

GTI SERVICE NOTE

GTI 112

AUGUST, 2013

Due to durability concerns with the Veris Watt Transducers on drilling rig applications that came to light with the increase in GTI application in this market, it became necessary to seek out alternate designs that are more robust and which would provide the durability required by our unique applications. The search and subsequent field testing has lead us to select a watt transducer, current transformers, and potential transformers supplied by Flex-Core. These products have proven to be much more reliable, and we are confident that they are the correct selection for our application.

As a result of this change and the different configuration of the Flex-Core products, we have had to change how the systems are specified and packaged, and you will need to follow a different ordering procedure. By means of this bulletin, we hope to clarify the changes, which are designed to increase stocking options and to reduce possible application selection errors.

With the original change to the Flex-Core product, unlike the Veris, it became necessary to differentiate between a 3-phase 3-wire, and 3-phase 4-wire system. This has caused a great deal of confusion and has resulted in a drastic increase in the time required to specify and quote a system that required these parts. A mistake in selection or installation can result in destruction of the Watt Transducers.

To deal with this problem, Altronic has devised a means by which the installation can be standardized between these two types of generators. Although it requires the use of three (3) CTs, it removes this confusion and simplifies the process.

Effectively immediately, the kW sensor system will no longer be sold as a kit, which will provide for better stocking options. A typical quote/order will consist of a CT part number and quantity, a watt transducer part number and quantity, and for 600VAC alternators, a potential transformer and quantity, as outlined in the tables below.

Please follow the instructions below to properly specify the required CTs, PT and Watt Transducer.

- 1) CURRENT TRANSFORMERS (CT):** The alternator current rating is needed in order to properly specify the correct current transformer rating. Once the current rating of the alternator is known, select the closest current transformer that is equal to or greater than the rated current. (Example: An alternator with a 1700amp current rating will get a G11081-2000A).

Current Transformer	Quantity	Quantity required per WT	Altronic P/N	User Cost
600 Amp	1	3	G11081-600A	\$597.00
800 Amp	1	3	G11081-800A	\$597.00
1000 Amp	1	3	G11081-1000A	\$597.00
1200 Amp	1	3	G11081-1200A	\$597.00
1500 Amp	1	3	G11081-1500A	\$597.00
1600 Amp	1	3	G11081-1600A	\$597.00
2000 Amp	1	3	G11081-2000A	\$597.00
2400 Amp	1	3	G11081-2400A	\$735.00

NOTE: For alternators with current ratings or voltage ratings other than what we have specified above, please contact Altronic for assistance.

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As described, the standard configuration will use three (3) CTs with every installation to eliminate the need to differentiate between 3-phase 3-wire, and 3-phase 4-wire. In this case, the installer would use Drawing XI in the STEPCON IOM. This new methodology is the solution sanctioned by Altronic. Although the cost is higher due to better quality and durability of the design, the use of three CTs will eliminate confusion in application, quoting, ordering, and damaged WTs.



Figure I – Flex-Core CTs

- 2) **WATT TRANSDUCER (WT):** The following information is required in order to specify the Watt Transducer: Alternator Output Voltage.

Alternator Output Voltage	Part Number	User Price
480VAC	G11081-480V	\$1850.00
600VAC	G11081-600V (PT required)	\$2000.00
	PT P/N G11107-01	\$1200.00

Note: For 600 VAC, both the Watt Transducer and Power Transformer are required



Figure II – Flex-Core Watt Transducer

Since these parts are used extensively on drilling rig applications which are mobile in application through their life, like all of the GTI parts and accessories, Master Distributors must order these parts through Altronic so that we are responsible for warranty replacements.

NOTE: Flex-Core system does not install the same as the VERIS system. Please refer to this wiring diagram or the IOM.

If you have any questions, please contact the factory

