RED LINE PRIME 1 – 15/30Jwin

HYDROCARBON INFRA RED GAS SENSOR

Safe Area Detector Head / offering local control and display

Specification Sheet C1811A v1
Doc No. 296 D11C

- Robust and weatherproof
- CANbus, 4~20mA output
- Addressable or stand alone
- Data logging
- Adjustments – non intrusive magnets/manual/hyperterminal
- Back lit alpha numeric full status display
- Optional 3 selectable alarm relays
- Optional sounder/relay
- Optional pumped aspirated sensor

The Red Line Prime sensor uses proven non-dispersive single beam dual-wave length infrared principles to detect and monitor the presence of gases. This non-poisoning sensing technique relies on the target gas having a unique well-defined absorption signature. This is used to identify the presence of the target gas and is highly specific. Using a suitable infrared source, an analysis of the optical absorption through the gas allows the concentration of the target gas to be determined. All sensor driving is internal to the transmitter and full fault monitoring of the sensor and transmitter is continuous.

General Data

This information relates to the device operating continuously.

Carbon Dioxide Sensor

Operation – continuous diffusion	NDIR (dual wave-length)
Measuring Range	0~100% LEL 0~100% Vol
Accuracy	± 5% F.S.D
Warm up time to zero	< 30 seconds
Response time to target gas T90	< 30 seconds
Long term zero drift	± 5% F.S.D

Indicators

Alarm – Red L.E.D
Fault / Inhibit – Amber L.E.D

Display

2 line alpha numeric back lit status display:
– gas type
– concentration units
– alarm levels
– alarm status (low/high/over range/fault)
– sensor ID

Relays 1,2,3 (optional)

Selectable – Low, High, Overrange, Fault
Default settings:
1 Low alarm
2 High alarm
3 Fault alarm
Rating 3A @30vDC S.P.C.O
Inhibit option during servicing

Sounder/Relay (optional)

Single relay – low/high alarm selectable.
S.P.C.O 3A @30vDC
Sounder – not less than 85dB @ 30cm

ELECTRICAL DATA

Input voltage – 3 wire device
18 to 35V DC – 24v DC nominal
(polarity protected)

Output
3 wire – 4~20mA (selectable as sink or source)
4 wire –CANbus addressable

Fail signal
4~20mA reduced to 2mA

Maximum current consumption
130mA

Maximum loop resistance in source mode
500R

Resolution
< 2% of range

Output resolution
0.02mA

Logging
Intervals – variable time
Rollover/stop
Storage – 2880 readings

ENVIRONMENTAL DATA
IP64 + Water Shield IP65

Operating Conditions
0 ~ 99% RH (non-condensing)
-20s ~ +55ºC

Storage Conditions
0~99% RH non-condensing
-20 ~ +60ºC

JUNCTION BOX
Type – 15/30J safe area use only
15J – shallow box (S)
30J – deep box (D)

Ingress Protection
IP65

Material
ABS Flame retardant FR40
Lid Screws M4SS

Finish
Signal White RAL 9003

Weight
380gms

Entries
Rear 5-20mm knock outs
Sides, Top, Bottom – not specified

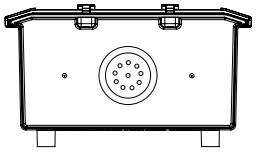
Mounting
Standoffs – M4 or No 8 screws
Drill at (C) when standoffs removed
Conduit box – drill at (A) 4.5mm
Surface mount box – drill at (B) 4.5mm

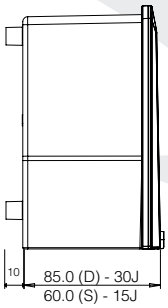
EU Design No.
01359723-00

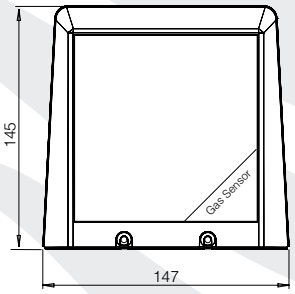
Accessories – Optional
Collector Cone + Universal Fitting
Flow Block
Duct Mount Kit
Detector Head Weather Shield
Aspirated Sensor (pump)

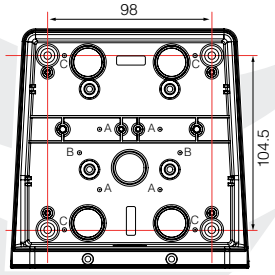
TRANSMITTER TECHNICAL DATA

Documents
Prime – C1884









Cover Lid Removed / Mounting Points

E: sales@gds–technologies.co.uk T: +44 (0)113 286 0166
GDS TECHNOLOGIES LTD | FUSION POINT | ASH LANE | GARFORTH | LEEDS | LS25 2GA | UK
www.gds–technologies.co.uk