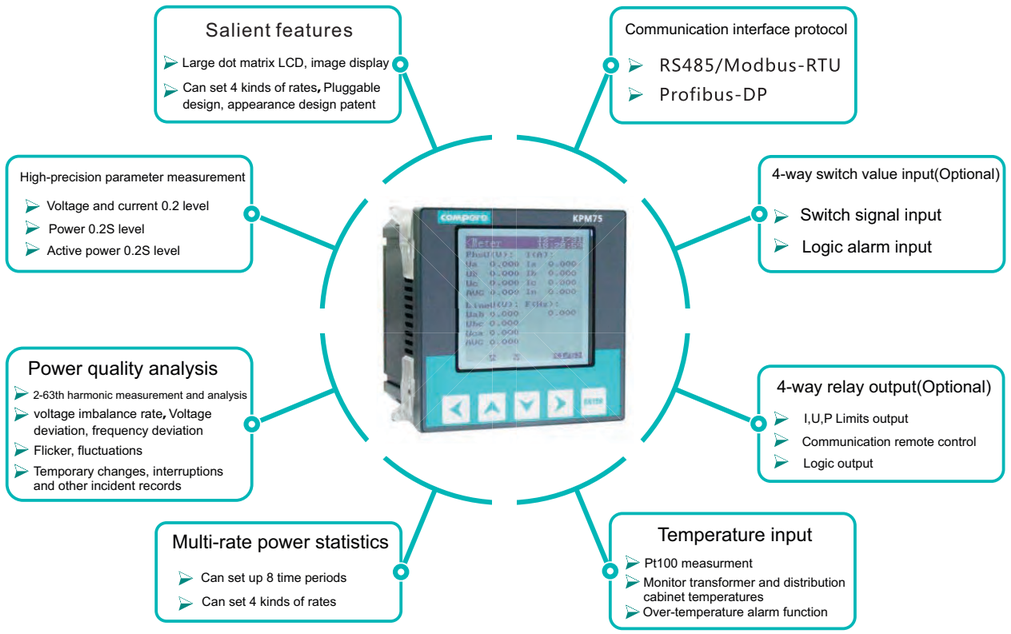
KPM75 Power quality analyser

The KPM75 is a new generation of high-end power quality analyzer that follow international power quality standards and monitor all power quality parameters such as flicker, short interruptions in recorded voltage, and harmonic up to 63 measurements with power data Statistics, IO signal control alarm, communication and other functions. Large graphic LCD display, pluggable function module design, widely used in key power applications, it is the ideal choice to monitor the distribution operation efficiency.

Product Features



Function features

- Measure the real effective value of all-parameter
- 63th harmonic measurement and analysis
- Measure voltage imbalance rate, voltage deviation, frequency deviation and other power quality parameters
- Measurement and recording voltage fluctuations and flicker, inter-harmonics and other power quality parameters
- Short-term interruption of voltage, surge, sudden drop and other power quality events recorded
- Demand statistics function, record the current value and maximum value
- 0.2S four quadrant power statistics
- Can set 4 kinds rates 8 time period multi-rate power statistics
- RS485 communication interface, Modbus-RTU protocol, Optional Profibus-DP
- 1 road passive optical coupler collector active pulse output
- Can be extended 4-way passive switch value input
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- Instrument working hours, load time statistics
- 160 * 160 graphic LCD screen, rich in content, intuitive and clear
- Pluggable design, appearence design patents, replacement and maintenance easy

Products list

KPM 75 □-□

Rated parameters
No:Rated current 5A, measuring range 0-6A
1:Rated current 1A, measuring range 0-1.2A

Extention Function
1-way4-20mA ouput
4-way relay output
Profibus-DP communication
1-way temperature input
4-way switch value input

Product series

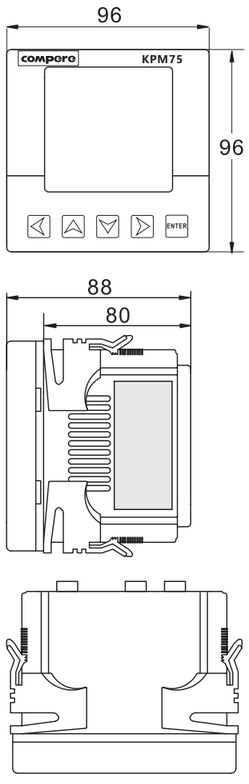
Compere Power Meter

◆ Example:KPM75-1:Rated current1A, power quality analysis instrument.

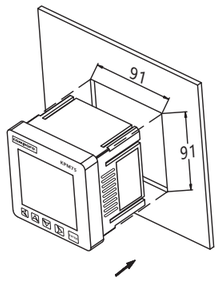
Application occasion

Measure, monitor and control power distribution system parameters | Collect energy consumption datathat cost center analysis needs | Power quality analysis (Harmonic, voltage interruption, flicker and so on) | Signal control alarm

Product size



Installation instructions

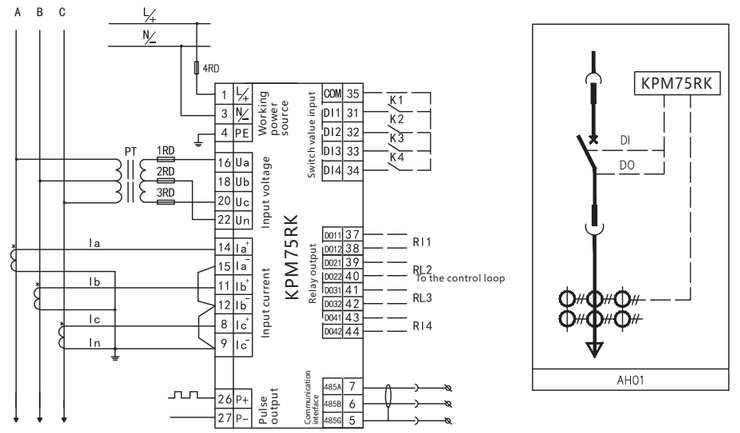


Technical Parameters

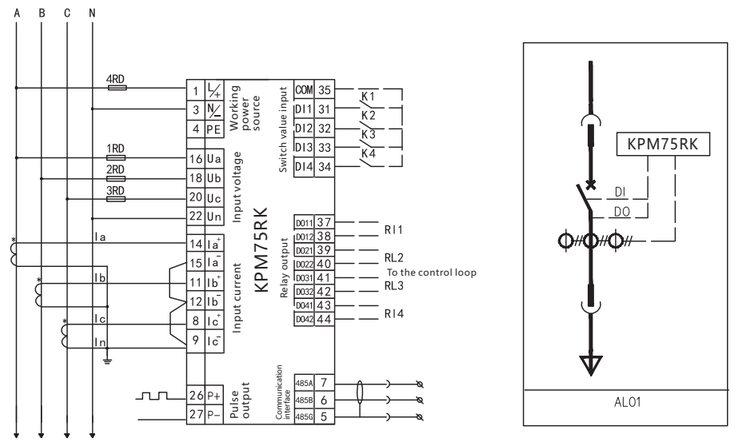
Working power source	Operating Voltage	AC 85-265V/DC 80-300V
	Rated power consumption	< 3VA
Input voltage	Rated voltage	57.7/100V,220/380V,380/660V
	Overvoltage capability	1.2 times rated voltage allowed, continuous work; 2 times the rated voltage allowed 1 second
	Rated power consumption	<0.5VA(per phase)
	Measurement range	5A:0-6A; 1A:0-1.2A
Input current	Rated current	Default 5A, input range 1-6A; optional 1A, input range 1-1.2A
	Overload capacity	1.2 times rated current allowed, continuous work; 20 times the rated current allowed 1 secon
	Rated power consumption	<0.4VA(per phase)
	Measurement range	5A:>5mA ; 1A:>0.8mA
Measure-ment accuracy	Voltage	±0.2% (0.01V)
	Current	±0.2% (0.01A)
	Active power	±0.2% (0.01W)
	Reactive power	±2.0% (0.01var)
	Power factor	±1.0% (0.001)
	Frequency	±0.002Hz
	Active energy	±0.2% (0.1kwh)
	Reactive energy	±2.0% (0.1kvarh)
Measure-ment display	Basic parameter	Voltage / current, active power, reactive power, apparent power, frequency, active energy
	Power quality	2-63 harmonic distortion rate; total harmonic distortion rate; crest factor; current K factor; voltage / current imbalance rate, flicker, voltage surge, dips, short interruptions
	Demand statistics	Power demand maximum, minimum and current value
	Multi-rate	8 time periods, 4 kinds of rates
	historical data	Record monthly average power factor and power data for the last three months
Comm unication	communication port	RS485, Photoelectric isolation interface
	Communication protocol	Modbus-RTU, 1200-38400BPS Probibus-DP,9600-12Mbps
Input output	Switch value input	4-way passive main line contact DI input, internal supply DC24V power supply
	Relay output	4-Way DO output, contact capacity 250VAC / 5A, 30VDC / 5A
	Pulse output	1-way passive optocoupler collector active pulse output
Product features	Display	160 * 160 large dot-matrix LCD graphics display
	Extensions function	Pluggable expansion design
	Degree of protection	Ip54
	Dimensions	96*96*88
Working environ-ment	Operating temperature	-25℃ ~ +70℃
	Storage temperature	-30℃ ~ +75℃
	Relative humidity	5% ~ 95% No condensation
	Altitude	Not more than 4000m
Safety	Withstand voltage	AC2kV/min~1mA input-output-source (GB/T13729)
	Insulation	>50MΩ (GB/T13729)
Electrom-agnetic Compati-bility (EMC)	Electrical fast transient/ burst immunity test	IEC61000-4-4,Level4
	Surge immunity test	IEC61000-4-5,Level4
	Electrostatic discharge immunity	IEC61000-4-3,Level4
	Power frequency magnetic field immunity	IEC61000-4-8,Level4

Typical wiring

KPM75RK High-voltage three-phase three-wire typical wiring



KPM75RK Low-voltage three-phase four-wire typical wiring



Explanation:

1.The wiring diagram is suitable for high voltage three-phase three-wire system,low voltage three-phase four-wire system, regard to other system wiring please refer to KPM75 instruction manual.

2.Terminal that without function description is invalid.

3.The function of dotted lines is optional.

4.The final interpretation belongs to Compere.