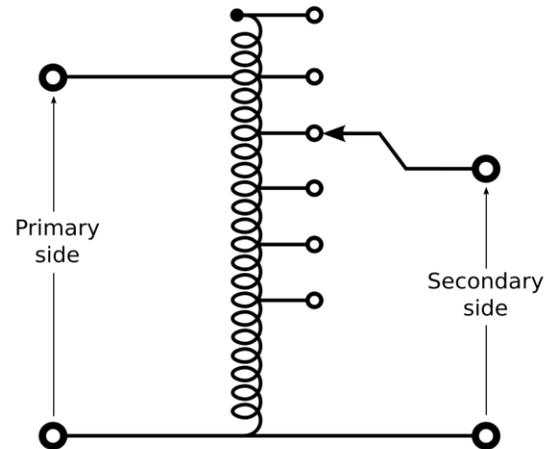


SHORT DESCRIPTION OF FOUR BASIC TRANSFORMER TYPES

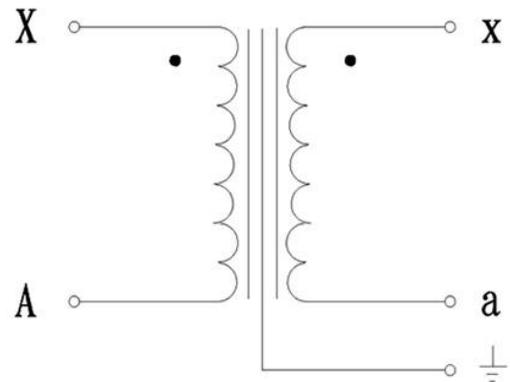
Autotransformer

An autotransformer has a single winding with two end terminals and one or more terminals at intermediate tap points. It is a transformer in which the primary and secondary coils have part of their turns in common. The portion of the winding shared by both the primary and secondary is the common section. Autotransformers have no galvanic isolation!



Isolation Transformer

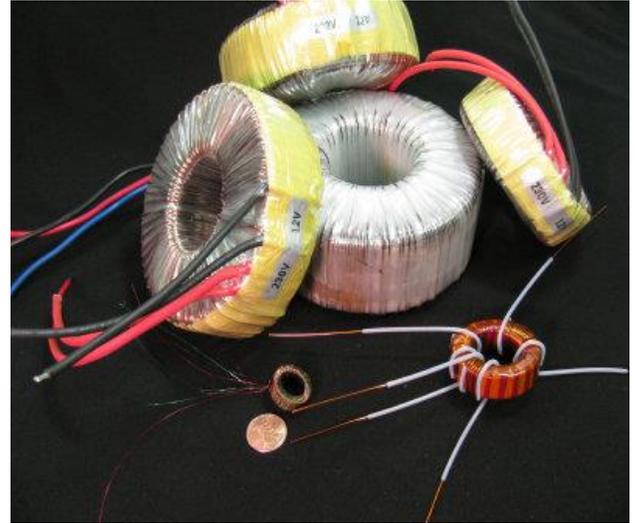
An isolation transformer is a transformer used to transfer electrical power from a source of alternating current (AC) power to some equipment or device while isolating the powered device from the power source, usually for safety reasons (or to reduce transients and harmonics). Isolation transformers provide galvanic isolation. Therefore no conductive path is present between the source and the load.



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Toroidal Transformer

A toroidal transformer is an electrical transformer constructed with a torus or donut-shaped core. Its primary and secondary windings are wound across the entire surface of the torus core, separated by an insulating material. This configuration minimizes the magnetic flux leakage. All Ascend Electronics toroidal transformers are constructed as isolation transformers.



Air-Core Transformers

Air-core transformers are designed to transfer energy or radio-frequency currents (currents used for radio transmission). Air-core transformers consist of two or more coils wound around a solid insulating substance or on an insulating coil form and have no magnetic core. Therefore, air-core transformers have a weak energy transmission ratio.

