



DUNNAIR
(Aust) Pty Ltd

Ducted Water Cooled



DWAIS4

Split Ducted Type

TECHNICAL SPECIFICATION

Total Cooling Capacity	4.3 kW	Refrigerant	R410A
Electrical Input (Cooling)	1.13kW	Refrigerant Charge	0.96 kg
E.E.R.(Cooling)	3.80	Minimum Water Flow	0.29 l/s
Running Amps (Total)	4.84A	Water Coil Pressure Drop	35 kPa
Fan Motor Full Load Amps	0.98A	Filter (Option)	EU1
Electrical Supply Required	240V.1 Ph.50Hz		

COOLING CAPACITY (kW)

AIR FLOW RATE (L/S)		328			
COIL E.A.T.	DB °C	23	27	31	
	WB °C	17	19	21	
Entering Water Temperature (E.W.T) °C	20	T	4.4	4.6	4.8
		S	3.2	3.6	4.1
		FL	0.29	0.29	0.29
		HR	5.5	5.7	6.0
	25	T	4.2	4.4	4.8
		S	3.1	3.5	4.0
		FL	0.29	0.29	0.29
		HR	5.3	5.5	6.0
	30	T	4.1	<u>4.3</u>	4.5
		S	2.9	<u>3.3</u>	3.9
		FL	0.29	<u>0.29</u>	0.29
		HR	5.0	<u>5.2</u>	5.7
	35	T	3.8	4.0	4.2
		S	2.8	3.2	3.6
		FL	0.29	0.29	0.29
		HR	4.7	4.9	5.0
	40	T	3.5	3.6	3.7
		S	2.7	3.1	3.5
		FL	0.29	0.29	0.29
		HR	4.5	4.5	4.8

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)		328			
WATER FLOW RATE (L/S)		0.29			
COIL E.A.T.	DB °C	18	21	25	
Entering Water Temperature (E.W.T) °C	15	HC	4.1	4.0	3.9
		Hab	3.1	3.0	2.9
		LWT	10.8	10.9	11.1
		INPT	0.91	0.93	0.95
	20	HC	4.6	<u>4.5</u>	4.2
		Hab	3.3	<u>3.2</u>	3.2
		LWT	15.4	<u>15.5</u>	15.6
		INPT	0.96	<u>0.99</u>	1.03
	25	HC	4.7	4.6	4.6
		Hab	3.6	3.5	3.4
		LWT	20.1	20.2	20.4
		INPT	1.1	1.1	1.2

HC = Heating Capacity (kW)

L.W.T.= Leaving Water Temperature (°C)

INPT = Compressor Input Power (kW)

Hab = Heat Absorbed (kW)

E.A.T.= Entering Air Temperature (°C)

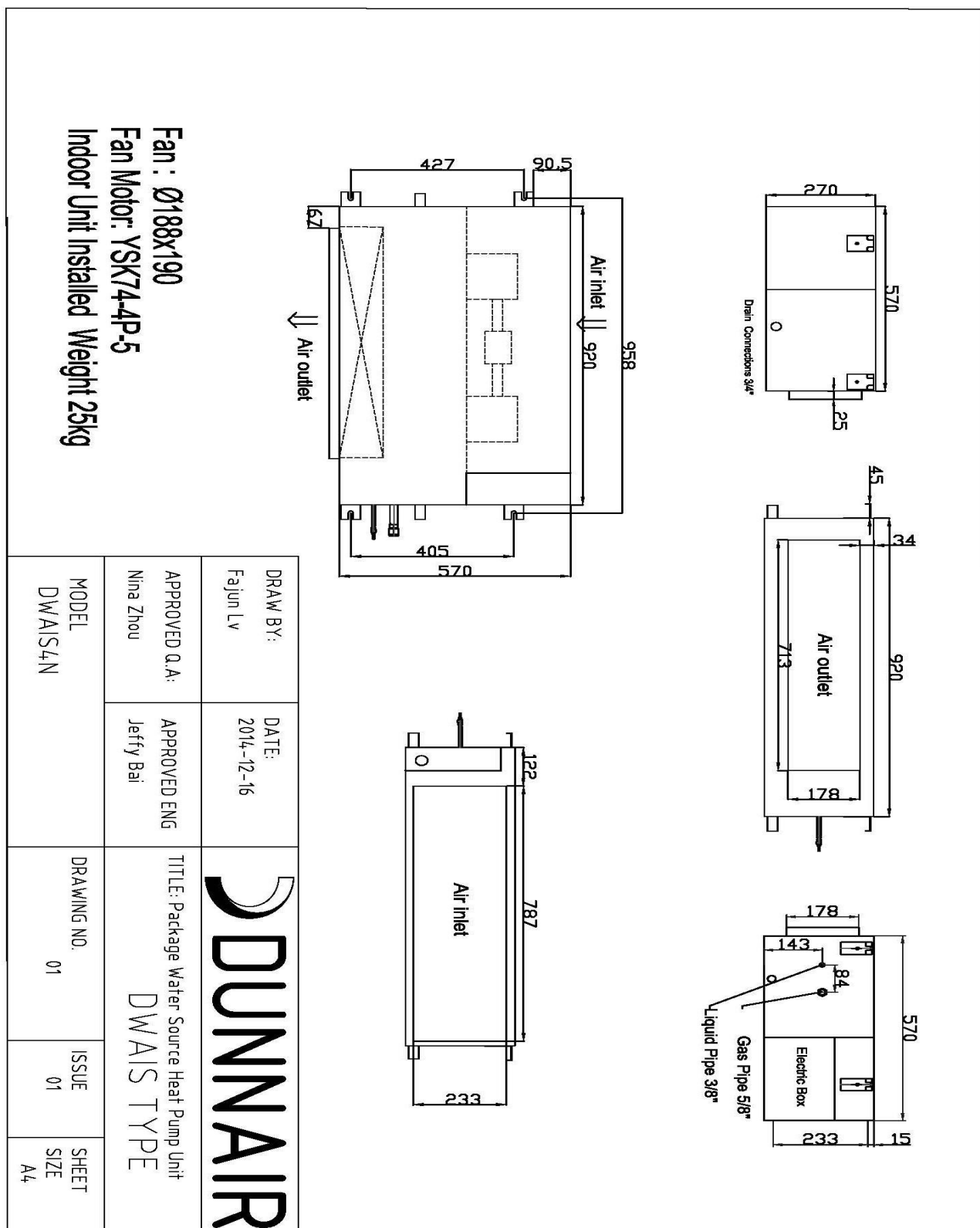
___ = Nominal Capacity (kW)

Note: All units are reverse cycle heat pump units.

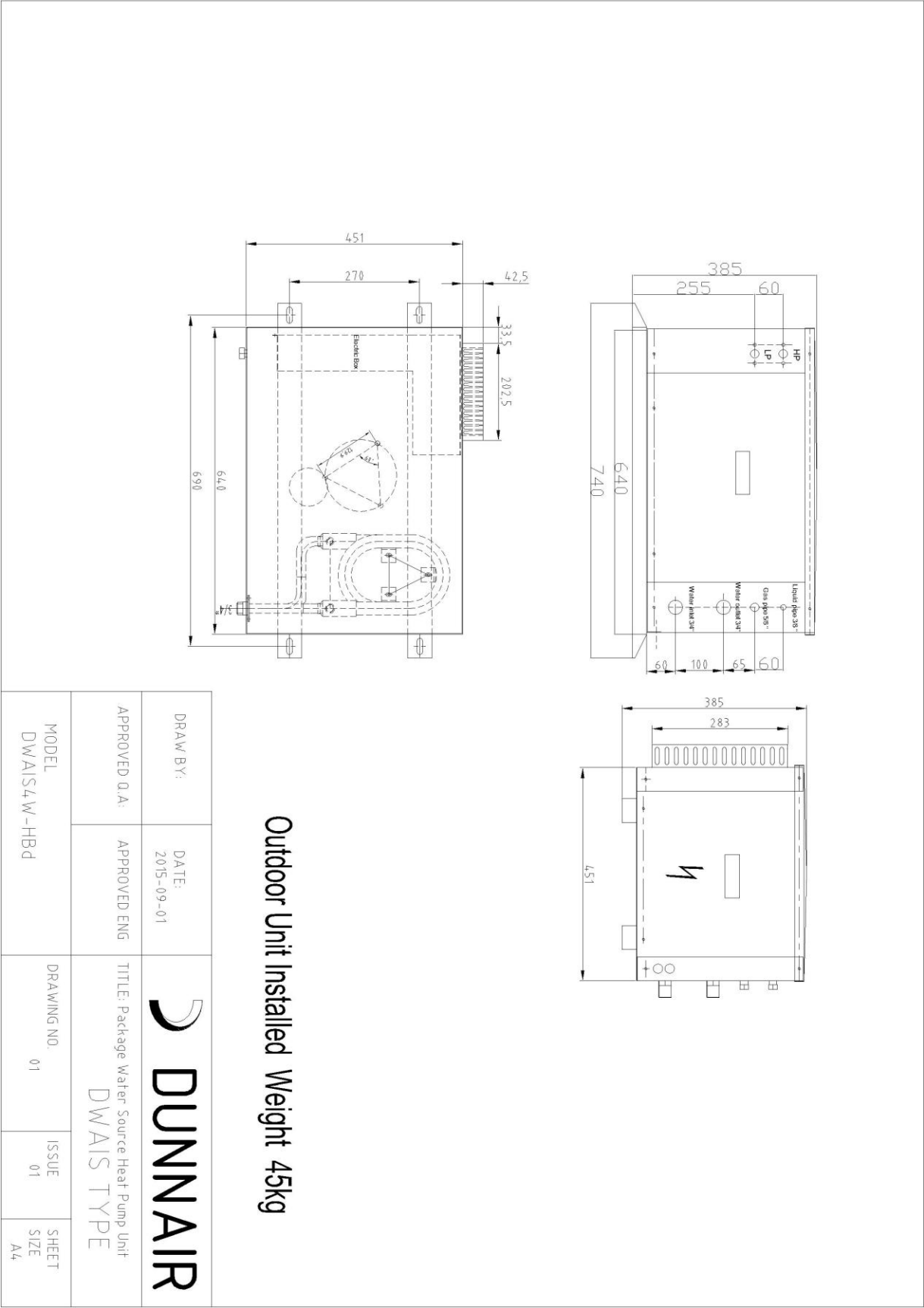
Note: 1. Capacities are gross and do not include allowance for fan motor heat loss.
For fan motor heat loss refers to Air Handling Performance.
2. Water flow and cooling capacity based on 5°C water temperature difference.

DUNNAIR (Aust) Pty Ltd supports a policy of continuous improvement.
Therefore specifications and designs are subject to change without prior notice.

INDOOR UNIT DIMENSIONS (mm)

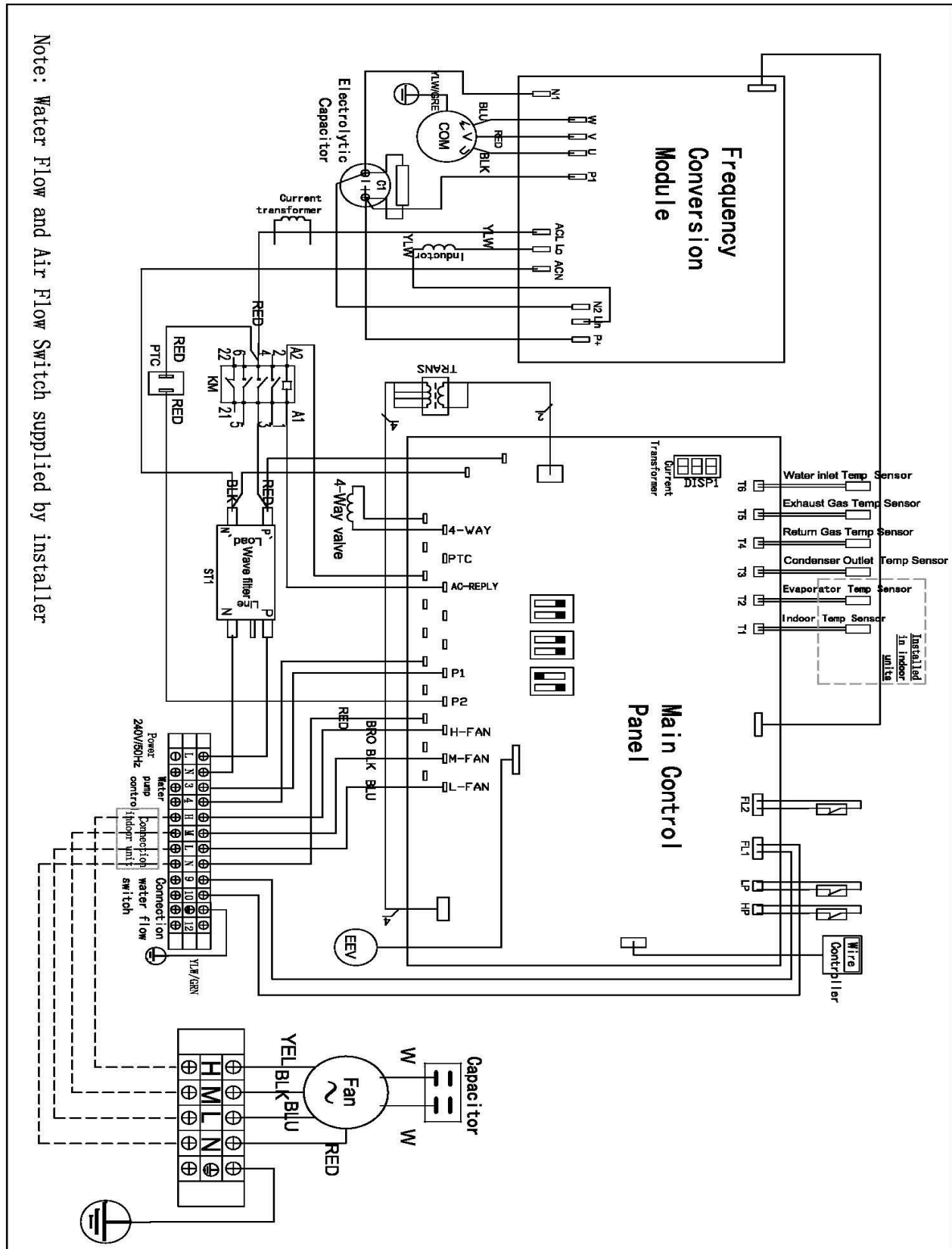


OUTDOOR UNIT DIMENSIONS (mm)



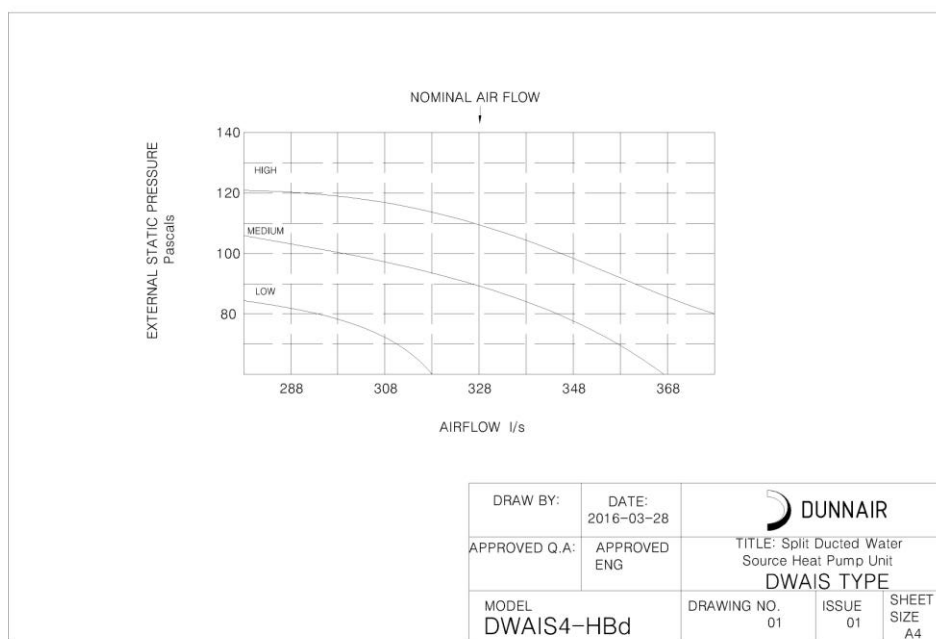
Outdoor Unit Installed Weight 45kg

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

