



HXF 300

Smart Three Phase CT/PT Meter

HXF300 is a smart three phase potential transformer meter. It complies with DLMS/COSEM protocol, and it shall be capable of system integration and connectivity. It is for CT/PT connection. Its seamless modular design with high accuracy measurement. It can meet a variety of customer's intelligent application requirements.

HXF 300

HXF300 is a smart three phase high accuracy meter. It complies with all related International standard like DLMS/COSEM protocol and certified by accredited lab. HXF300 enable utilities to monitor all essential factors of power grid such as, voltage, current, power factor and all power quality items.

Hot Plug-Play modular design of this meter enable utilities to deploy it in different environment with different communication requirement. This meter can support different communication modules such as PLC, RF and 3G technologies. As multiple I/O extensible property is an important factor in smart metering to guarantee future smart grid application, this meter is designed according to open meter principle to insure utilities's future investment.



MAIN FUNCTIONALITIES

Measurement

- > 2 or 3 elements
- > 4 Quadrants measurement
- > Harmonics/THD measuring (optional)
- > Import & Export KWh, Kvarh and KVAh (Total & Per tariff)
- > Cumulative & Delta energy

Demand Monitoring

- > Block / Slide mode
- > Programmable interval period (typically 5, 10, 15, 30 or 60 minutes)
- > Maximum demand: Import & Export KW (Total & Per tariff), Import & Export Kvar (Total), 4 Quadrants Kvar (Total)
- > Pre-set time (automatic)/Manual reset/remote reset

Instantaneous Values

- > Power, Vrms, Irms
- > Power Factor, Frequency
- > Energy values group & Instantaneous values group

Power Quality Monitoring

- > Under & Over voltage
- > Power failure
- > Phase sequence & Current reverse

Billing Data

- > 13 Billing periods
- > Automatic / Manual / Remote reset

Events & Alarms

- > Multiple kinds of events (standard, fraud, communication, disconnecter control, power quality & power outage event)
- > Customizable event list
- > 100 event records
- > Internal self-check , Alarms indicator (LED/LCD)

LCD

- > Support Dot or Segment LCD
- > Backlight (optional)
- > Configurable automatic & manual display list
- > OBIS codes (according to IEC62056-64)
- > Customizable display symble (optional)

Auxiliary Load Control

- > Load control power threshold configurable
- > Overload continuous period threshold configurable
- > Overload restoration period threshold configurable
- > Relay status indicator
- > Relay malfunction indicator

Anti-Tamper

- > 7 sealing positions
- > Meter cover removal detection
- > Terminal cover removal detection
- > Communication unit cover removal detection
- > Reverse current
- > Missing neutral detection (optional)
- > Strong magnetic field detection (optional)
- > By-pass detection (optional)
- > Remote & Local access report



Load Profile

- > Hourly & daily load profile
- > Harmonics profile (optional)
- > Configurable captured registers & periods

Clock

- > Quartz crystal time resource
- > Gregorian calendar & DST (Daylight Saving Time)
- > Remote & Local synchronization
- > Exchangeable Lithium Battery
- > Super cap

Tariffs

- > Active & Passive TOU tables
- > Up to 6 season tables, 8 week tables, 8 day tables
- > Up to 4 tariffs
- > Up to 50 holiday tables

Local and Remote Access

- > PC software
- > Hexing's Central System

Communication

- > 3 independent communication ports
- > Simultaneous individual operation
- > Optical port: IEC62056-21
- > HAN port: RS485 (RJ12 type), M-Bus (optional)
- > Modular Plug-play 2G / 3G / PLC / RF communication units

Installation

- > Wall - mounted & Suitable meter box by Hexing
- > 3 individual fixing screws (1 top, 2 bottom)

Security

- > Secure data transferring (authentication + encryption)
- > 3 data access levels (Lowest, LLS and HLS)
- > Data access management for all ports
- > Metrology data protection

SPECIFICATIONS

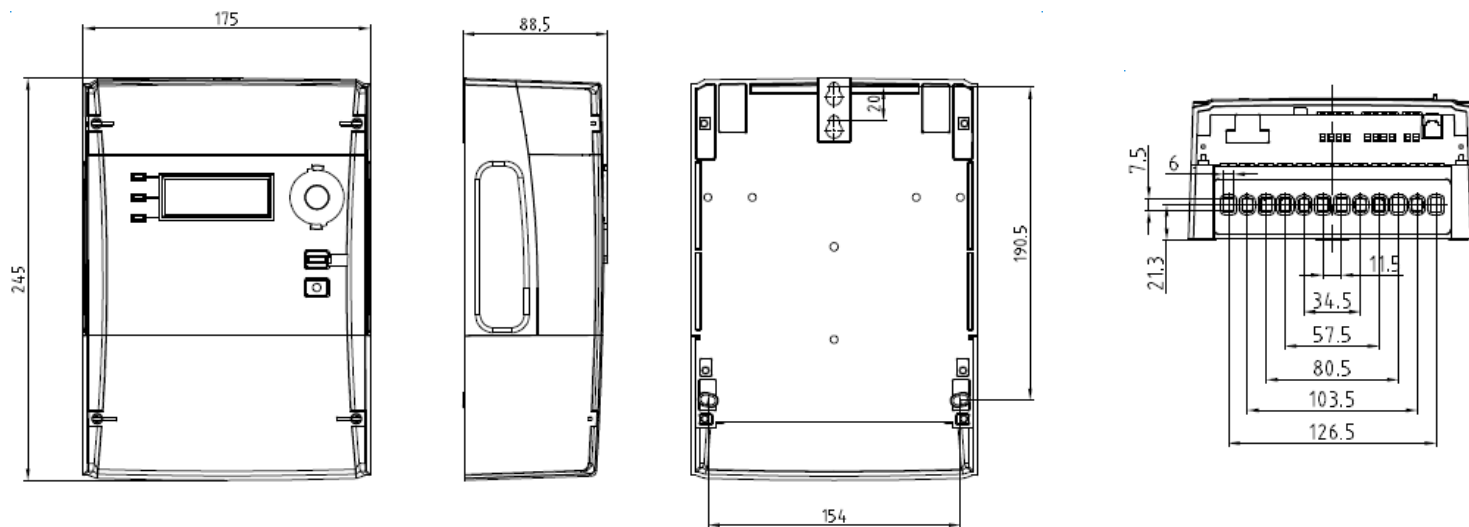
APPLICATION		CT/PT connection
ACCURACY	Active	Class 0.5S / Class 0.2S(IEC)
	Reactive	Class 2 / Class 1(IEC)
NOMINAL VOLTAGE	3 phase 4 wire	3×230V/400V, 3×240V/415V, 3×57.7V/100V, 3×57.7V/100V-240V/415V
	3 phase 3 wire	3×100V, 3×110V
CURRENT RANGE	Ib/ Iref	1A, 1.5A, 5A
	I _{max}	6A, 10A
STARTING CURRENT	According to IEC	0.1%I _b
FREQUENCY		50 / 60Hz, +/-5%
POWER CONSUMPTION	Phase voltage	230V
	Voltage circuit	< 2W, < 10VA
	Current circuit	< 0.5VA
TEMPERATURE RANGE	Operation	-40 ° C to +70 ° C
	Storage	-40 ° C to +70 ° C
HUMIDITY RANGE		Up to 95%
PROTECTION DEGREE		IP 54



EMC	Electrostatic discharge	Contact discharge 8KV Air discharge 15KV
	Fast transient burst	4KV
	Surge immunity	4KV
	Electromagnetic RF fields	Frequency range 80kHz to 2000MHz
		With current 10V / m
		Without current 30V / m
	Conducted disturbance	Frequency range 150kHz to 80MHz Voltage level 10V
	Radio interference(peak value)	30MHz~1GHz < 30dB
INSULATING STRENGTH	Impulse voltage	6KV 1.2 / 50 μ s
	AC voltage	4KV
RTC	Clock Accuracy	< 0.5s / day
STANDARDS	IEC standard	IEC62052-11 IEC62053-22
		IEC62053-23 IEC62056-21
		IEC62056-42 IEC62056-46
		IEC62056-47 IEC62056-53
		IEC62056-61
COMMUNICATION	Built-in	Optical, RS485, M-Bus(optional)
	Modules (optional)	2G / 3G / PLC(Prime,G3,BPSK) / RF
INDICATOR	Energy impulse LED	1 for active energy 1 for reactive energy
		Alarm / Status LED (optional)
OUTPUT/INPUT	2 x Passive pulse outputs (optional)	acc. IEC 62053-31
	1 x Passive pulse inputs (optional)	acc. IEC 62053-31
	Relay outputs (optional)	up to 2 set
DATA STORAGE	Load profile	Channel 1: 9 parameters, 15min period, 62 days of data Channel 2: 30 parameters, 24hour period, 31 days of data
	Billing data	13 monthly data
TERMINALS	Type	DIN 43857
BATTERY		Exchangeable
HOUSING MATERIAL		Polycarbonate + GF
CONNECTION		Ø6 mm
WEIGHT		About 1.28 kg
DIMENSION		175mmx 245mmx 88.5mm (W x H x D)

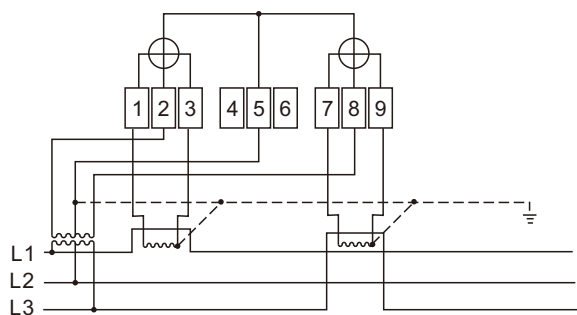


DIMENSION

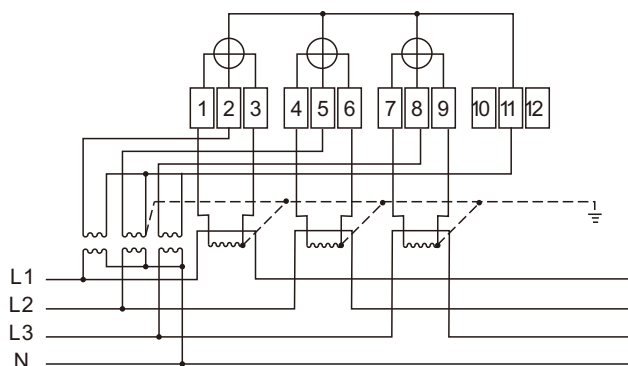


Connection Diagram

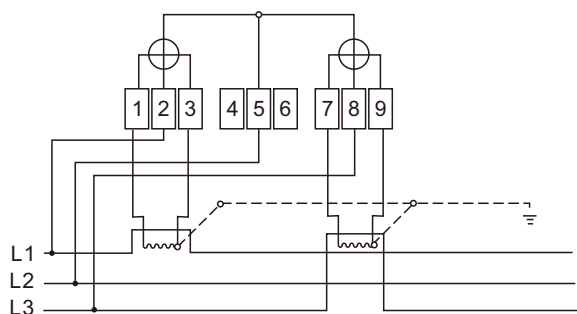
3P3W connection for CT/PT connected meter



3P4W connection for CT/PT connected meter



3P3W connection for CT connected meter



3P4W connection for CT connected meter

