浙江悦和科技有限公司
ZHEJIANG JOHAR TECHNOLOGY CO.,LTD

Temperature display instrument——GX029191

www.johar.cn
Tel:0571-88560873

Product introduction

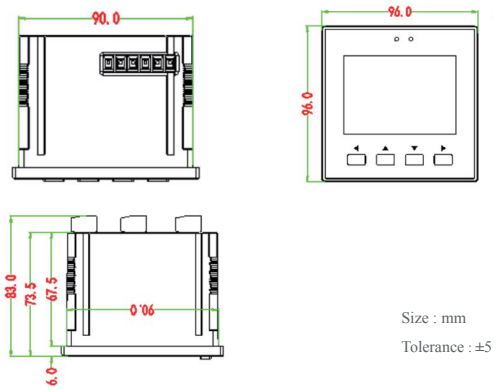
GX029191 temperature display module. It is developed specifically to collect, analyze and optimize data for temperature acquisition. It can solve the problems of large amount of data collected by temperature, high data density, low direct utilization efficiency of data, etc.

Key parameters

Working temperature range	-25℃~+70℃
Working humidity range	⩽90%（40℃±2℃）
Storage environment	-40℃~+70℃，Humidity 5%~95% RH condensation
Power line consumption	≤2000m
Power line consumption	≤5W
Input vlotage	DC 12V~48V
Interface	RS485
Communication protocol	Modbus-RTU
Size	96*96*80mm，Terminal not includede
Opening size	91*91mm
Weight	350g

Installation method

Installation method: Embedded in the installation hole, usually installed in the switchgear.



Technology indexes

Relay output

Contact capacity	AC 250V，5A（Resistive）or DC 30V，5A
Output mode	Level or pulse output, default level output
Contact form	Normally open

ModBus communication protocol

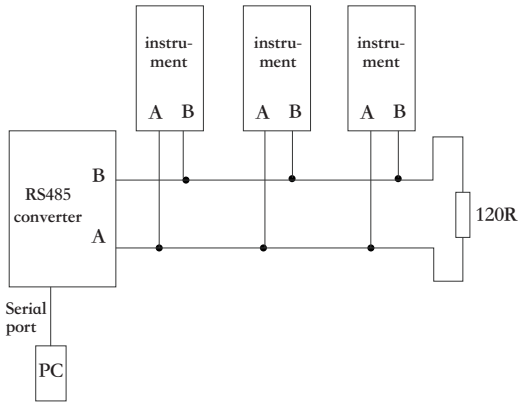
Modbus protocol Communication rate (bps)	1200、2400、4800、9600、19200 optional，default 9600
Parity	None/odd/even is optional, and there is no check by default.
Wireless communication selection	Communication frequency band 433 MHZ, effective distance 50m.

Electric properties

Insulance	100MΩ/500V
Dielectric strength	2kv（r.m.s），50Hz，1min（Voltage、current、 power supply、DO port） 1kv（r.m.s），50Hz, 1min（DI input、RS485 port）

Communication

- RS-485 communication port, with terminals marked as A and B.
- RS-485 communication mode allows up to 32 instruments to be connected on one bus, It is connected with the host computer through an RS-485 converter. Communication cables may with ordinary shielded twisted pair, the total length should not exceed 1200m. The positive and negative polarity of RS-485 port of each equipment must be connected correctly. if Twisted-pair shielding is long, it is recommended to connect a resistor of about 120Ω at its end,so as to improve the reliability of communication.



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Basic functions

Display	
Real-time data	Three-phase voltage, current, power, frequency and other electrical parameters display active and reactive power display.
Real-time alarm	Alarm information prompt
Equipment parameters	Set related parameters (communication parameters such as address, baud rate, verification method and product information)
Display setting	The LCD display should be able to automatically turn off the backlight display within 60S after the normal operation is finished.
Record	
Event log	Record the last 100 kinds of alarm records, respectively. (The temperature is too high or too low) . Each record records the alarm type, the state value of the alarm (see the agreement document for details) and the alarm occurrence time.
Clock and timing functions	
Clock	The clock has the functions of automatic calendar calculation, timing and leap year automatic conversion, and supports network time setting.
Output	
Relay output	2DO, remote control or associated alarm output can be set.

Electromagnetic compatibility

Static immunity Execution standard	GB/T 17626.2；IEC 61000-4-2 Class：ⅢClass（ Contact Discharge 8kV，Air Discharge 15kV）
Rf electromagnetic radiation immunity test Execution standard	GB/T 17626.3—2006；IEC 61000-4-3 Class：ⅢClass（10V/m）
Electrical fast burst immunity Execution standard	GB/T 17626.4；IEC 61000-4-4 Class：ⅣClass（Communication port 2kV，Other ports 4kV）
Surge immunity Execution standard	GB/T 17626.5—2006；IEC 61000-4-5 Class：ⅣClass（Voltage、 current、 power supply、DO port 4kV、DI input、RS485 port 1kV）
Immunity to conducted disturbances induced by radio-frequency fields	GB/T 17626.6； IEC61000-4-6 Class：ⅢClass（10V/m）
Power frequency magnetic field immunity test	GB/T 17626.8—2006；IEC 61000-4-8 Class： ⅣClass（30A/m）
Ring Wave Immunity test	GB/T 17626.12；IEC 61000-4-12 Class：ⅣClass（Line to Line 2kV，Line to Ground 4kV）
Limits for radiated disturbance test	GB9254-2008; CISPR 22 Performance: B