

LIMITED WARRANTY

LITTLE GIANT WARRANTY STATEMENT

LIMITED WARRANTY

Your Little Giant product is guaranteed to be in perfect condition when it leaves our Factory. It is warranted against defective materials and workmanship for a period of 12 months (90 day warranty on Models 1-AA-OM, GKPK-SC, PP-1, PPS-1, PP-12, PPS-12, PP-230 and Cooler King) from date of purchase by the user. No warranty on brush wear on Model 35-OM and impeller or cam in Models PP-1, PP-12, PPS-12 and PP-230. Any product that should fail for either of the above two reasons and is still within the warranty period, will be repaired or replaced if returned prepaid to our Factory. All defective products returned under warranty will be fully inspected to determine "CAUSE OF FAILURE" before any warranty is approved. Little Giant will honor the warranty within the warranty time period specified on satisfactory written proof of purchase.

DISCLAIMER: Any oral statements about the product made by the seller, the manufacturer, the representatives or any other parties, do not constitute warranties, shall not be relied upon by the user, and are not part of the contract for sale. Seller's and manufacturer's only obligation, and buyer's only remedy, shall be the replacement and/or repair by the manufacturer of the product as described above. Neither seller nor the manufacturer shall be liable for any injury, loss or damage, direct, incidental or consequential (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss), arising out of the use or the inability to use the product, and the user agrees that no other remedy shall be available to it. Before using, the user shall determine the suitability of the product for his intended use, and user assumes all risk and liability whatsoever in connection therewith. THE WARRANTY AND REMEDY DESCRIBED IN THIS LIMITED WARRANTY IS AN EXCLUSIVE WARRANTY AND REMEDY AND IS IN LIEU OF ANY OTHER WARRANTY OR REMEDY, EXPRESSED OR IMPLIED, WHICH OTHER WARRANTIES AND REMEDIES ARE HEREBY EXPRESSLY EXCLUDED, INCLUDING, BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Warranty will be VOID if any of the following conditions are found:

1. Product connected to voltage other than indicated on name plate.
2. Product abuse by customer.
3. Product used in a corrosive environment.
4. Product was used other than intended as described in the introduction of this Installation Guide.

Little GIANT

LITTLE GIANT PUMP COMPANY
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File this for safekeeping. It may be valuable to you for service under the term of the warranty.

Model # _____ Date of Purchase _____

Catalog # _____ Serial # _____

Name of Dealer _____

Little GIANT

AUXILIARY CONDENSATE SWITCH

MODEL NO.	CATALOG NO.	VOLTS	AMPS	WIRE SIZE	WIRE LENGTH
ACS-2	599122	48 V AC/DC	5 A	18 AWG	18"
ACS-2	599123	48 V AC/DC	5 A	18 AWG	72"
ACS-3	599124	125/250 V AC	11 A	18 AWG	72"

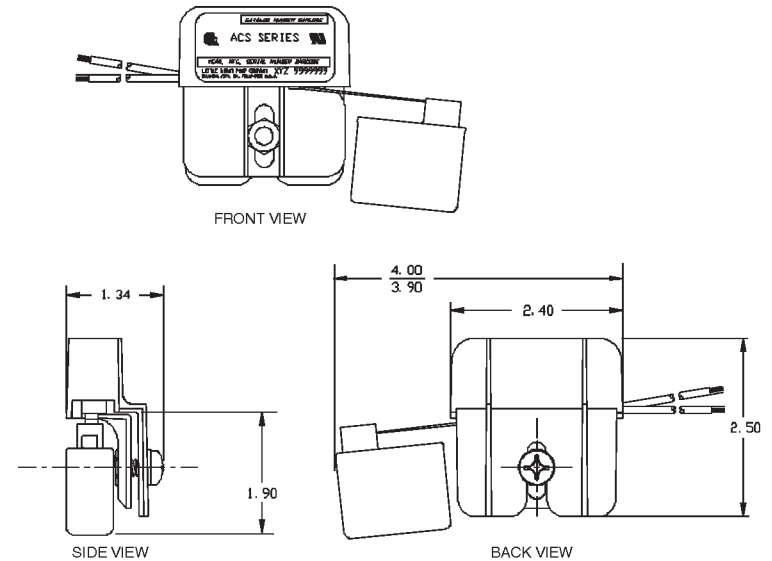


Figure 1

•INSTALLATION

•MAINTENANCE

•OPERATION

INTRODUCTION

The Little Giant Model Series ACS Auxiliary Condensate Switch is designed to be installed in the condensate drain pan of an air conditioning or refrigeration unit. The ACS when properly installed, will turn off the air conditioning or refrigeration unit if the condensate level in the condensate drain pan approaches overflow. The ACS is a SPDT switch in an ABS housing and is supplied with 18 AWG leads, a mounting screw, a sealing washer and a nut. The ACS may be wired in a "normally open" or "normally closed" position.

The Little Giant switches are carefully packaged, inspected and tested to insure safe operation and delivery. When you receive your switch, examine it carefully to determine that there are no parts missing or which may have been damaged or broken during shipment. If damage has occurred, make notation and notify and/or return to the firm from which you purchased the switch and they will assist you in the replacement or repair.

READ INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING TO INSTALL, OPERATE OR SERVICE THE LITTLE GIANT ACS. KNOW THE SWITCH APPLICATIONS, LIMITATIONS, AND POTENTIAL HAZARDS. PROTECT YOURSELF AND OTHERS BY OBSERVING ALL SAFETY INFORMATION. FAILURE TO COMPLY WITH INSTRUCTIONS COULD RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE! RETAIN INSTRUCTIONS FOR FUTURE REFERENCE.

SAFETY GUIDELINES



- DO NOT USE WITH FLAMMABLE OR EXPLOSIVE FLUIDS SUCH AS GASOLINE, FUEL OIL, KEROSENE, ETC. DO NOT USE IN EXPLOSIVE ATMOSPHERES. SWITCH SHOULD ONLY BE USED WITH WATER. (NOTE: THIS IS NOT A SUBMERSIBLE SWITCH).
- DO NOT HANDLE SWITCH WITH WET HANDS OR WHEN STANDING ON A WET OR DAMP SURFACE, OR IN WATER.
- DISCONNECT ALL ELECTRICAL SERVICE TO THE SWITCH BEFORE WORKING ON OR HANDLING THE UNIT.
- DO NOT CONNECT TO VOLTAGE AND/OR AMPERAGE ABOVE THAT INDICATED ON NAMEPLATE.
- DO NOT OPERATE UNLESS COMPLETELY ASSEMBLED.
- IN ANY INSTALLATION WHERE PROPERTY DAMAGE AND/OR PERSONAL INJURY MIGHT RESULT FROM AN INOPERATIVE SWITCH DUE TO POWER OUTAGES, OR ANY OTHER REASON, A BACKUP SYSTEM(S) AND/OR ALARM SHOULD BE USED.

INSTALLATION



- Refer to the air conditioning or refrigeration unit's Operating Manual during installation of the ACS switch.
- Disconnect power to the air conditioning or refrigeration unit, both main power and the low voltage thermostat circuit.
- All the switches are factory wired "normally closed". This configuration will open (break) an electrical circuit when switch is activated by high water level.
- If "normally open" configuration is required, remove the switch cover by sliding it up and off the switch housing. Carefully, remove the switch and change the lower lead wire from terminal marked "NC" to terminal marked "NO". Carefully, replace the switch and reinstall the switch cover. Test the operation of the switch to confirm "normally open" operation.
- Plug the drain hole of the condensate drain pan. Temporarily position the ACS in the desired location without the screw, nut or sealing washer so that the switch housing and switch cover are against the drain pan wall (refer to Figure 2). Start filling the drain pan with water until the float lifts up and activates the switch. Make sure that the water level does not approach or overflow the drain pan. There will need to be a sufficient gap (usually $\frac{3}{4}$ ") between the highest water level required to activate the switch and the top of the drain pan (see Figure 4). Confirm the float can travel its full range with no obstructions.
- Before removing the pre-assembled ACS, mark a position for the mounting hardware. Unplug the drain hole of the condensate drain pan and allow the water to drain out completely. Drill a $\frac{9}{32}$ " diameter hole for the mounting hardware to pass thru the drain pan. **The hole must be drilled above the highest water level** obtained during testing in step 5, and should line up with the slot on the switch cover. An appropriate sealant may be used in addition to the supplied sealing washer.
- Mount the ACS with the sealing washer located between the drain pan wall and the switch cover as shown in Figure 2.
- Connect the ACS leads in series with the low voltage thermostat circuit as specified in the unit's Operating Manual. Restore power to the air conditioning or refrigeration unit. Test the operation of the ACS by gently lifting the float until the switch is activated. Air conditioning or refrigeration unit should turn off.
- Place the "NOTICE" label included with the ACS on the outside of the access panel in a visible location.

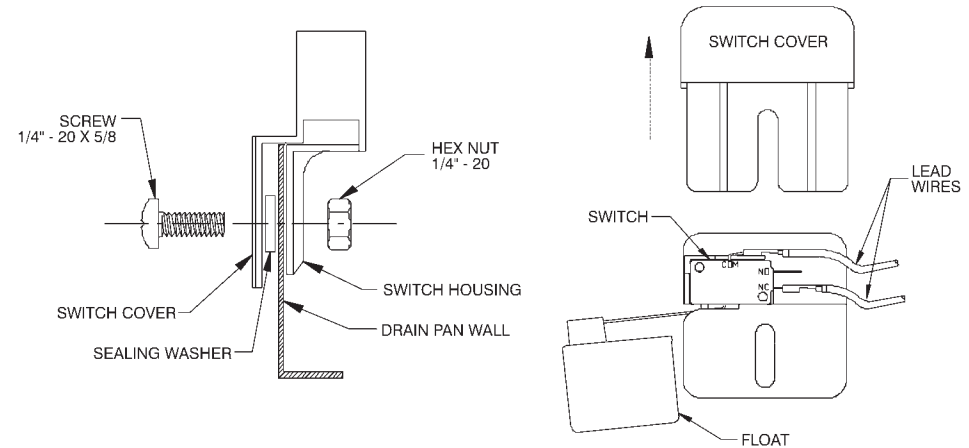


Figure 2

Figure 3

TYPICAL INSTALLATION

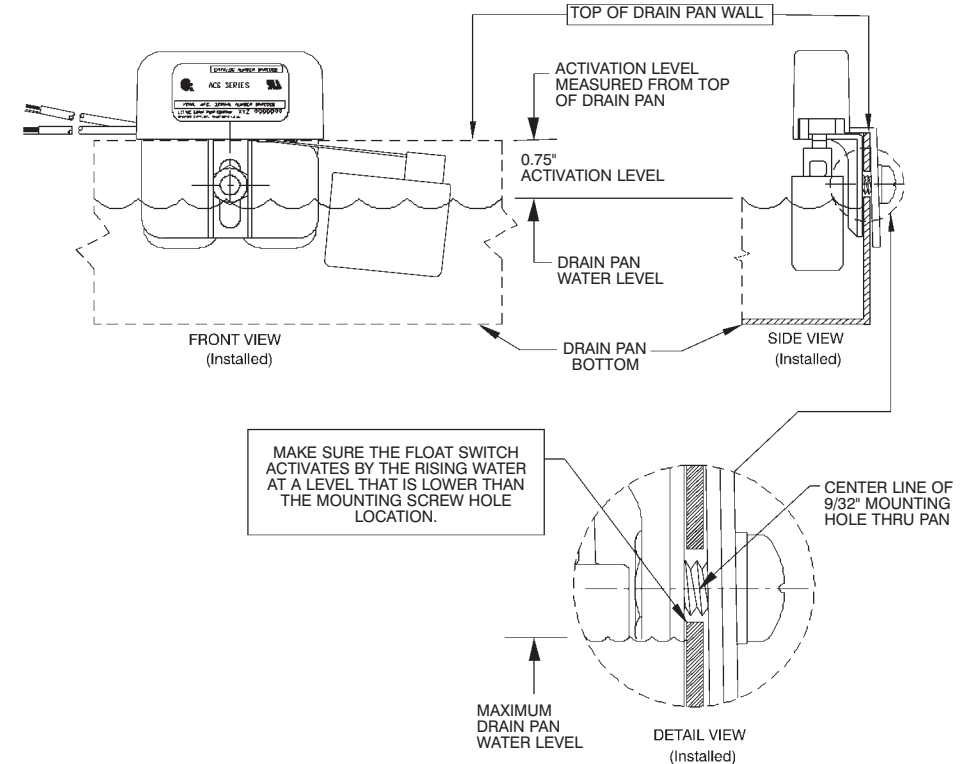


Figure 4