

Safety Instructions

Liquiline System CA80COD

Colorimetric analyzer for chemical oxygen demand

CHN Ex db eb ib pxb IIC T4 Gb



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Colorimetric analyzer for chemical oxygen demand

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Related documentation

This document is an integral part of the Operating instructions:



Operating Instructions Liquiline System CA80COD, BA01354C

Supplementary documentation

Competence Brochure CP00021Z

- Explosion Protection: Guidelines and General Principles
- www.endress.com

Certificates and declarations**Certificate number**

Certificates and declarations of conformity are available on: www.endress.com/download. The number of the NEPSI certificate that applies to the product can be found on the nameplate.

Certification body

Shanghai Inspection and Testing Institute of Instruments and Automation Systems Co., Ltd. (SITIAS)

Identification

The following information on the device can be found on the nameplate:

- Manufacturer identification
- Product designation
- Serial number
- Ambient conditions
- Input and output values
- Safety information and warnings
- Ex markings
- Certification information
- Warnings

- Compare the information on the nameplate with the order.

Type code

Type	Version							
CA80COD	- N6	**	*	*	*	*	*	+
	CHN Ex db eb ib pxb IIC T4 Gb	No Ex relevance						

Safety instructions

- The analyzer is suitable for use in hazardous areas. It meets the requirements of Chinese explosion protection regulations.
- The analyzer is an electrical apparatus with pressurized enclosures for use in hazardous areas, spec. classified as Zone 1 or 2.
- The analyzer provides Equipment Protection Level Gb.
- The normal working pressure of the pressurized cabinet is 0.002 to 0.005 bar above atmospheric pressure.
- The pressure range of the air supply source is 3 to 5 bar.
- The safety valve is equipped with a flow sensor comparison port, the comparison port monitors the air change flow of the positive pressure cavity, the pressurized system is equipped with a display screen, the system can calculate the air exchange time of 5 times the volume of the cabinet volume according to the dynamic flow value of the air exchange port, and the positive pressure system can set the minimum purge flow alarm value.
- When the entry port is actually used, it is necessary to be equipped with an explosion-proof cable clamping and sealing joint that is applicable to the explosion-proof level of this product and has obtained the CCC certificate.
- The spacing of the fixing bolts on the cover plate should not be more than 600 mm to ensure the mechanical strength of the cabinet, and the fixing bolts cannot be opened without tools.

- ▶ This product does not have a built-in system with a release source.
- ▶ The internal protective gas is clean air. Its temperature must not exceed 40 °C.
- ▶ The minimum air exchange time is 20 min, and the minimum air exchange flow rate is 10 m³/h. The minimum flow rate of protective gas is 2 m³/h and the maximum leakage flow rate is 0.7 m³/h.
- ▶ Metal enclosures must be connected to the local equipotential bonding system at the point of installation.
- ▶ Only genuine spare parts may be used for maintenance and repair work on the device. This work may only be carried out by service staff or specially trained and authorized personnel.
- ▶ The users shall not replace the parts of this product by themselves, and shall work with the product manufacturer to solve the fault in operation to prevent the occurrence of damage.
- ▶ The Ex P cabinet should be effectively grounded when the product is in use.
- ▶ On-site use and maintenance must strictly abide by the warning of "it is strictly forbidden to open the door with power on" which is stated on the product label.
- ▶ Installation, electrical connection, commissioning, inspection, maintenance and repair may only be performed by qualified specialists trained to work on explosion protected devices in accordance with the applicable standards, e.g. GB 50257, GB/T 3836.13, GB/T 3836.15, GB/T 3836.16 and GB/T 3836.18.
- ▶ Compliance with the instructions in the Operating Instructions and all of the technical data of the device is mandatory.
- ▶ The device shall be installed in a way to minimize the risk of electrostatic discharge. For ESD safety reasons the transmitter is marked with a warning label. Following content is stated in the product manual: "Beware of electrostatic charging. Device must be cleaned using a wetted cloth."
- ▶ In case of repair work, when the cable management module has been dismantled, attention shall be applied to fix the screw to the earthing bolt when reassembling.
- ▶ To ensure that the explosion protection of the device is maintained, the operator must not change the configuration. Any modification may affect safety.
- ▶ The cables must be installed such that they are fixed in place. Adequate strain relief must be ensured.
- ▶ Make sure that the cable glands are secured to prevent from working loose.
- ▶ Observe the instructions of the NEPSI certificate, available via the website of the product: www.endress.com/download.

Temperature table

Sensor	T Class	T _a (ambient)	
		Min.	Max.
CA80COD-N6*****+*	T4	-5 °C	40 °C

Connection

Voltage input

Type of voltage	AC
Minimum supply voltage	198 V
Maximum supply voltage	242 V
Nominal supply voltage	220 V

Current

Maximum 10 A

Galvanic isolation

The device electronic is fully isolated from earthed metal parts up to a test voltage of 1500 VAC rms.

Qualified cable glands

Cable gland	Clamping area, permitted cable diameter
M20 x 1.5	9 to 15 mm
Ø6 Threading joints	6 mm
Ø1/8 in Threading joints	3.2 mm



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