

Installation Instructions

Load Shed Control Kit

TS910-KWLS1PH2/4 AND TS910-KWLS3PH2/4
(Single Phase 2x0200A CTs/Single Phase 2x0400A CTs) AND
(Three Phase 3x0200A CTs/Three Phase 3x0400A CTs)

TS 910

TRANSFER SWITCH



HAZARD OF ELECTRICAL SHOCK, EXPLOSION, OR ARC FLASH

The installer is responsible for compliance with national electrical code requirements with respect to installation of this equipment.

Many components of this equipment operate at line voltage. DO NOT TOUCH. Use only electrically isolated tools.

Install and close all covers before applying power to this equipment

Do not open covers to equipment until ALL power sources are disconnected

This equipment must be installed and serviced only by qualified electrical personnel utilizing safe work practices and appropriate Personal Protective Equipment (PPE).



Failure to do so may cause personal

Current Transformers Installation [FIG. 1]



1. Visually inspect the kit for shipping damage. **Do not install the kit if it appears damaged!**

2. Disconnect the load cables and insert the current transformers onto the L1 and L2 Load Cables for Single Phase systems and L1,L2 and L3 for Three Phase systems. Note that the current transformers orientation is not polarity sensitive.



FIG. 1

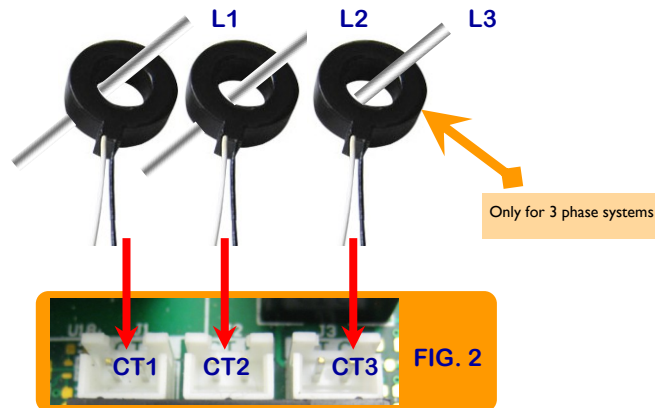


FIG. 2

3. Insert the connectors of the current transformers into the PCB connectors J1 and J2. To locate the connectors refer to FIG.3 and FIG.6

4. Re-torque the load cables contactor lugs to the value specified on the label located on the inside door of the Transfer Switch.



Failure to torque to the proper value may cause equipment damage, fire, other hazards!

PARTS LIST FOR TS910-KWLS1PH2

PART#	DESCRIPTION	MFG NAME	MFG PART#
0011053	XFMR, CURRENT, SOLID CORE, 200A, 0.3V	AMRAN	CT-201-201-08

PARTS LIST FOR TS910-KWLS1PH4

PART#	DESCRIPTION	MFG NAME	MFG PART#
0011054	XFMR, CURRENT, SOLID CORE, 400A, 0.3V	AMRAN	CT-202-401-06

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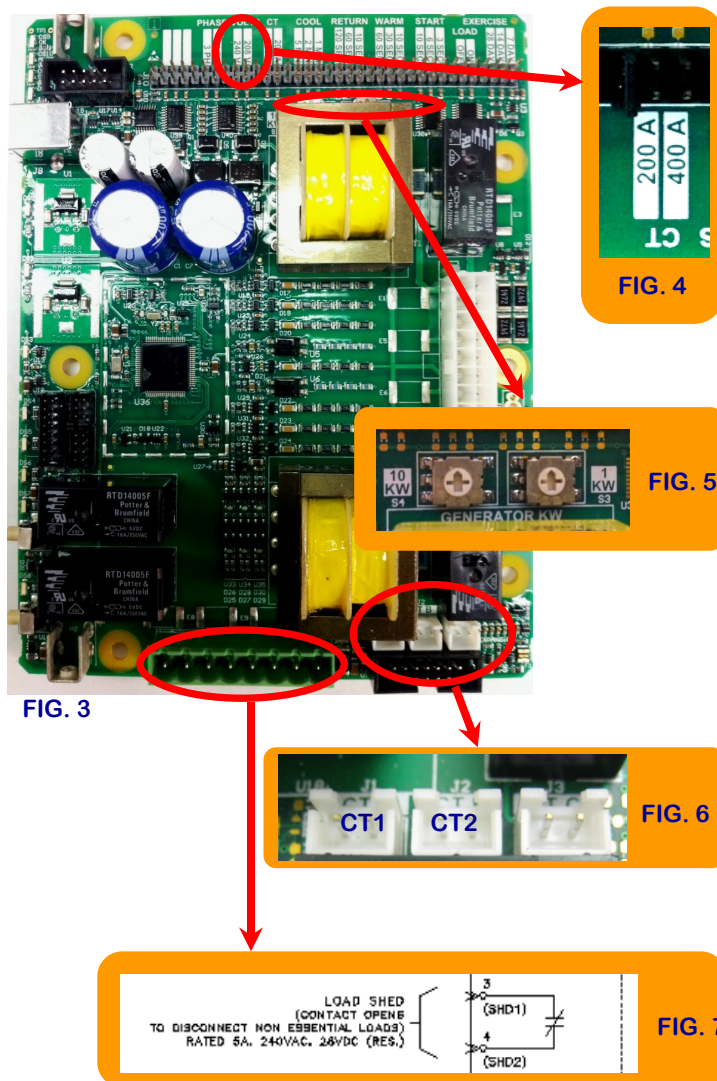
Select the Load Shed Mode (KW Load Management for this kit)

1. **Load Shed Disabled.** TS910 is factory supplied with the Load Shedding function disabled: The CT Ratio jumper placed on the pin adjacent to the 200A jumper as shown in FIG.4 and zero KW selection on the GENERATOR KW selection potentiometers. Refer to FIG.5.
2. **Basic Mode.** Adjust the GENERATOR KW selection to a value greater than zero to enable the mode. The LOAD SHED customer contact will OPEN when the Transfer switch transfers to the GENERATOR and return to CLOSE after switching back to the UTILITY supply. The Load SHED Amber LED will stay ON when the LOAD SHED is active. The LOAD SHED customer contact is rated for 5A, 240VAC, 28VDC (RESISTIVE) (FIG. 7).



Make sure the external circuit does not exceed these ratings or it may result in equipment damage, other hazards!

3. **KW Load Management.** Use the CT Ratio jumper to select the 200A or 400A CTs (refer to FIG.4). Set the Generator KW potentiometers on the TSC 9 controller to equal 95% of generators maximum output KW rating. Two KW Potentiometers are provided - left potentiometer for "Tens" Setting and the right potentiometer for "Ones" setting (refer to figure 5). Each potentiometer has 9 individual settings 0-99. (Example: For 100kW rated genset, set at "95", turn left potentiometer to "9" and the right potentiometer to "5".



The LOAD SHED customer contact will OPEN when the Transfer Switch transfers to the GENERATOR and remain open for five minutes. Should the KW reading exceed the KW SET POINT set the contact will remain OPEN otherwise will return to CLOSE. Once the LOAD SHED contact re-closes the TSC9 Controller calculates the value of the non-essential loads and stores the value in the memory. The value is reset whenever the load is transferred to the GENERATOR. Should the connected loads exceed the KW Shed Point for five seconds the LOAD SHED contact will open. To check if there is enough generator capacity to take on non-essential loads, TSC9 will add ten percent to the KW SET POINT value and compare it to the non-essential loads KW stored value.

The LOAD SHED will return to CLOSE after switching back to the UTILITY supply. The Load SHED Amber LED will stay ON when the LOAD SHED is active. The LOAD SHED customer contact is rated for 5A, 240VAC, 28VDC (RESISTIVE) (FIG. 7).



Make sure the external circuit does not exceed these ratings or it may result in equipment damage, other hazards!