



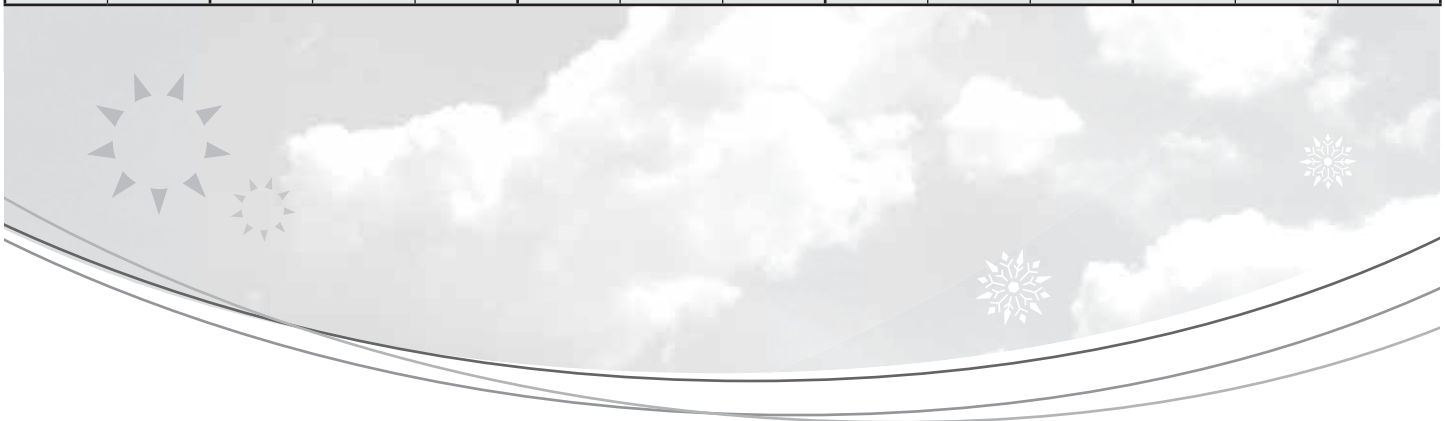
DUNNAIR
(Aust) Pty Ltd

R407c Refrigerant

SHE200
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 | 198.1 | 122.0 | 11.8 | 187.8 | 117.7 | 12.1 | 177.0 | 113.0 | 12.6 | 169.5 | 113.0 | 12.8 |
| | 18 | 205.1 | 110.1 | 12.5 | 194.5 | 105.6 | 13.3 | 183.1 | 100.6 | 13.6 | 175.9 | 97.5 | 14.0 |
| | 19 | 212.2 | 97.6 | 14.3 | 201.2 | 93.1 | 14.6 | 189.4 | 88.1 | 15.1 | 182.5 | 85.3 | 15.3 |
| | 20 | 220.1 | 84.5 | 15.3 | 208.6 | 79.8 | 15.7 | 196.1 | 74.9 | 16.1 | 189.3 | 71.8 | 16.5 |
| 23 | 17 | 198.8 | 145.8 | 11.7 | 188.6 | 141.6 | 12.1 | 177.8 | 136.9 | 12.5 | 170.2 | 133.8 | 12.8 |
| | 18 | 205.1 | 133.7 | 12.9 | 194.5 | 129.1 | 13.2 | 183.1 | 124.2 | 13.6 | 175.9 | 121.1 | 14.0 |
| | 19 | 212.2 | 121.2 | 14.1 | 201.4 | 116.7 | 14.5 | 189.5 | 112.0 | 15.0 | 182.5 | 108.9 | 15.3 |
| | 20 | 220.3 | 108.1 | 15.3 | 208.6 | 103.4 | 15.7 | 196.2 | 98.5 | 16.1 | 189.5 | 95.4 | 16.4 |
| | 21 | 228.2 | 95.1 | 16.4 | 216.4 | 190.4 | 16.8 | 203.9 | 85.1 | 17.2 | 196.6 | 82.0 | 17.6 |
| 25 | 17 | 200.8 | 167.7 | 11.6 | 190.5 | 163.0 | 11.9 | 179.8 | 157.9 | 12.5 | 172.8 | 154.7 | 12.7 |
| | 18 | 205.6 | 162.1 | 13.0 | 195.0 | 153.8 | 13.3 | 183.7 | 148.8 | 13.8 | 176.5 | 145.7 | 14.1 |
| | 19 | 212.3 | 154.4 | 14.1 | 201.4 | 140.2 | 14.5 | 189.5 | 135.5 | 15.0 | 182.8 | 132.5 | 15.2 |
| | 20 | 220.3 | 145.5 | 15.3 | 208.9 | 127.2 | 15.7 | 196.5 | 121.9 | 16.1 | 189.5 | 119.2 | 16.4 |
| | 21 | 228.3 | 135.8 | 16.4 | 216.4 | 105.9 | 16.8 | 203.9 | 108.6 | 17.2 | 196.6 | 105.9 | 17.4 |
| 27 | 17 | 203.9 | 185.9 | 11.5 | 194.7 | 180.4 | 11.8 | 184.2 | 174.0 | 12.2 | 177.5 | 170.1 | 12.6 |
| | 18 | 208.0 | 181.8 | 12.8 | 196.9 | 177.4 | 13.1 | 185.6 | 172.4 | 13.5 | 180.3 | 169.3 | 13.8 |
| | 19 | 214.4 | 168.7 | 13.9 | 201.8 | 164.3 | 14.3 | 190.0 | 159.3 | 14.7 | 183.1 | 156.3 | 15.0 |
| | 20 | 220.5 | 156.8 | 15.2 | 208.9 | 152.1 | 15.5 | 196.5 | 147.3 | 15.9 | 189.5 | 144.4 | 16.1 |
| | 21 | 228.4 | 142.1 | 16.4 | 210.6 | 137.4 | 16.8 | 203.9 | 132.2 | 17.2 | 196.7 | 129.4 | 17.4 |
| 29 | 17 | 209.5 | 192.2 | 11.4 | 200.0 | 194.8 | 11.8 | 189.5 | 187.1 | 12.2 | 181.8 | 183.0 | 12.5 |
| | 18 | 211.4 | 188.9 | 12.7 | 201.1 | 191.8 | 13.1 | 190.0 | 185.9 | 13.5 | 183.1 | 177.4 | 13.8 |
| | 19 | 214.4 | 185.6 | 14.0 | 203.6 | 189.5 | 14.3 | 191.7 | 184.6 | 14.7 | 183.8 | 174.1 | 15.1 |
| | 20 | 220.5 | 179.9 | 15.2 | 209.1 | 175.1 | 15.5 | 196.7 | 169.6 | 16.0 | 189.8 | 167.1 | 16.3 |
| | 21 | 228.4 | 165.7 | 16.4 | 216.6 | 160.9 | 16.8 | 203.9 | 155.8 | 17.2 | 196.7 | 152.9 | 17.4 |
| 31 | 17 | 216.1 | 214.8 | 11.0 | 207.0 | 206.6 | 11.4 | 195.9 | 197.1 | 11.8 | 189.8 | 191.4 | 12.0 |
| | 18 | 217.2 | 212.3 | 12.5 | 207.2 | 205.6 | 12.8 | 196.7 | 196.5 | 13.2 | 190.8 | 190.7 | 13.5 |
| | 19 | 218.3 | 210.0 | 13.8 | 208.0 | 204.8 | 14.2 | 196.7 | 195.5 | 14.6 | 190.8 | 190.1 | 14.8 |
| | 20 | 221.9 | 204.5 | 15.1 | 210.8 | 200.1 | 15.5 | 198.3 | 193.0 | 15.9 | 191.4 | 189.6 | 16.3 |
| | 21 | 228.9 | 191.0 | 16.4 | 216.9 | 186.2 | 16.8 | 203.9 | 188.9 | 17.2 | 196.9 | 178.2 | 17.6 |



Technical Specification SHE200 Economy Cycle Split Ducted

| | | | |
|---|---------|--|---------|
| Indoor Unit Model Number | SHE200N | Nominal Evaporator Air Flow (l/s) | 10500 |
| Outdoor Unit Model Number | SHE200W | Number of Compressors | 2 |
| Total Cooling Capacity (kW) | 201.8 | Power V / Ph | 415 / 3 |
| Sensible Cooling Capacity (kW) | 164.3 | Nominal Max. Current (A) | 190.3 |
| Heating Capacity (kW) | 196.2 | Power Input (kW) | 85.8 |
| *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 | 147.3 | 162.6 | 188.4 | 207.0 | 249.0 |

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 × 57.7 |
| Locked Rotor Amps | 2 × 320 |
| Displacement (m ³ /h) | 2 × 111.6 |

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 ²) | 2 × 1.7 |

Condenser Coil

| | |
|-----------------------------|------------------------|
| Type | Copper tube alum. fins |
| Face Area (m ²) | 2 × 1.9 |

Evaporator Fan

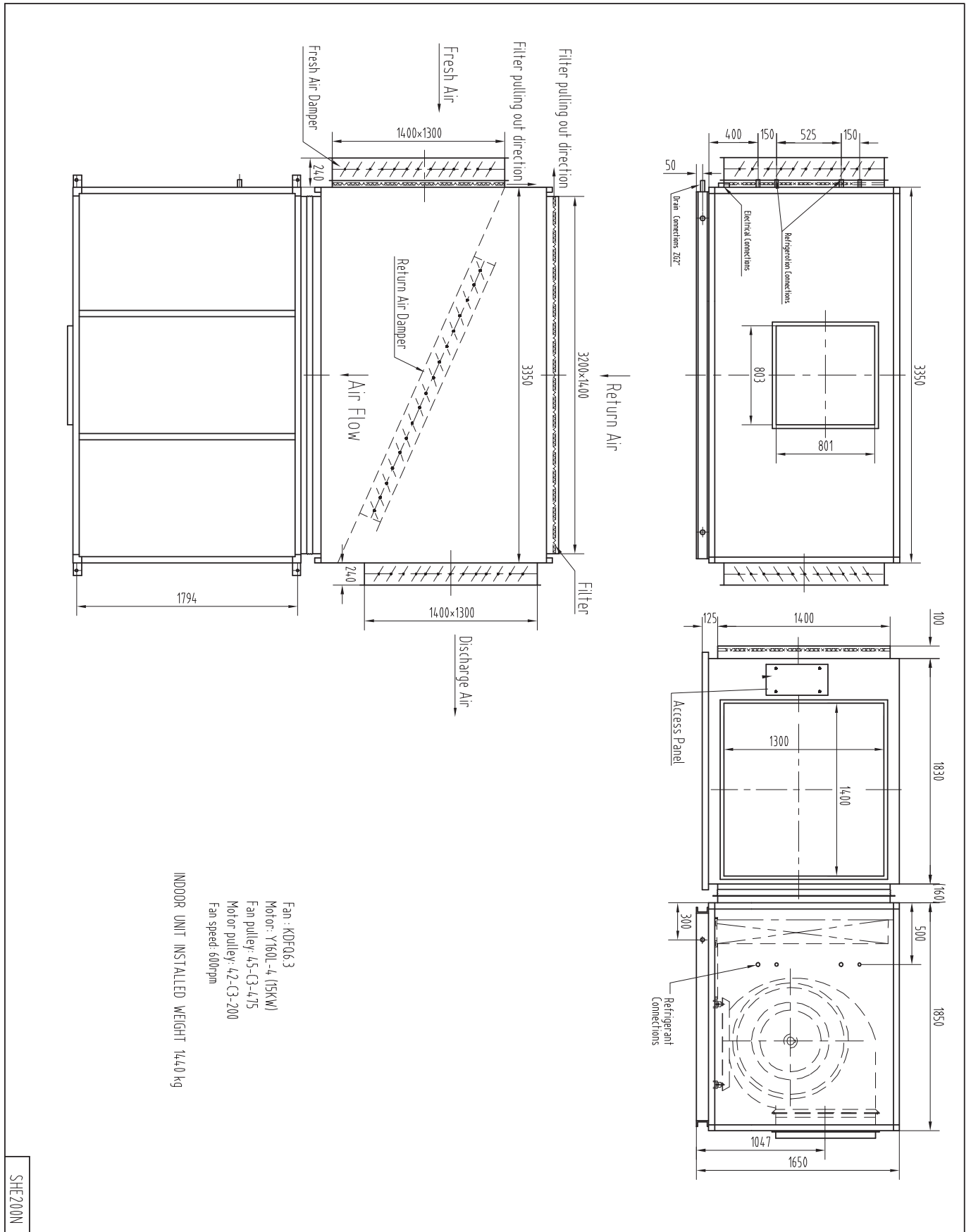
| | |
|-------------------------|--------------|
| Number of Fans | 1 |
| Type | Centrifugal |
| Drive | Belt |
| Motor V / Ph / Hz | 415 / 3 / 50 |
| Motor Output Power (kW) | 15 |
| Max. Fan Speed (rpm) | 600 |

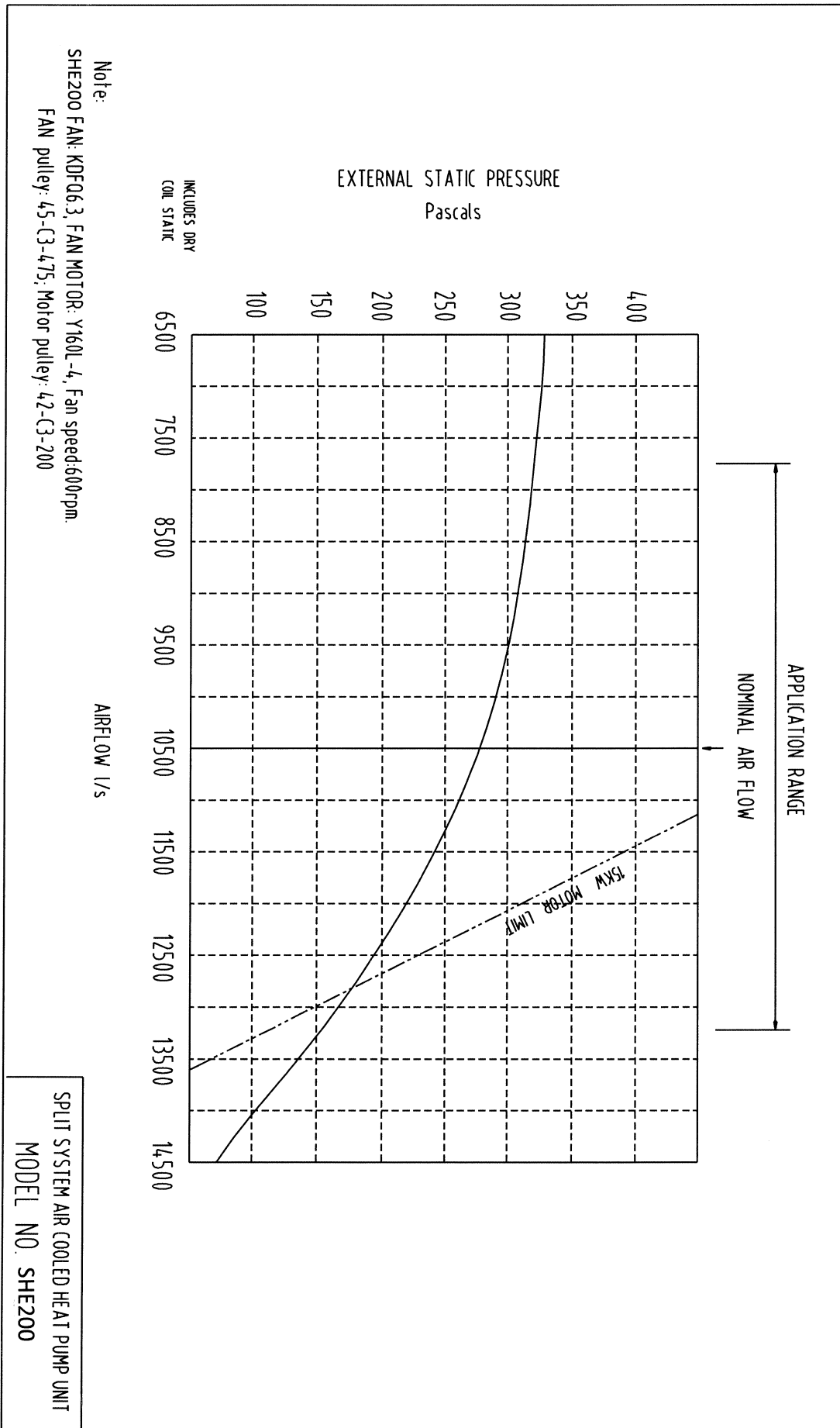
Condenser Fan

| | |
|-------------------------|--------------|
| Number of Fans | 4 |
| Type | Axial |
| Drive | Direct |
| Motor Output Power (kW) | 4 × 1.5 |
| Motor V / Ph / Hz | 415 / 3 / 50 |

Refrigerant System

| | |
|-------------------------|------------------|
| Refrigerant Type | R407c |
| Nominal Charge Required | 2 × 25.4kg |
| Line Size (mm) | |
| Liquid 0–15 metres | 28 |
| Gas 0–15 metres | 54 |
| Liquid 15–30 metres | 28 |
| Gas 15–30 metres | 54 |
| Service Connection | Rotor Lock Valve |
| Expansion Control | TX Valve |



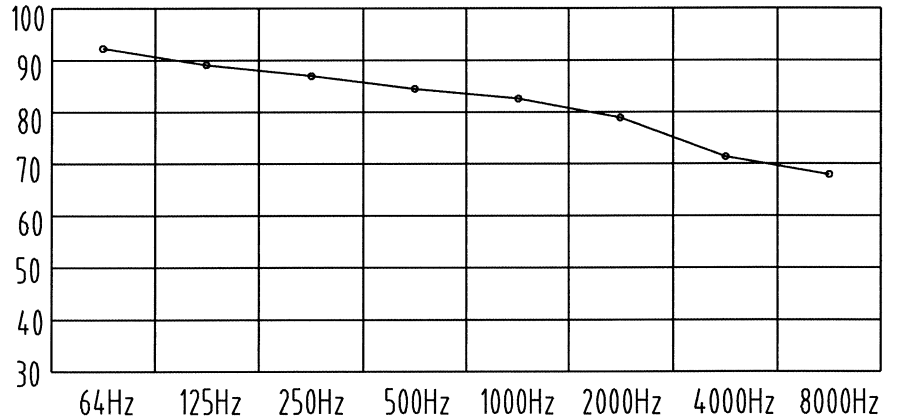


SHE200W Noise rate analysing chart

A Class: 87.2dB

| Hz | dB |
|--------|------|
| 64Hz | 92.1 |
| 125Hz | 89.0 |
| 250Hz | 87.1 |
| 500Hz | 84.4 |
| 1000Hz | 82.6 |
| 2000Hz | 78.7 |
| 4000Hz | 70.9 |
| 8000Hz | 68.1 |

Noise rate analysing chart (A Class: 87.2dB) dB



SHE200N Noise rate analysing chart

A Class: 82.6dB

| Hz | dB |
|--------|------|
| 64Hz | 91.5 |
| 125Hz | 86.4 |
| 250Hz | 82.5 |
| 500Hz | 78.4 |
| 1000Hz | 78.6 |
| 2000Hz | 73.1 |
| 4000Hz | 70.4 |
| 8000Hz | 63.1 |

Noise rate analysing chart (A Class: 82.6dB) dB

