



DUNNAIR
(Aust) Pty Ltd

R410a Refrigerant
SHE56
Economy Cycle Split Ducted

Performance Data

INDOOR COIL ENTERING AIR TEMP °C		OUTDOOR COIL ENTERING AIR TEMPERATURE °C											
		30°C			35°C			40°C			45°C		
		Tot Cap KW	Sens Cap KW	LWB °C	Tot Cap KW	Sens Cap KW	LWB °C	Tot Cap KW	Sens Cap KW	LWB °C	Tot Cap KW	Sens Cap KW	LWB °C
DB °C	WB °C												
21	17	54.9	33.6	11.2	51.9	32.4	11.6	49.0	31.2	11.9	46.6	31.2	12.2
	18	56.7	30.1	12.3	53.7	29.0	12.6	50.7	27.8	12.9	48.4	26.9	13.2
	19	58.6	26.6	13.4	55.6	25.4	13.7	52.5	24.1	14.1	50.2	23.2	14.3
	20	60.6	23.3	14.4	57.6	22.2	14.7	54.4	21.0	15.0	52.2	20.1	15.3
23	17	55.0	40.1	11.2	52.1	38.9	11.5	49.2	37.7	11.9	46.8	36.7	12.1
	18	56.6	36.5	12.2	53.7	35.4	12.6	50.7	34.2	12.9	48.3	33.3	13.2
	19	58.5	33.0	13.4	55.5	31.8	13.7	52.5	30.5	14.0	50.2	29.6	14.3
	20	60.6	29.7	14.4	57.5	28.6	14.7	54.4	27.4	15.0	52.2	26.5	15.3
	21	62.7	25.9	15.5	59.6	24.7	15.8	56.4	23.5	16.1	54.3	22.7	16.3
25	17	55.4	45.3	11.1	52.6	43.9	11.5	49.8	42.5	11.8	47.5	41.4	12.1
	18	56.4	44.3	12.1	53.4	41.9	12.5	50.4	40.8	12.8	48.0	39.9	13.0
	19	57.1	43.6	13.0	53.9	39.8	13.3	50.7	38.8	13.5	48.2	38.0	13.7
	20	57.7	43.0	13.7	54.4	37.8	13.9	51.1	36.9	14.2	48.5	36.3	14.3
	21	58.0	42.7	14.3	54.6	35.4	14.6	51.2	34.7	14.8	48.6	34.1	14.9
27	17	56.2	50.7	11.0	53.6	49.0	11.4	50.9	47.3	11.7	49.0	46.0	11.9
	18	57.2	48.6	12.2	54.4	47.2	12.5	51.5	45.9	12.8	50.0	44.9	13.1
	19	58.6	46.2	13.2	55.6	45.0	13.5	52.6	43.8	13.9	51.0	42.9	14.1
	20	60.5	42.6	14.3	57.4	41.4	14.7	54.3	40.2	15.0	52.1	39.4	15.2
	21	62.6	38.8	15.4	59.5	37.6	15.7	56.2	36.4	16.1	54.1	35.6	16.3
29	17	57.2	55.8	10.9	54.7	53.6	11.2	52.2	51.4	11.5	50.3	50.3	11.7
	18	58.2	53.7	12.0	55.5	52.0	12.3	52.7	50.3	12.7	50.3	50.3	12.9
	19	59.0	52.0	13.1	56.1	50.7	13.5	53.1	49.4	13.8	50.9	48.4	14.0
	20	60.6	48.8	14.3	57.5	47.6	14.6	54.4	46.4	14.9	52.2	45.5	15.2
	21	62.6	45.5	15.4	59.5	44.4	15.7	56.3	43.2	16.1	54.2	42.5	16.3
31	17	59.0	59.0	10.7	56.6	56.6	10.9	54.1	54.1	11.3	52.4	52.4	11.5
	18	59.5	58.0	11.9	56.9	55.9	12.2	54.1	54.1	12.5	52.4	52.4	12.7
	19	60.2	56.5	13.0	57.4	54.9	13.3	54.1	54.1	13.6	52.8	52.1	13.9
	20	61.0	55.4	14.3	58.0	54.2	14.6	54.9	53.0	14.9	52.9	52.9	15.1
	21	62.6	52.2	15.3	59.6	51.2	15.6	56.3	50.0	15.9	54.3	49.3	16.2

Capacity multipliers should be applied to the above capacities to adjust for reduced or increased air flow.



Technical Specification SHE56 Economy Cycle Split Ducted

Indoor Unit Model Number	SHE56N	Nominal Evaporator Air Flow (l/s)	3000
Outdoor Unit Model Number	SHE56W	Number of Compressors	2
Total Cooling Capacity (kW)*	55.6	Power Requirements (Volt / Phase)	415 / 3
Sensible Cooling Capacity (kW)*	45.0	Normal Max. Current (Amps / Phase)	41.7
Heating Capacity (kW)**	57.4		

*Entering air @ 27/19°C and ambient 35°C ** Entering air @ 21°C DB and 7°C ambient

Air Quantity Multiplying Factors

Capacity	% Rated Air Quantity-Nominal 3000 l/s				
	80	90	100	110	120
Total	0.95	0.98	1.00	1.02	1.04
Sensible	0.89	0.95	1.00	1.05	1.09

Heating Performance Data

Heating Capacity kW	Outdoor Coil Entering DB temp				
	0	4	8	12	18
	54.3	59.4	68.5	75.0	89.4

Heating Performance Correction

% Rated Air Quality	Multiplier	Return Air Temp °C	Multiplier	Outdoor Air Temp °C	Approx. Defrost Factor
80	0.93	15	1.05	0	0.80
90	0.97	18	1.03	2	0.78
100	1.00	21	1.00	4-6	0.75
110	1.03	24	0.97	7	0.87
120	1.05	27	0.95	8	1.00

Compressor

Number Per Unit	2
Type	Scroll
RPM (Nom)	2900
Normal Max. Current (Amps / Phase)	2 × 15.0
Locked Rotor Current (Amps / Phase)	2 × 112
Displacement (m ³ /h)	2 × 30.4

Electrical Controls and Safeties

High Pressure Switch (Setting kPa)	2800	Defrost	
Low Pressure Switch (Setting kPa)	100	Initiation Temperature (°C)	-4
Indoor Fan Overload	Internal	Termination Temperature (°C)	10
Outdoor Fan Overload	Internal	Min. Period Between De-Ice (min)	33
Compressor Delay Timer	300 sec	Max. De-Ice Period (min)	4

Standard Features

Manual reset high pressure and auto reset low pressure cutouts	
Thermal overload protection on all motors	Suction line accumulator
Compressor crankcase heater	Automatic de-ice system
Limit start timer (anti short cycling)	Thermally insulated indoor unit

Indoor Coil

Type	Copper Tube / Aluminium Fins
Face Area (m)	1.07
Air Quantity (l/s)	3000

Indoor Fan

Number of Fans	1
Type	Centrifugal
Drive	Belt
Motor Voltage / Phase / Frequency	415 / 3 / 50
Motor (kW) Standard	4.0
Max. Fan Speed (rpm)	870

Electrical

Power Requirements	3 Phase / 415V / 50Hz
Normal Max. Current (Amps / Phase)	41.7

Outdoor Coil

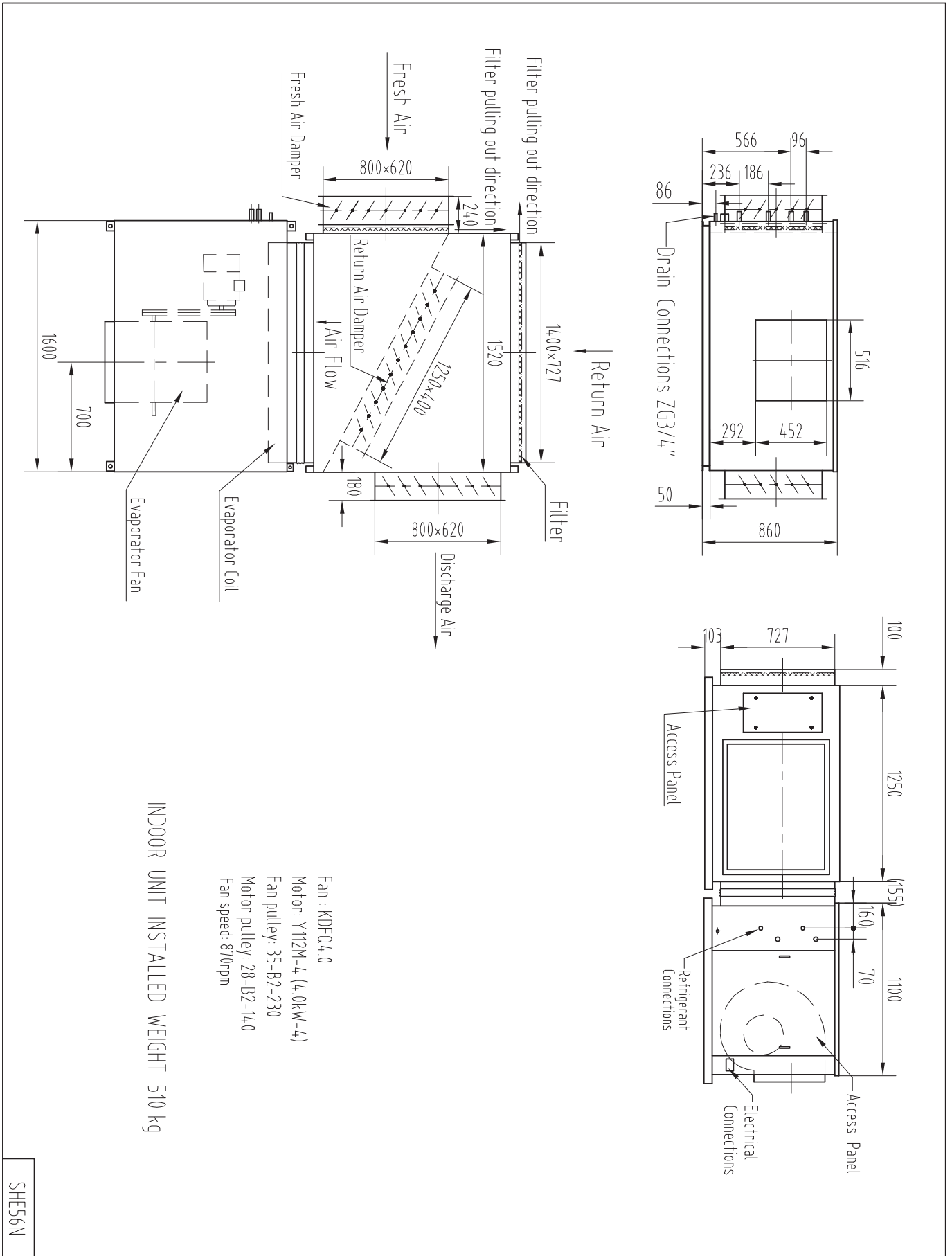
Type	Copper Tube / Aluminium Fins
Face Area	2 × 1.03

Outdoor Fan

Number of Fans	4
Type	Axial
Drive	Direct
Motor Watts / rpm	4 × 200 / 950
Motor Voltage / Phase / Frequency	415 / 3 / 50

Refrigerant System

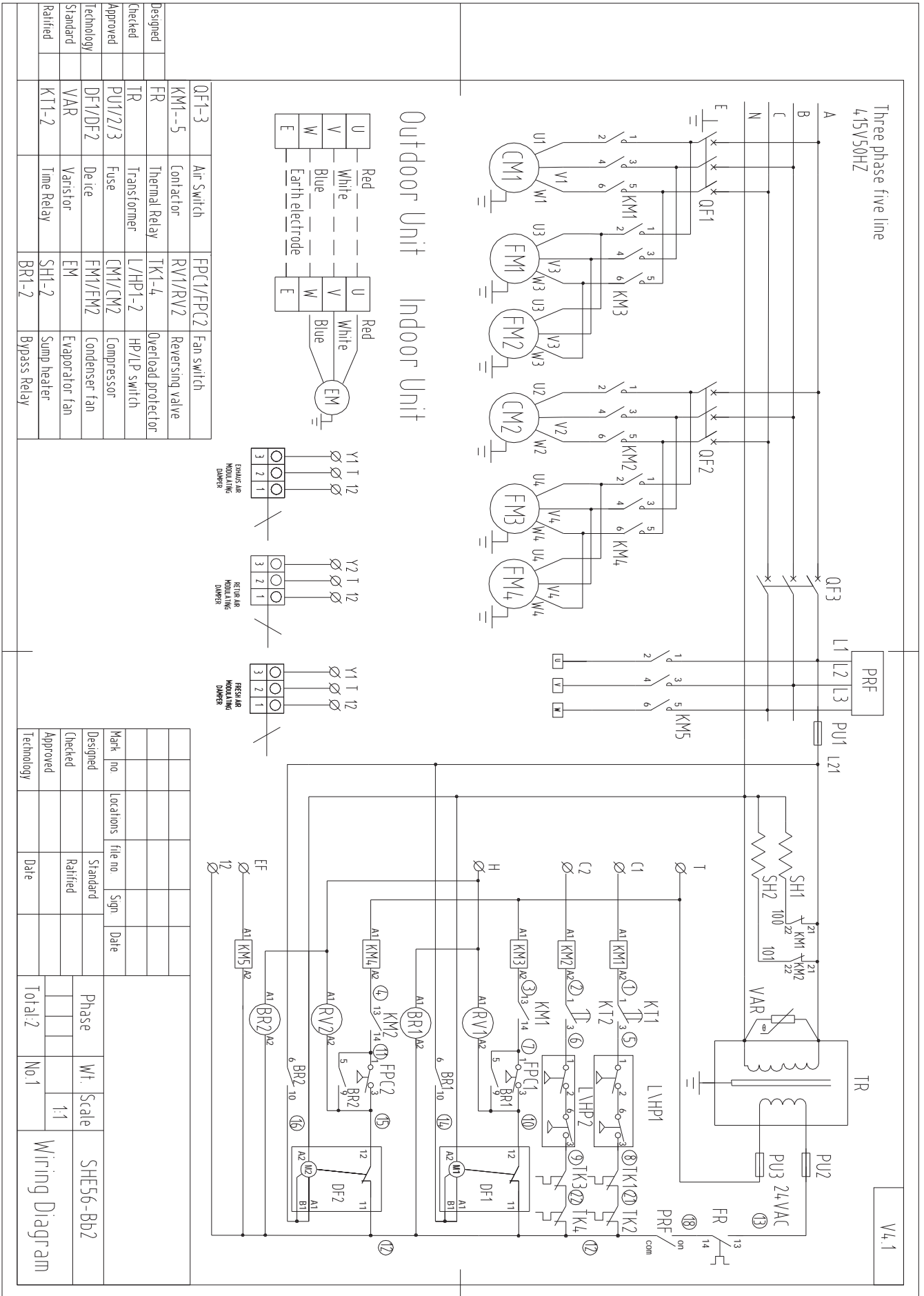
Refrigerant Type	R410a
Charge (kg)	2 × 7.4
Line Size (mm)	
Liquid 0-10 metres	19
Gas 0-10 metres	28
Liquid 10-20 metres	22
Gas 10-20 metres	28
Service Connections	Rotor Lock Valve
Expansion Control – in outdoor unit	TX Valve

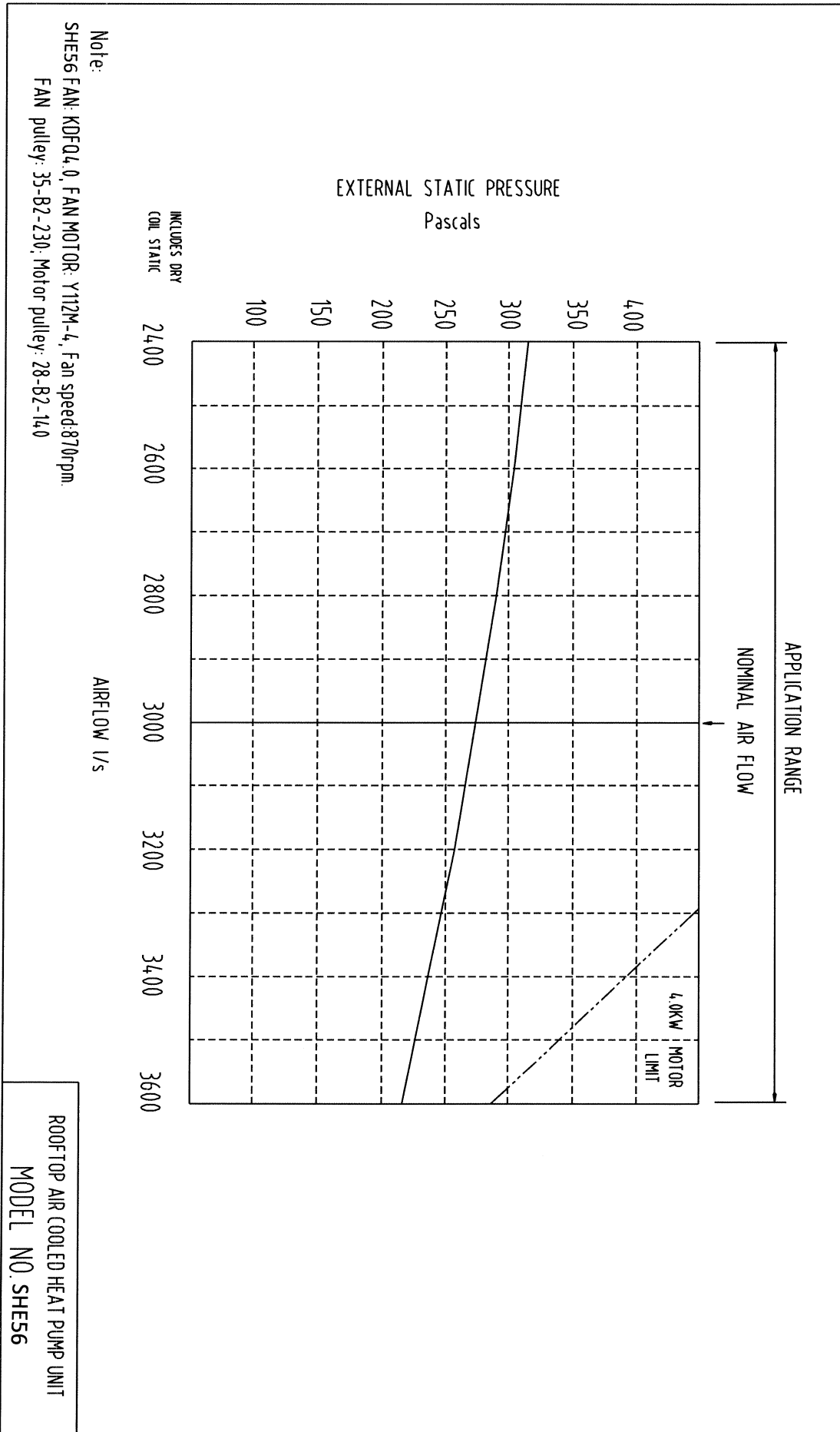


- Fan : KDFQ4.0
- Motor: Y112M-4 (4.0kW-4)
- Fan pulley: 35-B2-230
- Motor pulley: 28-B2-14.0
- Fan speed: 870rpm

INDOOR UNIT INSTALLED WEIGHT 510 kg

SHE56N



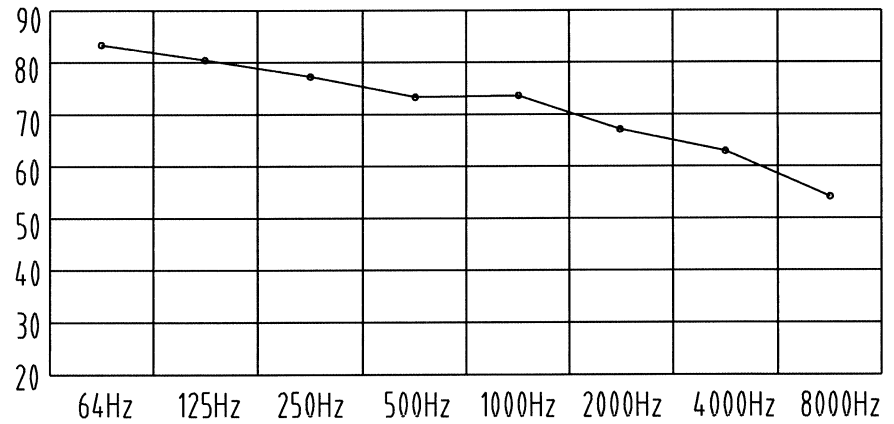


SHE56W Noise rate analysing chart

A Class: 77.1dB

Hz	dB
64Hz	82.5
125Hz	80.1
250Hz	77.6
500Hz	72.8
1000Hz	73.4
2000Hz	66.8
4000Hz	63.3
8000Hz	52.2

Noise rate analysing chart (A Class: 77.1dB) dB



SHE56N Noise rate analysing chart

A Class: 72.8dB

Hz	dB
64Hz	79.9
125Hz	79.2
250Hz	71.8
500Hz	68.5
1000Hz	68.1
2000Hz	64.1
4000Hz	61.0
8000Hz	53.8

Noise rate analysing chart (A Class: 72.8dB) dB

