Process Solutions You Can Trust





JFID-ES I JFID-PT THC Total Hydrocarbon Analyzer



APPLICATION

 Continuous real-time analysis of Total Hydrocarbon THC or Methane CH₄ as an option

BENEFITS

- · Fast response time
- · Low maintenance
- Relays for alarms, events and diagnostics
- · Independent of pressure fluctuation
- · Accurate and reliable
- · Adjustable ranges

FEATURES

- Proven, heated FID (Flame Ionization Detector)
- Display in ppm or mg/m³
- · Automatic start-up and flame ignition
- · Automatic calibration and span check
- · Electronic flow control
- Built-in combustion air and zero air
- · Complete diagnostics of all utilities

















JCT Analysentechnik

JFID-ES THC | JFID-PT THC Process Solutions You Can Trust

TECHNICAL DATA

| Model | JFID-ES THC | JFID-PT THC |
|-------------|-------------------|-------------|
| Description | 19" rack mounting | portable |

Operation

| • | | |
|-----------------------|---|-------------------------------------|
| Vacuum system | eductor or membrane pump | membrane pump |
| Number of channels | | 1 |
| Measurement range | free selectable | e, user defineable |
| THC | 0 – 1 mg org. C/m³ up | to 100 000 mg org. C/m ³ |
| Detection limit | ±5 % of mea | surement range |
| Linearity | < 1 % of mo | easured value |
| Zero noise | max. 2% from | measuring range |
| Span noise | max. 2 % from | measuring range |
| Selectable units | ppm, mg/m³ | |
| Signal output | 0/4 to 20 mA | |
| Ambient temperature | with eductor: -5° to 40 °C with membrane pump: 5° to 40 °C | 5° to 40 °C |
| Response time (T90) | < | 1 s |
| Sample gas flow | with eductor: 25 NI/h or 90 NI/h with membrane pump: 25 NI/h | 25 NI/h |
| Sample gas pressure | with eductor: 800 to 1.600 mbara with membrane pump: 800 to 1.200 mbara | 800 to 1.200 mbara |
| Air humidity | < 90 % rel. humidity, 20 °C | C; < 50 % rel. humidity, 40 °C |
| Geographical altitude | 0 to 1.500 m above sea level | |

Construction

| Dimensions over all (W x H x D) [mm] | with eductor: 483 x 135 x 401 with membrane pump: 445 x 135 x 401 | 380 x 155 x 380 with bottle holder: 483 x 290 x 510 |
|--------------------------------------|--|--|
| Weight | with eductor: approx. 10 kg with membrane pump: approx. 11 kg | approx. 11 kg with bottle holder: approx. 15 kg |
| Detector temperature | adjustable up to 200 °C | adjustable up to 170 °C |
| Catalyst temperature | 400 °C for combu | istion air and zero air |

Utilities

| Instrument air | with eductor: 3 to 3,9 barg / < 2 Nm³/h, quality to ISO 8573-1, 1.2.1 with membrane pump: air not needed | air not needed |
|-------------------|--|------------------------------|
| Fuel gas | hydrogen 0,7 to 1 barg | g / < 80 ml/min, quality 5.0 |
| Combustion air | with internal catalyst or optional synthetic air 1 to 1,5 barg < 30 NI/h | with internal catalyst |
| Calibration gas | 2 to 2,5 barg / < 130 NI/h during calibration concentration 60 % to 80 % of the measurement range | |
| Zero gas | with internal catalyst or optional nitrogen 2 to 2,5 barg 1 < 130 Nl/h quality 5.0 | with internal catalyst |
| Protection class | | P20 |
| Approvals / Signs | | CE |

Electrics

| Power supply | 115 V ± 10 % or 230 V ± 10 %; 48 Hz to 62 Hz |
|-------------------|--|
| Power consumption | < 500 W |

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ORDER CODES

| Part No. | Description |
|------------|--|
| 207.000000 | JFID-ES 19" plug-in module |
| 207.030000 | JFID-PT/LT portable |
| 207.030001 | JFID-PT/LT portable 84TE |
| 207.030002 | JFID-PT portable with gas bottle holder |
| 207.030003 | JFID-PT portable 84TE with gas bottle holder |

Options

| 407.950033 | Status & alarm board |
|------------|---|
| 407.020047 | Conversion kit zero gas external |
| 407.010076 | Gas connection fitting set SS |
| 407.010077 | Gas connection fitting set SS and aluminum |
| 407.020048 | Conversion kit for external zero air and synthetic air for combustion air |
| 407.020049 | Retrofit kit active carbon |
| 207.900000 | Data storage for measurement values and status report 250 A4 pages |
| 407.040190 | Air pressure regulator with fine filter assembly |
| 407.040182 | Gas cylinder pressure regulator for hydrogen |
| 407.040183 | Gas cylinder pressure regulator for calibration gas |
| 407.040184 | Gas cylinder pressure regulator for nitrogen |
| DAS 2 | Instrument air purifier |





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