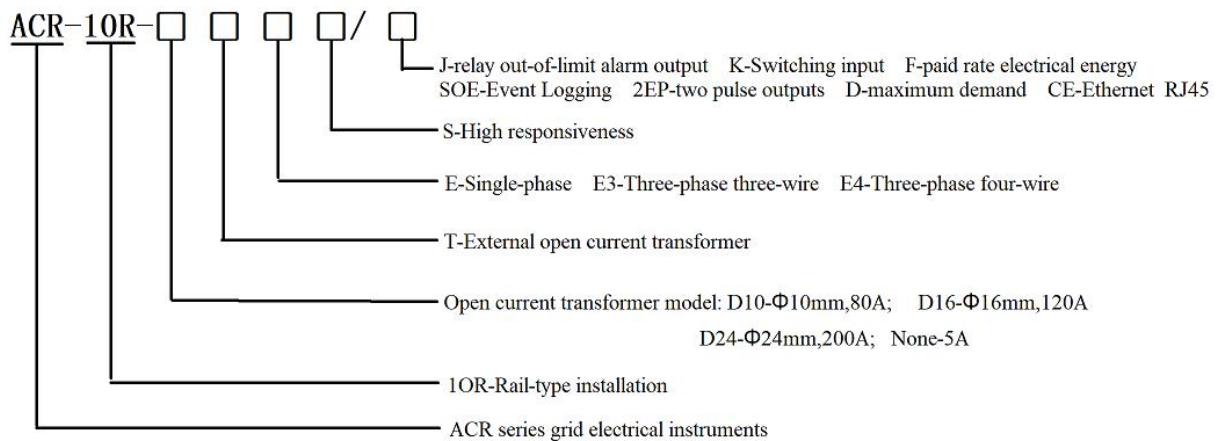


Note: The instrument must be installed on the spot together with a complementary split-core current transformer .

1. Overview

The rail-type multifunction electrical instrument with external Rogowski coil and split-core current transformer is applicable for the energy-saving reconstruction project in high energy consumption industries including the smelting, iron and steel, welding and semi-conductor industry. It is also suitable for applications such as the power monitoring of grid-connected cabinet for distributed photovoltaic power cabinet and energy demand management. It boasts of no need of bus removal, easy connection and safe construction, saving reconstruction cost and raising efficiency for the user. It integrates the measurements of all electric parameters (including single-phase or three-phase current, voltage, active power, reactive power, apparent power, frequency and power factor) and comprehensive energy monitoring and examination management. Meanwhile, it also has various peripheral interfaces for the user to choose: the RS485 communication interface with MODBUS-RTU protocol can meet the need of online communication management; the interfaces with switch input and relay output can realize the remote signalling and remote control of the circuit breaker switch. It is very suitable for real-time power monitoring system with an LCD display and the panel buttons to realize the setting and control of parameters.

2. Product specification



Note: "e" single-phase meter has no "EP" and other optional functions, and EP and j cannot be selected together.

3. Product Function

Model / Function		ACR10R-(DxxT)E4S	ACR10R-(DxxT)ES
		ACR10R-(DxxT)E3S	
Display method	LCD (field LCD)	■	■
Measurement parameters	Current/voltage/frequency/power factor	■	■
	Active/reactive power/apparent power	■	■

	Four-quadrant power measurement	■	■
	Maximum demand	■	■
	Complex rate power metering	■	■
Data logging	Event logging	□	
	Alarm	□	
	Built-in clock	■	■
Communication	RS485 interface	■	■
	Ethernet interface	□	
	RJ45 interface	□	
Optional function (choose one)	Relay output (2DO)	A1+ (B1 or C1) (4DI+2DO or 4DI+EP)*	
Communication	Switching input (4DI)	■	
Optional function (choose one)	Pulse output (2 channels)	A1+ (B1 or C1) (4DI+2DO or 4DI+EP)*	

Note:1.“■”refers to standard function, the standard configuration for above instruments is 1 channel RS485 communication.

- 2、 A1/B1/C1 etc. in the optional function corresponds to the terminal wiring method of 5.4.;
- 3、 Pulse output and relay output are not optional at the same time;
- 4、 When the optional event logging function is equipped, the DI or DO function must be configured.

4. Technical Parameters

Technical parameters		Indicators	
Input	Grid	Three-phase three-wire/three-phase four-wire	
	Frequency	45~65Hz	
	Voltage	Rated voltage:AC 57.7V/100V(100V)、 220V/380V(400V)	
		Overload: 1.2 times the rated voltage(continuous); 2 times the rated voltage lasting for 1 second	
		Power consumption: less than 0.2VA	
	Current	Rating: with external transformer 80A/26.7mA, 120A/40mA, 200A/66.66mA With built-in mutual sensor: 5A	
Overload: 1.2 times the rated current(continuous);10 times the rated current lasting for 1 second			

			Power consumption: less then 0.2VA
Output	Electricity		Output mode:Open collector optocoupler pulse, 2-way output
		Three-phase	Pulse constant:100imp/kWh
	Communication		RS485 interface, Modbus-RTU、 Ethernet
	Display		LCD
Function	On Off	Input	4 dry contact inputs
		Output	Output mode: 2-way relay normally open contact output
	Volume		Contact capacity: AC 250V/3A、 DC 30V/3A
Measurement precision			0.5 level, Reactive energy: 2 level、 Other: 1 level
Power supply			AC85~265V power consumption≤10VA
Safety	Power frequency withstand voltage		AC2kV between power//switching output//current input and voltage input//communication//pulse output//switching input 1min. Power supply//switching output//current input and voltage input between two two AC2kV 1min. AC1kV between communication//pulse output//switching input two by two 1min.
	Insulating resistor		Input and output to chassis >100MΩ
Environment			Working temperature: -10℃~+55℃ (Limit working temperature: -20℃~+65℃) ; Storage temperature: -25℃~+70℃ Relative humidity: 5%~95% non-condensing; altitude: ≤2500m

5. Installation

5.1 Overall and Installation Dimensions (Unit: mm)

