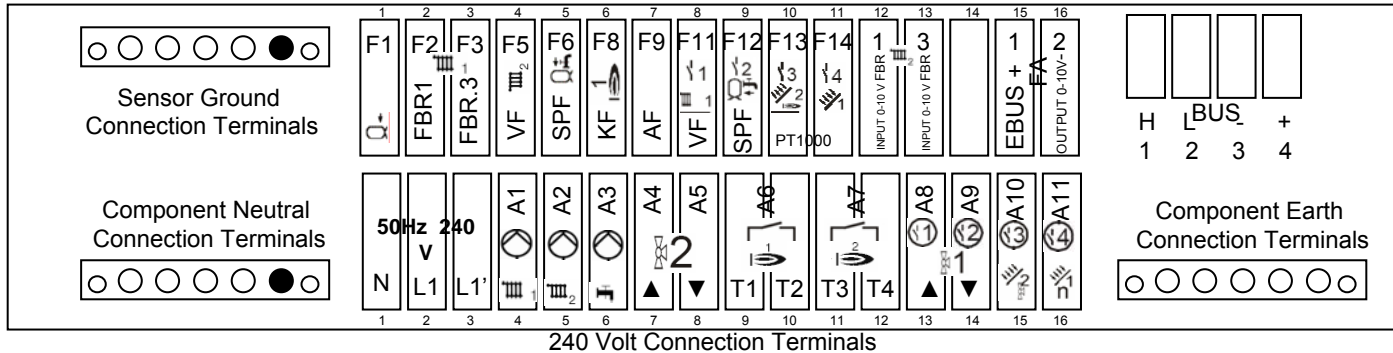


Ultramax KKM8 (5064) Cascade Manager Housing Wiring Guide (WAG3)

Low Voltage Connection Terminals (Only screened cables or MHS supplied sensor to be used.)



Low Voltage Connection Terminals (Upper Terminal Rail)

(*1 Not used with KMM8 in conjunction with MHS Ultramax Appliances. *2 FBR2 Room units not available via MHS Boilers Use BM / BM8 Units)

1. F1. Buffer storage tank lower sensor*1
2. F2. FBR2 room unit HC 1*2
3. F3. FBR2 room unit HC 1*2 / Volt Free Enable HC1 (Circuit made to common ground rail.)
4. F5. VF. Flow sensor HC 2 (Connect sensor ground to common ground rail)
5. F6. SPF. HWS Storage Vessel Sensor (Connect sensor ground to common ground rail)
6. F8. KF. Low loss header sensor (Connect sensor ground to common ground rail)
7. F9. AF. Outside air sensor (Connect sensor ground to common ground rail)
8. F11. VF. Flow Sensor HC 1 (Connect sensor ground to common ground rail) / Multifunction relay sensor 1*1
9. F12. SPF Storage Tank Low Sensor*1 (Not HWS sensor) / Multifunctional relay sensor 2*1
- 10.F13. PT1000 HS 2 sensor*1 / Solar sensor 2*1 / Multifunction relay sensor 3*1
- 11.F14. PT1000 Solar sensor 1*1 / Multifunctional relay sensor 4*1
- 12.1. 0-10 volt input + (connect - 0-10 volt to sensor ground rail & parameter alteration required (F15))/FBR2 room unit for HC 2*2/
Volt Free Enable HC2 (Circuit made to common ground rail.)
- 13.3. FBR2 room unit for HC 2*2 / Pulse counter for output measurement*1 (circuit to sensor ground rail)
14. No function
- 15.1. 0-10 volt output / E Bus*1
- 16.2. 0-10 volt output / Ground Bus*1

- H BUS COCO2 CAN Connection and Optional BM/BM8 Room Unit (Up to two BM/BM8 Units)
- L BUS COCO2 CAN Connection and Optional BM/BM8 Room Unit (Up to two BM/BM8 Units)
- BUS COCO2 CAN Connection and Optional BM/BM8 Room Unit (Up to two BM/BM8 Units)
- + BUS COCO2 CAN Connection and Optional BM/BM8 Room Unit (Up to two BM/BM8 Units)

Please note: Screened cables must be used for all low voltage, sensor and boiler communication circuits. The screening must be earthed at both ends.

Boiler communication and room unit connections are polarity sensitive.

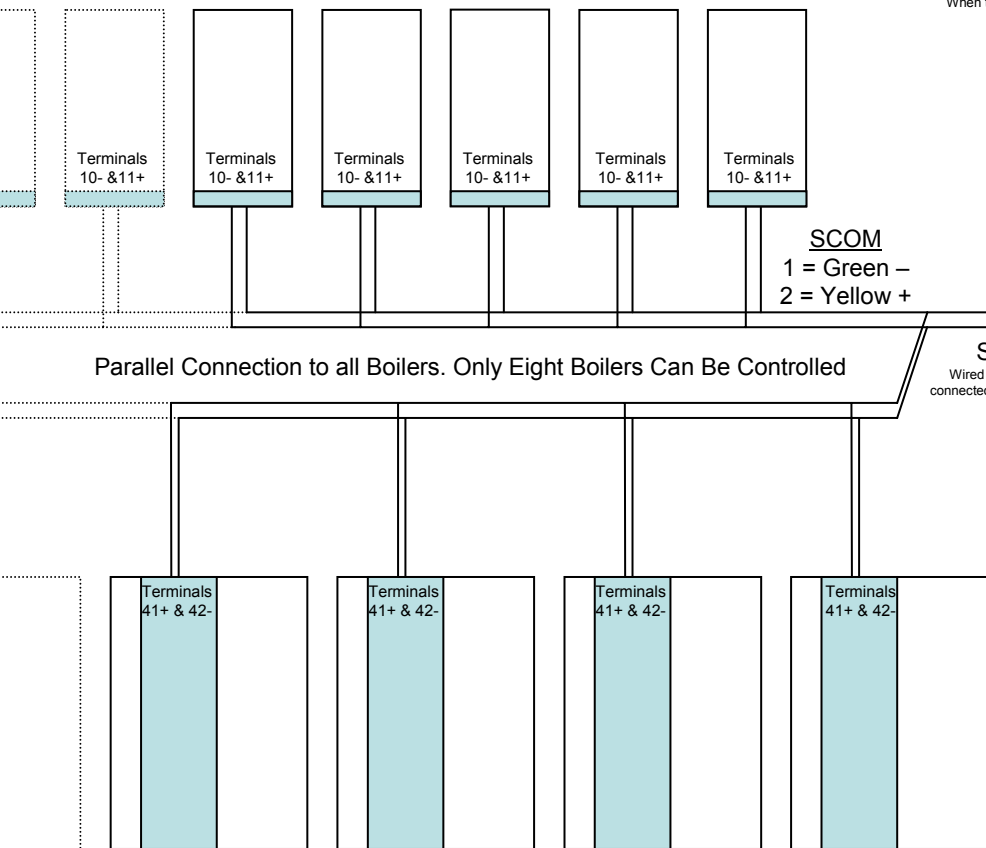
240 Volt Connection Terminals (Lower Terminal Rail)

1. N Permanent 240 Volt Neutral Supply.
2. L1 Permanent 240 Volt Live Supply. (Clock Supply.)
3. L1' Permanent 240 Volt Live Supply (Switching Relay Supply.)
4. 1 Heating Zone 1 Circulating Pump 240 Volt Output. (2 Amps Max.)
5. 2 Heating Zone 2 Circulating Pump 240 Volt Output. (2 Amps Max.)
6. 1 HWS Charging Pump 240 Volt Output. (2 Amps Max.)
7. 2 Heating Zone 2 Mixing Valve Opening Output. 240 Volt Output. (2 Amps Max.)
8. 2 Heating Zone 2 Mixing Valve Closing Output. 240 Volt Output. (2 Amps Max.)
9. T1 (Not Used With Ultramax / KKM8 5064 Controller Configuration.)
- 10 T2 (Not Used With Ultramax / KKM8 5064 Controller Configuration.)
- 11 T3 (Not Used With Ultramax / KKM8 5064 Controller Configuration.)
12. T4 (Not Used With Ultramax / KKM8 5064 Controller Configuration.)
13. 1 Heating Zone 1 Mixing Valve Opening Output. 240 Volt Output. (2 Amps Max.)
14. 1 Heating Zone 1 Mixing Valve Opening Output. 240 Volt Output. (2 Amps Max.)
15. 3 Solar Collector Pump 2/Switching Valve/Multifunctional relay 3 (2 Amps Max.)
16. 4 Solar Collector Pump 1 (rpm) / Multifunctional relay 4 (2 Amps Max.)

Ultramax COCO2 Communication Converter & BM/BM8 Room Unit Wiring Guide

Up To Eight Ultramax WM Boilers Can Be Controlled Via One KKM8 5064.

The units Volt Free Enable must be made to allow the unit to operate. Terminals 4 & 5.



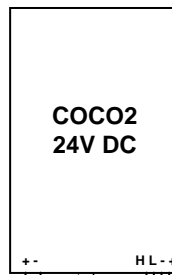
Up To Eight Ultramax Floor Standing Boilers Can Be Controlled Via One KKM8 5064.

The units Volt Free Enable must be made to allow the unit to operate. Terminals 10 & 11.

If Required A Mixture of Ultramax Boiler Types and Outputs Can Be Controlled via The KKM8 5064 controller

COCO2 Unit Mounted
in Wall Housing.

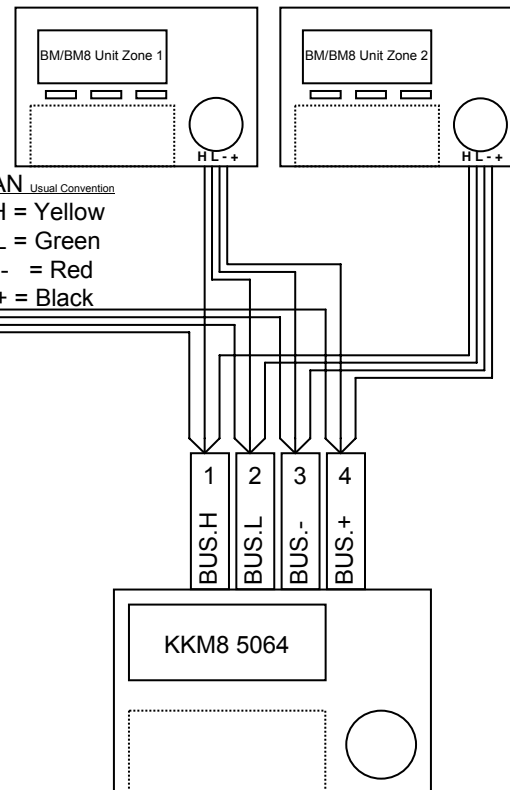
When the green light is on the unit is operational.



SCOM
1 = Green -
2 = Yellow +

SCOM
Wired to terminals or
connected via moulded plug

Up to two BM/BM8 room units can
be connected to a KKM8 5064



When BM/BM8 room units are connected the respective zone's circulating pumps must be controlled via the KKM8 5064 unit.

To enhance the temperature control of the individual heating zones, flow sensors and 3 way valves can also be connected to and controlled via the KKM8 5064 unit.