

The Kenrahn Twin Pump Starters are ideally suited to pump out storm water pits, septic tanks, sewage sumps etc. by operating two pumps in a lead, lag mode and alternate after each start. The standard unit will start on level rise, and stop on level fall using CR level regulators. This method is particularly reliable and positive switching gives accurate control in clean or dirty liquids, over large or small differentials as a level switch is used for each level.

General information

The standard unit is housed in a powder coated weather proof metal enclosure with all control switches and indicators behind a lockable door.

The Standard TPS has:-

- ◆ DOL (Direct On Line) contactor for each pump.
- ◆ Main Switch for local isolation and service.
- ◆ Motor rated circuit breakers for each pump.
- ◆ 24 Volt ELV (Extra Low Voltage) circuit for the level switches.
- ◆ Control circuit breaker.
- ◆ Thermal overload protection for each pump.
- ◆ Power Available light.
- ◆ Pump 1 and Pump 2 Run lights.
- ◆ Pump 1 and Pump 2 Overload lights.
- ◆ Alternating Relay.
- ◆ High Level Relay with 24 Volt ac output for remote alarm.

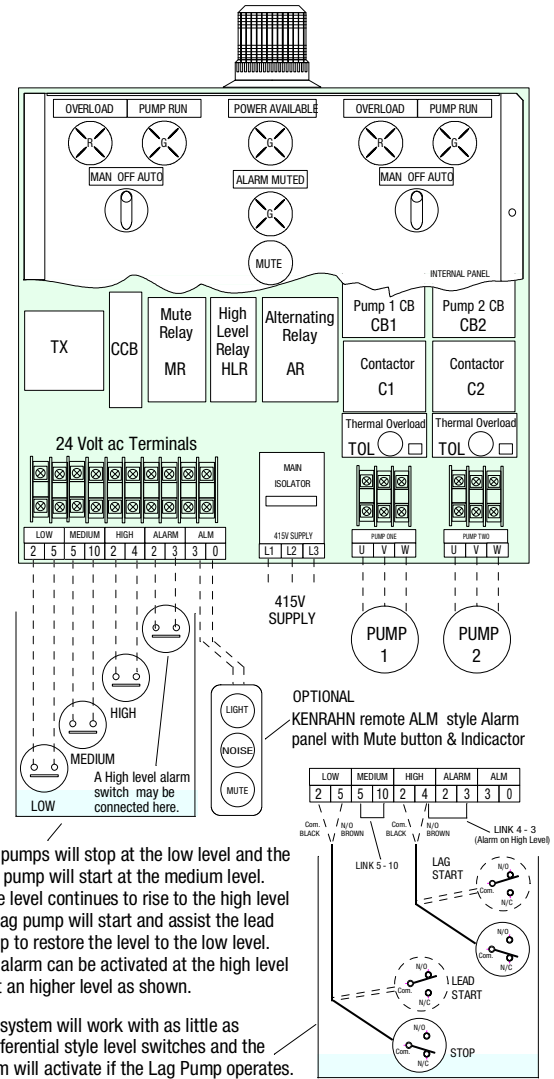
The Standard TPS can have many options:-

- ◆ Visual alarm on top of enclosure.
- ◆ Audible Alarm on bottom of enclosure.
- ◆ Audible alarm with mute button to silence the alarm.
- ◆ Hours Run meters for each pump.
- ◆ Ammeter for the supply to enable detection of pump malfunction.
- ◆ Voltage free contacts for pump run or fail connection to BMS.
- ◆ Intrinsically safe barriers.
- ◆ Electrode operation in lieu of level switches.
- ◆ Reverse circuit for tank filling instead of emptying.
- ◆ Overtemperature protection for each pump.
- ◆ Seal fail detection relays.
- ◆ Time clock to limit the operating hours.

Not all options are available on the economy models, please see the price list or check with Kenrahn before ordering.

Various starting methods, like Direct on Line, Star Delta, Soft starter, Auto transformer or Variable speed drive can be supplied for small or large kilowatt motors in standard or economy models.

TPS-HA-6D with Rotating light and Audible Alarm/Mute



The pumps will stop at the low level and the lead pump will start at the medium level. If the level continues to rise to the high level the lag pump will start and assist the lead pump to restore the level to the low level. The alarm can be activated at the high level or at an higher level as shown.

The system will work with as little as 2 differential style level switches and the alarm will activate if the Lag Pump operates.

STANDARD VERSIONS

MODEL	VOLTS	TYPE	REMARKS
TPS-2D	240V	Direct On Line	Standard TPS in 400 x 400 weather proof metal enclosure.
TPS-6D	415V	Direct On Line	
TPS-H-2D	240V	Direct On Line	Standard TPS in 400 x 400 weather proof metal enclosure. with Rotating Flashing light.
TPS-H-6D	415V	Direct On Line	
TPS-AM-2D	240V	Direct On Line	Standard TPS in 400 x 400 weather proof metal enclosure. with Audible Alarm and Mute.
TPS-AM-6D	415V	Direct On Line	
TPS-HA-2D	240V	Direct On Line	Standard TPS in 400 x 400 weather proof metal enclosure. with Rotating light and Audible Alarm/Mute.
TPS-HA-6D	415V	Direct On Line	

"REFER TO THE PRICE LIST FOR VARIOUS MOTOR SIZES AND TYPES TO SUIT PARTICULAR KILOWATT AND AMPS."

ECONOMY VERSION

Economy versions are housed in plastic enclosures with controls and alarms on the front of the enclosure. Care must be taken when selecting the mounting position due to weather and operating by unauthorised persons.

NOTE: The economy units have a 24 Volt control circuit and do not require a neutral for 415 Volt systems.

MODEL	VOLTS	TYPE	REMARKS
TPS-2DE	240V	Direct On Line	Economy TPS in a IP54 Plastic 340 x 210 x 160 enclosure.
TPS-6DE	415V	Direct On Line	
TPS-H-2DE	240V	Direct On Line	Economy TPS in a IP54 Plastic 340 x 210 x 160 enclosure. With rotating flashing light mounted on enclosure top.
TPS-H-6DE	415V	Direct On Line	