average current density

Also contains definition of: local current density

The average current density, \( j \), is defined by

\[
j = A^{-1} \int_A j_x \, dA
\]

where \( A \) is the electrode area, \( j_x \) is the local current density and \( dA \) is an infinitesimal surface element.

Source:
PAC, 1981, 53, 1827 (Nomenclature for transport phenomena in electrolytic systems) on page 1836