

# MULTI FUNCTION OVER AND UNDER VOLTAGE RELAY[59/27]3Ø



DOU-M33D [59/27] 3Ø (Draw out)  
 DOV-M33D [59] 3Ø (Draw out)  
 DUV-M33D [27] 3Ø (Draw out)

IEC255 JEC 2500, 2511



[3Ø]

## Specifications

### Rating

Rated Voltage AC 110V  
 Frequency 60/50Hz±5%  
 Auxiliary Voltage AC/DC 110V(80~260V)  
 Ambient temperature -10°C to 60°C(with noicing)

### Voltage setting

Over Voltage range 100~160V/(steps of 5V)  
 Under Voltage range 50~120V/(steps of 5V)

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

Over Voltage time INST. 0.1~10(steps of 0.1)±10%  
 Under Voltage time INST. 0.1~10(steps of 0.1)±10%  
 Instantaneous time Less than 60ms  
 Reset Value OV:V<90%, UV:V) 110%  
 Reset time Less than 100ms

### Burden

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

### Contact

Output Relay DOU-M33/M33D Trip 2c(OV,UV)  
 DOV-M33/M33D Trip 1c,Alarm 1a  
 DUV-M33/M33D 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 start LED(Red)  
 Operating(Trip) LED(manual Reset)

### Operating time

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

### Vibration resistance

Malfunction 0Hz 5mm double amplitude 30s each in X and Y directions 16.7Hz 2.5mm double amplitude 600s each in X,Y, and Z directions

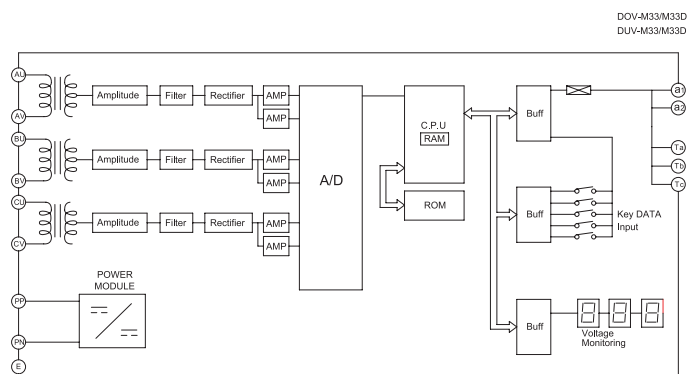
### Shock resistance

Destruction; 300% (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 > 1,000MΩ  
 Impluse Voltage Withstand 5kV-1,2/50 μs  
 Surge transient simulator 2.5kV 1MHz/200.0[IEC 255-6]  
 Weight 2.2kg

## Block diagram



# MULTI FUNCTION OVER AND UNDERVOLTAGE RELAY [59/27]1Ø,3Ø

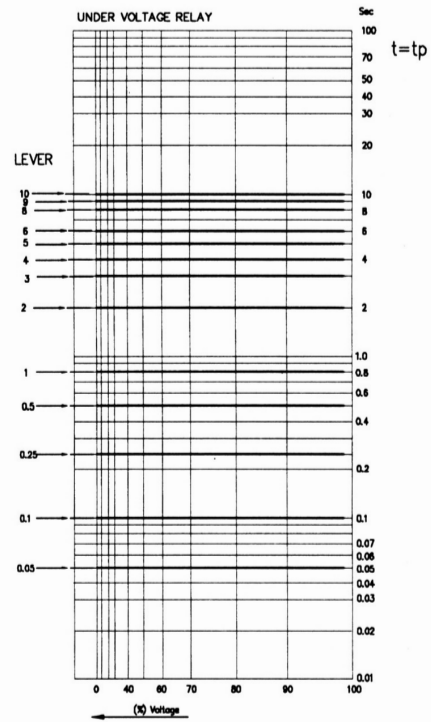
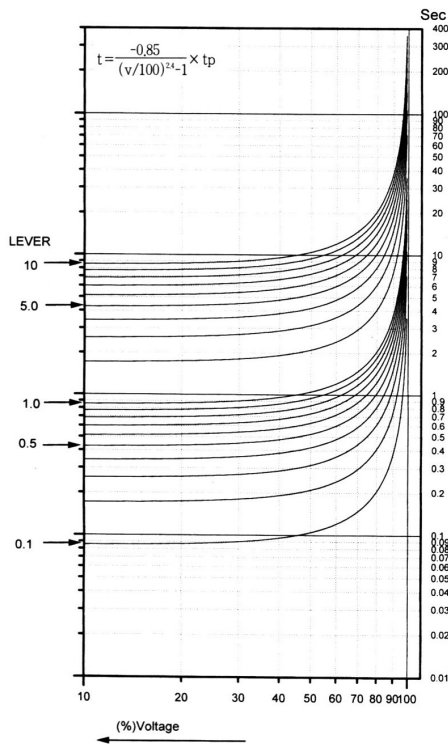


## Operating time curves

Under voltage relay

(Inverse time)

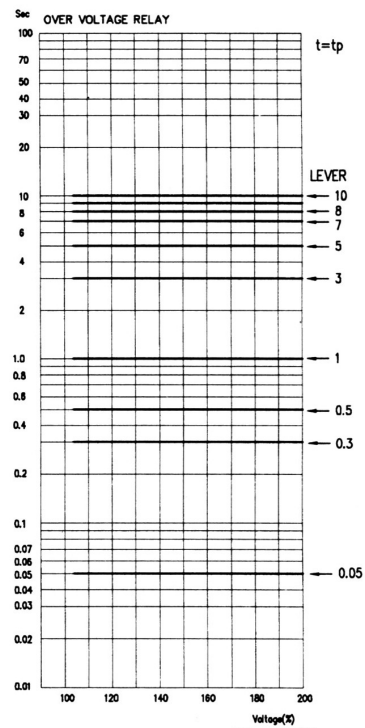
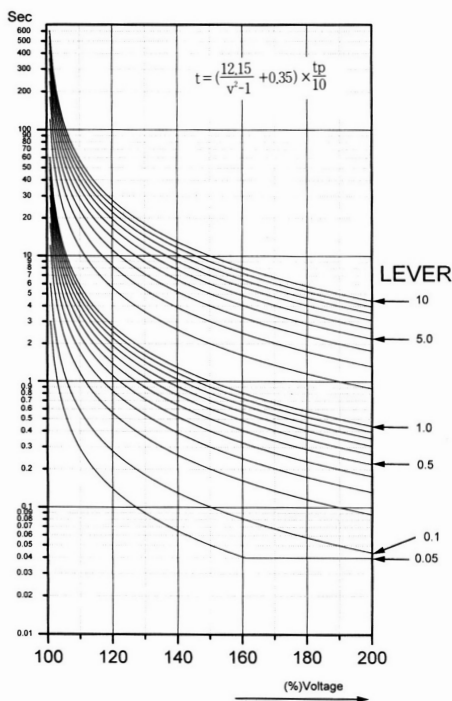
(Definite time)



Over voltage relay

(Inverse time)

(Definite time)

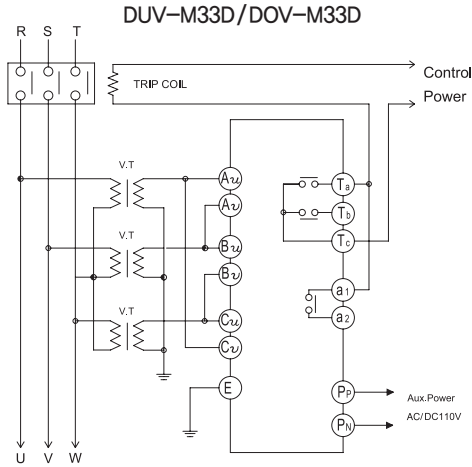


# MULTI FUNCTION OVER AND UNDERVOLTAGE RELAY [59/27]1Ø,3Ø

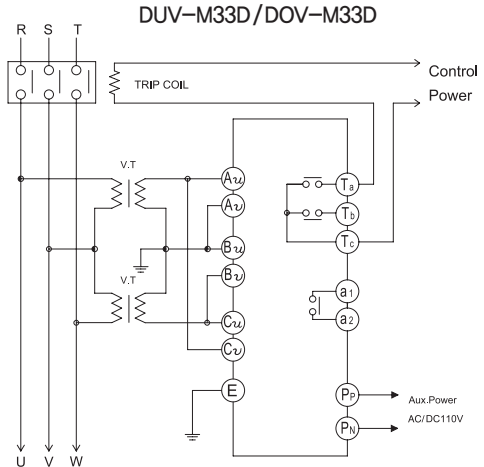


## Wiring

Y-Connection 110V

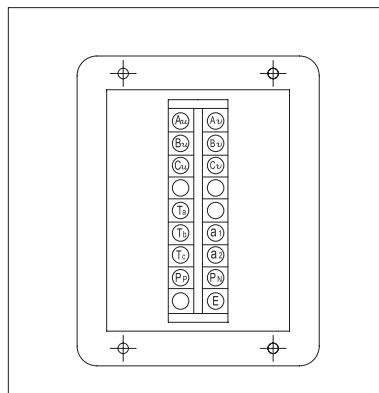


V-Connection 110V



## Terminal Arrangement

Draw out



## Dimension

Digital type draw out

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

Cutting Size: 165 X 122mm

