

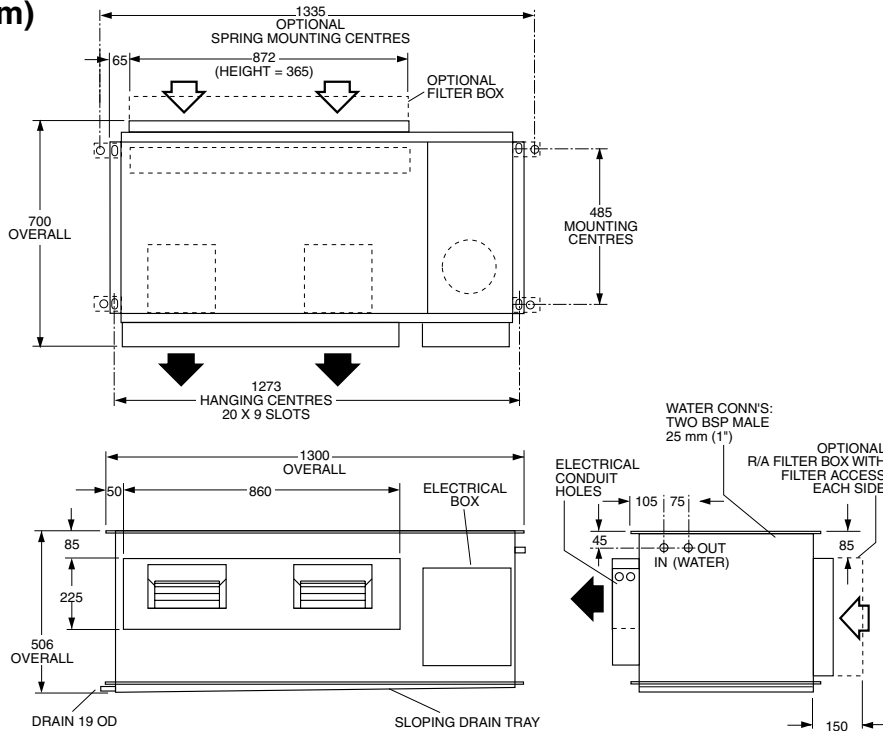
# HWP 139

# DATA SHEET

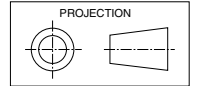
## Ducted Water Cooled R410A Packaged Air Conditioners

### Dimensions (mm)

Not to Scale



### HWP 139



Net Weight 141 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				
760	17	23	14.4	11.1	0.74	16.6	13.7	10.3	0.74	16.1	13.1	9.8	0.74	15.8	12.5	9.6	0.74	15.3	12.3	9.2	0.74	15.3	12.1	8.3	0.74	15.2
	19	27	15.4	11.1	0.74	17.6	15.2	10.9	0.74	17.7	13.9	10.9	0.74	16.6	13.5	10.3	0.74	16.5	12.5	10.2	0.74	15.4	12.3	10.0	0.74	15.4
	21	31	16.4	12.9	0.74	18.3	16.2	12.8	0.74	18.6	16.1	12.7	0.74	18.9	14.7	12.6	0.74	17.7	14.1	12.4	0.74	17.1	13.3	12.3	0.74	16.4

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 139R	0.74	18	12.5	9.4	16.4	2.7	13.4	10.1	19.7	2.8	14.4	11.0	23.0	2.9
		21	12.4	9.1	16.4	2.8	13.3	9.9	19.7	3.0	14.3	10.7	23.0	3.1
		25	12.4	8.9	16.4	3.1	13.3	9.6	19.7	3.2	14.2	10.4	23.0	3.4

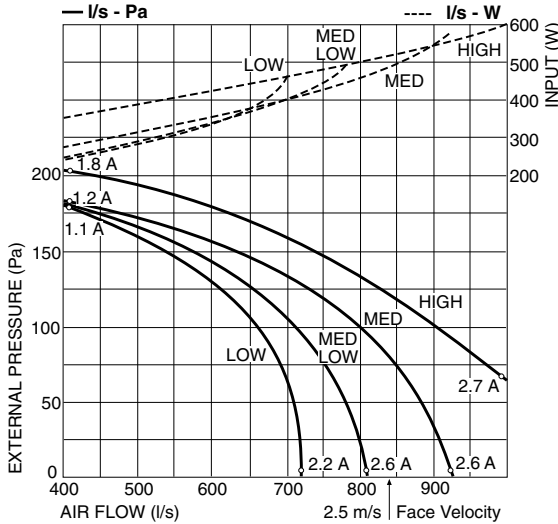
HC = Heating Capacity (kW)  
HAb = Heat Absorbed (kW)

EWT = Entering Water Temperature (°C) (Minimum required 17°C)  
INPT = Compressor Input (kW)

○ = Nominal Capacity (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)		
	5	9	13

## QUICK REFERENCE

**HWP 139**

Electrical Input (Cooling)	3.55 kW
E.E.R. (Cooling)	3.78
Running Amps/ph. (Total)	7.7 / 5.8 / 5.6
Fan Motor Full Load Amps	2.7
Electrical Supply Required	3 ph. 380-415V ±10% a.c. 50 Hz
Recom'd External Fuse Size	25 A
Refrigerant	HFC-410A (R410A)
Minimum Water Flow	0.74 l/s
Water Coil Pressure Drop	27.6 kPa (4 psi)
Filter (polypropylene net)	optional
Electric Heat Option	9 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

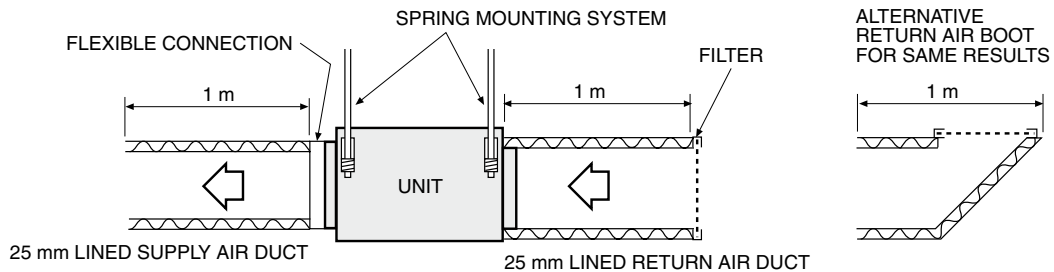
MODEL	FAN SPEED	AIR FLOW l/s	SOUND PRESSURE LEVELS (SPL) dB(A)	SOUND POWER LEVELS (SWL) dB						
				SWL dB(A)	OCTAVE BAND FREQ. Hz					
					125	250	500	1 k	2 k	4 k
HWP 139	LOW	650	47	56	63	56	56	49	42	38
	MED/LOW	700	49	58	64	59	58	52	43	39
	MED	780	51	60	67	61	59	54	46	41
	HIGH	820	54	63	69	66	62	58	49	45

### 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 139	LOW	650	56	65	63	59	62	60	57	53
	MED/LOW	700	57	66	65	62	64	62	59	55
	MED	780	59	68	67	64	65	64	61	57
	HIGH	820	62	71	69	67	67	64	64	60

### 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 139	LOW	650	55	64	68	61	61	59	55	49
	MED/LOW	700	56	65	69	61	61	60	57	50
	MED	780	57	66	70	64	62	62	58	52
	HIGH	820	59	68	71	67	64	63	60	55



## 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.