



**Wiring & Installation Diagram
for
ST-28196 & ST-28244 FLIP-PAKS
Instruction Bulletin No. 27414**

Important Points!

Product must be maintained and installed in strict accordance with the National Electrical Code and GEMS product catalog and instruction bulletin. Failure to observe this warning could result in serious injuries or damages.

An appropriate explosion-proof enclosure or intrinsically safe interface device must be used for hazardous area applications involving such things as *(but not limited to)* ignitable mixtures, combustible dust and flammable materials.

Pressure and temperature limitations shown on individual catalog pages and drawings for the specified products must not be exceeded. These pressures and temperatures take into consideration possible system surge pressures/temperatures and their frequencies.

Selection of materials for compatibility with the media is critical to the life and operation of GEMS products. Take care in the proper selection of materials of construction; particularly wetted materials.

Life expectancy of switch contacts varies with applications. Contact GEMS if life cycle testing is required.

Ambient temperature changes do affect switch set points, since the specific gravity of a liquid can vary with temperature.

GEMS products have been designed to resist shock and vibration; however, shock and vibration should be minimized.

Liquid media containing particulate and/or debris should be filtered to ensure proper operation of GEMS products.

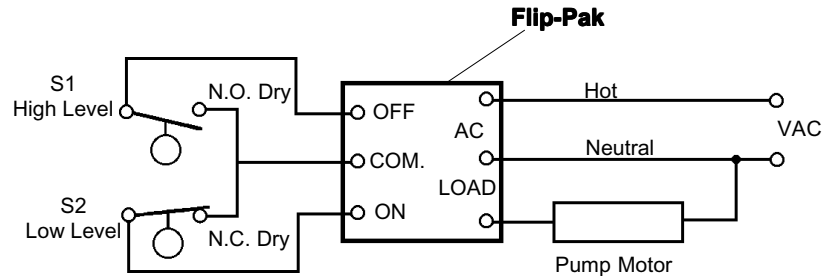
Electrical entries and mounting points may require liquid/vapor sealing if located in an enclosed tank.

GEMS products must not be field repaired.

Physical damage sustained by the product may render it unserviceable.

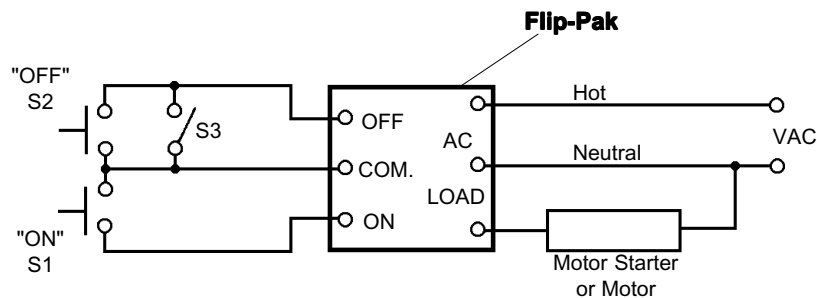
Typical Wiring Diagrams

FLIP-PAK: Providing Pump-Up/Pump-Down Control



Refill: Low level permits S2 to close, starting refill pump. Rising level allows S2 to open and eventually closes S1 to actuate the FLIP-PAK "OFF" circuit and stop the pump motor. The FLIP-PAK "OFF" override assures pump shut-down even if S2 failed to open.

Pump-Down: with "ON" and OFF" connections of S1 and S2 transposed at the FLIP-PAK, the pump is started by S1 and stopped by S2 at low level. The same "OFF" override prevails.



With two normally open momentary contact push buttons (S1 and S2), the FLIP-PAK provides solid-state control of the motor starter or the motor itself.....if load requirements are within FLIP-PAK ratings. S3 provides a safety shut-down. With S3 closed, the "ON" push button (S1) is rendered ineffective by the "OFF" override feature of the FLIP-PAK



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