

Water cooled CITY MULTI VRF system selected for the constant hot and humid conditions in Darwin, which does not require ventilation or external cooling.



Project Info

Application

Rydges Palmerston Hotel

Location

Palmerston, Darwin NT

The Team

Client

Amalgamated Holdings Ltd

HVAC Contractor

Mobile Electrics Pty Ltd

HVAC Consultant

Townes Chappel Mudgway

The Challenge

Rydges Palmerston, located in Darwin, Northern Territory, required a cooling solution for the 200 rooms, suites and units and general areas within the building.

As the location is hot and humid all year round, conventional air cooled air conditioning systems would not be effective.

The Solution

Mitsubishi Electric water cooled CITY MULTI VRF system was selected for the hotel air conditioning system to suit the constant hot and humid conditions experienced in Darwin.

The condensing units are situated in a mechanical pump and service room on each floor of the hotel, which does not require ventilation or cooling.

The water cooled condensers are connected to a cooling tower and heat exchanger located on the roof level by a closed water loop system.

The fan coil units are connected to the condenser on the same floor.

UNIT INFORMATION



Outdoor Units

PQHY-P300YHM-A x 11
PQHY-P250YHM-A x 21
PQHY-P200YHM-A x 26
PUHZ-RP140YKA2R1-A x 1
MUZ-GE50VAD-A1 x 1



Indoor Units

PCFY-P125VKM-ER1 x 2
PEFY-P250VMHS-E x 4
PEFY-P32VMA-E x 58
PEFY-P40VMA-E x 76
PEFY-P50VMA-E x 11



PEFY-P63VMA-E x 28
PEFY-P71VMA-E x 21
PEFY-P80VMA-E x 7
PKFY-P15VBM-ER3 x 1
PKFY-P20VBM-ER3 x 1
PKFY-P50VHM-ER2 x 5



PKFY-P63VKM-ER1 x 1
PLFY-P100VBM-E.TH x 1
PLFY-P20 x 17
PLFY-P25 x 10
PLFY-P32 x 5
PLFY-P40 x 2



PLFY-P50 x 17
PLFY-P63 x 17
PLFY-P80VBM-E.TH x 1
MSZ-GE50VAD-A1 x 1
PCA-RP140KAQ x 1



Controllers

PAR-31MAAE-J x 286