



## Energy Ring Systems

In electricity supply, a ring final circuit or ring circuit is an electrical wiring technique developed, and primarily used in the United Kingdom, that provides two independent conductors for live, neutral and protective earth (ground) within a building for each connected load or socket. This design enables the use of smaller-diameter wire than would be used in a radial circuit of equivalent total current.

### Description

In a single-phase system, the ring starts at a 32A single pole breaker in the consumer unit, visits each socket in turn, and then returns to the consumer unit. Ring circuits are commonly used in British wiring with fused 13 A plugs to BS 1363. In modular wiring terms, ring circuits are generally wired with 4.0mm<sup>2</sup> cable and protective conductor (Ground) of the same diameter. This helps to reduce the voltage drop in very long cable runs or derating factors such as thermal insulation, or grouping factors.