AHVS-LV series Hall voltage sensor

V1.0

Acrel Co., Ltd.

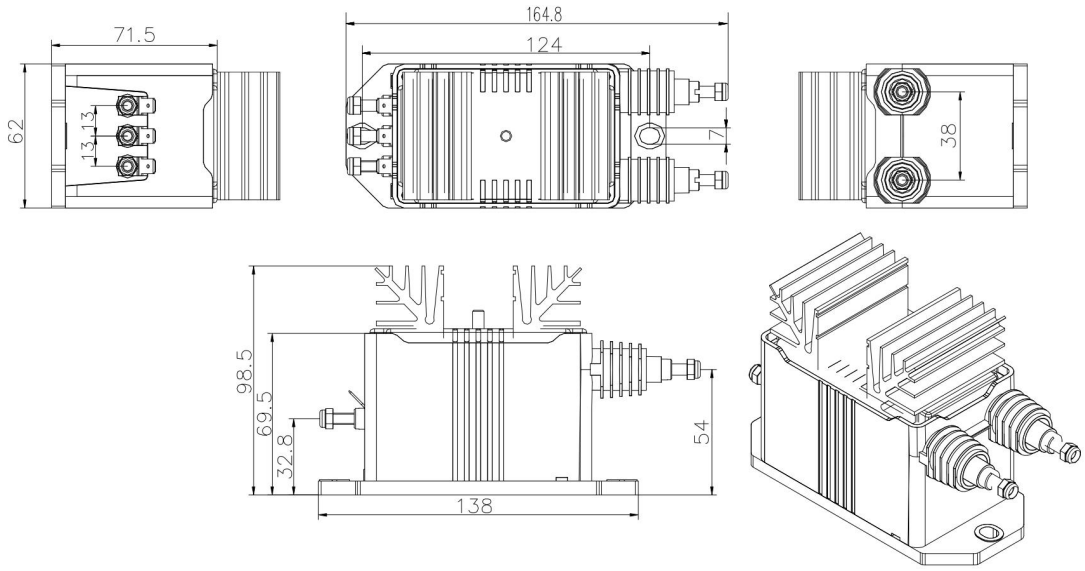
1. **Overview**

The primary and secondary voltage sensors of the AHVS-LV series are insulated and can be used to measure DC, AC, and pulse voltages.

Having characteristics of high precision, high linearity, high integration, small size, simple structure, stable long-term operation, and adaptability to various working environments, it is widely used in electrical equipment systems in industries such as power, petroleum, coal mining, chemical, railway, communication, and building automation systematic control and testing.

★ Used for measuring voltage
★ Fast response speed
★ Strong overload capacity
★ High accuracy
★ High insulation of primary and secondary edges

2. Outline and Dimension

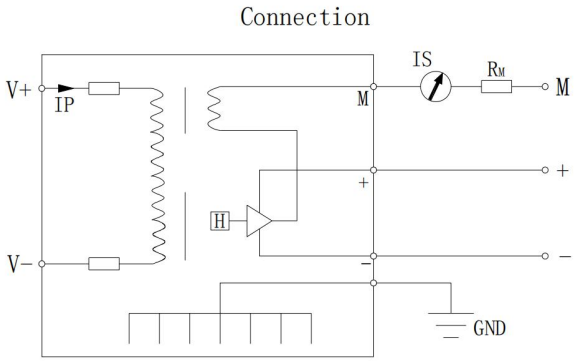


3. Technical Parameter

Rated input voltage	1000	2000	3000	4000	V
Measuring voltage range	2000	4000	6000	6400	V
Total input power consumption	10	10	10	10	W
Rated input current	10	5	3.33	2.5	mA
Turn ratio	10000：2000	20000：2000	20000：2000	40000：2000	

Rated output current	50±0.5%FS				mA
Supply voltage	±15～±24(±10%)				V
Output Load	Power supply ±15V		Power supply ±24V		
	0～230		0～390		Ω
Offset current	±0.1				mA
Temperature drift	≤200				ppm/℃
Linearity	≤0.1				%FS
Response time	≤200				uS
Insulation voltage	The withstand voltage between the primary and (secondary pole+heat sink) is 12kV, and the leakage current is set to 2mA				
Operation temperature	-40～+85				℃
Storage temperature	-40～+85				℃
Weight	850				g

4. **Wiring Method**



V+ -------- Signal input+

V - -------- Signal input-

M -------- Positive pole of signal output terminal

\+ -------- Auxiliary power supply+15V

\- -------- Auxiliary power supply -15V

Note: The signal output "-" is connected to the power center ground G, and the specific wiring is based on the terminal number on the physical casing.

5. Notes

1. When using Hall voltage sensors, the best measurement accuracy can only be obtained at the rated input voltage value;
2. The auxiliary power supply of the Hall voltage sensor should not exceed ± 20% of the calibrated value during normal operation;
3. The Hall voltage sensor is strictly prohibited from falling from a height (≥ 1m) during installation and use;
4. The auxiliary power supply needs to be configured by oneself;
5. The positive and negative poles of the power supply cannot be reversed.

6. Ordering Example

Example 1 AHVS-LV Hall Voltage Sensor
Auxiliary power supply: DC ± 15V
Input: 4000V
Output: 50mA
Accuracy: 0.5 level

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