

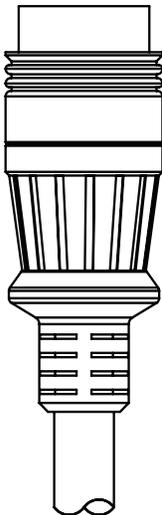
INSTALLATION & OPERATING INSTRUCTIONS



Southwire™
SURGE GUARD*

Marine Power Protection

MODEL 67050
PORTABLE



MODEL 67030
PORTABLE



FOR YOUR RECORDS

MODEL NO: _____

DATE PURCHASED: _____

WHERE PURCHASED: _____

INPUT POWER CORDS

OVER/UNDER VOLTAGE PROTECTION
 Should voltage drop below 102V or rise above 132V for more than 8 seconds, power to watercraft is turned off.
SEE TIME DELAY INDICATOR



The green LED indicates power to RV when illuminated.

TIME DELAY INDICATOR

When unit is plugged in, the red caution LED is flashing indicating delay. The LCD at the same will count up to 128 seconds. When the delay expires, the red caution LED will stop flashing and power will be applied to the watercraft. Time delay will also be applied to reset once power is restored to a safe range following the 128 second delay. This allows head pressure to bleed off the A/C Compressor.

SURGE FAILURE

If the red "SURGE" indicator LED is on, it means that the built-in surge protection has been sacrificed to protect your equipment and is no longer functioning properly. Other features will still function, but the unit is recommended to be replaced.

CAUTION LIGHT POLARITY PROTECTION

Indicates possible miswiring or current to ground condition present. (Will prevent power on 50 amp unit only.) The LCD screen will also indicate REVERSE POLARITY.

3 MODE SURGE PROTECTION

Protects the watercraft's sensitive electronic systems and appliances from potentially damaging power surge events without power interruptions to the watercraft.



OUTPUT POWER CORDS

marinepower.southwire.com

For technical assistance, please call 1-800-780-4324 x 20311

TECHNICAL SPECIFICATIONS

FEATURES	MODEL 67030	MODEL 67050
Operating Current	30 Amps	50 Amps
Operating Voltage	120 Volts	120/240 Volts
Maximum Watts	3600 Watts	12000 Watts
3 Mode Surge Protection	Yes, L-N, L-G,N-G	Yes, L-N, L-N, L-G, N-G, L-L
Energy Dissipation	2450 Joules	3850 Joules
Clamping Voltage	< 300 VAC	< 300 VAC
Maximum Spike Current	6500A per MOV	6500A per MOV
Over/Under Voltage Protection	Yes	Yes
Voltage Range	132/102V	132/102V
Trip Time	8-10 seconds	8-10 seconds
High Neutral Current Trip	N/A	130%
Plug/Receptacle Temperature Trip	Yes	Yes
Time Delay for A/C	128 seconds	128 seconds
Reverse Polarity Check	Yes	Yes
Voltage On Ground Check	Yes	Yes
Power Indicator	LCD Voltage & current reading	LCD Voltage & current reading
Warranty	1 year	1 year
Corrosion Resistant	Yes	Yes
Easy Installation	Yes	Yes
Industrial Contactor	Yes	Yes

OPERATING INSTRUCTIONS MODELS 67030 67050

1. Plug the Surge Guard* model 67030/67050 into an approved watercraft receptacle and plug the watercraft power cord into the Surge Guard unit.
2. Verify the delay indicator is flashing, the LCD is counting. The LCD will read between 102V and 132V.
3. Once caution light stops flashing (this takes 128 seconds), verify watercraft power is on.

NOTE: USING WITH POWER CORD ADAPTERS
Purchased power cord adapters will work in most cases with Surge Guard units but Southwire does not recommend using them for full load applications due to the possibility of over-heating. Be advised that power cord adapters have been known to cause fires when Amps (electrical current) ratings are exceeded. Should you decide to use an adapter, our recommendation is to check on the power cord from time to time to make sure it is not overheating.

TROUBLESHOOTING

SYMPTOM	CAUSE	SOLUTION
Caution light is flashing	There is a fault. Read LCD for information.	For reverse polarity or voltage on ground, move watercraft to new electrical source.
LCD reads less than 102V on first line or L1, L2 low on either line.	1. Only partial power at 50 Amp source. 2. No power at source	1. Move to a new source 2. Use inverter or generator power
When first plugging into pedestal power, caution light flashes momentarily, then goes out.	High or low voltage is present at source.	Change site or use inverter or generator power

LCD DISPLAY INDICATORS

	Surge Expended
	Open Ground
	Any line wired to neutral
	Voltage > 132
	Voltage < 102
	Current > 130%
	Current > 125%

Display for Normal Operation

During normal operation, the device's LCD screen alternates between two displays, a main screen showing voltages and currents for power lines 1 and 2 coming into the watercraft; and a secondary screen showing whether power to the watercraft is ON or OFF, with voltage for line 1 coming into the watercraft.

The main screen for model 67050 (50Amp) will show the voltages and currents for lines 1 and 2, whereas model 67030 will only show line 1 since there is no line 2 for that model.

There are two rows of text lines on the LCD screen. The top row for the main screen shows information for line 1 in the following format: 120V 50A. This means that the voltage on power line 1 coming into the watercraft is at 120 volts and the watercraft is drawing 50 amps of current on line 1. The bottom row of the main screen for 67050 shows voltage and current for line 2.

Model 67050

Main Screen

Secondary Screen

Model 67030

The top row of the secondary screen for both models shows ON or OFF, and the bottom row shows the voltage on power Line 1 as L1=120V.

If the power coming into the watercraft is less than 102 volts on either line 1 or 2, the main screen will show L1 low or L2 low, in place of the voltage or current. If the power coming in is greater than 132 volts, then the main screen will show L1 high or L2 high.

Display During Fault Conditions

When the device is powered up, the LCD screen will display "Delay" and the elapsed time in seconds until it reaches 128 seconds. After the delay is completed, the unit will go to the normal operating screen showing voltages and currents as described above. If there is a fault condition during normal operation such as high or low voltage, the unit will display that L1 or L2 is high or low; and when power comes back within range (102V-132V) the unit will begin the delay as described above before returning to the main screen that shows the voltages and currents.

Reverse Polarity Conditions

If the polarity of the voltages coming into the watercraft is reversed, then the Surge Guard unit will display the REVERSE POLARITY until this condition is corrected. Also, current or voltages on ground will be displayed as reversed polarity.