

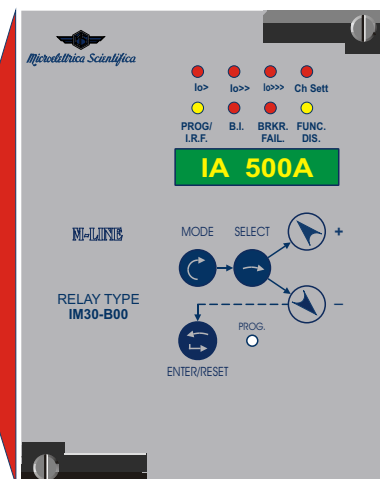
IM30-B00

N49_{-R0}



50N/51N, 51BF, 68

- Three Earth-Fault levels.
- Selectable double setting program.
- Time tagged event recording.
- User programmable output relays.
- Blocking Outputs and Blocking Inputs for pilot wire selectivity coordination.
- Breaker Failure protection.
- Modbus Communication Protocol.
- UL / CSA listed.



Earth fault relay with programmable Time Current Curves suitable for protection of HV & MV, Transmission and Distribution systems.

Selectable 1 or 5 A rating.

3rd harmonic active filter on the neutral current.

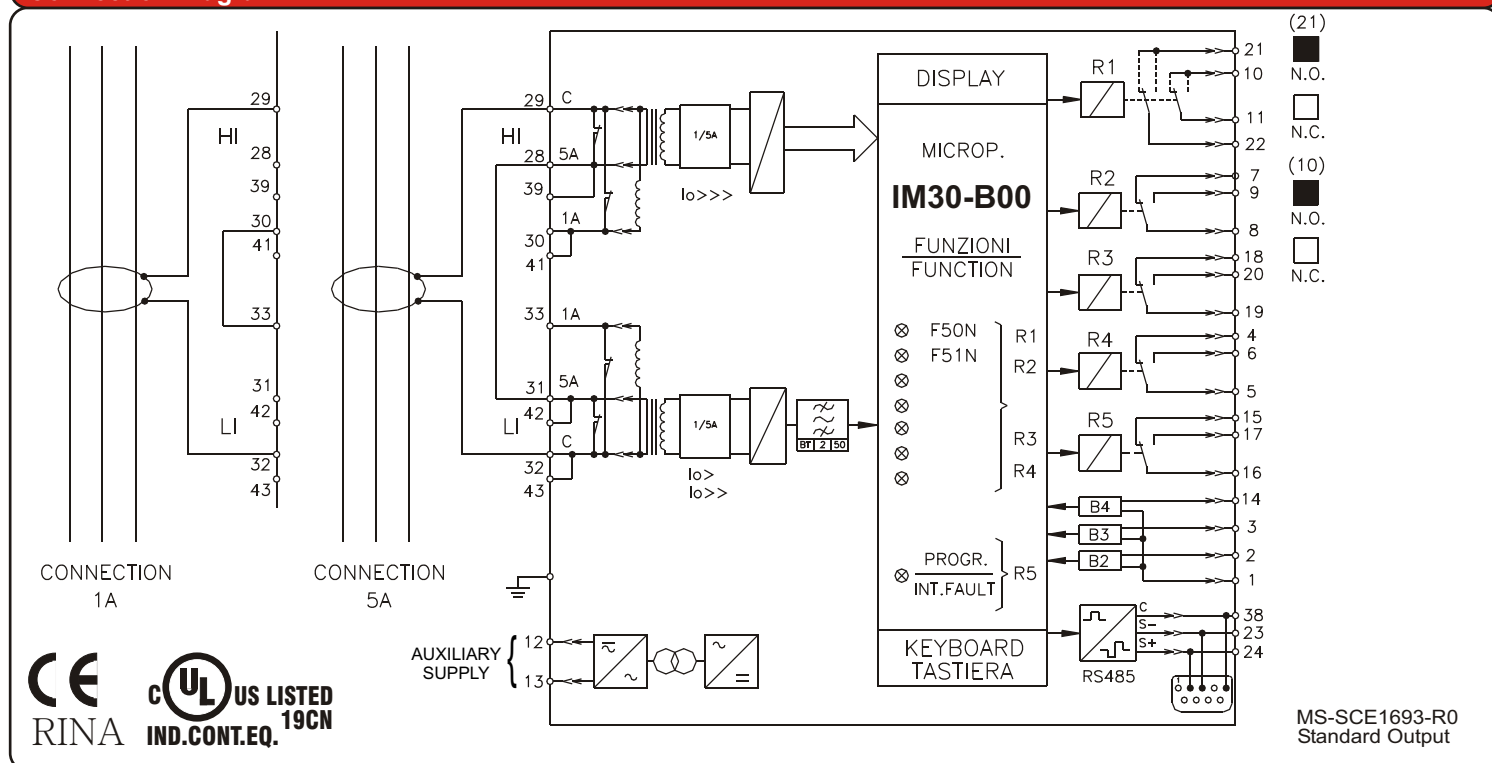
Two complete setting programs remotely selectable via digital input or via serial port

- Real Time Measurements = HI - LI
- Maximum Demand and Inrush Recording = HI - LI

Programmable Input Quantities

- **Fn** = System frequency : (50 - 60) Hz
- **HI** = Rated primary current of the CTs supplying terminals 29-28(30) : (1 - 9999)A, step 1A
- **LI** = Rated primary current of the CTs supplying terminals 32-31(33) : (1 - 9999)A, step 1A

Connection Diagram



1 - F50N/51N (1I): First Earth Fault Element

- ⊙ Current setting range : $1I = (0.01 - 2)LI$, step 0.01LI
- ⊙ Instantaneous output : **0.04s**
- ⊙ Definite trip time delay in the mode (D)
(10x[1I] in inverse time operation modes) : $t1I = (0.05 - 30)s$, step 0.01s
- ⊙ Time current curves F(1I) : Independent Definite Time (D), IEC (A / B / C), IEEE (MI / VI / I / EI / SI)

2 - F50N/51N (2I): Second Earth Fault Element

- ⊙ Current setting range : $2I = (0.01 - 2)LI$, step 0.01LI
- ⊙ Instantaneous element : **0.04s**
- ⊙ Independent time delay : $t2I = (0.05 - 3)s$, step 0.01s

3 - F50N/51N (3I): Third Earth Fault Element

- ⊙ Current setting range : $3I = (0.5 - 10)HI$, step 0.1HI
- ⊙ Instantaneous output : **0.04s**
- ⊙ Independent time delay : $t3I = (0.02 - 3)s$, step 0.01s

Breaker Failure Element

- ⊙ Trip time delay : $tBF = (0.05 - 0.75)s$, step 0.01s