# matis

# ML50H Residual Current Device (RCD/RCCB)



### Advantages

- ◆Provides protection against earth fault/leakage current and function of isolation
- ◆High current rating up to 100A
- ◆Applicable to terminal and pin/fork type busbar connection
- ◆Contact position indication
- ◆Fire resistant plastic parts endures abnormal heating and strong impact
- ◆Automatically disconnect the circuit when earth fault/leakage current occurs and exceeds the rated sensitivity.
- ◆Independent of power supply and line voltage and free from external interference, voltage fluctuation.



#### **Technical Data**

- ◆Mode: electro-magnetic type
- ◆Residual current characteristics: A,AC,G,S
- ◆Pole No:2,4
- ◆Rated making and breaking capacity: 500A(In=25A,40A) or 630A(In=63A)
- ◆Rated Current: 25,40,63A
- ◆Rated voltage: AC 230(240)/400(415)
- ◆Rated frequency: 50/60Hz
- ◆Rated residual operating current I△n(A): 0.03, 0.1, 0.3, 0.5
- ◆Rated residual non operating current I△no: 0.5I△n
- ◆Rated conditional short–circuit current Inc: 10KA
- ◆Residual tripping current range: 0.5I△n~I△n
- ◆Terminal Connection Height:19mm
- ◆Electro-mechanical endurance: 4000 cycles
- ◆Connection capacity: Rigid conductor
- ◆Connection terminal:Screw terminal
- ◆Fastening torque: 2.0N.m
- ◆Installation:
- ♦ On symmetrical DIN rail 35mm
- ◇Panel mounting
- ◆Ptotection calss: IP20



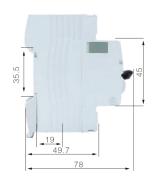
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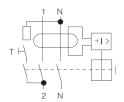


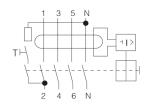
#### Overall & installation dimensions

## Wiring Diagram









## **Residual Current Action Breaking Time**

Туре	In/A	In/A	Residual Current(I△) Is Corresponding To The Following Breaking Time(S)				
			l∆n	2l∆n	5l∆n	5A,10A,20A,50A,100A,200A,500A	
general type	any value	any value	0.3	0.15	0.04	0.04	Max Break-time
S type	≥25	> 0.03	0.5	0.2	0.15	0.15	Max Break-time
			0.13	0.06	0.05	0.04	Min non-driving time
G type	any value	any value	0.5	0.2	0.15	0.15	Max Break-time
			0.01	0.01	0.01	0.01	Min non-driving time

The general type RCBO whose current I $\triangle$ n is 0.03mA or less can use 0.25A instead of 5I $\triangle$ n.

# Residual Current Operated Circuit Breaker Tripping Current Range

Type	Tripping current I∆/A					
AC	0.5I∆n≤I∆≤1∆n					
	Lagging Angle	I∆n > 0.01A	I∆n>0.01A			
А	O°	0.35l△n≤l△≤1.4ln	0.35l∆n≤l∆≤2ln			
	90°	0.25l△n≤l△≤1.4ln	0.25l∆n≤l∆≤2ln			
	135°	0.11I∆n≤I∆≤1.4In	0.11l∆n≤l∆≤2ln			