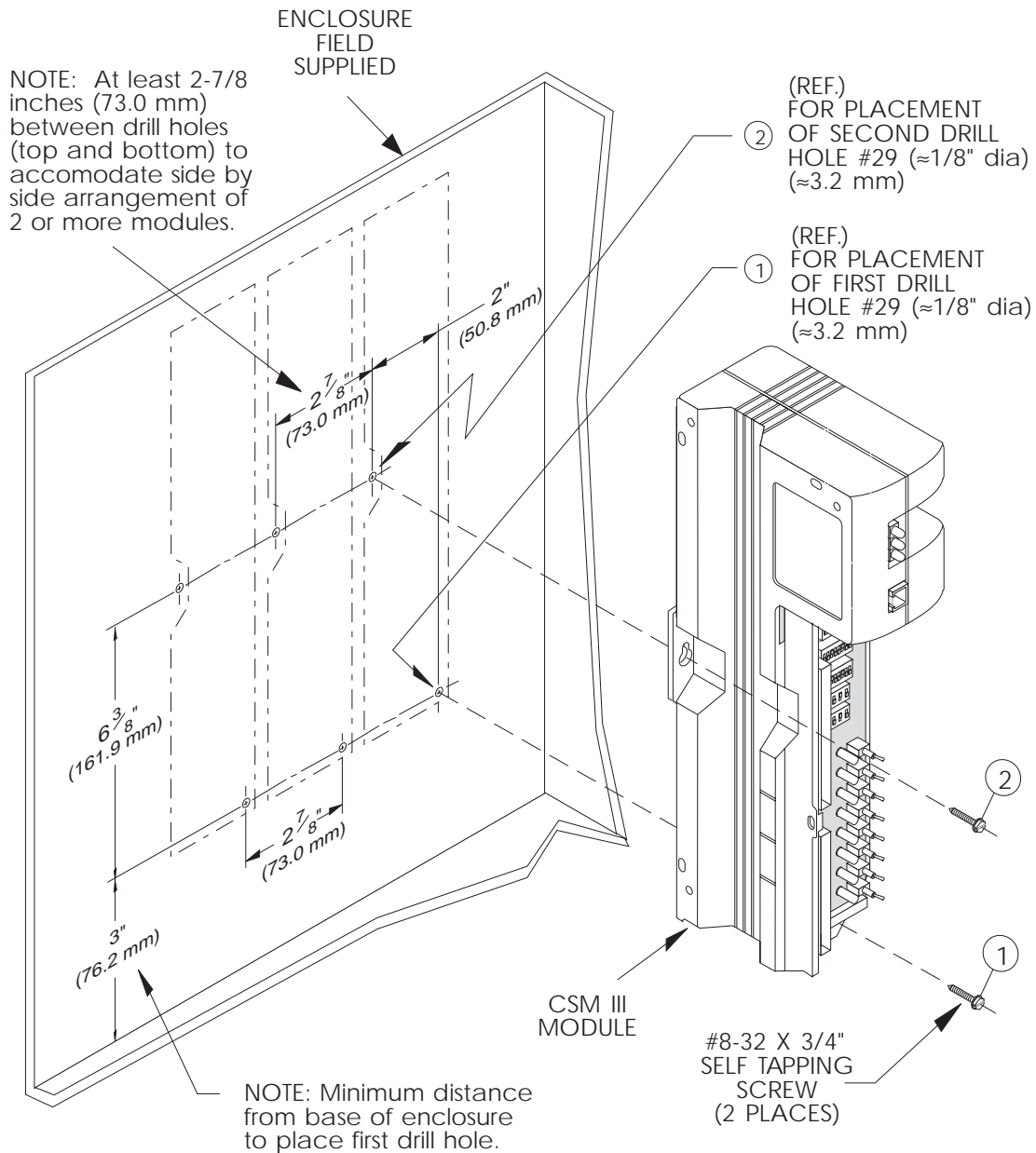


CHILLERVISOR System Manager III (CSM III) and Optional I/O Module Installation Instructions

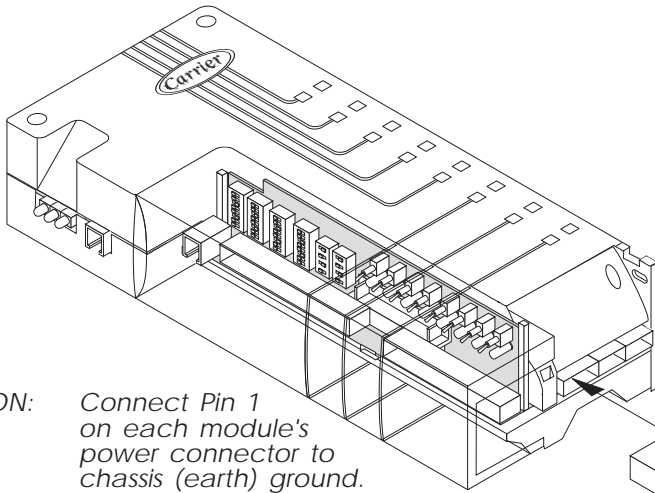
Panel Mounting



CSM III and Optional I/O Module Power Connector Location

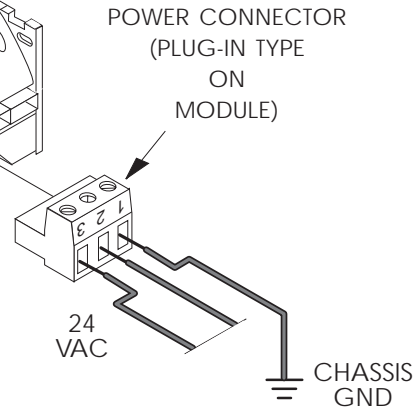
Warning: The 24 Vac power supply must be used only to power the CSM III. A single 24 Vac/50 VA transformer is recommended, as shown in the attached illustration.

| Pin Number | Power Connector |
|------------|-----------------|
| 3 | 24 Vac |
| 2 | 24 Vac |
| 1 | Chassis ground |

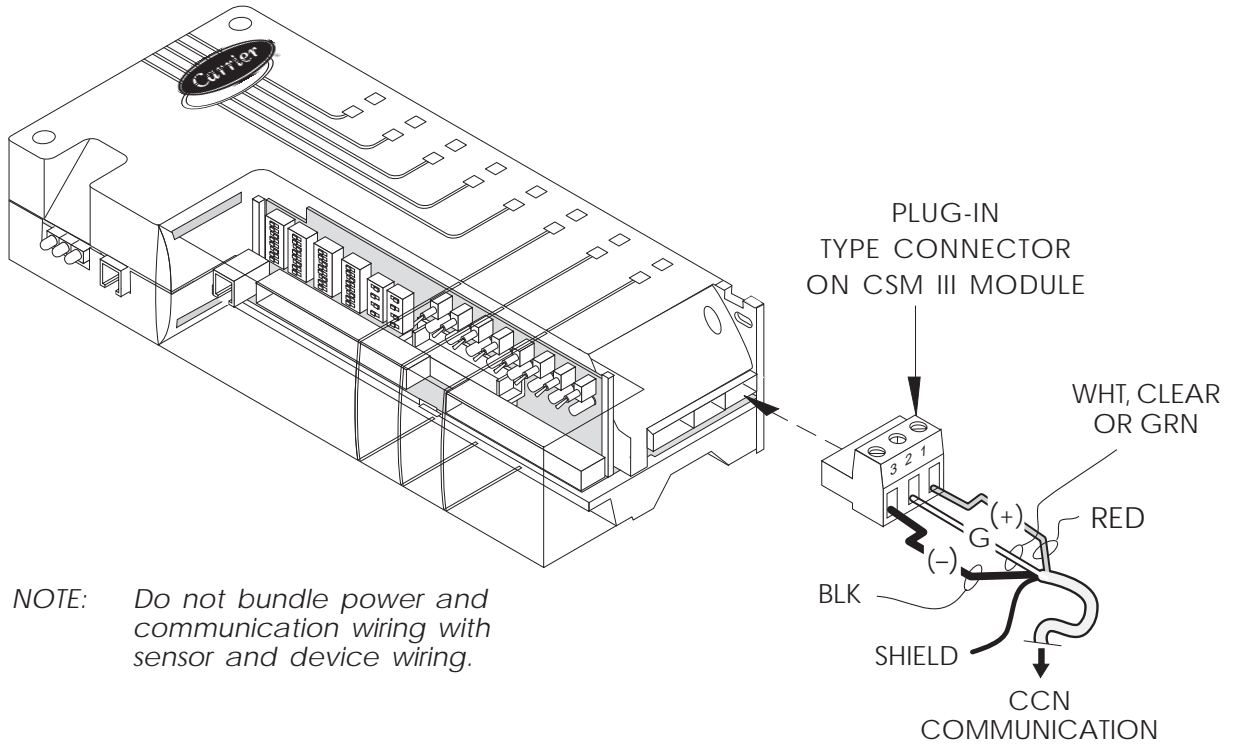


CAUTION: Connect Pin 1 on each module's power connector to chassis (earth) ground.

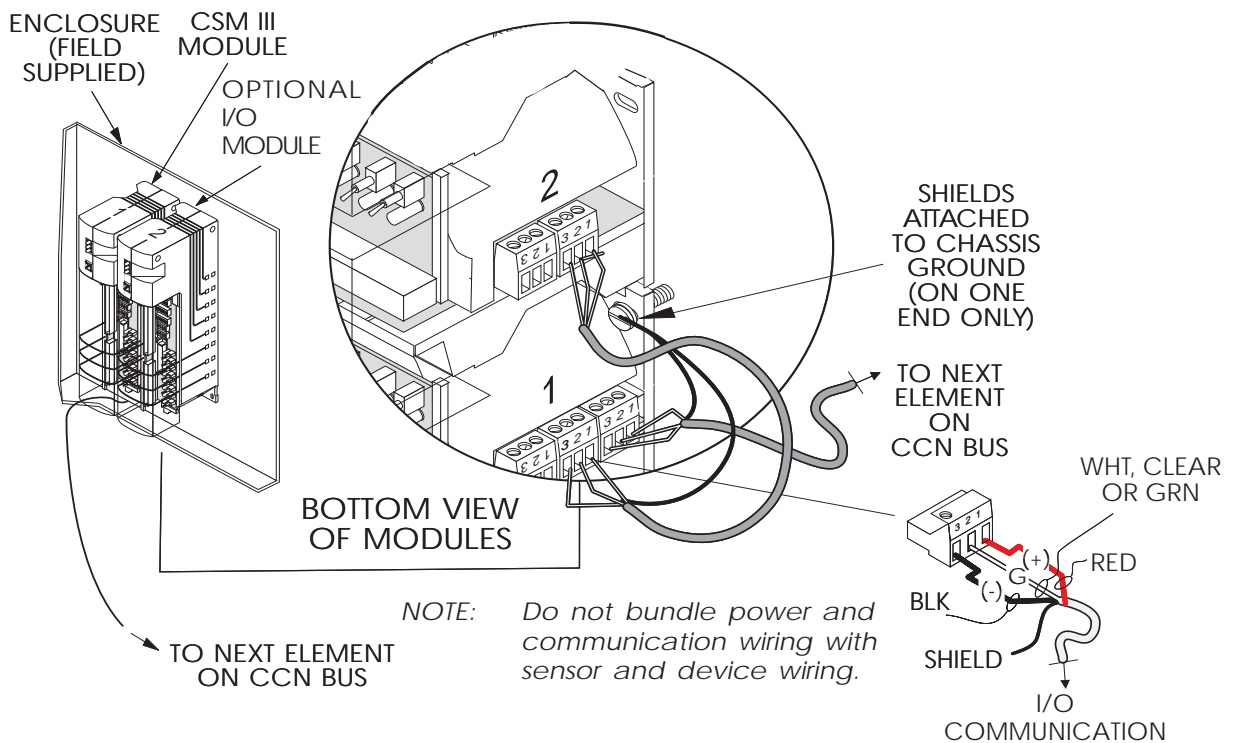
WARNING: Failure to correctly wire power connector can permanently damage module.



CSM III CCN Communication Connection



The figure below shows I/O communication connections between the CSM III and optional I/O modules.



CSM III and Optional I/O Module Power Wiring

UL has defined the following requirements to maintain Class II wiring and the UL916 PAZX listing:

- No input circuit can exceed 100 VA
- No input circuit can exceed 3.2 A
- The transformer cannot exceed 400 VA
- Each circuit cannot exceed 30 Vac or 42.4 Vdc.

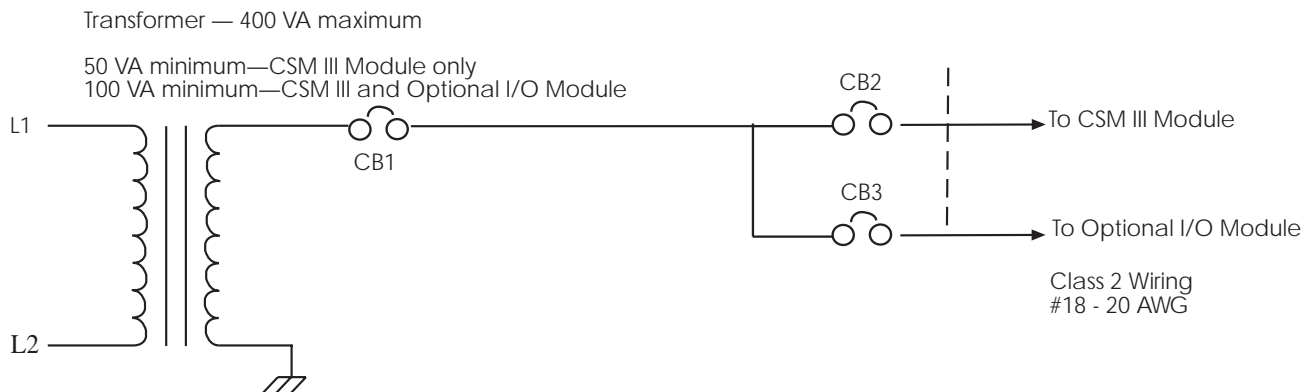
A typical wiring circuit is shown in the figure below and a transformer table with Heinemann circuit breaker part numbers is shown in the table below.

Use a 50 VA minimum transformer if powering the CSM III Module only. If powering both the CSM III Module and the Optional I/O Module, use a 100 VA minimum transformer.

Circuit breaker CB1 is not required to maintain the UL listing, but is recommended to protect the transformer. An equivalent slow blow type fuse can also be used.

CB2 and CB3 must include a circuit breaker rated at a maximum of 3.2 amps per circuit (or an equivalent slow blow type fuse if the fuse size is labeled adjacent to the fuse holder). The Heinemann KD1-3.0-BK circuit breaker is recommended for CB2 and CB3.

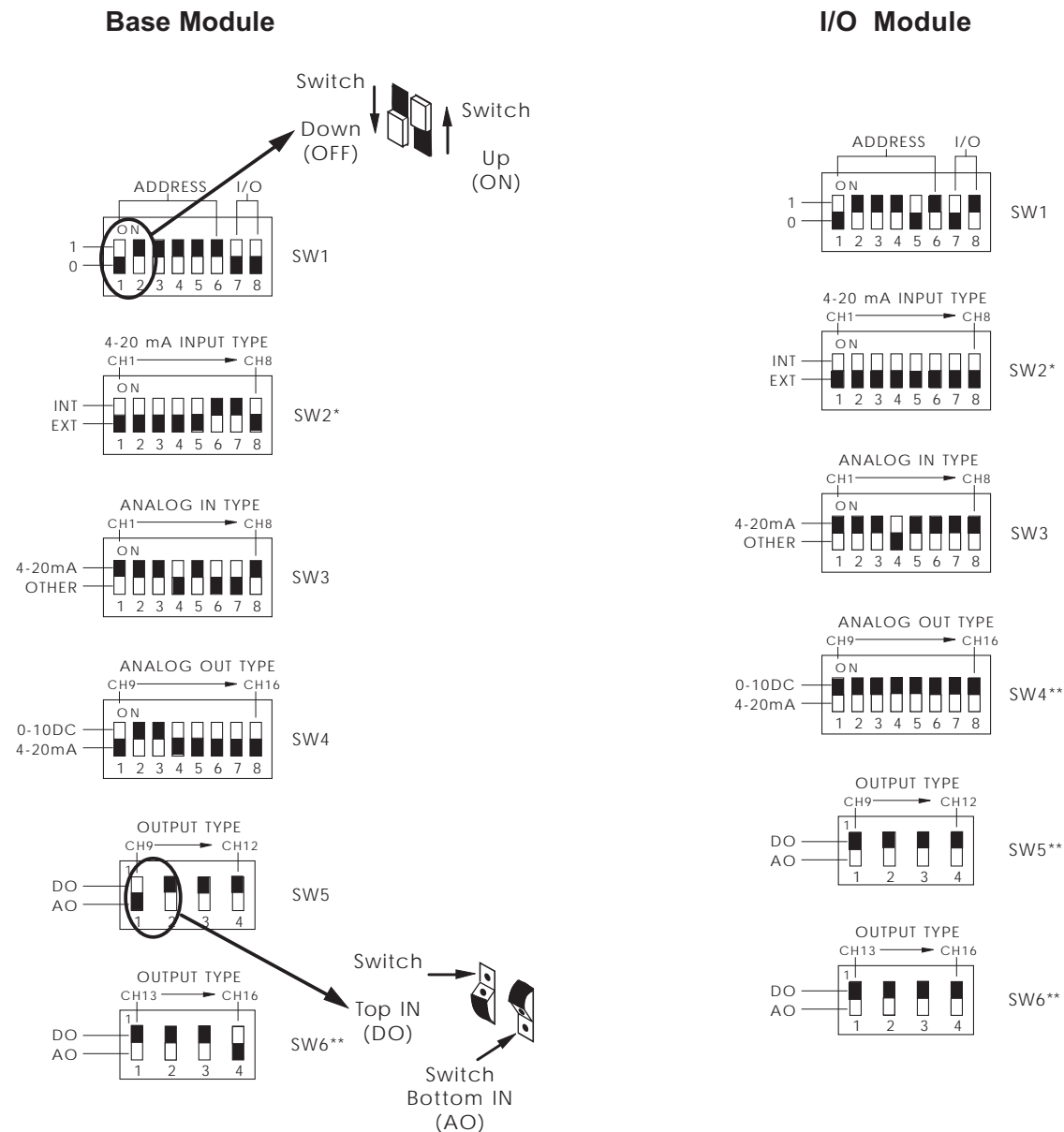
| Transformer VA | Min Wire Gauge | CB1 Amps | Heinemann P/N |
|----------------|----------------|----------|---------------|
| 50 | 18 | 3.0 | KD1-3.0-BK |
| 100 | 18 | 4.0 | KD1-4.0-BK |



Power Supply Installation

- Observe all applicable local codes, ordinances, and regulations.
- All module power wiring should be as short as possible.
- Do not run primary power wiring in the same conduit or Electrical Metallic Tubing (EMT) as the CCN Communication Bus, sensor field wiring, or device field wiring.

CSM III and Optional I/O Module Switch Settings



* Switch 4 is down when the transducer is powered externally.

** These switches are not used.

CSM III and Optional I/O Module Sensor Wiring

| C H I L L E R V I S O R | CSM III BASE MODULE | | SENSOR TYPE/TERMINAL NUMBER | | |
|--|---------------------------------------|--------|-----------------------------|--------|------------------|
| | | | THERM | 4-20ma | Disc |
| | | | 5K/10K | | |
| | DESCRIPTION | | | | |
| 1 | Supply Temperature | 1, 2 | N/A | N/A | Input Connector |
| 2 | Return Temperature | 3, 4 | N/A | N/A | |
| 3 | Load Return Temperature | 5, 6 | N/A | N/A | |
| 4 | Load Delta Pressure | N/A | 7,8 | N/A | |
| 5 | Override/OA Temperature | 9, 10 | N/A | N/A | |
| 6 | External Reset Input | N/A | 11, 12 | N/A | |
| 7 | External Demand Limit | N/A | 13, 14 | N/A | |
| 8 | Remote Contact Input/Plant Switch | N/A | N/A | 15, 16 | |
| 9 | Alarm Status Output (normally closed) | N/A | N/A | 1,2 | Output Connector |
| 10 | Bypass Valve #1 Output | N/A | 3,4 | N/A | |
| 11 | Bypass Valve #2 Output | N/A | 5,6 | N/A | |
| 16 | Alarm Status (normally open) | N/A | N/A | 15, 16 | |
| CSM III OPTIONAL I/O MODULE | | | | | Input Connector |
| 1 | Backup Supply Temperature | 1, 2 | N/A | N/A | |
| 2 | Backup Return Temperature | 3, 4 | N/A | N/A | |
| 3 | Backup Load Return Temperature | 5, 6 | N/A | N/A | |
| 4 | Backup Load Pressure | N/A | 7, 8 | N/A | |
| 5 | Override/OA Temp | 9, 10 | N/A | N/A | |
| 6 | Optional Reset Temperature | 11, 12 | N/A | N/A | |

Note: 10K sensors should be Type III (YSI) sensors

Related Documentation

For more information about the CHILLERVISOR System Manager III and Optional I/O Module, see the following:

- *CHILLERVISOR System Manager III Overview and Configuration Manual (808-957)*
- *CHILLERVISOR System Manager III Product Data Sheet (808-955)*