KPM 83 Microprocessor integrated protection relay

KPM83 series microprocessor integrated protection relay is based on high-performance DSP processor and embedded real-time operating system, it is a protection and monitoring devices that integrated protection, monitoring and control, communications.

It is suitable for substations, power plants, industrial and mining enterprises, construction and other fields with voltage levels up to 35KV. It has protection, telemetry, remote measure, remote adjust and remote control functions. We can provide line protection and monitoring and control, transformer protection and control, motor protection and control, PT protection and control, capacitor protection and control, backup power source automatic enable device bus bar protection and other protection functions.

Functions

- Fully enclosed structure, with good seismic dust performance
- Providing complete lines, transformers, motors, capacitors, PT, Bus line connection backup power automatic enable protection and other functions
- Using 192 * 64 dot matrix blue LCD display, all Chinese finished, the display rich and clear, easy to operate, beautiful appearance
- RS485 communication method, integrated standard Modbus communication protocol
- Perfect self-test function, improve the abnormal records, time records, records of operations, all information be maintained when power down.
- Advanced embedded real-time operating platform, software and hardware are modular design, easy to upgrade and extend functionality
- Light weight and reasonable structure, the use of high-quality high-level components and SMT production process, the product has a high electrical performance

Model selection

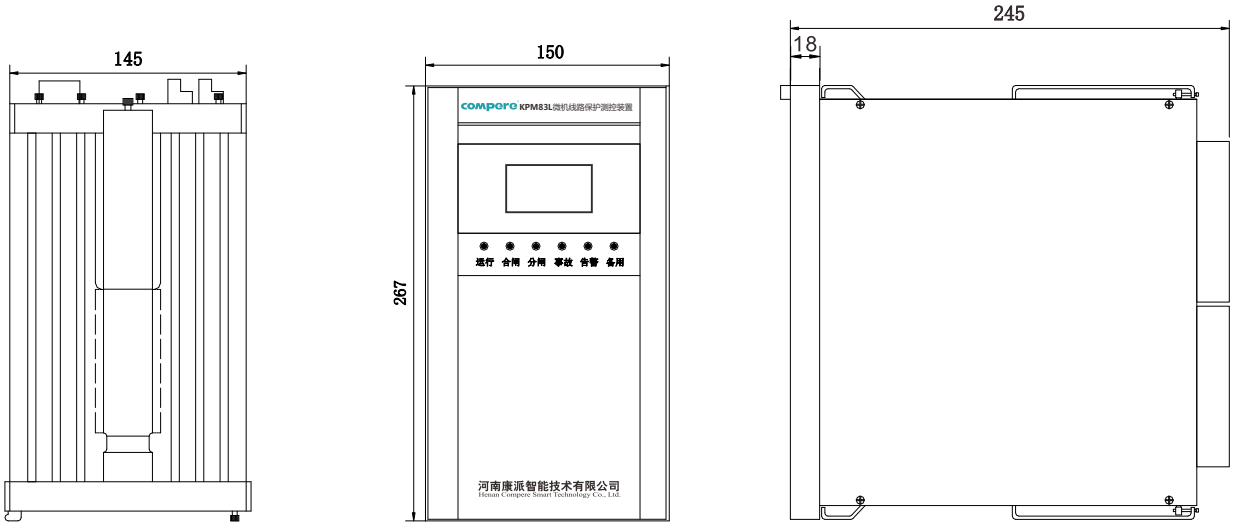
KPM 83 □□□-C□ Z□-□-□

- □: No : Modbus-RTU; 6 : IEC61850
- □: No; AP : Anti-pumping
- Z□: 5 : Zero sequence secondary CT rated current 5A; 1 : Zero sequence secondary CT rated current 1A
- C□: 5 : Protection/Measurement CT rated current 5A; 1 : Protection/Measurement CT rated current 1A
- □: L : 3P3W; P 3P4W
- □: A: AC power; D : DC power
- □: **L-** Line Protection; **M-** Motor protection; **C-** Capacitor protection; **T-** Transformer protection; **B-** Backup power automatic enables; **P-** PT switch protection; **TD-** Transformer differential protection; **BU-** Bus coupler backup power automatic enables; **MD-** Motor differential protection
- 83: Product Series
- KPM: Compere Power Meter

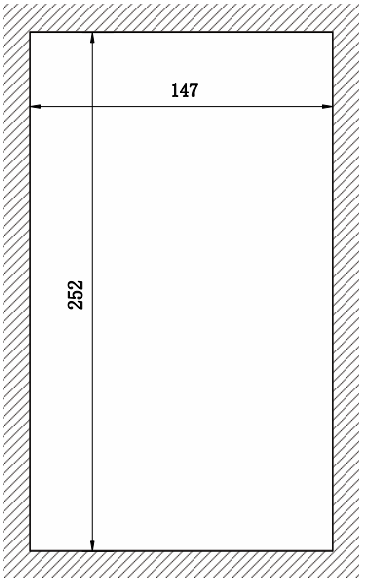
Function selection

	Functions \ Model	KPM 83L	KPM 83T	KPM 83TD	KPM 83C	KPM 83M	KPM 83MD	KPM 83P	KPM 83B	KPM 83BU
Protection function	Quick cut-off	●	●	●			●			
	Differential quick cut-off protection			●			●			
	Overcurrent tage I	●	●	●	●	●	●			●
	Overcurrent tage II	●	●	●	●	●	●			
	Negative sequence overcurrent stage I					●	●			
	Negative sequence overcurrent stage II					●	●			
	Inverse time overcurrent					●	●			
	Zero sequence overcurrent	●	●	●	●	●	●			●
	Unbalanced zero sequence overcurrent				●					
	Overload	●	●	●		●	●			
	Inverse time overload		●							
	Overvoltage protection	●		●	●	●	●			
	Zero sequence overvoltage				●	●				
	Unbalanced zero sequence overvoltage				●					
	Low voltage protection	●		●	●		●	●		
	Low voltage protection stage I					●				
	Low voltage protection stage II					●				
	Low-voltage inverse time zero sequence		●							
	Extraction voltage	●								
	Short circuit protection					●				
	Over-heat protection					●	●			
	Post-acceleration	●								
	Reclosing	●								
	PT disconnection	●	●	●	●		●	●		
	Discharge PT overvoltage				●					
	Non-power protection		●	●			●			
	Low frequency load shedding	●					●			
	Power direction	●								
	2nd harmonic restraint ratio differential Protection			●			●			
	CT disconnection detection & blocking			●			●			
	Fault recorder									
	Long start-up time protection					●				
	Charging protection								●	●
	Insulation monitoring							●		
	Control circuit disconnection			●			●			●
Measurement function	Circuit breaker remote switch output signal	●	●		●	●				
	IA、IB、IC、Ua、Ub、Uc、Ia2、Ib2、Ic2、U0、I0、P、Q、F、COSΦ etc., analog	●	●	●	●	●	●			
	Iah, Ibh, Ich, Ia1, Ib1, Ic1 analog									
	Real-time unbalanced current									

Size (mm)

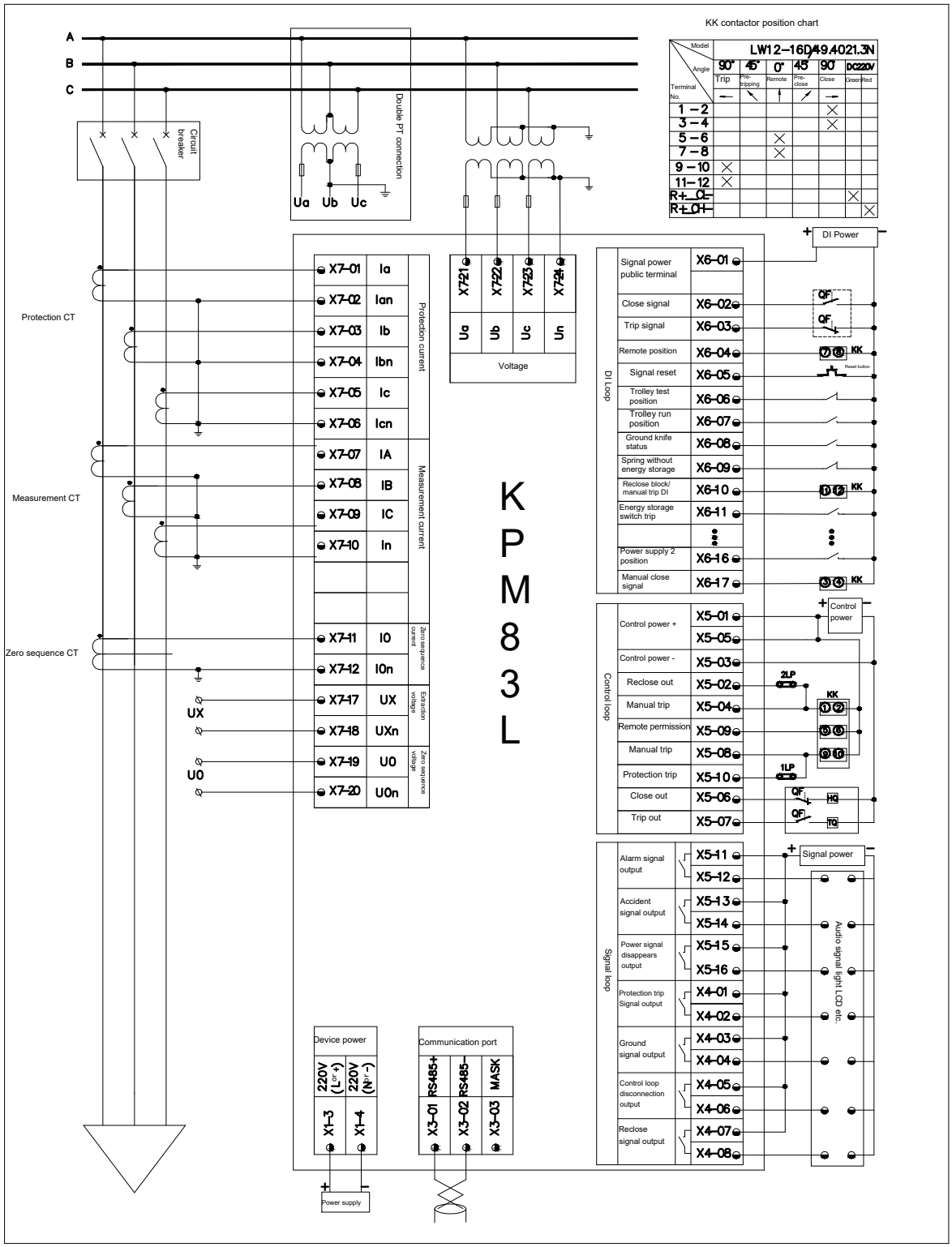
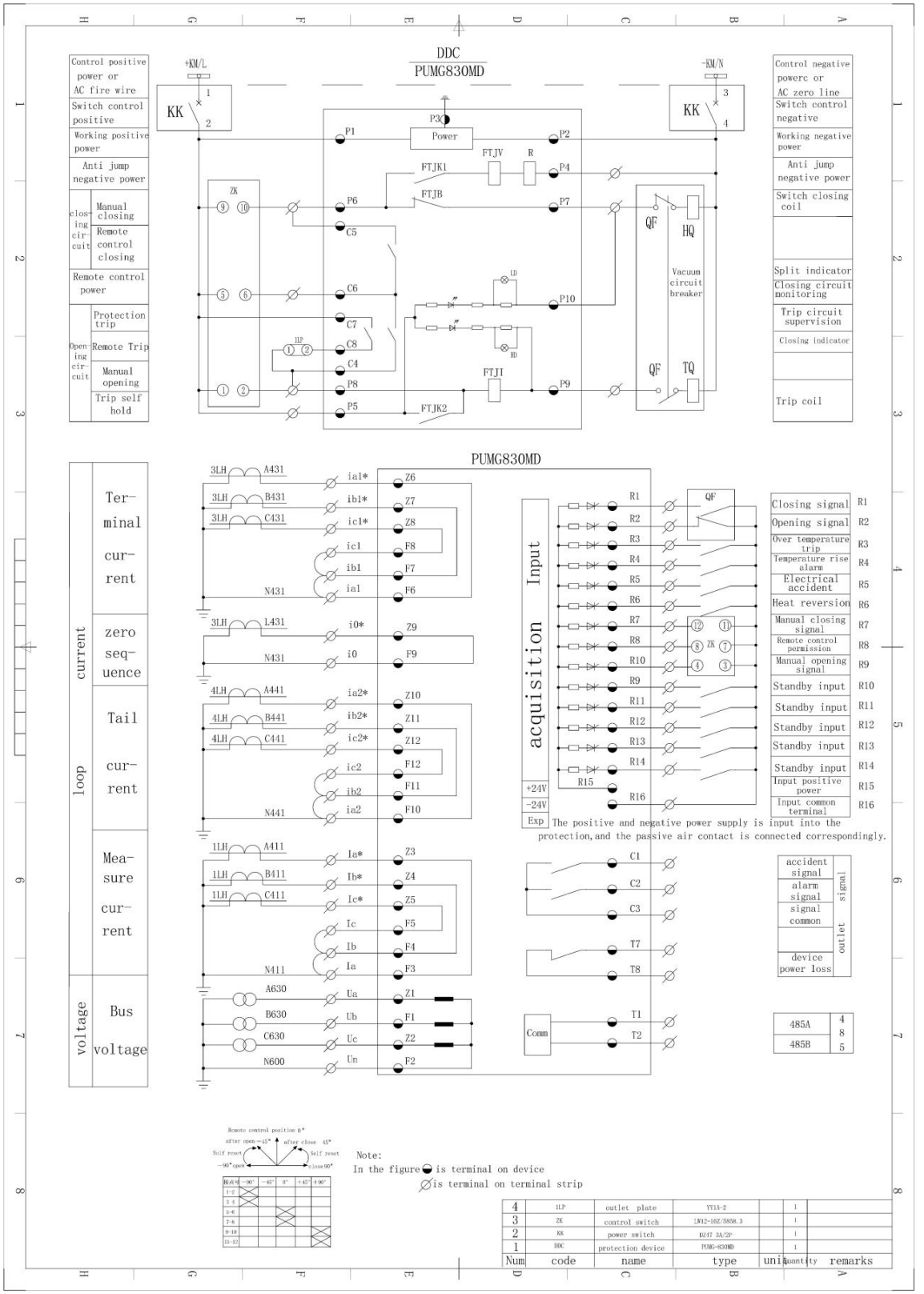


Installation size (mm)



Typical wiring

KPM83L line protection wiring



KPM83MD motor differential protection device