



Explosion protection

Marking ATEX	II 2G IIC T4 Gb
Marking	
NEC 500	Class I, Div. 2, Group B,C, or D, T3 or T4
NEC 505	Class I, Zone 1, with Chiller: AEx d e ib mb px IIB+H2 T3 or T4 without Chiller: AEx d e ib px IIB+H2 T4
CEC section 18	with Chiller: Ex d e ib mb px IIB+H2 T3 or T4 without Chiller: Ex d e ib px IIB+H2 T4
Certification	pending
Other approvals and certificates, see www.bartec.de	

Technical data

Technology	distillation
Method	correlates with: ASTM D86, DIN EN ISO 3405, IP 123
Measuring range	+20 °C to +400 °C (+68 °F to +752 °F)
Repeatability	≤ DIN EN/ASTM D86
Reproducibility	≤ DIN EN/ASTM D86
Measuring cycle	discontinuous, cycle time approx. 10 min for diesel cycle time approx. 15 min for gasoline
Product streams	2 x sample, 1 x validation

Electrical data

Nominal voltage	230 VAC ± 10 %, 1 phase; 50 Hz/60 Hz or 110 VAC +/- 10 %, 1 phase; 50 Hz/60 Hz with FKS 1,4-KWS 400 VAC +/- 10 %; 3 phase; 50 Hz/60 Hz other ratings on request
Maximum power consumption	approx. 700 W (analyzer only) incl. chiller for liquids: approx. 1600 W
Protection class	IP 54
Ambient temperature	operation +5 °C to +40 °C (+41 °F to +104 °F) storage -20 °C to +60 °C (-4 °F to +140 °F)
Ambient humidity	operation: 5 to 80 % , relative humidity at +25 °C, non- corrosive storage: 5 to 80 % , relative humidity at +25 °C, non- corrosive

Sample

Quality	filtered 50 µm, no suspended water, bubble-free
Consumption	20 to 40 l/h
Pressure at inlet	1 to 3 bar (14.5 to 43 psi)
Temperature at inlet	max. +50 °C (+122 °F)
Temperature change	max. 1K/min.
Viscosity	max. 37 cSt at inlet temperature

Utilities

Instrument air

Consumption - Purge	8 Nm ³ /h while purging Ex p (12 mins) approx. 1 Nm ³ /h (normal operation) approx. 1.5 Nm ³ /h at 6 bar, optional nitrogen generator is used approx. 0.1 Nm ³ /h for purging Ex d (for gasoline application) 5 bis 50 Nm ³ /h optional "Vortex"
Pressure at inlet	5 to 7 bar (72 to 101.5 psi)
Quality	humidity class 2 or better acc. to ISO8573.1
Coolant	Plant water or integrated FKS 1.4 KWS
Consumption	use of plant water: 20 to 40 l/h
Pressure at inlet	plant water: 1 to 3 bar
Temperature	plant water: -5 °C to +40 °C; ± 0.5 K
Quality	filtered 50 µm, pH 6 to 8
Analog outputs	max. 8 outputs 4 to 20 mA, (max. resistance 1000 Ω), active isolated on request
Analog inputs	4 to 20 mA, 160 Ω
Digital outputs	DC 24 V; max. 0.5 A; sum alarm Ready/Come-Read, Power identification Validation identification, Analysis Cycle Active
Digital inputs (max. 3 configurable inputs)	high: DC 15 to 28 V; low: DC 0 to 4 V Reset, Inhibit, Stream request, Validation request, Decoking request, Automatic stream switching, Electrical data of signal outputs and inputs
Control unit	Central control unit Industrial PC Operating system Windows 7 Control software PACS HMI TFT display (multi-touch)
Display	TFT display with touch function, 1024 x 768 pixel
Keyboard	virtual keyboard, controlled via TFT display with touch function
Tube fittings	Swagelok® 6 mm/12 mm/18 mm other fittings on request
Vent/Drain	open to atmosphere
Dimensions (W x H x D)	approx. 1150 x 1900 x 710 mm
Weight	approx. 300 kg approx. 450 kg (incl. FKS 1.4-KWS)
Space requirements	right: 500 mm, left: 500 mm
MODBUS interface	MODBUS RTU/TCP (RS485, RS422, VDSL/FO (IS) MODBUS/TCP via FOC is
Remote access	remote software with modem, ISDN, Ethernet via VDSL modem FO (FS)
Sample line connections	metric (6 mm/12 mm/18 mm) Typ 6 mm or imperial (¼", ½", ¾") Typ. ¼"

Important notice: rapidist-4 is subject to continuous product improvement, specifications are preliminary and may be subject to change without notice. If your technical data do not comply with existing data, please contact us for technical clarification.