WH31…Pulse
Three Phase Electronic Energy Meter

- **Phase loss with 3 x LED display for L1,L2,L3**
- **Pulse display with 2 x LED display for test & output**
- **Reverse direction display with LED**
- **Small modular size, DIN rail mounted.**
- **Easy installation to distribution boards, load center, miniature & etc. by identifying where energy is being used.**
- **6 digits mechanical displayable even power failure.**
- **Typical accuracy class 1.0 IEC1036**
- **3Ph3W, 3Ph4W. Voltage 100V, 380V, 220/380V, 57.5/100V & etc.**
- **Current 1.5(6), 5(30), 10(50), 15(90), 20(100), 5(40),5(100)A.**
- **Optional pulse output or RS485 for remote metering.**
- **Tropical and Trivialized meters: 95% relative humidity.**

Application.

The electronic electric meter registers energy consumption in alternating current systems. Its compact, rugged design allows for universal implementation in industrial systems, at construction sites, in the office, at leisure facilities and in the household. The meter can be mounted in any position on a top-hat rail per EN 50022 fastened. Installation of the energy meter at incoming power supply lines, distribution centers or directly at power consumers allows for the individual acquisition of energy data, as well as targeted billing of energy costs.

Technical Data.

Voltage inputs

Voltage range	: 100, 380, 57.5/100, 230/380V AC or request
Input impedance	: >1.3 MOhm
Burden	: max 0.15 VA
Frequency	: 45 - 65 Hz
Overload	: 130% continuous.
	: 200% / 3 sec.

Current inputs

Rated current (Ib)	: 1.5(6), 5(30), 10(50), 15(90), 20(100), 5(40),5(100)A.
Starting current	: 0.4% Ib
Input impedance	: 0.02 Ohm approximately
Burden	: max 0.1 VA
Overload	: 5(30) 600%Ib, 20(100)500%Ib
	: CT 5(100)A 2000% Ib

Typical accuracy

Energy	: class 1 according to IEC1036, EN61036
Frequency	: 45 to 65 Hz.

Display – Electromechnical counter.

Number of digits	: 6 digits
Digit height	: 6 mm.
Digit width	: 3 mm.
Resolution	: 0.1 kwh. Upto input

Nominal Insulation Voltage

Inputs	: AC 300 V
Outputs	: DC 50 V

Insulation Test Voltage

Input _Output / Housing	: AC 4 kV
Output _Housing	: 500 V

Electrical Safety

Protection Class	: II
Overvoltage Category	: III IEC 1036
Allowable Contamination Level	: 2

Electromagnetic Compatibility per IEC 1036

Surge Voltage	: 6 Kv, 1.2/50 us (IEC 255-4)
Burst	: 2 kV (DIN EN 61000-4-4)
Electromagnetic Fields	: 10 V / m (DIN EMV 50141)
Electrostatic discharge	: 15 Kv (DIN EN 61000-4-2)

Environmental conditions

Operating temperature	: -10 ° C to +60 ° C
Storage temperature	: -20 ° C to +75 ° C
Relative humidity	: 95% max. without condensation

Mechanical characteristics

Material	: NORYL UL94 V-0 self extinguishing plastic
Mounting	: Rail 35 x 15 mm. DIN EN50022
Protection degree	: IP54 (front panel); IP20 (terminals) EN60529
Terminals	: Screw type 2.5mm.
Size	: 125 x 88 x 73 mm .

Pulse Output (Option)

Number of channels	: 1 ch.
Type	: Open collector, Vext 5 Vdc
Pulse duration	: 80 ms.
Frequency	: Up to current rated

Application Regulations & Standards

DIN EN 50081-2	EMC interference emission
DIN EN 50081-2	EMC interference immunity
DIN VDE 0470 Part 1 / EN 60529	IP protection
DIN 43 856	Electric meters, tariff switching clocks and ripple-control receivers
DIN 43 864	Current interface for pulse transmission between pulse meters and tariff devices
IEC 68-2	Basic environmental test procedures
EC 255-4	High-frequency disturbance test
IEC 1036 / EN 61036 / VDE 0418 Part 7	Alternating current static watt-hour meters for active energy (classes 1 and 2)

Dimensional Drawing