FKGA4C2-HY21 Load Management Control Terminal

Summary

FKGA4C2-HY21 load control terminal based on industry-leading 32-bit AMR platform to support three lines and up to 48M primary frequency, high capable, use car-on-chip, very strong anti-interference ability and stability, wide temperature working (-40℃~+70℃); chip is rich in resources; includes 64KSRAM and 256K high-speed FLASH.

Technical specification

Terminal using GRPS / CDMA data communications approach to public GSM mobile communications network as the carrier, auxiliary on-site bus RS485, infrared and other means of communication, will become a key management with the object, to monitor information related to electricity, from a substation to the supply line and then to electricity users an integrated power supply testing, device management, data acquisition, remote meter reading, alarm lamp power exception message multiple functions. The terminal is the power enterprises to modernize the management of choice for electricity equipment, but also to achieve demand-side management is an important means.

Model

Model	Description	Accuracy class	
		Active	Reactive
FKGA4C2-HY21	Load management control terminal	1.0	2.0

Main technical data-parameters

Item	Technical requirement
Basic error of metering function rated	According to IEC62053 & GB/T17215
Reference frequency	50Hz ± 5%
Clock error	$< \pm 0.5s/d$
Average working time without fault	$\geq 5 \times 104h$
Static power consumption	<10VA
Normal working voltage	$3 \times 220(\pm 30\%)$
Limit working voltage	$< 420VAC$
Rated current	5(10) A
Impulse constant	3200imp/kwh 3200imp/kvar
Ambient temperature	(-25~55)℃
Limit temperature	(-40~70)℃
Storage and transport temperature	(-40~70)℃
Relative humidity	$< 95\%$
Safety performance	Power supply and ground insulation resistant$\geq$10MΩ
P.F. withstand voltage	2KV/1 min
Standby battery life	300 cycle
Standby battery voltage	Working voltage > 4.8 V
Outline dimension (length*width*height)	300MM*180MM*100MM

Communication Parameters

1. Infrared communication: 1200bps, even parity check, 1 stop bit

2. RS485 communication: You can set the baud rate and check methods

3. GPRS communication: according to TCP / IP protocol, or UDP protocol.

4. GPRS communication rate: 19200-115200.

5. GPRS / CDMA / GSM communications (optional)

Hardware Interface

1. Switch State: 4-way (passive interface input)

2. RS232 interface: one way (local communication)

3. RS485 interface: 2-way (meter reading communications, cascade and relay)

4. Gate node interface: a way (passive interface input)

5. 12V power supply output: 1 way (for the passive meter to provide 12V power supply, 150mA)

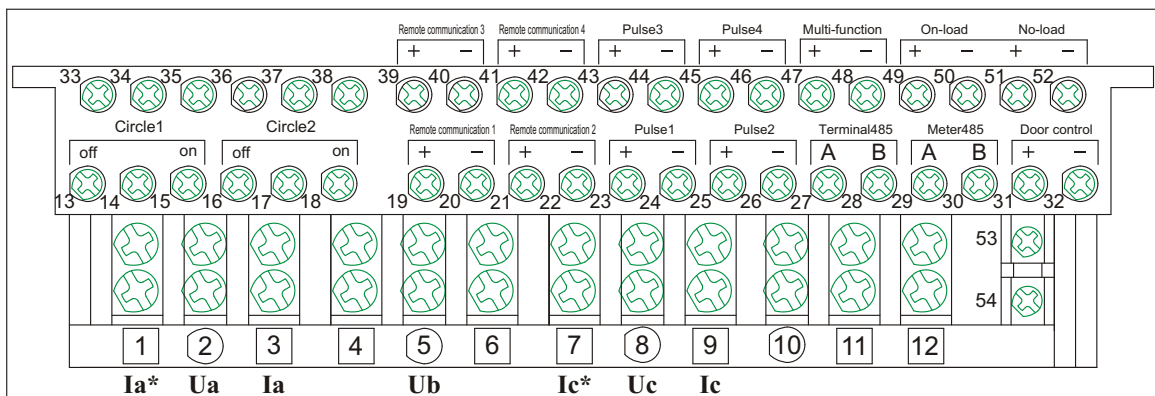6. GSM Antenna Interface: 1 (Model for SMA Yin head)

Wiring diagram

Terminal Size: 300mm × 180mm × 100mm

Hanging the terminal on the screw M5 × 10, the installation diagram is as below:
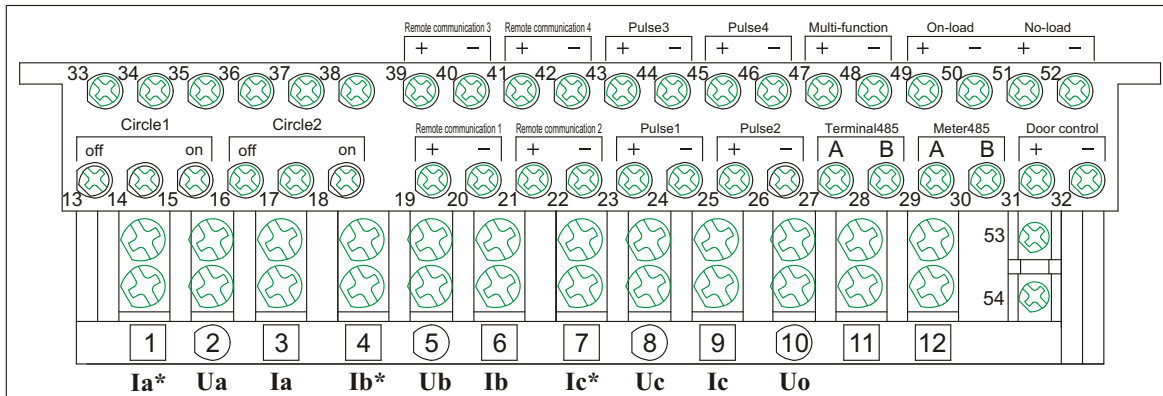
220V Functional terminal wiring diagram

100/110V Functional terminal wiring diagram