247

AMC16Z 系列直流精密配电监控装置

AMC16Z series DC precision power distribution monitoring device

安装使用说明书 V1.3

Installation and operation instruction V1.3

安科瑞电气股份有限公司

Acrel Co., Ltd.

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申　　明

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1 概述 Overview

随着数据中心的迅猛发展，数据中心的能耗问题也越来越突出，有关数据中心的能源管理和供配电设计已经成为热门问题，高效可靠的数据中心配电系统方案，是提高数据中心电能使用效率，降低设备能耗的有效方式。要实现数据中心的节能，首先需要监测每个用电负载，而数据中心负载回路非常的多，传统的测量仪表无法满足成本、体积、安装、施工等多方面的要求，因此需要采用适用于数据中心集中监控要求的多回路监控装置。

With the rapid development of data centers, the energy consumption of data centers has become more and more prominent. Energy management and power supply and distribution design of data centers have become a hot issue. Efficient and reliable data center power distribution system is an effective way to improve the energy use efficiency of data centers and reduce equipment energy consumption.To realize energy saving of data center, it is necessary to monitor each electrical load first. However, there are many load loops in data center, and traditional measuring instruments cannot meet the requirements of cost, volume, installation, construction and other aspects. Therefore, multi-loop monitoring devices suitable for centralized monitoring of data center are needed.

安科瑞公司 AMC16Z 系列直流精密配电监控装置是专门针对于数据中心服务器电源管理设计的测量装置。该装置设计小巧，能够对 A+B 两路进线和 96 路出线的全电参量参数、输入输出开关及防雷器状态等实时监测，所有测量通道的告警阈值均可单独设定，出线越限事件立即触发系统声光告警，在传统仪表的体积上实现了监控回路的高度集成。

AMC16Z series DC precise distribution monitoring device is a measurement device designed specifically for data center server power management.The device design exquisite, can for A + B two into line and 96 road for electrical parameters, the input and output parameters of the switch state and the lightning protection device such as real-time monitoring, all alarm threshold measurement channels can be set in A separate, to qualify the limit event trigger system sound and light alarm, immediately on the volume in the traditional instrument, the height of the monitoring circuit integration.

2 产品型号 Product model

型号 Model	功能描述 Function description
AMC16Z-ZD	监测 A+B 双路直流进线回路的全电量参数、6 路开关状态监测、2 路报警输出、1 路温湿度检测、1 路 RS485 通讯、±12V 输出（仅供电给进线模块配套霍尔传感器）。Monitor the full-power parameters of the A+B double-channel DC feed circuit, 6-way switch status monitoring, 2-way alarm output, 1-way temperature and humidity detection, 1-way RS485 communication, ±12V output (only power supply to the feed circuit module supporting Hall sensor).
AMC16Z-FD	监测 A+B 双路直流出线 24 分路的全电量参数、1 路 RS485 通讯。Monitor the full-power parameters of A+B double-channel DC outlet 24 and 1-channel RS485 communication.
AMC16Z-FDK24	监测 A+B 双路直流出线 24 分路的全电量参数和开关量状态、1 路 RS485 通讯。Monitor the full-power parameters and switching status of A+B double-channel DC outlet 24 and 1-channel RS485 communication.
AMC16Z-FDK48	监测 A+B 双路直流出线 48 分路的全电量参数和开关量状态、1 路 RS485 通讯。Monitor the full-power parameters and switching status of A+B double-channel DC off-line 48 sub-lines and 1-channel RS485 communication.

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AMC16Z-KA	湿接点，监测 A+B 共 48 分路的开关量状态、1 路 RS485 通讯。Wet contact, monitor A+B total 48 branch switch status, 1 channel RS485 communication.
AMC16Z-KD	干接点，监测 A+B 共 48 分路的开关量状态、1 路 RS485 通讯。At the dry contact, the switch status of A+B consists of 48 branches and RS485 communication is monitored.
AMC16Z-DC48V	DC48V 扩展电源，监测回路超出 A+B 共 96 分路时使用 DC48V extended power supply, when the monitoring circuit exceeds A+B total 96 branches
AMC16Z-DC240/336V	DC240V/336V 扩展电源，监测回路超出 A+B 共 96 分路时使用 DC240V/336V extended power supply, used when the monitoring circuit exceeds A+B total 96 branches

3 技术参数 Technical parameters

直流进线 DC incoming line

技术参数 Technical parameters		AMC16Z-ZD
测量参数 Measured parameters		电压、电流、功率、电能、环境温湿度 Voltage, current, power, electric energy, ambient temperature and humidity
母线电压 Bus voltage	额定 Rated	48VDC,240VDC,336VDC
	测量范围 Measured range	±20%
	过载 Overload	瞬时电压 2 倍/秒 Instantaneous voltage 2 times per second
电流进线回路 Currentincoming line circuit	额定 Rated	5V（霍尔传感器，由 AMC16Z-ZD 供电±12V） 5V (Hall sensor, powered by AMC16Z-ZD ±12V)
	过载 Overload	持续 1.2 倍、瞬时 10 倍/秒 Duration 1.2 times, instantaneous 10 times/second
温湿度 Temperature and humidity	温度范围 Temperature range	-40℃～+99℃
	湿度范围 Humidity range	20%～90%
测量精度 Measurement precision	进线 Incoming line	电压/电流 0.5 级，功率/电能 1 级 Voltage/current Class 0.5, power/electric energy Class 1
	温度 Temperature	±1℃
	湿度 Humidity	±5%
辅助电源 Auxiliary power		信号取电（≤15W） Signal take electricity（≤15W）

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环境 Environment	温度 Temperature	工作：-15℃～55℃　贮存：-25℃～70℃ Work: -15℃ ~ 55℃ Storage: -25℃ ~ 70℃
	湿度 Humidity	相对湿度≤93% Relative humidity ≤93%
	海拔 Altitude	≤2500m
开关量输出 Switching output		2 路　3A 250VAC /3A 30VDC 2 way 3A 250VAC /3A 30VDC
开关量输入 Switching input		6 路干节点 6 way dry contact
通讯 Communication		RS485/Modbus-RTU
安装方式 Installation		DIN35mm 导轨或底板式安装 DIN35mm guide rail or baseplate mounted
防护等级 Protection grade		IP20
污染等级 Pollution levels		2
安全性 Security	绝缘 Insulation	所有端子与外壳导电件之间的绝缘电阻不低于 100MΩ All terminals and the insulation resistance between the conductive pieces not below 100 m Ω
	耐压 Pressure	A 路电压电流信号// B 路电压电流信号//开关量输出//其他端口两两之间满足 AC2kV 1min，开关量输入和其他端口间应满足 AC0.5kV 1min，泄露电流应小于 2mA，无击穿或闪络现象。 A circuit voltage and current signal // B circuit voltage and current signal // Switching output // other ports should meet AC2kV 1min between pairs, switching input and other ports should meet AC0.5kV 1min, leakage current should be less than 2mA, no breakdown or flashering phenomenon.
电磁兼容性 Electromagnetic compatibility	抗静电干扰 Antistatic interference	4 级 Class 4
	抗电快速瞬变脉冲群 Resistance to rapid transient pulse groups	3 级 Class 3
	抗浪涌干扰 Resistant to surge interference	4 级 Class 4
	抗射频电磁场辐射 Radio frequency electromagnetic radiation	3 级 Class 3

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直流出线 DC outgoing line

技术参数 Technical parameters		AMC16Z-FD
测量参数 Measured parameter		电压、电流、功率、电能 Voltage, current, power, electric energy
母线 电压 Bus voltage	额定 Ratetd	48VDC,240VDC,336VDC
	测量范围 Measured range	±20%
	过载 Overload	瞬时电压 2 倍/秒 Instantaneous voltage 2 times per second
电流出线回路 Currentoutcoming line circuit	额定 Rated	5V（霍尔传感器，需外部电源供电±12V） 5V (Hall sensor, external power supply ±12V)
	范围 Range	
	过载 Overload	持续 1.2 倍、瞬时 10 倍/秒 Duration 1.2 times, instantaneous 10 times/second
测量 精度 Measurement precision	出线 Outgoing line	电压/电流 0.5 级，功率/电能 1 级 Voltage/current level 0.5, power/electric energy level 1
辅助电源 Auxiliary power		由 AMC16Z-ZD 供电 Get power from AMC16Z-ZD
环境 Environment	温度 Temperature	工作：-15℃～55℃　贮存：-25℃～70℃ Work: -15℃ ~ 55℃ Storage: -25℃ ~ 70℃
	湿度 Humidity	相对湿度≤93% Relative humidity ≤93%
	海拔 Altitude	≤2500m
通讯 Communication		RS485/Modbus-RTU
安装方式 Installation		DIN35mm 导轨或底板式安装 DIN35mm guide rail or baseplate mounted
防护等级 Protection level		IP20
污染等级 Pollution levels		2
安全性 Security	绝缘 Insulation	所有端子与外壳导电件之间的绝缘电阻不低于 100MΩ All terminals and the insulation resistance between the conductive pieces not below 100 m Ω
	耐压 Pressure	A 路电压电流信号// B 路电压电流信号//其他端口两两之间满足 AC2kV 1min，泄露电流应小于 2mA，无击穿或闪络现象。 A voltage current signal // B voltage current signal // Other ports meet AC2kV 1min between pairs, leakage current should be less than 2mA, no breakdown or flashering phenomenon.

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电磁兼容性 Electromagnetic compatibility	抗静电干扰 Anti-static interference	4 级 Class 4
	抗射频电磁场辐射 Radio frequency electromagnetic radiation	3 级 Class 3

注：直流进线和出线模块的二次侧输入电压为 5V，一次侧电流默认值为 50A。若霍尔传感器不同，客户可根据实际使用情况，通过触摸屏设置变比。

Note: The secondary input voltage of dc incoming and outgoing modules is 5V, and the default value of primary side current is 50A.If the Hall sensor is different, the customer can set the ratio through the touch screen according to the actual use.

技术参数 Technical parameters		AMC16Z-FDK24	AMC16Z-FDK48
测量参数 Measured parameter		电压、电流、功率、电能、开关量状态 Voltage, current, power, electrical energy, switching state	
母线电压 Bus voltage	额定 Ratetd	48VDC,240VDC,336VDC	
	测量范围 Measured range	±20%	
	过载 Overload	瞬时电压 2 倍/秒 Instantaneous voltage 2 times per second	
电流出线回路 Currentoutcoming line circuit	额定 Ratetd	5V（霍尔传感器，需外部电源供电±12V） 5V (Hall sensor, external power supply ±12V)	
	范围 Range		
	过载 Overload	持续 1.2 倍、瞬时 10 倍/秒 Duration 1.2 times, instantaneous 10 times/second	
测量精度 Measurement precision	出线 Outgoing line	电压/电流 0.5 级，功率/电能 1 级 Voltage/current level 0.5, power/electric energy level 1	
辅助电源 Auxiliary power		由 AMC16Z-ZD 供电 Get power supply from AMC16Z-ZD	
环境 Environment	温度 Temperature	工作：-15℃～55℃ 贮存：-25℃～70℃ Work: -15℃ ~ 55℃ Storage: -25℃ ~ 70℃	
	湿度 Humidity	相对湿度≤93% Relative humidity ≤93%	
	海拔 Altitude	≤2500m	
通讯 Communication		RS485/Modbus-RTU	
安装方式 Installation		DIN35mm 导轨或底板式安装	

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		DIN35mm guide rail or baseplate mounted
防护等级 Protection level		IP20
污染等级 Pollution levels		2
安全性 Security	绝缘 Insulation	所有端子与外壳导电件之间的绝缘电阻不低于 100MΩ All terminals and the insulation resistance between the conductive pieces not below 100 m Ω
	耐压 Pressure	A 路电压电流信号// B 路电压电流信号//其他端口两两之间满足 AC2kV 1min，泄露电流应小于 2mA，无击穿或闪络现象。 A voltage current signal // B voltage current signal // Other ports meet AC2kV 1min between pairs, leakage current should be less than 2mA, no breakdown or flashing phenomenon.
电磁兼容性 Electromagnetic compatibility	抗静电干扰 Anti-static interference	4 级 Class 4
	抗射频电磁场辐射 Radio frequency electromagnetic radiation	3 级 Class 3

注：AMC16Z-FDK 模块的二次侧输入电压为 5V，一次侧电流默认值为 50A。若霍尔传感器不同，客户可根据实际使用情况，通过触摸屏设置变比。

Note: The secondary input voltage of AMC16Z-FDK module is 5V, and the default value of the primary side current is 50A.If the Hall sensor is different, the customer can set the ratio through the touch screen according to the actual use.

有源开关量模块 Active switching module

技术参数 Technical parameters		AMC16Z-KA
输入频率 Input frequency		45-60Hz
辅助电源 Auxiliary power		由 AMC16Z-ZD 供电 Get power supply from AMC16Z-ZD
工频耐压 Power frequency withstand voltage		电源/输入信号　端口之间 AC 2kV/1min 50Hz AC 2kV/1min 50Hz between power/input signal ports
环境 Environment	温度 Temperature	工作：-15℃～55℃　贮存：-25℃～70℃ Work: -15℃ ~ 55℃ Storage: -25℃ ~ 70℃
	湿度 Humidity	相对湿度≤93% Relative humidity ≤93%
	海拔 Altitude	≤2500m
开关量输入 Switching input		48 路湿节点（48VDC,240VDC,336VDC） 48-way wet contact（48VDC,240VDC,336VDC）

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通讯 Communication		RS485/Modbus-RTU
安装方式 Installation		DIN35mm 导轨或底板式安装 DIN35mm guide rail or baseplate mounted
防护等级 Protection level		IP20
污染等级 Pollution levels		2
安全性 Security	绝缘 Insulation	所有端子与外壳导电件之间的绝缘电阻不低于 100MΩ All terminals and the insulation resistance between the conductive pieces not below 100 m Ω
	耐压 Pressure	A 路开关量输入信号// B 路开关量输入信号//其他端口两两之间满足 AC2kV 1min，泄露电流应小于 2mA，无击穿或闪络现象。 The input signal of a-channel switching quantity // B-channel switching quantity input signal // other ports should meet AC2kV 1min between pairs, the leakage current should be less than 2mA, and there is no breakdown or flashing phenomenon.
电磁兼容性 Electromagnetic compatibility	抗静电干扰 Anti-static interference	4 级 Class 4
	抗射频电磁场辐射 Radio frequency electromagnetic radiation	3 级 Class 3

无源开关量模块 Passive switching module

技术参数 Technical parameters		AMC16Z-KD
输入频率 Input frequency		45～60HZ
辅助电源 Auxiliary power		由 AMC16Z-ZD 供电 Get power supply from AMC16Z-ZD
绝缘电阻 Insulation Resistance		100MΩ
环境 Environment	温度 Temperature	工作：-15℃～55℃　贮存：-25℃～70℃ Work: -15℃ ~ 55℃ Storage: -25℃ ~ 70℃
	湿度 Humidity	相对湿度≤93% Relative humidity ≤93%
	海拔 Altitude	≤2500m
开关量输入 Switching input		48 路干节点 48-way dry contact
通讯 Communication		RS485/Modbus-RTU
安装方式 Installation		DIN35mm 导轨或壁挂式安装 DIN35mm guide rail or wall mounted installation

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防护等级 Protection level		IP20
污染等级 Pollution levels		2
安全性 Security	绝缘 Insulation	所有端子与外壳导电件之间的绝缘电阻不低于 100MΩ All terminals and the insulation resistance between the conductive pieces not below 100 m Ω
	耐压 Pressure	A 路开关量输入信号// B 路开关量输入信号//其他端口两两之间满足 AC2kV 1min，泄露电流应小于 2mA，无击穿或闪络现象。 The input signal of a-channel switching quantity // B-channel switching quantity input signal // other ports should meet AC2kV 1min between pairs, the leakage current should be less than 2mA, and there is no breakdown or flashing phenomenon.
电磁兼容性 Electromagnetic compatibility	抗静电干扰 Anti-static interference	4 级 Class 4
	抗射频电磁场辐射 Radio frequency electromagnetic radiation	3 级 Class 3

扩展电源模块 Extension power module

技术参数 Technical parameters		AMC16Z-DC48V
输入 Input	电压 Voltage	48VDC
	范围 Range	±20%
输出 Output	电压 Voltage	12VDC
	电流 Current	1A
	最大输出功率 Maximum output	12W
环境 Environment	温度 Temperature	工作：-15℃～55℃　贮存：-25℃～70℃ Work: -15℃ ~ 55℃ Storage: -25℃ ~ 70℃
	湿度 Humidity	相对湿度≤93% Relative humidity ≤93%
	海拔 Altitude	≤2500m
安装方式 Installation		DIN35mm 导轨或底板式安装 DIN35mm guide rail or baseplate mounted
防护等级 Protection level		IP20
污染等级 Pollution levels		2
安全性 Security	绝缘 Insulation	所有端子与外壳导电件之间的绝缘电阻不低于 100MΩ All terminals and the insulation resistance between the conductive

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		pieces not below 100 m Ω
	耐压 Pressure	A 路电压电流信号// B 路电压电流信号//电源输出两两之间满足 AC2kV 1min，泄露电流应小于 2mA，无击穿或闪络现象。 A circuit voltage and current signal // B circuit voltage and current signal // Supply output should meet AC2kV for 1min, leakage current should be less than 2mA, no breakdown or flashing phenomenon.
电磁兼容性 Electromagnetic compatibility	抗静电干扰 Anti-static interference	4 级 Class 4
	抗电快速瞬变脉冲群 Resistance to rapid transient pulse groups	3 级 Class 3
	抗浪涌干扰 Resistant to surge interference	4 级 Class 4
	抗射频电磁场辐射 Radio frequency electromagnetic radiation	3 级 Class 3

技术参数 Technical parameters		AMC16Z-DC240/336V
输入 Input	电压范围 Voltage range	DC180～410VDC
输出 Output	电压 Voltage	12VDC
	电流 Current	1A
	最大输出功率 Maximum output power	12W
环境 Environment	温度 Temperature	工作：-15℃～55℃　贮存：-25℃～70℃ Work: -15℃ ~ 55℃ Storage: -25℃ ~ 70℃
	湿度 Humidity	相对湿度≤93% Relative humidity ≤93%
	海拔 Altitude	≤2500m
安装方式 Installation		DIN35mm 导轨或底板式安装 DIN35mm guide rail or baseplate mounted
防护等级 Protection level		IP20
污染等级 Pollution levels		2

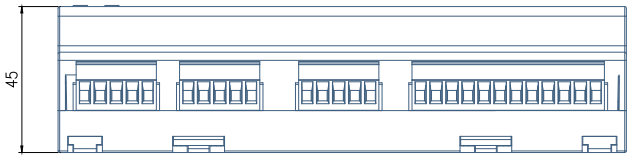
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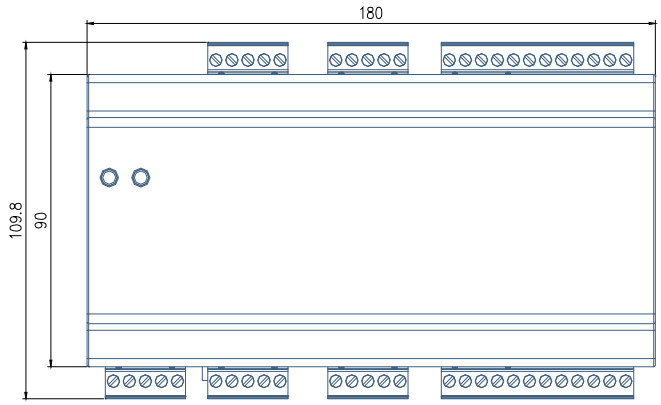
安全性 Security	绝缘 Insulation	所有端子与外壳导电件之间的绝缘电阻不低于 100MΩ All terminals and the insulation resistance between the conductive pieces not below 100 m Ω
	耐压 Pressure	A 路电压电流信号// B 路电压电流信号//电源输出两两之间满足 AC2kV 1min，泄露电流应小于 2mA，无击穿或闪络现象。 A circuit voltage and current signal // B circuit voltage and current signal // Supply output should meet AC2kV for 1min, leakage current should be less than 2mA, no breakdown or flashering phenomenon.
电磁兼容性 Electromagnetic compatibility	抗静电干扰 Anti-static interference	4 级 Class 4
	抗电快速瞬变脉冲群	3 级 Class 3
	抗浪涌干扰 Resistant to surge interference	4 级 Class 4
	抗射频电磁场辐射 Radio frequency electromagnetic radiation	3 级 Class 3

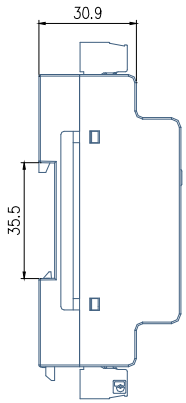
4 外形结构　Outline structure

AMC16Z 系列直流精密配电监控装置　　单位：mm

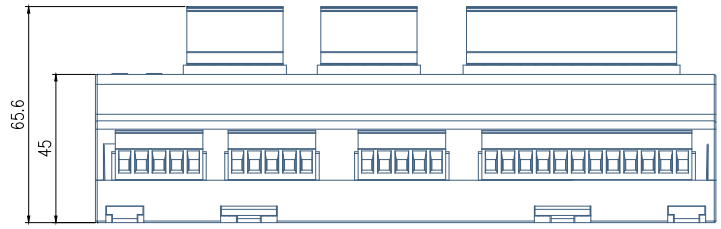
AMC16Z series DC precision distribution monitoring device　　Unit:mm

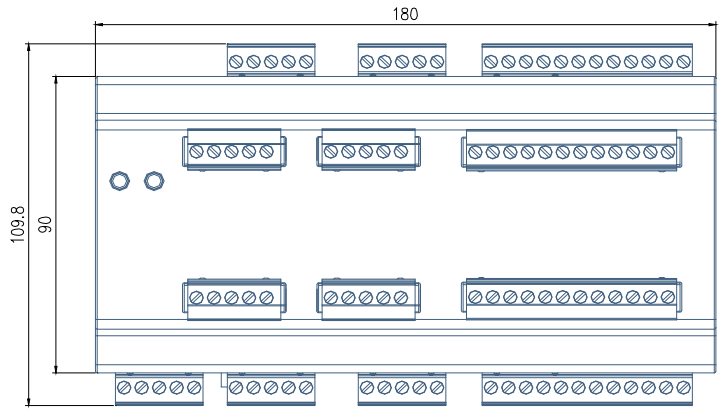


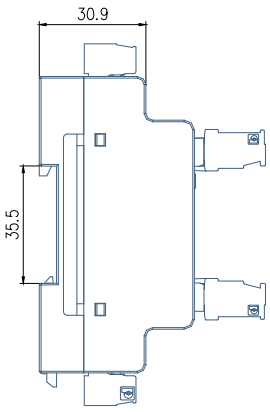




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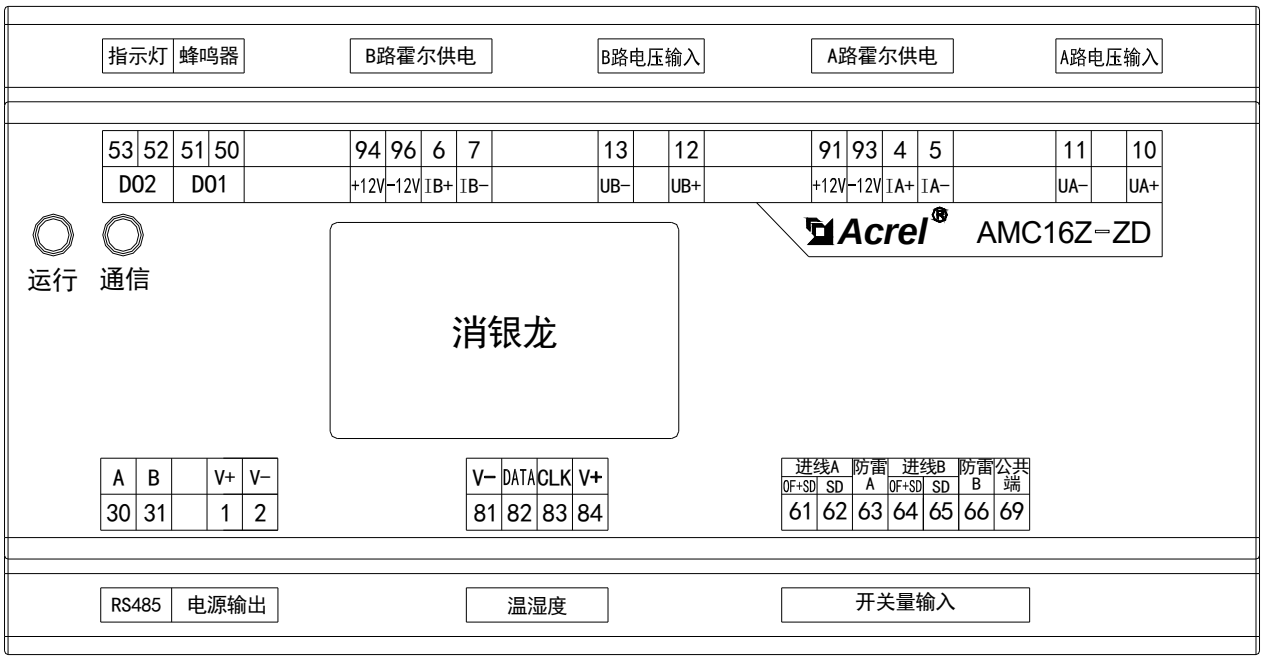






5 接线端子 Terminal blocks

5.1 AMC16Z-ZD



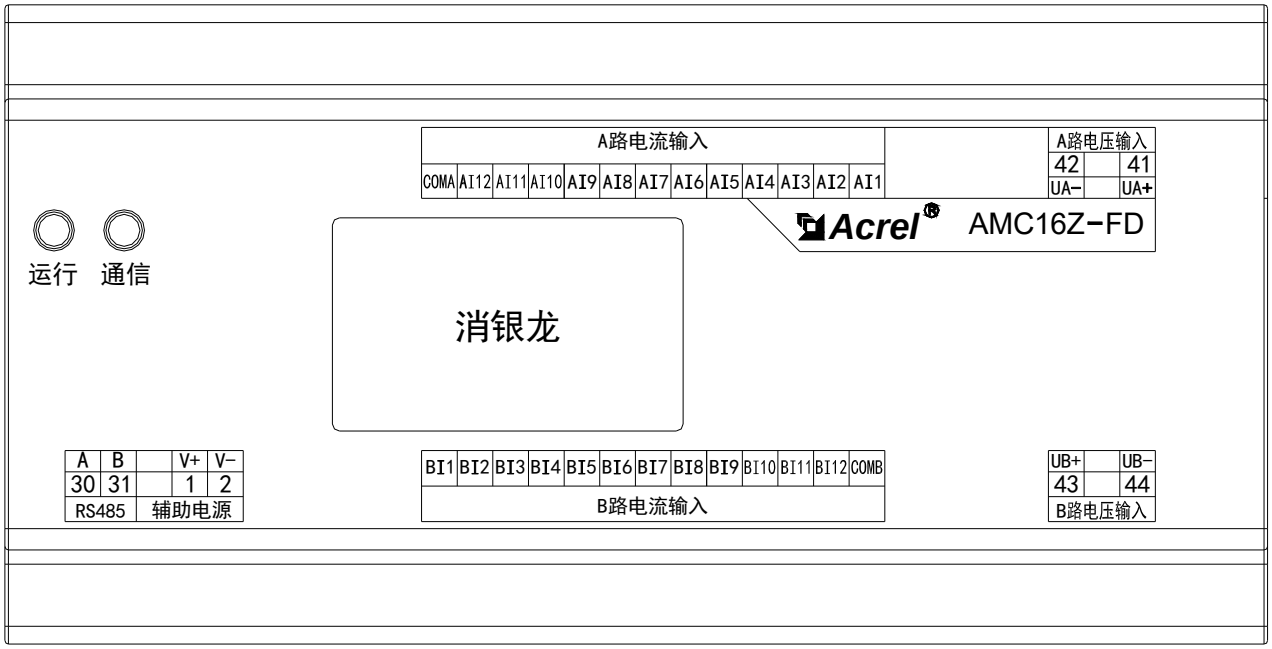
端子编号 Terminal No.	定义 Definition	说明 Explanation	备注 Remarks
1	V+	电源输出 Power Output	供电 12V 给 AMC16Z-FD，AMC16Z-KA，AMC16Z-KD 以及触摸屏，**该电源禁止外接其他设备（如指示灯、蜂鸣器）**The power supply is 12V for AMC16Z-FD, AMC16Z-KA, AMC16Z-KD and touch screen. The power supply is not allowed to be connected to other devices (such as indicator light and buzzer)
2	V-		

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4	IA+	A 路电流输入 A-way current input	A 路进线直流电流 （霍尔传感器输入） A-way incoming line DC current (Hall sensor input)
5	IA-		
6	IB+	B 路电流输入 B-way current input	B 路进线直流电流 （霍尔传感器输入） B-way incoming line DC current (Hall sensor input)
7	IB-		
10	UA+	A 路电压输入 A-way voltage input	A 路进线直流电压输入 A - way incoming DC voltage input
11	UA-		
12	UB+	B 路电压输入 B-way voltage input	B 路进线直流电压输入 B- way incoming DC voltage input
13	UB-		
30	A	RS485 通讯 RS485 communication	连接至触摸屏或者 RS485 集线器 Connect to touch screen or RS485 hub
31	B		
50	DO1	开关量输出 Switching output	蜂鸣器 Buzzer
51			
52	DO2		指示灯 Indicator light
53			
61	进线 A	开关量输入 Switching Input	OF+SD
62			SD
63	防雷 A		判断 A 路防雷器状态 Judge A-way lightning protector state
64	进线 B		OF+SD
65			SD
66	防雷 B		判断 B 路防雷器状态 Judge B-way lightning protector state
69	公共端		
81	V-	温湿度 Temperature and humidity	连接 WH-3 温湿度传感器 Connect WH-3 temperature and humidity sensor
82	DATA		
83	CLK		
84	V+		
91	+12V	A 路霍尔供电 A -way Hall power supply	供电给 A 路进线电流配套霍尔 Power supply to the A incoming line is matched with hall
93	-12V		
94	+12V	B 路霍尔供电 B -way Hall power supply	供电给 B 路进线电流配套霍尔 Power supply to the B incoming line is matched with hall
96	-12V		

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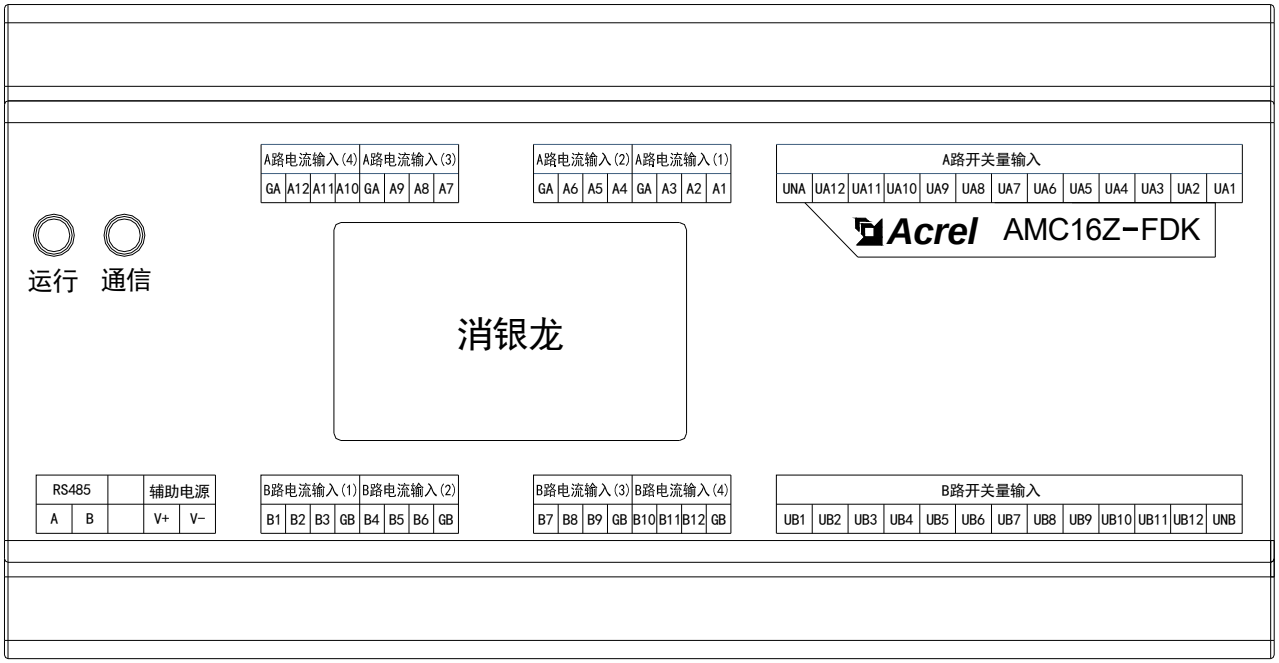
5.2 AMC16Z-FD



端子编号 Terminal No.	定义 Definition	说明 Explanation	备注 Remarks
1	V+	辅助电源 Auxiliary power	由 AMC16Z-ZD 供电 Get power from AMC16Z-ZD
2	V-		
30	A	RS485 通讯 RS485 communication	连接至触摸屏或者 RS485 集线器 Connect to touch screen or RS485 hub
31	B		
41	UA+	A 路电压输入 A-way voltage input	A 路出线直流电压输入 A-way outgoing line DC voltage input
42	UA-		
43	UB+	B 路电压输入 B-way voltage input	B 路出线直流电压输入 B-way outgoing line DC voltage input
44	UB-		
AI1-AI12		A 路电流输入 A-way current input	A 路出线直流电流输入 (12 路霍尔传感器) A-way outgoing line DC current input(12-way Hall sensor)
COMA			
BI1-BI12		B 路电流输入 B-way current input	B 路出线直流电流输入 (12 路霍尔传感器) B-way outgoing line DC current input(12-way Hall sensor)
COMB			

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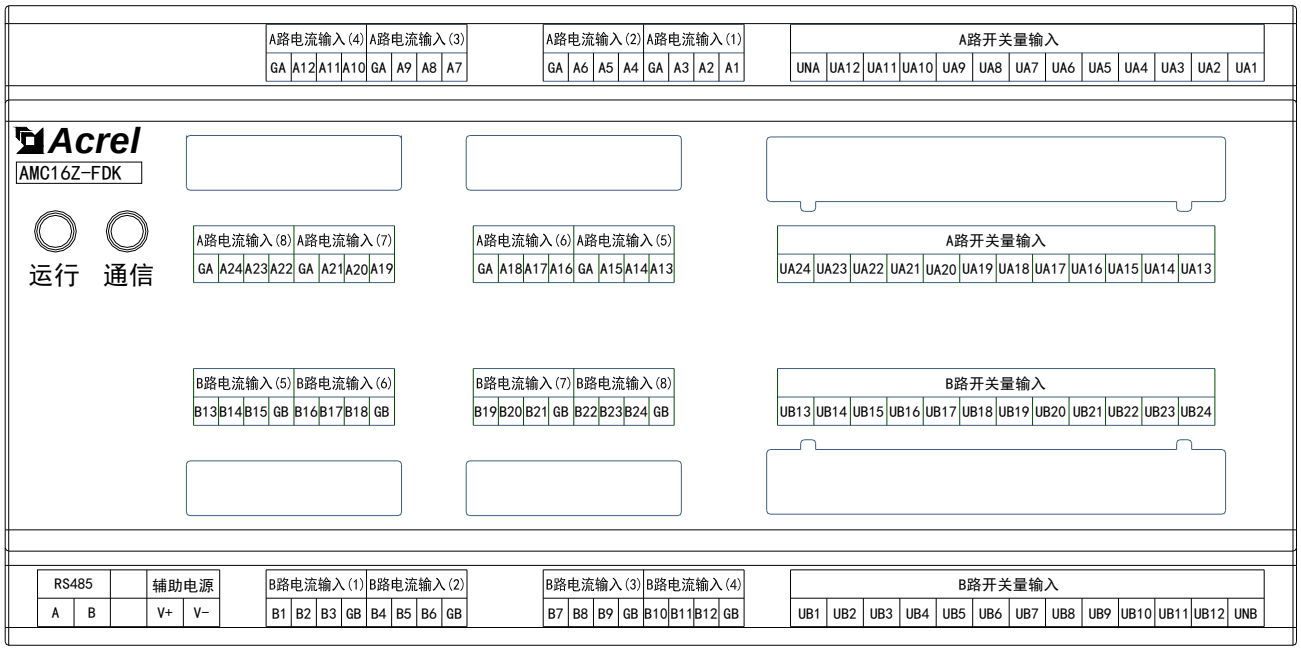
5.3 AMC16Z-FDK24



端子定义 Terminal No.	说明 Explanation	备注 Remarks
V+ V-	辅助电源 Auxiliary power	由 AMC16Z-ZD 供电 Get power from AMC16Z-ZD
A B	RS485 通讯 RS485 communication	连接至触摸屏或者 RS485 集线器 Connect to touch screen or RS485 hub
UA1-UA12 UNA	A 路电压输入 A-way voltage input	A 路开关量输入 A-way switch input
UB1-UB12 UNB	B 路电压输入 B-way voltage input	B 路开关量输入 B-way switch input
A1-A12 GA	A 路电流输入 A-way current input	A 路出线直流电流输入 (12 路霍尔传感器) A-way outgoing line DC current input(12-way Hall sensor)
B1-B12 GB	B 路电流输入 B-way current input	B 路出线直流电流输入 (12 路霍尔传感器) B-way outgoing line DC current input(12-way Hall sensor)

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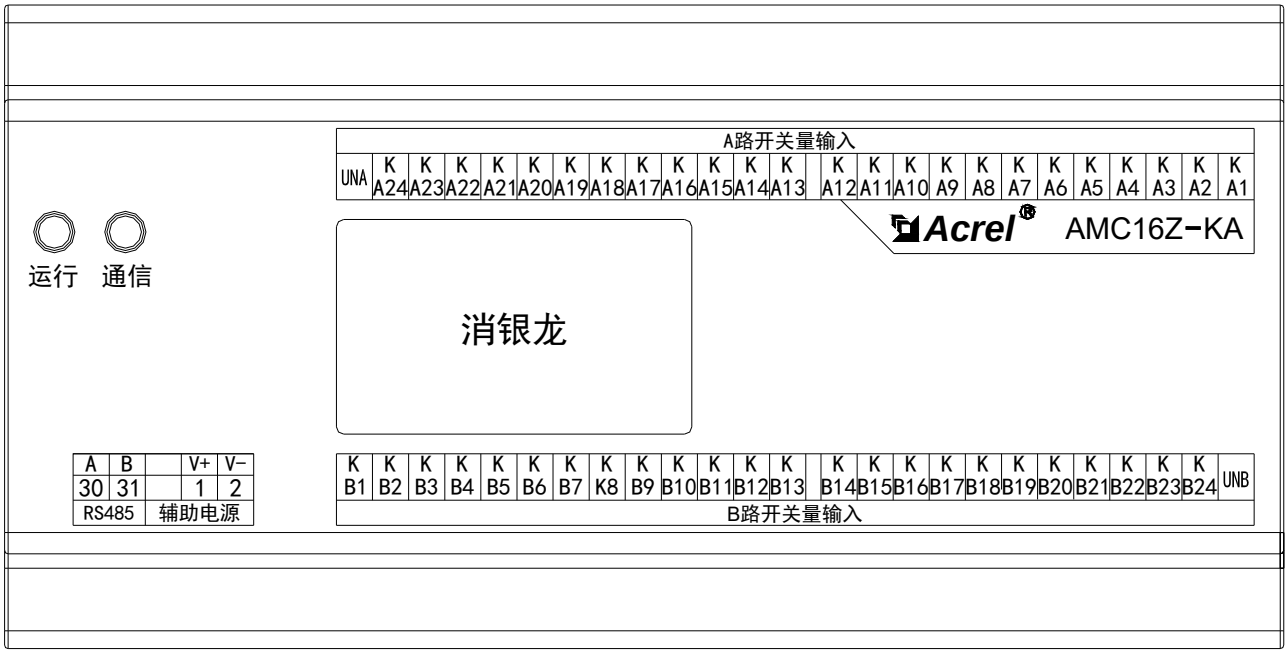
5.4 AMC16Z-FDK48



端子定义 Terminal No. 定义	说明 Explanation	备注 Remarks
V+ V-	辅助电源 Auxiliary power	由 AMC16Z-ZD 供电 Get power from AMC16Z-ZD
A B	RS485 通讯 RS485 communication	连接至触摸屏或者 RS485 集线器 Connect to touch screen or RS485 hub
UA1-UA24 UNA	A 路电压输入 A-way voltage input	A 路开关量输入 A-way switch input
UB1-UB24 UNB	B 路电压输入 B-way voltage input	B 路开关量输入 B-way switch input
A1-A24 GA	A 路电流输入 A-way current input	A 路出线直流电流输入 (24 路霍尔传感器) A-way outgoing line DC current input(24-way Hall sensor)
B1-B24 GB	B 路电流输入 B-way current input	B 路出线直流电流输入 (24 路霍尔传感器) B-way outgoing line DC current input(24-way Hall sensor)

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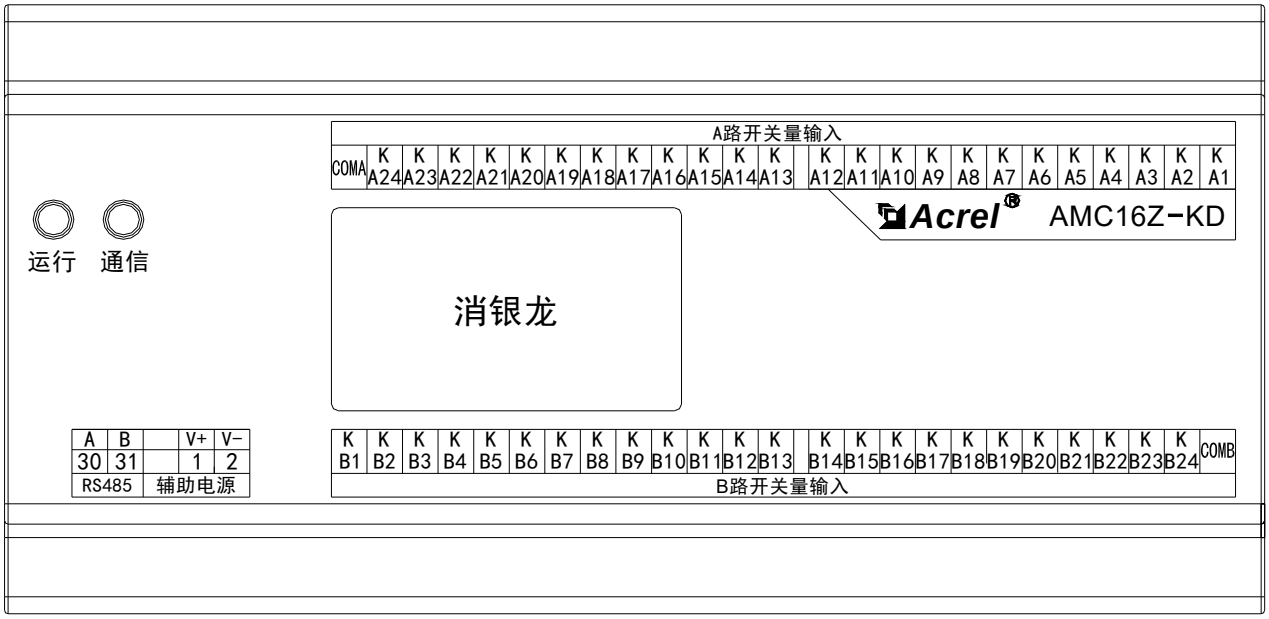
5.5 AMC16Z-KA



端子编号 Terminal No.	定义 Definition	说明 Explanation	备注 Remarks
1	V+	辅助电源 Auxiliary power	由 AMC16Z-ZD 供电 Get power from AMC16Z-ZD
2	V-		
30	A	RS485 通讯 RS485 communication	连接至触摸屏或者 RS485 集线器 Connect to touch screen or RS485 hub
31	B		
KA1-KA24		A 路开关量输入 A-way switch input	A 路有源开关量输入 （24 路） A way active switching input (24 ways)
UNA			
KB1-KB24		B 路开关量输入 B-way switch input	B 路有源开关量输入 （24 路） B way active switching input (24 ways)
UNB			

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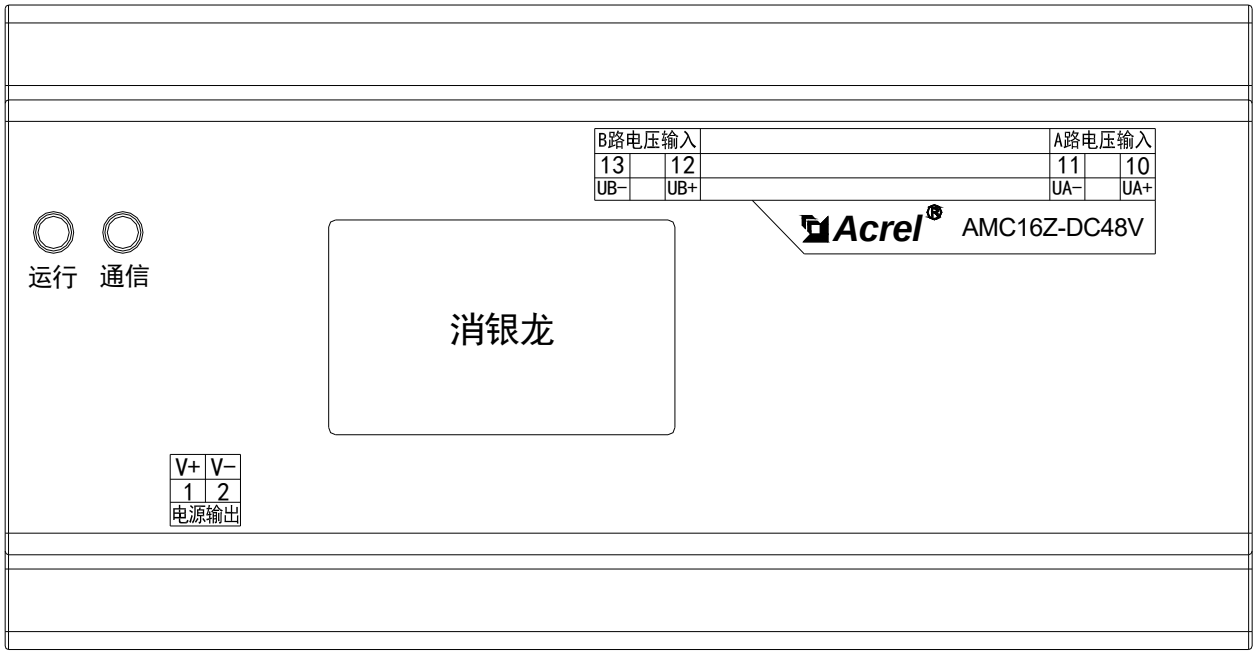
5.6 AMC16Z-KD



端子编号 Terminal No.	定义 Definition	说明 Explanation	备注 Remarks
1	V+	辅助电源 Auxiliary power	由 AMC16Z-ZD 供电 Get power from AMC16Z-ZD
2	V-		
30	A	RS485 通讯 RS485 communication	连接至触摸屏或者 RS485 集线器 Connect to touch screen or RS485 hub
31	B		
KA1-KA24		A 路开关量输入 A-way switch input	A 路无源开关量输入（24 路） A-way passive switching input (24 ways)
COMA			
KB1-KB24		B 路开关量输入 B-way switch input	B 路无源开关量输入（24 路） B-way passive switching input (24 ways)
COMB			

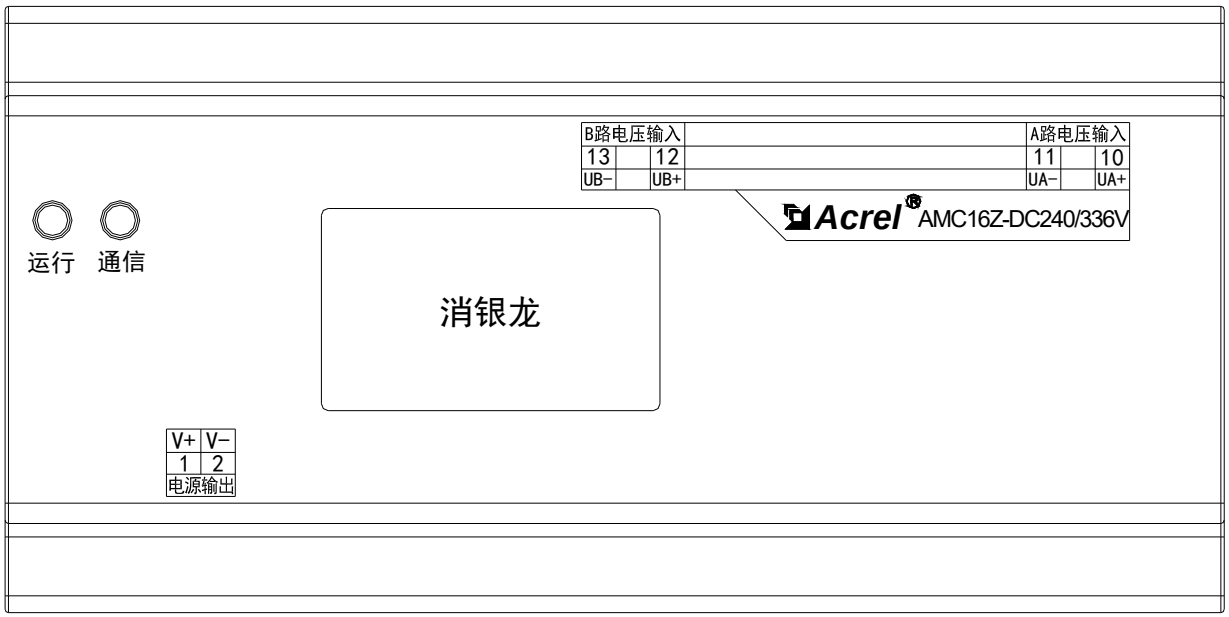
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5.7 AMC16Z-DC48V



端子编号 Terminal No.	定义 Definition	说明 Explanation	备注 Remarks
1	V+	电源输出 Power output	扩展电源，供电 12V 给 AMC16Z-FD，AMC16Z-KA 或 AMC16Z-KD，**该电源禁止外接其他设备（如指示灯、蜂鸣器）** Extend the power supply, supply 12V to AMC16Z-FD, AMC16Z-KA or AMC16Z-KD, and forbid external connection to other devices (such as indicator light and buzzer).
2	V−		
10	UA+	A 路电压输入 A-way voltage input	A 路直流电压输入 A-way DC voltage input
11	UA−		
12	UB+	B 路电压输入 B-way voltage input	B 路直流电压输入 B-way DC voltage input
13	UB−		

5.8 AMC16Z-DC240V/336V



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端子编号 Terminal No.	定义 Definition	说明 Explanation	备注 Remarks
1	V+	电源输出 Power output	供电 12V 给 AMC16Z-FD，AMC16Z-KA 或 AMC16Z-KD,**该电源禁止外接其他设备（如指示灯、蜂鸣器）** Power supply 12V to AMC16Z-FD, AMC16Z-KA or AMC16Z-KD. External connection of other equipment (such as indicator light, buzzer) is prohibited.
2	V-		
10	UA+	A 路电压输入 A-way voltage input	A 路直流电压输入 A-way DC voltage input
11	UA-		
12	UB+	B 路电压输入 B-way voltage input	B 路直流电压输入 B-way DC voltage input
13	UB-		

6 通讯协议 Communication protocol

本协议规定了 AMC16Z 系列直流精密配电监控装置与数据终端设备进行数据交换的物理连接和通讯协议，其协议方式类同 Modbus_RTU 通信规约。

This agreement stipulates the physical connection and communication protocol of AMC16Z series DC precision distribution monitoring device and data terminal equipment for data exchange, and its protocol mode is similar to Modbus_RTU communication protocol.

6.1 协议简述 Protocol overview

AMC16Z 系列直流装置所使用的通讯协议详细定义了地址码、功能码、校验码的数据序列定义，这些都是特定数据交换的必要内容。该协议在一根通讯线上使用主从应答式连接（半双工），这意味着在一根单独的通讯线上信号沿着相反的两个方向传输。首先，主计算机的信号寻址到一台唯一的终端设备（从机），然后，终端设备发出的应答信号以相反的方向传输给主机。

The communication protocol used in AMC16Z series DC devices defines in detail the data sequence definitions of address code, function code and check code, which are necessary for specific data exchange.The protocol USES a master-slave responder connection (half duplex) on a single communication line, which means that signals are transmitted in opposite directions on a single communication line.First, the signal of the main computer is addressed to a unique terminal (slave), and then the reply signal from the terminal is transmitted to the host in the opposite direction.

本协议只允许在主机（PC，PLC 等）和终端设备之间通讯，而不允许独立的终端设备之间的数据交换，这样各终端设备不会在它们初始化时占据通讯线路，而仅限于响应到达本机的查询信号。

This agreement only allows communication between the host computer (PC, PLC, etc.) and terminal equipment, but does not allow data exchange between independent terminal equipment, so that terminal equipment will not occupy the communication line when they are initialized, but only respond to the query signal arriving at the machine.

6.2 传输方式 Transmission mode

信息传输为异步方式，并以字节为单位，在主机和从机之间传递的通讯信息是 11 位字格式，包含 1 个起始位、8 个数据位（最小的有效位先发送）、奇偶校验位（无校验）、1 个停止位。

The information transmission is asynchronous and in bytes. The communication information transmitted

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between the host and the slave is in 11-bit word format, including 1 starting bit, 8 data bits (the smallest effective bit is sent first), parity bit (no calibration), and 1 stop bit.

6.2.1 数据帧格式 Data frame format

地址码 Address code	功能码 Function code	数据区 Data area	CRC 效验码 CRC Check code
1 字节 1 Byte	1 字节 1 Byte	n 字节 n Byte	2 字节 2 Byte

6.2.2 地址域 Address area

地址域在帧的开始部分，由一个字节（8 位二进制码）组成，十进制为 0～255，在我们的系统中只使用 1～247,其它地址保留。这些位标明了用户指定的终端设备的地址，该设备将接收来自与之相连的主机数据。每个终端设备的地址必须是唯一的，仅仅被寻址到的终端会响应包含了该地址的查询。当终端发送回一个响应，响应中的从机地址数据便告诉了主机哪台终端正与之进行通信。

The address field is composed of one byte (8-bit binary code) at the beginning of the frame. The decimal system is 0 to 255. In our system, only 1 to 247 is used.These bits indicate the address of the user-specified terminal device, which will receive data from the host to which it is connected.The address of each terminal must be unique, and only the terminal addressed to will respond to queries containing that address.When a terminal sends back a response, the slave address data in the response tells the host which terminal is communicating with it.

6.2.3 功能域 Function area

功能域代码告诉了被寻址到的终端执行何种功能。下表列出了该系列装置用到的功能码，以及它们的意义和功能。

The function domain code tells the addressable terminal what function to perform.The following table lists the functional codes used in this series of devices, as well as their meanings and functions.

代码 Code	意义 Significance	行为 Act
03	读数据寄存器 Read data register	获得一个或多个寄存器的当前二进制值 Gets the current binary value of one or more registers
16	预置多寄存器 Preset multiple registers	设定二进制值到一系列多寄存器中 Sets binary values to a series of multiple registers

6.2.4 数据域 Data area

数据域包含了终端执行特定功能所需要的数据或者终端响应查询时采集到的数据。这些数据的内容可能是数值、参考地址或者设置值。例如：功能域码告诉终端读取一个寄存器，数据域则需要指明从哪个寄存器开始及读取多少个数据，内嵌的地址和数据依照类型和从机之间的不同内容而有所不同。

A data domain contains data that a terminal needs to perform a specific function or that a terminal collects in response to a query.The content of this data may be a numeric value, a reference address, or a setting value.For example, the function field code tells the terminal to read a register, while the data field needs to indicate which

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register to start from and how much data to read. The embedded address and data vary according to the type and content of the slave machine

6.2.5 错误校验域 Error checking area

该域允许主机和终端检查传输过程中的错误。有时，由于电噪声和其它干扰，一组数据在从一个设备传输到另一个设备时在线路上可能会发生一些改变，出错校验能够保证主机或者终端不去响应那些传输过程中发生了改变的数据，这就提高了系统的安全性和效率，错误校验使用了 16 位循环冗余的方法（CRC16）。

This domain allows the host and terminal to check for errors in transit.Sometimes, due to the electrical noise and other disturbance, a set of data from one device to another device online may occur some changes on the road, error checking to ensure that the host or terminal not to response the changed in the process of transmitting data, this will improve the safety and efficiency of the system, and the error checking use 16 bits cyclic redundancy method (CRC16).

6.2.6 错误检测的方法 Error detection methods

错误校验域占用两个字节，包含了一个 16 位的二进制值。CRC 值由传输设备计算出来，然后附加到数据帧上，接收设备在接收数据时重新计算 CRC 值，然后与接收到的 CRC 域中的值进行比较，如果这两个值不相等，就发生了错误。

The error checking field occupies two bytes and contains a 16-bit binary value.The CRC value is calculated by the transmitting device and then attached to the data frame. The receiving device recalculates the CRC value upon receiving the data and then compares it with the value in the RECEIVED CRC domain. If the two values are not equal, an error occurs.

CRC 运算时，首先将一个 16 位的寄存器预置为全 1，然后连续把数据帧中的每个字节中的 8 位与该寄存器的当前值进行运算，仅仅每个字节的 8 个数据位参与生成 CRC，起始位和终止位以及可能使用的奇偶位都不影响 CRC。在生成 CRC 时，每个字节的 8 位与寄存器中的内容进行异或，然后将结果向低位移位，高位则用“0”补充，最低位（LSB）移出并检测，如果是 1，该寄存器就与一个预设的固定值（0A001H）进行一次异或运算，如果最低位为 0，不作任何处理。

During CRC operation, a 16-bit register is preset to all 1, and then the 8 bits in each byte of the data frame are computed continuously with the current value of the register. Only the 8 bits of each byte participate in generating CRC, and the starting and ending bits and the possible parity bits do not affect CRC.When generate CRC, each byte of eight different or with the contents of the registers, then the results to the low displacement, high use "0", its lowest (LSB) removed and test, if it is 1, the register is fixed with a preset value (0 a001h) for an exclusive or operation, if the lowest is 0, do not make any processing.

上述处理重复进行，直到执行完了 8 次移位操作，当最后一位（第 8 位）移完以后，下一个 8 位字节与寄存器的当前值进行异或运算，同样进行上述的另一个 8 次移位异或操作，当数据帧中的所有字节都作了处理，生成的最终值就是 CRC 值。

The above process repeated, until the end of the eight times perform shift operation, when the last one (eighth) after, an 8-bit bytes and register under the current value of exclusive or operation, another eight times for the same shift xor operation, when all the bytes of a data frame processing, generate the final value is CRC value.

生成一个 CRC 的流程为：

The process of generating a CRC is as follows:

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⑴ 预置一个 16 位寄存器为 FFFFH（全 1），称之为 CRC 寄存器。

(1) Presets a 16-bit register for FFFFH (all 1), called the CRC register..

把数据帧中的第一个字节的 8 位与 CRC 寄存器中的低字节进行异或运算，结果存回 CRC 寄存器。

The 8-bit of the first byte in the data frame is xor with the low byte in the CRC register, and the result is saved back to the CRC register.

将 CRC 寄存器向右移一位，最高位填以 0，最低位移出并检测。

The CRC register is moved to the right one bit, the highest bit is filled with 0, the lowest bit is removed and detected.

如果最低位为 0：重复第三步（下一次移位）；如果最低位为 1：将 CRC 寄存器与一个预设的固定值（0A001H）进行异或运算。

If the lowest order is 0: repeat step 3 (next shift);If the lowest order is 1: Xor the CRC register with a preset fixed value (0A001H).

重复第三步和第四步直到 8 次移位。这样处理完了一个完整的八位。

Repeat steps 3 and 4 until 8 shifts.This completes a full eight bits.

⑵ 重复第 2 步到第 5 步来处理下一个八位，直到所有的字节处理结束。

Repeat steps 2 through 5 to process the next eight bits until all bytes are processed.

最终 CRC 寄存器的值就是 CRC 的值。

The final CRC register value is the CRC value.

此外还有一种利用预设的表格计算 CRC 的方法，它的主要特点是计算速度快，但是表格需要较大的存储空间，该方法此处不再赘述，请参阅相关资料。

In addition, there is another method to calculate CRC using a preset table. Its main characteristic is that the calculation speed is fast, but the table requires a large amount of storage space. This method will not be described here.

6.3 功能码简介 Function Code introduction

6.3.1 功能码 01H、02H：读离散量输入

Function code 01H, 02H: Read discrete input

此功能码读取离散量输入的1至2000 连续状态。请求PDU 详细说明了起始地址，即指定的第一个输入地址和输入编号。从零开始寻址输入。因此寻址输入1-16 为0-15。根据数据域的每个比特将响应报文中的离散量输入分成为一个输入。指示状态为1= ON 和0=OFF。第一个数据字节的LSB（最低有效位）包括在询问中寻址的输入。其它输入依次类推，一直到这个字节的高位端为止，并在后续字节中从低位到高位的顺序。如果返回的输入数量不是八的倍数，将用零填充最后数据字节中的剩余比特（一直到字节的高位端）。字节数量域说明了数据的完整字节数。

This function code reads the continuous state of the discrete quantity input from 1 to 2000.The request PDU specifies the starting address, the first input address specified and the input number.Address input from scratch.So the address inputs 1-16 are 0-15.According to each bit in the data field, the discrete input in the response message is divided into one input.Indicates states 1= ON and 0=OFF.The LSB (least significant bit) of the first data byte includes the input addressed in the query.The other inputs are followed in sequence, up to the highest end of the byte, and from low to high in subsequent bytes.If the number of inputs returned is not a multiple of eight, the remaining bits in the last data byte are filled with zeros (up to the highest end of the byte).The number of bytes field indicates the complete

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number of bytes of data.

下面的例子是从01号从机读DI7～DI16的连续10个开关量状态。

The following example reads 10 consecutive switch states of DI7 ~ DI16 from no. 01 slave.

主机发送 Host send		发送信息 Send information
地址码 Address Code		01H
功能码 Function Code		02H
起始 地址 Starting address	高字节 High byte	00H
	低字节 Low byte	06H
输出数量 Output Amount	高字节 High byte	00H
	低字节 Low byte	0AH
CRC 校验码 CRC check code	低字节 Low byte	18H
	高字节 High byte	0CH

从机返回 Slave return		返回信息 Return information
地址码 Address Code		01H
功能码 Function Code		02H
字节数 Byte Amount		02H
输入状态 14-7 Input state 14-7		3FH
输入状态 16-15 Input state 16-15		02H
CRC 校验码 CRC check code	低字节 Low byte	29H
	高字节 High byte	89H

将离散量输入状态14-7表示为十六进制字节值3F，或二进制0011 1111。输入14是这个字节的MSB，输入7是这个字节的LSB。

The discrete input state 14-7 is represented as the hexadecimal byte value 3F, or binary 0011 1111.Input 14 is an MSB for this byte, and input 7 is an LSB for this byte.

将离散量输入状态 16-15 表示为十六进制字节值 02，或二进制 0000 0010。输入 15 是 LSB，零填充最后数据字节中的剩余比特。

Represents the discrete input state 16-15 as a hexadecimal byte value 02, or binary 0000 0010.Input 15 is LSB, and zero fills the remaining bits in the last data byte

6.3.2 功能码 03H：读寄存器 Function code 03H: read register

此功能允许用户获得设备采集与记录的数据及系统参数。主机一次请求的数据个数没有限制，但不能超出定义的地址范围。

This function allows users to obtain data and system parameters collected and recorded by the device.There is no limit to how much data a host can request at a time, but it cannot exceed the defined address range.

下面的例子是从 01 号从机读 3 个采集到的基本数据 （数据帧中每个地址占用 2 个字节）Uab、Ubc、Uca，其中 Uab 的地址为 03H，Ubc 的地址为 04H，Uca 的地址为 05H。

The following example is the basic data collected from machine reading no. 01 (2 bytes for each address in the data frame) Uab, Ubc and Uca, where Uab address is 03H, Ubc address is 04H and Uca address is 05H.

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主机发送 Host send		发送信息 Send information
地址码 Address code		01H
功能码 Function Code		03H
起始地址 Starting address	高字节 High byte	00H
	低字节 Low byte	03H
寄存器数量 Register Amount	高字节 High byte	00H
	低字节 Low byte	03H
CRC 校验码 CRC check code	低字节 Low byte	F5H
	高字节 High byte	CBH

从机返回 Slave return		返回信息 Return information
地址码 Address code		01H
功能码 Function Code		03H
字节数 Byte Amount		06H
寄存器 数据 Register Data	高字节 High byte	0EH
	低字节 Low byte	EEH
寄存器 数据 Register Data	高字节 High byte	0EH
	低字节 Low byte	E8H
寄存器 数据 Register Data	高字节 High byte	0EH
	低字节 Low byte	E9H
CRC 校验码 CRC check code	低字节 Low byte	8FH
	高字节 High byte	7EH

6.3.3 功能码 10H：写多个寄存器 Function code 10H: write multiple registers

功能码 10H 允许用户改变多个寄存器的内容，该仪表中系统参数、开关量输出状态等可用此功能号写入。主机一次最多可以写入 16 个(32 字节)数据。

Function code 10H allows users to change the contents of multiple registers. System parameters and switching output state of the instrument can be written by this function number.The host can write up to 16 (32 bytes) of data at a time.

下面的例子是预置地址为01的仪表同时输出开关量DO。开关量输出状态指示寄存器地址为0045H，第1位对应DO。

The following example is an instrument with a preset address of 01 that outputs a switching amount of DO.Switch output status indicator register address is 0045H, the first bit corresponds to DO.

主机发送 Host send		发送信息 Send information
地址码 Address code		01H
功能码 Function Code		10H
起始地址 Starting	高字节	00H

从机返回 Slave return		返回信息 Return information
地址码 Address code		01H
功能码 Function Code		10H
起始 地址	高字节	00H

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address	High byte	
	低字节 Low byte	45H
寄存器数量 Register Amount	高字节 High byte	00H
	低字节 Low byte	01H
字节数 Byte Amount		02H
0045H 待写入数据 0045H data to be written	高字节 High byte	00H
	低字节 Low byte	01H
CRC 校验码 CRC check code	低字节 Low byte	69H
	高字节 High byte	05H

Starting address	High byte	
	低字节 Low byte	45H
寄存器数量 Register Amount	高字节 High byte	00H
	低字节 Low byte	01H
CRC 校验码 CRC check code	低字节 Low byte	10H
	高字节 High byte	1CH

6.4 通讯地址 Communication address

6.4.1 AMC16Z-ZD

遥测，遥控 Remote measuring, remote control

参数区（0x00～0x2F）

Parameter area (0x00 ~ 0x2F)

序号 Serial No.	变量 Variant	地址 Address	读/写 Read/ write	字长 Word length	单位 Unit	数据类型 Data type	备注 Remarks
1	地址 Address	00H	R/W	1	NONE	Uint16	1～247
2	波特率 Baud rate	01H	R/W	1	NONE	Uint16	0:115200 1:2400 2:4800 3:9600 4:19200 5:38400 6:57600
3	校验位 Check digit	02H	R/W	1	NONE	Uint16	0:无校验 0:no check 2:奇校验 2:Odd check

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							3:偶校验 3.Even check
4	接线方式 Wiring Method	03H	R/W	1	NONE	Uint16	预留 Reserve
5	额定电压 Rated Voltage	04H	R/W	1	V	Uint16	48、240
6	额定电流 Rated current	05H	R/W	1	A	Uint16	预留 Reserve
7	出线电压变比 Outgoing voltage ratio	06H	R/W	1	NONE	Uint16	预留 Reserve
8	出线电流变比 Outgoing current ratio	07H	R/W	1	NONE	Uint16	预留 Reserve
9	备用 Standby	08H	R/W	1	NONE	Uint16	
10	第 1 路继电器输出 1st way relay output	09H	R/W	1	NONE	Uint16	
11	第 2 路继电器输出 2nd way relay output	0AH	R/W	1	NONE	Uint16	
12	零点屏蔽值设定 Zero screen value setting	0BH	R/W	1	%	Uint16	一位小数 A decimal
13	电流校零 Current check zero	0CH	R/W	1	NONE	Uint16	0x8801:第一路 0x8801:1st way 0x8802:第二路 0x8802:2nd way
14	电能清零 Power zero clearing	0DH	R/W	1	NONE	Uint16	0x6601:第一路 0x6601:1st way 0x6602:第二路 0x6602:2nd way 0x66FF:全部 0 x66ff: all

电参量数据区（0x30～0x5FD）Parameter data area（0x30～0x5FD）

序号 Serial No.	解释 Explanation	地址 Address	读/写 Read/ write	字长 Word length	单位 Unit	数据类型 Data type	备注 Remarks
1	A 侧直流进线 1 电压 A side DC incoming line 1 voltage	30H-31H	R	2	V	float	
2	A 侧直流进线 1 电流 A side DC incoming line 1	32H-33H	R	2	A	float	

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	current						
3	A 侧直流进线 1 功率 A side DC incoming line 1 power	34H-35H	R	2	W	float	
4	A 侧直流进线 1 电能 A side DC incoming line 1energy	36H-37H	R	2	0.01kWh	Uint32	
5	A 侧直流进线 2 电压 A side DC incoming line 2 voltage	38H-39H	R	2	V	float	
6	A侧直流进线2电流A side DC incoming line 2 current	3AH-3BH	R	2	A	float	
7	A 侧直流进线 2 功率 A side DC incoming line 2 power	3CH-3DH	R	2	W	float	
8	A 侧直流进线 2 电能 A side DC incoming line 2 energy	3EH-3FH	R	2	0.01kWh	Uint32	
9	备用 Standby	40H-05F9H	R				
10	温度 Temperature	05FAH-05FBH	R	2	℃	float	
11	湿度 Humidity	05FCH-05FDH	R	2	%	float	

遥信 Remote signal

序号 SerialNo.	变量 Variant	位地址 Bit address	读/写 Read/write	备注 Remarks
1	第 1 路开关量输入 1st way switch input	0	R	0 无效,1 有效 0 invalid,1 valid
2	第 2 路开关量输入 2nd way switch input	1	R	同上 Ditto
3	第 3 路开关量输入 3rd way switch input	2	R	同上 Ditto
4	第 4 路开关量输入 4th way switch input	3	R	同上 Ditto

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5	第 5 路开关量输入 5th way switch input	4	R	同上 Ditto
6	第 6 路开关量输入 6th way switch input	5	R	同上 Ditto
7	第 1 路开关量输出 1st way switch input	6	R	同上 Ditto
8	第 2 路开关量输出 2nd way switch output	7	R	同上 Ditto

6.4.2 AMC16Z-FD

遥测，遥控 Remote measurement,remote control

参数区（0x00～0x2F）Parameter area（0x00～0x2F）

序号 SerialNo.	变量 Variant	地址 Address	读/写 Read/ write	字长 Word length	单位 Unit	数据类型 Data type	备注 Remarks
1	地址 Address	00H	R/W	1	NONE	Uint16	1～247
2	波特率 Baud rate	01H	R/W	1	NONE	Uint16	0:115200 1:2400 2:4800 3:9600 4:19200 5:38400 6:57600
3	校验位 Check bit	02H	R/W	1	NONE	Uint16	0:无校验 0:No check 2:奇校验 2:Odd check 3:偶校验 3:Even check
4	接线方式 Wiring method	03H	R/W	1	NONE	Uint16	预留 Reserve
5	额定电压 Rated voltage	04H	R/W	1	V	Uint16	48、240
6	额定电流 Rated current	05H	R/W	1	A	Uint16	预留 Reserve
7	出线电压变比 Outgoing line voltage	06H	R/W	1	NONE	Uint16	预留 Reserve

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	ratio						
8	出线电流变比 Outgoing line current ratio	07H	R/W	1	NONE	Uint16	预留 Reserve
9	备用 Standby	08H	R/W	1	NONE	Uint16	
10	备用 Standby	09H	R/W	1	NONE	Uint16	
11	备用 Standby	0AH	R/W	1	NONE	Uint16	
12	零点屏蔽值设定 Zero screen setting	0BH	R/W	1	%	Uint16	一位小数 One decimal
13	电流校零 Current check zero	0CH	R/W	1	NONE	Uint16	0x8801:第一路 0x8801:1st way 0x8802:第二路 …… 0x8802:2nd way …… 0x88FF:全部 0x88FF:All
14	电能清零 Energy zero clearing	0DH	R/W	1	NONE	Uint16	06601:第一路 06601::1st way 0x6602:第二路 …… 06601::2nd way …… 0x66FF:全部 0x66FF:All

电参量数据区（0x30～0xEF）Parameter data area（0x30～0xEF）

序号 SerialNo.	变量 Variant	地址 Address	读/写 Read/write	字长 Word length	单位 Unit	备注 Remarks
1	A 侧直流出线 1 电压 A side DC outgoing line 1 voltage	30H-31H	R	2	V	
2	A 侧直流出线 2 电压	32H-33H	R	2	V	

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	A side DC outgoing line 2 voltage					
3	A 侧直流出线 3 电压 A side DC outgoing line 3 voltage	34H-35H	R	2	V	
4	A 侧直流出线 4 电压 A side DC outgoing line 4 voltage	36H-37H	R	2	V	
5	A 侧直流出线 5 电压 A side DC outgoing line 5 voltage	38H-39H	R	2	V	
6	A 侧直流出线 6 电压 A side DC outgoing line 6 voltage	3AH-3BH	R	2	V	
7	A 侧直流出线 7 电压 A side DC outgoing line 7 voltage	3CH-3DH	R	2	V	
8	A 侧直流出线 8 电压 A side DC outgoing line 8 voltage	3EH-3FH	R	2	V	
9	A 侧直流出线 9 电压 A side DC outgoing line 9 voltage	40H-41H	R	2	V	
10	A 侧直流出线 10 电压 A side DC outgoing line 10 voltage	42H-43H	R	2	V	
11	A 侧直流出线 11 电压 A side DC outgoing line 11 voltage	44H-45H	R	2	V	
12	A 侧直流出线 12 电压 A side DC outgoing line 12 voltage	46H-47H	R	2	V	
13	B 侧直流出线 1 电压 B side DC outgoing line 1 voltage	48H-49H	R	2	V	
14	B 侧直流出线 2 电压 B side DC outgoing line 2 voltage	4AH-4BH	R	2	V	

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15	B 侧直流出线 3 电压 B side DC outgoing line 3 voltage	4CH-4DH	R	2	V	
16	B 侧直流出线 4 电压 B side DC outgoing line 4 voltage	4EH-4FH	R	2	V	
17	B 侧直流出线 5 电压 B side DC outgoing line 5 voltage	50H-51H	R	2	V	
18	B 侧直流出线 6 电压 B side DC outgoing line 6 voltage	52H-53H	R	2	V	
19	B 侧直流出线 7 电压 B side DC outgoing line 7 voltage	54H-55H	R	2	V	
20	B 侧直流出线 8 电压 B side DC outgoing line 8 voltage	56H-57H	R	2	V	
21	B 侧直流出线 9 电压 B side DC outgoing line 9 voltage	58H-59H	R	2	V	
22	B 侧直流出线 10 电压 B side DC outgoing line 10 voltage	5AH-5BH	R	2	V	
23	B 侧直流出线 11 电压 B side DC outgoing line 11 voltage	5CH-5DH	R	2	V	
24	B 侧直流出线 12 电压 B side DC outgoing line 12 voltage	5EH-5FH	R	2	V	
25	A 侧直流出线 1 电流 A side DC outgoing line 1 current	60H-61H	R	2	A	
26	A 侧直流出线 2 电流 A side DC outgoing line 2 current	62H-63H	R	2	A	
27	A 侧直流出线 3 电流 A side DC outgoing line 3	64H-65H	R	2	A	

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	current					
28	A 侧直流出线 4 电流 A side DC outgoing line 4 current	66H-67H	R	2	A	
29	A 侧直流出线 5 电流 A side DC outgoing line 5 current	68H-69H	R	2	A	
30	A 侧直流出线 6 电流 A side DC outgoing line 6 current	6AH-6BH	R	2	A	
31	A 侧直流出线 7 电流 A side DC outgoing line 7 current	6CH-6DH	R	2	A	
32	A 侧直流出线 8 电流 A side DC outgoing line 8 current	6EH-6FH	R	2	A	
33	A 侧直流出线 9 电流 A side DC outgoing line 9 current	70H-71H	R	2	A	
34	A 侧直流出线 10 电流 A side DC outgoing line 10 current	72H-73H	R	2	A	
35	A 侧直流出线 11 电流 A side DC outgoing line 11 current	74H-75H	R	2	A	
36	A 侧直流出线 12 电流 A side DC outgoing line 12 current	76H-77H	R	2	A	
37	B 侧直流出线 1 电流 B side DC outgoing line 1 current	78H-79H	R	2	A	
38	B 侧直流出线 2 电流 B side DC outgoing line 2 current	7AH-7BH	R	2	A	
39	B 侧直流出线 3 电流 B side DC outgoing line 3 current	7CH-7DH	R	2	A	
40	B 侧直流出线 4 电流	7EH-7FH	R	2	A	

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	B side DC outgoing line 4 current					
41	B 侧直流出线 5 电流 B side DC outgoing line 4 current	80H-81H	R	2	A	
42	B 侧直流出线 6 电流 B side DC outgoing line 6 current	82H-83H	R	2	A	
43	B 侧直流出线 7 电流 B side DC outgoing line 7 current	84H-85H	R	2	A	
44	B 侧直流出线 8 电流 B side DC outgoing line 8 current	86H-87H	R	2	A	
45	B 侧直流出线 9 电流 B side DC outgoing line 9 current	88H-89H	R	2	A	
46	B 侧直流出线 10 电流 B side DC outgoing line 10 current	8AH-8BH	R	2	A	
47	B 侧直流出线 11 电流 B side DC outgoing line 11 current	8CH-8DH	R	2	A	
48	B 侧直流出线 12 电流 B side DC outgoing line 12 current	8EH-8FH	R	2	A	
49	A 侧直流出线 1 功率 A side DC outgoing line 1 power	90H-91H	R	2	W	
50	A 侧直流出线 2 功率 A side DC outgoing line 2 power	92H-93H	R	2	W	
51	A 侧直流出线 3 功率 A side DC outgoing line 3 power	94H-95H	R	2	W	
52	A 侧直流出线 4 功率 A side DC outgoing line 4 power	96H-97H	R	2	W	

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53	A 侧直流出线 5 功率 A side DC outgoing line 5 power	98H-99H	R	2	W	
54	A 侧直流出线 6 功率 A side DC outgoing line 6 power	9AH-9BH	R	2	W	
55	A 侧直流出线 7 功率 A side DC outgoing line 7 power	9CH-9DH	R	2	W	
56	A 侧直流出线 8 功率 A side DC outgoing line 8 power	9EH-9FH	R	2	W	
57	A 侧直流出线 9 功率 A side DC outgoing line 9 power	A0H-A1H	R	2	W	
58	A 侧直流出线 10 功率 A side DC outgoing line 10 power	A2H-A3H	R	2	W	
59	A 侧直流出线 11 功率 A side DC outgoing line 11 power	A4H-A5H	R	2	W	
60	A 侧直流出线 12 功率 A side DC outgoing line 12 power	A6H-A7H	R	2	W	
61	B 侧直流出线 1 功率 B side DC outgoing line 1 power	A8H-A9H	R	2	W	
62	B 侧直流出线 2 功率 B side DC outgoing line 2 power	AAH-ABH	R	2	W	
63	B 侧直流出线 3 功率 B side DC outgoing line 3 power	ACH-ADH	R	2	W	
64	B 侧直流出线 4 功率 B side DC outgoing line 4 power	AEH-AFH	R	2	W	
65	B 侧直流出线 5 功率 B side DC outgoing line 5	B0H-B1H	R	2	W	

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	power					
66	B 侧直流出线 6 功率 B side DC outgoing line 6 power	B2H-B3H	R	2	W	
67	B 侧直流出线 7 功率 B side DC outgoing line 7 power	B4H-B5H	R	2	W	
68	B 侧直流出线 8 功率 B side DC outgoing line 8 power	B6H-B7H	R	2	W	
69	B 侧直流出线 9 功率 B side DC outgoing line 9 power	B8H-B9H	R	2	W	
70	B 侧直流出线 10 功率 B side DC outgoing line 10 power	BAH-BBH	R	2	W	
71	B 侧直流出线 11 功率 B side DC outgoing line11 power	BCH-BDH	R	2	W	
72	B 侧直流出线 12 功率 B side DC outgoing line 12 power	BEH-BFH	R	2	W	
73	A 侧直流出线 1 电能 A side DC outgoing line 1 energy	C0H-C1H	R	2	0.01kWh	
74	A 侧直流出线 2 电能 A side DC outgoing line 2 energy	C2H-C3H	R	2	0.01kWh	
75	A 侧直流出线 3 电能 A side DC outgoing line 3 energy	C4H-C5H	R	2	0.01kWh	
76	A 侧直流出线 4 电能 A side DC outgoing line 4 energy	C6H-C7H	R	2	0.01kWh	
77	A 侧直流出线 5 电能 A side DC outgoing line 5 energy	C8H-C9H	R	2	0.01kWh	
78	A 侧直流出线 6 电能	CAH-CBH	R	2	0.01kWh	

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	A side DC outgoing line 6 energy					
79	A 侧直流出线 7 电能 A side DC outgoing line 7 energy	CCH-CDH	R	2	0.01kWh	
80	A 侧直流出线 8 电能 A side DC outgoing line 8 energy	CEH-CFH	R	2	0.01kWh	
81	A 侧直流出线 9 电能 A side DC outgoing line 9 energy	D0H-D1H	R	2	0.01kWh	
82	A 侧直流出线 10 电能 A side DC outgoing line 10 energy	D2H-D3H	R	2	0.01kWh	
83	A 侧直流出线 11 电能 A side DC outgoing line 11 energy	D4H-D5H	R	2	0.01kWh	
84	A 侧直流出线 12 电能 A side DC outgoing line 11 energy	D6H-D7H	R	2	0.01kWh	
85	B 侧直流出线 1 电能 B side DC outgoing line 1 energy	D8H-D9H	R	2	0.01kWh	
86	B 侧直流出线 2 电能 B side DC outgoing line 2 energy	DAH-DBH	R	2	0.01kWh	
87	B 侧直流出线 3 电能 B side DC outgoing line 3 energy	DCH-DDH	R	2	0.01kWh	
88	B 侧直流出线 4 电能 B side DC outgoing line 4 energy	DEH-DFH	R	2	0.01kWh	
89	B 侧直流出线 5 电能 B side DC outgoing line 5 energy	E0H-E1H	R	2	0.01kWh	
90	B 侧直流出线 6 电能 B side DC outgoing line 6 energy	E2H-E3H	R	2	0.01kWh	

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91	B 侧直流出线 7 电能 B side DC outgoing line 7 energy	E4H-E5H	R	2	0.01kWh	
92	B 侧直流出线 8 电能 B side DC outgoing line 8 energy	E6H-E7H	R	2	0.01kWh	
93	B 侧直流出线 9 电能 B side DC outgoing line 9 energy	E8H-E9H	R	2	0.01kWh	
94	B 侧直流出线 10 电能 B side DC outgoing line 10 energy	EAH-EBH	R	2	0.01kWh	
95	B 侧直流出线 11 电能 B side DC outgoing line 11 energy	ECH-EDH	R	2	0.01kWh	
96	B 侧直流出线 12 电能 B side DC outgoing line 12 energy	EEH-EFH	R	2	0.01kWh	

6.4.3 AMC16Z-FDK24

AMC16Z-FDK24/48 通讯时同一条总线中会占用 2 个地址，若表中地址为 1,则地址 2 占用，同一条总线中其余表地址不可设为 2，其余地址以此类推。

When communicating with AMC16Z-FDK24/48, two addresses will be occupied in the same bus. If the address in the table is 1, address 2 will be occupied. The other table addresses in the same bus cannot be set to 2, and the rest addresses can be set to the same.

遥测，遥控 Remote measurement,remote control

参数区（0x00～0x2F）Parameter area（0x00～0x2F）

序号 SerialNo.	变量 Variant	地址 Address	读/写 Read/write	字长 Word length	单位 Unit	数据类型 Data type	备注 Remarks
1	地址 Address	00H	R/W	1	NONE	Uint16	1～247
2	波特率 Baud rate	01H	R/W	1	NONE	Uint16	0:115200 1:2400 2:4800 3:9600 4:19200 5:38400 6:57600

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3	校验位 Check bit	02H	R/W	1	NONE	Uint16	0:无校验 0：no check 1:奇校验 1:Odd check 2:偶校验 2:Even check
4	接线方式 Wiring method	03H	R/W	1	NONE	Uint16	预留 Reserve
5	额定电压 Rated voltage	04H	R/W	1	V	Uint16	48、240、336
6	额定电流 Rated current	05H	R/W	1	A	Uint16	预留 Reserve
7	出线电压变比 Outgoing line voltage ratio	06H	R/W	1	NONE	Uint16	预留 Reserve
8	出线电流变比 Outgoing line current ratio	07H	R/W	1	NONE	Uint16	预留 Reserve
9	备用 Standby	08H	R/W	1	NONE	Uint16	
10	备用 Standby	09H	R/W	1	NONE	Uint16	
11	备用 Standby	0AH	R/W	1	NONE	Uint16	
12	零点屏蔽值设定 Zero screen setting	0BH	R/W	1	%	Uint16	一位小数 One decimal
13	电流校零 Current check zero	0CH	R/W	1	NONE	Uint16	0x8801:第一路 0x8801:1st way 0x8802:第二路 …… 0x8802:2nd way..... 0x88FF:全部 0x88FF:All
14	电能清零 Energy zero clearing	0DH	R/W	1	NONE	Uint16	06601:第一路 06601:1st way 0x6602:第二路

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							…… 06602:2nd way…… 0x66FF:全部 0x66FF:All
15	消抖次数 Shake frequency elimination	27H	R/W	1	NONE	Uint16	默认 2 Default 2
16	高电平判定值 High level determination	28H	R/W	1	NONE	Uint16	30，66，100

电参量数据区（0x30～0xED）Parameter data area (0x30 ~ 0xED)

序号 SerialNo.	变量 Variant	地址 Address	读/写 Read/ write	字长 Word length	单位 Unit	数据类型 Data type	备注 Remarks
1	Ⅰ段直流出线 1 电压 Section I DC outgoing line 1 voltage	30H-31H	R	2	V	float	
2	Ⅰ段直流出线 2 电压 Section I DC outgoing line 2 voltage	32H-33H	R	2	V	float	
3	Ⅰ段直流出线 3 电压 Section I DC outgoing line 3 voltage	34H-35H	R	2	V	float	
4	Ⅰ段直流出线 4 电压 Section I DC outgoing line 4voltage	36H-37H	R	2	V	float	
5	Ⅰ段直流出线 5 电压 Section I DC outgoing line 5 voltage	38H-39H	R	2	V	float	
6	Ⅰ段直流出线 6 电压 Section I DC outgoing line 6 voltage	3AH-3BH	R	2	V	float	
7	Ⅰ段直流出线 7 电压 Section I DC outgoing line 7 voltage	3CH-3DH	R	2	V	float	
8	Ⅰ段直流出线 8 电压 Section Ⅰ DC outgoing	3EH-3FH	R	2	V	float	

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	line 8 voltage						
9	Ⅰ段直流出线 9 电压 Section I DC outgoing line 9 voltage	40H-41H	R	2	V	float	
10	Ⅰ段直流出线 10 电压 Section I DC outgoing line 10 voltage	42H-43H	R	2	V	float	
11	Ⅰ段直流出线 11 电压 Section I DC outgoing line 11 voltage	44H-45H	R	2	V	float	
12	Ⅰ段直流出线 12 电压 Section I DC outgoing line 12 voltage	46H-47H	R	2	V	float	
13	Ⅱ段直流出线 1 电压 Section II DC outgoing line 1 voltage	48H-49H	R	2	V	float	
14	Ⅱ段直流出线 2 电压 Section II DC outgoing line 2 voltage	4AH-4BH	R	2	V	float	
15	Ⅱ段直流出线 3 电压 Section II DC outgoing line 3 voltage	4CH-4DH	R	2	V	float	
16	Ⅱ段直流出线 4 电压 Section II DC outgoing line 4 voltage	4EH-4FH	R	2	V	float	
17	Ⅱ段直流出线 5 电压 Section II DC outgoing line 5 voltage	50H-51H	R	2	V	float	
18	Ⅱ段直流出线 6 电压 Section II DC outgoing line 6 voltage	52H-53H	R	2	V	float	
19	Ⅱ段直流出线 7 电压 Section II DC outgoing line 7 voltage	54H-55H	R	2	V	float	
20	Ⅱ段直流出线 8 电压 Section II DC outgoing line 8 voltage	56H-57H	R	2	V	float	
21	Ⅱ段直流出线 9 电压	58H-59H	R	2	V	float	

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	Section II DC outgoing line 9 voltage						
22	II 段直流出线 10 电压 Section II DC outgoing line 10 voltage	5AH-5BH	R	2	V	float	
23	II 段直流出线 11 电压 Section II DC outgoing line 11 voltage	5CH-5DH	R	2	V	float	
24	B 侧直流出线 12 电压 Section II DC outgoing line 12 voltage	5EH-5FH	R	2	V	float	
25	I 段直流出线 1 电流 Section I DC outgoing line 1 current	60H-61H	R	2	A	float	
26	I 段直流出线 2 电流 Section I DC outgoing line 2 current	62H-63H	R	2	A	float	
27	I 段直流出线 3 电流 Section I DC outgoing line 3 current	64H-65H	R	2	A	float	
28	I 段直流出线 4 电流 Section I DC outgoing line 4 current	66H-67H	R	2	A	float	
29	I 段直流出线 5 电流 Section I DC outgoing line 5 current	68H-69H	R	2	A	float	
30	I 段直流出线 6 电流 Section I DC outgoing line 6 current	6AH-6BH	R	2	A	float	
31	I 段直流出线 7 电流 Section I DC outgoing line 7 current	6CH-6DH	R	2	A	float	
32	I 段直流出线 8 电流 Section I DC outgoing line 8 current	6EH-6FH	R	2	A	float	
33	I 段直流出线 9 电流 Section I DC outgoing line 9 current	70H-71H	R	2	A	float	

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34	I 段直流出线 10 电流 Section I DC outgoing line 10 current	72H-73H	R	2	A	float	
35	I 段直流出线 11 电流 Section I DC outgoing line 11 current	74H-75H	R	2	A	float	
36	I 段直流出线 12 电流 Section I DC outgoing line 12 current	76H-77H	R	2	A	float	
37	II 段直流出线 1 电流 Section II DC outgoing line 1 current	78H-79H	R	2	A	float	
38	II 段直流出线 2 电流 Section II DC outgoing line 2 current	7AH-7BH	R	2	A	float	
39	II 段直流出线 3 电流 Section II DC outgoing line 3 current	7CH-7DH	R	2	A	float	
40	II 段直流出线 4 电流 Section II DC outgoing line 4 current	7EH-7FH	R	2	A	float	
41	II 段直流出线 5 电流 Section II DC outgoing line 5 current	80H-81H	R	2	A	float	
42	II 段直流出线 6 电流 Section II DC outgoing line 6 current	82H-83H	R	2	A	float	
43	II 段直流出线 7 电流 Section II DC outgoing line 7 current	84H-85H	R	2	A	float	
44	II 段直流出线 8 电流 Section II DC outgoing line 8 current	86H-87H	R	2	A	float	
45	II 段直流出线 9 电流 Section II DC outgoing line 9 current	88H-89H	R	2	A	float	
46	II 段直流出线 10 电流 Section II DC outgoing	8AH-8BH	R	2	A	float	

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	line 10 current						
47	II 段直流出线 11 电流 Section II DC outgoing line 11 current	8CH-8DH	R	2	A	float	
48	II 段直流出线 12 电流 Section II DC outgoing line 12 current	8EH-8FH	R	2	A	float	
49	I 段直流出线 1 功率 Section I DC outgoing line 1 power	90H-91H	R	2	W	float	
50	I 段直流出线 2 功率 Section I DC outgoing line 2 power	92H-93H	R	2	W	float	
51	I 段直流出线 3 功率 Section I DC outgoing line 3 power	94H-95H	R	2	W	float	
52	I 段直流出线 4 功率 Section I DC outgoing line 4 power	96H-97H	R	2	W	float	
53	I 段直流出线 5 功率 Section I DC outgoing line 5 power	98H-99H	R	2	W	float	
54	I 段直流出线 6 功率 Section I DC outgoing line 6 power	9AH-9BH	R	2	W	float	
55	I 段直流出线 7 功率 Section I DC outgoing line 7 power	9CH-9DH	R	2	W	float	
56	I 段直流出线 8 功率 Section I DC outgoing line 8 power	9EH-9FH	R	2	W	float	
57	I 段直流出线 9 功率 Section I DC outgoing line 9 power	A0H-A1H	R	2	W	float	
58	I 段直流出线 10 功率 Section I DC outgoing line 10 power	A2H-A3H	R	2	W	float	
59	I 段直流出线 11 功率	A4H-A5H	R	2	W	float	

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	Section I DC outgoing line 11 power						
60	I 段直流出线 12 功率 Section I DC outgoing line 12 power	A6H-A7H	R	2	W	float	
61	II 段直流出线 1 功率 Section II DC outgoing line 1 power	A8H-A9H	R	2	W	float	
62	II 段直流出线 2 功率 Section II DC outgoing line 2 power	AAH-ABH	R	2	W	float	
63	II 段直流出线 3 功率 Section II DC outgoing line 3 power	ACH-ADH	R	2	W	float	
64	II 段直流出线 4 功率 Section II DC outgoing line 4 power	AEH-AFH	R	2	W	float	
65	II 段直流出线 5 功率 Section II DC outgoing line 5 power	B0H-B1H	R	2	W	float	
66	II 段直流出线 6 功率 Section II DC outgoing line 6 power	B2H-B3H	R	2	W	float	
67	II 段直流出线 7 功率 Section II DC outgoing line 7 power	B4H-B5H	R	2	W	float	
68	II 段直流出线 8 功率 Section II DC outgoing line 8 power	B6H-B7H	R	2	W	float	
69	II 段直流出线 9 功率 Section II DC outgoing line 9 power	B8H-B9H	R	2	W	float	
70	II 段直流出线 10 功率 Section II DC outgoing line 10 power	BAH-BBH	R	2	W	float	
71	II 段直流出线 11 功率 Section II DC outgoing line 11 power	BCH-BDH	R	2	W	float	

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72	II 段直流出线 12 功率 Section II DC outgoing line 12 power	BEH-BFH	R	2	W	float	
73	I 段直流出线 1 电能 Section I DC outgoing line 1 energy	C0H-C1H	R	2	0.01kWh	Uint32	
74	I 段直流出线 2 电能 Section I DC outgoing line 2 energy	C2H-C3H	R	2	0.01kWh	Uint32	
75	I 段直流出线 3 电能 Section I DC outgoing line 3 energy	C4H-C5H	R	2	0.01kWh	Uint32	
76	I 段直流出线 4 电能 Section I DC outgoing line 4 energy	C6H-C7H	R	2	0.01kWh	Uint32	
77	I 段直流出线 5 电能 Section I DC outgoing line 5 energy	C8H-C9H	R	2	0.01kWh	Uint32	
78	I 段直流出线 6 电能 Section I DC outgoing line 6 energy	CAH-CBH	R	2	0.01kWh	Uint32	
79	I 段直流出线 7 电能 Section I DC outgoing line7 energy	CCH-CDH	R	2	0.01kWh	Uint32	
80	I 段直流出线 8 电能 Section I DC outgoing line 8 energy	CEH-CFH	R	2	0.01kWh	Uint32	
81	I 段直流出线 9 电能 Section I DC outgoing line 9 energy	D0H-D1H	R	2	0.01kWh	Uint32	
82	I 段直流出线 10 电能 Section I DC outgoing line 10 energy	D2H-D3H	R	2	0.01kWh	Uint32	
83	I 段直流出线 11 电能 Section I DC outgoing line 11 energy	D4H-D5H	R	2	0.01kWh	Uint32	
84	I 段直流出线 12 电能 Section I DC outgoing	D6H-D7H	R	2	0.01kWh	Uint32	

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	line 12 energy						
85	II 段直流出线 1 电能 Section II DC outgoing line 1 energy	D8H-D9H	R	2	0.01kWh	Uint32	
86	II 段直流出线 2 电能 Section II DC outgoing line 2 energy	DAH-DBH	R	2	0.01kWh	Uint32	
87	II 段直流出线 3 电能 Section II DC outgoing line 3 energy	DCH-DDH	R	2	0.01kWh	Uint32	
88	II 段直流出线 4 电能 Section II DC outgoing line 4 energy	DEH-DFH	R	2	0.01kWh	Uint32	
89	II 段直流出线 5 电能 Section II DC outgoing line 5 energy	E0H-E1H	R	2	0.01kWh	Uint32	
90	II 段直流出线 6 电能 Section II DC outgoing line 2 energy	E2H-E3H	R	2	0.01kWh	Uint32	
91	II 段直流出线 7 电能 Section II DC outgoing line 7 energy	E4H-E5H	R	2	0.01kWh	Uint32	
92	II 段直流出线 8 电能 Section II DC outgoing line 8 energy	E6H-E7H	R	2	0.01kWh	Uint32	
93	II 段直流出线 9 电能 Section II DC outgoing line 9 energy	E8H-E9H	R	2	0.01kWh	Uint32	
94	II 段直流出线 10 电能 Section II DC outgoing line 10 energy	EAH-EBH	R	2	0.01kWh	Uint32	
95	II 段直流出线 11 电能 Section II DC outgoing line 11 energy	ECH-EDH	R	2	0.01kWh	Uint32	

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遥信 Remote signal

序号 SerialNo.	变量 Variant	地址 Address	读/写 Read/write	备注 Remarks
1	第 1 路开关量输入 1st way switch input	0	R	0 无效, 1 有效 0 invalid,1 valid
2	第 2 路开关量输入 2nd way switch input	1	R	同上 Ditto
3	第 3 路开关量输入 2rd way switch input	2	R	同上 Ditto
4	第 4 路开关量输入 4th way switch input	3	R	同上 Ditto
5	第 5 路开关量输入 5th way switch input	4	R	同上 Ditto
6	第 6 路开关量输入 6th way switch input	5	R	同上 Ditto
7	第 7 路开关量输入 7th way switch input	6	R	同上 Ditto
8	第 8 路开关量输入 8th way switch input	7	R	同上 Ditto
9	第 9 路开关量输入 9th way switch input	8	R	同上 Ditto
10	第 10 路开关量输入 10th way switch input	9	R	同上 Ditto
11	第 11 路开关量输入 11th way switch input	10	R	同上 Ditto
12	第 12 路开关量输入 12th way switch input	11	R	同上 Ditto
13	第 13 路开关量输入 13th way switch input	12	R	同上 Ditto
14	第 14 路开关量输入 14th way switch input	13	R	同上 Ditto
15	第 15 路开关量输入 15th way switch input	14	R	同上 Ditto
16	第 16 路开关量输入 16th way switch input	15	R	同上 Ditto
17	第 17 路开关量输入 17th way switch input	16	R	同上 Ditto

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18	第 18 路开关量输入 18th way switch input	17	R	同上 Ditto
19	第 19 路开关量输入 19th way switch input	18	R	同上 Ditto
20	第 20 路开关量输入 20th way switch input	19	R	同上 Ditto
21	第 21 路开关量输入 21st way switch input	20	R	同上 Ditto
22	第 22 路开关量输入 22nd way switch input	21	R	同上 Ditto
23	第 23 路开关量输入 23rd way switch input	22	R	同上 Ditto
24	第 24 路开关量输入 24th way switch input	23	R	同上 Ditto
25	第 25 路开关量输入 25th way switch input	24	R	同上 Ditto
26	第 26 路开关量输入 26th way switch input	25	R	同上 Ditto
27	第 27 路开关量输入 27th way switch input	26	R	同上 Ditto
28	第 28 路开关量输入 28th way switch input	27	R	同上 Ditto
29	第 29 路开关量输入 29th way switch input	28	R	同上 Ditto
30	第 30 路开关量输入 30th way switch input	29	R	同上 Ditto
31	第 31 路开关量输入 31st way switch input	30	R	同上 Ditto
32	第 32 路开关量输入 32nd way switch input	31	R	同上 Ditto
33	第 33 路开关量输入 33rd way switch input	32	R	同上 Ditto
34	第 34 路开关量输入 34th way switch input	33	R	同上 Ditto
35	第 35 路开关量输入 35th way switch input	34	R	同上 Ditto
36	第 36 路开关量输入 36th way switch input	35	R	同上 Ditto

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37	第 37 路开关量输入 37th way switch input	36	R	同上 Ditto
38	第 38 路开关量输入 38th way switch input	37	R	同上 Ditto
39	第 39 路开关量输入 39th way switch input	38	R	同上 Ditto
40	第 40 路开关量输入 40th way switch input	39	R	同上 Ditto
41	第 41 路开关量输入 41st way switch input	40	R	同上 Ditto
42	第 42 路开关量输入 42nd way switch input	41	R	同上 Ditto
43	第 43 路开关量输入 43rd way switch input	42	R	同上 Ditto
44	第 44 路开关量输入 44th way switch input	43	R	同上 Ditto
45	第 45 路开关量输入 45th way switch input	44	R	同上 Ditto
46	第 46 路开关量输入 46th way switch input	45	R	同上 Ditto
47	第 47 路开关量输入 47th way switch input	46	R	同上 Ditto
48	第 48 路开关量输入 48th way switch input	47	R	同上 Ditto

6.4.4 AMC16Z-FDK48

AMC16Z-FDK24/48 通讯时同一条总线中会占用 2 个地址，若表中地址为 1,则地址 2 占用，同一条总线中其余表地址不可设为 2，其余地址以此类推。

When communicating with AMC16Z-FDK24/48, two addresses will be occupied in the same bus. If the address in the table is 1, address 2 will be occupied. The other table addresses in the same bus cannot be set to 2, and the rest addresses can be set to the same.

遥测，遥控 Remote measurement,remote control

参数区（0x00～0x2F）Parameter data area（0x00～0x2F）

序号 SerialNo.	变量 Variant	地址 Address	读/写 Read/write	字长 Word length	单位 Unit	数据类型 Data type	备注 Remarks
1	地址 Address	00H	R/W	1	NONE	Uint16	1～247

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2	波特率 Baud rate	01H	R/W	1	NONE	Uint16	0:115200 1:2400 2:4800 3:9600 4:19200 5:38400 6:57600
3	校验位 Check bit	02H	R/W	1	NONE	Uint16	0:无校验 0:No check 1:奇校验 1:Odd check 2:偶校验 2:Even check
4	接线方式 Wiring method	03H	R/W	1	NONE	Uint16	预留 Reserve
5	额定电压 Rated voltage	04H	R/W	1	V	Uint16	48、240、336
6	额定电流 Rated current	05H	R/W	1	A	Uint16	预留 Reserve
7	出线电压变比 Outgoing line voltage ratio	06H	R/W	1	NONE	Uint16	预留 Reserve
8	出线电流变比 Outgoing line current ratio	07H	R/W	1	NONE	Uint16	预留 Reserve
9	备用 Standby	08H	R/W	1	NONE	Uint16	
10	备用 Standby	09H	R/W	1	NONE	Uint16	
11	备用 Standby	0AH	R/W	1	NONE	Uint16	
12	零点屏蔽值设定 Zero screen setting	0BH	R/W	1	%	Uint16	一位小数 One decimal
13	电流校零 Current check zero	0CH	R/W	1	NONE	Uint16	0x8801:第一路 0x8801:1st way 0x8802:第二路 …… 0x8802:2nd way

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							0x88FF:全部 0x88FF:All
14	电能清零 Energy zero clearing	0DH	R/W	1	NONE	Uint16	06601:第一路 06601:1st way 0x6602:第二路 …… 0x6602:2nd way 0x66FF:全部 0x66FF:All
15	消抖次数 Dejittering quantity	27H	R/W	1	NONE	Uint16	默认 2 Default 2
16	高电平判定值 High level determination	28H	R/W	1	NONE	Uint16	30，66，100

电参量数据区（0x30～0x10EF）Parameter data area（0x30～0x10EF）

序号 SerialNo.	变量 Variant	地址 Address	读/写 Read/write	字长 Word length	单位 Unit	数据类型 Data type	备注 Remarks
1	Ⅰ段直流出线 1 电压 Section I DC outgoing line 1 voltage	30H-31H	R	2	V	float	
2	Ⅰ段直流出线 2 电压 Section I DC outgoing line 2 voltage	32H-33H	R	2	V	float	
3	Ⅰ段直流出线 3 电压 Section I DC outgoing line 3 voltage	34H-35H	R	2	V	float	
4	Ⅰ段直流出线 4 电压 Section I DC outgoing line 4 voltage	36H-37H	R	2	V	float	
5	Ⅰ段直流出线 5 电压 Section I DC outgoing line 5 voltage	38H-39H	R	2	V	float	
6	Ⅰ段直流出线 6 电压 Section I DC outgoing line 6 voltage	3AH-3BH	R	2	V	float	
7	Ⅰ段直流出线 7 电压 Section I DC outgoing line	3CH-3DH	R	2	V	float	

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	7voltage						
8	I 段直流出线 8 电压 Section I DC outgoing line 8 voltage	3EH-3FH	R	2	V	float	
9	I 段直流出线 9 电压 Section I DC outgoing line 9 voltage	40H-41H	R	2	V	float	
10	I 段直流出线 10 电压 Section I DC outgoing line 10 voltage	42H-43H	R	2	V	float	
11	I 段直流出线 11 电压 Section I DC outgoing line 11 voltage	44H-45H	R	2	V	float	
12	I 段直流出线 12 电压 Section I DC outgoing line 12 voltage	46H-47H	R	2	V	float	
13	II 段直流出线 1 电压 Section II DC outgoing line 1 voltage	48H-49H	R	2	V	float	
14	II 段直流出线 2 电压 Section II DC outgoing line 2 voltage	4AH-4BH	R	2	V	float	
15	II 段直流出线 3 电压 Section II DC outgoing line 3 voltage	4CH-4DH	R	2	V	float	
16	II 段直流出线 4 电压 Section II DC outgoing line 4 voltage	4EH-4FH	R	2	V	float	
17	II 段直流出线 5 电压 Section II DC outgoing line 5 voltage	50H-51H	R	2	V	float	
18	II 段直流出线 6 电压 Section II DC outgoing line 6 voltage	52H-53H	R	2	V	float	
19	II 段直流出线 7 电压 Section II DC outgoing line 7 voltage	54H-55H	R	2	V	float	
20	II 段直流出线 8 电压	56H-57H	R	2	V	float	

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	Section II DC outgoing line 8 voltage						
21	II 段直流出线 9 电压 Section II DC outgoing line 9 voltage	58H-59H	R	2	V	float	
22	II 段直流出线 10 电压 Section II DC outgoing line 10 voltage	5AH-5BH	R	2	V	float	
23	II 段直流出线 11 电压 Section II DC outgoing line 11 voltage	5CH-5DH	R	2	V	float	
24	B 侧直流出线 12 电压 Side B DC outgoing line 12 voltage	5EH-5FH	R	2	V	float	
25	I 段直流出线 1 电流 Section I DC outgoing line 1 current	60H-61H	R	2	A	float	
26	I 段直流出线 2 电流 Section I DC outgoing line 2 current	62H-63H	R	2	A	float	
27	I 段直流出线 3 电流 Section I DC outgoing line 3 current	64H-65H	R	2	A	float	
28	I 段直流出线 4 电流 Section I DC outgoing line 4 current	66H-67H	R	2	A	float	
29	I 段直流出线 5 电流 Section I DC outgoing line 5 current	68H-69H	R	2	A	float	
30	I 段直流出线 6 电流 Section I DC outgoing line 6 current	6AH-6BH	R	2	A	float	
31	I 段直流出线 7 电流 Section I DC outgoing line 7 current	6CH-6DH	R	2	A	float	
32	I 段直流出线 8 电流 Section I DC outgoing line 8 current	6EH-6FH	R	2	A	float	

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33	Ⅰ段直流出线 9 电流 Section I DC outgoing line 9 current	70H-71H	R	2	A	float	
34	Ⅰ段直流出线 10 电流 Section I DC outgoing line 10 current	72H-73H	R	2	A	float	
35	Ⅰ段直流出线 11 电流 Section I DC outgoing line 11 current	74H-75H	R	2	A	float	
36	Ⅰ段直流出线 12 电流 Section I DC outgoing line 12 current	76H-77H	R	2	A	float	
37	Ⅱ段直流出线 1 电流 Section II DC outgoing line 1 current	78H-79H	R	2	A	float	
38	Ⅱ段直流出线 2 电流 Section II DC outgoing line 2 current	7AH-7BH	R	2	A	float	
39	Ⅱ段直流出线 3 电流 Section II DC outgoing line 3 current	7CH-7DH	R	2	A	float	
40	Ⅱ段直流出线 4 电流 Section II DC outgoing line 4 current	7EH-7FH	R	2	A	float	
41	Ⅱ段直流出线 5 电流 Section II DC outgoing line 5 current	80H-81H	R	2	A	float	
42	Ⅱ段直流出线 6 电流 Section II DC outgoing line 6 current	82H-83H	R	2	A	float	
43	Ⅱ段直流出线 7 电流 Section II DC outgoing line 7 current	84H-85H	R	2	A	float	
44	Ⅱ段直流出线 8 电流 Section II DC outgoing line 8 current	86H-87H	R	2	A	float	
45	Ⅱ段直流出线 9 电流 Section II DC outgoing line	88H-89H	R	2	A	float	

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	9 current						
46	II 段直流出线 10 电流 Section II DC outgoing line 10 current	8AH-8BH	R	2	A	float	
47	II 段直流出线 11 电流 Section II DC outgoing line 11 current	8CH-8DH	R	2	A	float	
48	II 段直流出线 12 电流 Section II DC outgoing line 12 current	8EH-8FH	R	2	A	float	
49	I 段直流出线 1 功率 Section I DC outgoing line 1 power	90H-91H	R	2	W	float	
50	I 段直流出线 2 功率 Section I DC outgoing line 2 power	92H-93H	R	2	W	float	
51	I 段直流出线 3 功率 Section I DC outgoing line 3 power	94H-95H	R	2	W	float	
52	I 段直流出线 4 功率 Section I DC outgoing line 4 power	96H-97H	R	2	W	float	
53	I 段直流出线 5 功率 Section I DC outgoing line 5 power	98H-99H	R	2	W	float	
54	I 段直流出线 6 功率 Section I DC outgoing line 6 power	9AH-9BH	R	2	W	float	
55	I 段直流出线 7 功率 Section I DC outgoing line 7 power	9CH-9DH	R	2	W	float	
56	I 段直流出线 8 功率 Section I DC outgoing line 8 power	9EH-9FH	R	2	W	float	
57	I 段直流出线 9 功率 Section I DC outgoing line 9 power	A0H-A1H	R	2	W	float	
58	I 段直流出线 10 功率	A2H-A3H	R	2	W	float	

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	Section I DC outgoing line 10 power						
59	I 段直流出线 11 功率 Section I DC outgoing line 11 power	A4H-A5H	R	2	W	float	
60	I 段直流出线 12 功率 Section I DC outgoing line 12 power	A6H-A7H	R	2	W	float	
61	II 段直流出线 1 功率 Section II DC outgoing line 1 power	A8H-A9H	R	2	W	float	
62	II 段直流出线 2 功率 Section II DC outgoing line 2 power	AAH-ABH	R	2	W	float	
63	II 段直流出线 3 功率 Section II DC outgoing line 3power	ACH-ADH	R	2	W	float	
64	II 段直流出线 4 功率 Section II DC outgoing line 4 power	AEH-AFH	R	2	W	float	
65	II 段直流出线 5 功率 Section II DC outgoing line 5 power	B0H-B1H	R	2	W	float	
66	II 段直流出线 6 功率 Section II DC outgoing line 6 power	B2H-B3H	R	2	W	float	
67	II 段直流出线 7 功率 Section II DC outgoing line 7 power	B4H-B5H	R	2	W	float	
68	II 段直流出线 8 功率 Section II DC outgoing line 8 power	B6H-B7H	R	2	W	float	
69	II 段直流出线 9 功率 Section II DC outgoing line 9 power	B8H-B9H	R	2	W	float	
70	II 段直流出线 10 功率 Section II DC outgoing line 10 power	BAH-BBH	R	2	W	float	

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71	II 段直流出线 11 功率 Section II DC outgoing line 11 power	BCH-BDH	R	2	W	float	
72	II 段直流出线 12 功率 Section II DC outgoing line 12 power	BEH-BFH	R	2	W	float	
73	I 段直流出线 1 电能 Section I DC outgoing line 1 energy	C0H-C1H	R	2	0.01kWh	Uint32	
74	I 段直流出线 2 电能 Section I DC outgoing line 2 energy	C2H-C3H	R	2	0.01kWh	Uint32	
75	I 段直流出线 3 电能 Section I DC outgoing line 3 energy	C4H-C5H	R	2	0.01kWh	Uint32	
76	I 段直流出线 4 电能 Section I DC outgoing line 4 energy	C6H-C7H	R	2	0.01kWh	Uint32	
77	I 段直流出线 5 电能 Section I DC outgoing line 5 energy	C8H-C9H	R	2	0.01kWh	Uint32	
78	I 段直流出线 6 电能 Section I DC outgoing line 6 energy	CAH-CBH	R	2	0.01kWh	Uint32	
79	I 段直流出线 7 电能 Section I DC outgoing line 7 energy	CCH-CDH	R	2	0.01kWh	Uint32	
80	I 段直流出线 8 电能 Section I DC outgoing line 8 energy	CEH-CFH	R	2	0.01kWh	Uint32	
81	I 段直流出线 9 电能 Section I DC outgoing line 9 energy	D0H-D1H	R	2	0.01kWh	Uint32	
82	I 段直流出线 10 电能 Section I DC outgoing line 10 energy	D2H-D3H	R	2	0.01kWh	Uint32	
83	I 段直流出线 11 电能 Section I DC outgoing line	D4H-D5H	R	2	0.01kWh	Uint32	

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	11 energy						
84	I 段直流出线 12 电能 Section I DC outgoing line 12energy	D6H-D7H	R	2	0.01kWh	Uint32	
85	II 段直流出线 1 电能 Section II DC outgoing line 1 energy	D8H-D9H	R	2	0.01kWh	Uint32	
86	II 段直流出线 2 电能 Section II DC outgoing line 2 energy	DAH-DBH	R	2	0.01kWh	Uint32	
87	II 段直流出线 3 电能 Section II DC outgoing line 3 energy	DCH-DDH	R	2	0.01kWh	Uint32	
88	II 段直流出线 4 电能 Section II DC outgoing line 4 energy	DEH-DFH	R	2	0.01kWh	Uint32	
89	II 段直流出线 5 电能 Section II DC outgoing line 5 energy	E0H-E1H	R	2	0.01kWh	Uint32	
90	II 段直流出线 6 电能 Section II DC outgoing line 6 energy	E2H-E3H	R	2	0.01kWh	Uint32	
91	II 段直流出线 7 电能 Section II DC outgoing line 7 energy	E4H-E5H	R	2	0.01kWh	Uint32	
92	II 段直流出线 8 电能 Section II DC outgoing line 8 energy	E6H-E7H	R	2	0.01kWh	Uint32	
93	II 段直流出线 9 电能 Section II DC outgoing line 9 energy	E8H-E9H	R	2	0.01kWh	Uint32	
94	II 段直流出线 10 电能 Section II DC outgoing line 10 energy	EAH-EBH	R	2	0.01kWh	Uint32	
95	II 段直流出线 11 电能 Section II DC outgoing line 11 energy	ECH-EDH	R	2	0.01kWh	Uint32	
96	II 段直流出线 12 电能	EEH-EFH	R	2	0.01kWh	Uint32	

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	Section II DC outgoing line 12 energy						
97	Ⅰ段直流出线 13 电压 Section I DC outgoing line 13 voltage	1030H-1031H	R	2	V	float	
98	Ⅰ段直流出线 14 电压 Section I DC outgoing line 14 voltage	1032H-1033H	R	2	V	float	
99	Ⅰ段直流出线 15 电压 Section I DC outgoing line 15 voltage	1034H-1035H	R	2	V	float	
100	Ⅰ段直流出线 16 电压 Section I DC outgoing line 16 voltage	1036H-1037H	R	2	V	float	
101	Ⅰ段直流出线 17 电压 Section I DC outgoing line 17 voltage	1038H-1039H	R	2	V	float	
102	Ⅰ段直流出线 18 电压 Section I DC outgoing line 18 voltage	103AH-103BH	R	2	V	float	
103	Ⅰ段直流出线 19 电压 Section I DC outgoing line 19 voltage	103CH-103DH	R	2	V	float	
104	Ⅰ段直流出线 20 电压 Section I DC outgoing line 20 voltage	103EH-103FH	R	2	V	float	
105	Ⅰ段直流出线 21 电压 Section I DC outgoing line 21 voltage	1040H-1041H	R	2	V	float	
106	Ⅰ段直流出线 22 电压 Section I DC outgoing line 22 voltage	1042H-1043H	R	2	V	float	
107	Ⅰ段直流出线 23 电压 Section I DC outgoing line 23 voltage	1044H-1045H	R	2	V	float	
108	Ⅰ段直流出线 24 电压 Section I DC outgoing line 24 voltage	1046H-1047H	R	2	V	float	

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109	II 段直流出线 13 电压 Section II DC outgoing line 13 voltage	1048H-1049H	R	2	V	float	
110	II 段直流出线 14 电压 Section II DC outgoing line 14 voltage	104AH-104BH	R	2	V	float	
111	II 段直流出线 15 电压 Section II DC outgoing line 15 voltage	104CH-104DH	R	2	V	float	
112	II 段直流出线 16 电压 Section II DC outgoing line 16 voltage	104EH-104FH	R	2	V	float	
113	II 段直流出线 17 电压 Section II DC outgoing line 17 voltage	1050H-1051H	R	2	V	float	
114	II 段直流出线 18 电压 Section II DC outgoing line 18 voltage	1052H-1053H	R	2	V	float	
115	II 段直流出线 19 电压 Section II DC outgoing line 19 voltage	1054H-1055H	R	2	V	float	
116	II 段直流出线 20 电压 Section II DC outgoing line 20 voltage	1056H-1057H	R	2	V	float	
117	II 段直流出线 21 电压 Section II DC outgoing line 21 voltage	1058H-1059H	R	2	V	float	
118	II 段直流出线 22 电压 Section II DC outgoing line 22 voltage	105AH-105BH	R	2	V	float	
119	II 段直流出线 23 电压 Section II DC outgoing line 23 voltage	105CH-105DH	R	2	V	float	
120	II 段直流出线 24 电压 Section II DC outgoing line 24 voltage	105EH-105FH	R	2	V	float	
121	I 段直流出线 13 电流 Section I DC outgoing line	1060H-1061H	R	2	A	float	

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	13 current						
122	Ⅰ段直流出线 14 电流 Section I DC outgoing line 14 current	1062H-1063H	R	2	A	float	
123	Ⅰ段直流出线 15 电流 Section I DC outgoing line 15 current	1064H-1065H	R	2	A	float	
124	Ⅰ段直流出线 16 电流 Section I DC outgoing line 16 current	1066H-1067H	R	2	A	float	
125	Ⅰ段直流出线 17 电流 Section I DC outgoing line 17 current	1068H-1069H	R	2	A	float	
126	Ⅰ段直流出线 18 电流 Section I DC outgoing line 18 current	106AH-106BH	R	2	A	float	
127	Ⅰ段直流出线 19 电流 Section I DC outgoing line 19 current	106CH-106DH	R	2	A	float	
128	Ⅰ段直流出线 20 电流 Section I DC outgoing line 20 current	106EH-106FH	R	2	A	float	
129	Ⅰ段直流出线 21 电流 Section I DC outgoing line 21 current	1070H-1071H	R	2	A	float	
130	Ⅰ段直流出线 22 电流 Section I DC outgoing line 22 current	1072H-1073H	R	2	A	float	
131	Ⅰ段直流出线 23 电流 Section I DC outgoing line 23 current	1074H-1075H	R	2	A	float	
132	Ⅰ段直流出线 24 电流 Section I DC outgoing line 24 current	1076H-1077H	R	2	A	float	
133	Ⅱ段直流出线 13 电流 Section II DC outgoing line 13 current	1078H-1079H	R	2	A	float	
134	Ⅱ段直流出线 14 电流	107AH-107BH	R	2	A	float	

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	Section II DC outgoing line 14 current						
135	II 段直流出线 15 电流 Section II DC outgoing line 15 current	107CH-107DH	R	2	A	float	
136	II 段直流出线 16 电流 Section II DC outgoing line 16 current	107EH-107FH	R	2	A	float	
137	II 段直流出线 17 电流 Section II DC outgoing line 17 current	1080H-1081H	R	2	A	float	
138	II 段直流出线 18 电流 Section II DC outgoing line 18 current	1082H-1083H	R	2	A	float	
139	II 段直流出线 19 电流 Section II DC outgoing line 19 current	1084H-1085H	R	2	A	float	
140	II 段直流出线 20 电流 Section II DC outgoing line 20 current	1086H-1087H	R	2	A	float	
141	II 段直流出线 21 电流 Section II DC outgoing line 21 current	1088H-1089H	R	2	A	float	
142	II 段直流出线 22 电流 Section II DC outgoing line 22 current	108AH-108BH	R	2	A	float	
143	II 段直流出线 23 电流 Section II DC outgoing line 23 current	108CH-108DH	R	2	A	float	
144	II 段直流出线 24 电流 Section II DC outgoing line 24 current	108EH-108FH	R	2	A	float	
145	I 段直流出线 13 功率 Section I DC outgoing line 13 power	1090H-1091H	R	2	W	float	
146	I 段直流出线 14 功率 Section I DC outgoing line 14 power	1092H-1093H	R	2	W	float	

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147	I 段直流出线 15 功率 Section I DC outgoing line 15 power	1094H-1095H	R	2	W	float	
148	I 段直流出线 16 功率 Section I DC outgoing line 16 power	1096H-1097H	R	2	W	float	
149	I 段直流出线 17 功率 Section I DC outgoing line 17 power	1098H-1099H	R	2	W	float	
150	I 段直流出线 18 功率 Section I DC outgoing line 18 power	109AH-109BH	R	2	W	float	
151	I 段直流出线 19 功率 Section I DC outgoing line 19 power	109CH-109DH	R	2	W	float	
152	I 段直流出线 20 功率 Section I DC outgoing line 20 power	109EH-109FH	R	2	W	float	
153	I 段直流出线 21 功率 Section I DC outgoing line 21 power	10A0H-10A1H	R	2	W	float	
154	I 段直流出线 22 功率 Section I DC outgoing line 22 power	10A2H-10A3H	R	2	W	float	
155	I 段直流出线 23 功率 Section I DC outgoing line 23 power	10A4H-10A5H	R	2	W	float	
156	I 段直流出线 24 功率 Section I DC outgoing line 24 power	10A6H-10A7H	R	2	W	float	
157	II 段直流出线 13 功率 Section II DC outgoing line 13 power	10A8H-10A9H	R	2	W	float	
158	II 段直流出线 14 功率 Section II DC outgoing line 14 power	10AAH-10ABH	R	2	W	float	
159	II 段直流出线 15 功率 Section II DC outgoing line	10ACH-10ADH	R	2	W	float	

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	15 power						
160	II 段直流出线 16 功率 Section II DC outgoing line 16 power	10AEH-10AFH	R	2	W	float	
161	II 段直流出线 17 功率 Section II DC outgoing line 17 power	10B0H-10B1H	R	2	W	float	
162	II 段直流出线 18 功率 Section II DC outgoing line 18 power	10B2H-10B3H	R	2	W	float	
163	II 段直流出线 19 功率 Section II DC outgoing line 19 power	10B4H-10B5H	R	2	W	float	
164	II 段直流出线 20 功率 Section II DC outgoing line 20 power	10B6H-10B7H	R	2	W	float	
165	II 段直流出线 21 功率 Section II DC outgoing line 21 power	10B8H-10B9H	R	2	W	float	
166	II 段直流出线 22 功率 Section II DC outgoing line 22 power	10BAH-10BBH	R	2	W	float	
167	II 段直流出线 23 功率 Section II DC outgoing line 23 power	10BCH-10BDH	R	2	W	float	
168	II 段直流出线 24 功率 Section II DC outgoing line 24 power	10BEH-10BFH	R	2	W	float	
169	I 段直流出线 13 电能 Section I DC outgoing line 13 energy	10C0H-10C1H	R	2	0.01kWh	Uint32	
170	I 段直流出线 14 电能 Section I DC outgoing line 14 energy	10C2H-10C3H	R	2	0.01kWh	Uint32	
171	I 段直流出线 15 电能 Section I DC outgoing line 15 energy	10C4H-10C5H	R	2	0.01kWh	Uint32	
172	I 段直流出线 16 电能	10C6H-10C7H	R	2	0.01kWh	Uint32	

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	Section I DC outgoing line 16 energy						
173	I 段直流出线 17 电能 Section I DC outgoing line 17 energy	10C8H-10C9H	R	2	0.01kWh	Uint32	
174	I 段直流出线 18 电能 Section I DC outgoing line 18 energy	10CAH-10CBH	R	2	0.01kWh	Uint32	
175	I 段直流出线 19 电能 Section I DC outgoing line 19 energy	10CCH-10CDH	R	2	0.01kWh	Uint32	
176	I 段直流出线 20 电能 Section I DC outgoing line 20 energy	10CEH-10CFH	R	2	0.01kWh	Uint32	
177	I 段直流出线 21 电能 Section I DC outgoing line 21 energy	10D0H-10D1H	R	2	0.01kWh	Uint32	
178	I 段直流出线 22 电能 Section I DC outgoing line 22 energy	10D2H-10D3H	R	2	0.01kWh	Uint32	
179	I 段直流出线 23 电能 Section I DC outgoing line 23 energ	10D4H-10D5H	R	2	0.01kWh	Uint32	
180	I 段直流出线 24 电能 Section I DC outgoing line 24 energy	10D6H-10D7H	R	2	0.01kWh	Uint32	
181	II 段直流出线 13 电能 Section II DC outgoing line 13 energy	10D8H-10D9H	R	2	0.01kWh	Uint32	
182	II 段直流出线 14 电能 Section II DC outgoing line 14 energy	10DAH-10DBH	R	2	0.01kWh	Uint32	
183	II 段直流出线 15 电能 Section II DC outgoing line 15 energy	10DCH-10DDH	R	2	0.01kWh	Uint32	
184	II 段直流出线 16 电能 Section II DC outgoing line 16 energy	10DEH-10DFH	R	2	0.01kWh	Uint32	

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185	II 段直流出线 17 电能 Section II DC outgoing line 17 energy	10E0H-10E1H	R	2	0.01kWh	Uint32	
186	II 段直流出线 18 电能 Section II DC outgoing line 18 energy	10E2H-10E3H	R	2	0.01kWh	Uint32	
187	II 段直流出线 19 电能 Section II DC outgoing line 19 energy	10E4H-10E5H	R	2	0.01kWh	Uint32	
188	II 段直流出线 20 电能 Section II DC outgoing line 20 energy	10E6H-10E7H	R	2	0.01kWh	Uint32	
189	II 段直流出线 21 电能 Section II DC outgoing line 21 energy	10E8H-10E9H	R	2	0.01kWh	Uint32	
190	II 段直流出线 22 电能 Section II DC outgoing line 22 energy	10EAH-10EBH	R	2	0.01kWh	Uint32	
191	II 段直流出线 23 电能 Section II DC outgoing line 23 energy	10ECH-10EDH	R	2	0.01kWh	Uint32	
192	II 段直流出线 24 电能 Section II DC outgoing line 24 energy	10EEH-10EFH	R	2	0.01kWh	Uint32	

遥信 Remote signal

序号 SerialNo.	变量 Variant	地址 Address	读/写 Read/write	备注 Remarks
1	第 1 路开关量输入 1st way switch input	0	R	0 无效,1 有效 0 invalid,1 valid
2	第 2 路开关量输入 2nd way switch input	1	R	同上 Ditto
3	第 3 路开关量输入 3rd way switch input	2	R	同上 Ditto
4	第 4 路开关量输入 4th way switch input	3	R	同上 Ditto
5	第 5 路开关量输入	4	R	同上

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	5th way switch input			Ditto
6	第 6 路开关量输入 6th way switch input	5	R	同上 Ditto
7	第 7 路开关量输入 7th way switch input	6	R	同上 Ditto
8	第 8 路开关量输入 8th way switch input	7	R	同上 Ditto
9	第 9 路开关量输入 9th way switch input	8	R	同上 Ditto
10	第 10 路开关量输入 10th way switch input	9	R	同上 Ditto
11	第 11 路开关量输入 11th way switch input	10	R	同上 Ditto
12	第 12 路开关量输入 12th way switch input	11	R	同上 Ditto
13	第 13 路开关量输入 13th way switch input	12	R	同上 Ditto
14	第 14 路开关量输入 14th way switch input	13	R	同上 Ditto
15	第 15 路开关量输入 15th way switch input	14	R	同上 Ditto

16	第 16 路开关量输入 16th way switch input	15	R	同上 Ditto
17	第 17 路开关量输入 17th way switch input	16	R	同上 Ditto
18	第 18 路开关量输入 18th way switch input	17	R	同上 Ditto
19	第 19 路开关量输入 19th way switch input	18	R	同上 Ditto
20	第 20 路开关量输入 20th way switch input	19	R	同上 Ditto
21	第 21 路开关量输入 21st way switch input	20	R	同上 Ditto
22	第 22 路开关量输入 22nd way switch input	21	R	同上 Ditto
23	第 23 路开关量输入 23rd way switch input	22	R	同上 Ditto

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24	第 24 路开关量输入 24th way switch input	23	R	同上 Ditto
25	第 25 路开关量输入 25th way switch input	24	R	同上 Ditto
26	第 26 路开关量输入 26th way switch input	25	R	同上 Ditto
27	第 27 路开关量输入 27th way switch input	26	R	同上 Ditto
28	第 28 路开关量输入 28th way switch input	27	R	同上 Ditto
29	第 29 路开关量输入 29th way switch input	28	R	同上 Ditto
30	第 30 路开关量输入 30th way switch input	29	R	同上 Ditto
31	第 31 路开关量输入 31st way switch input	30	R	同上 Ditto
32	第 32 路开关量输入 32nd way switch input	31	R	同上 Ditto
33	第 33 路开关量输入 33rd way switch input	32	R	同上 Ditto
34	第 34 路开关量输入 34th way switch input	33	R	同上 Ditto
35	第 35 路开关量输入 35th way switch input	34	R	同上 Ditto
36	第 36 路开关量输入 36th way switch input	35	R	同上 Ditto
37	第 37 路开关量输入 37th way switch input	36	R	同上 Ditto
38	第 38 路开关量输入 38th way switch input	37	R	同上 Ditto
39	第 39 路开关量输入 39th way switch input	38	R	同上 Ditto
40	第 40 路开关量输入 40th way switch input	39	R	同上 Ditto
41	第 41 路开关量输入 41st way switch input	40	R	同上 Ditto
42	第 42 路开关量输入 42nd way switch input	41	R	同上 Ditto

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43	第 43 路开关量输入 43rd way switch input	42	R	同上 Ditto
44	第 44 路开关量输入 44th way switch input	43	R	同上 Ditto
45	第 45 路开关量输入 45th way switch input	44	R	同上 Ditto
46	第 46 路开关量输入 46th way switch input	45	R	同上 Ditto
47	第 47 路开关量输入 47th way switch input	46	R	同上 Ditto
48	第 48 路开关量输入 48th way switch input	47	R	同上 Ditto

6.4.5 AMC16Z-KA

遥测，遥控 Remote measurement, remote control

参数区（0x00～0x2F）Parameter data area（0x00～0x2F)

序号 SerialNo.	变量 Variant	地址 Address	读/写 Read/ write	字长 Word length	单位 Unit	数据类型 Data type	备注 Remarks
1	地址 Address	00H	R/W	1	NONE	Uint16	1～247
2	波特率 Baud rate	01H	R/W	1	NONE	Uint16	0:115200 1:2400 2:4800 3:9600 4:19200 5:38400 6:57600
3	校验位 Check bit	02H	R/W	1	NONE	Uint16	0:无校验 0:No check 2:奇校验 2:Odd check 3:偶校验 3:Even check
4	接线方式 Wiring method	03H	R/W	1	NONE	Uint16	预留 Reserve
5	额定电压 Rated voltage	04H	R/W	1	V	Uint16	48、240、336
6	额定电流	05H	R/W	1	A	Uint16	预留

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	Rated current						Reserve
7	出线电压变比 Outgoing line voltage ratio	06H	R/W	1	NONE	Uint16	预留 Reserve
8	出线电流变比 Outgoing line current ratio	07H	R/W	1	NONE	Uint16	预留 Reserve
9	高电平判定值 High level determination	08H	R/W	1	V	Uint16	

电参量数据区（0x30～0x8F）Parameter data area（0x30～0x8F）

序号 SerialNo.	变量 Variant	地址 Address	读/写 Read/ write	字长 Word length	单位 Unit	数据类型 Data type	备注 Remarks
1	第 1 路开关量电压 1st Switch voltage	30H-31H	R	2	V	float	
2	第 2 路开关量电压 2nd Switch voltage	32H-33H	R	2	V	float	
3	第 3 路开关量电压 3rd Switch voltage	34H-35H	R	2	V	float	
4	第 4 路开关量电压 4th Switch voltage	36H-37H	R	2	V	float	
5	第 5 路开关量电压 5th Switch voltage	38H-39H	R	2	V	float	
6	第 6 路开关量电压 6th Switch voltage	3AH-3BH	R	2	V	float	
7	第 7 路开关量电压 7th Switch voltage	3CH-3DH	R	2	V	float	
8	第 8 路开关量电压 8th Switch voltage	3EH-3FH	R	2	V	float	
9	第 9 路开关量电压 9th Switch voltage	40H-41H	R	2	V	float	
10	第 10 路开关量电压 10th Switch voltage	42H-43H	R	2	V	float	
11	第 11 路开关量电压 11th Switch voltage	44H-45H	R	2	V	float	

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12	第 12 路开关量电压 12th Switch voltage	46H-47H	R	2	V	float	
13	第 13 路开关量电压 13th Switch voltage	48H-49H	R	2	V	float	
14	第 14 路开关量电压 14th Switch voltage	4AH-4BH	R	2	V	float	
15	第 15 路开关量电压 15th Switch voltage	4CH-4DH	R	2	V	float	
16	第 16 路开关量电压 16th Switch voltage	4EH-4FH	R	2	V	float	
17	第 17 路开关量电压 17th Switch voltage	50H-51H	R	2	V	float	
18	第 18 路开关量电压 18th Switch voltage	52H-53H	R	2	V	float	
19	第 19 路开关量电压 19th Switch voltage	54H-55H	R	2	V	float	
20	第 20 路开关量电压 20th Switch voltage	56H-57H	R	2	V	float	
21	第 21 路开关量电压 21st Switch voltage	58H-59H	R	2	V	float	
22	第 22 路开关量电压 22nd Switch voltage	5AH-5BH	R	2	V	float	
23	第 23 路开关量电压 23rd Switch voltage	5CH-5DH	R	2	V	float	
24	第 24 路开关量电压 24th Switch voltage	5EH-5FH	R	2	V	float	
25	第 25 路开关量电压 25th Switch voltage	60H-61H	R	2	V	float	
26	第 26 路开关量电压 26th Switch voltage	62H-63H	R	2	V	float	
27	第 27 路开关量电压 27th Switch voltage	64H-65H	R	2	V	float	
28	第 28 路开关量电压 28th Switch voltage	66H-67H	R	2	V	float	
29	第 29 路开关量电压 29th Switch voltage	68H-69H	R	2	V	float	
30	第 30 路开关量电压 30th Switch voltage	6AH-6BH	R	2	V	float	

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31	第 31 路开关量电压 31st Switch voltage	6CH-6DH	R	2	V	float	
32	第 32 路开关量电压 32nd Switch voltage	6EH-6FH	R	2	V	float	
33	第 33 路开关量电压 33rd Switch voltage	70H-71H	R	2	V	float	
34	第 34 路开关量电压 34th Switch voltage	72H-73H	R	2	V	float	
35	第 35 路开关量电压 35th Switch voltage	74H-75H	R	2	V	float	
36	第 36 路开关量电压 36th Switch voltage	76H-77H	R	2	V	float	
37	第 37 路开关量电压 37th Switch voltage	78H-79H	R	2	V	float	
38	第 38 路开关量电压 38th Switch voltage	7AH-7BH	R	2	V	float	
39	第 39 路开关量电压 39th Switch voltage	7CH-7DH	R	2	V	float	
40	第 40 路开关量电压 40th Switch voltage	7EH-7FH	R	2	V	float	
41	第 41 路开关量电压 41st Switch voltage	80H-81H	R	2	V	float	
42	第 42 路开关量电压 42nd Switch voltage	82H-83H	R	2	V	float	
43	第 43 路开关量电压 43rd Switch voltage	84H-85H	R	2	V	float	
44	第 44 路开关量电压 44th Switch voltage	86H-87H	R	2	V	float	
45	第 45 路开关量电压 45th Switch voltage	88H-89H	R	2	V	float	
46	第 46 路开关量电压 46th Switch voltage	8AH-8BH	R	2	V	float	
47	第 47 路开关量电压 47th Switch voltage	8CH-8DH	R	2	V	float	
48	第 48 路开关量电压 48th Switch voltage	8EH-8FH	R	2	V	float	

遥信 Remote signal

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序号 SerialNo.	变量 Variant	地址 Address	读/写 Read/write	备注 Remarks
1	第 1 路开关量输入 1st way switch input	0	R	0 无效, 1 有效 0 invalid,1 valid
2	第 2 路开关量输入 2nd way switch input	1	R	同上 Ditto
3	第 3 路开关量输入 3rd way switch input	2	R	同上 Ditto
4	第 4 路开关量输入 4th way switch input	3	R	同上 Ditto
5	第 5 路开关量输入 5th way switch input	4	R	同上 Ditto
6	第 6 路开关量输入 6th way switch input	5	R	同上 Ditto
7	第 7 路开关量输入 7th way switch input	6	R	同上 Ditto
8	第 8 路开关量输入 8th way switch input	7	R	同上 Ditto
9	第 9 路开关量输入 9th way switch input	8	R	同上 Ditto
10	第 10 路开关量输入 10th way switch input	9	R	同上 Ditto
11	第 11 路开关量输入 11th way switch input	10	R	同上 Ditto
12	第 12 路开关量输入 12th way switch input	11	R	同上 Ditto
13	第 13 路开关量输入 13th way switch input	12	R	同上 Ditto
14	第 14 路开关量输入 14th way switch input	13	R	同上 Ditto
15	第 15 路开关量输入 15th way switch input	14	R	同上 Ditto
16	第 16 路开关量输入 16th way switch input	15	R	同上 Ditto
17	第 17 路开关量输入 17th way switch input	16	R	同上 Ditto
18	第 18 路开关量输入	17	R	同上

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	18th way switch input			Ditto
19	第 19 路开关量输入 19th way switch input	18	R	同上 Ditto
20	第 20 路开关量输入 20th way switch input	19	R	同上 Ditto
21	第 21 路开关量输入 21st way switch input	20	R	同上 Ditto
22	第 22 路开关量输入 22nd way switch input	21	R	同上 Ditto
23	第 23 路开关量输入 23rd way switch input	22	R	同上 Ditto
24	第 24 路开关量输入 24th way switch input	23	R	同上 Ditto
25	第 25 路开关量输入 25th way switch input	24	R	同上 Ditto
26	第 26 路开关量输入 26th way switch input	25	R	同上 Ditto
27	第 27 路开关量输入 27th way switch input	26	R	同上 Ditto
28	第 28 路开关量输入 28th way switch input	27	R	同上 Ditto
29	第 29 路开关量输入 29th way switch input	28	R	同上 Ditto
30	第 30 路开关量输入 30th way switch input	29	R	同上 Ditto
31	第 31 路开关量输入 31st way switch input	30	R	同上 Ditto
32	第 32 路开关量输入 32nd way switch input	31	R	同上 Ditto
33	第 33 路开关量输入 33rd way switch input	32	R	同上 Ditto
34	第 34 路开关量输入 34th way switch input	33	R	同上 Ditto
35	第 35 路开关量输入 35th way switch input	34	R	同上 Ditto
36	第 36 路开关量输入 36th way switch input	35	R	同上 Ditto
37	第 37 路开关量输入	36	R	同上

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	37th way switch input			Ditto
38	第 38 路开关量输入 38th way switch input	37	R	同上 Ditto
39	第 39 路开关量输入 39th way switch input	38	R	同上 Ditto
40	第 40 路开关量输入 40th way switch input	39	R	同上 Ditto
41	第 41 路开关量输入 41st way switch input	40	R	同上 Ditto
42	第 42 路开关量输入 42nd way switch input	41	R	同上 Ditto
43	第 43 路开关量输入 43rd way switch input	42	R	同上 Ditto
44	第 44 路开关量输入 44th way switch input	43	R	同上 Ditto
45	第 45 路开关量输入 45th way switch input	44	R	同上 Ditto
46	第 46 路开关量输入 46th way switch input	45	R	同上 Ditto
47	第 47 路开关量输入 47th way switch input	46	R	同上 Ditto
48	第 48 路开关量输入 48th way switch input	47	R	同上 Ditto

6.4.6 AMC16Z-KD

遥测，遥控 Remote measurement,remote control

参数区（0x00～0x2F）Parameter area（0x00～0x2F)

序号 SerialNo.	变量 Variant	地址 Address	读/写 Read/ write	字长 Word length	单位 Unit	数据类型 Data type	备注 Remarks
1	地址 Address	00H	R/W	1	NONE	Uint16	1～247
2	波特率 Baud rate	01H	R/W	1	NONE	Uint16	0:115200 1:2400 2:4800 3:9600 4:19200 5:38400

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							6:57600
3	校验位 Check bit	02H	R/W	1	NONE	Uint16	0:无校验 0:No check 2:奇校验 2:Odd check 3:偶校验 3:Even check
4	接线方式 Wiring method	03H	R/W	1	NONE	Uint16	预留 Reserve
5	额定电压 Rated voltage	04H	R/W	1	V	Uint16	预留 Reserve
6	额定电流 Rated current	05H	R/W	1	A	Uint16	预留 Reserve
7	出线电压变比 Outgoing line voltage ratio	06H	R/W	1	NONE	Uint16	预留 Reserve
8	出线电流变比 Outgoing line current ratio	07H	R/W	1	NONE	Uint16	预留 Reserve

遥信 Remote signal

序号 SerialNo.	变量 Variant	位地址 Bit address	读/写 Read/write	备注 Remarks
1	第 1 路开关量输入 1st way switch input	0	R	0 无效, 1 有效 0 invalid,1 valid
2	第 2 路开关量输入 2nd way switch input	1	R	同上 Ditto
3	第 3 路开关量输入 3rd way switch input	2	R	同上 Ditto
4	第 4 路开关量输入 4th way switch input	3	R	同上 Ditto
5	第 5 路开关量输入	4	R	同上

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	5th way switch input			Ditto
6	第 6 路开关量输入 6th way switch input	5	R	同上 Ditto
7	第 7 路开关量输入 7th way switch input	6	R	同上 Ditto
8	第 8 路开关量输入 8th way switch input	7	R	同上 Ditto
9	第 9 路开关量输入 9th way switch input	8	R	同上 Ditto
10	第 10 路开关量输入 10th way switch input	9	R	同上 Ditto
11	第 11 路开关量输入 11th way switch input	10	R	同上 Ditto
12	第 12 路开关量输入 12th way switch input	11	R	同上 Ditto
13	第 13 路开关量输入 13th way switch input	12	R	同上 Ditto
14	第 14 路开关量输入 13th way switch input	13	R	同上 Ditto
15	第 15 路开关量输入 15th way switch input	14	R	同上 Ditto
16	第 16 路开关量输入 16th way switch input	15	R	同上 Ditto
17	第 17 路开关量输入 17th way switch input	16	R	同上 Ditto
18	第 18 路开关量输入 18th way switch input	17	R	同上 Ditto
19	第 19 路开关量输入 19th way switch input	18	R	同上 Ditto
20	第 20 路开关量输入 20th way switch input	19	R	同上 Ditto
21	第 21 路开关量输入 21st way switch input	20	R	同上 Ditto
22	第 22 路开关量输入 22nd way switch input	21	R	同上 Ditto
23	第 23 路开关量输入 23rd way switch input	22	R	同上 Ditto
24	第 24 路开关量输入	23	R	同上

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	24th way switch input			Ditto
25	第 25 路开关量输入 25th way switch input	24	R	同上 Ditto
26	第 26 路开关量输入 26th way switch input	25	R	同上 Ditto
27	第 27 路开关量输入 27th way switch input	26	R	同上 Ditto
28	第 28 路开关量输入 28th way switch input	27	R	同上 Ditto
29	第 29 路开关量输入 29th way switch input	28	R	同上 Ditto
30	第 30 路开关量输入 30th way switch input	29	R	同上 Ditto
31	第 31 路开关量输入 31st way switch input	30	R	同上 Ditto
32	第 32 路开关量输入 32nd way switch input	31	R	同上 Ditto
33	第 33 路开关量输入 33rd way switch input	32	R	同上 Ditto
34	第 34 路开关量输入 34th way switch input	33	R	同上 Ditto
35	第 35 路开关量输入 35th way switch input	34	R	同上 Ditto
36	第 36 路开关量输入 36th way switch input	35	R	同上 Ditto
37	第 37 路开关量输入 37th way switch input	36	R	同上 Ditto
38	第 38 路开关量输入 38th way switch input	37	R	同上 Ditto
39	第 39 路开关量输入 39th way switch input	38	R	同上 Ditto
40	第 40 路开关量输入 40th way switch input	39	R	同上 Ditto
41	第 41 路开关量输入 41st way switch input	40	R	同上 Ditto
42	第 42 路开关量输入 42nd way switch input	41	R	同上 Ditto
43	第 43 路开关量输入	42	R	同上

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	43rd way switch input			Ditto
44	第 44 路开关量输入 44th way switch input	43	R	同上 Ditto
45	第 45 路开关量输入 45th way switch input	44	R	同上 Ditto
46	第 46 路开关量输入 46th way switch input	45	R	同上 Ditto
47	第 47 路开关量输入 47th way switch input	46	R	同上 Ditto
48	第 48 路开关量输入 48th way switch input	47	R	同上 Ditto

7 注意事项

Matters needing attention

7.1 装置应安装在干燥、清洁、远离热源和强电磁场的地方。

The device should be installed in a dry, clean place away from heat source and strong electromagnetic field.

7.7 通信电缆应使用屏蔽双绞线。

Communication cables should be shielded twisted pair.

8 常见故障的诊断、排查方法

Common fault diagnosis, troubleshooting methods

8.1 电压、电流测量正确但功率测量不准确

The voltage and current are measured correctly but the power is not measured accurately

*检查电流输入方向是否正确；

* Check whether the current input direction is correct;

*检查每个电流回路对应的相位是否正确；出线回路需按实际接入进行调整。

* Check whether the corresponding phase of each current loop is correct;The outgoing loop shall be adjusted according to the actual access.

8.2 通信不正常

Abnormal communication

*检查通讯连接线是否连接正常；

* Check whether the communication cable is connected normally;

*检查通信的 A、B 端子是否交错；

* Check whether terminals A and B of communication are interlaced;

*检查装置的地址是否设定正确，通讯波特率是否设定正确；

* Check whether the address of the device is set correctly and whether the communication baud rate is set correctly;

*多装置通讯不正常时，先试一下单机通讯是否正常；

* If the multi-device communication is not normal, try whether the single device communication is normal;

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8.3 AMC16Z-ZD 在负载没有电流时电流有数值

AMC16z-zd the current has a value when the load has no current

*调整 AMC16Z-ZD 的电流零点值（直流霍尔传感器的零点不一致，差异较大，需进行调整）。

* Adjust the current zero value of AMC16Z-ZD (the zero value of DC Hall sensor is inconsistent and has a big difference, which needs to be adjusted).

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说明书修订记录

日期	旧版本	新版本	修改内容
2018.7.10		V1.0	1.第一次编写
2018.8.29	V1.0	V1.1	1.“3 技术参数-直流进线”的“耐压”参数做修改 2.“3 技术参数-直流进线”和“直流出线”的“CT”参数做修改，并增加说明 3.“ZD、FD、KA、KD”地址表中将预留的波特率及校验方式设置开放 4.“ZD、FD”的地址表中校零和清电能写入值更改 校零： 0x01：第一路->0x8801:第一路 0x02：第二路->0x8802:第二路 0xFF：全部->0x88FF:全部 清电能：0x01：第一路->0x6601:第一路 0x02：第二路->0x6602:第二路 0xFF：全部->0x66FF:全部 5.“ZD”地址表中增加了“温度”、“湿度”单位以及 DI5、DI6 两路开关量 6. “ZD”地址表中额定电压栏的备注更改 48VDC、240VDC、336VDC->240 “FD”地址表中额定电压栏的备注更改 48VDC、240VDC、336VDC->48、240 “KA”地址表中额定电压栏的备注更改 48VDC、240VDC、336VDC->48、240、336
2018.11. 8	V1.1	V1.2	1.将 ZD、FD、KA、KD 中预留部分合并 2.将 ZD、FD 中校零和清电能地址修改 校零：0x0B->0x0C 清电能：0x0C->0x0D 3.ZD、FD 的地址表中增加零点屏蔽值地址 0x0B 4.更改 FD 中校零和清电能的写入值 校零： 0x66xx->0x88xx 清电能：0x88xx->0x66xx 5.ZD 中电压额定值设定修改 240->48、240 6.地址表进行了格式修改 7.申明中的“最新规格”“最”字去掉 8.概述中出现的“精确”“全方位”字眼删除 9.“5 接线端子”增加 AMC16Z-DC48V AMC16Z-DC240V/336V
2019.7.12	V1.2	V1.3	1.产品型号中增加 AMC16Z-FDK24、AMC16Z-FDK48 2.技术参数中增加 AMC16Z-FDK24、AMC16Z-FDK48 3.接线端子中增加 AMC16Z-FDK24、AMC16Z-FDK48 4.通讯地址表中增加 AMC16Z-FDK24、AMC16Z-FDK48

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