

| Photo   | Features   | Part Number                     | 1000 Ohm Nickel @ 70°F | 1000 Ohm Nickel @ 32°F | 1000 Ohm Platinum (E85) | 1000 Ohm Platinum (E75) | 10K Ohm NTC Thermistor Type II | 10K NTC for IECs | 0-10V | 0-5V | 4-20mA | Switching/Contact Closure | Digitally Communicating | Connection Type | PP = Point to Point | FB = Termination Block | 2 x 4 Utility Box Enclosure | Plastic Housing <sup>1</sup> | Primary Measurement Output Accuracy             | Primary Measurement Output Range           | Specification Sheet | Installation Instructions |
|---|--|---------------------------------|------------------------|------------------------|-------------------------|-------------------------|--------------------------------|------------------|-------|------|--------|---------------------------|-------------------------|-----------------|---------------------|------------------------|-----------------------------|------------------------------|---|--|---------------------|---------------------------|
| <b>Room Temperature Sensors</b>                       |  |                                 |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         |                 |                     |                        |                             |                              |   |  |                     |                           |
|   | Sensing Only Wall Mounted  | 540-660B/540-661B               |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 0.75°F (0.4°C)                                  | 55 to 95°F (13 to 35°C)                    | 149-312             | 540-742                   |
|   | Sensing Only Wall Mounted  | QAA2355.EWNN <sup>1</sup>       |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 1.8°F (±1.0°C)                                  | Selectable                                 | 149-710             | 129-482                   |
|   |  | QAA2330.EWNN <sup>1</sup>       |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 0.5°F (0.3°C)                                   | 55 to 95°F (13 to 35°C)                    | 149-710             | 129-482                   |
|   |  | QAA2332.EWNN <sup>1</sup>       |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 0.5°F (0.3°C)                                   | 55 to 95°F (13 to 35°C)                    | 149-710             | 129-482                   |
|   |  | QAA2320.EWNN <sup>1</sup>       |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 0.5°F (0.3°C)                                   | 55 to 95°F (13 to 35°C)                    | 149-710             | 129-482                   |
|   |  | QAA2321.EWNN <sup>1</sup>       |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 0.5°F (0.3°C)                                   | 55 to 95°F (13 to 35°C)                    | 149-710             | 129-482                   |
|   | Sensing with Display, Setpoint, and Override   | 540-670B/540-671B               |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | RJ-11           |                     |                        |                             |                              | 0.5°F (0.3°C)                                   | 55 to 95°F (13 to 35°C)                    | 149-312             | 540-742                   |
|   | Sensing with Bi-Metallic Display   | QAA2312.DWTC <sup>1</sup> (LED) |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 0.9°F (0.5°C)                                   | 55 to 95°F (13 to 35°C)                    | 149-710             | 129-482                   |
|   |  | QAA2330.BWNN <sup>1</sup>       |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 0.5°F (0.3°C)                                   | 55 to 95°F (13 to 35°C)                    | 149-710             | 129-482                   |
|   |  | QAA2332.BWNN <sup>1</sup>       |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 0.5°F (0.3°C)                                   | 55 to 95°F (13 to 35°C)                    | 149-710             | 129-482                   |
|   |  | QAA2320.BWNN <sup>1</sup>       |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 0.5°F (0.3°C)                                   | 55 to 95°F (13 to 35°C)                    | 149-710             | 129-482                   |
|   |  | QAA2321.BWNN <sup>1</sup>       |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 0.5°F (0.3°C)                                   | 55 to 95°F (13 to 35°C)                    | 149-710             | 129-482                   |
|   | Sensing with Display, Setpoint, and Override   | 540-680FB <sup>9</sup>          |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | RJ-11           |                     |                        |                             |                              | 1.8°F (±1.0°C)                                  | 55 to 95°F (13 to 35°C)                    | 149-312             | 540-742                   |
|   | Sensing with Display, Setpoint, and Override   | QAA2355.FWNN <sup>1</sup>       |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 1.8°F (±1.0°C)                                  | Selectable                                 | 149-710             | 129-482                   |
|   |  | QAA2312.FWNN <sup>1</sup>       |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 0.5°F (0.3°C)                                   | 55 to 95°F (13 to 35°C)                    | 149-710             | 129-482                   |
|   |  | QAA2330.FWNN <sup>1</sup>       |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 0.5°F (0.3°C)                                   | 55 to 95°F (13 to 35°C)                    | 149-710             | 129-482                   |
|   |  | QAA2332.FWNN <sup>1</sup>       |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 0.9°F (0.5°C)                                   | 55 to 95°F (13 to 35°C)                    | 149-710             | 129-482                   |
|   |  | QAA2320.FWNN <sup>1</sup>       |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 0.5°F (0.3°C)                                   | 55 to 95°F (13 to 35°C)                    | 149-710             | 129-482                   |
|   |  | QAA2321.FWNN <sup>1</sup>       |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 0.5°F (0.3°C)                                   | 55 to 95°F (13 to 35°C)                    | 149-710             | 129-482                   |
| <b>Flush Mount Room Temperature Sensors</b>           |  |                                 |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         |                 |                     |                        |                             |                              |   |  |                     |                           |
|   | Plastic Housing  | 536-994B                        |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | Leads           |                     |                        |                             |                              | 0.5°F (0.3°C)                                   | 55 to 95°F (13 to 35°C)                    | 149-956             | 538-048                   |
|   |  | 540-520B                        |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | RJ-11           |                     |                        |                             |                              | 0.5°F (0.3°C)                                   | 55 to 95°F (13 to 35°C)                    | 149-956             | 538-043                   |
|   |  | 544-374B                        |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | Leads           |                     |                        |                             |                              | 0.5°F (0.3°C)                                   | 55 to 95°F (13 to 35°C)                    | 149-956             | 538-048                   |
|   | Metal Housing  | 540-984                         |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | Leads           |                     |                        |                             |                              | 0.5°F (0.3°C)                                   | 55 to 95°F (13 to 35°C)                    | 149-956             | 129-390                   |
|   |  | 540-995                         |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | RJ-11           |                     |                        |                             |                              | 0.5°F (0.3°C)                                   | 55 to 95°F (13 to 35°C)                    | 149-956             | 129-500                   |
|   |  | 544-973                         |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | Leads           |                     |                        |                             |                              | 0.5°F (0.3°C)                                   | 55 to 95°F (13 to 35°C)                    | 149-956             | 129-390                   |
|   | Stainless Steel Button   | QAA1011.AASU                    |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | Leads           |                     |                        |                             |                              | 0.54°F (±0.3°C) at Cal. Pt.                     | -40 to 157°F (-40 to 125°C)                | 149-971             | 129-501                   |
|   |  | QAA1031.AASU                    |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | RJ-11           |                     |                        |                             |                              | 0.54°F (±0.3°C) at Cal. Pt.                     | 55 to 95°F (13 to 35°C)                    | 149-971             | 129-501                   |
|   | Stainless Steel Button with Wallplate  | QAA1011.AATU                    |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | Leads           |                     |                        |                             |                              | 0.54°F (±0.3°C) at Cal. Pt.                     | -40 to 157°F (-40 to 125°C)                | 149-971             | 129-501                   |
|   |  | QAA1031.AATU                    |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | RJ-11           |                     |                        |                             |                              | 0.54°F (±0.3°C) at Cal. Pt.                     | 55 to 95°F (13 to 35°C)                    | 149-971             | 129-501                   |
| <b>Room Humidistats</b>                               |  |                                 |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         |                 |                     |                        |                             |                              |   |  |                     |                           |
|   | Room Humidistat  | QFA1000 <sup>9</sup>            |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 5%  | Setpoint: 30 to 90% rh                     | 155-708             | 129-604                   |
|   |  | QFA1001 <sup>1</sup>            |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 5%  | Setpoint: 30 to 90% rh                     | 155-708             | 129-604                   |
| <b>Room Relative Humidity and Temperature Sensors</b> |  |                                 |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         |                 |                     |                        |                             |                              |   |  |                     |                           |
|   | Relative Humidity and Temperature with ±2% Accuracy  | QFA3355.EWNN <sup>1</sup>       |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 2%  | 0 to 100% rh                               | 149-103             | 129-109                   |
|   |  | QFA3312.EWNN <sup>1</sup>       |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 2%  | 0 to 100% rh                               | 149-103             | 129-109                   |
|   | Relative Humidity and Temperature with ±2% Accuracy with Display, Setpoint, and Occupancy Override | QFA3355.FWNN <sup>1</sup>       |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 2%  | 0 to 100% rh                               | 149-103             | 129-109                   |
|   |  | QFA3312.FWNN <sup>1</sup>       |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 2%  | 0 to 100% rh                               | 149-103             | 129-109                   |
|   |  | QFA3330.FWNN <sup>1</sup>       |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 2%  | 0 to 100% rh                               | 149-103             | 129-109                   |
|   |  | QFA3332.FWNN <sup>1</sup>       |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 2%  | 0 to 100% rh                               | 149-103             | 129-109                   |
| <b>Room Carbon Dioxide Sensors</b>                    |  |                                 |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         |                 |                     |                        |                             |                              |   |  |                     |                           |
|   | CO <sub>2</sub> Sensing  | QPA2000N                        |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | ±50 ppm +2% of Measured Value                   | 0 to 2000 ppm                              | 149-910             | 129-435                   |
|   | CO <sub>2</sub> and VOC Sensing Order D Suffix for Display   | QPA2002N/QPA2002D <sup>1</sup>  |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | CO <sub>2</sub> : ±50 ppm +5% of Measured Value | 0 to 2000 ppm                              | 149-910             | 129-435                   |
|   | CO <sub>2</sub> and Temp Sensing Order D Suffix for Display  | QPA2060N/QPA2060D <sup>1</sup>  |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | CO <sub>2</sub> : ±50 ppm +5% of Measured Value | 0 to 2000 ppm                              | 149-910             | 129-435                   |
|   | CO <sub>2</sub> , Temp and rh with ±5% Accuracy Order D Suffix for Display                         | QPA2062N/QPA2062D <sup>1</sup>  |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | CO <sub>2</sub> : ±50 ppm +2% of Measured Value | 0 to 2000 ppm                              | 149-910             | 129-435                   |
|   | VOC Only   | QPA1000N                        |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | CO <sub>2</sub> : ±50 ppm +2% of Measured Value | 0 to 2000 ppm                              | 129-609             | 149-601                   |
|   | CO <sub>2</sub> , Temp (Passive) Order D Suffix for Display  | QPA2080N/QPA2080D <sup>1</sup>  |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | CO <sub>2</sub> : ±50 ppm +2% of Measured Value | 0 to 2000 ppm                              | 129-609             | 149-601                   |
| <b>Duct Point Temperature Sensors</b>                 |  |                                 |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         |                 |                     |                        |                             |                              |   |  |                     |                           |
|   | Available with 8", 24", 36" and 48" Lengths  | 533-376-XX                      |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | Leads           |                     |                        |                             |                              | See spec sheet                                  | 20 to 120°F (-7 to 49°C)                   | 149-263P25          | 129-510                   |
|   |  | 533-377-XX                      |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | Leads           |                     |                        |                             |                              | See spec sheet                                  | 30 to 250°F (-1 to 121°C)                  | 149-263P25          | 129-510                   |
|   |  | 544-339-XX                      |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | Leads           |                     |                        |                             |                              | See spec sheet                                  | -40 to 240°F (-40 to 116°C)                | 149-261P25          | 129-511                   |
|   |  | 544-560-XX                      |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | Leads           |                     |                        |                             |                              | See spec sheet                                  | -4 to 122°F (-20 to 50°C)                  | 149-263P25          | 129-510                   |
|   | 3" Probe For Commissioning Only 50 per pack  | QAM1030.008P50                  |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | Leads           |                     |                        |                             |                              | 5°F (3°C)                                       | -40 to 240°F (-40 to 116°C)                | 149-905             | 129-096                   |
|   | Duct Point Sensors Use suffixes for ordering: .010 = 4", .020 = 8", .045 = 18" Ex: QAM2030.045     | QAM2012.XXX                     |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | Leads           |                     |                        |                             |                              | 0.75°F (0.4°C)                                  | -40 to 240°F (-40 to 116°C)                | 149-915             | 129-463                   |
|   |  | QAM2030.XXX                     |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | Leads           |                     |                        |                             |                              | 1°F (0.5°C)                                     | -40 to 248°F (-40 to 120°C)                | 149-915             | 129-463                   |
| <b>Rigid Averaging Duct Sensors</b>                   |  |                                 |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         |                 |                     |                        |                             |                              |   |  |                     |                           |
|   | Available with 18", 24", 36" and 48" Lengths   | 535-490-XX                      |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | Leads           |                     |                        |                             |                              | See spec sheet                                  | 20 to 120°F (-7 to 49°C)                   | 149-263P25          | 129-515                   |
|   |  | 544-343-XX                      |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | Leads           |                     |                        |                             |                              | See spec sheet                                  | 20 to 120°F (-7 to 49°C)                   | 149-261P25          | 129-516                   |
| <b>Flexible Averaging Duct Sensors</b>                |  |                                 |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         |                 |                     |                        |                             |                              |   |  |                     |                           |
|   | Metal Housing Available with 8", 16" and 24" Lengths   | 533-380-XX                      |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | Leads           |                     |                        |                             |                              | See spec sheet                                  | 20 to 120°F (-7 to 49°C)                   | 149-263P25          | 129-512                   |
|   |  | 544-342-XX                      |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | Leads           |                     |                        |                             |                              | See spec sheet                                  | 20 to 120°F (-7 to 49°C)                   | 149-261P25          | 129-514                   |
|   | Metal Housing Probes in 8" to 25"  | QAM2012.XXX                     |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | Leads           |                     |                        |                             |                              | 0.75°F (0.4°C) at Mid-point                     | -40 to 240°F (-40 to 116°C)                | 149-916             | 129-495                   |
|   |  | QAM2030.XXX                     |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | Leads           |                     |                        |                             |                              | 1°F (0.5°C) at Mid-point                        | -40 to 248°F (-40 to 120°C)                | 149-916             | 129-495                   |
|   | Plastic Housing 6.5" Probe   | QAM2112.200                     |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 0.75°F (0.4°C)                                  | -58 to 176°F (-50 to 80°C)                 | 149-805             | 129-525                   |
|   |  | QAM2112.040                     |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 0.75°F (0.4°C)                                  | -58 to 176°F (-50 to 80°C)                 | 149-805             | 129-525                   |
|   |  | QAM2130.040                     |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 1°F (0.5°C)                                     | -58 to 176°F (-50 to 80°C)                 | 149-805             | 129-525                   |
|   | Plastic Housing 16" Probe  | QAM2161.040                     |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 0.75°F (0.4°C)                                  | Jumper Selectable: 32 to 122°F (0 to 50°C) | 149-805             | 129-525                   |
|   |  | QAM2171.040                     |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 0.75°F (0.4°C)                                  | -58 to 122°F (-50 to 50°C)                 | 149-805             | 129-525                   |
| <b>Duct Relative Humidity Sensors</b>                 |  |                                 |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         |                 |                     |                        |                             |                              |   |  |                     |                           |
|   | Duct Humidistat  | QFM81.2                         |                        |                        |                         |                         |                                |                  |       |      |        |                           |                         | TB              |                     |                        |                             |                              | 4%  | Setpoint: 15 to 95% rh                     |                     |                           |