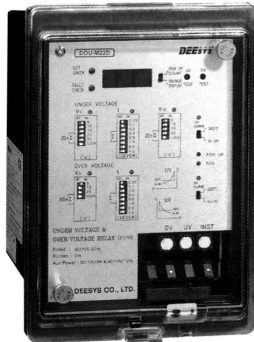


# MULTI FUNCTION OVER AND UNDER VOLTAGE RELAY [59/27]



DOU-M22D

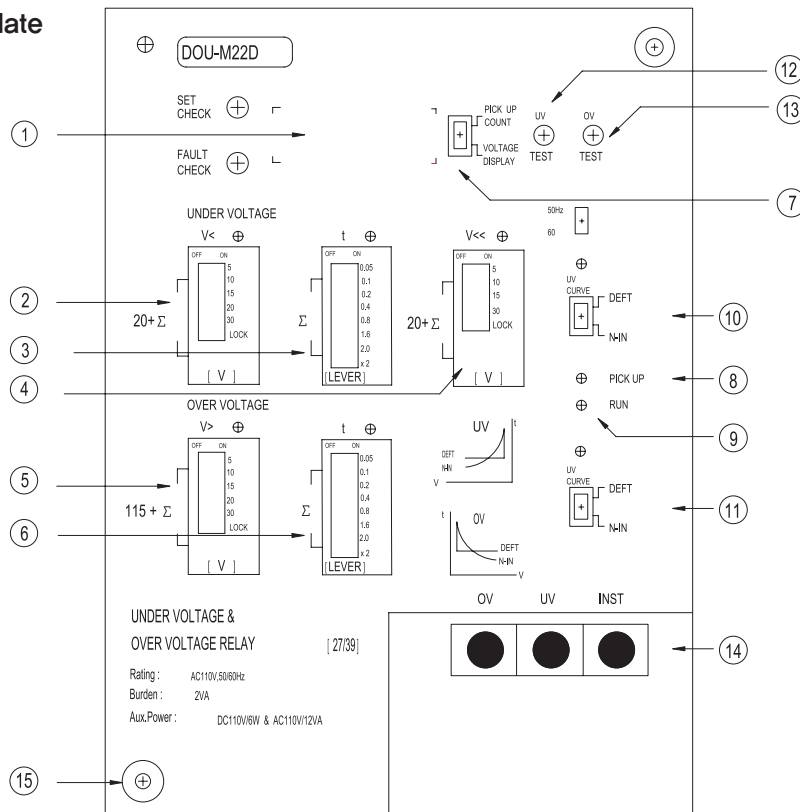


[ 1Ø ]

## Characteristics

- Up to now OVR and UVR relays were separately set and also operated but they are compacted in one relay unit. So very convenient for handling too.
- As assembled with state of art and multifunctions, it is most suitable and applicable to protective coordination.
- Volt meter being installed, it can be used for measuring
- Electronic indicator target accurately show the troubles and surely indicate electric trouble.

## Front plate



1. Voltage Display / Operating Count
2. Voltage Limits Element
3. Time Lever Element
4. Instantaneous Element
5. Over Voltage Setting Element
6. Time Lever Element
7. Monitor Selection Switch
8. Over & Under Voltage State
9. CPU Run LED
10. Under Voltage Curve Setting
11. Over Voltage Curve Setting
12. Under Voltage Test
13. Over Voltage Test
14. Target
15. Draw-out Handle

# MULTI FUNCTION OVER AND UNDER VOLTAGE RELAY[59/27]



DOU-M22D(Draw out)

IEC255 JEC 2500, 2511

## Specifications

### ■ MODEL

DOU-M22D(Draw out)

### ■ Rating

Rated Voltage AC 110V  
 Frequency 60/50Hz±5%  
 Auxiliary Voltage AC/DC 110V(80~260V)  
 Ambient temperature -10°C to 60°C(with no icing)

### ■ Voltage setting

Over Voltage range 115~150V/(Steps of 5V)  
 Under Voltage range 20~100V/(Steps of 5V)

### ■ Time setting & Curve Definite time or Inverse time

Over Voltage time lever 0.05~10.3(steps of 0.05)  
 0.05±25ms, 0.1~10S±10%  
 Under Voltage time lever 0.05~10.3(steps of 0.05)  
 0.05±25ms, 0.1~10S±10%  
 Under Voltage Instantaneous 20~80V(Steps of 5V)  
 Resetting Value OV:V<90%, UV:V>110%  
 Reset time < 100ms

### ■ Burden

Over Voltage Less than 2VA  
 Under Voltage Less than 2VA  
 Aux. Voltage 12VA(AC), 6W(DC)

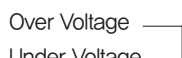
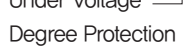
### ■ Contact

Out put Relay OV : 1C / UV : 1C  
 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 start LED(Red)  
 Operating(Trip) Target(Manual Reset)

### ■ Operating time

Over Voltage  Inverse or definite time  
 Under Voltage  Inverse or definite time  
 Degree Protection IP 52

### ■ 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

### ■ Shock resistance

Destruction; 300% $\frac{1}{s}$ (approx. 30G)  
 3 time each in 3 directions

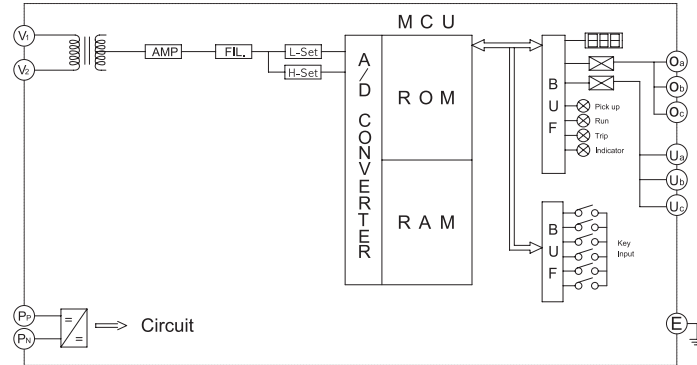
### ■ Insulation to IEC 255

Dielectric withstand 2kV for 1 minute between all  
 terminals and case earth  
 Insulation resistance at 500V > 100M $\Omega$   
 Impluse Voltage Withstand 5kV-1.2/50  $\mu$ s  
 Surge transient simulator 2.5kV 1MHz/200 $\Omega$   
 Weight 2.0kg

# MULTI FUNCTION OVER AND UNDER VOLTAGE RELAY[59/27]1Ø

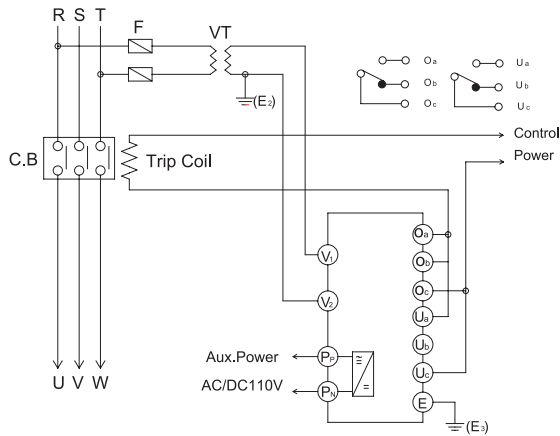


## Block diagram



## Wiring

Draw out



## Terminal arrangement

Draw out

