

EARLY WARNING LIQUID LEAK LOCATING SYSTEM

DESCRIPTION	TECHNICAL DATA
<u>1.General Features</u>	
Made	ELSA
Model	3L-SP/AP
Dimension	146mm(w)x222mm(L)x55mm(H)
Panel Mounting Hole dimension	158.7mm(L)x 91mm(w)
Precision to locate leak location	+/-1m or +/-0.5%
Display	LCD with backlight -4 x 20 characters
Sound Alarm	90dB max. buzzer with silencing button
System reset	One Single Push Button for Testing/Resetting the system (hold down button for 6 secs)
Failsafe operation	Ability to operate in loop installation, ability to detect / locate liquid leakage during cable break
Time to detect leak/cablebreak	18 seconds typical
Liquid leak detection data	Typically 20mm in length of liquid (e.g tap water) in full contact with sensing cable, leak sensitivity is adjustable
Remote Supervision	By RS485 Modbus and/or analog output 4 - 20mA interface
Simultaneous Supervision	Up to 15 panels through Modbus by BMS or PC software
<u>2.Environment Ratings</u>	
Operating temperature	0 °C to 40 °C (indoor installation only)
Storage temperature	-20 to 70 degree C
Humidity	5% to 95% non-condensing
<u>3. Power Requirement</u>	
Power Supply	100-240 +/- 15% VAC, 50/60 Hz
Optional input	12 to 30 VAC/DC power input
Power Consumption	5 VA/4 W maximum

<u>4. Power Relays Switching characteristics</u>	
Cable break/power failure dry contact	Operation - SPDT, Switching current – 0.5 A at 250 VAC, 1A at 30 VDC
Liquid leakage dry contact	Operation - SPDT, Switching current – 0.5 A at 250 VAC, 1A at 30 VDC
<u>5. Serial Communication Interface</u>	
Physical support	RS485-two-wire, ESD and surge protected as per IEC 61000-4-2
Protocol	Modbus
<u>6. Compliance to International Standards</u>	
EMC emission	IEC 61000-6-3(2001)- Electromagnetic compatibility, General emission standard for residential, commercial and light industrial environment
EMC immunity	IEC 61000-6-1(2001)-Electromagnetic compatibility, General immunity standard for residential, commercial and light industrial environment
<u>8. Characteristic and Performance of ELSA sensing cable -3L-LS</u>	
Cable diameter	6.5mm avg
Continuity wires	White and Red insulated with flame-retardant polymer
Sensing Wires	2x Black wires semi-conductive polymer
Carrier	Flame-retardant polymer material with greenish color in high visibility
Fire resistance	Non-flame propagating and self-extinguishing