



MITSUBISHI  
ELECTRIC

CONSULTANT  
FOCUS

# THE NEW ECODAN R290 CAHV-Z COMMERCIAL AIR SOURCE HEAT PUMP

ecodan® R290

SUSTAINABLE  
APPROACH

SCALABLE  
SOLUTIONS

RELIABLE  
AND ROBUST

The new Mitsubishi Electric Ecodan CAHV-Z air source heat pump utilises ultra-low GWP R290 refrigerant, offering a robust, ultra-low carbon system for the provision of:

SANITARY  
HOT WATER

SPACE  
HEATING

ULTRA  
LOW  
GWP

R290 REFRIGERANT (GWP 0.02)  
AND REDUCED EMBODIED CARBON

HELPS MEET  
F-GAS  
REGULATIONS

AND  
CSR  
TARGETS

SUPPORTS THE  
TRANSITION TO  
LOW-CARBON  
HEATING  
& COOLING

SUITABLE FOR WIDE RANGE OF COMMERCIAL APPLICATIONS, INCLUDING:

NEW BUILD

HOSPITALS

SCHOOLS

RETROFIT



40kW UP TO 280kW\*

INNOVATIVE  
DESIGN  
FLEXIBLE IN  
APPLICATION

CAN OPERATE  
INDEPENDENTLY  
OR AS PART  
OF A  
MULTIPLE  
UNIT SYSTEM

CASCADE  
& ROTATION  
BUILT IN AS  
STANDARD



MULTIPLE UNIT CASCADE CONTROL UP TO 280kW\*  
CAPACITY PROVIDES DESIGN FLEXIBILITY

ABILITY TO  
CASCADE  
AVAILABLE  
UNITS  
ON AND OFF TO  
MEET THE LOAD  
REQUIREMENTS  
OF A BUILDING

A 7-UNIT SYSTEM

ALLOWS INCREMENTS OF  
CAPACITY ALL THE WAY UP TO

280kW\*

\*AT NOMINAL CONDITIONS A7W45

ambient temperature for  
continuous heating provision

OUTLET TEMPERATURE  
DOWN TO -15°C

ambient temperature for  
continuous heating provision

HIGH-TEMPERATURE  
HEATING PERFORMANCE  
ACHIEVES

75°C

OUTLET TEMPERATURE  
DOWN TO -15°C

ambient temperature for  
continuous heating provision

HIGH SEASONAL  
EFFICIENCY WITH A  
SCOP >4

(SEASONAL COEFFICIENT  
OF PERFORMANCE)

40Pa  
EXTERNAL STATIC  
PRESSURE

AND ABILITY TO APPLY  
ACOUSTIC ATTENUATION

LOW NOISE MODE

REDUCING SOUND PRESSURE  
LEVEL (SPL) BY 5dBA



WATER FLOW TEMPERATURES FROM  
24°C TO 75°C WITHOUT BOOST HEATERS,  
RESULTS IN COST AND ENERGY SAVINGS



EASY INSTALLATION & LOW MAINTENANCE

REDUCING SOUND PRESSURE  
LEVEL (SPL) BY 5dBA



RAPID DEFROST  
OPERATION

maintains heat output  
and maximises system  
uptime during cold  
weather

ANTI-SIMULTANEOUS  
DEFROST CONTROL

prevents full system  
shutdown during defrost  
cycles, ensuring continuous  
heating delivery

HERMETICALLY SEALED  
MONOBLOC DESIGN REQUIRES  
ONLY WATER & ELECTRICAL  
CONNECTIONS

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