Q5

NETWORK DIAGRAMS

Q5

POWER SUPPLY | 24VAC

M CONTROLLER

ZONE 3 FAN
ZONE 2 FAN
ZONE 1 FAN

Zone 1 Fan

| 4 | 6 | 2 | | 8 |
| 3 | 5 | 1 | | 7 |

TB1 TB2 TB3 TB4 TB5
strobe horn

TB6

TB7 TB8 TB9 TB10 to Zone 2
TB11 to Zone 3
TB12
M5

RS422 PORT

zone 4
zone 3
zone 2
zone 1

Q5 Address #0
tb4 tb5 tb6 tb7

Q5 Address #1
tb4 tb5 tb6 tb7

Q5 Address #2
tb4 tb5 tb6 tb7

Q5 Address #31
tb4 tb5 tb6 tb7

M RELAY
Address #0

PARKING GARAGE
Zone 1

Typical Control Strategies:

1. Q5 gas transmitters provide local gas concentrations to M-Controller through RS-485 port
2. Q5 are addressable via RS-485
3. Areas or floors can be zoned into one or more groups of sensors to control local fans.
4. Zones can be determined at M-Controller for fan control. M-Controller is able to connect to max. 32 Q5s. They can be connected via one to four RS-485 port.
5. Typical Settings:
   CO low alarm: 25ppm / 20ppm
   CO high alarm: 100ppm / 80ppm
   NO2 low alarm: 1.0ppm / 0.8ppm
   NO2 high alarm: 3.0ppm / 2.0ppm
   CO2 low alarm: 1200ppm / 1000ppm
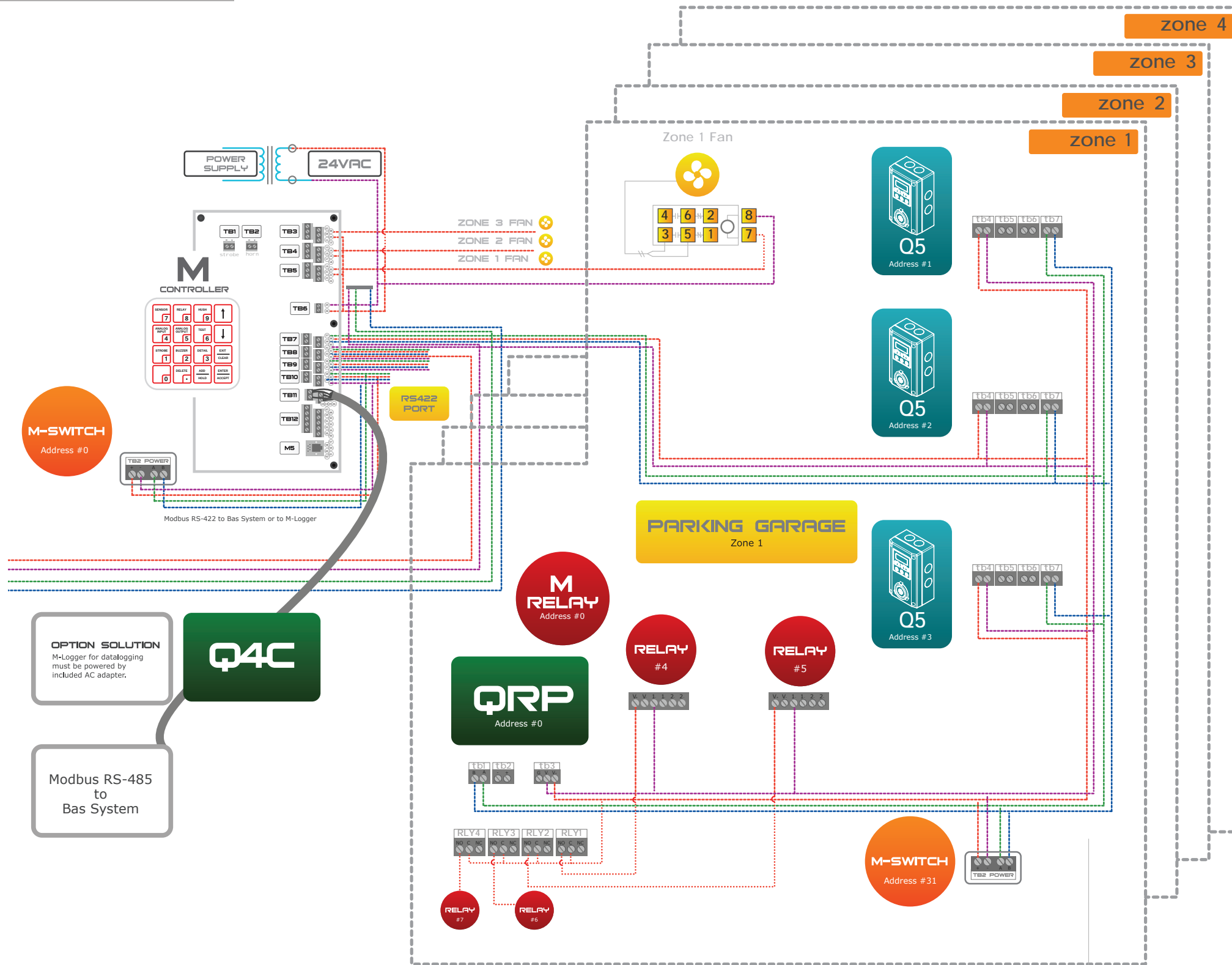   CO2 high alarm: 2500ppm / 2200ppm

RS-485 Wiring Trunk Topology

The best topology is a single trunk that in-outs on the terminal blocks of each device it connects.
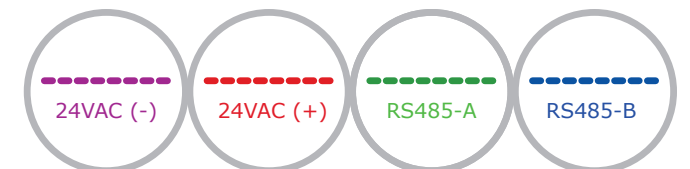
Avoid Star configurations.
Avoid Tees and Stub.

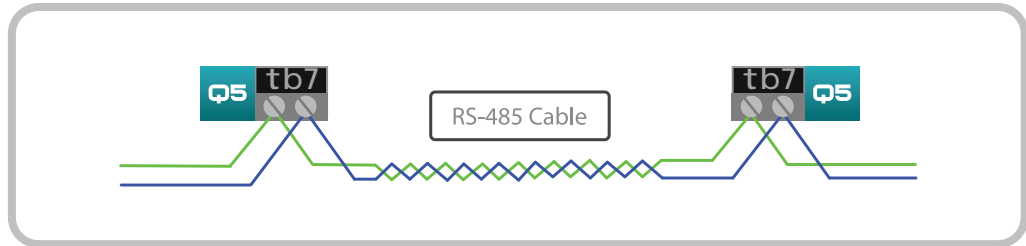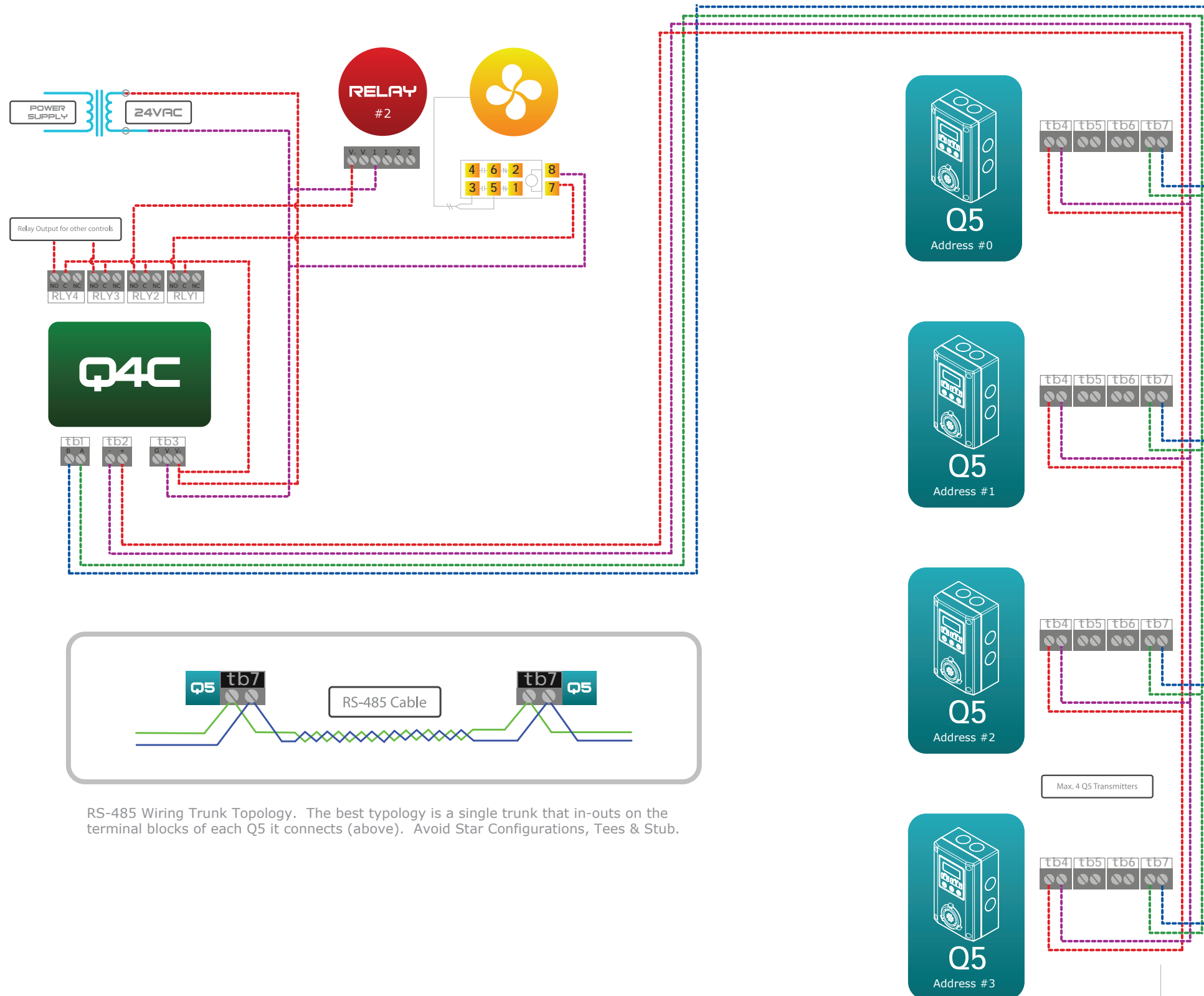24VAC (-) | 24VAC (+) | RS485-A | RS485-B

Q5

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   CO2 low alarm: 1200ppm / 1000ppm
   CO2 high alarm: 2500ppm / 2200ppm

zone 4
zone 3
zone 2
zone 1

Zone 1 Fan

4 6 2 8
3 5 1 7

POWER SUPPLY
24VAC

ZONE 3 FAN
ZONE 2 FAN
ZONE 1 FAN

M CONTROLLER

TB1 TB2
TB3
TB4
TB5
TB6
TB7
TB8
TB9
TB10
TB11
TB12
M5

RS422 PORT

Modbus RS-422 to Bas System or to M-Logger

M-SWITCH
Address #0

TB2 POWER

Q5
Address #1

Q5
Address #2

Q5
Address #3

PARKING GARAGE
Zone 1

M RELAY
Address #0

RELAY #4

RELAY #5

OPTION SOLUTION
M-Logger for datalogging must be powered by included AC adapter.

Q4C

QRP
Address #0

Modbus RS-485 to Bas System

RLY4 RLY3 RLY2 RLY1

RELAY #7   RELAY #6

M-SWITCH
Address #31

TB2 POWER

24VAC (-)   24VAC (+)   RS485-A   RS485-B

Parking Garage 3

POWER SUPPLY — 24VAC

RELAY #2

Relay Output for other controls

V V 1 1 2 2

| 4 | 6 | 2 | | 8 |
| 3 | 5 | 1 | | 7 |

NO C NC NO C NC NO C NC NO C NC
RLY4   RLY3   RLY2   RLY1

Q4C

tb1   tb2   tb3

Q5
Address #0

tb4 tb5 tb6 tb7

Q5
Address #1

tb4 tb5 tb6 tb7

Q5
Address #2

tb4 tb5 tb6 tb7

Max. 4 Q5 Transmitters

Q5
Address #3

tb4 tb5 tb6 tb7

Q5 | tb7   tb7 | Q5

RS-485 Cable

RS-485 Wiring Trunk Topology. The best typology is a single trunk that in-outs on the terminal blocks of each Q5 it connects (above). Avoid Star Configurations, Tees & Stub.

Q5

Typical Control Strategies:

1. Q5 gas transmitters provide local gas concentrations to Q4-Controller through RS-485 port
2. Q5 are addressable via RS-485
3. Q4-Controller is able to connect to max. 4 Q5s. They can be connected via RS-485 port.
4. Typical Settings:
   CO low alarm: 25ppm / 20ppm
   CO high alarm: 100ppm / 80ppm
   NO2 low alarm: 1.0ppm / 0.8ppm
   NO2 high alarm: 3.0ppm / 2.0ppm
   CO2 low alarm: 1200ppm / 1000ppm
   CO2 high alarm: 2500ppm / 2200ppm

24VAC (-)   24VAC (+)   RS485-A   RS485-B