



Description

The EF-LASD is a professional, high-sensitivity air sampling smoke detector, designed for the protection of risks requiring class A, B or C design sensitivity. The unit is rugged, compact, weatherproof and highly versatile, enabling it to be used for both general area coverage and localised protection of equipment cabinets or ductwork. Areas which are subject to high levels of dust, low temperature or water ingress can also be accommodated using optional harsh environment filters, water traps and pipework heaters.

EF-LASD is available in 1 or 2 pipe versions, each with 2 sets of alarm and 1 set of fault contacts per channel. Alarm contacts are programmable across the dynamic sensitivity range of 0.06 to 3.33% per meter in 9 stages. The internal fan is both powerful and quiet, allowing pipe lengths of up to 100m (25mm of 3/4" tube) per channel to be installed.

The EF-LASD requires no special tools or software to configure and can be programmed and interrogated externally by a code protected membrane keypad. A PC utility, Configtracer, is also available for configuration and diagnostics, which is accessed via an external USB port.

System Design

Pipe configurations can be installed following simple pre-engineered guidelines or developed and verified using Aspire2 PC software.

Operation

The EF-LASD utilises high sensitivity laser point detectors in an aspirated enclosure. Each detector monitors the air from separate sampling pipes, which allows for a large area of coverage using sampling holes in place of traditional point detectors.

Air is drawn from the protected area from one or two perforated 25mm pipes. A powerful fan together with sophisticated air-flow monitoring and control circuitry ensures that transport delays are minimised and air-flow is kept within working limits. System status and flow control is continuously displayed and internal power management ensures that operating current is kept to a minimum, allowing superior performance and optimisation of external power supply and standby battery resources.

Features

- EN54-20 approved
- Economical, single or dual area aspirated 'fire' detection
- 1 or 2 sampling pipes - each up to 100m in length
- Coverage up to 1,500m at class C
- 3 users configurable alarm levels per channel
- Integral Display and Programmer
- Field serviceable and/or replaceable laser detection element
- Easy to install, commission and maintain
- Low operating current
- Rugged IP65 enclosure
- Single, redundant or coincidence detection strategies

Mechanical	
Sampling Pipe Inlets	1 or 2 (EF-LASD1 & EF-LASD2 respectively)
Detectors	1 or 2, 0.06%/m Laser Point Detectors (fitted)
Sampling Holes (Max)	18 class C, 6 class B, 3 class A
Sampling Pipe Length	100m (max) per pipe. For VdS approved installations, consult manual
Sampling Pipe Diameter	1 or 2 x 25mm or 3/4" (27mm) nominal bore
Exhaust Air Pipe Outlet	1 (25mm or 3/4")
Electrical	
Supply Voltage	Nominal 24Vdc (18 to 30Vdc)
Operating Current	350mA max (fan speed dependant)
Sensitivity	0.06 - 3.33% obscuration per metre, adjustable in 9 stages
Alarm Levels	Programmable Alert, Fire 1, Fire 2 (per channel)
Operating Modes	Single detector, redundancy, double-knock
Settings	Isolate, latching, non-latching, operating mode, reset
Programming/set-up	Integral control switch's and/or PC via USB
Event Log	1000 Events
Fault Monitoring	Power failure (common), flow fault per channel, detector fault
Relay Outputs	2 alarm & 1 fault per channel (changeover contacts)
Cable Terminals	Removable 2.0mm maximum
Display	5 common status plus 10 segment LED bargraph per channel
User Controls	External weatherproof membrane - Code protected
Flow Monitoring	Thermal, with adjustable high/low and sensitivity limits
Environmental	
Operating Temperature	-10 to +50°C
Operating Humidity	10 to 95% (non condensing)
IP Rating	IP65 with exhaust pipe fitted and cable entries sealed
General	
Filtration (Standard Internal)	Replaceable dust particle. Harsh environment filter also available
Filtration (External)	Optional, external harsh environment filter
Housing Material	ABS with tamper-proof locking mechanism
Mounting	Upright, horizontal or inverted
Weight	2.7kg
Dimension (W x H x D)	259 x 184 x 166mm
Equipment Approvals	EN54-20, CE, VdS, CPD
Ordering Information	
EF-LASD1, 1 x Inlet Pipe/Area	82-105
EF-LASD2, 2 x Inlet Pipe/Area	82-110
Replacement Internal Filter	02-FL53
Spare Cover Key	20-LA0015-01

