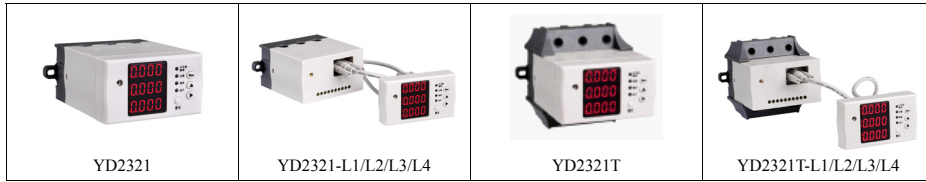


YD2321 系列智能电机保护控制器

YD2321 Series Intelligent Motor Protection Controller



性能指标 Specifications

工作电源 Power supply: AC220V, 50Hz, AC85V~265V or DC85V~330V (可选 Optional)

输出接点容量 Output contact capacity: AC250V, 3A

测量准确度 Measuring Accuracy: $\pm 1.0\%$ ($\leq 120\%I_e$) 【 I_e 为控制器标准输入电流。 I_e is the standard input current of the controller.】
 $\pm 3.0\%$ ($120\%I_e \sim 800\%I_e$), 漏电流 current leakage: $\pm 2.0\%$

整机功耗 Power consumption: $< 5VA$

绝缘电阻 Insulation resistance: $100M\Omega/500V$

介质强度 Dielectric strength: $2kV$ (r.m.s.), 50Hz, 1min

EMC (电磁兼容): III级, IEC60255-22 标准 EMC(Electromagnetic compatibility): Class III, standard of IEC60255-22

响应时间 Response time: 小于 less than 120ms

环境条件 Environment conditions

工作环境 Working condition: $-10^{\circ}C \sim 55^{\circ}C$, 湿度 Humidity: 20%RH~95%RH

储存环境 Storage condition: $-10^{\circ}C \sim 70^{\circ}C$, 湿度 Humidity: 20%RH~95%RH

大气压力 Atmospheric pressure: 80kPa~110kPa (相对于海拔高度 2km 及以下 Relative altitude less than 2km)

端子定义 Definition of terminals

L/+	N/-	跳闸继电器 Trip relay K1		信号继电器 Signal relay K2		E1	E2	A/+	B/-	Modbus-RTU		M+	M-
1	2	3	4	5	6	7	8	9	10	11	12	13	14
												DC4~20mA	

产品概述 General

智能电机保护控制器是一款实用型、多功能的电动机保护控制装置。采用先进的分体组合结构,可实现一体式、分体式安装以及主回路穿芯式、端子式接线方式,对电动机的短路、过载、堵转、断相/不平衡、欠载、漏电/接地等故障引起的危害予以保护。

Intelligent motor protection controller is a practical, multi-function electric device for motor protection. It can prevent damages to the motor caused by short circuit, overloading, block loading, phase loss/unbalance, under load, leakage/ Grounding, etc.

操作步骤 Operating instructions

- 1) 拔开显示模块,按附图或设计图正确接线后再插上。Unplug the display mode and plug it when finishes the correct connection according to the diagram.
- 2) 参照设置说明设置以下参数 Setting parameters according to the setting instructions:
 - a. CT 一次电流,如无 CT 则设置为输入电流如: 1A、5A、25A、100A。Set CT primary current, or set the input current 1A, 5A, 25A and 100A if there is no CT.
 - b. 电机额定工作电流。Set the rated current of the electrical appliance.
 - c. 电机启动时间。Set the starting time for the appliance.
 - d. 电机过载、不平衡、堵转、欠载、漏电/接地保护参数,如不设置则使用出厂默认参数。Set the parameters for the overload, unbalance and Block loading. The parameters are defaulted without any Setting.
- 3) 设置完毕,设备可投入运行。The device is ready for operation after setting.

参数设置说明 Instructions for setting parameters

参数设置必须在电机没有运行进行,电机启动后不能进入设置。Parameters must be set before the appliance is running. Setting is not allowed after the startup of the appliance.

首先,进行密码验证,按“▶”一次进入“PASS”,再按“▲”2次及“▶”3次,画面出现“2000”,再按“▶”一次即进入参数设置菜单。

First of all, enter the password. Press “▶” once to enter “PASS”. Press “▲” twice and “▶” three times, and “2000” show up. Press “▶” once again to enter parameters setting Menu.

其次,通过“Menu”键移到需要设置的参数画面,然后按“▶”一次,数值开始闪烁,这时通过“▲”键进行数据加,通过“▶”键进行数据移位,数据修改结束后,按“▶”多次,直到数值不再闪烁,该项参数设置完成,继续通过“Menu”键选择设置其他参数。

Secondly, press key “Menu” to move the cursor to the Parameters to be set. Press “▶” once, and the digit blinks. Now, Press “▲” to increase the value, and press “▶” to shift to the Next digit. When data is set, press “▶” many times to stop Blinking and the setting are finished. Press key “Menu” to continue.

最后,参数设置完毕,通过“Menu”键选择到“quit”画面,按“▶”一次保留参数并返回到保护器工作画面。

Finally, all the parameters settings are finished. Press key “Menu” to “quit”, press “▶” once to save settings and back to the working display menu of the protector.

符号 Characters	定义 Definition	范围 Range	出厂值 Default
PASS	密码验证 Passwords		2000
Addr	本机地址 Address	1~246	1
baud	波特率 Baud rate	1200、2400、4800、9600、19200	9600
CT	CT 一次电流 Primary current of CT	1~9999A	
rR-A	电机额定电流(Ie) Rated current of the motor(Ie)	0.1~6500.0A	
StAr	启动时间 Startup time	1~255s	10s
CoEF	过载保护系数 (K 系数) Overload protection coefficient (coefficient K)	10、25、60、75、100、125、250、300、500、750、1000、1200	125
StoP	堵转保护整定电流和时间 Rated current for stall protection and time	0.05Ie~8.0Ie (0 为关闭 0 means close) 0.0s~25.5s	4Ie,0.5s
brER	电流不平衡率(H)和保护时间(L) unbalance rate for current (H) and protection time(L)	0.5%~100%(0 为关闭 0 means close) 0.0s~25.5s	30%,5s
Lo-I	欠载保护 Under load protection	0.40Ie~70%Ie(0 为关闭 0 means close) 0.0s~25.5s	0,0s
CrEE	漏电/接地保护 Leakage/grounding protection	0.10~999mA(0 为关闭 0 means close), 0.0s~25.5s	0, 0s
PHbr	缺相保护 Losing-phase protection	0.0s~25.5s(0 为关闭 0 means close)	0.3s
SHot	短路保护整定电流和时间 Shot current for stall protection and time	0,>=8.0Ie (0 为关闭 0 means close) 0.0s~25.5s	8Ie,0.2s
bUtH	定时限保护整定电流和时间 bUtH current for stall protection and time	0.05Ie~8.0Ie (0 为关闭 0 means close) 0.0s~25.5s	2Ie,5s
QUit	退出设置 Exit setting		

故障查询 Fault detecting

保护器在正常运行时可通过按“Menu”键查询故障记录,按“▲”可依次从后到前查询到8次故障信息;当发生故障时会即时出现故障信息。故障代码表:

Through pressing “Menu” to detect the fault record when the protector is normally running. And press “▲” to detect 8 times of error information from back to front. It will show up error information when error occurs. Table for fault code is as follows:

序号 No.	故障代码 Fault codes	故障代码定义 Definition
1	E05	短路 Short circuit
2	E06	堵转 Stall protection
3	E07	漏电保护 Current leakage
4	E08	不平衡/缺相 unbalance/Phase failure

