

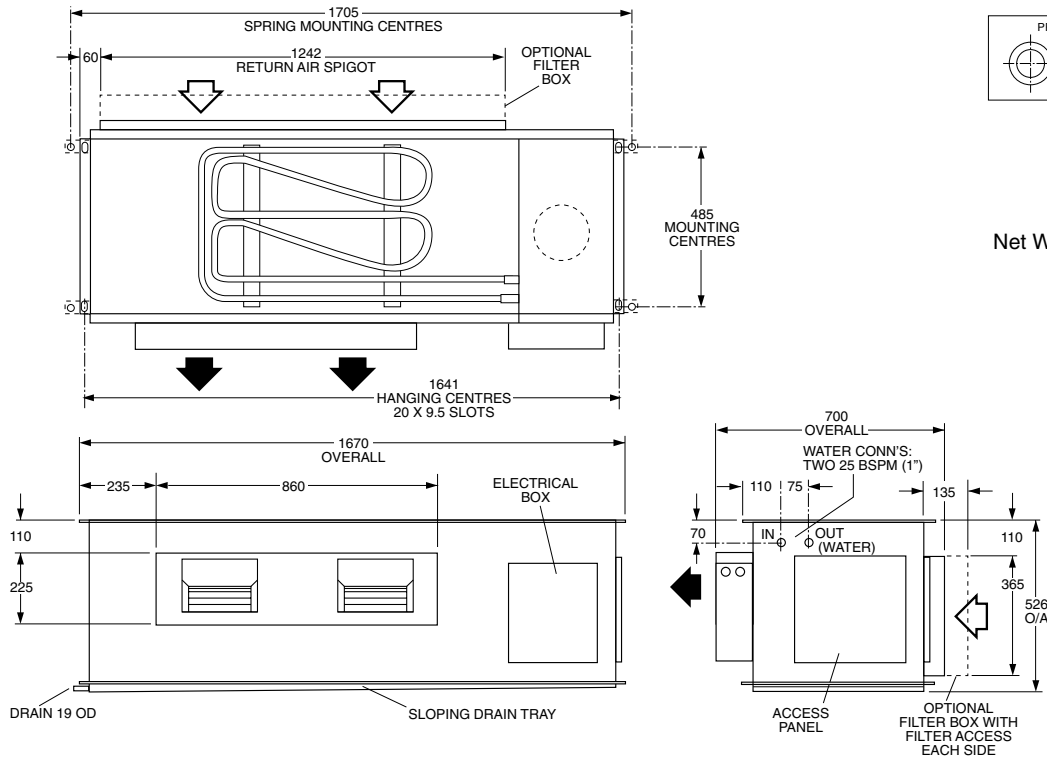
HWP 190

DATA SHEET

Ducted Water Cooled R410A Packaged Air Conditioners

Dimensions (mm)

Not to Scale



HWP 190

Net Weight 179 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				
1060	17	23	19.5	15.1	1.15	22.7	18.6	14.0	1.15	22.1	17.8	13.4	1.15	21.7	17.0	13.0	1.15	21.0	16.7	12.5	1.15	20.9	16.5	11.3	1.15	20.9
	19	27	20.9	15.2	1.15	24.1	20.6	14.9	1.15	24.2	18.9	14.8	1.15	22.0	18.4	14.0	1.15	22.6	17.0	13.9	1.15	21.1	16.7	13.6	1.15	21.1
	21	31	22.3	17.5	1.15	25.1	21.1	17.5	1.15	25.5	21.9	17.4	1.15	26.0	20.0	17.2	1.15	24.2	19.2	16.9	1.15	23.5	18.1	16.8	1.15	22.5

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 190R	1.15	18	17.4	13.3	16.0	3.5	18.6	14.3	19.2	3.7	20.0	15.5	22.5	3.8
		21	17.3	12.9	16.0	3.7	18.5	14.0	19.2	3.9	19.9	15.2	22.5	4.1
		25	17.2	12.5	15.9	4.0	18.5	13.7	19.2	4.2	19.8	14.8	22.5	4.4

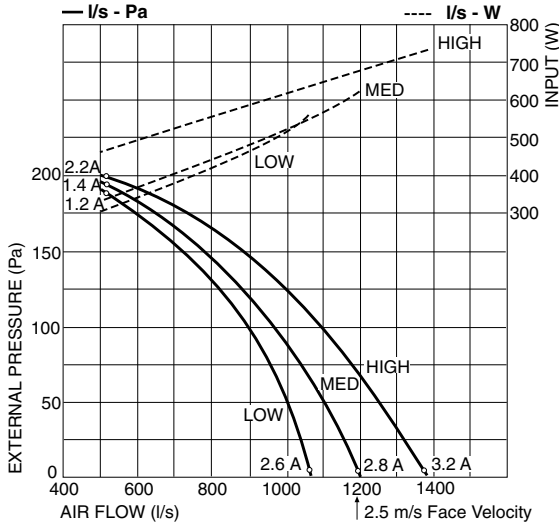
HC = Heating Capacity (kW)
HAb = Heat Absorbed (kW)

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 190

Electrical Input (Cooling)	5.09 kW
EER / AEER (Cooling)	3.59 / 3.58
Running Amps/ph. (Total)	10.5 / 7.7 / 8.0
Fan Motor Full Load Amps	2.8
Electrical Supply Required	3 ph. 380-415V ±10% a.c. 50 Hz
Recom'd External Fuse Size	32 A
Refrigerant	HFC-410A (R410A)
Minimum Water Flow	1.15 l/s
Water Coil Pressure Drop	44.9 kPa (6.5 psi)
Filter (polypropylene net)	optional
Electric Heat Option	12 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

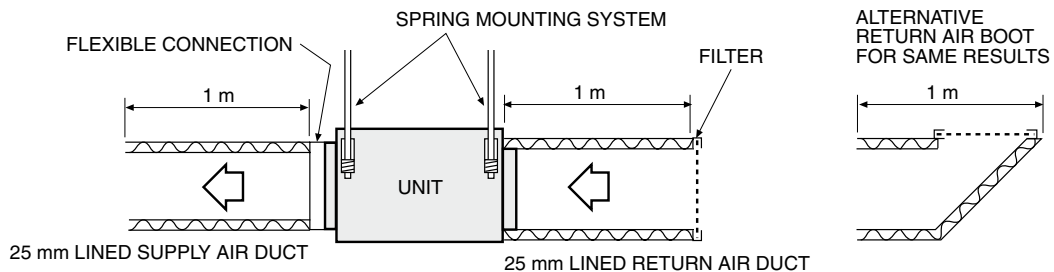
MODEL	FAN SPEED	AIR FLOW l/s	SOUND PRESSURE LEVELS (SPL) dB(A)	SOUND POWER LEVELS (SWL) dB						
				SWL dB(A)	OCTAVE BAND FREQ. Hz					
					125	250	500	1 k	2 k	4 k
HWP 190	LOW	1000	48	58	62	57	57	52	45	40
	MED	1050	50	60	63	59	60	54	46	41
	HIGH	1200	54	63	65	63	63	58	49	45

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 190	LOW	1000	58	67	62	60	64	63	60	55
	MED	1050	59	69	64	62	66	65	62	57
	HIGH	1200	61	71	65	65	68	67	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 190	LOW	1000	56	66	64	59	61	60	60	55
	MED	1050	56	66	64	61	61	61	60	56
	HIGH	1200	57	67	66	62	65	62	61	56



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.