

TECHNICAL SPECIFICATIONS / CTRL-100 & CTRL-150

Overview





Intelligent pump controller and data acquisition device with LoRaWAN communication

Key Features

- Remote monitoring and control for decentralized sites with minimal I/O requirements
- No need for intermediate relays directly operates and reads 230 VAC signals
- No battery replacements 230 VAC input with integrated surge protection for maintenancefree power supply
- Converts 0–20 mA analog signals to digital and transmits wirelessly
- Quick and easy installation suitable for outdoor and industrial environments

Typical Applications

- Control of wastewater packaged pumping stations (single pump)
- Motor condition monitoring
- Wireless transmission of 0–20 mA signals
- Optimization of pumping energy consumption
- Monitoring of power outages

Technical Data

Power Supply	90-240 VAC, 50/60 Hz, max. 7.5 W		
Communication	LoRaWAN EU868, internal antenna		
Inputs 2 x Digital Input (230 VAC) (*)			
P. A.	 Input impedance approx. 1 MΩ @ 240 VAC 		
	1 x Analog Input with galvanic isolation (*)(**)		
	Configurable measurement ranges		
	○ 0–100 mA, passive		
	o 0–50 mA, active, 24 V		
	Minimum operating voltage (passive mode)		
	o 3 VDC @ 20 mA		
	o 5 VDC @ 100 mA		
	1 x Internal temperature sensor		
	(*) Protected against overcurrent and overvoltage		
		(**) Available on CTRL-150 only	
Outputs	Output Type	Load Capacity (*)	
	1 x NO/NC Relay	0.75 A @ 240 VAC, cos φ = 1	
		$0.75 \text{ A} @ 240 \text{ VAC, } \cos \varphi = 0.5$	
		(*) Protected against overcurrent and overvoltage	
Overvoltage Category	CAT III 300 VAC (per EN 62368-1), test voltage 8 kV		
Ingress Protection	IP 67		
Operating Temperature	-40 °C + 60 °C		
Storage Temperature	-40 °C + 60 °C		
Dimensions ((W x H x D)	96 x 120 x 45 mm		
Country of Manufacture	China, Estonia		
Mounting options	Pole or wall mounting		
Installation Guidelines		Maximum altitude 2,000 m above sea level	
		Installation must be performed by a licensed electrician	
Accessories (sold separately)	Current transformer		