7. SEE SHEET 5 FOR WALL MOUNT ENCLOSURE INTERNAL COMPONENTS.

6. EXERCISE CAUTION WHEN ADDING OR ENLARGING HOLES IN WALL MOUNT ENCLOSURE. METAL PARTICLES COULD SERIOUSLY DAMAGE ELECTRONICS. COVER ELECTRONICS BEFORE DRILLING OR PUNCHING. WALL MOUNT ENCLOSURE DOOR TO REMAIN FREE OF HOLES.

5. SEE SHEET 4 FOR WALL MOUNT ENCLOSURE WITH DISPLAY DIMENSIONS.

4. SEE SHEET 3 FOR WALL MOUNT ENCLOSURE WITHOUT DISPLAY DIMENSIONS.

3. GENERIC USER INTERFACE PANEL SHOWN ONLY. SEE SHEETS 6 THROUGH 9 FOR USER INTERFACE PANEL CONNECTIONS.

2. SEE SHEET 2 FOR FRONT PANEL DISPLAY DIMENSIONS.

1. SEE CD RESOURCE GUIDE FOR ADDITIONAL MOUNTING AND WIRING INFORMATION.

NOTES: UNLESS OTHERWISE SPECIFIED

DIMENSIONS = IN [MM]
Hi 4060 Rate Controller Front Panel Display

Front Panel Display Terminal Block

NOTES:
   Wire Tightening Torque:
   2 lb-in Minimum / 4 lb-in Maximum.
3. Maximum Cable Length: 100 Feet [30.48 Meters]
4. See Sheet 6 For Remote Display Wire Terminations To The Hi 4060 Rate Controller Main Unit.

Front Panel Display Mounting Dimensions
[Viewed From Front Of Instrument]
NEMA 4/4X WALL MOUNT HI 4060 RATE CONTROLLER - INTERNAL COMPONENTS

OPTION PMP & PMWS DISPLAY CABLE

HI 4060 RATE CONTROLLER MAIN UNIT

OPTION IT1, IT2, JB1 OR JB2 SUMMING CARD CABLE
[WIRED BY HARDY INSTRUMENTS]

OPTION IT1, IT2, JB1 OR JB2 SUMMING CARD
SEE SHEET 10 FOR IT SUMMING CARD OR
LOAD CELL SUMMING CARD CONNECTIONS.

CABLE GLAND FITTINGS AND/OR HOLE PLUG SEALS ARE PACKED SEPARATELY INSIDE ENCLOSURE

DIMENSIONS = IN [MM]
**Power Input Terminations**

**Option Code AC**

- **Notes:**
  1. Input Voltage: 100-240 VAC, 50-60 Hz, 0.5 Amp, 10 Watt.
  2. Option AC Operating Temperature: -10°C to +40°C.

**Option Code DC**

- **Notes:**
  1. Input Voltage: 24 VDC, 0.42 Amp, 10 Watt.
  2. Option DC Operating Temperature: -10°C to +40°C.
  3. Wire Size: 12 AWG maximum / 22 AWG minimum.

**Control Output Terminations**

- **Notes:**
  2. Control outputs are software configurable. See User's Guide for additional setting configurations.
  3. Factory Default settings: Current & Voltage: 4-20mA output, 0-10 VDC
  4. Software Configuration [For All Channels]: Motor Control
  5. Wire Size: 12 AWG maximum / 22 AWG minimum.

**Ethernet Termination**

- **Notes:**
  2. Connector Type: RJ-45, 8 PIN
  3. N.C. = Not Connected.

**Remote Display Terminations**

- **Notes:**
  2. Wire Size: 20 AWG maximum / 26 AWG minimum.
  4. See Sheet 2 for front panel display wire terminations.
  5. Maximum Cable Length: 100 Feet [30.48 Meters]

**External Input & Printer/Scoreboard Terminations**

- **Notes:**
  2. External inputs are non-isolated, active low and referenced to common [GND].
  3. Do not bundle analog input wiring with power wiring, relay cable or any other high energy cables.
  4. External inputs can be configured in the mapping section of the instrument's web page. Factory default external input mappings: None
WEIGH SCALE INPUT TERMINATIONS

NOTES:
1. DO NOT RUN LOAD CELL CABLE PARALLEL TO, OR IN THE SAME CONDUIT WITH POWER WIRING, RELAY CABLE OR OTHER HIGH ENERGY CABLES.

2. FACTORY INSTALLED JUMPERS TO REMAIN IN PLACE FOR FOUR WIRE LOAD CELL CONNECTION. JUMPERS TO BE REMOVED FOR SIX WIRE OR EIGHT WIRE [C2] LOAD CELL CONNECTIONS. EXCITATION AND SENSE WIRE TO BE CONNECTED TOGETHER IN JUNCTION BOX.

3. REQUIRED LOAD CELL CABLE FOR C2 SECOND GENERATION CALIBRATION SYSTEM. HARDY INSTRUMENTS PART NUMBER 0020-0001-0.

4. SEE USER'S GUIDE FOR ADDITIONAL INFORMATION ON ANALOG WEIGH SCALE INPUT CONNECTIONS.

5. C2 WIRE PAIR MUST BE CONNECTED WHEN USING THE HARDY INTEGRATED TECHNICIAN SUMMING CARDS.

6. WIRE SIZE: 12 AWG MAXIMUM / 22 AWG MINIMUM.
   WIRE TIGHTENING TORQUE: 2 LB-IN MINIMUM / 4 LB-IN MAXIMUM.

---

FACTORY INSTALLED JUMPERS
LOAD CELL CABLE SHIELD
JUNCTION BOX
LOAD CELL
TERMINALS FOR C2 SECOND GENERATION CALIBRATION SYSTEM
LEAVE THESE TERMINALS UNCONNECTED IF C2 IS NOT USED
**RELAY OUTPUT TERMINATIONS**

**NOTES:**
1. RELAY CONTACT RATINGS:
   - AC: 240 VAC, 4 AMP NOMINAL
   - DC: 50 VDC, 2 AMP NOMINAL [RESISTIVE LOAD]
2. RELAY TYPE: MECHANICAL, NORMALLY OPEN, ALL MAPPABLE.
   FACTORY DEFAULT RELAY MAPPING:
   - RELAY 1 = ON
   - RELAY 2 = SHUT OFF
   - RELAY 3 = REC [RATE EXCEPTION CONTROL]
   - RELAY 4 = ALARM
   - RELAY 5 = REFILL
   ALTERNATE RELAY CONFIGURATIONS MAY BE OBTAINED IN
   THE MAPPING SECTION OF INSTRUMENT'S WEB PAGE.
3. SEE USER'S GUIDE FOR ADDITIONAL INFORMATION ON
   RELAY OUTPUT TERMINATIONS.
4. WIRE SIZE: 12 AWG MAXIMUM / 22 AWG MINIMUM.
   WIRE TIGHTENING TORQUE: 2 LB-IN MINIMUM / 4 LB-IN MAXIMUM.

**ANALOG INPUT TERMINATIONS**

**NOTES:**
1. SEE USER'S GUIDE FOR ADDITIONAL INFORMATION ON
   ANALOG INPUT TERMINATIONS.
2. ANALOG INPUTS ARE NON-ISOLATED.
   DO NOT BUNDLE ANALOG INPUT WIRING WITH POWER WIRING,
   RELAY CABLE OR ANY OTHER HIGH ENERGY CABLES.
3. ANALOG INPUTS ACCEPT ONLY 1 OF THE 2 SIGNALS: EIGHTER
   VOLTAGE OR CURRENT, WHICH MUST BE CONFIGURED IN
   THE INSTRUMENT'S REMOTE SETPOINT SECTION IN THE INSTRUMENT'S MENU.
   THIS INPUT IS NOT MAPPABLE AND CAN ONLY BE CONFIGURED
   THROUGH THE INSTRUMENT'S REMOTE SETPOINT FEATURE.
4. SELECTABLE ANALOG INPUT RANGES:
   - ANY VOLTAGE RANGE WITHIN 0-10 VOLS
   - OR
   - ANY CURRENT RANGE WITHIN 0-20 mA
5. WIRE SIZE: 12 AWG MAXIMUM / 22 AWG MINIMUM.
   WIRE TIGHTENING TORQUE: 2 LB-IN MINIMUM / 4 LB-IN MAXIMUM.

**SWITCH INPUT TERMINATIONS**

**NOTES:**
1. SEE USER'S GUIDE FOR ADDITIONAL INFORMATION ON
   SWITCH INPUT TERMINATIONS.
2. SWITCH INPUTS ARE NON-ISOLATED, ACTIVE LOW AND
   REFERENCED TO COMMON [COM]
3. DO NOT BUNDLE SWITCH INPUT WIRING WITH POWER WIRING,
   RELAY CABLE OR ANY OTHER HIGH ENERGY CABLES.
4. SWITCH INPUTS ARE MAPPABLE.
   FACTORY DEFAULT SWITCH INPUT MAPPING:
   - INPUT 1 = START
   - INPUT 2 = STOP
   - INPUT 3 = ESTOP
   - INPUT 4 = FORCE REFILL
   - INPUT 5 = CLEAR TOTAL
   ALTERNATE SWITCH INPUT CONFIGURATIONS MAY BE OBTAINED IN
   THE MAPPING SECTION OF INSTRUMENT'S WEB PAGE.
5. WIRE SIZE: 12 AWG MAXIMUM / 22 AWG MINIMUM.
   WIRE TIGHTENING TORQUE: 2 LB-IN MINIMUM / 4 LB-IN MAXIMUM.
OPTION CODE DN - DEVCENET COMMUNICATIONS

NOTES:
1. SEE USER'S GUIDE FOR ADDITIONAL INFORMATION ON
   DEVCENET TERMINATIONS.
2. OPTION DN IS LOCATED IN THE NETWORK OPTION SLOT,
   WHEN ORDERED.
3. WIRE SIZE: 12 AWG MAXIMUM / 22 AWG MINIMUM.
   WIRE TIGHTENING TORQUE: 2 LB-IN MINIMUM / 4 LB-IN MAXIMUM.

OPTION CODE RIO - ALLEN-BRADLEY REMOTE I/O INTERFACE

NOTES:
1. SEE HI 4000 SERIES REMOTE I/O USER'S GUIDE FOR
   ADDITIONAL INFORMATION ON ALLEN-BRADLEY
   REMOTE I/O INTERFACE TERMINATIONS.
2. N.C. = NOT CONNECTED.
3. ONLY TERMINATE THE LAST NETWORK CARD IN THE CHAIN.
4. OPTION RIO IS LOCATED IN THE NETWORK OPTION SLOT,
   WHEN ORDERED.
5. WIRE SIZE: 12 AWG MAXIMUM / 22 AWG MINIMUM.
   WIRE TIGHTENING TORQUE: 2 LB-IN MINIMUM / 4 LB-IN MAXIMUM.

OPTION CODE PB - PROFIBUS DP I/O

NOTES:
1. SEE USER'S GUIDE FOR ADDITIONAL INFORMATION ON
   PROFIBUS DP I/O INTERFACE TERMINATIONS.
2. OPTION PB IS LOCATED IN THE NETWORK OPTION SLOT,
   WHEN ORDERED.
3. INTERFACE CONNECTOR TYPE ON THE INSTRUMENT:
   9 PIN D-SUBMINIATURE (DE-9), FEMALE CONTACTS.

CONNECTOR TERMINATIONS

<table>
<thead>
<tr>
<th>PIN</th>
<th>SIGNAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NO CONNECT</td>
</tr>
<tr>
<td>2</td>
<td>NO CONNECT</td>
</tr>
<tr>
<td>3</td>
<td>RXD/TXD +</td>
</tr>
<tr>
<td>4</td>
<td>RTS</td>
</tr>
<tr>
<td>5</td>
<td>GND BUS</td>
</tr>
<tr>
<td>6</td>
<td>45V BUS</td>
</tr>
<tr>
<td>7</td>
<td>NO CONNECT</td>
</tr>
<tr>
<td>8</td>
<td>RXD/TXD -</td>
</tr>
<tr>
<td>9</td>
<td>NO CONNECT</td>
</tr>
</tbody>
</table>
OPTION CODES IT1 & IT2 - IT SUMMING CARD
OPTION CODES JB1 & JB2 - LOAD CELL SUMMING CARD

NOTES:
1. DO NOT RUN LOAD CELL CABLES PARALLEL TO, OR IN THE SAME CONDUIT
   WITH POWER WIRING, RELAY CABLE OR OTHER HIGH ENERGY CABLES.

2. REQUIRED LOAD CELL CABLE FOR C2 SECOND GENERATION CALIBRATION
   SYSTEM. HARDY PROCESS SOLUTIONS PART NUMBER 6020-0001-0.

3. SEE USER’S GUIDE FOR ADDITIONAL INFORMATION ON
   IT SUMMING/LOAD CELL SUMMING CARD CONNECTIONS.

4. WIRE SIZE: 12 AWG MAXIMUM / 22 AWG MINIMUM.
   WIRE TIGHTENING TORQUE: 2 LB-IN MINIMUM / 4 LB-IN MAXIMUM.

ZERO OHM JUMPER REMOVED WHEN SUMMING CARD IS
EQUIPPED WITH TRIM POTS, 4 PLACES
APPLIES TO OPTION CODES IT2 & JB2 ONLY
NOTE: THE USE OF TRIM POTS WILL INVALIDATE C2
CALIBRATION DATA WHEN USED WITH C2 LOAD CELLS

TO THE HI 4060
[WIRED BY HARDY
PROCESS SOLUTIONS]

IT SUMMING/LOAD CELL SUMMING CARD WIRING DIAGRAM