Switcheroo is designed to detect primary pump flow loss and automatically activate a secondary pump. An alarm output is also triggered when the switchover occurs.

With a flow detection device installed onto Pump #1, turn Pump #1 ON by pressing front panel switch. “Pump 1 ON” panel LED will light and relay will enable pump. When flow detection signal is lost after 1 minute, Pump #1 relay and panel LED will turn OFF. Pump #2 relay and panel LED will turn ON, along with Alarm relay and panel LED.

If no flow detected within the first 3 minutes after turning ON Pump #1, Pump #1 will turn OFF and NOT perform the switchover. Check for pumping faults such as no chemical, closed valves, flow generation device, etc.

Flow Detection

Switcheroo uses either 4-20mA or Pulse input signals to detect zero pump flow. Various devices may be connected to the pump to generate the signals:

4-20: Magnetic Flow Meter
PULSE: Walchem PosiFlow
  LMI Digi-Pulse
  AW Company JVK Series
  Kobolb Flo-Sensors
  Tacmina Model FM-01
  Reed Switch Device

Pulse – Connect + signal input to TB101-10 and common to TB101-11. +12VDC is available at TB101-9 for device power. Hall-type devices must be of the open collector type. When pulse is missing for one minute unit turns off Pump #1 and switches over to Pump #2 and triggers alarm relay.

4-20mA – Connect + signal to TB101-12 and – signal to TB101-13. When signal drops below 4mA for one minute unit turns off Pump #1 and switches over to Pump #2 and triggers alarm relay.
TB101-1 – AC Hot Input (120 VAC, 1 phase, 60Hz)
TB101-2 – AC Neutral Input
TB101-3 – AC Neutral
TB101-4 – Earth Input
TB101-5 – Earth
TB101-6 – Pump # 1 (120VAC/1/60)
TB101-7 – Pump # 2 (120VAC/1/60)

TB101-8 – Alarm (120VAC/1/60)
TB101-9 – +12VDC
TB101-10 – +Pulse Flow Signal Input
TB101-11 – Common Pulse Flow Signal Input
TB101-12 – +4-20mA Flow Input
TB101-13 – -4-20mA Flow Input

---

Connections

1 - AC HOT (120VAC)
2 - AC NEUTRAL
3 - AC NEUTRAL
4 - EARTH
5 - EARTH
6 - PUMP #1 RELAY OUTPUT
7 - PUMP #2 RELAY OUTPUT
8 - ALARM RELAY OUTPUT
9 - +12 VDC
10 - PULSE FLOW SIGNAL INPUT
11 - COMMON
12 - +4-20mA INPUT
13 - COMMON (-4-20mA INPUT)

FUSE = 5 AMP SLO-BLO

---

EquipSolutions

SCALE: ALL DIMENSIONS IN INCHES
DRAWN BY: PGM
CHECKED BY: WSK
DATE: APRIL 22, 2011
REVISED: AUGUST 9, 2011

SWITCHEROO AUTOMATIC PUMP SWITCH OVER
EXTERNAL, CONNECTIONS

Switcheroo
automatic pump switchover
Dimensions / Layout / Inputs / Outputs

A - POWER INPUT CORD w/ MOLDED PLUG
B - PUMP #1 PIG TAIL
C - PUMP #2 PIG TAIL
D - ALARM OUTPUT PIG TAIL
E - INPUT SIGNAL

 EquipSolutions
1364 Hamilton Parkway, Illinois, 60143
Phone: 888-200-1800
Fax: 630-351-9080
www.equip-solutions.com