

# Aaah, Fresh Air



# A Beijer Ref Company

Armcor Air Solutions are wholly owned subsidiary of Beijer Ref, Sweden.

Beijer Ref is a Swedish based, technology-oriented trading group, which supplies customers all over a large proportion of the world with products supporting the fields of commercial refrigeration, industrial refrigeration, air conditioning and heating.

Since we began 40 years ago our focus has been driven by connecting with people who appreciate healthy, fresh air in the places where they work, live, learn and play.

Now more than ever, people are conscious of their wellbeing in a healthier environment.

This inspires our passion and commitment to integrate ideas into fresh air solutions reliably and economically.

That is why at Armcor we strive to exceed our customer expectations by delivering state-of-the-art, energy efficient solutions (equipment) that bring fresh air indoors.

### **Our Vision**

### To put Fresh Air into Every Building.

From the skyscraper to the school room every building needs fresh air.

### Our Purpose

### To integrate ideas into Fresh Air Solutions.

Conditioning fresh air is always an engineering challenge. You have the ideas? We integrate these into realisable solutions.

### **Our Services**

We know that our customers primary call is 'Help me to deliver a hassle free project'.

Our Design, Engineering and Manufacturing expertise will do exactly that.

### **Our Values**



Leadership



**Agility** 



Teamwork



**Industrious** 



Loyalty



### Australian Made

Australian manufacturing provides customer security and mitigates the supply chain risk for critical projects.

### The people bring the process together:

- Engineering in-house to Australian conditions
- Seamless on-site end-to-end workflow processes
- Highly skilled tradespersons with direct supervision
- Quality assurance at every step
- Predictable 'Delivery-In-Full-On-Time'



### Sales Orders Received

Sales & Customer Support



# Order Confirmation

Sales Engineer



### Production Engineering

Project Engineer



#### Production

**Trades Persons** 



### Scheduling

**Project Planning** 



### **Purchasing**

Procurement



### **Quality Assurance**

**QA Process** 

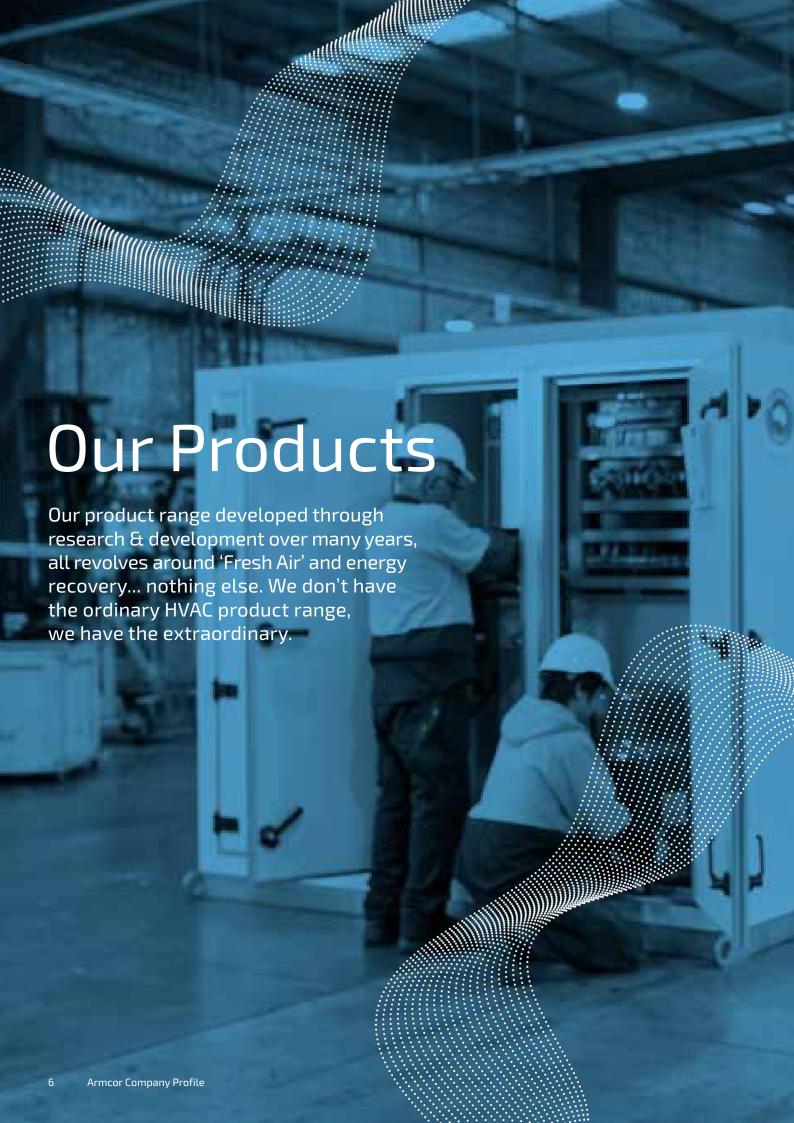


### Dispatch

Logistics



People to People communication at every step.



# **Product Range**

Design is at the core of our product range. Continuous improvements & development produces equipment that is recognised as best in category.

- Design-led thinking
- Efficiency
- Reliability
- Quality components
- Foresight

XEP Packaged Airconditioning Unit	XEP 900-8000
XES Swim Pool Unit	XES 900-8000
XEM External Mount Unit	XEM 400-9000
XCM Compact Multiflow ERV Unit	XCM 125-1225
XEC Chilled/Hot Water Coil Unit	XEC 400-9000
REM Rotary Heat Wheel Unit	REM 500-8000
DHP Dehumidification PAC Unit	DHP 500-5000
HTC Humidity and Temperature Control	HTC400-20P3 – HTC5400-270P3
OAP Outside Air Package Unit	OAP900-13P3 - OAP7200-104P3



# ERV-PAC Packaged Airconditioning

XEP Packaged Airconditioning Unit XEP 900 – 8000

The XEP combines the efficiency of heat exchange integrated with a packaged airconditioning system to provide a total solution to temperature control for applications that require substantial or full fresh air.

The unit configuration suits external rooftop or ground level applications and includes energy-saving EC plug fans and the option of enthalpy or sensible heat exchange media.

With standard capacities from 900 l/sec to 8,000 l/sec, there are units readily available to suit the below applications.

- Commercial public activity venues, sporting complexes and gymnasiums
- · Public utility buildings, police, ambulance stations
- · Nursing homes, child care, education
- Large occupancy buildings and retail showrooms
- Professional suites

# ERV-PAC Packaged Airconditioning

# XES Swim Pool Unit XES 900-8000

The XES series provides packaged air conditioning and energy recovery for indoor swimming pool areas. The XES unit includes EC plug fans and polypropylene plate heat exchange media. The cabinet and components are lined with a corrosion-resistant coating.

Standard capacities range from 900 l/sec to 8,000 l/sec and equipment can be specifically designed for larger applications up to 15,000 l/sec.

#### **Options Include**

- · Additional hot and chilled water coils
- · Various control options



### XEPH High Efficiency Packaged Airconditioning Unit XEPH 600 – 8400

Armcor's high efficiency range of package airconditioning ERV gives optimum performance through the inclusion of all the high end features of inverter compressor(s), economy cycle, inbuilt filters, UV-C germicidal lamps, and RIA bypass.

- Commercial public activity venues, sporting complexes and gymnasiums
- · Public utility buildings, police, ambulance stations
- Nursing homes, child care, education
- Large occupancy buildings and retail showrooms
- Professional suites



# ERV-Energy Recovery

# XEM External Mount Unit XEM 400 – 9000

The XEM series is our standard heat recovery ERV solution for rooftop, ground level or plant room applications.

EC plug fans are standard on all models, providing variable speed control and optimal energy efficiency.

Larger equipment can be specifically designed for applications up to 18,000 l/sec. Units are readily available to suit the below applications.

#### **Project Applications**

- Commercial public activity venues, sporting complexes and gymnasiums
- Public utility buildings, police, ambulance stations
- Nursing homes, child care, education
- Large occupancy buildings and retail showrooms
- Professional suites

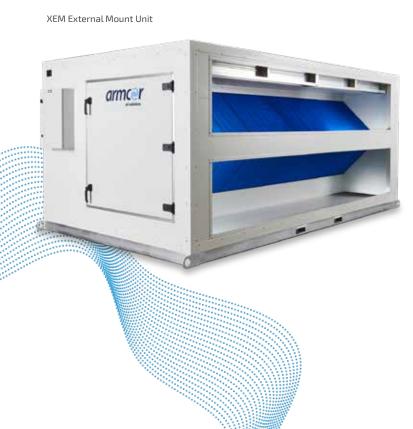
# XCM Compact Multiflow Unit XCM 125 – 1225

The XCM series is a compact, horizontal low-profile ceiling mount heat recovery unit designed for installation within a roof space.

These ERV units utilise the Xchange plate heat exchanger to recover the energy from the exhaust air into the incoming fresh air, resulting in significant energy savings. Both enthalpy and sensible heat exchange media are available. The option of EC plug fans makes this our star achiever in energy savings and controllability.

Suitable for any application where there is a requirement for fresh air.

- Commercial offices, child care and education
- Apartment bathroom exhaust
- Residential damp and mould control
- Public occupancy buildings
- Professional suites







# ERV-Energy Recovery

# XEC Chilled/Hot Water Coils XEC 400 - 9000

The XEC series combines ERV with an inbuilt chilled water and/or hot water coils to condition the air following the heat recovery process.

With standard capacities from 400 l/sec to 9,000 l/sec, there are units readily available to suit the below applications.

#### **Project Applications**

- Commercial public activity venues, sporting complexes and gymnasiums
- · Public utility buildings, police, ambulance stations
- Nursing homes, child care, education
- Large occupancy buildings and retail showrooms
- Professional suites

#### Options Include

- Enthalpy or sensible media
- · Hot and chilled water coils
- Economy cycle
- Various control options



# REM Rotary Wheel Unit REM 500 – 8000

The REM series is the ultimate in high efficiency heat recovery utilising a rotary heat exchanger to recover the energy from the exhaust air and transfer it to the incoming fresh air.

Standard capacity available from 500 l/sec to 8,000 l/sec, to suit any application where large volumes of fresh air are required.

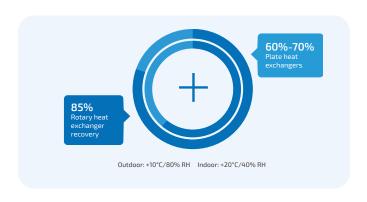


#### **Project Applications**

- Commercial venues, sporting complexes and gymnasiums.
- Public utility buildings, police, ambulance, nursing homes.
- Education facilities

#### **Options Include**

- Enthalpy or Sensible Media
- Hot and chilled water coils
- Economy cycle
- · Various control options





### Dehumidification

# DHP Dehumidification PAC Unit DHP 500 – 5000

The DHP series are packaged dehumidification units designed to provide an economical and practical solution for humidity control.

Reduction in moisture content is achieved by a combination of a plate heat exchanger and a packaged air conditioning system.

With nominal capacities of  $500 - 5{,}000 \, l/sec$ , DHP units are ideally suited to applications where humidity control is essential.

- Data centre pressurisation
- Libraries, archive storage and public buildings, surgery and laboratories
- · Apartment lobby ventilation
- Applications where tempered fresh air is required in hot and humid locations

### Dehumidification

# HTC Humidity and Temperature Control HTC400-20P3 – HTC5400-270P3

The HTC series are packaged humidity and temperature control units designed to provide a practical solution for temperature and humidity control where there is a significant requirement for fresh air. The reduction of moisture content is achieved through the careful design of compressor capacity, coil capacity and air flow to cater for the specific ambient conditions. Where standard airconditioning systems cope well with recirculated return air temperatures up to 24°C, the HTC can be designed to cope with much higher 'air on' conditions.

With nominal capacities of 400 - 5,400 l/sec, and cooling capacities of 20 kW - 270 kW, the HTC are project specific, designed for the appropriate climatic conditions.

#### **Project Applications**

HTC units are ideally suited to applications where both humidity and temperature control is essential such as

- Living quarters and reception/community centres in hot and humid locations
- Libraries, surgeries, laboratories and archive storage
- Process manufacturing



# 100% Outside Air Packaged Air Conditioning

OAP Outside Air Package Unit
OAP900-13P3 - OAP7200-104P3

The OAP series are a packaged air-conditioning unit specifically designed to provide tempered supply air where there is a requirement for 100% Outside Air to be introduced into a built space.

The ability to cope with high and low ambient intake conditions is achieved through the careful design of compressor capacity, coil capacity and air flow. Where standard air conditioning systems cope well with recirculated return air temperatures up to 24°C, the OAP can be designed to cope with 'air on' conditions of up to  $38^{\circ}$ C.

With nominal capacities of 900-7,200 l/sec, and a cooling capacity range of 13 kW-104 kW, the OAP are project specific, designed for the appropriate climatic conditions and the required outlet supply temperature.

#### **Project Applications**

OAP units are ideally suited to applications where tempered outside air is required such as

- Lobby ventilation
- Kitchen make-up air
- Lift shaft ventilation
- Health care facilities

· Positive pressure applications





# **Economy Cycle**

Economy cycle operation is designed to take advantage of favourable ambient air conditions to enhance equipment performance and provide additional efficiencies.

Economy cycle operation is sometimes referred to as 'free cooling'.

Armcor economy cycle systems use 4 opposed blade dampers controlled by modulating motors which open/close upon demand from ambient temperature sensor.

In a typical summer operation, if the ambient temperature is less than the indoor set point, dampers will open to allow fresh air to bypass and enter directly into the supply air ductwork.

### Economy Cycle available with:

XEP - XES	Packaged Airconditioning Unit
XEM	External Mount Unit
XEC	Chilled/Hot Water Coils





## Ikon Park Redevelopment

**Category:** Community **Location:** Carlton North VIC

**Contractor:** PJM Engineering Services Ptv Ltd

It is great to see the Ikon Park project completing through the redevelopment stages.

This significant redevelopment will allow the opportunity to support the increase in demand to service the club's combined football programs and the wider community, with opportunities available to inspire and develop the next generation of female sporting talent.

Armcor worked collaboratively with the contractor – PJM Engineering Services Pty Ltd to provide the state-of-the-art equipment for the various stages of the IKON park redevelopment project as per the specifications & requirements of the project.

With Armcor's use of impeccable design, engineering and manufacturing expertise the team provided business solutions with designing and manufacturing various XCM units, XES units and XEP units.

Armcor's multiflow design thinking "XCM units" are compact, horizontal low-profile ceiling mount heat recovery unit designed for installation within a roof space.

These units are suitable for any application where there is a requirement for fresh air. Various XCM units were supplied for the world class project.

Fresh & clean air is essential to everyone, especially for the indoor swimming pool area. For the stage 2 of the redevelopment, Armcor supplied their XES4000P3 with a capacity of 4000 l/sec and a compressor capacity of 80kW.

For the stage 3 of the redevelopment, Armcor provided its expert solution by manufacturing the XEP3000P3S and XEP2000P3S units both in the economy cycle. Both these unit's configuration suited external rooftop or ground level applications and included energy-saving EC plug fans and were supplied with the option of sensible heat exchange media.

All the units were assembled and manufactured within the project requirements and delivery timeframes. At Armcor Air Solutions it is our passion & commitment to create reliable and economically happier, healthier environments at a price that reflects the engineering & efficiency of our systems.



# Melbourne Square

**Category:** Commercial **Contractor:** D & E **Location:** Southbank, VIC Airconditioning Pty Ltd

Melbourne Square has been designed as a prominent gateway precinct inspired by the cultural heritage, greenery and grandeur of the city.

The contoured terraces of the podium connect to the streets of Southbank across the new gardens, piazzas, cafés, retail outlets and supermarket. Rising above, the towers have a sculptural quality, with residences positioned to enjoy natural light and sweeping views.

And of course, the design includes an indoor pool.

An Armcor XES2500P3 energy recovery unit was selected to introduce and condition the fresh air required to successfully ventilate the pool area.

With twin compressors providing 52kW of heating and cooling, this unit will stay out of sight, yet be a key performer to keep the personnel at top comfort levels in the pool environs.





## Lindfield Learning Village

Category: EducationMechanical Consultant: ErbasLocation: Lindfield, NSWContractor: Climatech NSW

Parents are rushing to enroll their children in a revolutionary new state school that will scrap year levels, school bells and the word 'classroom'. Lindfield Learning Village won't be the kind of school most adults recognise. Teaching will happen around 'waterholes' or 'campfires'. Students will take responsibility for their own learning. And high schoolers will mentor kindy kids.

Armcor worked along with Climatech to provide 10 packaged air-conditioning ERV units to meet the tight time frame required for installation before the end of 2018. Each unit has a full economy system to make the most efficient use of natural cooling whenever possible.

Stage 2 was another tight timeline with another 16 units for the start of the 2021 school year.

With units ranging from 46kW to 100kW cooling capacity, the school is now equipped for the hot summer months providing an economical solution to the fresh air needs a positive education environment.





### For more information

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