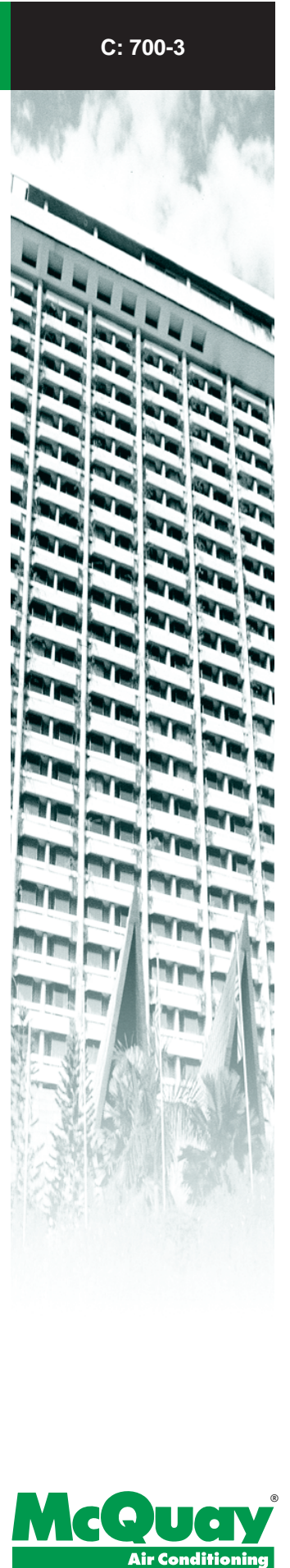
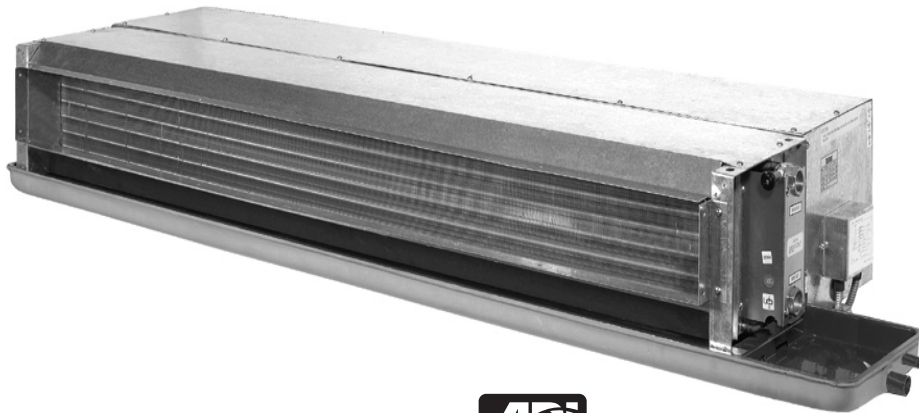


# McQuay® Horizontal Concealed Fan Coil Unit

Model THC (Vintage B)

Sizes 200 Through 1200 CFM



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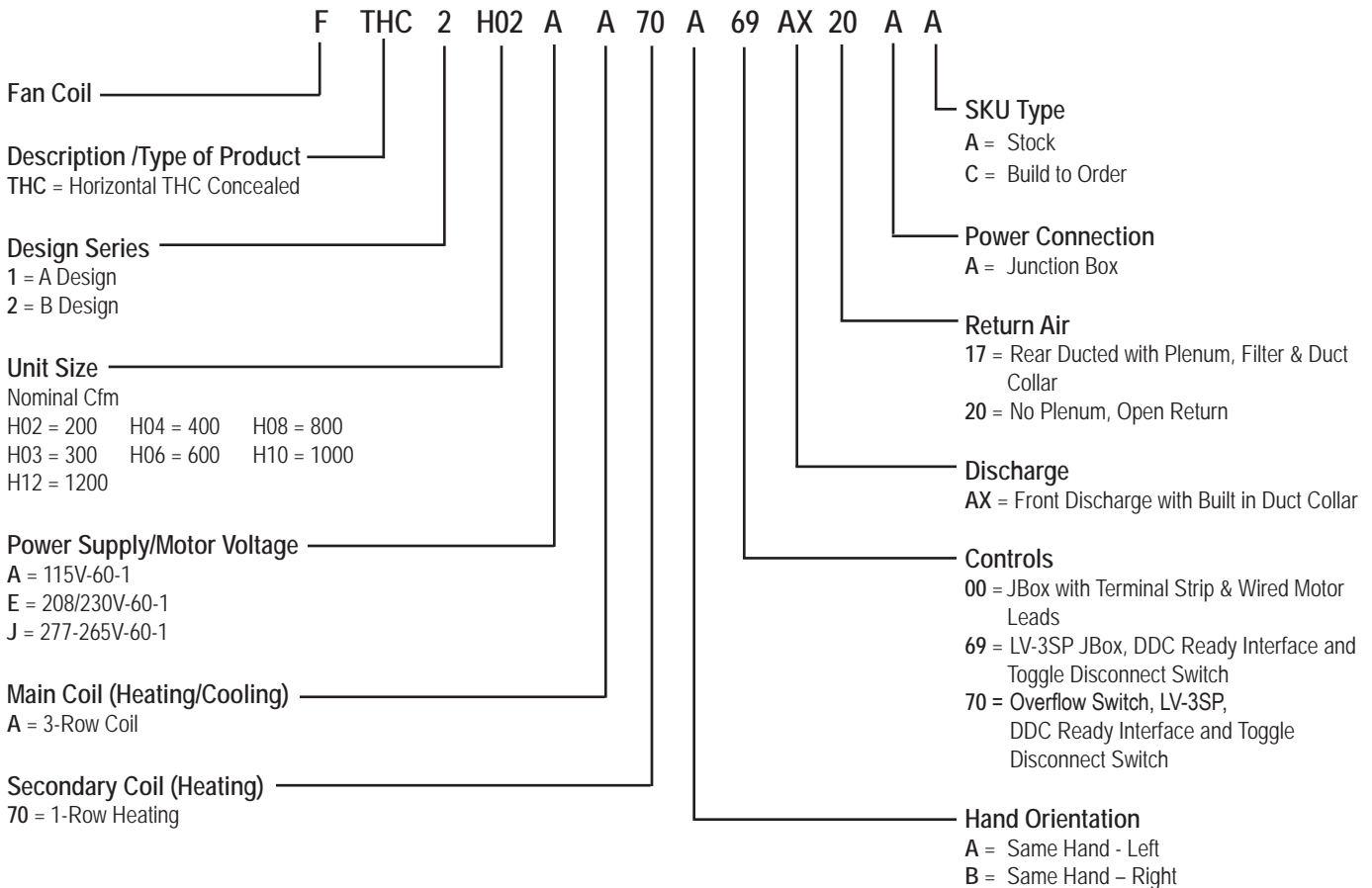


All standard units  
 All custom units



Ratings certified by the Air Conditioning & Refrigeration Institute (ARI)

## Nomenclature



# Introduction

McQuay fan coils have been widely applied in hotels, apartments, dormitories and military barracks, assisted living facilities and offices. They have earned a reputation for quality - providing years of efficient, reliable, quiet heating and cooling and easy, low-cost installation and maintenance. The Model THC horizontal concealed fan coil unit is a slim, lightweight unit that is ideal for installation in ceilings where height is limited. Units are available in seven sizes from 200 to 1,200 cfm.

## Design Features

### Slim Profile

The highly compact, super lightweight design of the Model THC fan coil unit makes it ideal for inside ceiling installations where height is limited.

### High Efficiency Coil

Unique coil design promotes the mixture of warm and cold air, resulting in high thermal efficiency and lower operating costs.

## Quiet and Efficient Centrifugal Fan-Motor Assembly

With a dynamically balanced centrifugal fan wheel and a high efficiency motor assembly, the THC offers you:

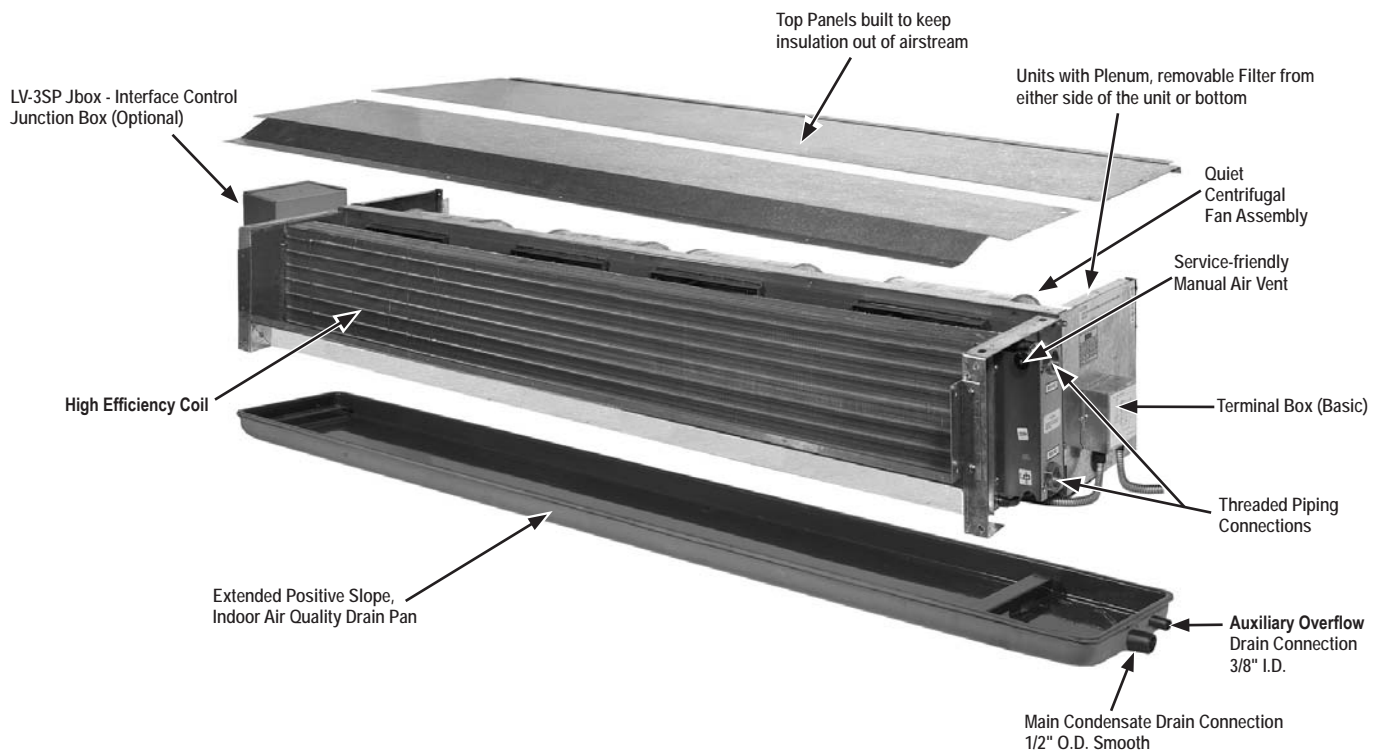
1. Minimized vibration.
2. Low noise operation.
3. Low operating cost.
4. 4 speed tap motor for better speed control.

## Indoor Air Quality Design

### 1. Coils

- All THC water coils feature aluminum blue fins mechanically bonded to seamless copper tubes. The blue fins are covered with an epoxy polymer that causes condensation to drip off more quickly, preventing mold build-up and increasing the coil and fin life expectancy.
- Hand operated brass air vent, conveniently located over the drain pan, requires no tools for venting, and is supplied with a clear plastic hose to prevent spills.

## Fan coil Construction Illustration



## 2. Drain Pan

- Galvanized or stainless steel.
- Extends past the coil to collect condensation from valve and piping packages.
- Stamped with no welded corners.
- Positively sloped to provide proper drainage and minimize microbial growth.
- Equipped with main condensate and auxiliary drain connections to provide overflow protection.
- Easily removable.
- Coated with a thick layer of powder paint and baked for easy cleaning and to help protect against microbial growth and corrosion.
- Insulated with form-fitted, closed cell insulation to prevent condensation build-up on the exterior of the drain pan.

## 3. Return Air Plenum

- Units are available with or without a return air plenum. Units with a plenum are supplied with a high quality filter, filter guide and 3/4" return air duct collar. Easy filter removal encourages frequent changing, especially when the unit is used with a McQuay T170 thermostat, which has a filter reminder.
- Aluminum foil faced insulation is used in the return air plenum to prevent glass fibers from entering the air stream, to reduce unit sweating, and to attenuate fan noise.
- Top and side panels surrounding the coil are also insulated with aluminum foil face to prevent the possibility of condensation forming on the outside of the cabinet.

## Flexible Coil and Piping Connections

Units are easily converted to opposite-hand orientation without requiring additional parts or a conversion kit. Heating and cooling pipe connections are located on the same end. Four pipe coils are factory installed in the re-heat position, but are easily field-converted to the pre-heat position. Coils can be factory installed in the pre-heat position as a special request.

## Threaded or Sweat Connections

Coils feature a brass header with 3/4" FPT connections to facilitate quick installation of McQuay threaded or quick-connect, factory built valve packages. A galvanized steel cover plate protects the header and provides additional structural support to facilitate connection of any type of valve package and matched load pumps. If sweat copper tube connections are desired, sets of two (2) 3/4" MPT x 1/2" copper male adapters are provided in the basic units.

## Electrical Connection - Control Interface

All remote thermostats and controls generally require low voltage control wiring from the thermostat/control device to the unit control box. That is why McQuay provides a full range of control options. See Thermostats and Controls below.

## Thermostats and Controls

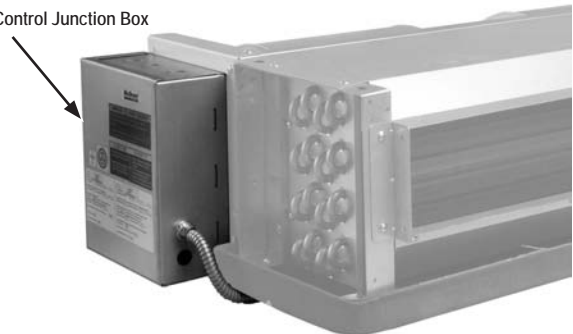
Wall-mounted thermostats are available for all applications, ranging from a simple thermostat and/or 3-speed switch to a digital, ADA display thermostat with auto-stage control.

**Note:** For details on thermostats and wiring refer to ED18513.

## Factory installed options include:

- Basic: A single point power connection junction box that consists of a terminal strip for line-voltage control connection to an Off, Hi, Med, Lo switch, plus a thermostat or a control.
- DDC ready interface via an LV-3SP control box: For low-voltage applications, it includes three 24 volt relays, a line voltage/24volt transformer, two sets of terminal strips and a toggle disconnect. This interface control can be used with a simple 24 volt thermostat or with building automation systems. This interface is also available as a field installed option.

Interface Control Junction Box



**Note:** For wiring diagram details for Vintage B THC units and the LV-3SP Jbox refer to Certified Drawing FC-THC-H02-H012

## Valve Packages

Two-way and three-way electric valves are available in low- and line-voltage configurations for field installation on 2-pipe and 4-pipe systems. Basic, enhanced and deluxe valve/piping packages are also available with and without quick-connect, threaded connections.

Valve/piping packages are available with and without bleed lines. Packages without bleed lines will require thermostats capable of sampling the entering water temperature to sense automatic changeover on two-pipe changeover units. (Refer to valve/piping package Engineering Data documentation).

# Performance Data – THC Horizontal Concealed (2-Pipe System)

## ARI Approved Standard Coil Water Cooling Capacity Ratings<sup>1</sup>

| UNIT SIZE | FTHC HORIZONTAL CONCEALED UNIT |               |                |                     |
|-----------|--------------------------------|---------------|----------------|---------------------|
|           | COOLING CAPACITY <sup>1</sup>  |               | WATER FLOW GPM | WATER P.D. FT. W.C. |
|           | TOTAL BTUH                     | SENSIBLE BTUH |                |                     |
| H02       | 8500                           | 6100          | 1.94           | 5.10                |
| H03       | 11,100                         | 8400          | 2.51           | 3.26                |
| H04       | 14,500                         | 10,800        | 3.26           | 5.80                |
| H06       | 21,200                         | 16,100        | 4.70           | 12.82               |
| H08       | 22,700                         | 18,000        | 5.14           | 3.68                |
| H10       | 25,300                         | 20,000        | 5.70           | 4.76                |
| H12       | 34,200                         | 27,000        | 7.75           | 8.29                |

## Standard Coil Water Heating Capacity Ratings<sup>2</sup>

| UNIT SIZE | FTHC HORIZONTAL CONCEALED UNIT |  |                |                     |
|-----------|--------------------------------|--|----------------|---------------------|
|           | HEATING CAPACITY <sup>2</sup>  |  | WATER FLOW GPM | WATER P.D. FT. W.C. |
|           | SENSIBLE BTUH                  |  |                |                     |
| H02       | 14,900                         |  | 1.94           | 5.10                |
| H03       | 20,300                         |  | 2.51           | 3.26                |
| H04       | 26,800                         |  | 3.26           | 5.80                |
| H06       | 37,600                         |  | 4.70           | 12.82               |
| H08       | 42,400                         |  | 5.14           | 3.68                |
| H10       | 48,300                         |  | 5.70           | 4.76                |
| H12       | 68,800                         |  | 7.75           | 8.29                |

Water heating coils at 70°F DB entering air, 140°F entering water, 30°F water temperature drop and high fan speed with standard 115/60/1 motor. For heating coil capacity ratings at conditions other than those listed refer to the RepTools Computer Selection Program or consult your McQuay representative.

## General Unit Data

|   | Unit Size  |       |       |       |        |        |        |
|---|--|-------|-------|-------|--------|--------|--------|
|   | H02  | H03   | H04   | H06   | H08    | H10    | H12    |
| <b>Fan</b>                                    |  |       |       |       |        |        |        |
| Type  | Centrifugal Fan (forward-curved galvanized steel fan wheel)        |       |       |       |        |        |        |
| Number of Fans                                | 1  | 1     | 2     | 2     | 3      | 3      | 4      |
| <b>Coil</b>                                   |  |       |       |       |        |        |        |
| Number of Rows                                | 3/1 Split  |       |       |       |        |        |        |
| Type  | Water - (3-Row Chilled Water) (1-Row Hot Water)                    |       |       |       |        |        |        |
| <b>Motor(s)</b>                               |  |       |       |       |        |        |        |
| Type  | PSC  |       |       |       |        |        |        |
| Number of Motors                              | 1  | 1     | 1     | 1     | 2      | 2      | 2      |
| Power Supply                                  | 115/60/1, 208-230/50/60/1, 277/60/1                                |       |       |       |        |        |        |
| <b>Watts - High Speed</b>                     |  |       |       |       |        |        |        |
| 50Hz  | 62   | 91    | 109   | 171   | 242    | 249    | 321    |
| 60Hz  | 75   | 109   | 131   | 205   | 291    | 299    | 385    |
| Coil Connection                               | 3/4" FPT   |       |       |       |        |        |        |
| Drain Pipe Connections                        | Main Drain - 3/4" O.D. Smooth / Auxiliary Drain - 3/8" I.D. Smooth |       |       |       |        |        |        |
| <b>Unit with Return Air Plenum and Filter</b> |  |       |       |       |        |        |        |
| Length  | in.  | 23.25 | 23.25 | 23.25 | 23.25  | 23.25  | 23.25  |
| Width   | in.  | 32.05 | 38.74 | 43.86 | 51.73  | 61.57  | 75.75  |
| Height  | in.  | 9.88  | 9.88  | 9.88  | 9.88   | 9.88   | 9.88   |
| Ship Weight                                   | lb.  | 63.00 | 73.00 | 88.00 | 102.00 | 134.00 | 153.00 |

### Conditions:

**1 Cooling Capacity:** Entering air temp. 80°F (DB), 67°F (WB); Entering water temp. 45°F, Leaving water temp. 55°F.

**2 Heating Capacity:** Entering air temp. 70°F (DB); Entering water temp. 140°F, The same amount of water flow with cooling.

**Air Flow:** Under dry coil conditions, fan speed high.

**Weight:** Includes return air plenum and packing.

# Performance Data – THC Horizontal Concealed (4-Pipe System)

## ARI Approved Standard Coil Water Cooling Capacity Ratings<sup>1</sup>

| UNIT SIZE | FTHC HORIZONTAL CONCEALED UNIT |               |                |                     |
|-----------|--------------------------------|---------------|----------------|---------------------|
|           | COOLING CAPACITY <sup>1</sup>  |               | WATER FLOW GPM | WATER P.D. FT. W.C. |
|           | TOTAL BTUH                     | SENSIBLE BTUH |                |                     |
| H02       | 8500                           | 6100          | 1.94           | 5.10                |
| H03       | 11,100                         | 8400          | 2.51           | 3.26                |
| H04       | 14,500                         | 10,800        | 3.26           | 5.80                |
| H06       | 21,200                         | 16,100        | 4.70           | 12.82               |
| H08       | 22,700                         | 18,000        | 5.14           | 3.68                |
| H10       | 25,300                         | 20,000        | 5.70           | 4.76                |
| H12       | 34,200                         | 27,000        | 7.75           | 8.29                |

## Standard Coil Water 1-Row Heating Capacity Ratings<sup>2</sup>

| UNIT SIZE | FTHC HORIZONTAL CONCEALED UNIT      |  |                |
|-----------|-------------------------------------|--|----------------|
|           | 1-ROW HEATING CAPACITY <sup>2</sup> |  | WATER FLOW GPM |
|           | SENSIBLE BTUH                       |  |                |
| H02       | 11,500                              |  | 0.64           |
| H03       | 16,300                              |  | 0.91           |
| H04       | 20,400                              |  | 1.12           |
| H06       | 29,600                              |  | 1.65           |
| H08       | 36,100                              |  | 2.00           |
| H10       | 40,300                              |  | 2.24           |
| H12       | 49,800                              |  | 2.76           |

Water heating coils at 70°F DB entering air, 180°F entering water, 40°F water temperature drop and high fan speed with standard 115/60/1 motor. For heating coil capacity ratings at conditions other than those listed refer to the RepTools Computer Selection Program or consult your McQuay representative.

## General Unit Data

|                        |  | Unit Size                              |       |       |        |        |        |        |
|------------------------|--|--|-------|-------|--------|--------|--------|--------|
|                        |  | H02                                    | H03   | H04   | H06    | H08    | H10    | H12    |
|                        |  | Fan                                    |       |       |        |        |        |        |
| Type                   | Centrifugal Fan (forward-curved galvanized steel fan wheel)        |  |       |       |        |        |        |        |
| Number of Fans         | 1  | 1                                      | 2     | 2     | 3      | 3      | 4      |        |
|                        |  | Coil                                   |       |       |        |        |        |        |
| Number of Rows         | 3/1 Split  |  |       |       |        |        |        |        |
| Type                   | Water - (3-Row Chilled Water) (1-Row Hot Water)                    |  |       |       |        |        |        |        |
|                        |  | Motor(s)                               |       |       |        |        |        |        |
| Type                   | PSC  |  |       |       |        |        |        |        |
| Number of Motors       | 1  | 1                                      | 1     | 1     | 2      | 2      | 2      |        |
| Power Supply           | 115/60/1, 208-230/50/60/1, 277/60/1                                |  |       |       |        |        |        |        |
|                        |  | Watts - High Speed                     |       |       |        |        |        |        |
| 50Hz                   | 62   | 91                                     | 109   | 171   | 242    | 249    | 321    |        |
| 60Hz                   | 75   | 109                                    | 131   | 205   | 291    | 299    | 385    |        |
| Coil Connection        | 3/4" FPT   |  |       |       |        |        |        |        |
| Drain Pipe Connections | Main Drain - 3/4" O.D. Smooth / Auxiliary Drain - 3/8" I.D. Smooth |  |       |       |        |        |        |        |
|                        |  | Unit with Return Air Plenum and Filter |       |       |        |        |        |        |
| Length                 | in.  | 23.25                                  | 23.25 | 23.25 | 23.25  | 23.25  | 23.25  | 23.25  |
| Width                  | in.  | 32.05                                  | 38.74 | 43.86 | 51.73  | 61.57  | 65.51  | 75.75  |
| Height                 | in.  | 9.88                                   | 9.88  | 9.88  | 9.88   | 9.88   | 9.88   | 9.88   |
| Ship Weight            | lb.  | 63.00                                  | 73.00 | 88.00 | 102.00 | 134.00 | 143.00 | 153.00 |

### Conditions:

**1 Cooling Capacity:** Entering air temp.80°F (DB), 67°F (WB); Entering water temp.45°F, Leaving water temp. 55°F.

**2 Heating Capacity:** Entering air temp.70°F (DB); Entering water temp.180°F.

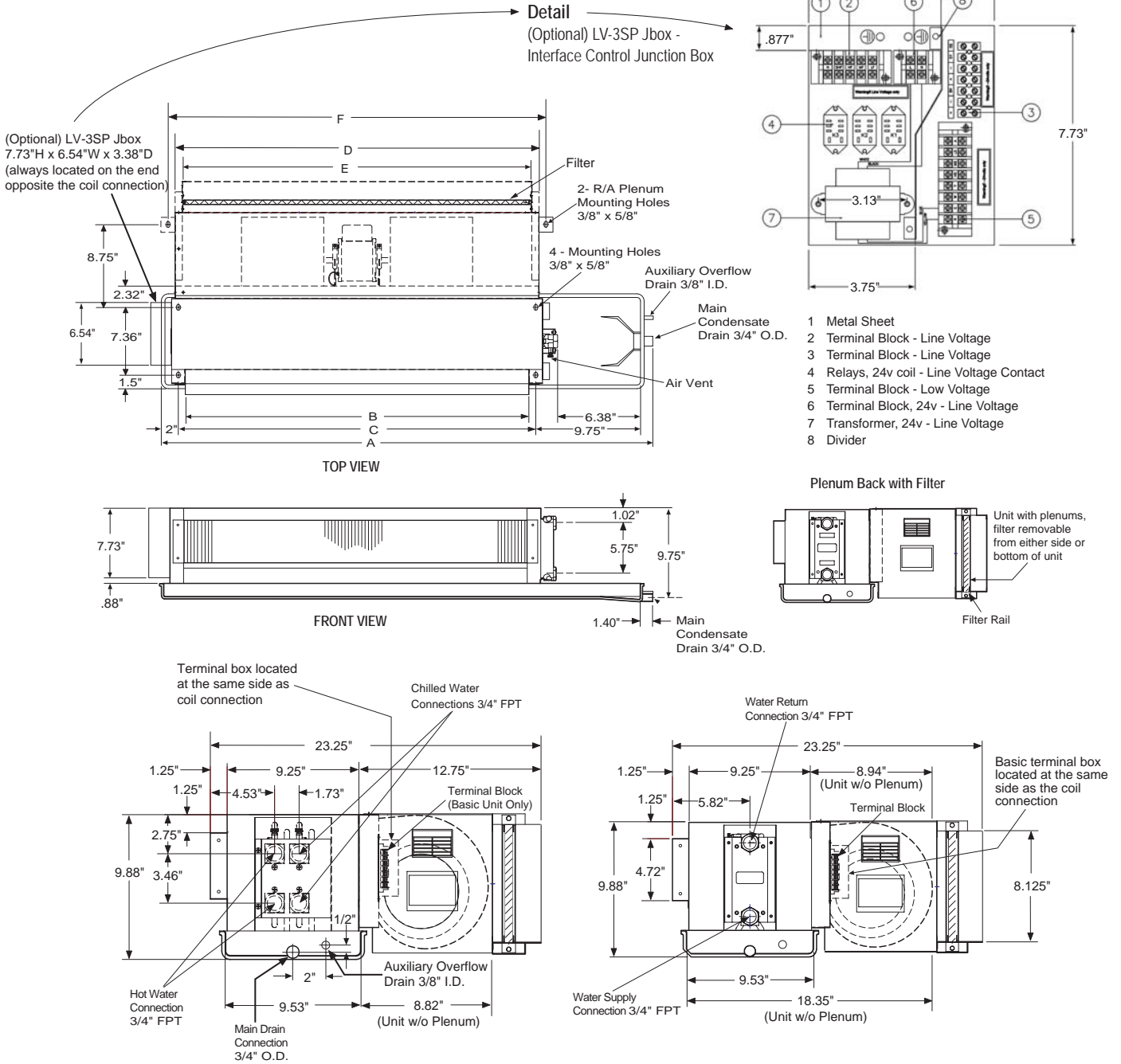
**Air Flow:** Under dry coil conditions, fan speed high.

**Weight:** Includes return air plenum and packing.

# Dimensional Data – THC Horizontal Concealed, with Plenum Box

| Unit Size | A      | B      | C      | D      | E      | F      | Filters                                    |     |
|-----------|--------|--------|--------|--------|--------|--------|--|-----|
|           |        |        |        |        |        |        | Size                                       | Qty |
| H02       | 32.05" | 17.64" | 19.17" | 19.96" | 18.46" | 21.13" | 18 <sup>7</sup> / <sub>8</sub> " x 8" x 1" | 1   |
| H03       | 38.74" | 24.33" | 25.87" | 26.65" | 25.15" | 27.82" | 24 <sup>7</sup> / <sub>8</sub> " x 8" x 1" | 1   |
| H04       | 43.86" | 29.45" | 30.98" | 31.77" | 30.20" | 32.94" | 29 <sup>7</sup> / <sub>8</sub> " x 8" x 1" | 1   |
| H06       | 51.73" | 37.32" | 38.86" | 39.65" | 38.07" | 40.82" | 18 <sup>7</sup> / <sub>8</sub> " x 8" x 1" | 2   |
| H08       | 61.57" | 47.17" | 48.70" | 49.49" | 47.91" | 50.66" | 23 <sup>3</sup> / <sub>4</sub> " x 8" x 1" | 2   |
| H10       | 65.51" | 51.10" | 52.64" | 53.43" | 51.85" | 54.60" | 25 <sup>3</sup> / <sub>4</sub> " x 8" x 1" | 2   |
| H12       | 75.75" | 61.34" | 62.87" | 63.66" | 62.09" | 64.83" | 30 <sup>7</sup> / <sub>8</sub> " x 8" x 1" | 2   |

**Note:** For wiring diagram details for Vintage B THC units and the LV-3SP Jbox refer to Certified Drawing FC-THC-H02-H012



**4-Pipe System - Right Hand Unit\***  
 \*Factory supplied left hand units also available

**2-Pipe System - Right Hand Unit\***

# Air Volume Capacity Data

Air volume versus external static pressure

| Unit Size |              | Fan Motor Speed                            |      |      |      |      |      |      |  |      |      |      |      |      |      |  |      |      |      |      |      |      |
|-----------|--------------|--|------|------|------|------|------|------|--|------|------|------|------|------|------|--|------|------|------|------|------|------|
|           |              | High                                       |      |      |      |      |      |      | Medium                                     |      |      |      |      |      |      | Low  |      |      |      |      |      |      |
|           |              | External Static Pressure (inches of water) |      |      |      |      |      |      | External Static Pressure (inches of water) |      |      |      |      |      |      | External Static Pressure (inches of water) |      |      |      |      |      |      |
|           |              | .00  | .05  | .10  | .15  | .20  | .25  | .30  | .00  | .05  | .10  | .15  | .20  | .25  | .30  | .00  | .05  | .10  | .15  | .20  | .25  | .30  |
| H02       | Air Flow cfm | 311  | 293  | 276  | 258  | 240  | 223  | 203  | 231  | 211  | 195  | 178  | 164  | 152  | 134  | 181  | 157  | 139  | 125  | 111  | 94   | 87   |
|           | RPM          | 1070                                       | 1130 | 1170 | 1200 | 1230 | 1262 | 1291 | 869  | 899  | 966  | 1012 | 1051 | 1104 | 1142 | 704  | 773  | 826  | 887  | 965  | 1032 | 1091 |
| H03       | Air Flow cfm | 423  | 391  | 368  | 344  | 319  | 297  | 270  | 296  | 277  | 262  | 244  | 229  | 213  | 197  | 234  | 202  | 179  | 161  | 144  | 122  | 113  |
|           | RPM          | 1143                                       | 1172 | 1202 | 1226 | 1255 | 1282 | 1313 | 838  | 890  | 945  | 992  | 1043 | 1097 | 1144 | 714  | 756  | 833  | 886  | 953  | 1023 | 1081 |
| H04       | Air Flow cfm | 507  | 472  | 444  | 416  | 386  | 359  | 326  | 349  | 327  | 310  | 288  | 268  | 247  | 227  | 278  | 241  | 214  | 192  | 171  | 145  | 134  |
|           | RPM          | 1122                                       | 1165 | 1201 | 1221 | 1258 | 1285 | 1314 | 788  | 851  | 903  | 964  | 1043 | 1093 | 1156 | 678  | 737  | 811  | 891  | 957  | 1028 | 1091 |
| H06       | Air Flow cfm | 798  | 770  | 742  | 714  | 688  | 654  | 627  | 581  | 555  | 530  | 508  | 483  | 456  | 432  | 518  | 497  | 471  | 444  | 425  | 406  | 376  |
|           | RPM          | 1295                                       | 1311 | 1333 | 1361 | 1382 | 1399 | 1416 | 990  | 1017 | 1060 | 1102 | 1151 | 1182 | 1230 | 894  | 937  | 994  | 1049 | 1086 | 1141 | 1181 |
| H08       | Air Flow cfm | 949  | 915  | 874  | 828  | 775  | 730  | 690  | 740  | 701  | 652  | 615  | 572  | 528  | 490  | 662  | 620  | 580  | 535  | 490  | 442  | 400  |
|           | RPM          | 1172                                       | 1192 | 1221 | 1259 | 1286 | 1320 | 1341 | 931  | 1003 | 1027 | 1072 | 1124 | 1167 | 1219 | 892  | 935  | 956  | 1014 | 1070 | 1121 | 1174 |
| H10       | Air Flow cfm | 1032                                       | 981  | 932  | 881  | 836  | 712  | 716  | 775  | 723  | 688  | 631  | 582  | 533  | 493  | 697  | 643  | 602  | 538  | 496  | 463  | 410  |
|           | RPM          | 1251                                       | 1279 | 1303 | 1331 | 1344 | 1386 | 1412 | 984  | 1037 | 1068 | 1115 | 1169 | 1245 | 1255 | 902  | 969  | 1001 | 1062 | 1123 | 1161 | 1204 |
| H12       | Air Flow cfm | 1428                                       | 1380 | 1334 | 1287 | 1229 | 1173 | 1114 | 1067                                       | 1022 | 976  | 927  | 875  | 833  | 781  | 960  | 912  | 877  | 826  | 788  | 806  | 705  |
|           | RPM          | 1344                                       | 1367 | 1389 | 1408 | 2845 | 2886 | 1462 | 1039                                       | 1062 | 1106 | 1149 | 1192 | 1235 | 1277 | 958  | 1003 | 1043 | 1095 | 1141 | 1178 | 1224 |

Note: Based on 115V operation, and dry coils.

## Motor Data

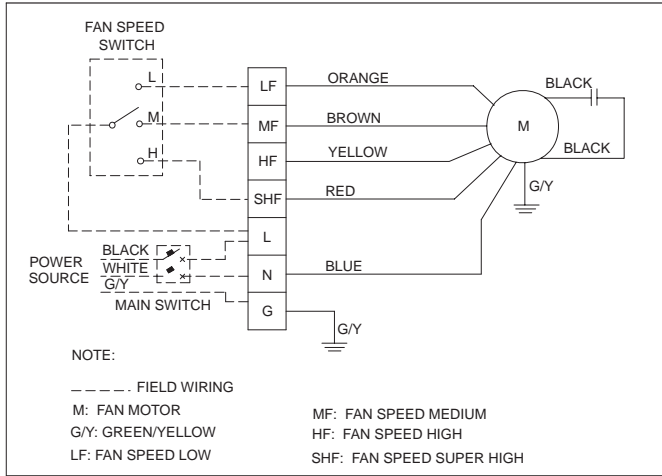
| Fan Motor Speed | Unit Size |       |      |      |       |      |      |       |      |      |       |      |      |       |      |      |       |      |      |       |      |
|-----------------|-----------|-------|------|------|-------|------|------|-------|------|------|-------|------|------|-------|------|------|-------|------|------|-------|------|
|                 | H02       |       |      | H03  |       |      | H04  |       |      | H06  |       |      | H08  |       |      | H10  |       |      | H12  |       |      |
|                 | Amps      | Watts | RPM  | Amps | Watts | RPM  | Amps | Watts | RPM  | Amps | Watts | RPM  | Amps | Watts | RPM  | Amps | Watts | RPM  | Amps | Watts | RPM  |
| 115/60/1        |           |       |      |      |       |      |      |       |      |      |       |      |      |       |      |      |       |      |      |       |      |
| High            | 0.7       | 75    | 1043 | 1.0  | 109   | 1143 | 1.2  | 131   | 1122 | 1.8  | 205   | 1295 | 2.6  | 291   | 1172 | 2.7  | 299   | 1251 | 3.5  | 385   | 1344 |
| Medium          | 0.6       | 61    | 869  | 0.7  | 73    | 838  | 0.9  | 93    | 788  | 1.4  | 155   | 990  | 2.0  | 229   | 931  | 2.0  | 225   | 984  | 2.7  | 305   | 1039 |
| Low             | 0.5       | 53    | 704  | 0.6  | 63    | 714  | 0.8  | 83    | 678  | 1.3  | 145   | 894  | 1.9  | 211   | 892  | 1.9  | 211   | 902  | 2.5  | 279   | 958  |

Note: Based on 115V operation, dry coil, and 0.0 ESP

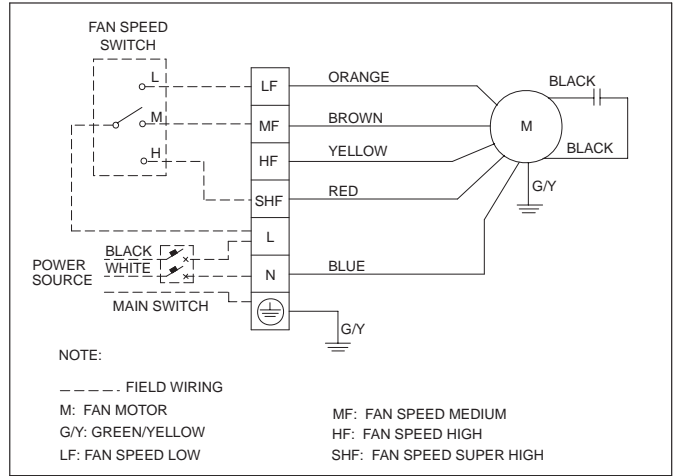
# Wiring Diagrams

For Models: THCH02, THCH03, THCH04, and THCH06 (Basic Unit Only)

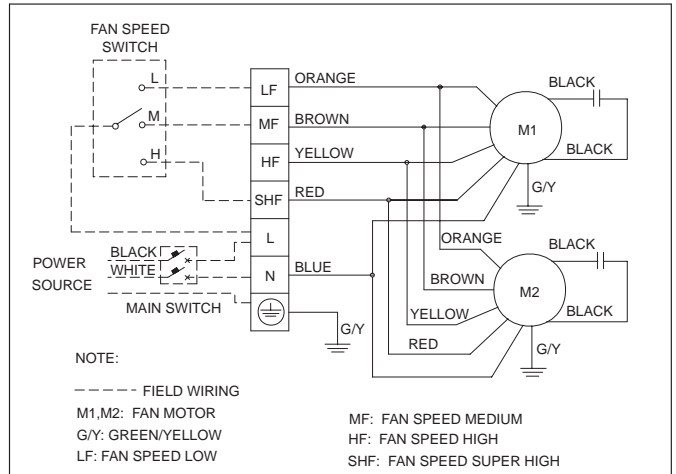
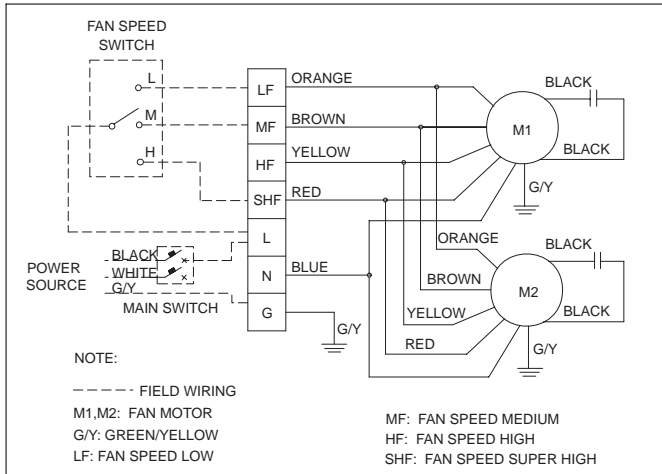
Wiring (115V/1P/60Hz)(208-230V/1P/60Hz)(265/277V/1P/60Hz)



Wiring (220V/1P/50Hz)



For Models: THCH08, THCH10, THCH12 (Basic Unit Only)



# McQuay THC Horizontal Concealed Fan Coil

## Engineering Guide Specifications

Furnish and install where shown on the plans and specifications, McQuay THC Horizontal Concealed Fan-Coil Units. Types, sizes and performance are as tabulated in the schedule. Unit performance is substantiated by computer generated output data. Each unit is ARI certified and consists of and complies with the following:

### Construction

**General** – Basic unit consist of a chassis, hydronic coil(s), drain pan, junction box, motor, centrifugal fan assembly. Top and side panels surrounding the coil are insulated with aluminum foil face to prevent condensation. The casing, fabricated of heavy gauge galvanized steel with four-sided one inch duct collar for an easy connections to discharge duct work. Units are available with or without return air plenum. Units with return air plenum have a filter frame with 3/4" return air duct collar. Plenum is fully insulated with foil faced, thermal and acoustical insulation to prevent glass fibers in the air stream, unit sweating, and to attenuate fan noise. Mounting holes are to be provided on all four corners to allow the units to be suspended from the ceiling with threaded rods. Selectable either as 2 or 4-pipe systems with coil pipe connections located on the same side. Units are tested in accordance with ARI 440. The units comply with NFPA 90A and are ETL listed in the U.S. and Canada. Top panel and drain pan is easily removed to allow coil access.

**Coils** – All THC water coils feature aluminum blue fins mechanically bonded to seamless copper tubes. The blue fins are covered with an epoxy polymer that causes condensation to drip off more quickly, preventing mold build-up and increasing the coil and fin life expectancy. All water coils are 12 fins per inch. Factory burst tested at 425 psig (2930kPa) and leak tested at 225 psig (1552 kPa). Maximum main coil working pressure is 300 psig (2,069 kPa). Maximum entering water temperature is 200°F (93°C). Cooling coil (2-Pipe) or combination cooling and heating coils (4-Pipe) are available. Heating coils are factory installed in the reheat position with same hand coil connection. Heating coils are capable to be field converted to preheat position. Coils are provided with a brass header, 3/4" FPT coil connections, and a hand operated brass manual air vent, conveniently located over the drain pan, and supplied with a clear plastic hose to prevent spills. The 3/4" FPT connections facilitate the field installation of McQuay threaded, quick-connect factory built valve package. Coil brass headers are protected with a galvanized steel cover plate and held in position with holding screws thus providing additional structural support to thread piping-valve package and matched load pumps.

On Basic units optional sets of two (2) 3/4" MPT x 1/2" copper male adapters are provided if sweat copper tube connections are desirable.

Note: Units provided with factory installed LV-3SP interface board (with or without plenum) are provided with sets of two (2) 3/4" MPT x 1/2" piping elbow adapter to be used with McQuay threaded, quick-connect valve packages.

**Fan Assembly** – Aluminum fan wheels are dynamically balanced, forward curved, double-width, inside double-inlet scroll centrifugal type housings constructed of galvanized steel for corrosion resistance. The rest of the assembly is made with a heavier gauge galvanized steel which provides additional strength and rigidity resulting in smoother, quieter operation.

**Sound** – Units shall have published sound power level data tested in accordance with ARI 350. (For more information contact your local Mcquay Sales Representative).

**Motors** – 4 speed, permanently lubricated sleeve bearing, permanent split capacitor motors, (115/60/1) (208-230/60/1) (265/60/1) with UL listed automatic reset integral thermal overload protection. Maximum ambient operating temperature of 104°F. Run tested in assembled units.

Motors are resiliently mounted to assure quiet, vibration free operation.

**Drain Pan** – Stamped with no welded corners. The galvanized steel drain pans are cleaned, phosphatized before they are coated with a thick layer of powder paint. Insulated with form-fitted closed cell insulation the drain pan is positively sloped and easily removable for cleaning. Extended out 6½" beyond the coil connections for valve/piping packages. Vintage B drain pans include a auxiliary drain connection. Optional stainless steel drain pan is also available with the same features as above, excluding the backed powder paint.

**Insulation** – Hideaway return air plenum is fully insulated with foil faced, thermal and acoustical insulation to prevent glass fibers entering the air stream, unit sweating, and to attenuate fan noise.

**Filters** – Standard filter is 1" nominal throwaway type. Design vintage B filters are removable from the sides or bottom.

**Electrical** – THC fan-coils are made available with the following factory installed options:

- Basic: Unit is furnished with single point power connection junction box that includes a terminal strip for line voltage control connection.
- DDC ready interface: LV-3SP control box includes (3) - 24 volt relays, line voltage/24volt transformer, 4 sets of terminal strips and toggle disconnect (See Notes below).

**Piping Packages** - All THC units are available with factory-built piping package options for field installation. Basic, enhanced and deluxe piping package options are available with a variety of control valve options:

- 2 or 3-way
- 1/2" control valve
- 2-position or modulating.

Basic piping package consists of a quick-connect union, shutoff ball valve with memory stop and control valve on the supply and quick-connect union, shutoff ball valve with memory stop on the return.

Enhanced piping package consists of a quick-connect union, shutoff ball valve, control valve on the supply; quick-connect union, shutoff ball valve and manual circuit setter balancing valve on the return.

Deluxe piping package has one quick-connect union, shutoff ball valve, control valve and a strainer on the supply; quick-connect union, shutoff ball valve, manual circuit setter balancing valve on the return.

Valve packages for sweat connection are also available.

**Notes:** Units with the LV-3SP junction box are provided with a set of two (2) 3/4" MPT x 1/2" piping elbow adapters to be used with McQuay quick-connect, threaded valve packages.

This document contains the most current product information as of this printing. For the most up-to-date product information, please go to **[www.mcquay.com](http://www.mcquay.com)**.

