Installation Instructions
Part Number 38AP-900---022

CONTENTS
SAFETY CONSIDERATIONS ............................................. 1
GENERAL ............................................................................. 1
INSTALLATION .......................................................... 1
Install Harness and Make Wire Connections .................. 6
Controls Configuration for EMM Options ................. 7

SAFETY CONSIDERATIONS
Installation of this accessory can be hazardous due to system pressures, electrical components, and equipment location (such as a roof or elevated structure).

Only trained, qualified installers and service technicians should install, start up, and service this equipment.

When installing this accessory, observe precautions in the literature, labels attached to the equipment, and any other safety precautions that apply.

• Follow all safety codes.
• Wear safety glasses and work gloves.
• Use care in handling and installing this accessory.

WARNING
Electrical shock can cause personal injury and death. Shut off all power to this equipment during installation. There may be more than one disconnect switch. Tag all disconnect locations to alert others not to restore power until work is completed.

GENERAL
The energy management module (EMM) accessory (Fig. 1) package is required for additional temperature reset, demand limit, and remote set point features of the ComfortLink controls for 30MP, 30RAP and 38AP units. Chilled water temperature reset by return water, outside air or space temperature does NOT require the addition of this accessory. The following additional features are supported by this accessory:

• temperature reset by 4 to 20 mA field-supplied signal.
• demand limit control via field-supplied two-step switch input.
• demand limit control by 4 to 20 mA field-supplied signal.
• support of unoccupied operation for ice making through field-supplied contacts (30MP, 30RAP only).
• cooling set point control by 4 to 20 mA field-supplied signal.

ACCESSORY PACKAGE CONTENTS

<table>
<thead>
<tr>
<th>ITEM</th>
<th>PART NO.</th>
<th>QUANTITY</th>
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<tbody>
<tr>
<td>Energy Management Module</td>
<td>30GT515218</td>
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<tr>
<td>Harness (38APD,S025-065)</td>
<td>38APHLSBCE-A00</td>
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</tr>
<tr>
<td>Harness (38APD070-130)</td>
<td>38APHLSLCE-A10</td>
<td>1</td>
</tr>
<tr>
<td>Harness, EMM to LVT (30RAP, 30MP)</td>
<td>38APHSCALE-A00</td>
<td>1</td>
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<tr>
<td>Harness, EMM to MBB/EXV (Power - 30RAP, 30MP)</td>
<td>38APHSCALECA10</td>
<td>1</td>
</tr>
<tr>
<td>Harness, EMM to MBB/EXV (Comm. - 30RAP, 30MP)</td>
<td>38APHSCALECA00</td>
<td>1</td>
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<tr>
<td>Harness, EMM to AUX (Comm. - 30MP)</td>
<td>38APHSCALXCA00</td>
<td>1</td>
</tr>
<tr>
<td>Screw, no. 6, 1-in. long</td>
<td>AL56AU130</td>
<td>1</td>
</tr>
<tr>
<td>Wire Tie</td>
<td>—</td>
<td>4</td>
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</tbody>
</table>

NOTE: Component arrangement drawings and wiring diagrams show available options that may not be applicable to your unit.

1. Inspect the package contents for missing or damaged parts. File a claim with shipping agency if parts are damaged. Notify your Carrier representative if any items are missing.

2. Open and tag all electrical disconnects.

3. Access control box:
   a. Model 30RAP011-030, 30MP015-071 and 38APD025-130, 38APS025-065: Open control box door and remove inner cover.
   b. Model 30RAP035-150 and 38APD040-130: Open center control box door.

4. For 30RAP and 38AP units, loosen the four screws securing the scrolling marquee display bracket. Lift the bracket up and slide it in the holding slots at the top of its mounting bracket.
   For 30MP units, carefully suspend the display bracket from the wiring harness.
5. Using the no. 6 screw provided and the existing retaining clips in the control box, mount the EMM module to the back of the control box. See Fig. 2-7 for the mounting location of each unit.

6. The board address is set through a 4-position DIP switch. All switches should be set to ON.

LEGEND FOR FIG. 2-8

- AUX — Auxiliary Board
- CB — Circuit Breaker
- CCB — Compressor Circuit Breaker
- CCH — Crankcase Heater Relay
- CHC — Cooler/Pump Heater Contactor
- CSB — Current Sensor Board
- CXB — Compressor Expansion Board
- EMM — Energy Management Module
- EQUIP — Equipment
- EXV — Electronic Expansion Valve
- FB — Fuse Block
- FC — Fan Contactor
- GND — Ground
- LON — LON Card
- LVT — Low Voltage Terminal
- MBB — Main Base Board
- MM — Management Module
- TB — Terminal Block
- TRAN — Transformer
- UPC — UPC Translator Board

Terminal Block Connection
Fig. 2 — Mounting EMM — 38AP025-030 Units

Fig. 3 — Mounting EMM — 38AP040-060 Units
Fig. 4 — Mounting EMM — 38AP070-130 Units

See Legend on page 2.

Fig. 5 — Mounting EMM — 30RAP011-030 Units

See Legend on page 2.
Fig. 6 — Mounting EMM — Typical 30RAP035-060 Units Shown

See Legend on page 2.

Fig. 7 — Mounting EMM — 30MP015-071 Units

See Legend on page 2.
Install Harness and Make Wire Connections

38AP025-065 UNITS WITH AUX BOARD

Perform the following procedure to install the harness and make the wiring connections. See Fig. 9 for wiring.

1. Disconnect the MBB-J3 connector and plug it into the EMM-J3 connector.
2. Install the new harness 38APHLSBCE-A00 provided.
   a. Install connector labeled MBB-J3 to MBB-J3 and other end labeled EMM-J4 to EMM-J4.
   b. Install connector labeled MBB-J2 to MBB-J2 and other end labeled EMM-J1 to EMM-J1.
   c. Install connectors labeled EMM-J6 and J7 to EMM-J6 and J7 and other end labeled LVT-J10 to LVT terminal strip.

38AP025-065 UNITS WITHOUT AUX BOARD

Perform the following procedure to install the harness and make the wiring connections. See Fig. 9 for wiring.

Install the new harness 38APHLSBCE-A00 provided.

1. Install connector labeled MBB-J3 to MBB-J3 and other end labeled EMM-J4 to EMM-J4.
2. Install connector labeled MBB-J2 to MBB-J2 and other end labeled EMM-J1 to EMM-J1.
3. Install connectors labeled EMM-J6 and J7 to EMM-J6 and J7 and other end labeled LVT-J10 to LVT terminal strip.

38AP070-130 UNITS WITH AUX BOARD

Perform the following procedure to install the harness and make the wiring connections. See Fig. 10 for wiring.

1. Disconnect the CXB connector J4 and plug it into the EMM connector J3.
2. Install the new harness 38APHSCALECA00. Install connector labeled EXV-J4 to EXV-J4 and other end labeled EMM-J4 to EMM-J4.
3. Install the new harness 38APHSCALECA10. Disconnect MBB connector J2 and plug it into the EMM-J2. Install connector labeled MBB/EXV-J2 to MBB-J2 and other end labeled EMM-J1 to EMM-J1.
4. Install the new harness 38APHSCALE-A00. Install connectors labeled EMM-J6 and J7 to EMM-J6 and J7 and other end labeled LVT-J10 to LVT terminal strip.

38AP070-130 UNITS WITHOUT AUX BOARD

Perform the following procedure to install the harness and make the wiring connections. See Fig. 10 for wiring.

Install the new harness 38APHLSLCE-A10 provided.

1. Install connector labeled CXB-J4 to CXB-J4 and other end labeled EMM-J4 to EMM-J4.
2. Install connector labeled CXB-J2 to CXB-J2 and other end labeled EMM-J1 to EMM-J1.
3. Install connectors labeled EMM-J6 and J7 to EMM-J6 and J7 and other end labeled LVT-J10 to LVT terminal strip.

30RAP011-060 UNITS WITH AUX BOARD

Perform the following procedure to install the harness and make the wiring connections. See Fig. 11 for wiring.

1. Disconnect the EXV connector J4 and plug it into the EMM connector J4.
2. Install the new harness 38APHSCALECA00. Install connector labeled EXV-J4 to EXV-J4 and other end labeled EMM-J4 to EMM-J3.
3. Install the new harness 38APHSCALECA10. Disconnect MBB connector J2 and plug it into the EMM-J2. Install connector labeled MBB/EXV-J2 to MBB-J2 and other end labeled EMM-J1 to EMM-J1.
4. Install the new harness 38APHSCALE-A00. Install connectors labeled EMM-J6 and J7 to EMM-J6 and J7 and other end labeled LVT-J10 to LVT terminal strip.

30RAP011-060 UNITS WITHOUT AUX BOARD

Perform the following procedure to install the harness and make the wiring connections. See Fig. 11 for wiring.

1. Install the new harness 38APHSCALECA00. Install connector labeled EXV-J4 to EXV-J4 and other end labeled EMM-J3 to EMM-J3.
2. Install the new harness 38APHSCALECA10. Install connector labeled MBB/EXV-J2 to MBB-J2 and other end labeled EMM-J1 to EMM-J1.
3. Install the new harness 38APHSCALE-A00. Install connectors labeled EMM-J6 and J7 to EMM-J6 and J7 and other end labeled LVT-J10 to LVT terminal strip.

30RAP070-150 UNITS WITH AUX BOARD
Perform the following procedure to install the harness and make the wiring connections. See Fig. 12 for wiring.
1. Disconnect the CXB connector J4 and plug it into the EMM connector J4.
2. Install the new harness 38APHSCALECA00. Install connector labeled EXV-J4 to CXB-J4 and other end labeled EMM-J3 to EMM-J3.
3. Install the new harness 38APHSCALECA10. Install connector labeled MBB/EXV-J2 to CXB-J2 and other end labeled EMM-J1 to EMM-J1.
4. Install the new harness 38APHSCALE-A00. Install connectors labeled EMM-J6 and J7 to EMM-J6 and J7 and other end labeled LVT-J10 to LVT terminal strip.

30RAP070-150 UNITS WITHOUT AUX BOARD
Perform the following procedure to install the harness and make the wiring connections. See Fig. 12 for wiring.
1. Install the new harness 38APHSCALECA00. Install connector labeled EXV-J4 to CXB-J4 and other end labeled EMM-J3 to EMM-J3.
2. Install the new harness 38APHSCALECA10. Install connector labeled MBB/EXV-J2 to CXB-J2 and other end labeled EMM-J1 to EMM-J1.
3. Install the new harness 38APHSCALE-A00. Install connectors labeled EMM-J6 and J7 to EMM-J6 and J7 and other end labeled LVT-J10 to LVT terminal strip.

30MP015-045 UNITS WITH AUX BOARD
Perform the following procedure to install the harness and make the wiring connections. See Fig. 13 for wiring.
1. Install the new harness 38APHSCALECA00. Install the connector labeled EMM-J3 to EMM-J3 and other end labeled AUX-J9 to AUX-J9.
2. Install the new harness 38APHSCALECA10. Install the connector labeled MBB/EXV-J2 to MBB-J2 and the other end labeled EMM-J1 to EMM-J1.
3. Install the new harness 38APHSCALE-A00. Install connectors labeled EMM-J6 and J7 to EMM-J6 and J7 and the other end labeled LVT-J10 to J10 of the LVT terminal strip.

30MP015-045 UNITS WITHOUT AUX BOARD
Perform the following procedure to install the harness and make the wiring connections. See Fig. 13 for wiring.
1. Install the new harness 38APHSCALECA00. Install the connector labeled EMM-J3 to EMM-J3 and other end labeled AUX-J9 to AUX-J9.
2. Install the new harness 38APHSCALECA10. Install the connector labeled MBB/EXV-J2 to MBB-J2 and the other end labeled EMM-J1 to EMM-J1.
3. Install the new harness 38APHSCALE-A00. Install connectors labeled EMM-J6 and J7 to EMM-J6 and J7 and the other end labeled LVT-J10 to J10 of the LVT terminal strip.

30MP050-071 UNITS WITH AUX BOARD
Perform the following procedure to install the harness and make the wiring connections. See Fig. 13 for wiring.
1. Install the new harness 38APXHSCALECA00 provided. Install the connector labeled AUX-J9 to AUX-J9.
2. Install the new harness 38APHSCALECA10. Install the connector labeled MBB/EXV-J2 to MBB-J2 and the other end labeled EMM-J1 to EMM-J1.
3. Install the new harness 38APHSCALE-A00. Install connectors labeled EMM-J6 and J7 to EMM-J6 and J7 and the other end labeled LVT-J10 to J10 of the LVT terminal strip.

30MP050-071 UNITS WITHOUT AUX BOARD
Perform the following procedure to install the harness and make the wiring connections. See Fig. 13 for wiring.
1. Install the new harness 38APXHSCALECA00 provided. Install the connector labeled AUX-J9 to AUX-J9.
2. Install the new harness 38APHSCALECA10. Install the connector labeled MBB/EXV-J2 to MBB-J2 and the other end labeled EMM-J1 to EMM-J1.
3. Install the new harness 38APHSCALE-A00. Install connectors labeled EMM-J6 and J7 to EMM-J6 and J7 and the other end labeled LVT-J10 to J10 of the LVT terminal strip.

FIELD WIRING CONNECTIONS
Refer to Fig. 2-7 for field wiring interfaces with the LVT terminal strip.

Controls Configuration for EMM Options
Refer to the 38AP controls and troubleshooting manual for split system configuration of controls. Refer to the 30RAP controls and troubleshooting manual for AquaSnap® configuration of controls for 30RAP units. Refer to the 30MP controls and troubleshooting manual for configuration of controls for 30MP units.
Fig. 9 — Typical Wiring Connections (38AP025-065 Units)

See Legend on page 7.
Fig. 10 — Typical Wiring Connections (38AP070-130 Units)

See Legend on page 7.
Fig. 11 — Typical Wiring Connections (30RAP011-060 Units)

See Legend on page 7.
Fig. 12 — Typical Wiring Connections (30RAP070-150 Units)
Fig. 13 — Typical Wiring Connections (30MP015-071 Units)

See Legend on page 7.