

Sfere 720C

8MB

0.2S



IN

Tariffs
4



MAIN FEATURES

Measuring

- Fundamental V/A/P/Q/S
- Demand
- Max./Min. Value
- Load profile

Power Quality

- Harmonics up to 63rd
- Sequence component
- Unbalance
- Crest factor and K factor
- Phasor diagram

Energy Metering

- Bi-directional energy
- Four-quadrant reactive energy
- Tariff energy
- Fundamental energy



FUNCTION

Networks

- TN, TT, IT networks

Communication

- Modbus-RTU -Modbus-TCP -Profibus-DP

Accuracy

- Active energy: 0.2S
- Voltage: 0.1%
- Current: 0.1%

Data Log

- Demand record
- Max./Min. value record
- Off-limit record
- SOE record

Power Quality

- THD
- Harmonics up to 63rd
- Unbalance
- Sequence component
- Crest factor and K factor
- Waveform display
- Flicker
- Transient (Only Sfere720)

Optional Modules

- FM1 (2 AC digital inputs)
- FM2 (4 dry digital inputs)
- FM3 (2 relay outputs)
- FM4 (2 analog inputs)
- FM5 (2 temperature inputs)
- FM6 (2 analog outputs)
- FM7 (Modbus-TCP)
- FM8 (Profibus-DP V0)
- FM9 (WiFi)
- FM10 (GPRS)
- FM11 (RS485, Modbus-RTU)
- FM12 (M-Bus communication)
- FM13 (BACnet / MSTP communication)
- FM14 (BACnet / IP communication)
- FM15 (RS232, Modbus-RTU)



APPLICATIONS



Data Acquisition



Energy Management



Remote Power Monitoring

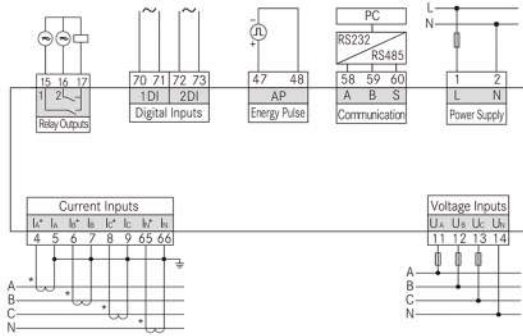


TECHNICAL SPECIFICATION

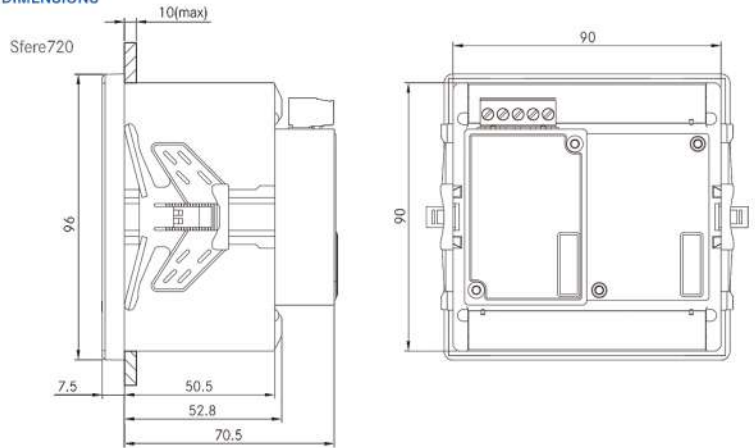
Display Mode		Sfere720C
Accuracy	V / A	0.2%
	P / Q / S / PF	0.2%
	F	±0.01 Hz
	+kWh	Class 0.2S
Voltage Input	+kvarh	Class 2
	Rated value	AC 100V, AC 380V
	Overload	Continuous: 1.2In Instantaneous: 2Vn / 10s
	Burden	≤0.1VA(per phase)
Current Input	Impedance	≥1.7MΩ
	Frequency	45Hz-65Hz
	Rated value	AC 1A, AC 5A
Auxiliary Supply	Overload	Continuous: 1.2In Instantaneous: 2In / 5s
	Burden	≤0.2VA(per phase)
	Impedance	≤20mΩ
Communication Port	Working range	AC 80-270V 50/60Hz, DC 100-350V
	Consumption	≤5VA
Energy Pulse Output		RS485, Modbus-RTU, 2-wire, up to 38.4kbps
Digital Input		1 photocoupler output, pulse width (80±20%) ms
Relay Output		2 AC wet contact inputs, Isolation: 5kVAC
Environment Conditions		2 relay outputs, contact rated at AC 5A / 250V or DC 5A / 30V, Isolation: 2kVAC
	Operating temperature	-25°C - 70°C
	Storage temperature	-30°C - 80°C
	Relative humidity	≤93%
Insulation	Altitude	≤2500m
		≥2kVAC
IP Degree		Front IP64, Rear IP20



TYPICAL WIRING



DIMENSIONS



Republic of the Philippines
ENERGY REGULATORY COMMISSION
 Pacific Center Bldg., San Miguel Avenue
 Ortigas Center, Pasig City

CERTIFICATE OF APPROVAL

No. 0007-22

Validity: February 14, 2022 to February 13, 2027

Date of Approval: February 14, 2022

This is to certify that the following type of meter product has been granted by the Energy Regulatory Commission (ERC) full approval for use in revenue metering:

Type: **SFERE 720C**
 3x5 A, 3x230/400 V, 50/60 Hz,
 Programmable kh, 3-Phase, 4-Wire

Brand: **SFERE**

Issued to Applicant: **FUJI-HAYA ELECTRIC CORPORATION OF THE PHILIPPINES**
 Silangan Industrial Park, Canlubang,
 Calamba City, 4028 Laguna, Philippines

Manufacturer: **Jiangsu Sfero Electric Co., Ltd.**
 No. 1 Dongding Road, Jiangyin, Jiangsu, China

AGNES VST DEVANADERA
 Chairperson and CEO



Specimen:
 Meter Serial No. 2155071699
 ERC Sticker No. 21P0260210



Established in 1978, Fuji-Haya Electric Corp. of the Philippines has become the biggest manufacturer of electrical distribution and control equipment such as Panelboards, Switchgears, Meter Centers for the commercial building market.

In this span of over 4 decades, Fuji-Haya Electric has gained the trust of many customers through its highly reliable and durable equipment.

The Fuji-Haya Electric AION Energy Meters is another example of this reliability and durability and comes with built in Modbus connectivity and dual tariff capabilities and are Philippine ERC approved and listed.

The Fuji-Haya Electric Sfera 720C Power Monitor Meter performs measurement of various electrical characteristics that are essential to the safe and informed operation of Switchgears. The Fuji-Haya Electric Sfera 720C is also Philippine ERC approved and listed.

Complementing these meters are Fuji-Haya Electric AION Current Transformers manufactured in full compliance with IEC 61869-1, IEC 61869-2



Telephone : 8892 - 8886 / 8819-5380

Plant Address : Silangan Industrial Park Road,
Canlubang, Calamba City
Philippines

Liaison Office : 2nd Floor Matrinco Building,
2178 Pasong Tamo St.,
Makati City 1201 Philippines

Cebu Office : Unit 24A, Latitude Corporate Center,
Mindanao Ave, CBP,
Cebu City

Website : _____

 www.fujihayaelectric.com

Contact us at : _____

 info@fujihayaelectric.com

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Sfere 720C

MULTI-FUNCTION POWER METER



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ELECTRIC**

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