

TECHNICAL SPECIFICATION

Total Cooling Capacity	8.0 kW	Refrigerant	R410A
Electrical Input (Cooling)	2.0 kW	Refrigerant Charge	1.5 kg
E.E.R.(Cooling)	4.0	Minimum Water Flow	0.4 l/s
Running Amps (Total)	12.5A	Water Coil Pressure Drop	38 kPa
Fan Motor Full Load Amps	2.0A	Filter (Option)	EU1
Electrical Supply Required	1 Ph.240V.50Hz	Electric Heater (Option)	6.0 kW

COOLING CAPACITY (kW)

AIR FLOW RATE (L/S)		420			
COIL E.A.T.	DB °C	23	27	31	
	WB °C	17	19	21	
Entering Water Temperature (E.W.T) °C	20	T	8.5	8.9	9.4
		S	6.1	7.0	7.9
		FL	0.5	0.5	0.5
		HR	10.3	10.8	11.2
	25	T	8.1	8.6	9.5
		S	6.2	6.9	7.9
		FL	0.5	0.5	0.5
		HR	10.0	10.5	11.5
	30	T	7.6	<u>8.0</u>	8.9
		S	5.7	<u>6.6</u>	7.7
		FL	0.5	<u>0.5</u>	0.5
		HR	9.6	<u>10.0</u>	11.0
	35	T	7.1	7.5	7.8
		S	5.5	6.4	7.2
		FL	0.5	0.5	0.5
		HR	9.1	9.5	9.9
40	T	6.8	7.0	7.3	
	S	5.0	6.2	7.0	
	FL	0.5	0.5	0.5	
	HR	8.8	9.0	9.4	

T = Total Capacity (kW) S = Sensible Capacity (kW)
 FL = Water Flow (l/s) E.A.T.= Entering Air Temperature (°C)
 ___ = Nominal Capacity (kW) HR = Heat Rejection

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.

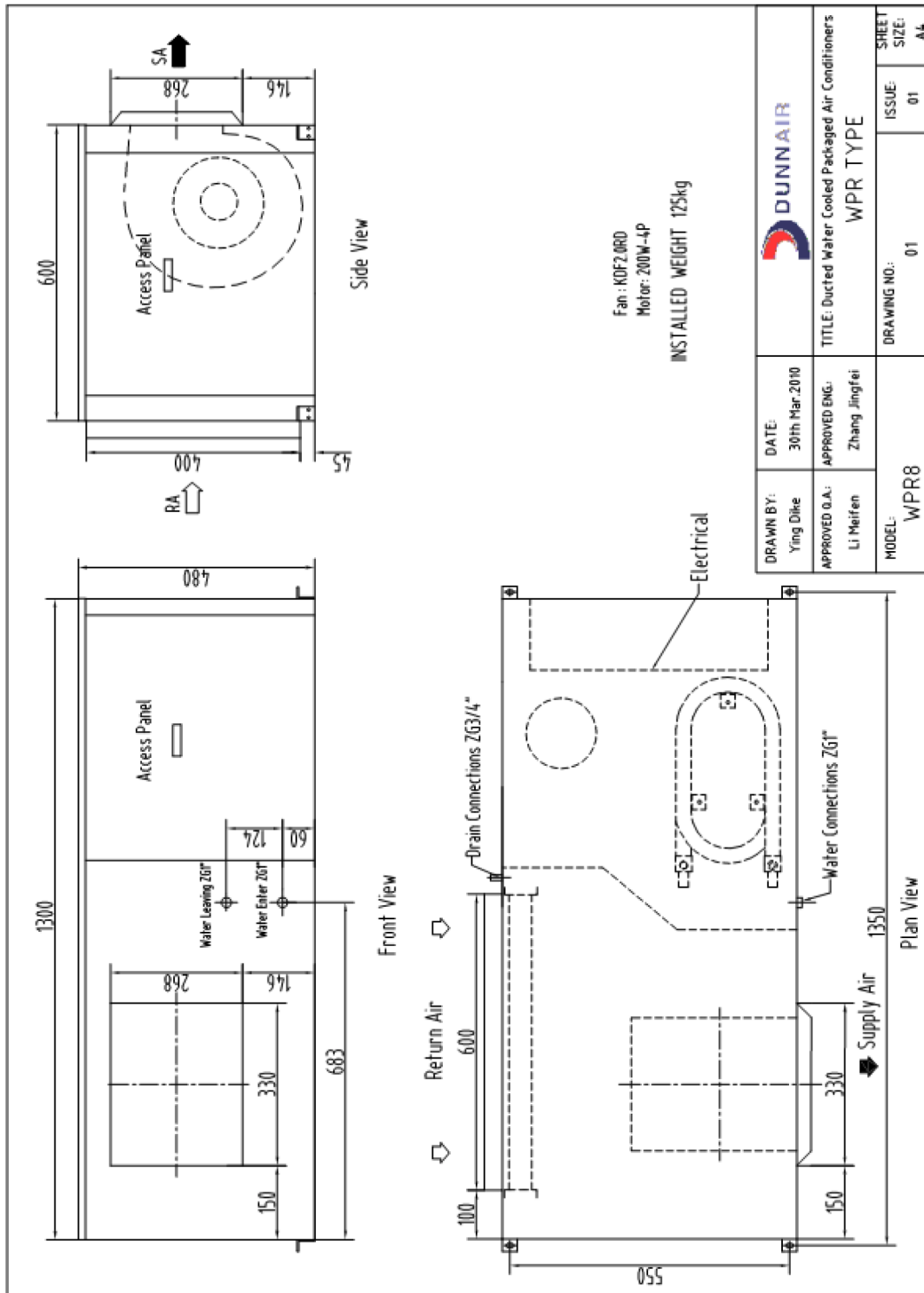
HEATING CAPACITY (kW)
WPR Reverse Cycle Version

AIR FLOW RATE (L/S)		420			
WATE FLOW RATE (L/S)		0.5			
COIL E.A.T.	DB °C	18	21	25	
Entering Water Temperature (E.W.T) °C	15	HC	8.1	8.0	7.6
		Hab	6.1	6.0	5.6
		LWT	11.1	11.2	11.4
		INPT	2.0	2.0	2.0
	20	HC	8.6	<u>8.5</u>	8.1
		Hab	6.6	<u>6.5</u>	6.1
		LWT	15.9	<u>15.9</u>	16.1
		INPT	2.0	<u>2.0</u>	2.0
	25	HC	9.3	9.2	8.9
		Hab	7.2	7.1	6.7
		LWT	20.5	20.6	20.8
		INPT	2.1	2.1	2.1

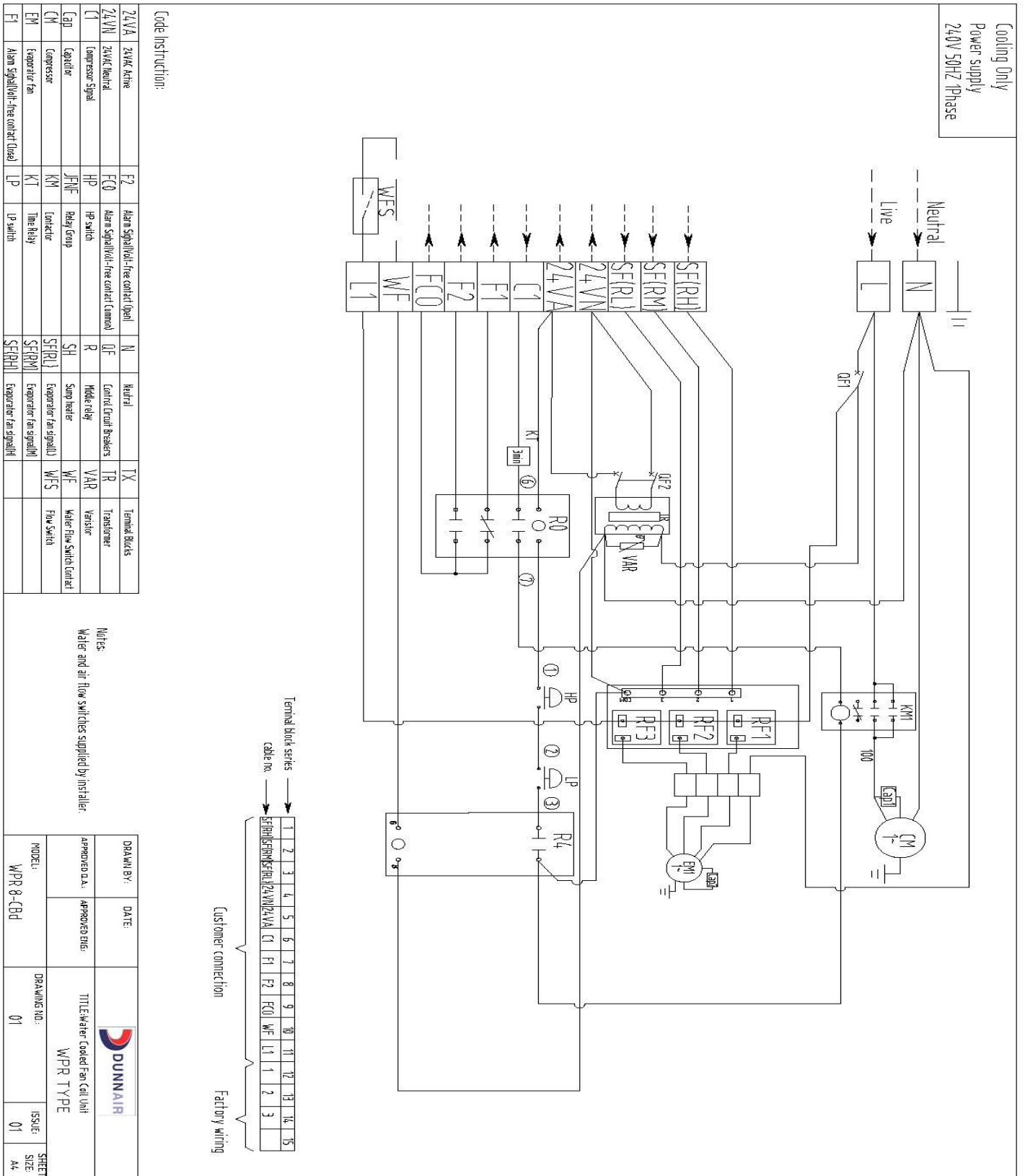
HC = Heating Capacity (kW) Hab = Heat Absorbed (kW)
 L.W.T.= Leaving Water Temperature (°C) E.A.T.= Entering Air Temperature (°C)
 INPT = Compressor Input Power (kW) ___ = Nominal Capacity (kW)

Note: All units are reverse cycle heat pump units. Models can also be provided as cooling only or cooling only with electric heater.

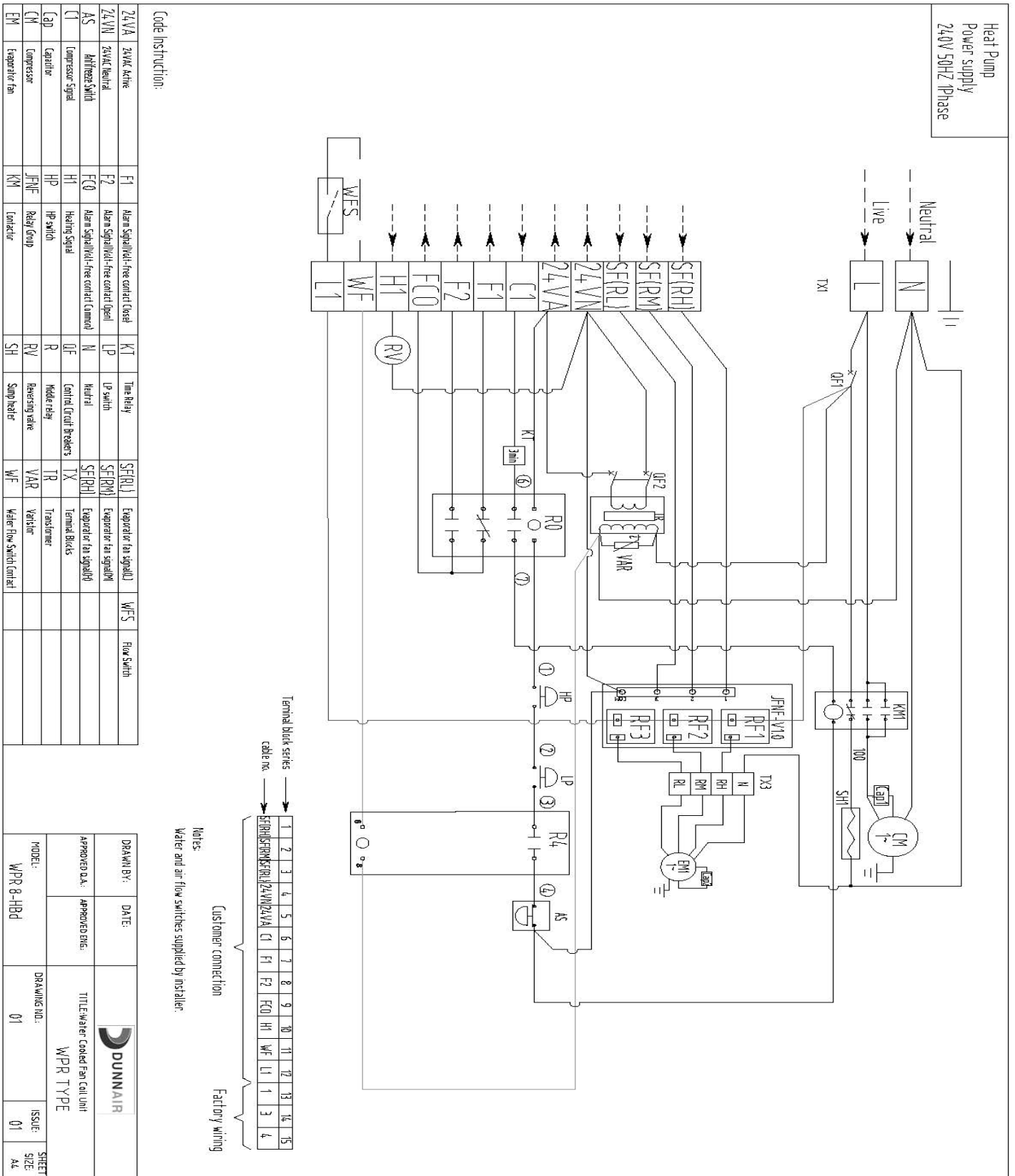
DIMENSIONS (mm)



WIRING DIAGRAMS – Cooling Only

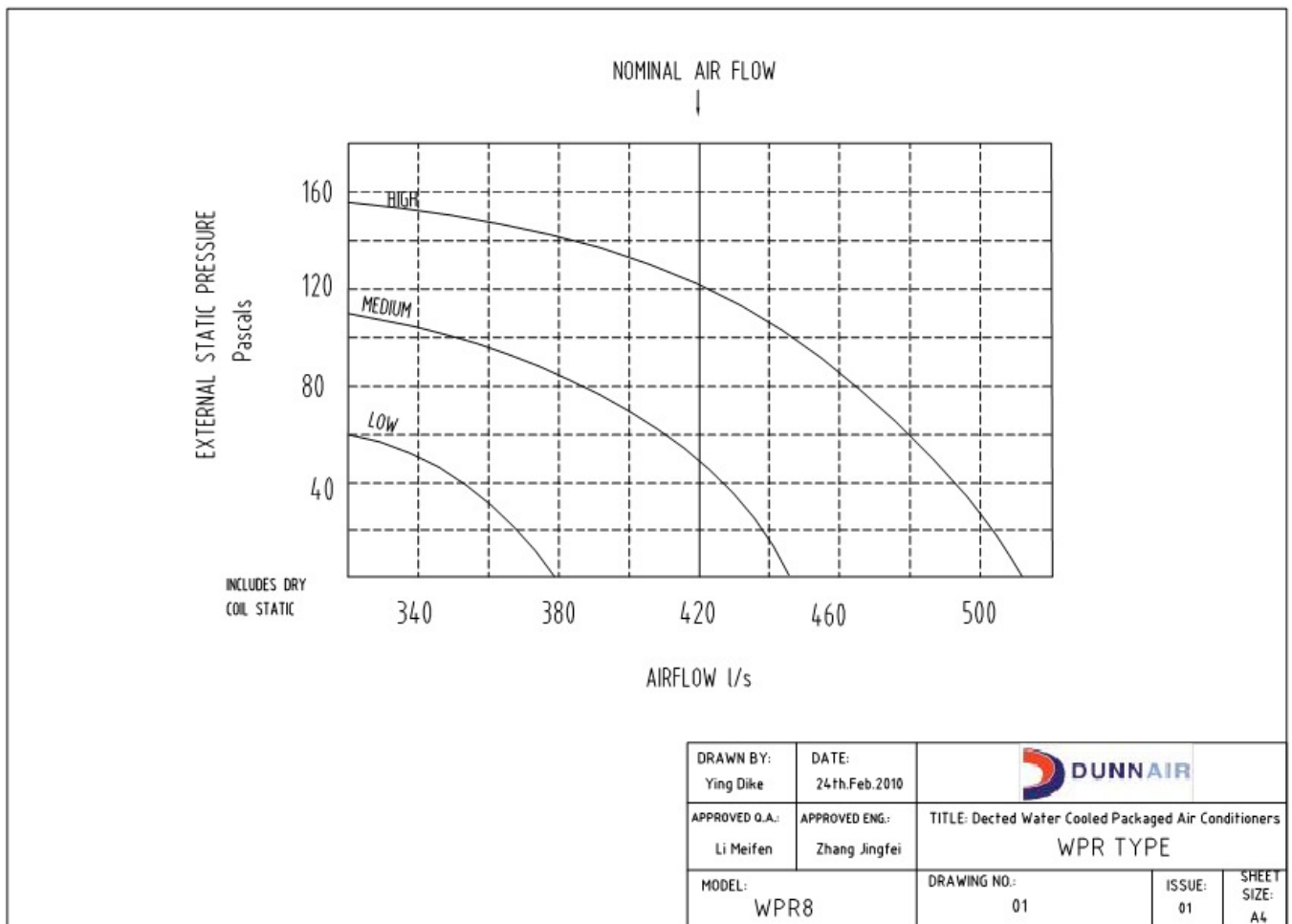


WIRING DIAGRAMS – Reverse Cycle



AIR HANDLING PERFORMANCE

Fan Curve (Without Filter)



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 DUNNAIR engineering office to establish of unit model.
4. EU1 rate filter pressure loss 15Pa.

AIR HANDLING PERFORMANCE

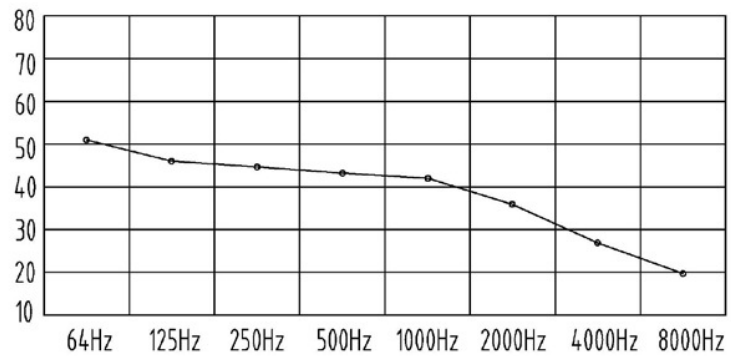
Sound Levels

WPR8 Noise rate analysing chart


A Class: 45.8dB

Hz	dB
64Hz	50.6
125Hz	46.1
250Hz	45.0
500Hz	43.1
1000Hz	41.7
2000Hz	36.0
4000Hz	27.9
8000Hz	20.2

Noise rate analysing chart (A Class: 45.8dB) dB



Note: 1m from source with 1m insulated duct and fully reflective surface surrounding unit.

DRAWN BY: Ying Dike	DATE: 10th.Dec.2010			
APPROVED Q.A.: Li Meifen	APPROVED ENG.: Zhang Jingfei	TITLE: Ducted Water Cooled Packaged Air Conditioners WPR TYPE		
MODEL: WPR8	DRAWING NO.: 01	ISSUE: 01	SHEET SIZE: A4	