



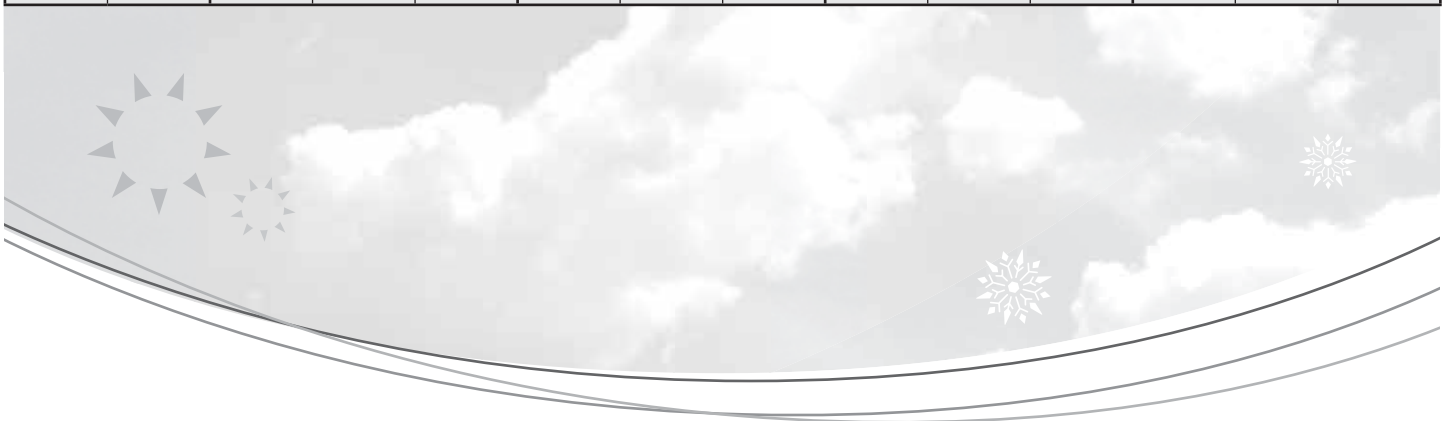
**DUNNAIR**  
(Aust) Pty Ltd

R407c Refrigerant

**SHE120**  
*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	115.3	70.7	11.5	109.3	68.2	11.8	103.1	65.5	12.2	98.3	65.5	12.4
	18	119.3	63.8	12.1	113.2	61.2	13.0	106.6	58.3	13.3	102.4	56.5	13.6
	19	123.7	56.5	13.9	117.2	53.9	14.2	110.2	51.0	14.6	106.3	49.5	14.8
	20	128.1	49.0	14.8	121.5	46.3	15.3	114.3	43.4	15.7	110.2	41.6	16.0
23	17	115.8	84.5	11.4	109.7	82.1	11.8	103.5	79.4	12.1	99.1	77.5	12.4
	18	119.3	77.4	12.5	113.2	74.8	12.8	106.6	71.9	13.3	102.4	70.2	13.6
	19	123.7	70.2	13.7	117.3	67.6	14.1	110.3	64.9	14.5	106.3	63.1	14.8
	20	128.2	62.6	14.8	121.5	59.9	15.3	114.4	57.0	15.7	110.3	55.3	15.9
	21	132.8	55.1	15.9	126.1	52.4	16.3	118.4	49.3	16.7	114.4	47.5	17.1
25	17	117	97.2	11.3	110.8	94.4	11.6	104.6	91.6	12.1	100.6	89.6	12.3
	18	119.6	94.0	12.6	113.5	89.1	13.0	106.9	86.2	13.4	102.7	84.5	13.7
	19	123.9	89.4	13.7	117.3	81.3	14.1	110.3	78.6	14.5	106.5	76.8	14.7
	20	128.2	84.4	14.8	121.6	73.7	15.3	114.4	70.7	15.7	110.3	69.0	15.9
	21	132.9	78.7	15.9	126.1	61.4	16.3	118.4	62.9	16.7	114.4	61.4	17.0
27	17	118.7	107.7	11.2	113.3	104.5	11.5	107.2	100.9	11.9	103.4	98.6	12.2
	18	121.1	105.4	12.4	114.7	102.8	12.7	108.1	99.8	13.2	104.9	98.1	13.4
	19	124.8	97.8	13.5	117.6	95.2	13.9	110.6	92.3	14.3	106.6	90.6	14.5
	20	128.3	90.9	14.7	121.6	88.2	15.1	114.4	85.4	15.5	110.3	83.7	15.7
	21	132.9	82.4	15.9	126.2	79.7	16.3	118.5	76.6	16.7	114.5	75.0	17.0
29	17	121.9	111.4	11.1	116.4	112.9	11.5	110.3	108.4	11.9	105.8	105.8	12.1
	18	123.1	109.5	12.3	117.1	111.2	12.7	110.6	107.7	13.2	106.6	102.9	13.4
	19	124.8	107.6	13.6	118.5	109.5	13.9	111.6	106.9	14.3	107.0	100.9	14.6
	20	128.3	104.2	14.7	121.8	101.5	15.1	114.5	98.3	15.6	110.4	96.8	15.8
	21	132.9	95.2	15.9	126.2	93.2	16.3	118.5	90.2	16.7	114.5	88.7	17.0
31	17	125.9	124.5	10.7	120.5	119.6	11.1	114.1	114.1	11.5	110.5	110.5	11.7
	18	126.5	123.1	12.1	120.7	119.1	12.4	114.5	113.9	12.8	111.2	110.5	13.2
	19	127.1	121.7	13.4	121.1	118.7	13.8	114.5	113.3	14.2	111.2	110.1	14.4
	20	129.2	118.5	14.6	122.8	115.9	15.1	115.5	111.9	15.5	111.4	109.9	15.8
	21	133.1	110.6	15.9	126.3	108.0	16.3	118.7	109.5	16.7	114.7	103.3	17.1



## Technical Specification SHE120 Economy Cycle Split Ducted

Indoor Unit Model Number	SHE120N	Nominal Evaporator Air Flow (l/s)	6500
Outdoor Unit Model Number	SHE120W	Number of Compressors	2
Total Cooling Capacity (kW)	117.6	Power V / Ph	415 / 3
Sensible Cooling Capacity (kW)	95.2	Nominal Max. Current (A)	98.9
Heating Capacity (kW)	116.2	Power Input (kW)	48.1
*Cooling cap entering air 27°/19°C (DB/WB) Ambient 35°C		** Heating cap entering air 21°C Outdoor ambient 7°C	

### Cooling Performance Correction

Capacity	% Rated Air Flow				
	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 Capacity

Amb. °C DB	0	4	8	12	18
Cap kW	91.2	100.7	116.6	128.1	154.1

Heating cap is based on 21°C DB. Frost formation will have greatest effect at amb 4 to 6°C. Above 8°C defrost is unlikely and a factor of 1 may be used.

### Heating Performance Correction

% Air Flow	×	Return Air Temp °C	×	O/door 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

### Compressors

Number Per Unit	2
Type	Hermetic Scroll
Nominal RPM	2900
Nominal Max. Amps	2 × 35.7
Locked Rotor Amps	2 × 230
Displacement (m <sup>3</sup> /h)	2 × 60.5

### Electrical Controls and Safeties

Indoor Fan Overload	Internal	Defrost Cycle Start °C	-4
Outdoor Fan Overload	Internal	Defrost Cycle End °C	10
Compressor Delay Timer	300 sec	Min. Defrost Cycle	33 mins
High Pressure Switch (kPa)	2800	Max. Defrost Period	4 mins
Low Pressure Switch (kPa)	100		

### Standard Features

HP/LP Cutouts	Thermal Overload Protection
Crankcase Heater	Limit Start Timer
Automatic De-Ice	Indoor 25mm Insulation
Gas Separator	240 Volt Control

### Evaporator Coil

Type	Copper tube alum. fins
Face Area (m <sup>2</sup> )	2.4

### Condenser Coil

Type	Copper tube alum. fins
Face Area (m <sup>2</sup> )	2×1.7

### Evaporator Fan

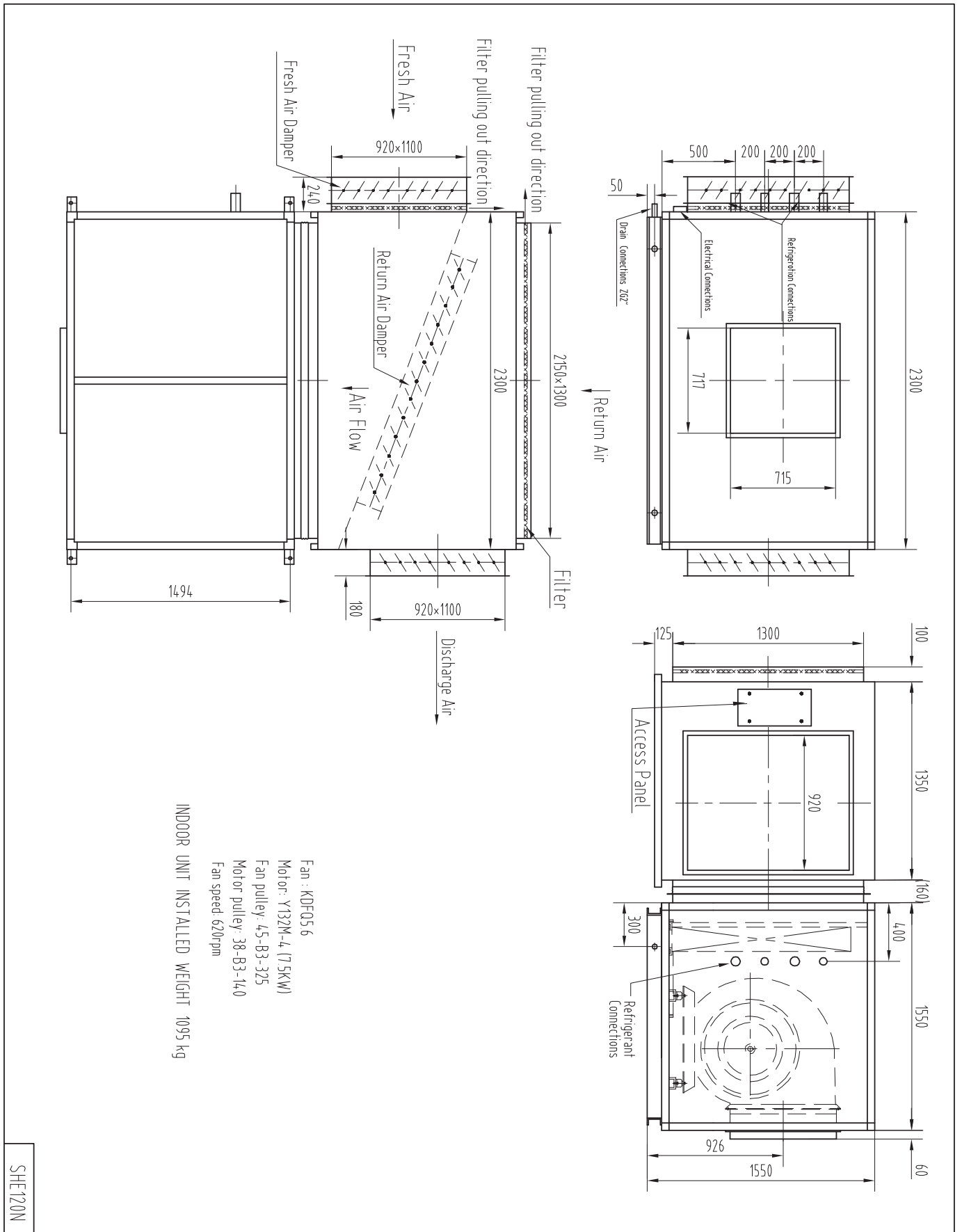
Number of Fans	1
Type	Centrifugal
Drive	Belt
Motor V / Ph / Hz	415 / 3 / 50
Motor Output Power (kW)	7.5
Max. Fan Speed (rpm)	620

### Condenser Fan

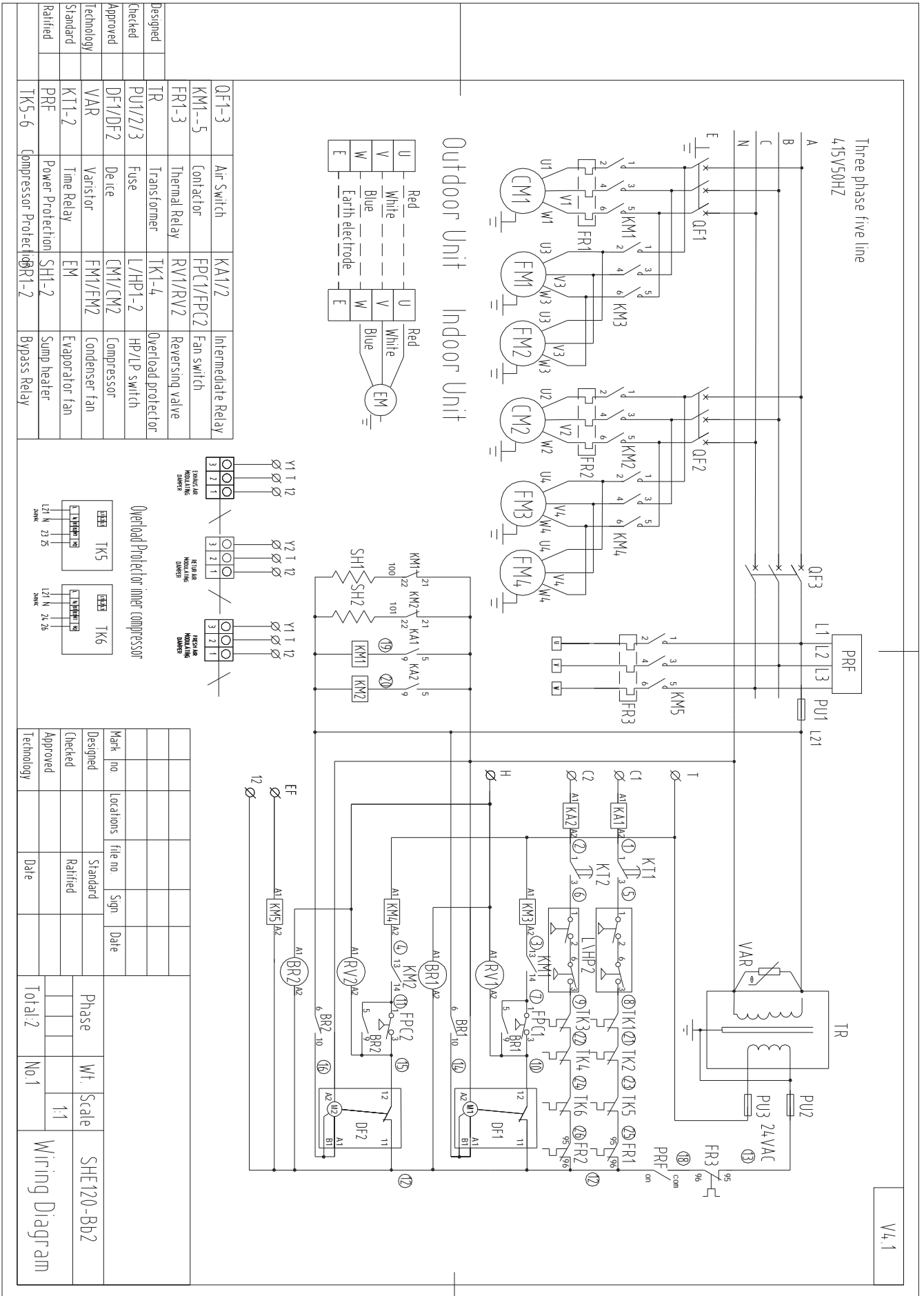
Number of Fans	4
Type	Axial
Drive	Direct
Motor Output Power (kW)	4 × 0.75
Motor V / Ph / Hz	415 / 3 / 50

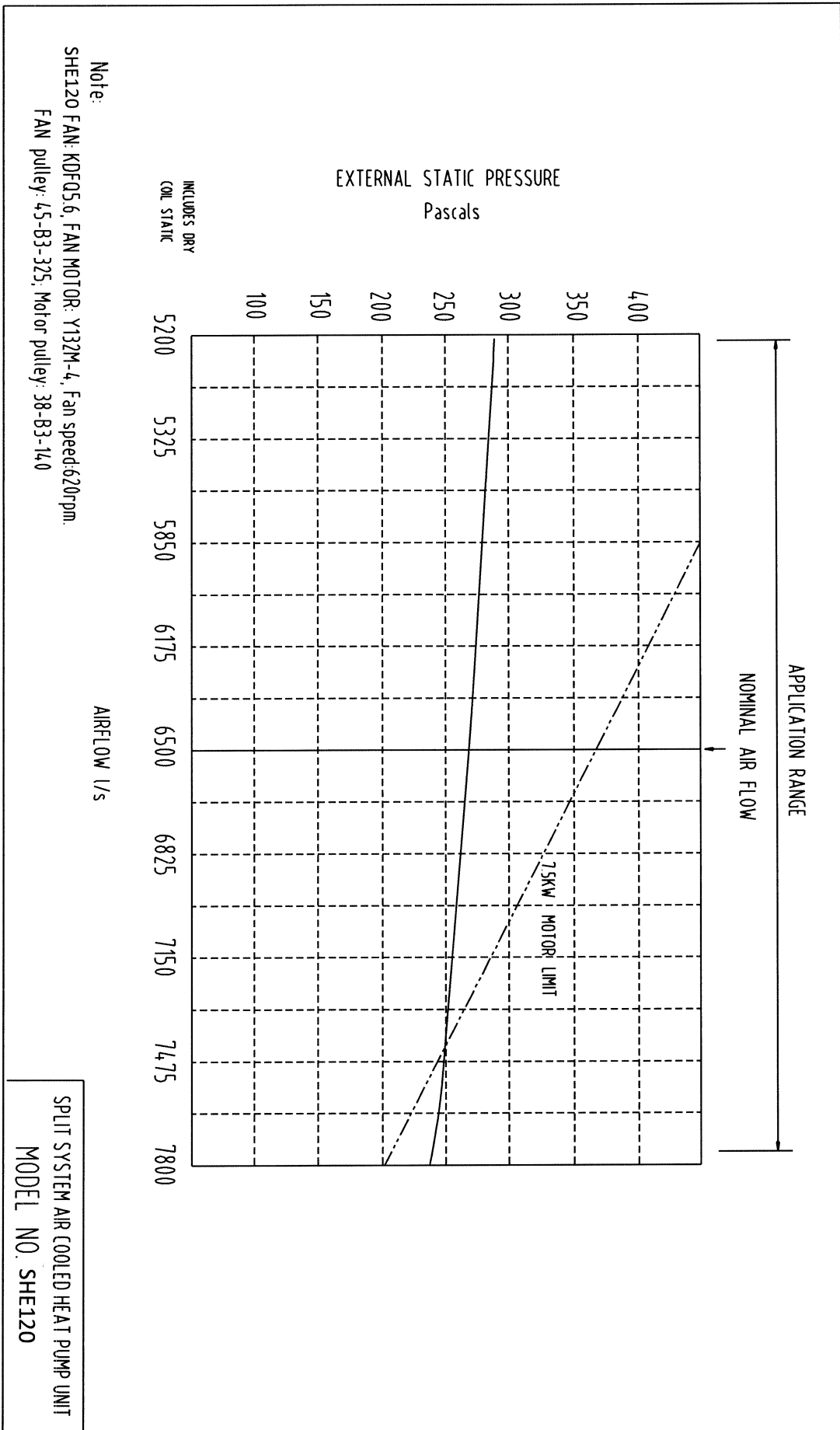
### Refrigerant System

Refrigerant Type	R407c
Nominal Charge Required	2 × 14.6kg
Line Size (mm)	
Liquid 0–15 metres	22
Gas 0–15 metres	35
Liquid 15–30 metres	28
Gas 15–30 metres	42
Service Connection	Rotor Lock Valve
Expansion Control	TX Valve



SHE120N



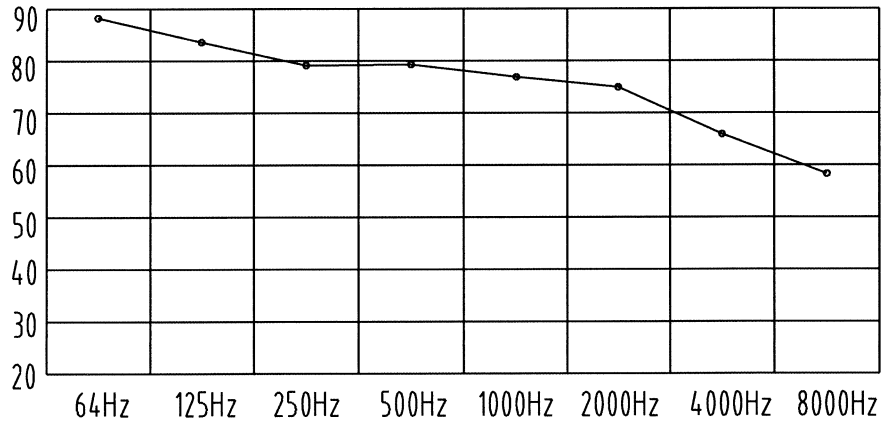


SHE120W Noise rate analysing chart

A Class: 82.2dB

Hz	dB
64Hz	88.1
125Hz	83.4
250Hz	79.2
500Hz	79.4
1000Hz	77.2
2000Hz	75.6
4000Hz	66.7
8000Hz	58.8

Noise rate analysing chart ( A Class: 82.2dB) dB



SHE120N Noise rate analysing chart

A Class: 77.1dB

Hz	dB
64Hz	86.4
125Hz	82.4
250Hz	75.4
500Hz	72.5
1000Hz	73.2
2000Hz	67.8
4000Hz	65.1
8000Hz	58.3

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

