

RELAY

MEDIUM VOLTAGE PROTECTION RELAY AM2SE



RELAY

Description

The protection relay for medium voltage applications is an essential device in medium voltage electrical systems, designed to detect and respond to abnormal conditions that may occur in the system, such as short circuits, overloads, and ground faults, among others.

This relay is responsible for sending open commands to isolation devices, such as circuit breakers, in the event of a fault, to quickly isolate the affected part of the system and prevent more severe damage.

The relay can be configured with adjustable parameters related to its protection functions, allowing for precise adaptation to the specific characteristics of the electrical system in which it is installed.

Additionally, the medium voltage protection relay offers advanced features such as local and remote communication, status and trip indicator LEDs, interlocking parameterization, and real-time monitoring for more efficient and secure management of the electrical system.

Features

Applications:

- Feeder Protection;
- Transformer Protection.

Measurements:

- RMS Voltage and Current;
- Frequency;
- Power Factor;
- Active Power RMS.

Control Functions:

- Local / Remote Control;
- Programmable Interlocking.



Protection Functions

Overcurrent (3 Stages - IDMT) - ANSI 51

Negative Sequence Overcurrent (2 Stages - IDMT) - ANSI 51Q

Ground Fault (3 Stages - IDMT) - ANSI 51G

Overload - ANSI 49

Underfrequency - ANSI 81U

Overvoltage - ANSI 59

Undervoltage - ANSI 27

Residual Overvoltage - ANSI 59 and 59 N

Automatic Reset - ANSI 79

PT Supervision - ANSI 60

Loss of Supply - ANSI 27

Switching Overcurrent - ANSI 50

Ground Fault Current - ANSI 50 and 51

Opening and Closing Supervision - ANSI 74

Induced Overvoltage - ANSI 64

Directional Neutral Overcurrent - ANSI 67N

Technical Specifications

Power Supply	220 VAC/DC	-20% ~ +15%
	110 VAC/DC	-20% ~ +15%
	48 VDC	-20% ~ +15%
	24 VDC	-20% ~ +15%
Nominal AC Voltage	220 V	± 10%
Ripple		≤ 5%
Voltage Inputs	3	
Nominal Voltage	Input	220 VAC; 115 VAC; $115/\sqrt{3}$ VAC
Current Inputs	4	
Nominal Current	Input	5A ; 1A AC
Frequency	Nominal	50Hz; 60 Hz
Communication Ports	1 RS485	
Communication Protocols	IEC60870-5-103	
	Modbus-RTU	
Digital Inputs	Quantity	8
Digital Outputs	Quantity	5
Monitoring	Local/Remote	
Measurements	Voltage, Current, Frequency, Active Power, Reactive Power, Power Factor, Active Energy, Reactive Energy, Apparent Energy	

Technical Specifications

	Event Sequence	200 Event Sequence
Records	Logs	400 Logs
	Trip Data	10 s (Trip Data)
	Temperature	-25 °C to +55 °C
Environmental Conditions	Humidity	5% to 95% (non-condensing)
	Atmospheric Pressure	66 kPa to 106 kPa

We provide solutions for improvement of electrical energy generation, transmission and distribution efficiency, quality and reliability. With a highly specialized and experienced team in research, development and innovation, HVEX develops tailor-made solutions for Brazilian and foreign markets. Wide range of products with solutions focused on signal transduction, measurement, monitoring and protection.



Boosting the Innovation



☎ 35 3622-2699

✉ contato@hvex.com.br

🌐 www.hvex.com.br

📍 R. Ismael Pinto de Noronha, 86,
Nossa Sra. de Fatima, Itajubá-MG