PRESTOLITE POWER
66 Industry Court – Ste. F, Troy, OH 45373 U.S.A.
Telephone: 800-367-2002 Fax: 800-654-4024

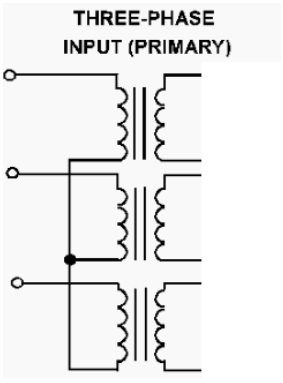
From: Matt Bridge
Date: 10/16/2015
Re: "Scott T" vs Three transformer configurations

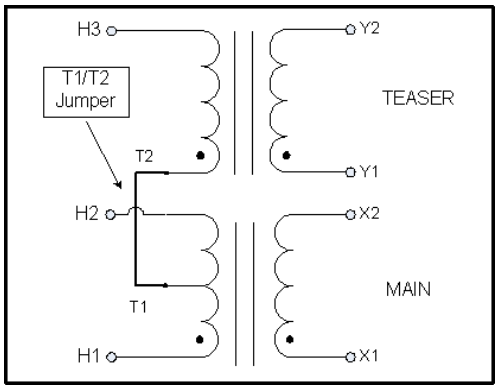
The purpose of this memo is to provide additional information related to the transformer designs employed in two of our proven ferroresonant products. Both product families have had several decades in the field and display typical AMETEK rugged and reliable performance. In both the Battery Mate 100 and the Accu-Charger, this performance is backed by a 10 year warranty. Below is a comparison to help better describe the differences in the transformer connections.

The Accu-Charger uses three individual transformers (traditional design) connected as shown in the diagram below. Each of the smaller transformers is interconnected to make them a three phase solution. The outputs of the transformers are connected to rectifiers which then connect to the battery. The total copper winding weights and steel core laminations are described under the picture.

The Battery Mate 100 uses two larger transformers (Scott T design) called the "main" and the "teaser". They are interconnected at the center tap of the main to the teaser primary. The outputs of the transformers are connected to rectifiers which then connect to the battery. The total copper winding weights and steel core laminations are described under the picture.

The data on the listed lamination and copper amounts are taken from an 18 cell / 1050AH three phase charger. The data clearly indicates that the overall lamination and copper weights are larger in the Battery Mate product as compared to the Accu-Charger. This extra material speaks to the fact that the Scott T design utilized in the Battery Mate is in line with the traditional 3 transformer design of the Accu Charger. The final measure of evaluation of these two models is the output current and how it charges a battery. These characteristics remain unchanged between the Accu-Charger and the Battery Mate.





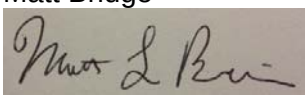
Accu Charger style transformers
Traditional 3 XFMR design
Quantity 3 - 3" steel laminations
15.9 pounds of primary winding copper
21.1 pounds of secondary winding copper

Battery Mate 100 style transformers
Scott T XFMR design
Quantity 2 - 5" steel laminations
17.8 pounds of primary winding copper
22.7 pounds of secondary winding copper

Please feel free to contact me for any further questions or comments on this topic.

Regards,

Matt Bridge



Director of Engineering
Ametek / Prestolite Power
66 Industry CT Suite F
Troy, OH 45373
Office (800) 367-2002 x898
Cell (937) 776-0985