



CUSTOM-BUILT THREE-PHASE TRANSFORMERS WITH SPECIAL CONNECTIONS INCLUDING SCOTT, LE BLANC, ZIG-ZAG, HEX PHASE, AND PST OPTIONS

Special connection requirements for 3ph transformers.

Insulation systems: Class E, Class F, or Class H (dependent on size).

Insulation system up to 1.1kV.

Frequency of 50 / 60 Hz.

Scott connection for 3ph to 2ph or 2ph to 3ph.

Le Blanc connection for 3ph to 2ph.

Also zig-zag, hex phase, PST connection options available.



*SCOT5000
Scott-connected
transformer*

As well as offering standard 3ph to 3ph and 3ph to 1ph connection options for custom-built transformers we can design and manufacture transformers with other special connection requirements using either standard or non-standard core frames. These connection configurations offer special solutions to some complex technical requirements such as phase load balancing, earth grounding, harmonic suppression, and phase displacement. Our current kVA capacity is up to 500kVA using standard three-phase vector groups. For other requirements please contact our sales department.

SCOTT CONNECTED 3PH TO 2PH OR 2PH TO 3PH

There are applications where it is necessary to convert 3ph supplies to 2ph supplies and maintain a balanced load. This configuration can be used where there is an existing 2ph system needing a new supply from a 3ph system. The supply can be used to provide power for 2ph systems from a 3ph existing supply. This configuration can be used to interlink a 2ph system to a 3ph system or vice versa. If there are two single-phase loads that are not connected in any way they can be supplied from this configuration and the input load remains in balance.

LE BLANC CONNECTED 3PH TO 2PH

Le Blanc transformers are an alternative to Scott connected transformers for transforming 3ph to 2ph supplies. This design method is an acceptable model. It is not as well known as the Scott connection method and therefore has not gained the same popularity.

ZIG-ZAG CONNECTED 3PH CONNECTION

The delta zig-zag connection provides the same benefits as the conventional delta/star connection but it has some other main advantages. It is less costly for grounding purposes, better for third harmonic suppression, better for ground current isolation, and there is no phase angle displacement.

HEX PHASE AND PHASE SHIFTING TRANSFORMERS (PST)

Hex phase and phase shifting transformers (PST) designs can be produced to customer requirements.

To discuss your specific needs for any of the above special connection requirements please contact our technical sales department.