



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	11.5	6.8	12.2	10.9	6.5	12.6	10.2	6.2	13.5	9.7	6.2	13.0
	18	12.0	6.0	13	11.3	5.7	13.8	10.7	5.4	14.0	10.2	5.2	14.3
	19	12.5	5.2	14.5	11.8	4.9	14.8	11.1	4.6	15.1	10.6	4.4	15.3
	20	13.0	4.4	15.5	12.3	4.1	15.6	11.5	3.8	16.1	11.1	3.6	16.4
23	17	11.6	8.3	12.3	10.9	8.0	12.6	10.2	7.7	13.0	10.6	7.5	13.2
	18	12.0	7.6	13.4	11.3	7.3	13.8	10.6	7.0	14.0	11.1	6.8	14.4
	19	12.5	6.7	14.5	11.8	6.4	14.8	11.1	6.1	15.1	11.5	5.9	15.5
	20	13.0	5.9	15.6	12.3	5.6	15.8	11.5	5.3	16.2	11.1	5.2	16.5
	21	13.4	5.0	16.6	12.7	4.7	16.7	12.0	4.4	17.1	11.5	4.2	17.0
25	17	11.6	9.9	12.2	11.0	9.7	12.5	10.3	9.3	12.8	9.8	9.1	13.2
	18	12.0	9.4	13.4	11.3	8.8	13.8	10.6	8.6	14.1	10.1	8.3	14.4
	19	12.5	8.8	14.4	11.8	8.0	14.7	11.1	7.7	15.1	10.6	7.5	15.3
	20	13.0	8.2	15.6	12.2	7.2	15.8	11.5	6.8	16.3	11.0	6.7	16.5
	21	13.4	7.6	16.6	11.5	5.7	17.4	11.9	5.9	17.3	11.5	5.7	17.5
27	17	11.9	11.0	12.0	11.2	10.7	12.1	10.6	10.3	12.8	11.0	10.1	12.9
	18	12.1	10.7	13.3	11.4	10.4	13.5	10.7	10.1	14.0	10.2	9.9	14.2
	19	12.5	9.8	14.4	11.5	9.7	14.3	11.1	9.2	15.1	10.6	9.0	15.3
	20	12.9	9.0	15.5	12.2	8.7	16.0	11.5	8.4	16.3	11.0	8.2	16.5
	21	13.4	8.1	16.5	12.7	7.8	16.8	11.9	7.5	17.1	11.5	7.3	17.5
29	17	12.2	12.0	11.9	11.6	11.2	12.3	10.9	10.6	12.6	10.5	10.5	12.8
	18	12.3	11.9	13.1	11.6	11.2	13.4	10.9	10.6	13.8	10.5	10.5	14.0
	19	12.5	11.4	14.3	11.9	11.1	14.7	11.1	10.8	15.0	10.7	10.6	15.3
	20	12.9	10.5	15.5	12.2	10.2	15.8	11.4	9.9	16.3	11.0	9.7	16.5
	21	13.4	9.6	16.5	12.7	9.3	16.6	11.9	9.0	17.2	11.5	8.8	17.4
31	17	12.7	12.7	11.7	12.0	12.0	12.1	11.0	11.0	12.5	10.9	10.9	12.7
	18	12.7	12.7	13.0	12.0	12.0	13.3	11.3	11.3	13.6	10.9	10.9	13.9
	19	12.7	12.7	14.2	12.0	12.0	14.6	11.3	11.2	14.8	10.8	10.8	15.2
	20	13.0	12.0	15.4	12.3	11.7	15.8	11.5	10.6	16.2	11.1	11.1	16.4
	21	13.4	11.1	16.5	12.7	10.9	16.5	11.9	10.5	17.2	11.5	10.4	17.3

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



Technical Specification SHSE12 Economy Cycle Split Ducted

Indoor Unit Model Number	SHSE12N	Nominal Evaporator Air Flow (l/s)	695
Outdoor Unit Model Number	SHSE12W	Number of Compressors	1
Total Cooling Capacity (kW)*	11.5	Power Requirements (Volt / Phase)	415 / 3
Sensible Cooling Capacity (kW)*	9.7	Normal Max. Current (Amps / Phase)	11.6
Heating Capacity (kW)**	12.1		

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

Air Quantity Multiplying Factors

	% Rated Air Quantity-Nominal 695 l/s				
Capacity	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

	Outdoor Coil Entering DB temp				
	0	4	8	12	18
Heating Capacity kW	10.5	11.8	12.5	13.6	15.1

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	1
Type	Scroll
RPM (Nom)	2900
Normal Max. Current (Amps / Phase)	7.0
Locked Rotor Current (Amps / Phase)	53.5
Displacement (m ³ /h)	14.2

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)	0.36
Air Quantity (l/s)	695

Indoor Fan

Number of Fans	2
Type	Centrifugal
Drive	Direct
Motor Voltage / Phase / Frequency	240 / 1 / 50
Motor (kW) Standard	2 × 0.37
Max. Fan Speed (rpm)	1330

Electrical

Power Requirements	3 Phase / 415V / 50Hz
Normal Max. Current (Amps / Phase)	11.6

Outdoor Coil

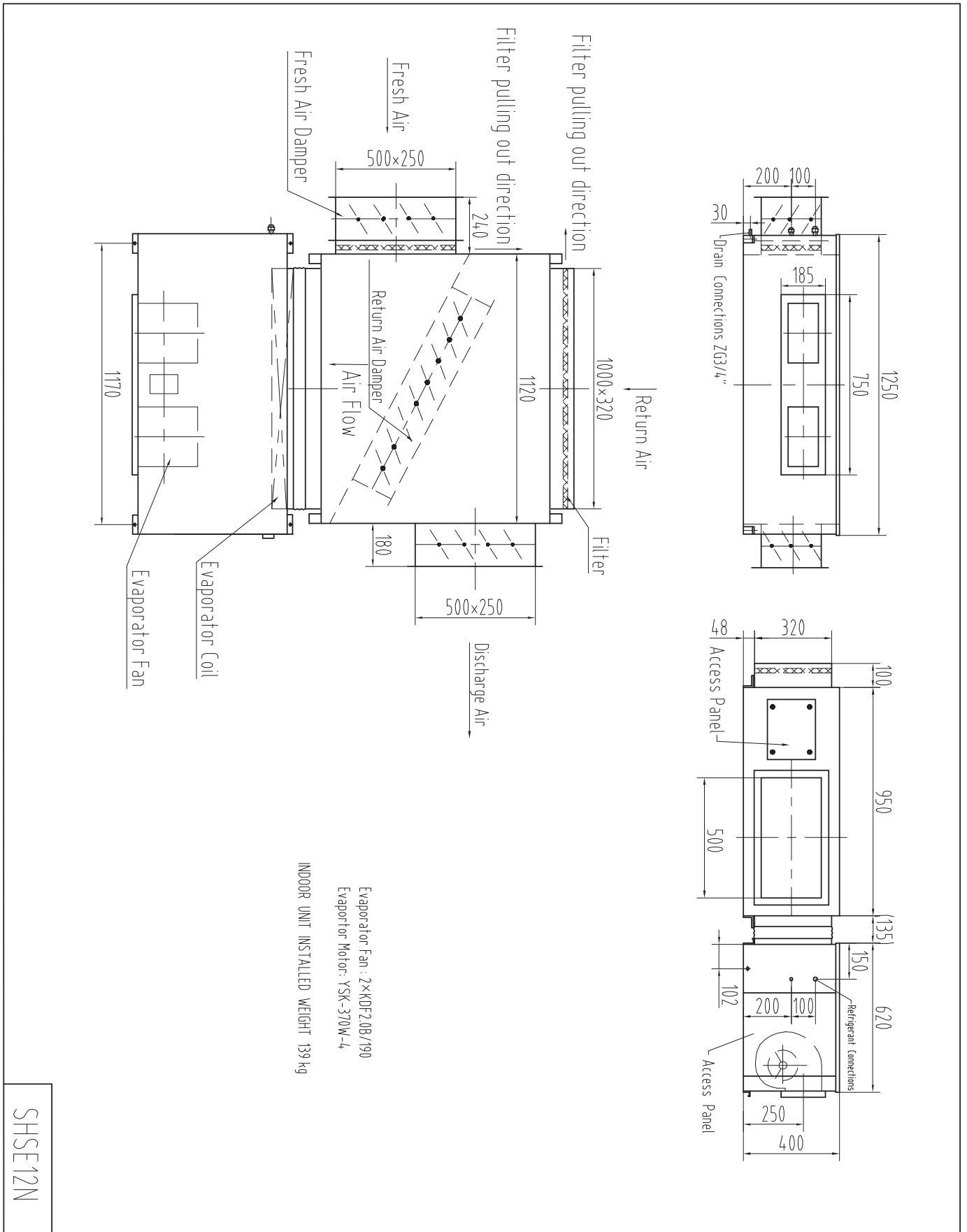
Type	Copper Tube / Aluminium Fins
Face Area	0.97

Outdoor Fan

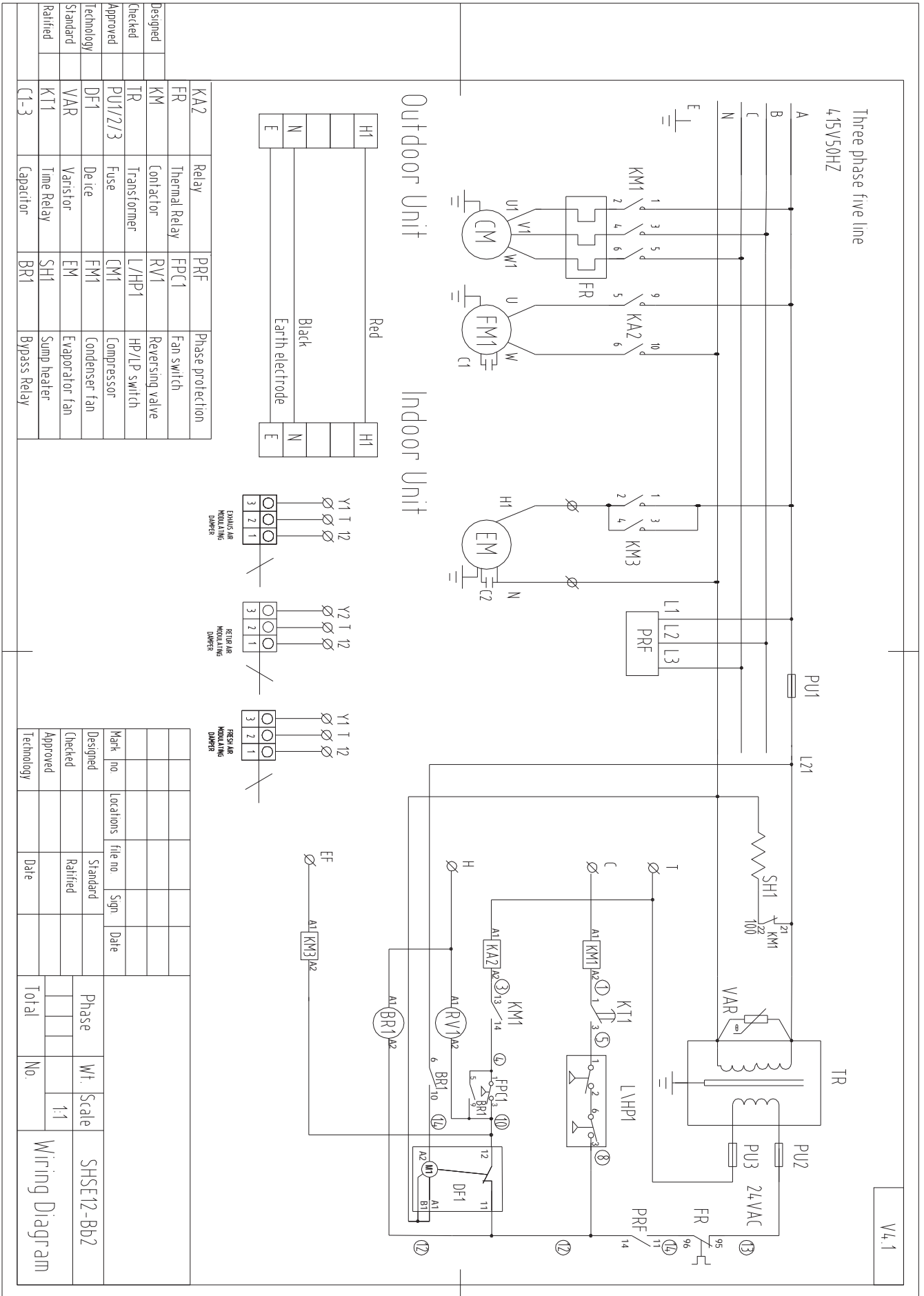
Number of Fans	2
Type	Axial
Drive	Direct
Motor Watts / rpm	2 × 240 / 950
Motor Voltage / Phase / Frequency	240 / 1 / 50

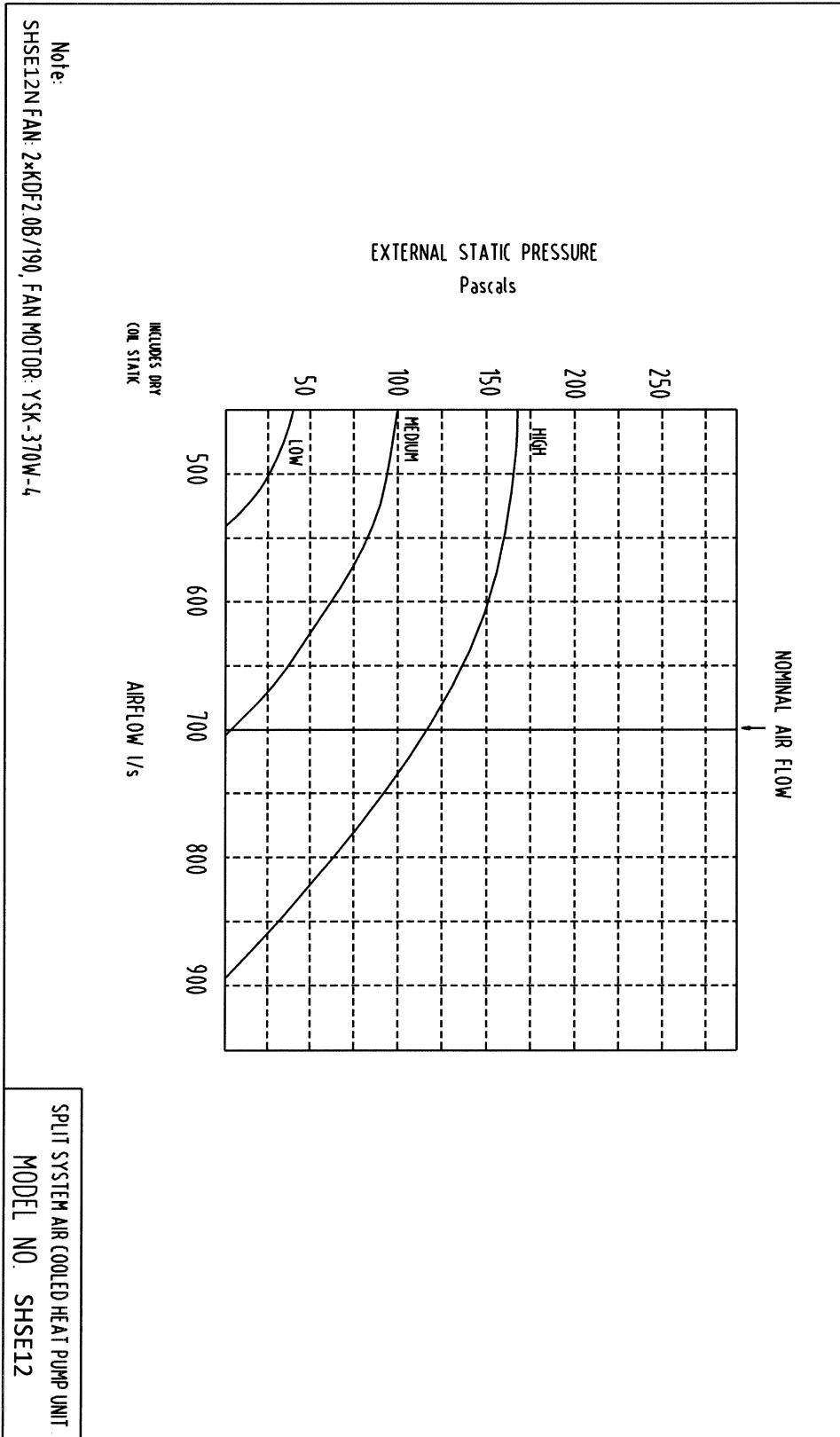
Refrigerant System

Refrigerant Type	R410a
Charge (kg)	3.6
Line Size (mm)	
Liquid 0-10 metres	13
Gas 0-10 metres	19
Liquid 10-20 metres	-
Gas 10-20 metres	-
Service Connections	Rotor Lock Valve
Expansion Control – in outdoor unit	Capillary



SHSE12N



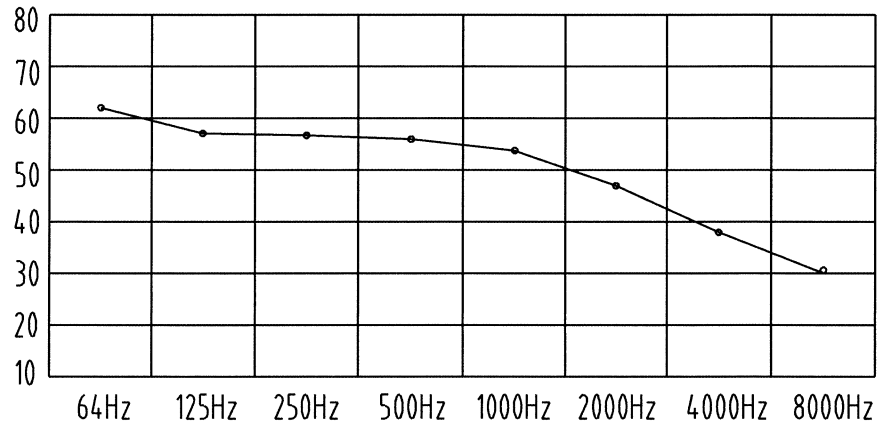


SHSE12W Noise rate analysing chart

A Class: 57.5dB

Hz	dB
64Hz	61.6
125Hz	57.1
250Hz	56.0
500Hz	55.8
1000Hz	53.9
2000Hz	47.0
4000Hz	38.7
8000Hz	30.3

Noise rate analysing chart (A Class: 57.5dB) dB



SHSE12N Noise rate analysing chart

A Class: 68.4dB

Hz	dB
64Hz	76.8
125Hz	72.9
250Hz	72.2
500Hz	70.7
1000Hz	66.6
2000Hz	61.2
4000Hz	56.6
8000Hz	51.8

Noise rate analysing chart (A Class: 68.4dB) dB

