



Switchgear Wireless Temperature Measurement Device Instruction Manual



Switch cabinet wireless temperature measurement device

1. Product Overview This

product is a new concept of wireless temperature measurement device for switch cabinets, with powerful functions, suitable for 3-35KV

Indoor central cabinets, handcart cabinets, fixed cabinets, ring network cabinets and other switch cabinets.

This product adopts the intelligent control of single-chip microcomputer, can measure the temperature of the busbar contacts wirelessly, can be configured with 3-point temperature measurement, 6-point temperature measurement, 9-point temperature measurement, 12-point temperature measurement, etc. The temperature of the contact point can be set, and the over-temperature alarm output can be set. It can be equipped with 2-way temperature and humidity monitoring in the cabinet, collect the temperature and humidity in the cabinet in real time, and automatically adjust the temperature and humidity environment in the cabinet according to user settings, with heating and dehumidification functions. It can be equipped with real-time power parameter information, such as three-phase voltage, current, zero-sequence current, active power, reactive power, apparent power, power factor, frequency, active energy, reactive energy, etc. Optional real-time monitoring switch input status signal. The RS485 communication interface of this product enables the device and other equipment in the substation to form a real-time microcomputer error-proof monitoring system. This product adopts unique anti-jamming design and industrial-grade electronic components, with strong anti-jamming ability and high reliability. In addition to the above series of standard configuration products, the company can also customize products with different functional combinations according to user requirements to meet the diverse needs of users.

Second, technical

indicators 1. Working voltage: device power supply: AC/DC90-260V.

Load power supply: AC220V±10% 50Hz. 2. Power consumption of the device: ≤15VA. 3. Dielectric strength:

≥AC2000V between the shell and the terminal. 4. Insulation performance: more than 100MΩ between the shell and the terminal. 5. Communication:

RS485 interface, MODBUS protocol, factory address can be set, baud rate 4800/9600. 6. Temperature and humidity control range in the cabinet

(optional): temperature -20~99; humidity 0%RH~95%RH.

7. Contact temperature measurement: It can be equipped with 3-point temperature measurement, 6-point temperature measurement, 9-point temperature measurement, 12-point temperature measurement, etc.

8. Measurement accuracy: Temperature ±2; Humidity ±5%RH. 9. Multi-electricity measurement (optional): measure three-

phase voltage, current, power, power factor, electric energy, etc.

10. Working environment: normal working temperature -20 ~70 °, annual average humidity ≤95%. 11. Anti-electromagnetic interference performance: in line with the standard requirements of

IEC60255-22.

12. Display mode: large-size blue-screen LCD display.

3. Function description

Wireless contact temperature measurement function: This device

has a temperature measurement function, the temperature measurement sensor is a strap type, and the standard length of the strap is 34 cm; according to the strap contacts, it can be divided into 3-point temperature measurement, 6-point temperature measurement, 9 Point temperature measurement, 12-point temperature measurement. each 3 straps are installed on the upper and lower contacts of the circuit breaker or the busbar copper bars, respectively, A, B, C three-phase straps are yellow, green, red three straps; The bell has its fixed contact address, which corresponds to the address on the host of the device, and communicates with the host to upload the real-time temperature measured to the host of the device.

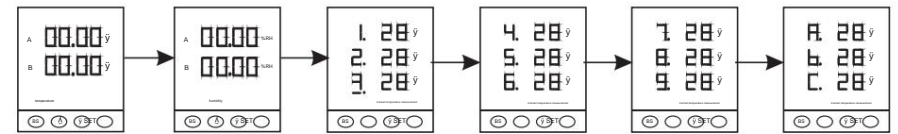
The temperature measurement range of the strap is -20°C~120°C. When the contact temperature exceeds 70°C (factory setting value), install Set the overheat alarm indicator light on, and the overheat alarm relay contact closure output.

Communication function:

The device can be equipped with RS485 communication interface, modbus protocol, which can transmit real-time temperature and humidity values, contact temperature monitoring values, real-time power data, switch status information, heating, disconnection, exhaust, overheating and other status parameters.

Device setting menu function description:

After power on, enter the temperature and humidity measurement interface in the cabinet: press the "up" and "down" keys to switch other interfaces



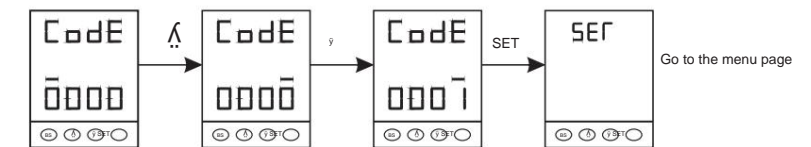
Cabinet temperature display cabinet humidity display 1-3 point contact temperature measurement 4-6 point contact temperature measurement 7-9 point contact temperature measurement 10-12 point contact temperature measurement

Long press the "OK" key to enter the password "0001" to enter the main menu, and press the "up and down" keys to select the menu;

"SET" key: long press and enter the password to enter the main menu, after the menu value is modified, press this key to save the modification;

"BS" cancel key: in the menu, press this key to return to the previous menu and exit the main menu; "y" up key: number increase key and page turn query key;

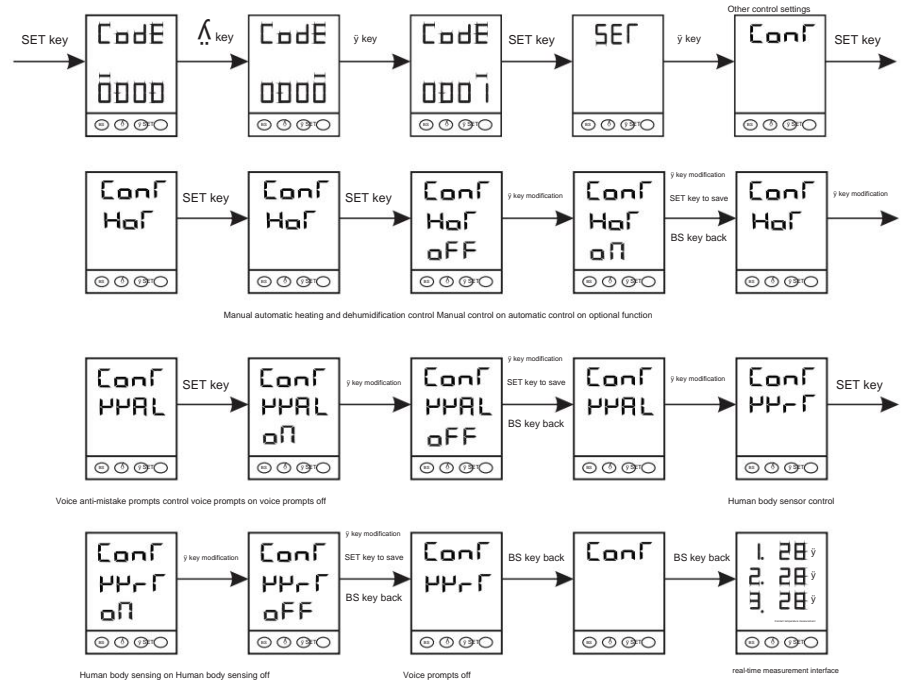
down key: number reduction key, page-turning query key and menu password setting shift key;



Menu character introduction:

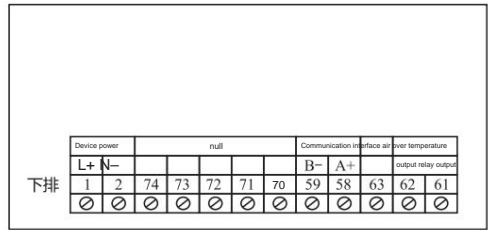
character	text description code	Character	text description mod
Code	password	nod	Protocol settings
SEr	Set set disp	Addr	Addr mailing address
dISP	display	PAR	Par verification method
CIRC	Circ cycle display	BAUD	Baud baud rate setting
PAUS	Paus toggle display	ALAR	Alar Alarm Settings
LED	Lcd backlight power saving time	U-H	UH voltage upper limit alarm
CLER	Cler energy clear	U-L	UL low voltage limit alarm
no	NO is not cleared	I-H	IH current upper limit alarm
YES	Yes OK to clear	I-L	IL Current lower limit alarm
InPr	Inpt input settings	ALt	Alt alarm delay setting do switch
PF	PT Voltage Multiplier	do	output dot1 first channel out
CT	CT current magnification	do1	delay setting do1u first channel out type setting
LINE	Line connection	do1U	
SU	SU voltage range	Ao	Ao analog output
SA	SA Current range conn	AoH1	The upper limit of the first transmission output of AoH1
Conn	Communication setting	AoL1	The lower limit of the first transmission output of AoL1
LED	Led Cabinet Lighting Control	AoU1	AoU1 first channel transmission type setting
T1-H	T1-H first high temperature exhaust setting	T-CD	T-cd contact temperature measurement address setting
T2-H	T2-H Second high temperature exhaust setting	T-AL	T-AL contact over temperature threshold setting
T1-L	T1-L 1st circuit low temperature heating setting	Conf	Cont controls output settings
T2-L	T2-L Second low temperature heating setting	Hot	HOT Manual Heat Control Settings
H1-H	H1-H 1st dehumidification setting	YYAL	YYAL voice anti-mistake prompt start and stop settings
H2-H	H2-H 2nd dehumidification setting	YYRT	YYRT infrared human body sensor start and stop settings
UP	UP Temperature and humidity overrun	oN	ON function is on
down	threshold setting down Overrun hysteresis setting	oFF	OFF function off

Manual heating, human body induction and voice anti-mistake prompt control: enter the menu as above (press the OK key to save after modification)

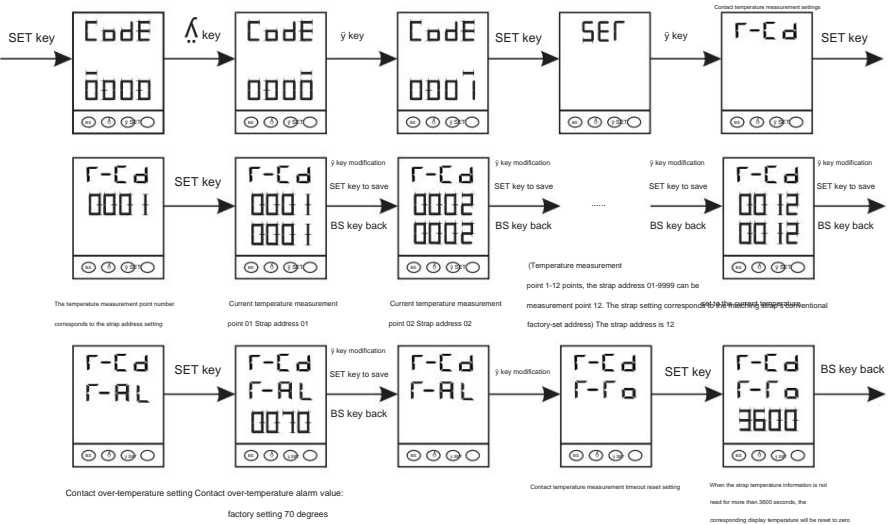


4. Terminal description

after wiring description:



Contact temperature measurement strap address setting and temperature measurement over-temperature alarm setting:



Wiring:



