



AMBIRAD

HEATING AND VENTILATION SOLUTIONS

Product Overview

AMBIRAD **AIRBLOC** **NORDAIRNICHE** **BENSON**

A Thomas & Betts Company. Registered in England No. 1390934



AMBIRAD

HEATING AND VENTILATION SOLUTIONS

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AmbiRad Ltd is Europe's leading developer and manufacturer of energy efficient radiant and warm air heating systems for industrial and commercial environments, and a major supplier of energy saving overdoor air curtains.

AmbiRad heating products provide energy efficient, cost-effective heating that helps end-users reduce their environmental impact and achieve carbon reduction targets.

The company's philosophy is to develop innovative products that constantly challenge the market's expectations for heating and environmental performance.

AmbiRad's experience shows that a correctly designed and installed heating system, using the most efficient advanced technology, can reduce energy consumption by up to 65%.

Total project support

AmbiRad offers a full range of services to ensure optimum customer satisfaction.

The services available include:

- > Investigative site visits and assistance with system design
- > Detailed schematic drawings
- > Running costs and payback calculations
- > Liaison with installation contractors
- > Commissioning
- > Warranty work
- > Tailored service packages

Applications

- > Aircraft hangars
- > Engineered workshops
- > Factories
- > Agricultural
- > Museums
- > Retail Outlets
- > Sports arenas
- > Distribution Centres
- > Vehicle Workshops
- > Warehouses
- > Commercial kitchens
- > Rail sheds



Saving energy around the world

Export trade has grown exponentially, as customers in over 35 countries around the world realise the cost-efficiency and environmental benefits of AmbiRad energy efficient heating systems.

We operate through a network of carefully selected distributors in Europe, North and South America, the Middle and Far East, and Australasia.

Solutions that take heating efficiency to a new level

AmbiRad develops and manufactures high quality, environmentally friendly, energy and cost-efficient heating systems, fuelled by natural gas, LPG or oil. All products are certified to BS EN ISO 9001:2000 accreditation, tested and approved to the prevailing standard for particular worldwide markets, with full CE approval on all European sales.

AmbiRad solutions in practice

The selection of an appropriate heating scheme is dependent on the nature and requirements of the specific building concerned. Our expertise ensures that the ideal solution is found for each particular situation. This may require the application of radiant, warm air or a combination of both technologies.

AmbiRad energy efficient heating systems have been installed in a diversity of market sectors, bringing the benefit of energy savings to thousands of businesses worldwide

For further information a comprehensive range of product literature in a series of individual brochures covering each product specification is available on request or alternatively visit www.ambirad.co.uk.

Typical clients

- > BMW
- > British Airways
- > Channel Tunnel Rail Link
- > Ford Motors
- > MoD
- > Monarch Airways
- > National Exhibition Centre
- > Pilkington Glass
- > Royal Mail
- > Sports England - The Optimum Sports Hall
- > Tata Steel

Enhanced Capital Allowances

The Government's Enhanced Capital Allowance scheme actively encourages industry and commerce to reduce energy consumption by promoting the use of energy efficient equipment.

This symbol verifies that the product has been independently assessed and qualifies for the ECA scheme, an upfront tax relief enabling businesses that invest in energy-saving equipment to claim 100% first-year capital allowances against their taxable profits.





AMBI RAD

Radiant Heating

Through significant ongoing investment in R&D, AmbiRad has continually pushed the boundaries of space heating energy efficiency

Renowned for its pioneering track record, AmbiRad, Europe's leading supplier of radiant tube heating systems, has yet again raised the industry standard in terms of innovation and technical performance.

AmbiRad Vision is the most exciting development in radiant heating technology of recent years. The principles behind radiant heating have changed little since the technology was first invented, but Vision takes performance further than ever before, thanks to its all-new burner technology.

A wide range of heat outputs is available, answering the heating needs of the majority of large scale buildings.

Vision VSX

High efficiency radiant tube heating systems



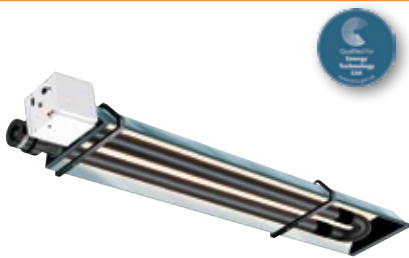
The VSX range of high efficiency Vision radiant tube heaters with the inclusion of a recuperative heat exchanger delivers exceptional performance in terms of efficiency and the potential to reduce energy costs.

Radiant Heating Benefits

- > Reduced running costs. Savings of up to 65% of fuel costs can be achieved
- > Even heat coverage at low level
- > Does not directly heat the air - ideal in areas of high air infiltration
- > Minimises roof heat losses - reduced stratification
- > Systems can be controlled easily to provide varying zoned temperatures and operating times
- > Rapid heat up and recovery times
- > Easy to install, maintain and operate

Vision VS

Radiant tube heating systems



The VS Series with its slim-line burner head found in the whole Vision range provides a long evenly distributed flame that dramatically improves temperature distribution along the entire length of the heater, delivering a more even floor coverage.

Nor-Ray-Vac

Continuous radiant tube heating systems



The Nor-Ray-Vac gas fired continuous radiant tube heating system offers the widest range of burner inputs of any continuous radiant system. It is designed to provide uniform heat coverage over the entire floor area.

Sonning

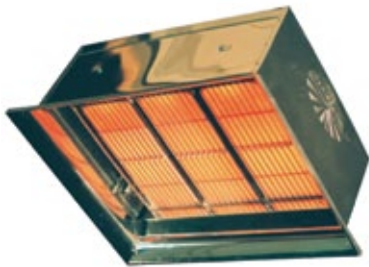
Recirculated air radiant tube heating systems



Sonning is a high level radiant tube heating system using hot air as the heating medium, rather than hot water, steam or the combustion products from a naked flame.

RV

Radiant plaque heaters



RV heaters offer high intensity radiant heating for areas of high air change or spot heating.

Quartz Glow

Electric radiant heaters



The AmbiRad Quartz Glow range provide instant high frequency infra-red heat, which is focused exactly where required.

SmartCom

Energy saving controller



AmbiRad SmartCom is an intelligent energy management controller designed to satisfy the growing need for higher efficiencies and to complement efficient heating systems.

How Radiant Heating Works

- > Working in the same way as the sun, radiant heat warms all solid objects and surfaces in its path through infrared waves. Being mounted overhead, AmbiRad radiant heaters produce infrared heat that is directed downwards to low level by a reflector
- > Infrared energy passes inertly through the air, dissipating as heat upon contact with people and surfaces thus creating a comfortable, all round radiant warmth at lower air temperature. This is ideal for spot or localised heating
- > Radiant heat takes only minutes to reach comfort temperatures, so energy is never wasted in prolonged warm-up times. If external doors are opened, allowing cold air to enter the building, radiant heating will recover comfort temperatures in just a few minutes



BENSON

Warm Air Heating

Benson continue their tradition of manufacturing high efficiency warm air heating equipment with the introduction of the new ultra high efficient ULTRA series of energy saving condensing gas fired unit heaters.

The ULTRA range provides the highest efficiency levels and substantially reduced CO₂ & NO_x emissions (under 25ppm).

ULTRA

High efficiency condensing unit heaters



The new ultra high efficient ULTRA series of energy saving condensing gas fired unit heaters provides the highest efficiency levels of up to 109% thermal efficiency and substantially reduced CO₂ & NO_x emissions (under 25ppm).

UESA

High efficiency condensing unit heaters



The UESA range of room sealed fully condensing unit heaters utilises patented MacroChannel heat exchanger technology to deliver up to 104% thermal efficiency (based on net CV).

Manufactured from aluminium the highly conductive MacroChannel reduces energy consumption and CO₂ emissions by 14% - 20%.

Warm Air Benefits

- > Effective heat distribution within buildings to achieve optimum temperatures
- > Easy installation and maintenance
- > Compact reliable units that provide a range of heating options i.e heating only, heating and ventilation, or heating and cooling
- > High efficiency units offer significant energy savings. The higher efficiency models are included on the Government's energy technology list thereby qualifying for Enhanced Capital Allowances

UDSA & UDSB

High efficiency unit heaters



The UDSA/B range of units incorporates a unique aero-dynamic 4 pass heat exchanger manufactured from titanium stabilised aluminised steel for enhanced life expectancy and operational reliability.

The compact lightweight units deliver higher airflows for improved air distribution and reduced running costs.

Variante & External Variante

Gas fired unit heaters



The compact highly efficient Variante heaters provide cost effective heating for most commercial and industrial buildings, such as showrooms, factories, workshops, warehouses and greenhouses.

The heaters are available for either room sealed or conventional power flue applications.

OUIH

Oil fired unit heaters



For areas requiring suspended unit heaters where gas is not available the OUIH oil fired suspended heaters are the ideal solution. The units combine high thermal efficiency with high air flows for improved air distribution and reduced stratification.

EnviroAir

Combined heating and ventilation



EnviroAir units are available as SDH non condensing heaters, with thermal efficiencies in excess of 91%, or SHH fully condensing heaters with thermal efficiencies of 102% (ncv).

EnviroAir SDH/SHH units are primarily for ducted installations to provide either heating or combined heating and ventilation.

Cabinet Heaters & External Cabinet Heaters

Cabinet heaters



Cabinet heaters combine innovative design with a proven four pass heat exchanger technology to provide a high efficiency cost effective and durable range.

Combined heating and ventilation

Room sealed fan assisted flue cabinet heaters



Suitable for free blowing applications PVN models are supplied complete with adjustable discharge nozzles. For ducted air installations PVD units are supplied complete with duct outlet spigot.

Optimum Economy & Fuel Savings

- > In times of rapidly increasing energy costs, reducing energy consumption makes sense both financially and environmentally since this also significantly reduces CO₂ emissions
- > Although condensing air heaters require a higher initial capital investment they are very economical and can repay the extra initial cost in fuel savings in 2-4 years depending on usage
- > When replacing traditional units more than 10 years old, savings of 30% can be achieved



NORDAIR NICHE

Combined Heating & Ventilation

The comprehensive range of gas fired air heaters provides high efficiency combined heating and ventilation solutions across a broad spectrum of industrial and commercial applications. Combined heating and ventilation units ensure precise control, excellent indoor air quality and optimum energy efficiency.

DF/IDF

Gas fired combined heating and ventilation



DF/IDF units are available as either direct fired units or indirect fired units to give complete flexibility for optimum design capability.

IDFE

High efficiency room sealed unit heaters



IDFE range of gas fired air heaters incorporate a high efficiency gas fired condensing heating coil with a minimum thermal efficiency of 104%, which currently qualify for Enhanced Capital Allowances.

Combined Heating Benefits

- > Fully CE approved units for both indoor and outdoor installation
- > High thermal efficiency for reduced operating costs
- > Close temperature control
- > SFP compliant with 2006 Building Regulations
- > Fully compatible for use with transpired solar panels to facilitate use of renewable solar energy
- > Fully modulating direct gas fired burner control with 20:1 turn down ratio
- > Indirect fired units with turn down ratio of up to 12:1

DF/IDF Kitchen Unit

Gas fired combined heating and ventilation



Nordair Niche kitchen units are designed to be installed to provide tempered and filtered fresh air make-up into commercial kitchens.

DF/IDF Swimming Pool Unit

Gas fired combined heating and ventilation



Nordair Niche swimming pool units are designed to be installed to provide tempered and filtered fresh air make-up into swimming halls.

Air Rotation

Gas fired combined heating and ventilation



Air rotation units are ideal for applications such as distribution centres and warehouses requiring frost protection or constant background temperatures.

The system provides even heating over large areas and eliminates the requirement for ductwork or de-stratification fans.

DVDH

Direct fired heating & ventilation units



DV/DH direct fired units are designed as make-up air units to provide a heated supply of fresh air for buildings having extract ventilation. They may also be used as high efficiency space heaters for applications requiring ventilation. In summer the units can be used for 'free cooling' ventilation.

DVDH

Direct fired heating & ventilation units



ColdAIR evaporative cooling systems are the low cost environmentally friendly alternative to costly air conditioning.

Evaporative cooling systems are designed with energy efficiency in mind, typically consuming only 20% of the energy used by traditional air conditioning systems and with the ability to install without any structural alterations to your existing building.

SolarWall

Perforated transpired solar collector (pTSC)



CA Groups SolarWall® is an astonishingly simple, effective solution to the demand for CO₂ reduction - and the energy cost savings that accompany it. A steel or aluminium cladding for industrial and commercial buildings that captures warmth from the sun and uses solar heated air to heat the building.

System Types

The units are designed to provide the primary heat source across a wide range of applications including:

- > Ductless air distribution
- > Air induction systems
- > Tempered input ventilation
- > Industrial make-up air
- > Industrial air displacement ventilation
- > Pressure ventilation systems



AIRBLOC

Commercial & Industrial Air Curtains

Warehouses, factories, retail premises and cold rooms are all subject to the problems caused by frequently opened doors. The open door not only causes discomfort but greatly increases energy loss and therefore the running costs of the building.

Airbloc units offer a cost-effective, energy efficient solution to these problems by reducing heat loss up to 80%

The Airbloc range comprises ambient unheated models or heated models using gas, electricity, hot water or steam. In well insulated structures, Airbloc provides the final complement to the low energy concept by eliminating a major source of heat-loss.

Commercial / retail air curtains

Airbloc air curtains can be recess mounted in bulkheads or above false ceilings and can be fully cased for surface mounting, offering exceptional installation flexibility.

Ceiling tile heaters

Designed to complement the Airbloc air curtain range, ceiling tile heaters provide a cost-effective heating solution for retail outlets, restaurants and showrooms. Available recessed or surface mounted.

Industrial air curtains

Designed for industrial or large warehousing doors, the powerful Airbloc AB range of industrial air curtains offers protection for doorways up to six metres high. Industrial units are available as gas, low pressure hot water (LPHW), medium pressure hot water (MPHW), electric or steam heated.

Air Curtain Benefits

- > Air curtains ensure a clean environment - protecting from dust, fumes, insects and general outdoor pollution
- > With an over door air curtain, energy lost through open doors which was previously seen as an unavoidable, can actually be reduced by as much as 80%
- > Air curtains induce warm air down from high level that would otherwise be lost through the roof, thus helping to de-stratify the building and eliminate cold spots

AC

Commercial & retail air curtains



Commercial/retail air curtain, designed to be aesthetically pleasing when wall mounted or on drop rods in front of glass fronted entrances.

The unit has a host of unique lighting and building safety features that enhance both its functionality and looks. The semi-circular profile and range of finishes make the air curtains an aesthetic addition to a building's interior.

ACR

Commercial & retail air curtains



The ACR recessed cased air curtain is designed for discreet positioning in a suspended ceiling or bulkhead in the doorways of retail or commercial premises. It creates comfortable conditions for staff and customers by providing a powerful down-flow of heated or ambient air.

AC & ACR Mini

Commercial & retail over door heater



The AC Mini is an aesthetically pleasing commercial/ retail over door, wall or ceiling mounted heater.

The ACR Mini is designed for discreet positioning in a suspended ceiling or bulkhead in kiosks of fast food or commercial premises.

ACT

Recessed ceiling tile & surface mounted stockroom heaters



The Airbloc ACT is an electric heater that directs a down-flow of warm air from overhead, delivering immediate heat where required and rapidly creating a comfortable environment for staff and customers.

AB

Industrial air curtains



AB industrial air curtains provide a barrier of high velocity air that helps block incoming winds and stops warm air escaping. They achieve this by delivering a powerful barrier of heated air across the entire width of the doorway. Units can be easily fitted within existing or new buildings and are ideal for open doorways.

SmartElec Controller

Energy saving controller



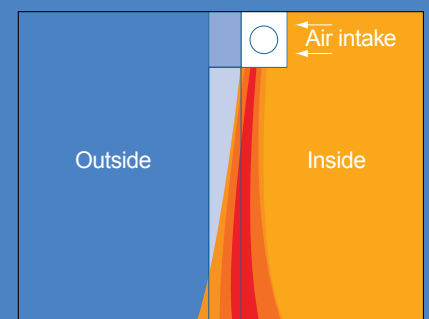
The SmartElec energy saving control unit reduces both power consumption and energy costs by up to 50%, making it the perfect complement for Airbloc energy saving air curtains.

SmartElec is suitable for use with Airbloc AC, ACR and ACT 3 phase electrically heated units.

The Technology

In order to achieve low energy solutions, the air jet width, velocity and pattern of the airflow is crucial. Airbloc units incorporate the following design features for optimum performance:

- > Uniform linear flow across the full door width
- > Fan speed control with extra width adjustable air jet for improved wind resistance



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AmbiRad UK is a registered trademark of AmbiRad Limited. Because of continuous product innovation, AmbiRad reserves the right to change product specification without due notice.

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