

**Note:** Control board requires 12 Volts DC from generator battery or transfer switch. In the event 12 Volts is not available, an OPTIONAL 12 Volt supply Model DR15-12 is available.

## PSP Load Shed, CT Demand - Definitions (2274C)

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**UT OK** - High input (or contact closed) and assumes utility has returned and solid. Low input is outage.

**Outage, UT OK goes low** - 5-second debounce seems long enough. All stages go to off at the end of 5 sec. It is assumed GEN PWR will not go high in the 5 seconds. Anytime the UT OK returns to high, start the Outage Transfer Delay sequence.

**Outage Transfer Delay** - PC setup, 1-45 minutes. This starts when UT OK goes high. All stage contactors are opened. At delay end stage step begins.

**UT OK is priority** - At the end of Outage Transfer Delay, all outputs will step in, CT current is no longer monitored.

- Thus this product is **not** for manual transfer applications

**Non-manual transfer switch application** - Standby generator or its breaker must be off before the Outage Transfer Delay is run out.

**Standby generator test** - No hot test allowed (ATS must stay in UT → LOAD position).

**Target** = kW (PC entry) x 1000/240

**Shed, step down stages** - CT current level, 2-second over target decision, highest stage. Next CT current decision (2 seconds) - if 20% over target also drop the next highest stage.

**AC/HP low voltage shed** - One function or relay tied directly to shed stage 1, the second function or relay tied directly to shed stage 2. Also see PC Setup.

**Detecting generator connection/power** - With this REV C and V6.0\* the CT is used to detect generator function, power available. This is a direct sequence function when the UT OK contact opens. After the UT OK opens (5+ seconds) if the CT does not detect generator power greater than 5 amps, all shed stage contactors remain open. When the UT OK dry contact is closed, the generator CT is ignored, all shed stage contactors remain open. When the UT OK dry contact is closed, the generator CT is ignored, all shed contacts are opened, and the Outage Transfer Delay is started. At the end of this PC setup time, the logic must assume utility is solid and the ATS has removed the generator from the load. Thus the load shed contactors step in and will be closed as long as UT OK dry contact is closed.

**Hardware/software logic** - Each unique product model number (type and sizing) must relate to specific chip code and board hardware arrangement.

**Logic transitions** - Except for real time generator current (CT amps) going up and down, where possible do not cause a function change when the status LED is doing a 1 count or blink.

## PSP Load Shed, External Input Staging LS\*\*1\*\*LX (2274C)

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### Four circuit 100 Amp stand alone load shedding system

The following paragraphs are in reference to the various control points, connections, and description relating to this generic system main hookup drawing (LH404). This does not show the load shed contactors and line voltage wiring for the loads or sub-panels.

- A. Automatic Transfer Switch (ATS), the ATS logic interface and ground/bonding to the GEN is not shown.
- B. Stand by Generator (GEN), logic and/or connections between GEN and ATS are not shown, that information relates to the manufacturers of either both devices.
- C. Load shed demand staging controller (2274C) and field hookup points.
- D. 12 VDC power source for the load shed, demand staging controller (2274C). Connection polarity must be observed and correct.  
*It is assumed the 12V battery has a trickle charger active during non-outage. This battery is the 10-14VAC source to the load shed, demand staging, control board at all times (see G). The standby requirement is less than 0.2 amps.*
- E. It is assumed the battery negative terminal is the same as the bonded ground connections within the system. The 12VDC “-” terminal is the common bonding point for the controller.
- F. Status LED for the load shed, demand staging operations:

- On solid = normal non-outage, UT OK is HI, GEN PWR is LO
  - 1 blink every 2 seconds = doing delay between stage step (typically 15 sec). This has precedence over all others.
  - 2 blinks every 2 seconds = UT OK and no input
  - 3 blinks every 2 seconds = UT OK and any input stage

- G. The A/B switch is for setting up logic between input and output contactor NO or NC. Powerdown reset is required after this setup.

- Switch in A position - Normally Open Devices
    - Hi input = Device Closed
    - Lo input = Device Open

- Switch in B position - Normally Closed Device
    - Hi input = Open Device
    - Lo input = Closed Device

- H. Connection point for staging, load shed, inputs. Plug-in TB provided, field cable required.

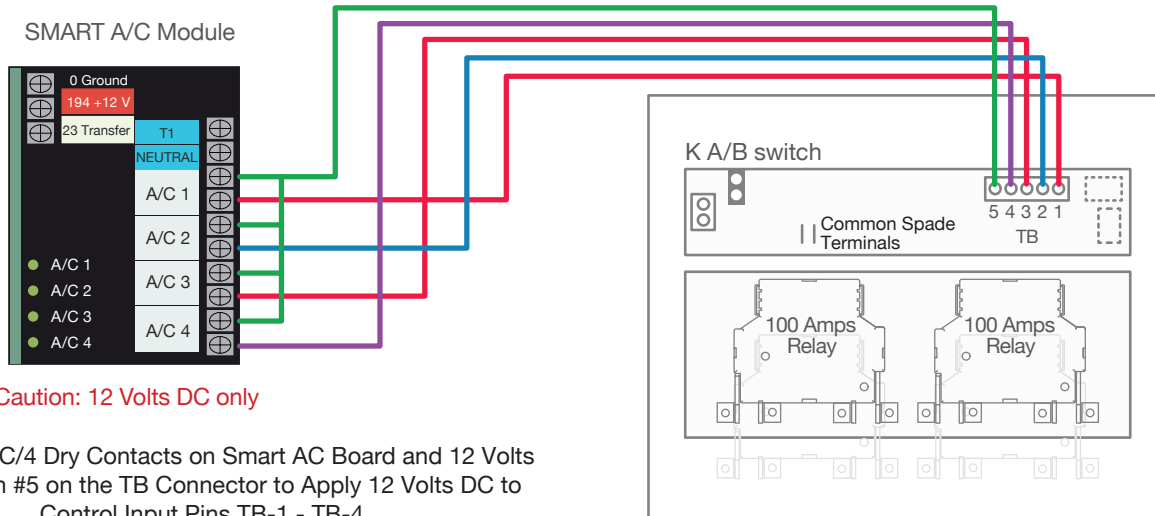
**Warning:** do not connect any voltage or signal to the PSP, load shed, staging controller greater than 24VAC (Class 2 wiring).

**Comment:** The ATS status (D) still applies.

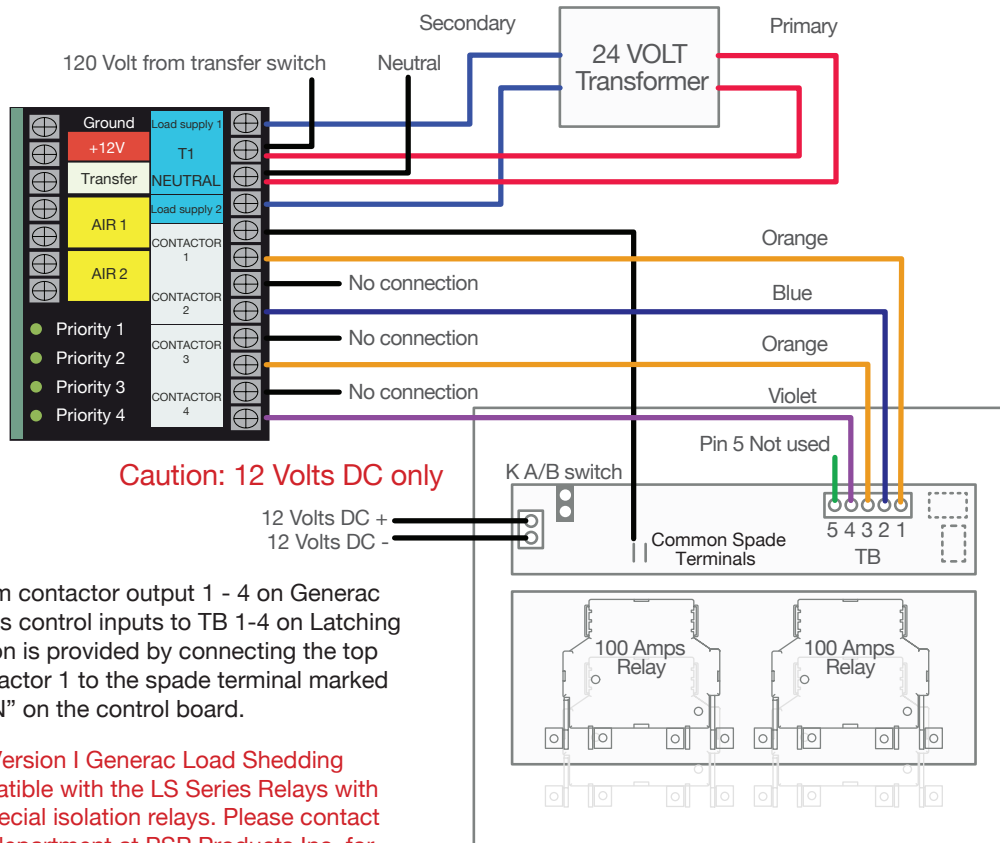


## Generac Wiring Diagrams

### Generac Version III Smart AC Load Shedding Module



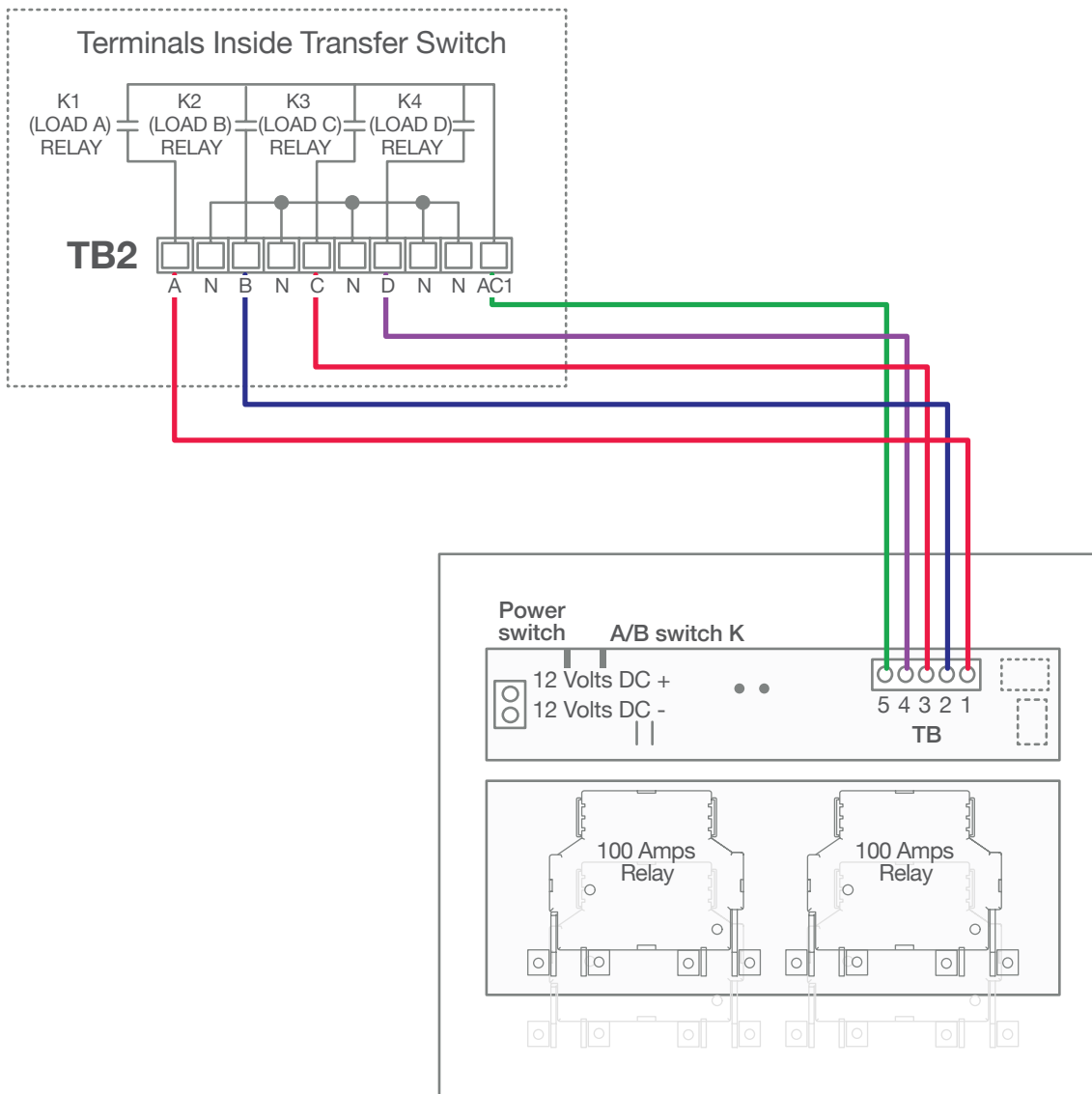
### Generac Version II Load Shedding Module 24 VAC Output Only



Kohler® Wiring Diagrams

NEW On Board RXT Load Shedding Controller

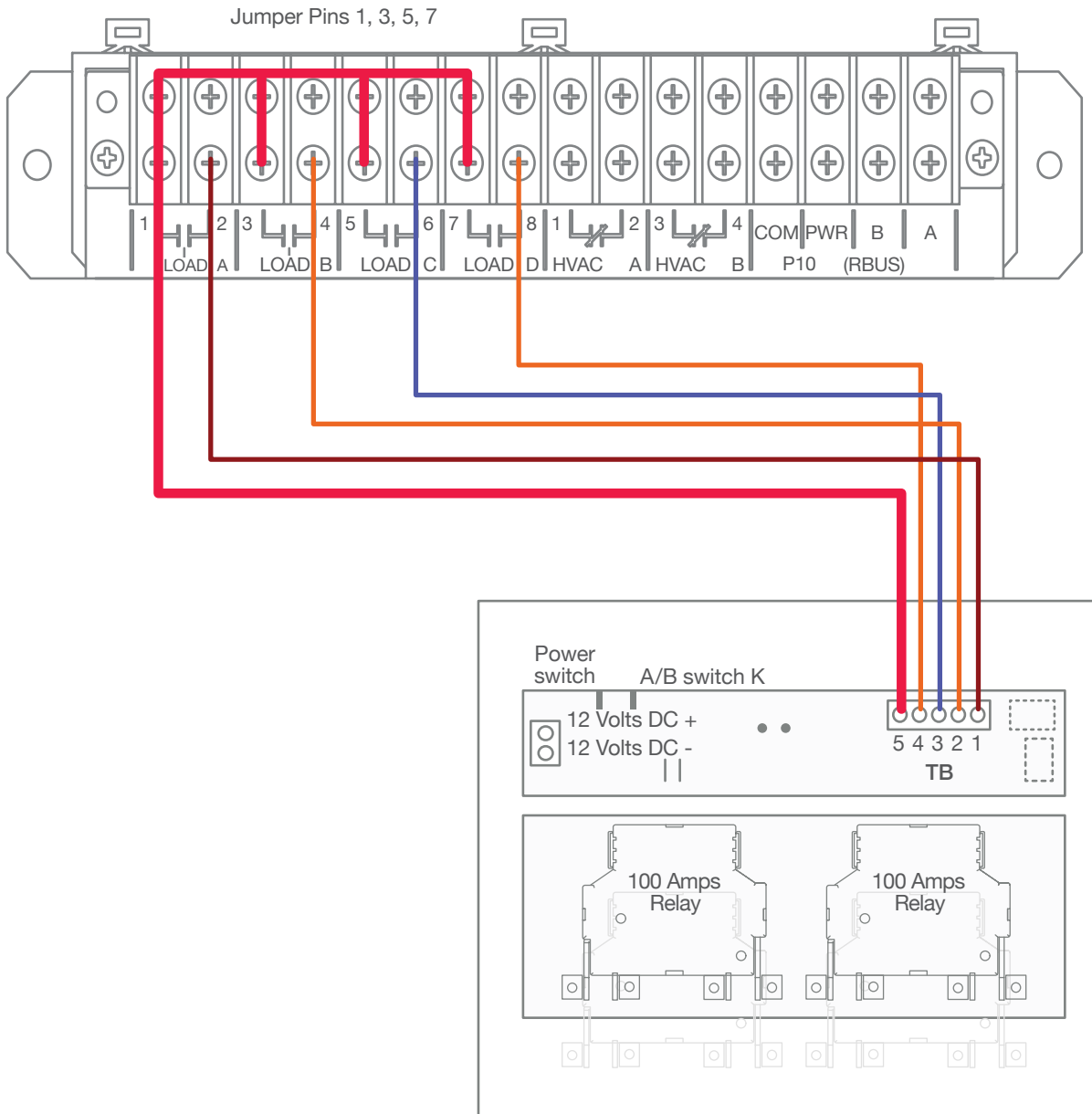
NOTE: When using this configuration no other devices can be connected to the outputs of A, B, C & D



Uses **12 Volt DC** Output from pin 5 of the TB terminal block to energize the common terminals of loads A, B, C & D. The Load shedding module controls the loads by applying or removing 12 Volts DC to pins 1-4 on the TB terminal block

**Kohler® Wiring Diagrams**

**Legacy Load Shedding Controller Module**



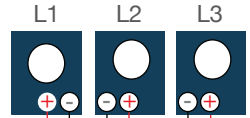
Uses **12 Volt DC** Output from pin 5 of the TB terminal block to energize the common terminals of loads A, B, C & D by looping the common terminals. The load shedding module controls the loads by applying or removing 12 Volts DC to pins 1-4 on the TB terminal block

## Wiring Configurations for LSC-08 Load Control Module

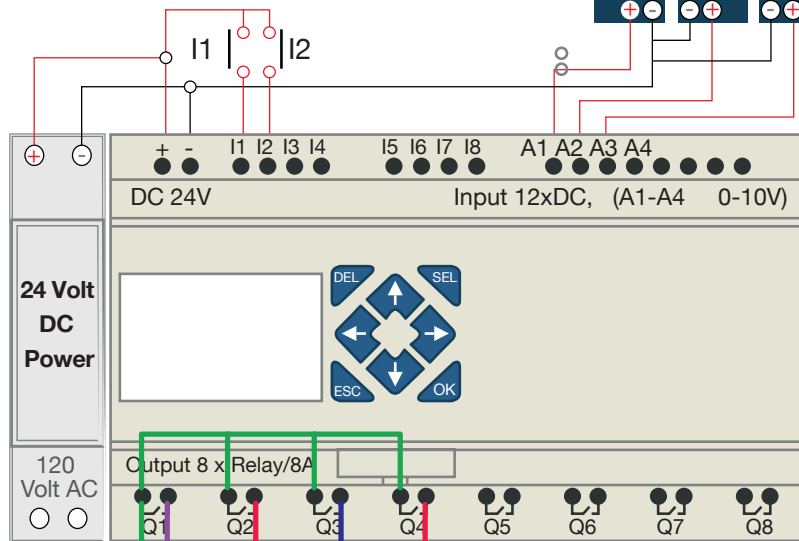
**I1 Optional Connection**  
**Closed** - Utility Mode  
**Open** - Generator Mode

**I2 Optional Connection**  
**Closed** - Normally Closed Logic  
**Open** - Normally Open Logic

**Current Transformers**



**Important:**  
 Observe CT polarity or damage may occur to controller or CT.



120 VAC

**Note:**  
 Position Switch "K" to the "A" position for NO Operation

**Caution: 12 Volts DC Only**

12 Volts DC +  
 12 Volts DC -

