LIEBERT® AC4™
Product Specification/Installation Guide

VERTIV.

Liebert AC4™

The Liebert AC4 coordinates control of systems with redundant equipment, such as multiple thermal-management units or pumps. The AC4 can control stand-by functions and unit rotation, perform testing on stand-by devices, stage operation based on sensor-reading levels, and monitor alarm status of connected devices. The Liebert AC4 interfaces with any device that closes an electrical contact.

The AC4 tracks data in alarm and event logs. System configuration and data monitoring is accessible using a local, LCD interface.

FEATURES

- Custom configuration for specific applications
- Alarm and Event logs with time-and-date stamp
- Back-up and download configuration files
- User interface via RS232 or modem connection
- On-board audible alarm
- Configuration data and operating program permanently stored in nonvolatile Electrically Erasable Programmable Read Only Memory (EEPROM) for protection against power loss
- Real-time clock
- Status LEDs for verification and diagnostics

AC4 Enclosure

The AC4 enclosure includes a key lock for added security, is made of metal to protect from environmental exposure, and includes top and bottom access slots for cables and wiring.

Controller Input and Output

The controller supports the following points:

- 4 digital inputs
- 4 digital outputs
- 2 common-alarm outputs

Digital inputs are dry contacts. Digital outputs and common-alarm outputs are Form C contact relays. The common-alarm output is one output with two sets of contacts.
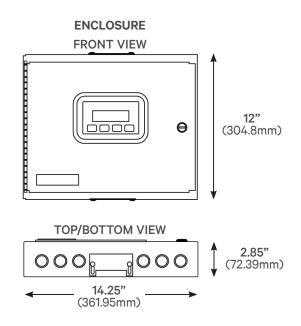
Point terminations on the control board are made using removable terminal blocks. The board includes and RS232 port.

Keypad Display

The AC4 user interface is a password-protected LCD display with a keypad providing stand-alone configuration and monitoring from the controller.

DIMENSIONS -
TOP, FRONT AND SIDE

ENCLOSURE

FRONT VIEW

12"
(304.8mm)

TOP/BOTTOM VIEW

2.85"
(72.39mm)

14.25"
(361.95mm)

WIRING SPECIFICATIONS

CONNECTION	MAXIMUM LENGTH, ft (m)	RATING	SUPPORTED TYPE
Digital Input	750 (225)	Dry-contact, 24 VDC, 10 mA	18 – 22 AWG stranded, unshielded (18 AWG recommended) Non-plenum: Belden 9740 Plenum: Belden 89740
Digital Output	**8 AWG** @3 A: 50 (15), @2 A: 100 (30), @1 A: 200 **20 AWG** @3 A: 40 (12), @2 A: 60 (18), @1 A: 100 (30) **22 AWG** @3 A: 25 (7), @2 A: 35 (10), @1 A: 74 (23)	24 VAC @ 3 A	
Common Alarm Output			
Communication RS232	50 (15)	N/A	Null modem cable
24-VAC Power (TB7)	1,000 (300)	N/A	18 – 22 AWG stranded, unshielded (18 AWG recommended) Non-plenum: Belden 8770 Plenum: Belden 88770

SPECIFICATIONS

Power Requirements	24 VAC ±10% of nominal, 60 Hz, 1.3 A, 30 VA
Dimensions, W x D x H	14-1/4 x 2-34 x 12 in. (361.95 x 69.85 x 304.8 m)
Weight (assembled)	7.68 lb (3.48 kg)
Enclosure Type	NEMA 1
Liquid-crystal Display	4-line, 20-character, backlit
Mounting Surface	Building wall or structural member
Ambient Operating Environment	32 to 104°F (0 to 40°C) 0% to 95% RH, non-condensing

PROCESSOR

Model	Motorola XC68HC812A4
Clock Speed	16 MHz
Total RAM	32 Kb
Total FLASH	4 M
Total EEPROM	4 K
A/D Resolution (Analog IN)	12 bit
Clock Type	Real-time
Clock Battery back-up type	Lithium (non-replaceable)
Clock Battery life	7 years, constant, no power

COMMUNICATION

Local	RS232

AGENCY LISTINGS

UL	UL 3121
CE	Yes
FCC Compliance	CFR47 Part 15

INPUT AND OUTPUT

Digital Inputs	(4) dry-contact closures, 24 VDC, 10 mA
Digital Outputs	(4) 24-VAC, 3-A
Common Alarm Outputs	(2) 24-VAC, 3-A

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