

ABB SACE EMAX PR121 Molded case Low Voltage Breakers

The model implements the L,S, I and G element.

Three subversions are available:

“ABB SACE EMAX PR121 3H 20” (2000 A version)

“ABB SACE EMAX PR121 4H 20” (4000 A version)

“ABB SACE EMAX PR121 3H generic” (supporting any available rated current). The rated current can be set in the “Measurement” block.

Regarding the max clear curve implementation the following simplifications have been used:

L element: trip threshold between 105% and 120% (as described in the manual),
time tolerance $\pm 10\%$ (instead of 10% for $I < 6I_n$, 20% $I > 6I_n$)

S element: trip threshold tolerance $\pm 10\%$ (instead of $\pm 7\%$ for $I < 6I_n$, $\pm 10\%$ $I > 6I_n$),
time tolerance $\pm 20\%$ (instead of $\pm 15\%$ for $I < 6I_n$, $\pm 20\%$ $I > 6I_n$, the best between 40 ms and $\pm 10\%$ for the time const characteristic)

I element: trip threshold tolerance 10% (instead of $\pm 10\%$)

G element: trip threshold tolerance $\pm 7\%$,
time tolerance $\pm 15\%$ for in the I2T characteristic and $\pm 10\%$ for the time constant characteristic (instead of $\pm 15\%$ for in the I2T characteristic and the best between 40 ms and $\pm 10\%$ for the time const characteristic)