5 years WARRANTY

WK 6000TU

WK6000TU power transducers provide a simple solution to all measurement problems, analysis, transmission, management and conversion of electrical parameters.

WK6000TU power transducers are designed in a JM Concept case unplugged from its rail DIN base, with self-shorting contacts on current inputs, and use universal JM Concept supply.
Use of very efficient components in a wide temperature range ensures a very high reliability level and very low thermal drift rate.

WK6000TU transducers are programmable on PC with SETLINE software, freely downloadable.

JM Concept
une vision d'avance

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WK6000TU

• WK6000TU power measurement transducers have analogue outputs, pulses outputs, relays outputs and, digital link RS485 (MODBUS, JBUS) on screw terminals and an USB connector on front face, allowing to recover the measures and to transmit them in digital.

Unplugged power measurement WK6000TU units are designed to measure and to convert each electrical parameter of primary and composed values, on every electrical network type: monophase, three-phase balanced or unbalanced, 3 or 4 wires, for all current and tension values.
Unplugged power measurement WK6000TU units are sold with their BL02WLV wiring base with self short-circuiting contacts for current inputs.

Current inputs are galvanically isolated between themselves with internal current transformers.
Analogue and relays outputs can be progammed on all avalaible mesure.
Pulses outputs can be progammed on all avalaible energy mesure.

INPUT	OUTPUTS	DIGITAL OUTPUT
Monophase , 3 and 4 phases input Balanced or unbalanced	1 to 3 Isolated analogue output	1 RS485 output
	0 to 2 pulses outputs	1 USB output
	2 Relays outputs N/O	
Each input and each output is totally isolated		

GENERAL SETTINGS : WK6000TU

WK6000TU power measurement units have a serie bidirectional digital link RS485 MODBUS, than it is possible to recover measures and to transmit them in digital, it is also possible to configure and to drive the power measurement unit.

This digital link is avalaible on :

• Front face with USB connector allowing through mini USB cable to wire the tranducer to PC USB connector.

• On screw terminal allowing, as all JM Concept devices, through UNILINE communication interface (RS485 / TCP-IP modbus converter and RS232/RS485 converter) witch enables to interact with WK6000TU power measurement unit in INTRANET, ETHERNET.
Use of free software SETLINE enables a very simple product configuration with PC.

FUNCTIONS

INTEGRATION TIME	Programmable from 1mn to 99mn
CUT OFF IN VOLTAGE	Programmable from 5V to 50V
CUT OFF IN CURRENT	Programmable from 0.05A to 1.00A
INPUT SCALE FACTOR	Allows providing a magnifying effect on the outputs
CT TRANSFORMATION REPORT	CT: Primary from 1A to 9999A, Secondary from 5A or 1A
VT TRANSFORMATION REPORT	VT: Primary from 1V to 100KV, Secondary from 1V to 700V
SEGMENTATION	A break line can be programmed on analog ouput affected to any parameter

WK6000TU AVAILABLE MEASUREMENTS

PRIMARY MEASUREMENT	NB		NB
Voltage between phases	3	Frequency	3
Average voltage between phases	1	Cos phi per phase	3
Voltage between phase and neutral	3	Cos phi average	1
Line current	3	Tangent phi	1
Neutral current	1	Phase angle	1
Average current	1		

POWER MEASUREMENT	NB		NB
Active power per phase	1	Average active power OUT	1
Total active power	3	Average reactive power IN	1
Reactive power per phase	1	Average reactive power OUT	1
Total reactive power	3	Maximum active power IN	1
Apparent power per phase	1	Maximum active power OUT	1
Total apparent power	1	Maximum reactive power IN	1
Average active power IN	1	Maximum reactive power OUT	1

ENERGY MEASUREMENT	NB		NB
Active energy IN	1	Reactive energy OUT	1
Reactive energy IN	1	Apparent energy IN	1
Active energy OUT	1	Apparent energy OUT	1

WK6000TU : TECHNICAL CHARACTERISTICS

CURRENT INPUT

CURRENT INPUT VALUE (AC)	0/5A ; 0/1A programmable from 0 to 6,5A or 0 to 1,3A
MEASUREMENT TYPE	On Current Transformer
ADMISSIBLE OVERLOAD	10 In 1s - 2 In permanent
MINIMUM MEASURABLE SIGNAL	50 mA
MAXIMUM MEASURABLE SIGNAL	2.5A for 0/1A scale - 7A for 0/5A scale
INPUT IMPEDANCE 5 MΩ	5 mΩ

VOLTAGE INPUT

VOLTAGE INPUT VALUE (AC)	0/100V ; 0/250V ; 0/500V ; 0/700V ; auto
ADMISSIBLE OVERLOAD	1000V permanent
MINIMUM MEASURABLE SIGNAL	5V scale 0/100V - 10V scale 0/250V ; 15V scale 0/500V - 20V scale 0/700V
MAXIMUM MEASURABLE SIGNAL	150V scale 0/100V - 340V scale 0/250V ; 600V scale 0/500V - 750V scale 0/700V
INPUT IMPEDANCE	13.5 MΩ per phase

OUTPUTS

CURRENT OUTPUT	
Current output load	< 950 Ω
RESIDUAL DRIFT	20 µA
Pulse output	
CHARACTERISTICS	Open collector Umin = 10Vdc Umax = 250 Vdc Imax = 20mA
Relay outputs	
CHARACTERISTICS	1T - 2A/250Vac - 1R on option

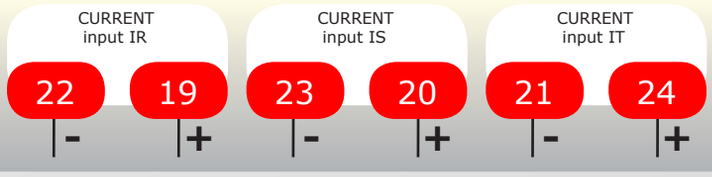
PRECISION CLASS	
On primary values (I, U, F)	0.3
On composed values (P, Q …)	0.5
Thermal drift	< 100ppm
Response time	< 300ms
Measurement in true RMS	Until row 11
Testing frequency	2000 Hz per phase
ISOLATION	
Supply/ input - outputs isolation	2500Vac - 1mn - 50Hz
Input / outputs isolation	2500Vac - 1mn - 50Hz
Analogue output / digital Output isolation	Without
AUXILIARY SOURCE	
Standard auxiliary source	20Vdc/370Vdc& 80Vac/256 Vac
Auxiliary source in option	20Vac/60Vac
Consumption	< 6VA
TEMPERATURE	
Operating temperature	-25°C / +60°C
Storage temperature	-40°C / +80°C
PROTECTION INDEX	IP20
CASE	Self-extinguishable black polyamide ULV0

OPTIONS REFERENCES

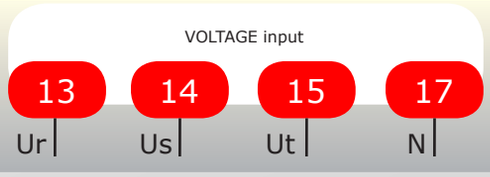
OPTIONS	PRODUCT CODE
Varnish option	WK600xTUx-T
Auxiliary supply 20Vac/60Vac	WK6009TU

CONFIGURATION-WIRING-DIMENSIONS

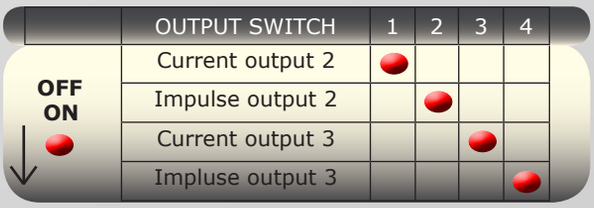
CURRENT INPUTS WIRING



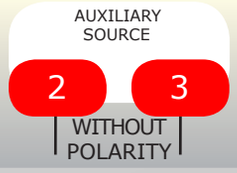
VOLTAGE INPUTS WIRING



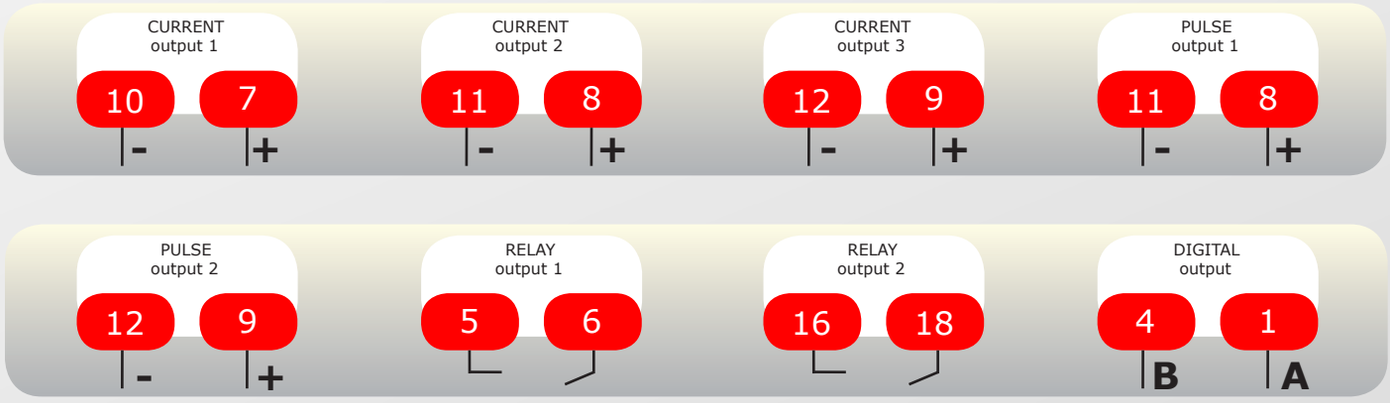
OUTPUTS WIRING



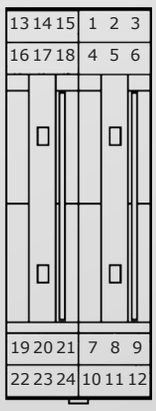
AUXILIARY SOURCE WIRING



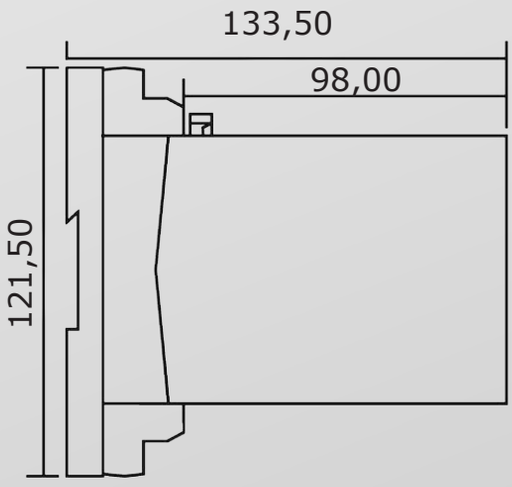
OUTPUTS WIRING



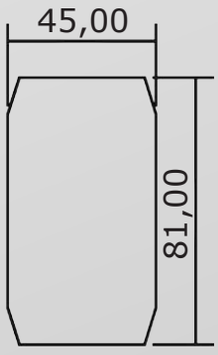
DIMENSIONS AND TERMINALS



BASELINE
Screw



45mm CASE



Wiring base provided

SETTINGS

Electrical network : 4 unbalanced wires
CT : 5/5A
VT : NO
Scale : 0/700V
Analogue outputs 1 : unused
2 : unused
3 : unused

Relay output 1 : unused
Relay output 2 : unused