

NOTES TO GO THROUGH BEFORE STARTING THE UNIT

X1M : Main terminal
 X2M : Field wiring terminal for high voltage
 X3M : Field wiring terminal for low voltage

--- : Earth wiring
 - - - - : Field supply



: Option



: Wiring depending on model



: Not mounted in switchbox



: PCB

— **/12.2 : Connection ** continues on page 12 column 2



: Several wiring possibilities

User installed options:

- Backup heater (includes wiring diagram of option)
- Domestic hot water tank
- Domestic hot water tank with solar connection (Only for EKHVM)
- Room thermostat (Wired)
- Room thermostat (Wireless)
- External temperature sensor
- Remote user interface
- Digital I/O PCB
- Demand PCB
- Solar pump and control station (Only for EKHVM)

Legend

* : included in option kit
 # : field supplied

A1P : Main PCB
 A2P : User interface PCB
 A3P : control PCB
 A4P : Inverter PCB
 A5P : QA PCB
 A6P : Filter PCB
 A7P * : Digital I/O PCB
 A8P * : Demand PCB
 A9P : Multi tenant PCB
 A10P * : Thermostat PCB
 A11P * : Receiver PCB
 A12P * : Solar pump station PCB
 B1PH : High pressure sensor
 B1PL : Low pressure sensor
 BSK * : Solar pump station relay
 C1-C3 : Filter capacitor
 C1-C3 (A4P) : PCB Capacitor
 DS1 (A*P) : Dipswitch
 F1U : Fuse (T, 3.2A, 250V)
 F1U (A1P/A3P/A9P) : Fuse (T, 3.15A, 250V)
 F1U (A6P) : Fuse (T, 6.3A, 250V)
 F1U-F2U (A7P) * : Fuse (5A, 250V)
 F3U-F4U (A*P) : Fuse (T, 6.3A, 250V)
 HAP (A*P) : PCB LED
 IPM1 : Integrated power module
 K1A-K3A : Interface relay
 K1E-K3E : Electronic expansion valve
 K*R (A*P) : PCB Relay
 K1S * : 3 way valve
 K2S : 3 way valve
 K3S : 2 way valve
 K4S # : 2 way valve
 M1C : Compressor
 M1F : Switchbox cooling fan
 M1P-M2P : DC inverter pump
 PC (A11P) * : Power circuit
 PHC1 (A7P) * : Optocoupler input circuit
 PS (A*P) : Switching power supply
 Q1DI-Q2DI # : Earth leakage protector
 Q2L : Thermal protector water piping
 R1-R2 (A4P) : Resistance
 R1L : Reactor
 R1H (A10P) * : Humidity sensor
 R1T (A10P) * : Ambient sensor
 R2T * : Domestic hot water tank Thermistor
 R2T * : External sensor (floor or ambient)
 R3T : Liquid thermistor R410A
 R4T : Returning water thermistor
 R5T : Leaving water thermistor (heating)
 R6T : Discharge thermistor
 R7T : Liquid thermistor R134a
 R8T : Fin thermistor
 R9T : Leaving water thermistor (cooling)
 R10T : Liquid thermistor (cooling)
 R11T : Suction thermistor (cooling)
 RC (A*P) : Receiver circuit
 S1PH : High pressure switch
 S1S # : benefit kWh rate power supply contact
 S3S # : Input multiple setpoint 1
 S4S # : Input multiple setpoint 2
 SS1 (A1P) : Selector switch (Emergency)
 SS1 (A2P) : Selector switch (master slave)
 SS1 (A7P) * : Selector switch
 TC (A*P) : Transmitter circuit
 T1R-T2R (A*P) : Diode bridge
 T3R : Power module
 V1C-V8C : Ferrite core noise filter
 X1M-X3M : Terminal strip
 X*M (A*P) * : PCB terminal strip
 X1Y-X4Y : Connector
 Z1F-Z5F (A*P) : Noise filter