

Circuit-breakers for power distribution

Basic protection functions

Symbol	Description	Overview
L	Protection against overload	This protection function trips when there is an overload with inverse long-time delay trip according to the IEC 60947-2 Standard ($I^2t=k$).
S	Protection against short-circuit with time delay	Protection against short-circuit with time delay This protection function trips when there is a short-circuit, with long inverse time-delay trip ($I^2t=k$ ON) or a constant trip time ($I^2t=k$ OFF)
I	Instantaneous protection against short-circuit	This protection function trips instantaneously in case of a short-circuit.
G	Protection against earth fault	The protection against earth fault trips when the vectorial sum of the currents passing through the current sensors exceeds the set threshold value, with long inverse time-delay trip ($I^2t=k$ ON) or a constant trip time ($I^2t=k$ OFF)
U	Protection against unbalanced phase	The protection function against unbalanced phase U can be used in those cases where a particularly precise control is needed regarding missing and/or unbalance of the phase currents. The trip time is instantaneous.