

## ELECTRICAL QUANTITIES

| QUANTITY           | SYMBOL             | UNIT             | UNIT ABBREVIATION |
|--------------------|--------------------|------------------|-------------------|
| Time               | $t$                | second           | s                 |
| Frequency          | $f$                | hertz            | Hz                |
| Radian frequency   | $\omega$           | radian/sec       | rad/s             |
| Phase angle        | $\theta, \phi$     | degree or radian | $^{\circ}$ or rad |
| Energy             | $w$                | joule            | J                 |
| Power              | $p$                | watt             | W                 |
| Charge             | $q$                | coulomb          | C                 |
| Current            | $i$                | ampere           | A                 |
| Electric field     | $\epsilon$         | volt/meter       | V/m               |
| Voltage            | $v$                | volt             | V                 |
| Impedance          | $Z$                | ohm              | $\Omega$          |
| Admittance         | $Y$                | siemens          | S                 |
| Resistance         | $R$                | ohm              | $\Omega$          |
| Conductance        | $G$                | siemens          | S                 |
| Reactance          | $X$                | ohm              | $\Omega$          |
| Susceptance        | $B$                | siemens          | S                 |
| Inductance, self   | $L$                | henry            | H                 |
| Inductance, mutual | $M$                | henry            | H                 |
| Capacitance        | $C$                | farad            | F                 |
| Magnetic flux      | $\phi$             | weber            | wb                |
| Flux linkages      | $\lambda$          | weber-turns      | wb-t              |
| Power ratio        | $\log_{10}(P1/P2)$ | Bel              | B                 |