

DIRECTIONAL GROUND RELAY[67]

DDG-M22D

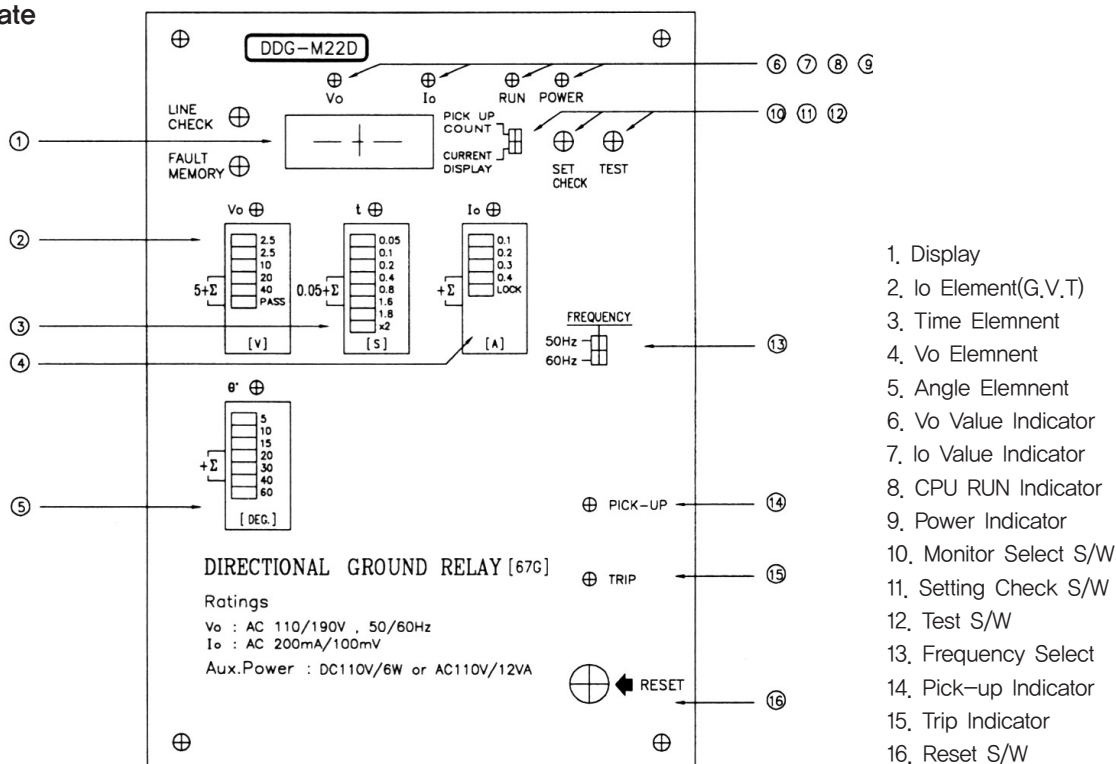


Characteristics

Directional ground relay being non-grounded type ground protection is activated by zero phase sequence voltage(tertiary voltage of GPT installed on bus line) and zero phase sequence current (secondary current of ZCT installed on each phase)

- A precision filter circuit is employed at input end for accurate determination of the detection even when signal wave form is distorted.
- Since the burden of zero phase sequence voltage (V_0) input end is minimized, any single unit of small capacity ground potential transformer (GPT) can support several or more relays at one time.
- Taps provided for time limit setting offer convenient means of reserve protection.

Front plate



DIRECTIONAL GROUND RELAY[67]

DDG-M22D(Draw out)

IEC 255 JEM 1394

Specifications

■Model

DDG-M22D(Draw out)

■Rating

GPT input	AC 110/190
ZCT	200mA/100mV
Frequency	50/60Hz±5%
Auxiliary Voltage	AC/DC 110V(86~260V)
Ambient temperature	-10°C to 60°C(with no icing)

■Current setting

Operating	
Current Setting tap(Io)	0.1~1.0A(0.1A step)±10%
Voltage Setting tap(Vo)	5~82.5V(steps of 2.5V)
Characteristic angle	0~180° (steps of 5°)
Zone of operating	±90(Error±10°)(lead)

■Time setting Curve

Operating	
Time tap	0.05~10s (steps of 0.05 sec)
Resetting Value	>90%
Reset time	<100ms

■Burden

G, P, T terminal(G1, G2)	Less than 1VA
Aux. Voltage	8VA(AC)

■Contact

Out put Relay	Trip 1c, Alarm 1a
Trip & contact capacity	
Make	AC 240V 10A(L/R=0ms) DC 1000W 0.5Sec(L/R=0ms)
Break	AC 240V 3A(L/R=0ms) DC 30W 0.5Sec(L/R=0ms)

■Indicator

Operating(trip)	LED
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■Vibration resistance

Malfunction	10Hz 5mm double amplitude 30s each in X and Y directions 16.7Hz 2.5mm double amplitude 600s each in X,Y, and Z directions
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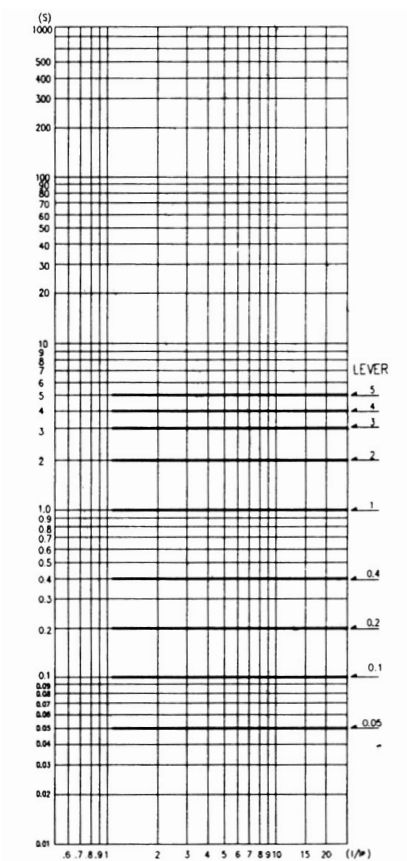
■Shock resistance

Destruction;	300% (approx. 30G) 3 time each in 3 directions
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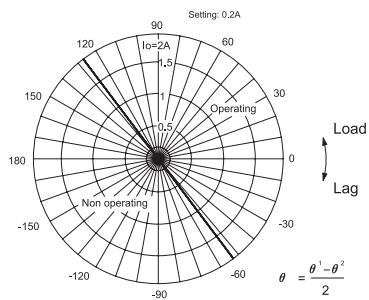
■Insulation to IEC 255

Dielectric withstand	2kV for 1 minute between all terminals and case earth
Insulation resistance at	500V > 100MΩ
Impluse Voltage Withstand	5kV-1.2/50 μs
Surge transient simulator	2.5kV 1MHz/200Ω
Weight	2.2kg

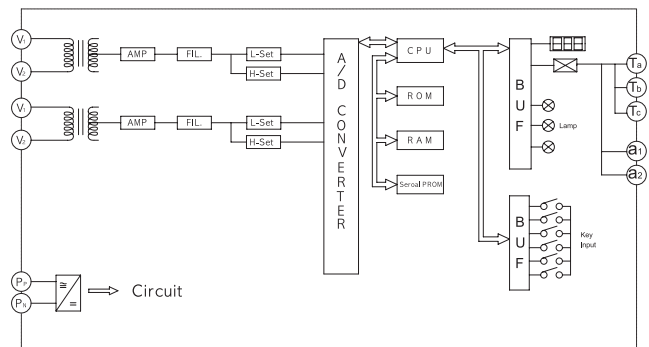
Operating time curves



Phase-angle characteristics

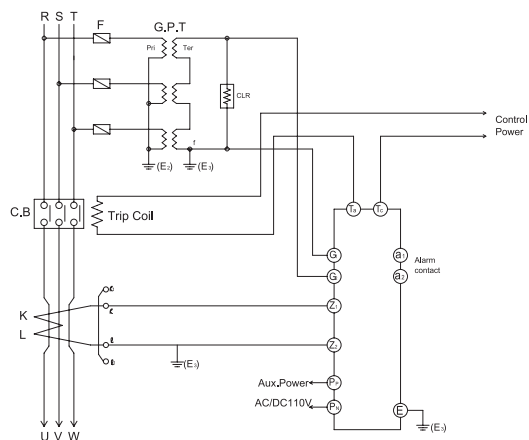


Block diagram



Wiring

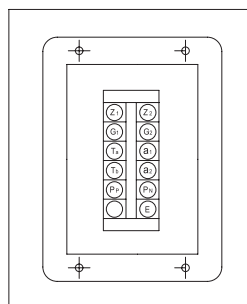
Draw out



- ※ 1. a, f Z1, Z2
- 2. ZCT 200mA/100mV (Nickel Core)

Terminal arrangement

Draw out



Dimension

Digital type draw out

Case : ABS 난연성 (Non flammable)
Color : Black (N1.5)

Cutting Size: 165 X 122mm

