Data Sheet – TL300 Module

Tariff Control

- Tariff functionality up to 4 tariffs using a dry contact
- Distinguishes between grid and generator as power source
- Designed and compatible for Kamstrup Electricity meters

Load Control 2 Channel

- Channel 1 External load control, switches 230VAC 10A
  - Ideal for contactor or relay control
  - Energy management and other electrical equipment

- Channel 2, Internal load control
  - Switching the meter's internal breaker
  - Can be used as timer
  - Can be used as exclusion on a certain tariff

- Totally configurable on the meter using Kamstrup Meter Tool

+27 813 063 059
info@flecto.co.za
www.flecto.co.za
269 Annette van Zyl, Garsfontein, Pretoria, South Africa

Application

The TL-300 module basically has two main functions:

- Tariff Control
  - 4 tariffs can be controlled using an external trigger from a relay or generator change over panel, e.g. T1 can be utilized as Grid power and T2 can be utilized as Generator power that will enable the meter to have 2 different accumulative energy registers (4 Quadrant), one (T1) for grid power and the other (T2) for generator power. Then there is still T3 and T4 available to register other power sources such as Batter back-up etc.
  - The configuration on this function can be done via the electricity meter using Kamstrup MeterTool to achieve the desired function or rule

- 2 X Load control Channels
  - The load control functions are used for switching a load on and off via the the electricity meter using the Kamstrup MeterTool for the desired function or rule
  - Channel 1 is controlling an external load by means of a 10A relay with N/O, Com and N/C connector points on-board the TL-300 module (Please refer to Fig.1)
  - Channel 2 is controlling the internal breaker of the meter (This is only applicable to the Kamstrup single phase and 3phase direct on line (DOL) meters equipped with internal breakers with configurable functions and rules
  - The TL-300 is ideal for generator control and inclusion or exclusion of the supply during a power failure where the generator is the power source and the end user wishes not to be connected to the generator. The back and forth switching of the end user's supply between grid and generator power will thus be automatic and will always result in accurate electrical energy accumulation for both grid (T1) and generator (T2) power sources and will automatically be recorded on the internal Analysis Logger of the meter as well as full remote data functionality for AMR purposes.
  - Two more tariff registers are available to register and control other additional power sources, conditions and equipment such as Battery back-up power, non-essential circuits, HVAC systems etc.
- Basically the TL-300 module is a combination of the Kamstrup Tariff Control and 2 X Load Control modules all in one with the exception that the second load control channel controls the internal breaker of the meter and the other is n 10A relay for external control. This makes the TL-300 module a versatile add-on feature to the Kamstrup electrical meter range and is fully compatible to the Omnia rage and previous Legacy range of Kamstrup meters
- The TL-300 is also fully compatible with the Kamstrup CT meter apart from the Channel 2 load control function due to the fact that the CT meter is not equipped with an internal breaker.

- It also allows the module to be configured for various other applications apart from generator tariff control and load management such as:
    - Can be used as a timer slaving on the meter's own RTC e.g. for controlling signage that will allow to switch on and off based on the meters configurable internal scheduled control.
    - Pumps and HVAC systems can also be controlled and basically any external device that is powered by electricity
    - Non-essential circuits can be controlled by syncing the tariff on the external control relay e.g. non-essential circuits like stoves HVAC systems pumps can be automatically excluded if the generator is the power source and again be automatically included once the grid power is reconnected
- The module is connected to the meter by inserting it into the main module port of the meter (Please refer to Fig.3) and will automatically be protected by the meter's cover equipped with a tamper switch as well as fasteners that can be sealed
- The module will have no effect or influence on the RF communication capability of the meter to the Data Concentrator. The T1 to T4 energy registers can also be remotely retrieved for a 3rd party billing or monitoring system
- This is an automatic on-site control solution and the data will automatically register in the meter's on-board memory and data loggers allowing for accurate readings on all registers and is totally independent from the GSM networks meaning that it is also possible to manually read the tariff registers from the meter's display without compensating accuracy

Connection Diagram – TL300 module

External relay Control

Tariff control Terminal block for T1, T2, T3 and T4

External relay control Terminal block for N/O, Com and N/C

Fig.1

Tariff Control Terminal Block connections

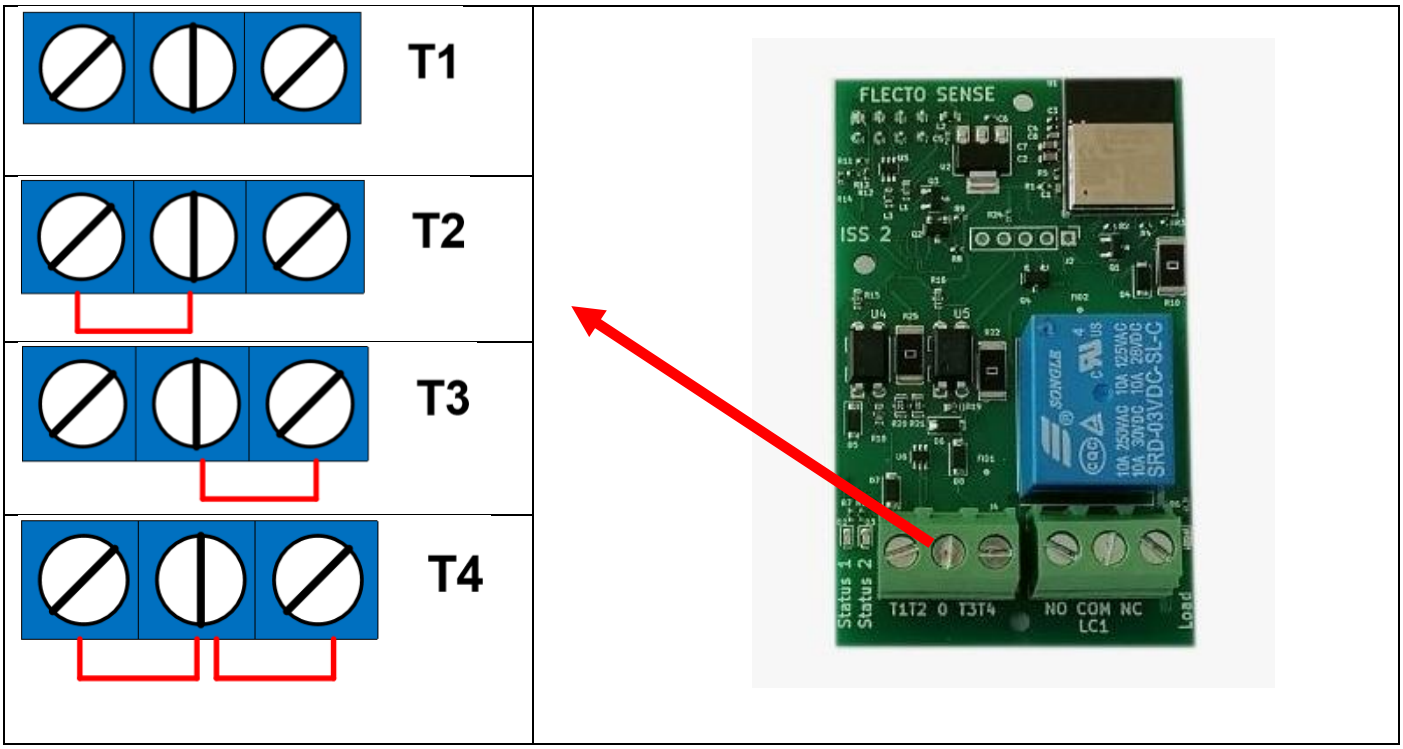

Fig.2

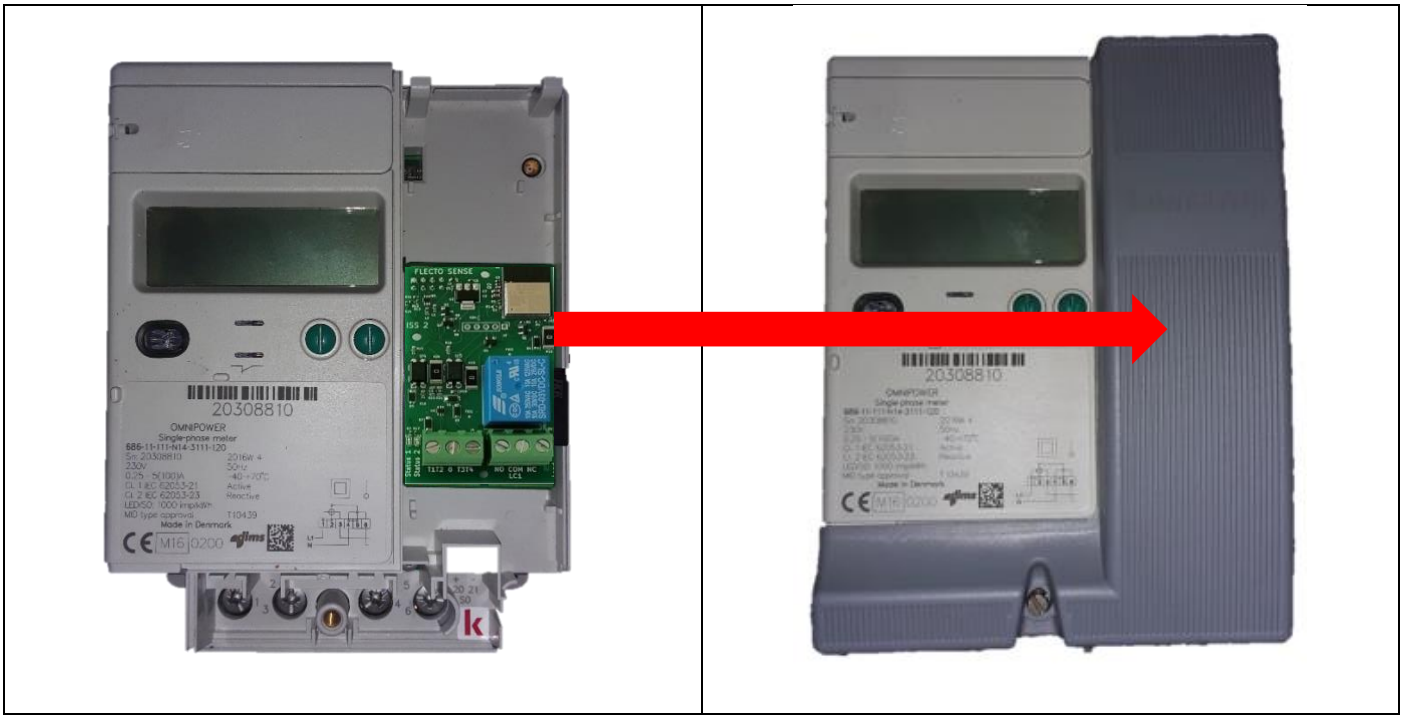

Fig.3

For more Information and technical support on this product please contact us:

E mail: Info@flecto.co.za

Office Tel: +2781 306 3059

Wouter de Kock: +2782 332 2389