

**MH** Protection Relays

# e-series

an evolution of protection

ROA 207e



# ROA 207e - V1

IDMTL Overcurrent Protection Relay



The **ROA 207e** is an overcurrent protection relay for commercial and industrial electrical facilities application.

Key features:

- Simple to use and compact size
- ANSI 51 (Time-delay phase overcurrent)
- ANSI 50 (Instantaneous phase overcurrent)
- High-set trip function
- Microprocessor controlled IDMTL operation
- High contrast LCD display
- ANSI, IAC, IEC and 1.3/10 trip curves
- Wide range auxiliary supply
- Four trip events record
- Sealable tamper proof front cover

Technical Specification		
Description		Value
Protection and Functionality Description		ANSI 51 – Time-delay phase overcurrent ANSI 50 – Instantaneous phase overcurrent
Curve Standard Selection		ANSI, IAC, IEC, 1.3/10
Curve Type Selection		<ul style="list-style-type: none"> <li>• Normally inverse</li> <li>• Very inverse</li> <li>• Extremely inverse</li> <li>• Short time inverse (only for IEC, IAC)</li> <li>• Moderately inverse (only for ANSI)</li> <li>• Definite time</li> </ul>
Overcurrent Pickup Current Setting		20-200% (1% Step)
Time Multiplier Setting		0.02 - 2.00 in step of 0.01 (IEC, 1.3/10) 0.3 - 20.0 in step of 0.1 (ANSI, IAC)
Definite Time Delay (DTL) Setting		0.03 -2.00 sec in step of 0.01 sec
Instantaneous Setting (High-Set)		2.0-10.0 times of setting current in step of 0.1
Measurement Resolution		True RMS
Auxiliary Supply Voltage		AC/DC 85 - 265V (other voltage available upon request)
Power Consumption		< 4VA
Rated Input Current		5A (1A available upon request)
Output Contacts	Relay Output	1 x CO (Changeover) and 1 x NO (Normally Open)
	Contact Rating	Rated 250VAC, 5A
Display Type		High contrast LCD
Trip Event record		Last 4 trip events record memory
Relay Status Indicator		Red Color LED
Operating temperature		0-60°C
Operating humidity		< 95% RH (non-condensing)
Access control		User configurable PIN password
IP Protection		IP54 (front), IP20 (rear)
Housing material		ABS resin comply with UL94V0
Unit weight		Approximately 500g
Unit dimension		96mm (width) x 96mm (height) x 86mm (depth)

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## IDMTL Overcurrent Protection Relay

### Connection Diagram and Dimension

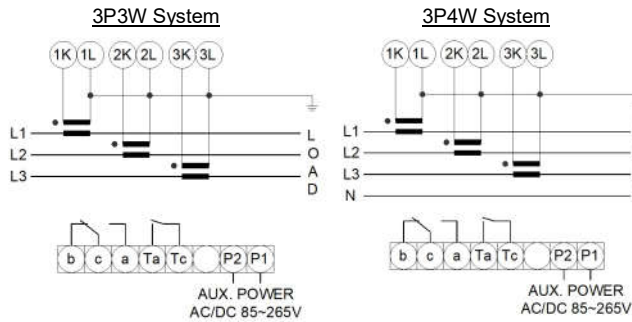


Fig 1 & 2 Connection diagram

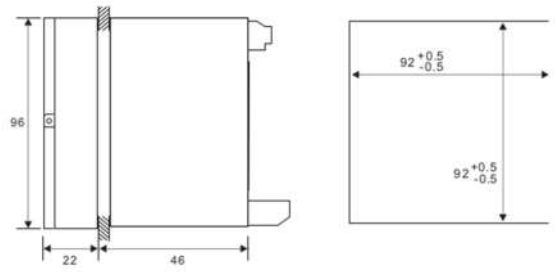
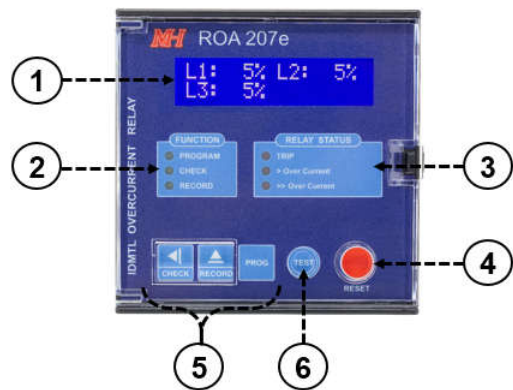


Fig 3 Dimension & Cut out panel opening size

### User Interface



#### User Interface Features

1. High contrast LCD display
2. Function selection indicators
3. Relay status indicators
4. Reset button
5. Navigation buttons
6. Test trip button

Standards Compliance	
Electromagnetic compatibility of electrical equipment	Directive 2014/30/EU
Product Safety Requirement	IEC 60255-27
Noise immunity:	
Electrostatic discharge	IEC 61000-4-2 (IEC 60255-26)
Radiated radiofrequency electromagnetic field	IEC 61000-4-3 (IEC 60255-26)
Fast transients	IEC 61000-4-4 (IEC 60255-26)
Surge	IEC 61000-4-5 (IEC 60255-26)
Conducted disturbance induced by radiofrequency fields	IEC 61000-4-6 (IEC 60255-26)
Power frequency magnetic field	IEC 61000-4-8 (IEC 60255-26)
A.C. voltage dips, and interruptions	IEC 61000-4-11 (IEC 60255-26)
Emissions:	
Radiated emission	CISPR 11/22 (IEC 60255-26)
Conducted emission	CISPR 22 (IEC 60255-26)
Environmental test:	
Vibration	IEC 60255-21-1
Shock and Bump	IEC 60255-21-2
Cyclic Temperature with Humidity	IEC 60068-2-30 (IEC 60255-1)
Safety	CE Marking

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