Dual Sampler Controller, type 6970-30

- **The dual sampler controller is a control unit for a sample collection system.**
- **The high performance device, which is equipped with RS232 P-Net converter and a microprocessor-controlled data processing unit, has a robust die-cast aluminium housing and is designed for heavy-duty use on tankers.**

Description

Dual sampler motor controller system for the bottling of representative milk samples, including set quantities and the conditioned measurements of the flow level meter.

Connection of two RS232 devices to the P-Net fieldbus.

Function

Processing of default data during the round of sampling.

Recording and conditioning of the output signals on the flow level meter.

Recording and conditioning of the output signals on a milk sensor with temperature measurement.

Data exchange with two RS232 terminals.

Application

Stationary dual or quad sample collection system

Dual or quad sample collection system directly on the milk lorry.

Features

- **Microprocessor-controlled sampling.**
- **Recording and processing of measurements from the flow level meter and the temperature sensor.**
- **Data exchange with MAK systems via fieldbus (P-NET).**
- **Dual sampler motor drive.**
- **Connection option for two RS232 tag readers.**

BARTEC BENKE GmbH ● Schulstraße 30 ● D-94239 Gotteszell ● Phone +49 (0) 9929 301-0 ● Fax 301-112
E-mail: gotteszell@bartec-benke.de ● Internet: www.bartec-benke.de

Technical data	
Device-specific data	
Nominal operating temperature	23 ± 2 °C
Electrical data	
Voltage rating electronic	DC 24 V ± 5%, fine-wire fuse 3 A
Operating voltage I/O and stepper motors	On-board power supply DC min. 23 V max. 30 V, fine-wire fuse 6.3 A
Power consumption electronic	165 mA no load
Power consumption I/O and stepper motors	100 mA no stepper motors, no load
Required power supply	DC 24 V ± 5%, > 200 W
Interface 1	
System bus interface	RS485 P-Net 76800 Bit/sec
Interface 2	
RS 232	RxD, TxD, CTS, RTS, 9.6 Kbaud, galvanic separation
Output for auxiliary energy	DC 24 V, max. 150 mA, fuse protection 300 mA
Interface 3	
RS 232	RxD, TxD, CTS, RTS, 9.6 Kbaud, galvanic separation
Output for auxiliary energy	DC 24 V, max. 150 mA, fuse protection 300 mA
Outputs	
Number of channels	2
Circuit	High side solid state (MOSFET)
Voltage	DC 24 V on-board power supply
Current	Max. 1 A per output
R_{ON}	Approx. 200 mΩ
Digital inputs	
Number	2, galvanic isolation with optocoupler (3750 Vrms)
Input impedance	Approx. 3 kΩ
Voltage	DC 24 V on-board power supply
Circuit	Bipolar, solid state
Milk sensor input	
Pt100	Pt100 4-conductor, -20 … +100 °C, 0.05% resolution
Output for auxiliary energy	DC 24 V, max. 100 mA, fuse protection 400 mA
Flow level meter input	
Voltage input (FLM fill level)	0 - 2.4 V = 100 - 0 %, 0.5 % resolution
Power input (FLM flow)	4 - 20 mA = 0 - 100%, 0.5% resolution
Output for auxiliary energy	DC 24 V, max. 250 mA, fuse protection 400 mA
Sampler controller tank/sample	
Power consumption	2 x 2.7 A
Maximum step frequency	10 kHz
Number of sampler motors	2
Ambient conditions	
Operating temperature	- 20 … + 50 °C
Storage temperature	- 20 … + 60 °C
Protective type	IP 65 as per DIN 40040
Mechanical data	
Dimensions	See scale drawing
Material	Diecast aluminium, blue coated
Weight	25 N (2.5 kg)

Ordering details	
Designation	**Order no.**
Dual Sampler Controller, type 6970-30	303360

Dimensions