

ERV-PAC Packaged Airconditioning

XES Swim Pool Unit

XES1700P3 Technical Data



Technical Specifications

Nominal Airflow

| | |
|-----------------------|-------------|
| Supply Air (l/sec) | 1600 - 1700 |
| Return Air (l/sec) | 1600 - 1700 |
| Fresh Air (l/sec) | 1600 - 1700 |
| Condensor Air (l/sec) | 1260 |
| Exhaust Air (l/sec) | 2960 |

Supply Fan

| | |
|----------------------|-------------|
| Fan Type | EC Plug Fan |
| Motor Power (Watts) | 4450 |
| External Static (Pa) | 250 |
| Fan Diameter | 450 |
| Number of Fans | 1 |

Exhaust Fan

| | |
|----------------------|-------------|
| Fan Type | EC Plug Fan |
| Motor Power (Watts) | 4450 |
| External Static (Pa) | 250 |
| Fan Diameter | 450 |
| Number of Fans | 1 |

Electrical

*Max FLA to be used to size supply cables and relevant safety devices

| Compressor Type | Fixed Speed | Inverter |
|------------------------|--------------------|--------------------|
| Total Run Current (A) | 27.9 - 27.9 - 27.9 | 26.9 - 26.9 - 26.9 |
| Maximum Full Load (A) | 46.0 - 46.0 - 46.0 | 53.0 - 53.0 - 53.0 |
| Power Supply (V/Ph/Hz) | 415/3/50 | 415/3/50 |

Controls

| | |
|------------------------|-----------|
| 0-10V DC (Fan Control) | Included |
| 24V AC Control Relays | Included |
| Fan Fault Signal | Included |
| Fan Status | Available |
| Switchboard | Yes |
| Circuit Breakers | Yes |

Heat Exchanger

*Rated at standard conditions of 35.5° db/24.0° wb

| | |
|-------------------------|----------|
| Sensible Poly Media | Standard |
| Face Velocity (m/sec) | 1.8 |
| Pressure Drop (Pa) | 70.5 |
| Kw Recovered (Heating)* | 17.3 |

Cabinet Construction

| | |
|----------------------------|----------------------|
| Casing | 50mm Insulated Panel |
| Finish | Surf Mist Colourbond |
| Insulation Value | R2.0 |
| Side Access Panels | Included |
| Corrosion Resistant Lining | Included |

Design Temperatures

| | |
|---------------------------|-----------|
| Ambient (DB/WB) Summer | 35°C/24°C |
| Return Air (DB/WB) Summer | 24°C/17°C |
| Ambient Winter | 7°C |
| Return Air Winter | 21°C |

Coil Selection

| | |
|-----------------------------|-----------------|
| Indoor Coil FL x FH (mm) | 1220 x 635 |
| Face Velocity (m/sec) | 2.2 |
| Outdoor Coil FL x FH (mm) | 1220 x 865 |
| Face Velocity (m/sec) | 2.8 |
| Anti-Corrosion Coil Coating | Included |
| Drain Tray | Stainless Steel |

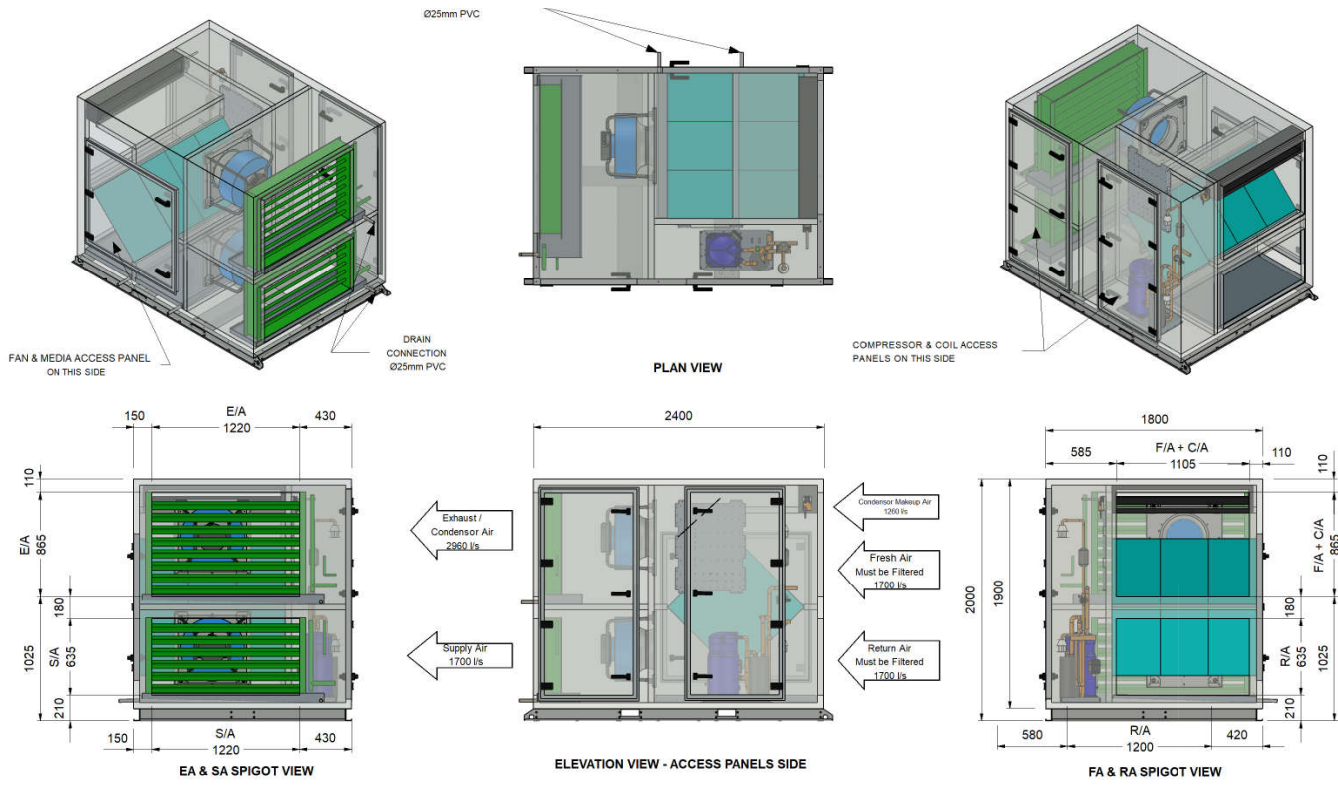
Refrigeration *At standard design temperatures

| | |
|------------------------|------------------------|
| Heating Capacity (kW)* | 37 |
| Cooling Capacity (kW)* | 37 |
| Fixed Speed Compressor | Standard - x1 - R407C |
| Inverter Compressor | Available - x1 - R410A |
| Expansion Device | TX Biflow Valves |
| Head Pressure Control | Included |

Options

| | |
|--------------------------|-------------------------|
| Economy Cycle | Available (XES1700P3EC) |
| Return Air Bypass Damper | Available |

Technical Drawings – XES1700P3



| Dimension | |
|-----------------------|----------------------------|
| Height (mm) | 2000 |
| Width (mm) | 1800 |
| Length (mm) | 2400 |
| Weight (kg) | 1060 |
| Access Clearance (mm) | 1200 (Fan & Media Access) |
| Access Clearance (mm) | 1200 (Electrical Controls) |

| Duct Sizes | |
|---------------------------------|------------|
| Supply Air (mm) | 1220 x 635 |
| Return Air (mm) | 1105 x 635 |
| Fresh Air/Condensor Air Inlet | 1105 x 865 |
| Exhaust/Condensor Air | 1220 x 865 |
| Recommended min F/A Filter Size | 1220 x 610 |

Compressor Performance Data

Compressor Capacity (KW) – Cooling

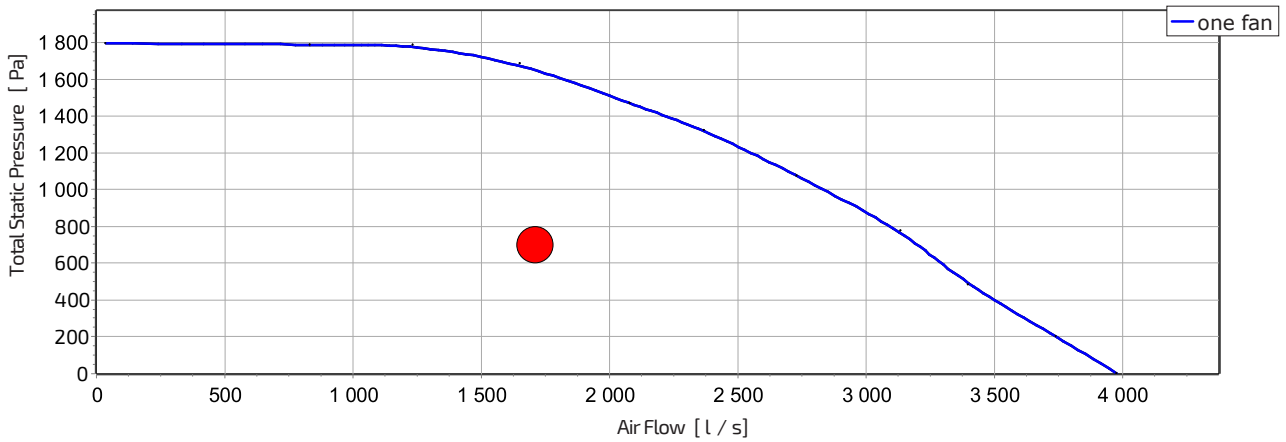
| Return Air Temperatures | Outdoor Coil Entering Air Temperature (E.A.T) °C db | | | | | | | | | | | |
|-------------------------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 23 | | 27 | | 31 | | 35 | | 39 | | 43 | |
| 24°C/17°C db/wb | Total | Sens. | Total | Sens. | Total | Sens. | Total | Sens. | Total | Sens. | Total | Sens. |
| | 40.0 | 31.9 | 39.2 | 31.9 | 38.5 | 31.6 | 37.0 | 30.7 | 34.4 | 29.2 | 31.8 | 22.4 |

Compressor Capacity (KW) – Heating

| Return Air Temperatures | Outdoor Coil Entering Air Temperature (E.A.T) °C db | | | | | |
|-------------------------|---|------|------|------|------|------|
| | -1 | 1 | 3 | 5 | 7 | 9 |
| 22°C | 28.5 | 30.3 | 32.2 | 34.8 | 37.0 | 38.5 |

Fan Performance Data

*Duty point - 1700 L/s at 700 Pa Total Static Pressure (250Pa External Static Pressure)

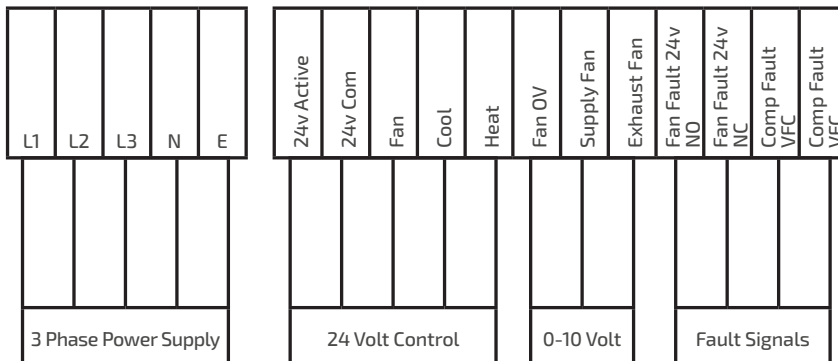


Sound Power Levels

*Sound power levels at 700 Pa Total Static Pressure and 1700 L/s Total Air Volume

| Inlet Rating dB | | Outlet Rating dB | |
|-----------------|------|------------------|------|
| 63 Hz | 48.2 | 63 Hz | 49.5 |
| 125 Hz | 59.2 | 125 Hz | 59.9 |
| 250 Hz | 65.6 | 250 Hz | 66.0 |
| 500 Hz | 68.4 | 500 Hz | 73.8 |
| 1K Hz | 70.3 | 1K Hz | 77.9 |
| 2K Hz | 70.1 | 2K Hz | 77.3 |
| 4K Hz | 70.8 | 4K Hz | 75.1 |
| 8K Hz | 60.6 | 8K Hz | 66.2 |
| LwA | 76.6 | LwA | 82.6 |

Wiring Diagram



STANDARD INCLUSIONS

Fan Speed Controller
0-10v DC - BMS Connection, **OR**
24v AC - Fan Speed Control via Pots

Circuit Breakers

Time Delay Relay

Phase Fail Relay

Reversing Valve

High Pressure Cutout

Low Pressure Cutout

Compressor Overload

OPTIONS

Compressor Sump Heat

Current Sensing Relay

0-10v Digital Compressor

