

ACBC-120 SERIES

Alarm Controller and Battery Charger for pump control panels



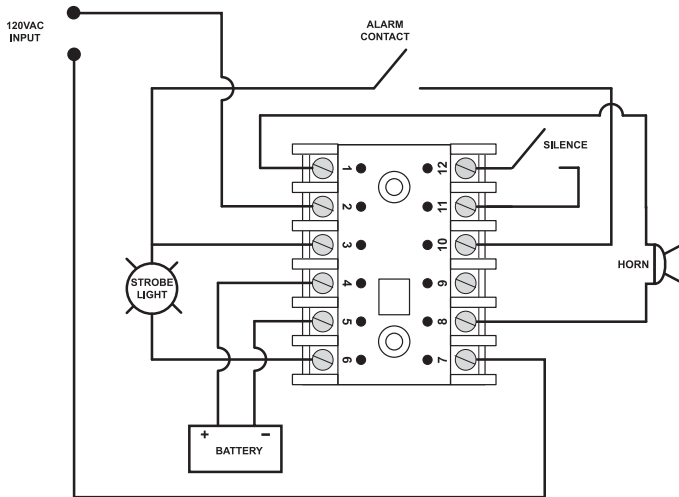
Description

The ACBC-120 Series is a dual purpose alarm controller/battery charging unit. When there is a loss of 120VAC power, the ACBC-120's primary function as an alarm controller activates. When this power loss occurs, input power is switched to a 12VDC, lead-acid, rechargeable backup battery and a 12VDC alarm consisting of a strobe light and/or a horn is activated. The horn follows a 2 second on/2 second off pattern with a "horn silence" option to turn the sound off. An LED indicator on the unit also signals that the device has entered the alarm mode.

When 120VAC input is present the alarm circuit can be tested and the unit's secondary function as a 12VDC backup battery charger is activated. In fast charge mode, the unit has the capability to source up to 100mA of charging current. However, the device normally charges at a current of 14mA in maintenance mode. The alarm circuit can be tested by pressing the "test" button located on the front of the unit or by activating an external switch via the "alarm contact" pin.

The device has the ability to signal low battery voltage if the voltage drops below 10.5VDC. The device can also detect if no battery is present or if the battery is connected backwards. In either of these cases, the ACBC-120 will signal a battery error and will not attempt to charge.

Wiring Diagram



For dimensional drawing see: Appendix, page 509, Figure 8.

Must use Model SD12-PC socket for UL Rating!

*Note: Manufacturer's recommended screw terminal torque for the SD Series Sockets is 12 in.-lbs.

Features & Benefits

FEATURES	BENEFITS
Controls 12VDC alarm circuit	Activates strobe and/or horn when power loss occurs
Selectable fast charge mode	Unit sources higher charging current up to 100mA (normal mode is 14mA)
Trip delay timer	Prevents nuisance tripping
Battery fault detection and reverse polarity protection	Signals if battery voltage drops below 10.5VDC and can detect if no battery is present or if the battery is connected backwards
LED indication	Visual indication of unit status or trip
Test button	Preventative maintenance check of the alarm circuit by pressing the test button on the unit or externally through alarm contact connection

Accessories



SD12-PC 12-pin Rectangle Socket
Rectangle Socket for the ACBC-120.
12-pin surface mountable.

Ordering Information

MODEL	LINE VOLTAGE	DESCRIPTION
ACBC-120	120VAC	Does not include SD12-PC socket for mounting
ACBC-120-SD	120VAC	Includes SD12-PC socket for mounting

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Specifications

Input Characteristics

Supply Voltage	120V +/-10%
AC Input Voltage	50/60Hz
Frequency	0.018A (max.) 0.003 (typical)
AC Input Current	2.4W (max.) fast charge current
AC Input Power	0.4W (typical) maint. charge current

Functional Characteristics

Battery Charging Characteristics	12V lead-acid rechargeable
Acceptable Battery Type	100mA +/-10%
Fast Charge Current	14mA +/-50%
Maintenance Charge Current	10.5V
Low Battery Alert Level	

Output Characteristics

Strobe Light Alarm Output	12VDC@1A (max.)
Horn Alarm Output	12VDC@1A (max.)

General Characteristics

Temperature Range	-40° to 60°C (-40° to 140°F)
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Standards Passed

Electrostatic Discharge (ESD)	IEC 61000-4-2, Level 3, 6kV contact, 8kV air
Radio Frequency, Radiated	150MHz, 10V/m
Fast Transient Burst	IEC 61000-4-4, Level 4, 4kV input lines; 4kV signal lines

Safety Marks

UL (SD12-PC socket required)	UL508 (File #E68520)
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Dimensions

H 44.45 mm (1.75"); **W** 60.325 mm (2.375");
D 104.775 mm (4.125") (with socket)

Weight

0.7 lb. (11.2 oz., 317.51 g)

Mounting Method

Surface mount with #8 or #10 screws (plug into SD12-PC socket)

Socket Available

Model SD12-PC (UL Rating 600V)
The 600V socket can be surface mounted