



DATA SHEET

High Accuracy Voltage Sensor

P/N: CFV20000DVH15D50

I_{PN}=20000A

Feature

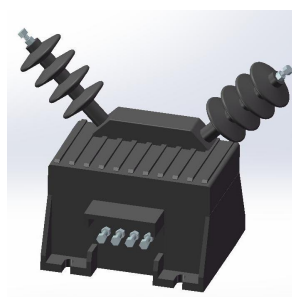
- It is a current sensor, based on the principle of fluxgate principle.
- Electrostatic shield between primary and secondary circuit
- It provides accurate electronic measurement of DC, AC or pulsed voltage.
- Supply voltage: $\pm 14.5 \sim \pm 26.4$ V

Advantages

- High accuracy
- Wide frequency bandwidth
- Low temperature drift
- Very good linearity
- Optimized response time

Applications

- Metrological verification and calibration
- Laboratory current measurement
- Instrumentation (e.g. power analyzer)
- Medical equipment (e.g. MRI)
- Battery pack detection
- Power control



RoHS



Electrical data: ($T_A = 25^\circ\text{C} \pm 5^\circ\text{C}$)

Type	CFV20000DVH15D50		
Parameters			
Rated Input $I_{PN}(A)$	± 20000		
Measuring Range $I_{PM}(A)$ 1Min/Hour	± 24000		
Current consumption $I_C (mA)$ I_{PM} Range	Minimum	Standard	Maximum
	± 40	± 90	± 100
Power Supply V_C	± 14.5	± 15	± 26.4
Current change Input:Output K_N	20000V: 50MA		
Rated Output Current(I_{SN})mA	--	50	--



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Measuring Resistance(Ω) R_M	0	60	100
Accuracy Xe (A) @0%~50% I_{PN}	--	--	25
Accuracy Xe (V) RD% @50% I_{PN} ~ I_{PM}	--	--	0.2
Ratio error X_{Ge} (A) @0%~50% I_{PN}	--	--	25
Ratio error X_{Ge} RD% @50% I_{PN} ~ I_{PM}	--	--	0.2
Angle error X_{Pe} crad	--	--	0.5
Linearity ε_L (ppm)	--	--	200
Temperature drift coefficient TCI ppm/K	--	--	10
Time drift coefficient TT ppm/month	--	--	10
Power supply anti interference TV ppm/V	--	--	20
Zero offset current I_O (mA) $25 \pm 10^\circ C$	--	--	± 0.05
Zero offset current I_{OT} (mA) Within the full operating temperature range	--	--	± 0.1
Ripple current I_n DC-10Hz (ppm)	--	--	50
Dynamic response time $t_r(us)$ $di/dt=100A/us$ rise to 90% I_{PN}	--	--	50
Bandwidth(-3dB) F (kHz)	0	--	10

Insulation Coordination:

Item	Symbol	Test condition	Value	Unit
RMS voltage for AC insulation test	V_d	50Hz/1Min between primary and secondary	40	KV
Impulse withstand voltage	V_w	50us between primary and secondary	50	KV

General data:

Parameter	Value
Operating temperature $T_A(^{\circ}C)$	-40 ~ +85
Storage temperature $T_S(^{\circ}C)$	-45~ +85
Mass $M(g)$	2500g \pm 300g

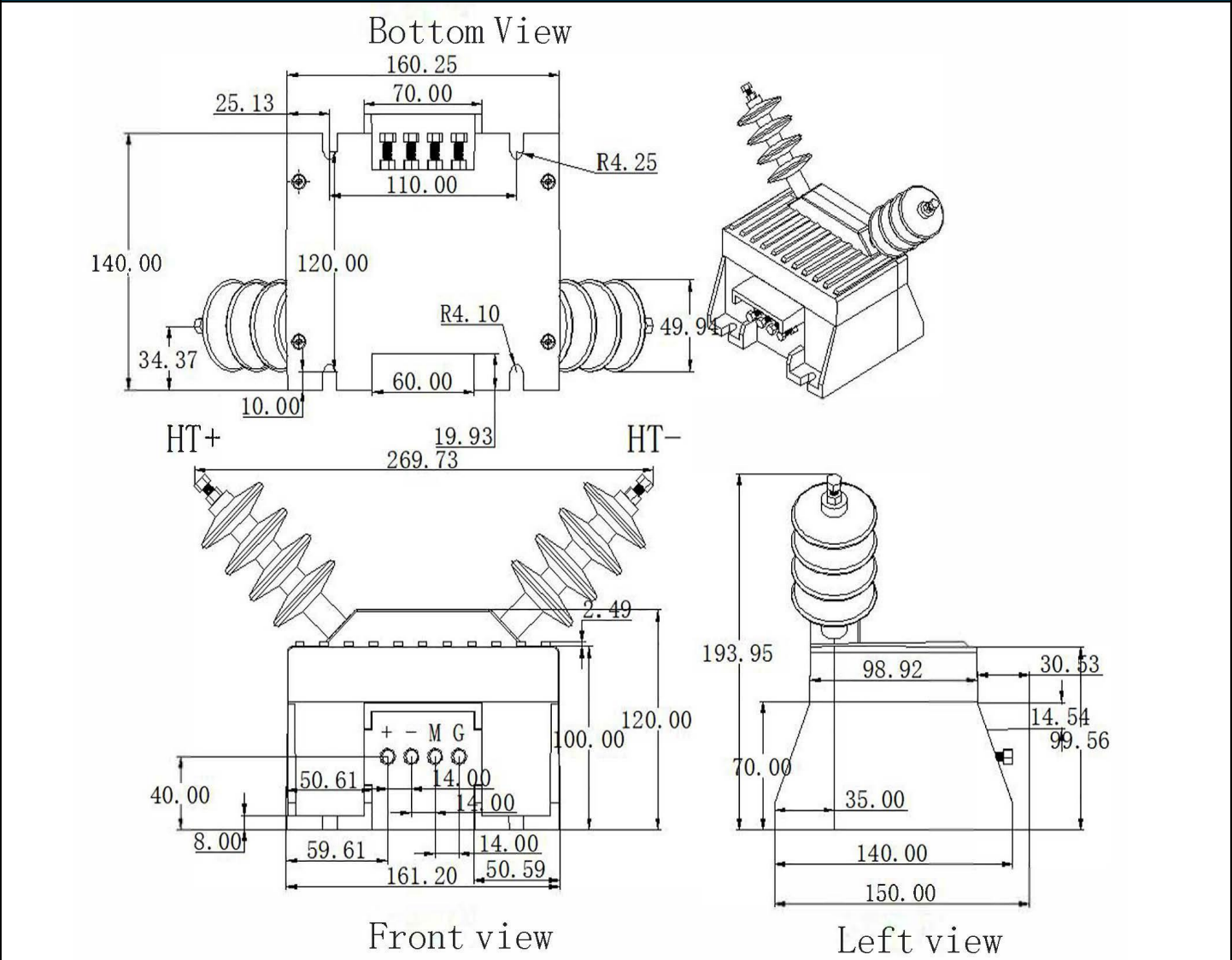


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Standards	IEC60950-1:2001
	JB/T7490-2007
	SJ20790-2000
	UL94-V0
	EN60947-1:2004

Dimensions(mm):



Remarks:
1. All dimensions are in mm.
2. General tolerance $\pm 2\text{mm}$.
Connector: M5 bolt.



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Remarks:

- Before using the product, please make sure to carefully read the user manual. When moving the product, please make sure to turn off the power first and unplug all the connecting cables that are connected to it. If any damage is found to the casing, firmware, power cord, connecting cable, or connected equipment, please immediately disconnect the device from the power supply. and If there are any concerns about the safe operation of the equipment, please immediately shut down the equipment and its related accessories, and contact our company's technical support department as soon as possible to communicate and resolve the issue.
- When the direction of the input current IP is consistent with the direction indicated by the arrow in the outline drawing, the output current IS is in the forward direction.
- Please try to locate the primary conductor at the center of the probe aperture as much as possible.
- This module is a standard sensor, please contact us for special applications.
- We reserve the right to modify this sensor manual without prior notice.

WARNING : Incorrect wiring may cause damage to the sensor.



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