## ROOFTOP PACKAGED UNITS

## Clima**Sync** Control System

## For Rooftop Packaged Units

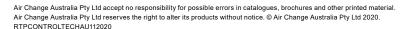
Communication

Air Change Rooftop Packaged Units are available with the ClimaSync Control System, ensuring optimal performance and easy integration into any building or facility. The control logic and operational functions are tailored to meet the requirements of each project.





## Touchscreen Human Machine Interfaces HMI are available for unit operation and monitoring. Monitoring HLI Modbus and BACnet protocols are Room temperature & humidity. Real-time Status available for unit operation and monitoring Outside temperature & humidity. via High Level Interface. Supply temperature & humidity. Available upon request. Online Component status & speeds. **Unit Start/Stop** Operating mode. Remote Switch Unit run terminals are available for start/ Refrigeration pressures. stop via external low level signal. Trend Lines Room temperature & humidity. HMI/HLI Unit start/stop can be achieved via the Outside temperature & humidity. HMI or HLI. Supply temperature & humidity. Time Scheduling Unit start/stop can be scheduled according Component speeds. to days of the week and time of the day. **Control Logic** Refrigeration pressures. Cooling / Heating Compressors and reversing valve are Fault Alarms Low level alarm signals are available controlled to meet the required room alongside HLI and HMI fault status. condition (adjustable setpoint). A log of faults and when they occurred is Alarm History Self-learning PID loop logic improves Proactive Thermostat available cooling/heating precision over typical Sensors reactive thermostats, along with minimising Temperature & Humidity compressor off-cycling (inverter compressor Outside Air Available with unit. option only). Supply Air Available with unit. Integrated Constant Volume or Pressure Supply / Exhaust Air Room / Return Air Available with unit. Averaging logic is Fans Control. available for multiple room sensors. • Fan speed is modulated to maintain the **Protection Logic** required airflow volume or duct pressure Refrigeration Refrigeration pressures are modulated to (adjustable setpoint). Pressures stay within the acceptable envelope. Various modes of operation can be **Operating Modes** Compressor start/stop and speed are time Compressor Timing incorporated into the unit control strategy. managed in order to prevent damage. These may include: Compressor lockout occurs upon successive Compressor Lockout Economy Cycle Mode - heat exchanger refrigeration faults in order to prevent bypass for free cooling. lasting damage. • CO2 Mode - modulating return air Where possible, remaining functionality will Fault Impact bypass with respect to CO2 levels. Minimisation attempt to compensate for lost functionality Early Morning Warm-Up - full return air upon fault. bypass for expeditive warming.



**OR CHANGE** DOAS & DEHUMIDIFICATION

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