

Analogue LHD Control Unit - Self Programmable AACUSP



Overview

The AACUSP is a self programmable, Analogue Linear Heat Detection (LHD) cable control unit. It provides monitoring for any of the AA range of LHD sensor cable, configuration of alarm and prealarm temperatures as well as enabling simple interface to a main fire alarm or BMS system.

Interface and Programming

The AACUSP provides LED indications as well as an LCD. Internal pushbuttons allow configuration without the need for a PC.

Pre-Alarm and Alarm thresholds can be set through simple menu options with no need for any graphs or nomograms. Initial set-up is done by measuring and entering the calibration resistance of the sensor cable removing the need to know the sensor cable length.

Volt free changeover contacts are provided inside the control unit for Pre-Alarm and Alarm signaling to a main fire alarm control panel or BMS system. A failsafe opt-isolated phototransistor fault output is also provided.

No user controls are provided on the control unit. An isolated input is provided enabling remote reset functionality.

Operation

As well as monitoring the LHD sensor cable for changes in temperature, the control unit also monitors for open and short circuit faults along the cable ensuring notification if the cable becomes damaged. It is fitted with its own internal temperature monitor and should the temperature within the controller enclosure reach 100°C, an alarm will be signalled.

Each control unit may have up to 500m of LHD sensor cable connected to it, acting as single detection zone. When the LHD sensor cable and the control unit are installed in different areas, a suitable interposing cable can be used to make the electrical connection between them.

Features

- UL521 and CE approval
- Up to 500m of sensor cable per zone
- Separate pre-alarm and alarm signals
- Easy programmable interface
- Enclosure temperature alarm
- IP65 rated enclosure
- No nomograms or charts required



Kidde Australia Pty Ltd

ABN 68 006 252 428

Building F, Unit 1
3-29 Birnie Avenue
Lidcombe NSW 2141
Australia
1800 654 435

www.kidde.com.au

©2025 Kidde, All rights reserved.

Technical Specifications

Operating Voltage	20-28VDC
Current consumption	
Quiescent	<70mA
Fault	<70mA
Pre-Alarm	<80mA
Alarm	<80mA
Pre-alarm and alarm	<100mA
Outputs	
Pre-Alarm (Form C Relay resistive load)	2A @ 30VDC / 0.25A @ 250VAC (62.5VA)
Alarm (Form C Relay resistive load)	2A @ 30VDC / 0.25A @ 250VAC (62.5VA)
Fault (Opto-isolated phototransistor output) Max.	50V @ 20mA
Inputs	
Remote reset (isolated) 5s pulse	20 - 28VDC
Zone length	30.5m to 500m
Mechanical	
Material	Polycarbonate
Colour	Light grey
Weight	804 g
Dimensions (W x H x D)	182mm x 180mm x 90mm
Environmental	
Operating temperature (max)	0 to ±50°C
Relative humidity	0% to 95% (Max 75% RH for <75 m cable & 54°C alarm setting)
IP rating	IP66
IK rating	IK08

Ordering Information

Part Number	Description
AACUSP	Alarmline II Analogue LHD Control Unit - Self Programmable