Drop (nom./+15%)	38 kPa / 48 kPa
Filter (EU2 rated)	optional
Electric Heat Option	24 kW

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.
- 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.

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 440	LOW	1500
	MED	1700
	HIGH	2340

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	
51	61	59	59	61	55	48	50	
56	66	63	63	65	60	54	56	
61	71	68	69	70	65	60	62	

CASE B/O/T + 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	
59	69	74	66	67	62	62	57	
60	70	75	69	69	64	61	57	
62	72	77	72	71	66	63	60	

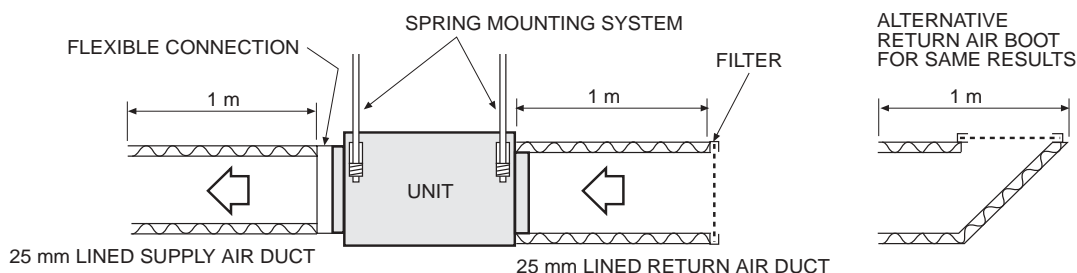
SUPPLY AIR OUTLET

MODEL	FAN SPEED	AIR FLOW l/s
HWP 440	LOW	1500
	MED	1700
	HIGH	2340

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	
60	70	64	63	68	65	63	61	
65	75	68	67	71	69	68	66	
70	80	72	72	76	75	73	72	

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	
61	71	76	67	70	65	62	58	
62	72	77	70	69	67	64	60	
66	76	78	73	72	71	69	65	



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.