



DUNNAIR
(Aust) Pty Ltd

Water Cooled



DWAIS10

Split Ducted Type

TECHNICAL SPECIFICATION

Total Cooling Capacity	10.1 kW	Refrigerant	R410A
Electrical Input (Cooling)	2.7 kW	Refrigerant Charge	1.7 kg
E.E.R.(Cooling)	3.74	Minimum Water Flow	0.50 l/s
Running Amps (Total)	11.3A	Water Coil Pressure Drop	40 kPa
Fan Motor Full Load Amps	1.78A	Filter (Option)	EU1
Electrical Supply Required	1 Ph.240V.50Hz		

COOLING CAPACITY (kW)

AIR FLOW RATE (L/S)		475			
COIL E.A.T.	DB °C	23	27	31	
	WB °C	17	19	21	
Entering Water Temperature (E.W.T) °C	20	T	10.1	10.6	10.5
		S	8.1	8.5	8.9
		FL	0.567	0.567	0.567
		HR	11.6	11.8	12.1
	25	T	9.8	10.4	10.5
		S	8.0	8.3	8.8
		FL	0.567	0.567	0.567
		HR	11.3	11.5	12.0
	30	T	9.7	<u>10.1</u>	10.3
		S	7.8	<u>8.2</u>	8.7
		FL	0.567	<u>0.567</u>	0.567
		HR	11.0	<u>11.2</u>	11.6
	35	T	9.5	9.7	9.9
		S	7.6	7.9	8.3
		FL	0.567	0.567	0.567
		HR	10.6	10.8	11.0
	40	T	9.1	9.3	9.4
		S	7.4	7.8	8.3
		FL	0.567	0.567	0.567
		HR	10.3	10.3	10.7

T = Total Capacity (kW)
FL = Water Flow (l/s)
___ = Nominal Capacity (kW)

S = Sensible Capacity (kW)
E.A.T.= Entering Air Temperature (°C)
HR = Heat Rejection

HEATING CAPACITY (kW)

Reverse Cycle Version

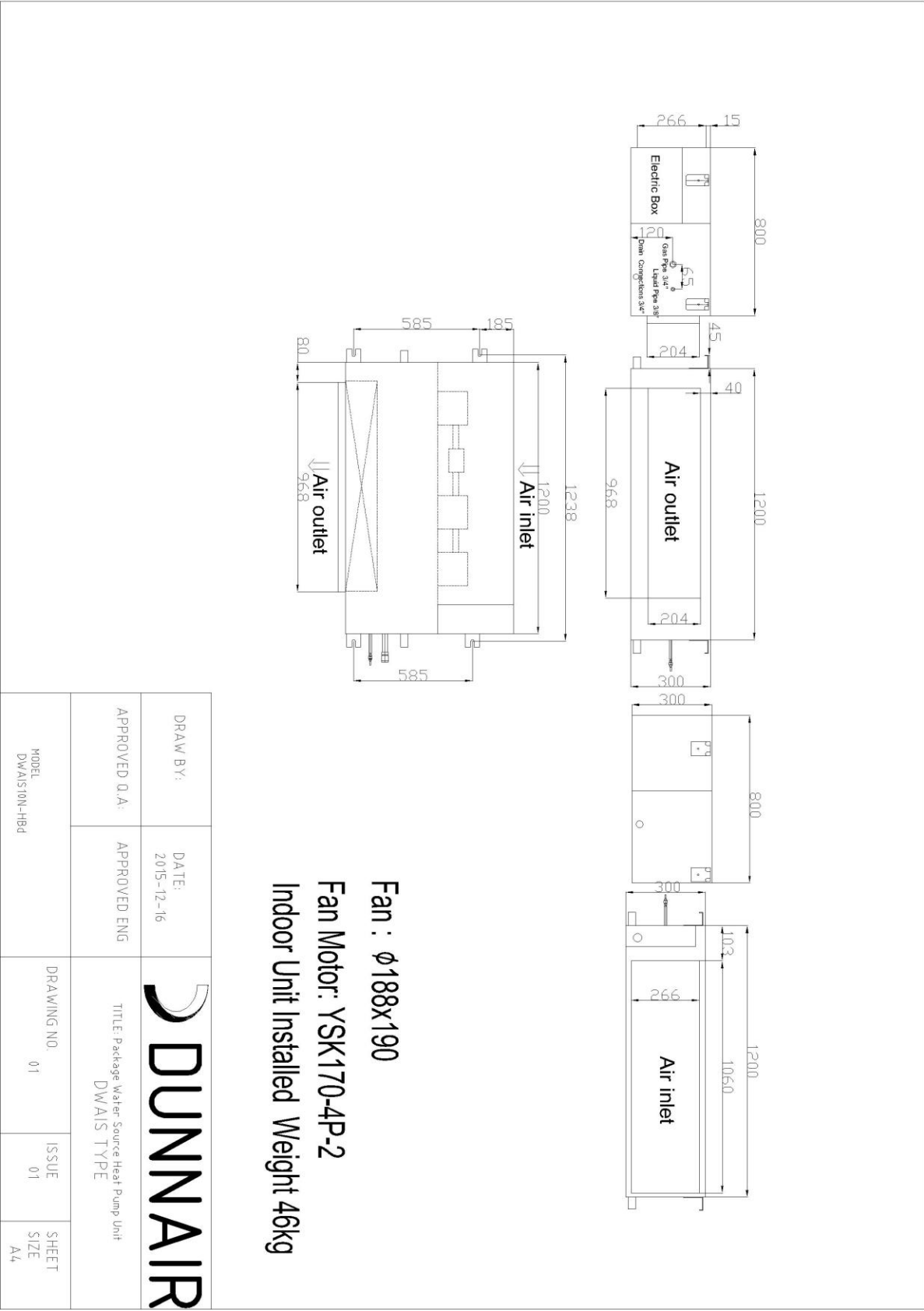
AIR FLOW RATE (L/S)		475			
WATER FLOW RATE (L/S)		0.567			
COIL E.A.T.	DB °C	18	21	25	
Entering Water Temperature (E.W.T) °C	15	HC	9.7	9.3	9.0
		Hab	8.4	8.3	8.1
		LWT	11.6	11.7	11.8
		INPT	2.05	2.09	2.13
	20	HC	10.1	<u>9.5</u>	9.3
		Hab	8.6	<u>8.5</u>	8.4
		LWT	15.6	<u>15.7</u>	15.8
		INPT	2.18	<u>2.22</u>	2.26
	25	HC	10.3	10.1	10.0
		Hab	8.9	8.7	8.6
		LWT	20.4	20.6	20.7
		INPT	2.27	2.32	2.37

HC = Heating Capacity (kW) Hab = Heat Absorbed (kW)
L.W.T.= Leaving Water Temperature (°C) E.A.T.= Entering Air Temperature (°C)
INPT = Compressor Input Power (kW) ___ = Nominal Capacity (kW)

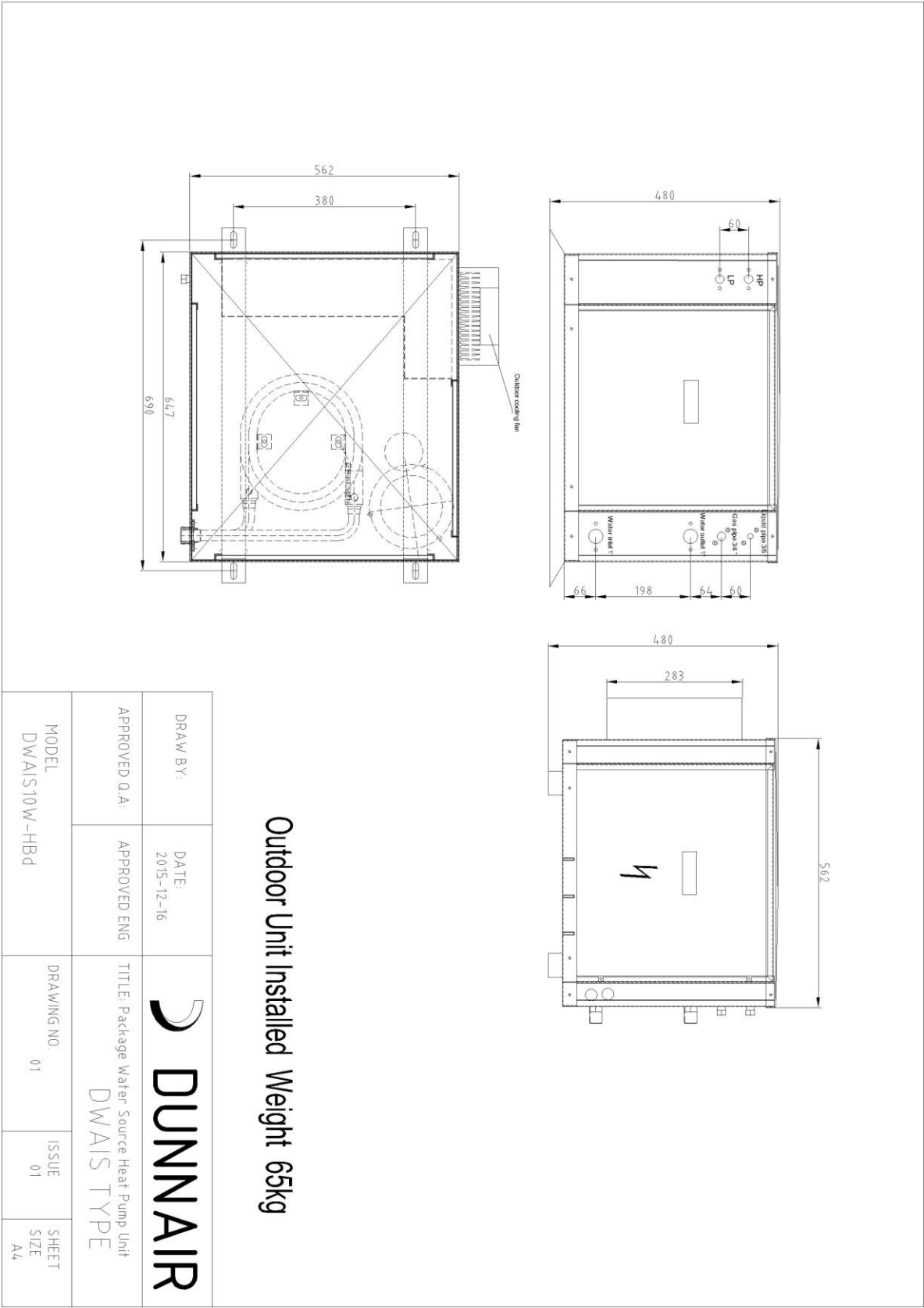
Note: All units are reverse cycle heat pump units.

Note: 1. Capacities are gross and do not include allowance for fan motor heat loss.
For fan motor heat loss refers to Air Handling Performance.
2. Water flow and cooling capacity based on 5°C water temperature difference.

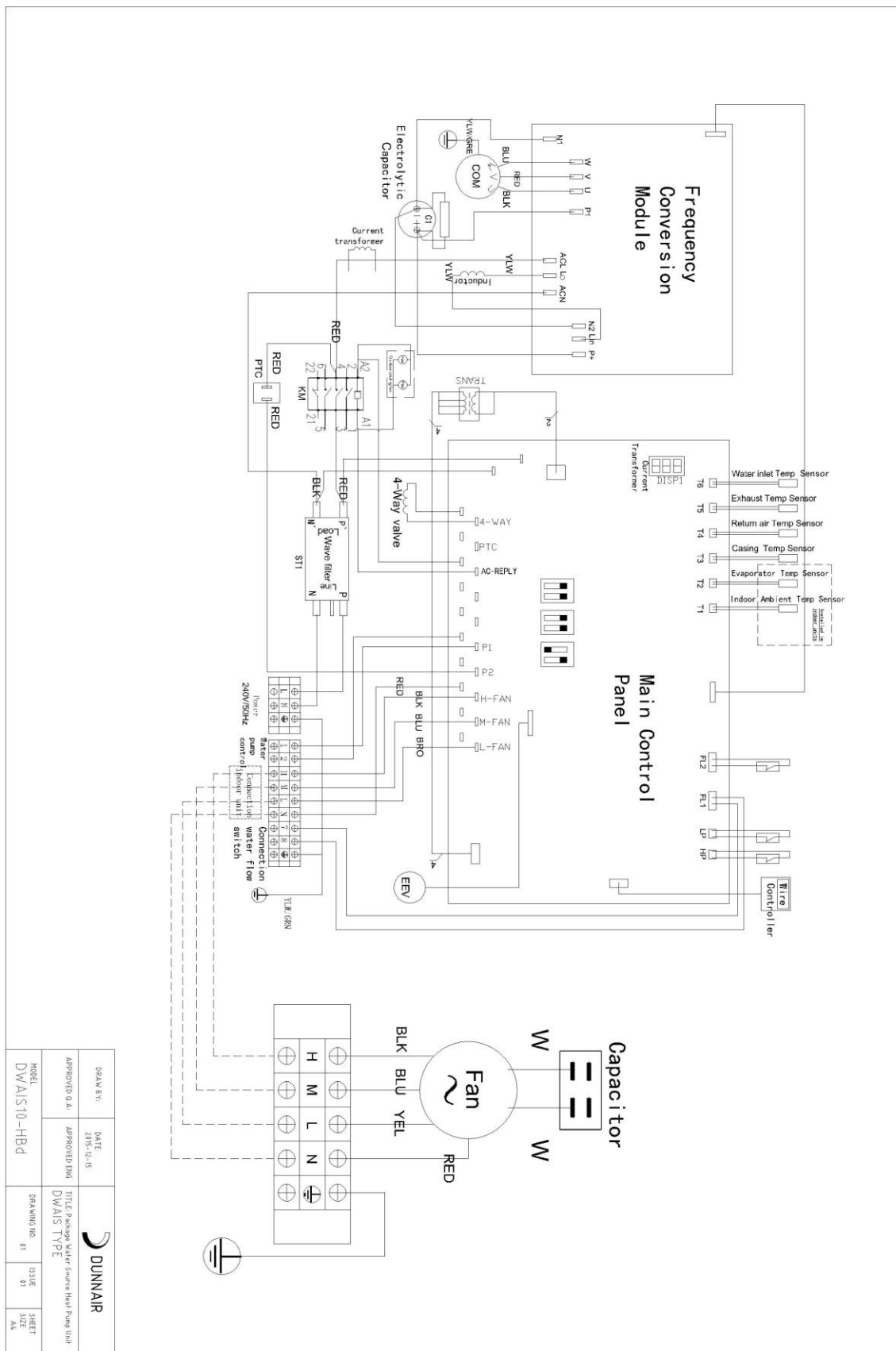
INDOOR UNIT DIMENSIONS (mm)



OUTDOOR UNIT DIMENSIONS (mm)

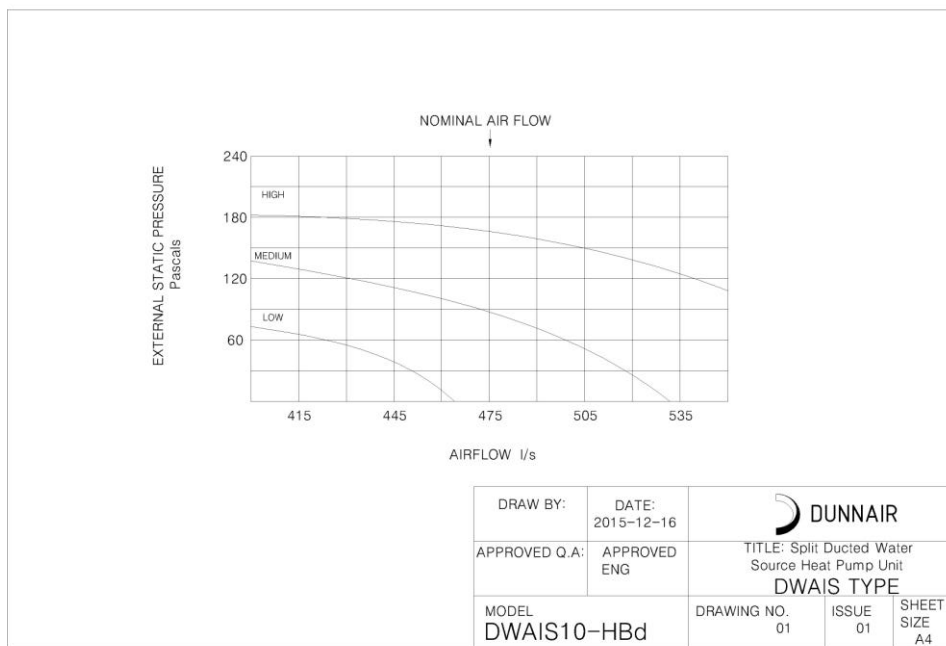


WIRING DIAGRAMS – Reverse Cycle



AIR HANDLING PERFORMANCE

Fan Curve (Without Filter)



Note:

1. In tropical (high humidity) conditions, care must be taken to select 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 DUNNAIR engineering office to establish of unit model.
4. EU1 rate filter pressure loss 15Pa.

AIR HANDLING PERFORMANCE

Sound Curve

