



Measures Short Term Energy Usage

High Frequency Output provides High Resolution Measurements

Simple to Install

Standard DIN Rail mounting

Safe to Use

Isolated Frequency Output and Fully Isolated Current Inputs

Flexible in Use

Frequency proportional to Power - Total Count proportional to Energy

Accurate and Precise

Measures True Power, even in the presence of Harmonics

XD303F is a precision kW transducer with an isolated frequency output proportional to true power. allows both Energy and Power to be simply measured:

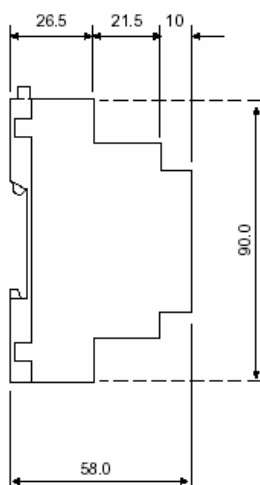
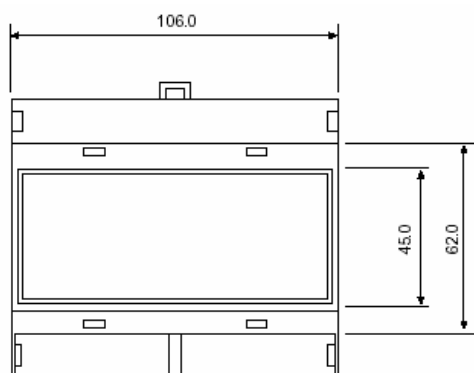
- **Power** – Measure frequency
- **Energy** – Count output pulses

The XD303F is designed to measure energy consumption in short batch processes:

- Rubber compounding
- Preparation of bread dough
- Mixing of chemicals
- White Goods Testing
- etc.

Frequency output is via an isolated volt free contact and is suitable for interface to external counters, instruments, or to a PLC. Maximum standard output frequency for a 3j Meter is 100Hz – 100 pulses per Watt hour being the factory calibration.

The pulse Output conforms to DIN 43864 and the proposed IEC 61393 Class A and Class B devices at output frequencies less than 16.6Hz.



OUTLINE SPECIFICATION

INPUTS	
System	3 Phase 3 or 4 Wire Unbalanced Load
Voltage U_n	400/230V. 3 Phase 3 or 4 Wire Single Phase to order.
Current I_n	5 Amp from External CTs Direct connection possible under Category II
Measurement Range	Voltage 80% to 120% Current 0.5% to 120%
Frequency Range	Fundamental 45 to 65Hz Harmonics Up to 50 th harmonic at 50Hz
Burden	Voltage <0.1VA per phase Current To suit CT used
Overload	Voltage x4 for 1 hour Current As per CT specification
AUXILIARY SUPPLY	
Standard	230V 50/60 Hz \pm 15%
Options	110V 50/60 Hz \pm 15%
Load	5VA max.
Overload	x1.2 continuous
ACCURACY	
kWh	Class 1 per EN 62053-21 & BS 8431
kW	Class 0.2 per IEC 60688
PULSE OUTPUT	
Function	1 Pulse per unit of energy
Standard Setting	3 phase 100 Hz @ 400 V 5A PF = 1 1 phase 33.3 Hz @ 230 V 5A PF = 1
Scaling	Binary 1/2 – 1/1024 Multiplier x1 – x9
Pulse Format	ON / OFF with 1:1 mark / Space ratio
Max Frequency	100 Hz
Type	N/O Volt free contact. Optically isolated BiFET
Contacts	100mA ac/dc max., 50V ac/dc max.
Isolation	2.5kV 50Hz 1 minute
GENERAL	
Temperature	Operating -10 °C to +55 °C Storage -25 °C to +70 °C
Humidity	< 75% non-condensing
MECHANICAL	
Environment	IP22 (IP65 in external case)
Enclosure	DIN 42880 6 Modules
Material	Noryl UL94-V-O. Self extinguishing
Dimensions	106mm x 90mm x 58mm
Weight	~ 325 gms
Terminals	Rising Cage. 4mm ² (12 AWG) cable max.
SAFETY	
Conforms to	EN 61010-1 Installation Category III