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PRODUCT INFORMATION

ALP400 ALARM SYSTEM

features

- Microprocessor based**
- Expandable configuration**
- Analog or digital inputs**
- Optional remote displays**
- Common new alarm output**
- Hardware watchdog monitor**
- Field programmable**
- Various configurations available**



description

The ALP400 is a microprocessor based alarm system based on an 8 point plug in module. Each 8 point board is a complete, stand alone, alarm unit with indicator lamps and all necessary electronic components, including a microprocessor, required for monitoring and annunciation alarm conditions. All calibration constants such as input polarity and delays are stored in FLASH (non volatile) memory within the microprocessor. This insures that each board is completely self contained.

The ALP400 alarm system can be expanded to monitor an almost unlimited number of points simply by using the required number of alarm boards. All boards are equipped with a CAN bus communications bus that connects to the back plane in the card cage. This provides a means of communicating with other devices such as remote mimic displays, group alarm repeaters etc. The CAN bus system also allows any point in the system to be calibrated while the card is installed.

The alarm system will accept either open-on-fault or close-on-fault external sensors. It can also be configured to work with monitored lines where the integrity of the interconnecting cable is a factor. Analog signals may also be read when the proper interface is installed.

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DESCRIPTION (CONT)

New alarms are indicated by a flashing lamp as well as an audible signal. Silencing a new alarm will remove the local audible signal as well as open the new alarm relay contacts feeding any external device (i.e. Siren or beacon) but will keep the alarm indication flashing and latched. Acknowledging a new alarm will perform all the silencing functions as well as removing the latched mode and changing the lamp display to a steady indication. Once an alarm condition has been acknowledged, correcting the fault will allow the lamp to turn off. The test switch checks to operation of the microprocessor as well as all lamp driver electronics and causes all lamps to turn on.

Each point may be assigned a delay value (Transient delay). This delay determines the period of time that the alarm condition must be continuously present before an alarm condition is indicated.

A point may be configured to enable a second point. An example would be to have one point set as a status point (i.e. Engine Running). This point would then be able to enable one or more additional points (i.e. Low Oil Pressure). All enabled points have an additional one-time delay (Initial or Enabling delay) that occurs only when the enabling point first becomes active. Using the example above, this would allow the oil pressure sufficient time to build on engine startup before the point is monitored. The transient delay only begins once the Initial delay timer has timed out. Both the enabling point and the enabled points must all be located on the same card.

There are a number of optional units that may be connected to the ALP400 alarm system. These include repeater panels, group alarm displays, remote data collectors and both LCD and CRT remote displays.

SPECIFICATIONS

Supply voltage.....	12-28 VDC (120VAC optional)
Number of alarm point inputs per card.....	8
Maximum number of points per card cage.....	72
Dry relay NEW ALARM output.....	Yes
Input configurations.....	digital, analog or monitored line
Alarm set points.....	2 (high and low limit)
Analog resolution.....	better than 0.5%
Point types.....	Alarm, enabling or status
Latching of new alarm conditions.....	Yes
Individual transient delays.....	Yes (0-255 seconds)
Individual initial delays.....	Yes (0-255 seconds)
Watchdog circuit.....	Yes
Board fail output line.....	Yes
Synchronized flash in multi-board systems.....	Yes
Control switches.....	Acknowledge, Silence and Test
External Communications.....	CAN bus
Optional group alarm repeater displays.....	Yes
Optional 2 line LCD display.....	Yes
Optional RS232 calibration port.....	Yes

All specifications are subject to change. Nortek Electronics reserves the right to modify the above product without notice in order to improve performance and other specifications.