



ELSA CONTROL PANEL 3L-AP

3L-AP is a simple and easy to install complete monitoring system to detect early liquid leakage. Once leak is detected, it responds within a few seconds and provide liquid leakage location accurately.

GENERAL FEATURES:

- Maximum accumulated length of sensing cable : 200m (Note: 192m for 4 – 20mA interface)
- Maximum accumulated length of jumper cable : 300m
- Precision to locate leak location : +/- 1 m or +/- 0.5%
- Display : LCD with backlight - 2 x 14 characters
(Blue background with white characters)
- Sound Alarm : 90 dB max. buzzer with silencing button
- System Reset : One single push button for testing/resetting the system
(hold down buzzer button for 6 sec)
- Failsafe Operation : Ability to operate in loop installation: ability to detect/locate liquid leakage during cable break
- Time to detect Leak/Cablebreak : 4 seconds typical
- Liquid leak detection data : Typically 20 mm in length of liquid (such as tap water)
in full contact with sensing cable, leak sensitivity is adjustable
- Multi-leak detection and location capability
- Modbus TCP (ability to provide world-wide remote supervision through Internet connection) as optional
- Remote supervision by RS-485 Modbus as optional
- Analog output 4 – 20mA interface as optional
- ASIC-based digital location principle (patent pending) with inherent temperature stability, zero-drift and very low power consumption

ENVIRONMENTAL RATINGS

Operating temperature : -10 to 50°C (indoor installation only)
Storage temperature : -20 to 70°C
Humidity : 5% to 95% non-condensing

POWER REQUIREMENTS

Power supply : 230 +/- 15% VAC, 50/60 Hz
Optional input : 115 VAC/50-60 Hz or 12 to 30 VAC/DC power input
Power consumption : 3.5 VA/3 W maximum

POWER RELAYS SWITCHING CHARACTERISTICS

Cable break/power failure by contact : Operation – SPDT
(1 relay) Switching current – 3 A at 250 VAC, 5A at 30 VDC

Liquid leakage dry contact : Operation – SPDT
(2 relays) Switching current – 5 A at 250 VAC, 7A at 30 VDC

SERIAL COMMUNICATION INTERFACE

Physical support : Two-wire RS485, ESD and surge protected as per IEC 61000-4-5
Protocol : Modbus
Optional Modbus/TCP output with 10/100Mbps Ethernet and RJ-45 connector

ANALOG OUTPUT

Physical support : 4 to 20 mA opto-isolated interface
Voltage range : 9 to 36 VDC overvoltage protected
Additional information : Two-wire opto-isolated analog current interface with galvanic separation of 2.5 kV
Nominal current : NORMAL – 4 mA
CABLEBREAK – 20 mA
LEAK – 6 mA plus 0.0625 mA per meter of leak location

COMPLIANCE TO INTERNATIONAL STANDARDS

EMC emission : IEC61000-6-3(2001) –
Electromagnetic compatibility
Generic emission standard for residential,
commercial and light industrial environment

EMC immunity : IEC61000-6-1(2001) –
Electromagnetic compatibility
Generic immunity standard for residential,
commercial and light industrial
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3L-AP PANEL (MOUNTING HOLE DIMENSIONS)

