

# Installation

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**NOTICE**

The latest instruction sheets are posted as PDF files at [sandc.com/en/support/product-literature/](http://sandc.com/en/support/product-literature/). IntelliCap software can be downloaded at [sandc.com/en/support/sc-customer-portal/](http://sandc.com/en/support/sc-customer-portal/). If you need assistance, please contact **GSMC@sandc.com** or call (888) 762-1100.



# Introduction

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## Qualified Persons

### **WARNING**

The equipment covered by this publication must be installed, operated, and maintained by qualified persons who are knowledgeable in the installation, operation, and maintenance of overhead electric power distribution equipment along with the associated hazards.

A qualified person is one who is trained and competent in:

- The skills and techniques necessary to distinguish exposed live parts from nonlive parts of electrical equipment
- The skills and techniques necessary to determine the proper approach distances corresponding to the voltages to which the qualified person will be exposed
- The proper use of the special precautionary techniques, personal protective equipment, insulating and shielding materials, and insulated tools for working on or near exposed energized parts of electrical equipment

These instructions are intended only for such qualified persons. They are *not* intended to be a substitute for adequate training and experience in safety procedures for this type of equipment.

## Read this Instruction Sheet

### **NOTICE**

Read this instruction sheet thoroughly and carefully before installing or operating your S&C IntelliCap Automatic Capacitor Control. Familiarize yourself with the Safety Information on page 4 and Safety Precautions on page 5. The latest version of this publication is available online in PDF format at [sandc.com/en/support/product-literature/](http://sandc.com/en/support/product-literature/).

## Retain this Instruction Sheet

This instruction sheet is a permanent part of your S&C IntelliCap Automatic Capacitor Control. Designate a location where you can easily retrieve and refer to this publication.

## Proper Application

### **WARNING**

The equipment in this publication must be selected for a specific application. The application must be within the ratings furnished for the selected equipment.

## Special Warranty Provisions

The standard warranty contained in S&C's standard conditions of sale, as set forth in Price Sheets 150 and 181, applies to the S&C IntelliCap Automatic Capacitor Control, except that the first paragraph of the said warranty is replaced by the following:

**(1) General:** The seller warrants to the immediate purchaser or end user for a period of 10 years from the date of shipment that the equipment delivered will be of the kind and quality specified in the contract description and will be free of defects of workmanship and material. Should any failure to conform to this warranty appear under proper and normal use within 10 years after the date of shipment, the seller agrees, upon prompt notification thereof and confirmation that the equipment has been stored, installed, operated, inspected, and maintained in accordance with the recommendations of the seller and standard industry practice, to correct the nonconformity either by repairing any damaged or defective parts of the equipment or (at the seller's option) by shipment of necessary replacement parts. The seller's warranty does not apply to any equipment that has been disassembled, repaired, or altered by anyone other than the seller. This limited warranty is granted only to the immediate purchaser or, if the equipment is purchased by a third party for installation in third-party equipment, the end user of the equipment. The seller's duty to perform under any warranty may be delayed, at the seller's sole option, until the seller has been paid in full for all goods purchased by the immediate purchaser. No such delay shall extend the warranty period.

Replacement parts provided by the seller or repairs performed by the seller under the warranty for the original equipment will be covered by the above special warranty provision for its duration. Replacement parts purchased separately will be covered by the above special warranty provision.

Warranty of the S&C IntelliCap Automatic Capacitor Control is contingent upon the installation, configuration, and use of the control or software in accordance with S&C's applicable instruction sheets.

This warranty does not apply to major components not of S&C manufacture. However, S&C will assign to the immediate purchaser or end user all manufacturer's warranties that apply to such major components.

Warranty of equipment/services packages is contingent upon receipt of adequate information on the user's distribution system, sufficiently detailed to prepare a technical analysis. The seller is not liable if an act of nature or parties beyond S&C's control negatively impact performance of equipment/services packages; for example, new construction that impedes radio communication, or changes to the distribution system that impact protection systems, available fault currents, or system-loading characteristics.

## Safety Information

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### Understanding Safety-Alert Messages

Several types of safety-alert messages may appear throughout this instruction sheet and on labels attached to the S&C IntelliCap Automatic Capacitor Control. Familiarize yourself with these types of messages and the importance of these various signal words:

#### DANGER

“DANGER” identifies the most serious and immediate hazards that *will likely* result in serious personal injury or death if instructions, including recommended precautions, are not followed.

#### WARNING

“WARNING” identifies hazards or unsafe practices that *can* result in serious personal injury or death if instructions, including recommended precautions, are not followed.

#### CAUTION

“CAUTION” identifies hazards or unsafe practices that *can* result in minor personal injury if instructions, including recommended precautions, are not followed.

#### NOTICE

“NOTICE” identifies important procedures or requirements that *can* result in product or property damage if instructions are not followed.

### Following Safety Instructions

If you do not understand any portion of this instruction sheet and need assistance, contact your nearest S&C Sales Office or S&C Authorized Distributor. Their telephone numbers are listed on S&C’s website [sandc.com](http://sandc.com) Or call S&C Headquarters at (773) 338-1000; in Canada, call S&C Electric Canada Ltd. at (416) 249-9171.

#### NOTICE

Read this instruction sheet thoroughly and carefully before installing or operating your S&C IntelliCap Automatic Capacitor Control.



### Replacement Instructions and Labels

If you need additional copies of this instruction sheet, contact your nearest S&C Sales Office, S&C Authorized Distributor, S&C Headquarters, or S&C Electric Canada Ltd.

It is important that any missing, damaged, or faded labels on the equipment be replaced immediately. Replacement labels are available by contacting your nearest S&C Sales Office, S&C Authorized Distributor, S&C Headquarters, or S&C Electric Canada Ltd.

**⚠ DANGER**



The S&C IntelliCap Automatic Capacitor Control line voltage input range is 93 to 276 Vac. Failure to observe the precautions below will result in serious personal injury or death.

Some of these precautions may differ from your company's operating procedures and rules. Where a discrepancy exists, follow your company's operating procedures and rules.

- |  |  |
|--|--|
| <ol style="list-style-type: none"> <li>1. <b>QUALIFIED PERSONS.</b> Access to the IntelliCap Automatic Capacitor Control must be restricted only to Qualified Persons.</li> <li>2. <b>SAFETY PROCEDURES.</b> Always follow safe operating procedures and rules. Always maintain proper clearance from energized components.</li> <li>3. <b>PERSONAL PROTECTIVE EQUIPMENT.</b> Always use suitable protective equipment, such as rubber gloves, rubber mats, hard hats, safety glasses, arc-flash clothing, and fall protection, in accordance with safe operating procedures and rules.</li> </ol> | <ol style="list-style-type: none"> <li>4. <b>SAFETY LABELS AND TAGS.</b> Do not remove or obscure any of the "DANGER," "WARNING," "CAUTION," or "NOTICE" labels and tags. Remove tags ONLY if instructed to do so.</li> <li>5. <b>MAINTAINING PROPER CLEARANCE.</b> Always maintain proper clearance from energized components.</li> </ol> |
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# Installation

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## Applicable Software

This instruction sheet was prepared for use with IntelliCap software: **ICAP109S** and **IVAR109S**.

Software identification is shown on the IntelliLink® Setup Software *Troubleshooting>Control & Switch Information* screen. For questions regarding the applicability of information in this instruction sheet to future product releases, please contact S&C Electric Company.

## Pre-Installation Checklist

Before installing the IntelliCap control, carry out the following steps in the shop:

**STEP 1.** Inspect the control for visible damage.

Make sure there is no obvious damage to the control enclosure or any internal components.

**STEP 2.** Check whether a sensor cable may be needed.

With var sensing, the control may require a connection cable for the sensors.

**STEP 3.** Use the required setup software and equipment.

It is possible to use the faceplate switches and LCD screen for initial setup of an IntelliCap control, but using IntelliLink software is easier and faster. The faceplate switches can be used for later adjustments in the field. Equipment needed includes:

- **A personal computer** The computer should have a Microsoft Windows® 7 or 10 operating system, Internet Explorer 5.0 or higher, 32 MB of RAM, a USB or serial port, and Internet access to the S&C Automation Customer Support Portal.
- **A serial communication cable** This cable connects the computer to the LOCAL COMM PORT on the control. Use a straight-through cable, not a null-modem cable. The cable must be long enough to connect to an installed IntelliCap control.

The serial connection is RS232 with a DB9-pin connector.

If the computer only has USB ports, use a serial-to-USB cable adapter.

**STEP 4.** Do one of the following:

- Go to the installation site and install the IntelliCap control. Then configure the control as described in Instruction Sheet 1022-530, "S&C IntelliCap® Automatic Capacitor Control: *Setup*."
- Complete the configuration steps summarized in the "Optional In-Shop Setup" section while you are in the shop. Then install the control at the site.

## Optional In-Shop Setup

The following steps can be completed while you are still in the shop or later at the installation site:

**STEP 1.** Install the IntelliLink software on your computer.

For details, see the "Install the IntelliLink Software" section in Instruction Sheet 1022-530, "S&C IntelliCap® Automatic Capacitor Control: *Setup*."

**STEP 2.** Configure the control software.

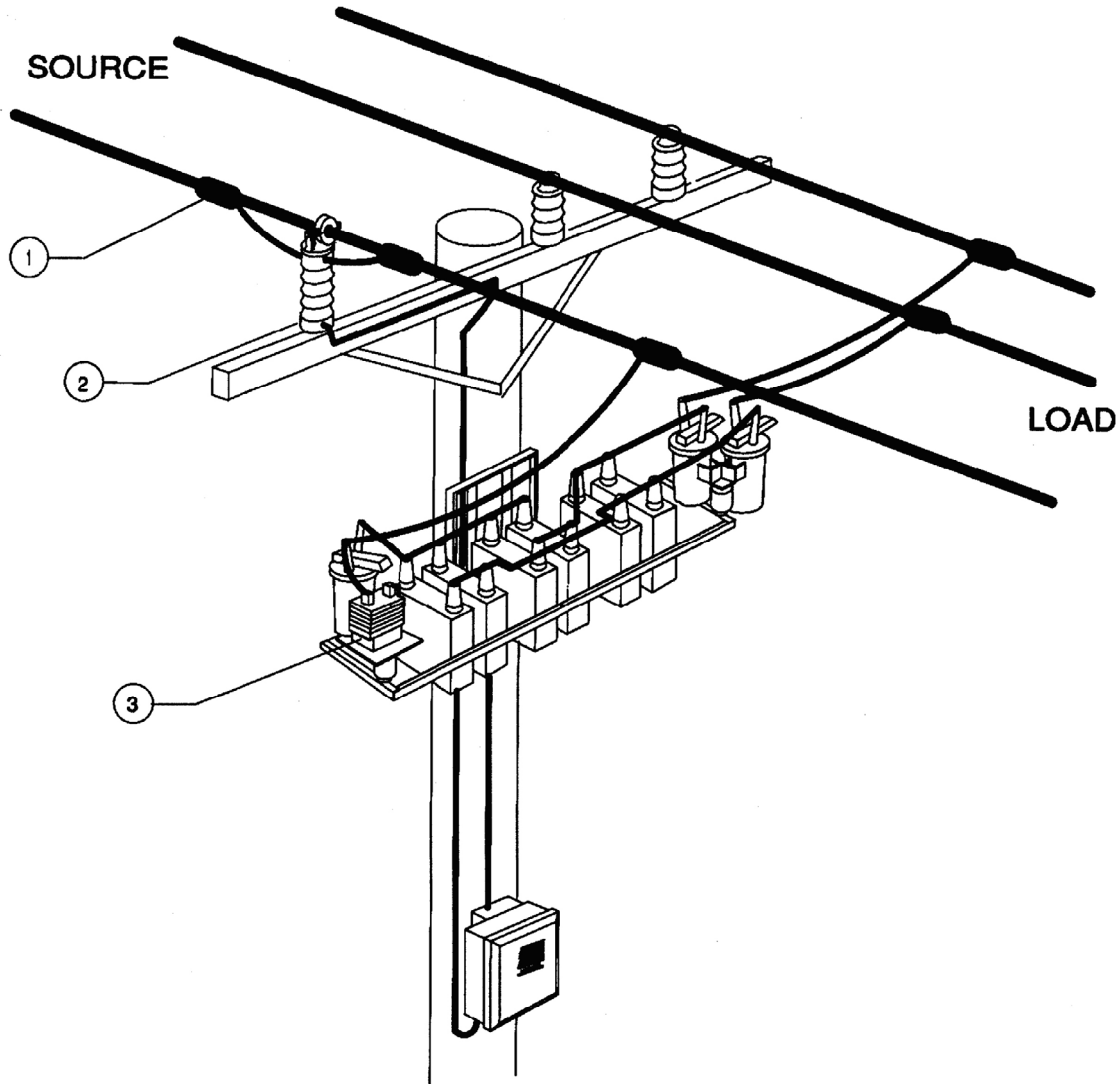
Most of the software setup can be done in the shop. For an explanation of how to configure the software, see the "Setting Up the Capacitor Control" section in Instruction Sheet 1022-530, S&C IntelliCap® Automatic Capacitor Control: *Setup*."

### Installing the Current Sensor (var only)

The IntelliCap with Var control uses the phase-angle relationship between the voltage waveform of the 120-Vac control power source and the current waveform from the current sensor. Calculations will be incorrect if the control-power source is not connected to the feeder being monitored for current.

Other factors that may also affect accuracy:

- To achieve the most accurate var-calculation results, power the control with a dedicated potential transformer (PT) that has at least one leg connected to the same phase as the current sensor.
- The PT supplying control power to the control may be connected phase to phase or phase to ground. Either connection can be configured in the setup software.
- When the control is powered from an adjacent secondary, the phase angle may be affected slightly. The calculated var level may also be changed by a few percentage points, depending on the secondary loading and its associated voltage reduction. With this wiring configuration, voltage-override logic will not have effective control of the primary feeder voltage.
- Because calculations are based on single-phase current, balanced three-phase currents or loads will produce the best results. Current measurements at the time of installation may help to decide the best phase to monitor if the feeder is significantly unbalanced.
- Install the current sensor on the source side of the capacitor bank connection. See Figure 1 on page 8. The source side is the side nearest the substation during normal operation. The control will then measure the effect of the capacitor bank on power factor when the bank is switched in.
- Signal polarity reversal can be configured in the setup software.
- Ground the sensor base at the top of the pole.
- With S&C and Lindsey line-post current Sensors, the signal wires are shielded, and the shield must be grounded at the IntelliCap control for safety.
- We recommend that a Lindsey current sensor be installed with a permanent current-sensor choke. This eliminates the need for field calibration and ensures more accurate results. The S&C current sensor does not require a choke.



**Figure 1. The current sensor installation (IntelliCap with Var only control).**

Detail notes for Figure 1:

1. Install the current sensor on the source side of the capacitor bank connection.
2. The current sensor must be grounded at the top of the pole.
3. A dedicated potential transformer for control power should be connected with one leg connected to the same phase as the current sensor.



## Onsite Installation

Follow these steps to install the IntelliCap control at the site:

**STEP 1.** Read the following warnings before you install or operate this equipment.

### WARNING

This control is connected to capacitors operating at primary voltage levels. High voltage may be present in the wiring to the control or the control itself during certain malfunctions of the capacitor bank wiring or grounding system, or because of a malfunction of the capacitor bank itself. For this reason, access to the control should be treated with the same safety precautions that would be applied when accessing other high-voltage lines and equipment. Follow all locally approved safety procedures when working on or around this control.

When open-circuited, current transformers can produce high voltages that can result in injury or death. Proper shorting hardware and operating procedures are required for safe operation. The current transformer must be shorted **before** installing or removing the control. **This control does NOT provide for shorting of the current transformer.**

### WARNING

Do not energize the 110-240 Vac power source entering the control enclosure until all wiring is complete.

Do not plug the sensor cable into the control until called for in the instructions.

Before attempting to access an existing installation, check carefully for visible or audible signs of electrical or physical malfunction—do this before touching or operating the control or any other part of the installation. These warning signs include such things as smoke, fire, open fuses, crackling noises, loud buzzing, etc. If a malfunction is suspected, treat all components of the installation, including the control and associated mounting hardware, as if they were elevated to primary (HIGH) voltage.

You must follow the sequence of installation steps outlined in this instruction sheet to ensure a safe and successful control installation.

### WARNING

These instructions do **NOT** replace the need for utility operation standards. Any conflict between the information in this document and utility practices should be reviewed by appropriate utility personnel and a decision made as to the correct procedures to follow.

The S&C IntelliCap Automatic Capacitor Control is connected to switchgear operating at primary voltage levels. High voltage may be present in the wiring to the switch control or in the switch control itself during certain failures of the switchgear wiring or grounding system, or because of a failure of the switch itself. For this reason, access to the switch control should be treated with the same safety precautions that would be applied when accessing other high-voltage lines and equipment. Follow all locally approved safety procedures when working on or around this switch control.

Before attempting to access an existing switch installation, check carefully for visible or audible signs of electrical or physical malfunction (do this before touching or operating the switch control or any other part of the installation). These warning signs include such things as smoke, fire, open fuses, crackling noises, loud buzzing, etc. If a malfunction is suspected, treat all components of the installation, including the switch control and associated mounting hardware, as if they were elevated to primary (high) voltage.

**STEP 2.** Remove the load fuse.

Remove the 10-A fuse near the lower left corner of the faceplate. See Figure 2 on page 10.

# Installation

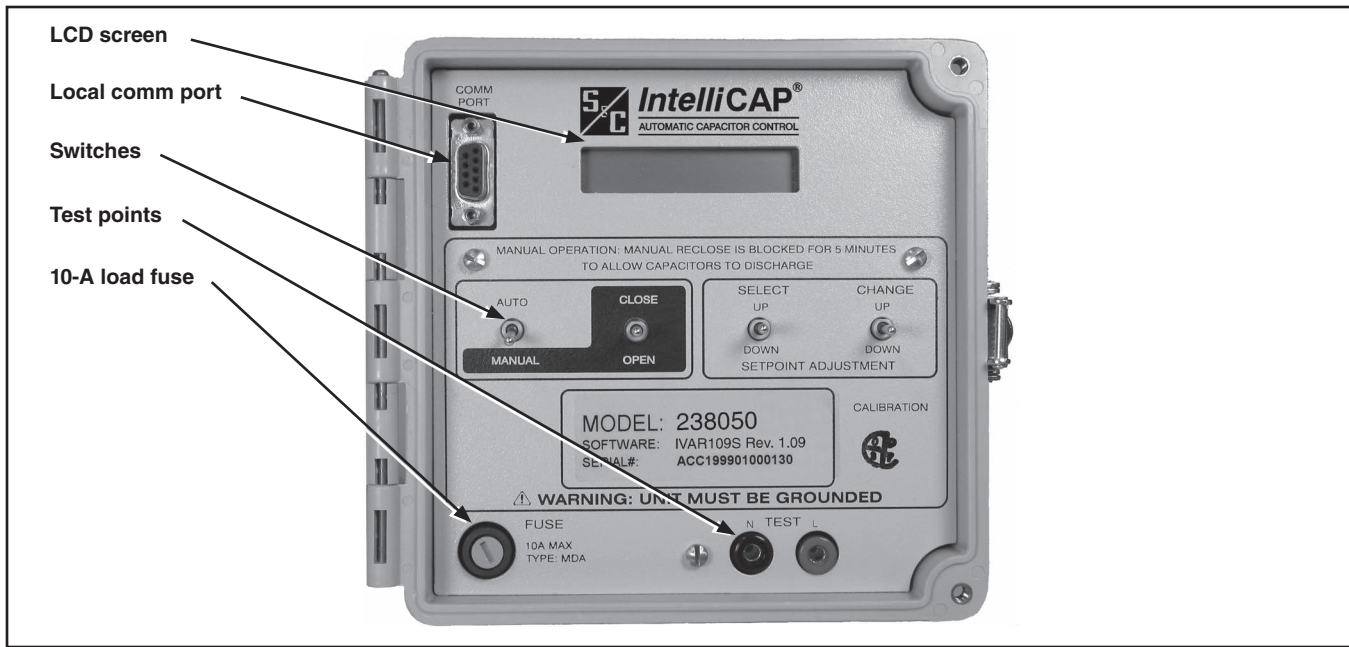


Figure 2. The control faceplate, showing the load fuse location.

## NOTICE

Leave the 10-A fuse out until instructed to replace it later in the installation process.

### STEP 3. Install the control.

Install the control on the meter base, pole, or panel, in a location with minimum traffic exposure.

All IntelliCap controls have an internal terminal strip. The terminal strip wires connect to the meter base, cable connector, or the cable wire directly. A meter base with a pole-mounting bracket and a meter ring assembly is available from S&C Electric Company.

### Meter Base Mounting

#### STEP 4. Confirm that the meter base socket is wired correctly for this control.

The required socket wiring for a four-jaw plug is shown in Figure 3. The wiring for each type of six-jaw meter base is shown in Figures 4 through 9 on pages 11 and 12. The correct configuration for the control is indicated by a label on the back of the control enclosure.

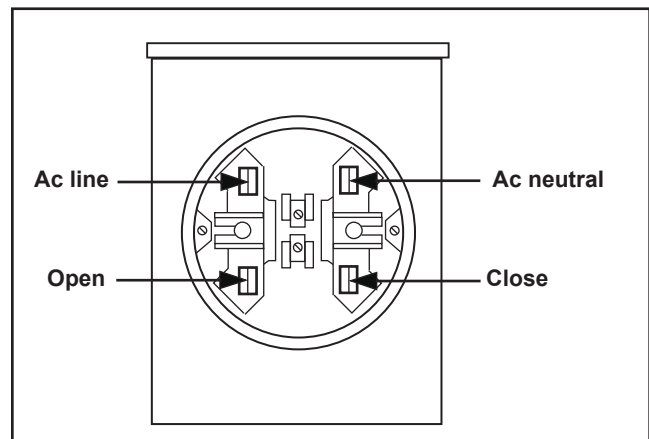


Figure 3. Four-jaw meter base socket configuration for capacitor controls with catalog number suffix -J40.

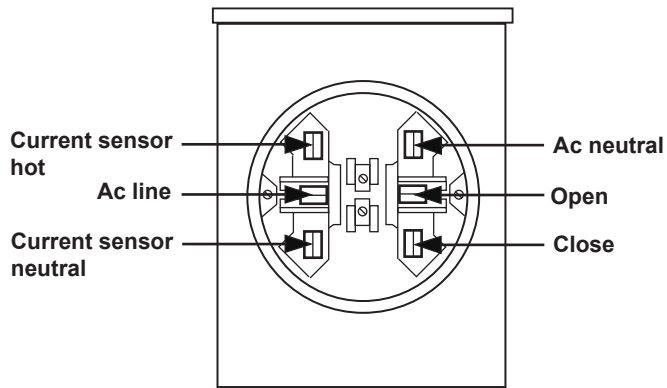


Figure 4. Six-jaw meter base socket configuration for capacitor controls with catalog number suffix -J61.

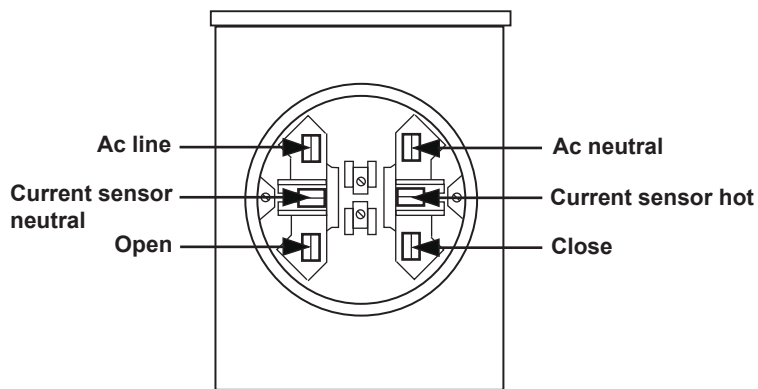


Figure 5. Six-jaw meter base socket configuration for capacitor controls with catalog number suffix -J62.

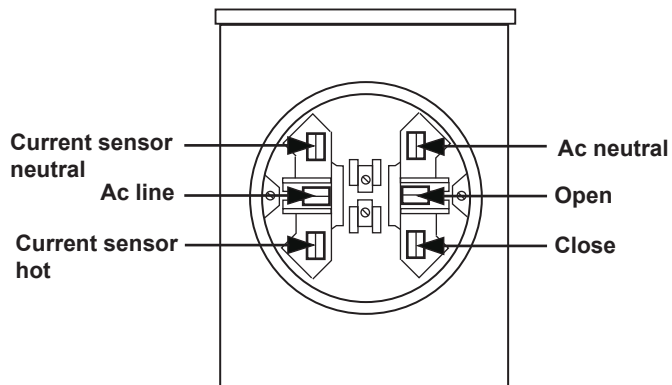


Figure 6. Six-jaw meter base socket configuration for capacitor controls with catalog number suffix -J63.

# Installation

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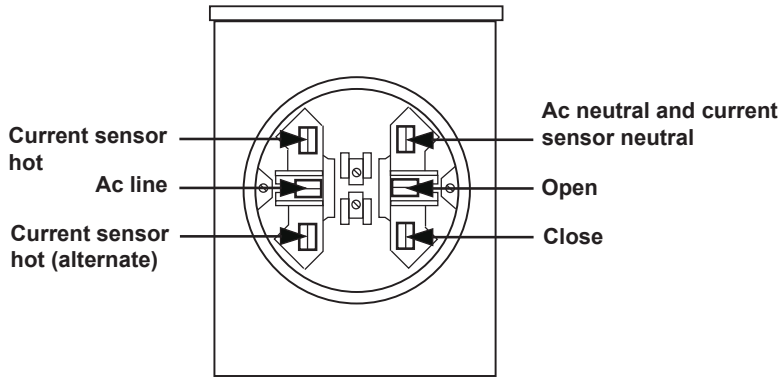


Figure 7. Six-jaw meter base socket configuration for capacitor controls with catalog number suffix -J64.

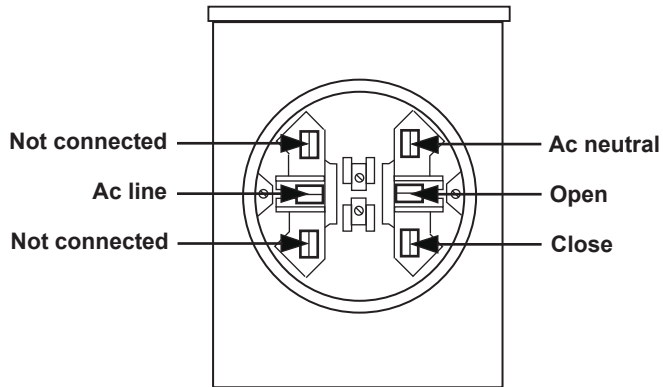


Figure 8. Six-jaw meter base socket configuration for capacitor controls with catalog number suffix -J65.

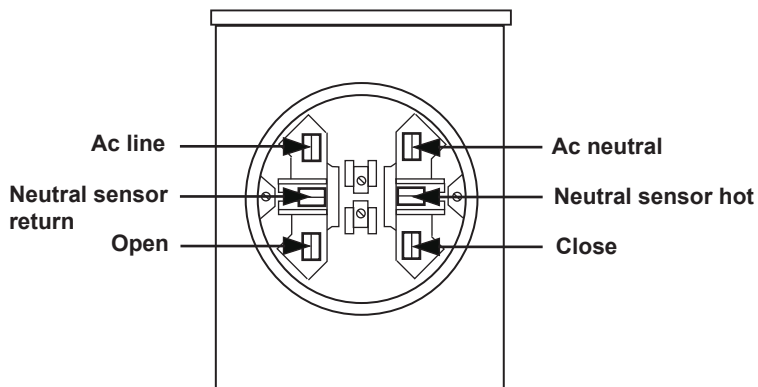


Figure 9. Six-jaw meter base socket configuration for capacitor controls with catalog number suffix -J68.

**STEP 5.** Connect the ground lug on the bottom of the control.

Ground the control with the ground lug on the bottom of the control enclosure. See Figure 10. The ground lug accommodates up to #2 copper or aluminum, solid or stranded wire. Ground impedance must be 25 ohms or less to properly protect the equipment.

**⚠ WARNING**

The control must be properly grounded. You must read and understand all applicable grounding codes and requirements for your service area before installing this control.

**⚠ WARNING**

These instructions do not replace the need for utility construction and operating standards. Any conflict between the information in this document and utility standards and practices should be reviewed by appropriate utility personnel and a decision made as to the correct action to follow.

The IntelliCap control must be properly grounded. We recommend that all equipment and pole ground conductors and neutral conductors be tied at one point, preferably at the secondary neutral level.

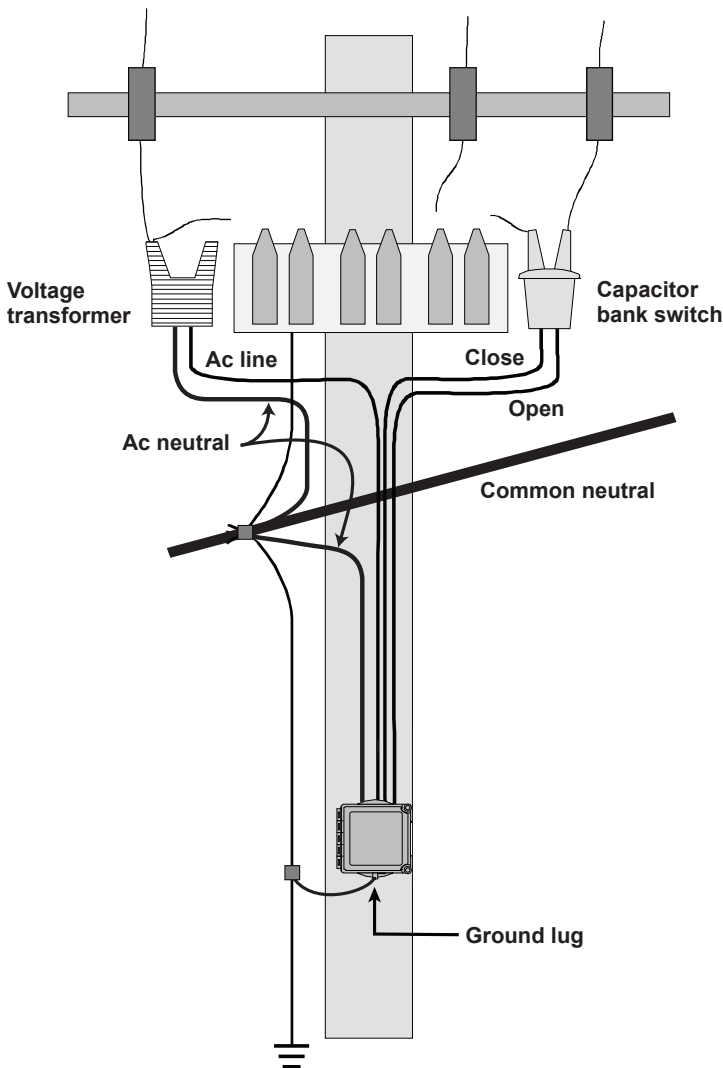


Figure 10. Grounding diagram for the IntelliCap control.

## Installation

**STEP 6.** Set the IntelliCap control to **Manual** operation mode.

### **WARNING**

The AUTO/MANUAL switch must be set to **Manual** mode to avoid unexpected operation of the capacitor bank during installation or setup operations.

**STEP 7.** Reinstall the 10-A load fuse.

The faceplate LCD screen should start scrolling through real-time and setpoint data. See Figure 2 on page 10. If one of the following is true, see Instruction Sheet 1022-550, “S&C IntelliCap® Automatic Capacitor Control: *Troubleshooting*.”

- The display is blank.
- The display reads **\*\*RE\*\***, **\*\*REA\*\***, **\*\*READ\*\***, or **\*\*READY\*\*** and does not clear.
- The display shows an error message.

### Bracket Mounting

Attach the control to the pole with either lag bolts for a wood pole, or metal straps for a concrete or metal pole. Then connect the cables.

### For a Wood Pole

Follow these steps to attach the enclosure to a wood pole:

### **WARNING**

The control must be set to **Manual** mode to avoid unexpected operation of the capacitor bank during installation or setup operations.

**STEP 1.** Use two 1/2-inch through-bolts or lag bolts, and flat washers if necessary. Drill a hole for the top bolt, or start the top lag screw.

**STEP 2.** Support the control and install the top bolt to hold the control on the pole, or hang the control on the top lag screw.

**STEP 3.** Vertically align the control on the pole and drill the bottom hole. Install the bottom bolt, or lag screw.

**STEP 4.** Tighten the two bolts or lag screws.

**STEP 5.** Confirm that the cable from the switch and power source is wired correctly for the connector on the control. Wiring options for the connector are shown in Figure 11 on page 16.

A bracket-mounted control may have additional sensor-cable connectors installed on the bottom of the enclosure. The connector configuration is shown on a label inside the enclosure door.

**STEP 6.** Connect the ground lug.

Use the ground lug on the bottom of the enclosure to ground the control. The ground lug will accommodate up to #2 copper or aluminum, solid or stranded wire.

### **WARNING**

The control must be properly grounded. You must read and understand all applicable grounding codes and requirements for your service area before installing this device.

**STEP 7.** Connect the cable from the junction box to the connector on the bottom of the control.

When an energized cable is connected to the control, after a few seconds the LCD screen will start to scroll.

### For a Metal or Concrete Pole

Follow these steps to attach the enclosure to a metal or concrete pole:

#### **WARNING**

The control must be set to **Manual** mode to avoid unexpected operation of the capacitor bank during installation or setup operations.

- STEP 1.** Pass a stainless steel strap or clamp through the two upper mounting slots in the bracket. Pass a second strap through the two lower mounting slots.
- STEP 2.** Lift the control into position on the pole. Then support the control while tightening the upper and lower straps around the pole.
- STEP 3.** Confirm that the cable from the switch and power source is wired correctly for the connector on this control. See Figure 11 on page 16.

A bracket-mounted control may have additional sensor-cable connectors installed on the bottom of the enclosure. The connector configuration is shown on a label inside the enclosure door.

- STEP 4.** Connect the ground lug.

Use the ground lug on the bottom of the enclosure to ground the control. See Figure 10 on page 13. The ground lug accommodates up to #2 copper or aluminum, solid or stranded wire.

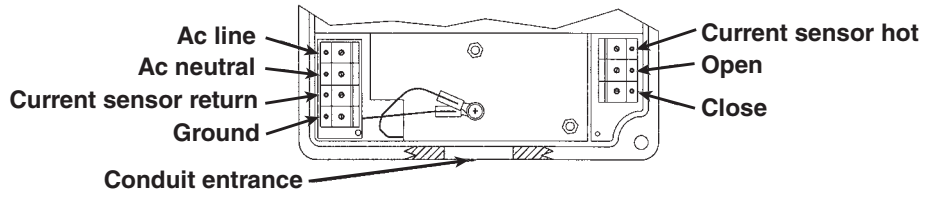
#### **WARNING**

The control must be properly grounded. You must read and understand all applicable grounding codes and requirements for your service area before installing this control.

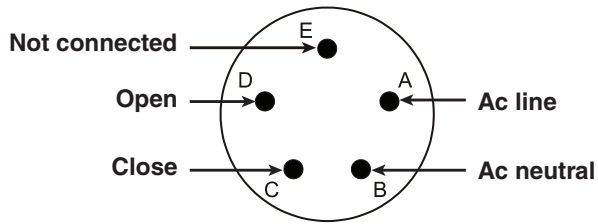
- STEP 5.** Connect the cable from the junction box to the connector on the bottom of the control.

When an energized cable is connected to the control, after a few seconds the LCD screen will start to scroll.

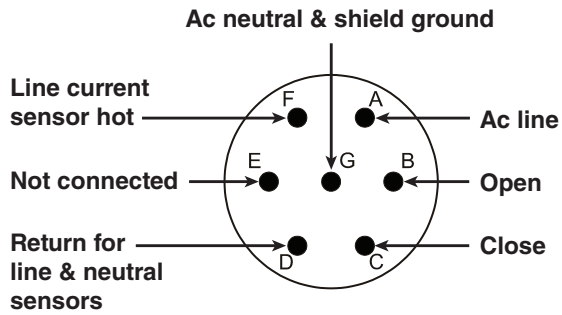
# Installation



IntelliCap terminal strip configuration



Connector configuration-M1



Connector configuration-M3

Figure 11. The terminal strip and connectors for a bracket-mounted control.



## Testing Capacitor Bank Operation

Follow these steps to check control operation:

**STEP 1.** Check that the control is operating properly. If the faceplate LCD screen is scrolling through the setpoints, go to step 2 below. If the LCD screen has an error message:

- (a) Connect your computer to the control and start IntelliLink Setup Software. See Instruction Sheet 1022-530, “S&C IntelliCap® Automatic Capacitor Control: *Setup*,” for more information.

Read the message(s) on the *Troubleshooting>Event Log* screens, and take appropriate action to correct any problems. See Instruction Sheet 1022-550, “S&C IntelliCap® Automatic Capacitor Control: *Troubleshooting*,” for more information.

- (b) After error conditions are corrected, go to step 2.

**STEP 2.** Check operation of the close/open relays:

- (a) Make sure the AUTO/MANUAL switch is set to the **Manual** mode.
- (b) Following your company procedures, use the CLOSE/OPEN switch on the faceplate to operate the capacitor bank. Verify visually that the faceplate LCD screen correctly indicates each bank-switch position.

The bank status on the LCD screen (\*\*Stat=BankOffline\*\* or \*\*Stat=BankOnline\*\*) indicates the last requested operation, which is normally the same as the present switch position. The \*\*Stat=\*\* display will be blank until the bank has been switched for the first time.

### NOTICE

The capacitor bank cannot be closed for a period of 5 minutes after being opened. This delay provides time for the capacitor charge to bleed off. For more details, see Instruction Sheet 1022-540, “S&C IntelliCap Automatic Capacitor Control: *Operation*.”

## Setting the Control for Manual Operation

The IntelliCap control will only respond to a manual operation.

### CAUTION

Be sure to leave IntelliCap control in **Manual** (not **Auto**) mode until the software in the control has been configured for this installation site.

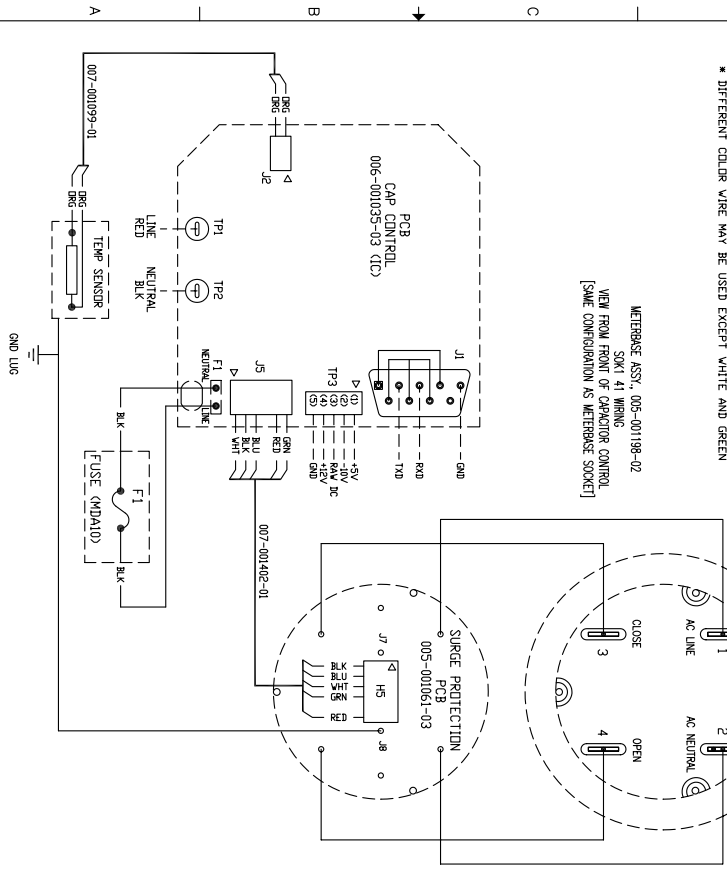
This completes the IntelliCap control hardware installation.

See Instruction Sheet 1022-530, “S&C IntelliCap® Automatic Capacitor Control: *Setup*” for control configuration instructions.

ASSY. NO. (QBD)	ORIGIN	DESTINATION	COLOR	AVG
007-001402-01	JS-1	H5-3 R NEUTRAL	WHT	16
	JS-2	H5-1 AC LINE	BLK	16
	JS-3	H5-2 CLOSE	BLU	16
	JS-5	H5-4 OPEN	RED	16
	JS-6	H5-4 NEUTRAL	GRN	14
007-001406-01	WETBASE PCB	J8		
	PCB	J8		
	P2	R11	DRG	24
007-001099-01	JS-2	R11	DRG	24
	JS-2	R11	DRG	24
	J2-2	R11	DRG	24
006-001035-03	FUSE	F1-BOTTOM	DRG	24
	F1	F1-TOP	DRG	24
	F1	F1-NEUTRAL	DRG	24

\* DIFFERENT COLOR WIRE MAY BE USED EXCEPT WHITE AND GREEN

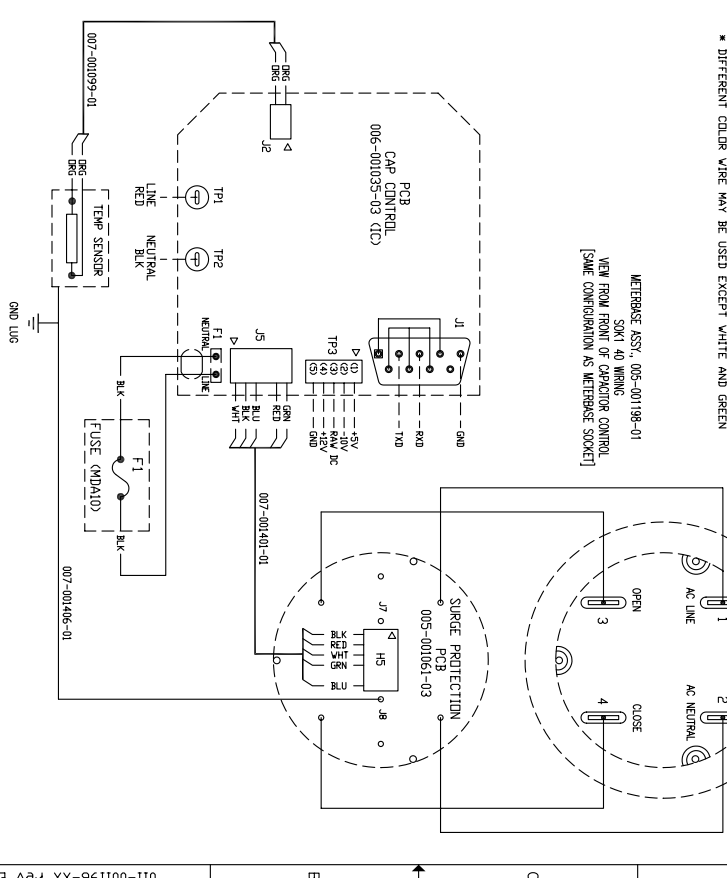
WETBASE ASSY. 005-001198-02  
SOKI 41 WIRING  
VIEW FROM FRONT OF CAPACITOR CONTROL  
[SAME CONFIGURATION AS WETBASE SOCKET]



ASSY. NO. (QBD)	ORIGIN	DESTINATION	COLOR	AVG
007-001401-01	JS-1	H5-3 R NEUTRAL	WHT	16
	JS-2	H5-1 AC LINE	BLK	16
	JS-3	H5-2 CLOSE	BLU	16
	JS-5	H5-4 OPEN	RED	16
	JS-6	H5-4 NEUTRAL	GRN	14
007-001406-01	WETBASE PCB	J8		
	PCB	J8		
	P2	R11	DRG	24
007-001099-01	JS-2	R11	DRG	24
	JS-2	R11	DRG	24
	J2-2	R11	DRG	24
006-001035-03	FUSE	F1-BOTTOM	DRG	24
	F1	F1-TOP	DRG	24
	F1	F1-NEUTRAL	DRG	24

\* DIFFERENT COLOR WIRE MAY BE USED EXCEPT WHITE AND GREEN

WETBASE ASSY. 005-001198-01  
SOKI 40 WIRING  
VIEW FROM FRONT OF CAPACITOR CONTROL  
[SAME CONFIGURATION AS WETBASE SOCKET]



ECO REV	DESCRIPTION	DATE	APPROVED
0707 A <td>PREL. RELEASE</td> <td>01/19/99 <td>LES</td> </td>	PREL. RELEASE	01/19/99 <td>LES</td>	LES
0808 B <td>CHANGED TO 607-001404-WIRE FRONT</td> <td>02/17/00 <td>LES</td> </td>	CHANGED TO 607-001404-WIRE FRONT	02/17/00 <td>LES</td>	LES
0909 C <td>ADDED SURGE PROTECTION PCB</td> <td>02/16/00 <td>LES</td> </td>	ADDED SURGE PROTECTION PCB	02/16/00 <td>LES</td>	LES
1000 D <td>ADDED SURGE PROTECTION PCB</td> <td>02/16/00 <td>LES</td> </td>	ADDED SURGE PROTECTION PCB	02/16/00 <td>LES</td>	LES
1100 E <td>REWORKING CONNECTION</td> <td>5/9/07 <td>LES</td> </td>	REWORKING CONNECTION	5/9/07 <td>LES</td>	LES

NOTES: UNLESS OTHERWISE SPECIFIED  
1. LEGEND: SOLDER POINTS = ●  
HARDWARE = -----

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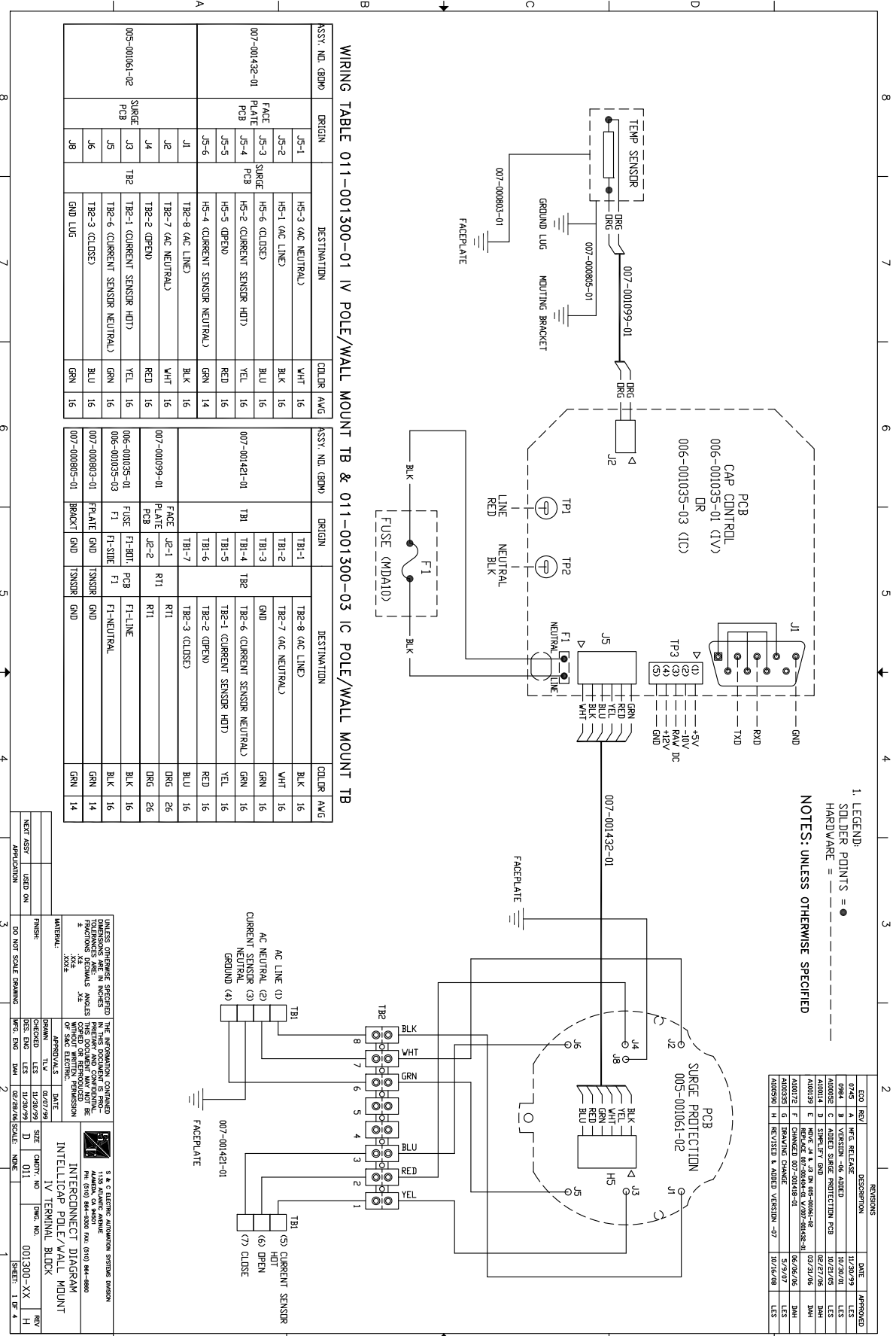
S & C ELECTRIC, AUTOMATIC SYSTEMS DIVISION  
1130 ALABAMA AVENUE  
ANN ARBOR, MI 48106  
TEL: (313) 963-3300 FAX: (313) 963-4800

DIAGRAM, INTERCONNECT  
IC 40 & 41 WIRING  
INTELLICAP

REVISIONS	DATE	APPROVED
ECO REV <td></td> <td></td>		
0707 A <td>01/19/99</td> <td>LES</td>	01/19/99	LES
0808 B <td>02/17/00</td> <td>LES</td>	02/17/00	LES
0909 C <td>02/16/00</td> <td>LES</td>	02/16/00	LES
1000 D <td>02/16/00</td> <td>LES</td>	02/16/00	LES
1100 E <td>5/9/07</td> <td>LES</td>	5/9/07	LES







WIRING TABLE 011-001300-01 IV POLE/WALL MOUNT TB & 011-001300-03 IC POLE/WALL MOUNT TB

ASSY. NO. (BOM)	ORIGIN	DESTINATION	COLOR	AVG
007-001432-01	J5-1	H5-3 (AC NEUTRAL)	WHT	16
	J5-2	H5-1 (AC LINE)	BLK	16
	J5-3	H5-6 (CLOSED)	BLU	16
	J5-4	H5-2 (CURRENT SENSOR HOT)	YEL	16
	J5-5	H5-5 (OPEN)	GRN	16
	J5-6	H5-4 (CURRENT SENSOR NEUTRAL)	RED	14
005-001061-02	J1	TB2-8 (AC LINE)	BLK	16
	J2	TB2-7 (AC NEUTRAL)	WHT	16
	J4	TB2-2 (OPEN)	RED	16
	J3	TB2-1 (CURRENT SENSOR HOT)	YEL	16
	J5	TB2-6 (CURRENT SENSOR NEUTRAL)	GRN	16
	J6	TB2-3 (CLOSED)	BLU	16
	J8	GND LUG	GRN	16
	J7	TB2-4 (CURRENT SENSOR NEUTRAL)	RED	14
	J9	TB2-5 (CURRENT SENSOR HOT)	YEL	16
	J10	TB2-1 (CURRENT SENSOR NEUTRAL)	GRN	16

ASSY. NO. (BOM)	ORIGIN	DESTINATION	COLOR	AVG
007-001421-01	TB1-1	TB2-9 (AC LINE)	BLK	16
	TB1-2	TB2-7 (AC NEUTRAL)	WHT	16
	TB1-3	GND	GRN	16
	TB1-4	TB2-6 (CURRENT SENSOR NEUTRAL)	GRN	16
	TB1-5	TB2-1 (CURRENT SENSOR HOT)	YEL	16
	TB1-6	TB2-2 (OPEN)	RED	16
	TB1-7	TB2-3 (CLOSED)	BLU	16
	J2-1	RT1	DRG	25
	J2-2	RT1	DRG	25
	J1-BOT	F1-LINE	BLK	16
	F1	F1-NEUTRAL	BLK	16
006-001035-01	F1	F1-LINE	BLK	16
	F1	F1-NEUTRAL	BLK	16
	F1	F1-NEUTRAL	BLK	16
	F1	F1-NEUTRAL	BLK	16
006-001035-03	F1	F1-LINE	BLK	16
	F1	F1-NEUTRAL	BLK	16
	F1	F1-NEUTRAL	BLK	16
	F1	F1-NEUTRAL	BLK	16
007-000803-01	F1	F1-LINE	BLK	16
	F1	F1-NEUTRAL	BLK	16
	F1	F1-NEUTRAL	BLK	16
	F1	F1-NEUTRAL	BLK	16

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INTELLICAP POLE/WALL MOUNT  
 IV TERMINAL BLOCK

118 ATLANTIC AVENUE  
 NEW BRUNSWICK, NJ 07102  
 TEL: (908) 841-4000 FAX: (908) 844-4880

CHECKED: LES DATE: 11/28/99  
 DESIGNED: LES DATE: 11/28/99  
 DRAWN: LES DATE: 11/28/99

SIZE: QUANTITY: 001300-XX  
 QTY: 011  
 DATE: 001300-XX  
 SHEET: 1 OF 4

DO NOT SCALE DRAWING

APPLICATION

REV H

011-001300-XX Rev H

S&C ELECTRIC AUTOMATION SYSTEMS DIVISION

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APPLICATION

REV H

011-0013

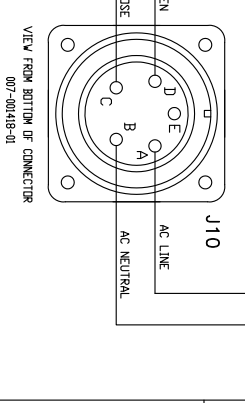
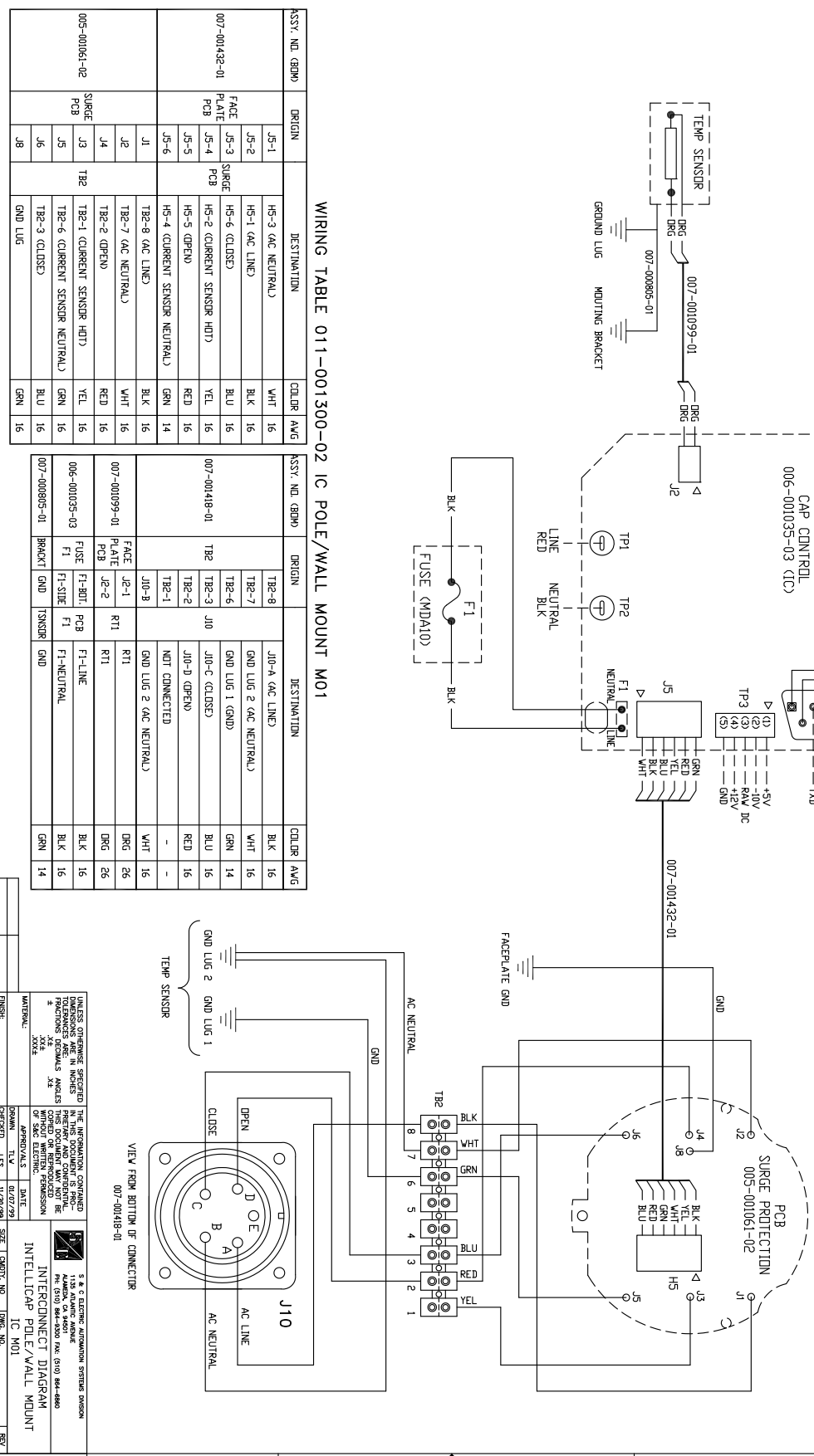
—WIRING TABLE 011-001300-02 IC POLE/WALL MOUNT M01

ASSY. NO. (BOM)	ORIGIN	DESTINATION	COLOR	AVG
007-001432-01 FACE PLATE PCB	J5-1	H5-3 (AC NEUTRAL)	WHT	16
	J5-2	H5-1 (AC LINE)	BLK	16
	J5-3	H5-6 (CLOSE)	BLU	16
	J5-4	H5-2 (CURRENT SENSOR HDT)	YEL	16
	J5-5	H5-5 (OPEN)	RED	16
	J5-6	H5-4 (CURRENT SENSOR NEUTRAL)	GRN	14
005-001061-02 SURGE PLATE PCB	J1	TBE-8 (AC LINE)	BLK	16
	J2	TBE-7 (AC NEUTRAL)	WHT	16
	J4	TBE-2 (OPEN)	RED	16
	J3	TBE-1 (CURRENT SENSOR HDT)	YEL	16
	J5	TBE-6 (CURRENT SENSOR NEUTRAL)	GRN	16
	J6	TBE-3 (CLOSE)	BLU	16
	J8	GND LUG	GRN	16

ASSY. NO. (BOM)	ORIGIN	DESTINATION	COLOR	AVG
007-001418-01	TBE-8	J10-A (AC LINE)	BLK	16
	TBE-7	GND LUG 2 (AC NEUTRAL)	WHT	16
	TBE-6	GND LUG 1 (GND)	GRN	14
	TBE-3	J10-C (CLOSE)	BLU	16
	TBE-2	J10-D (OPEN)	RED	16
	TBE-1	NOT CONNECTED	-	-
	J10-B	GND LUG 2 (AC NEUTRAL)	WHT	16
	J2-1	R11	DRG	26
	J2-2	R11	DRG	26
	J2-1	R11	DRG	26
006-001035-03	F1	F1-LINE	BLK	16
	F1-BOT	F1-NEUTRAL	BLK	16
	F1-SIDE	F1-NEUTRAL	BLK	16
	F1	F1-NEUTRAL	BLK	16
007-000805-01	BRACKET	GND	GRN	14
	TMSDR	GND	GRN	14
	TMSDR	GND	GRN	14
	TMSDR	GND	GRN	14

REV	DESCRIPTION	DATE	APPROVAL
ECO	REV		
	DESCRIPTION		
	SEE SHEET 1		

1. LEGEND:  
 ● SOLDER POINTS = ●  
 --- HARDWARE = ---  
 NOTES: UNLESS OTHERWISE SPECIFIED



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DATE: 11/20/2020  
 DESIGNED BY: TCS  
 CHECKED BY: TCS  
 MFG. ENG. DATE: 11/23/2020  
 MFG. ENG. DATE: 11/23/2020

INTELLICAP POLE/WALL MOUNT IC M01

1. S & C ELECTRIC AUTOMATION SYSTEMS DIVISION  
 118A ALABAMA AVENUE  
 HOUSTON, TEXAS 77055  
 PH: (510) 984-4000 FAX: (510) 984-4880

2. SHEET: 2 OF 4

