

VF-20 & VF-30: 110VAC, 220VAC, 24VDC Series Installation/Instructions

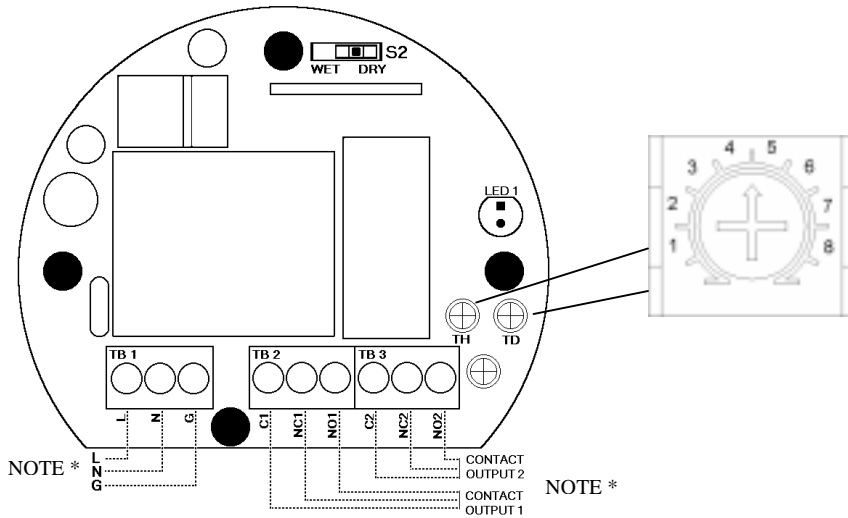


FIGURE 1

- 1) Mount VF series probe in suitable process connection. Verify that the forks will not be within 1/2 inch of any object in the vessel.
- 2) Connect wiring per FIGURE 1 using one of the following operating power options from model # found on housing.
 - /a = /1 - 24 VDC
L: + N: -
 - /a = /2 - 120 VAC
L: L1 N: Neutral
 - /a = /3 - 240 VAC
L: L1 N: L2 G: Ground

VERIFY that the proper operating power is available before energizing unit.

- 3) The outputs will have the following characteristics depending on the position S2.

S2 in position WET –

The relay will energize when fork is wet and give continuity between C1 and NO1, as well as C2 and NO2. A dry fork will give continuity between C1 and NC1, as well as C2 and NC2.

S2 in position DRY –

The relay will energize when fork is dry and give continuity between C1 and NO1, as well as C2 and NO2. A wet fork will give continuity between C1 and NC1, as well as C2 and NC2.

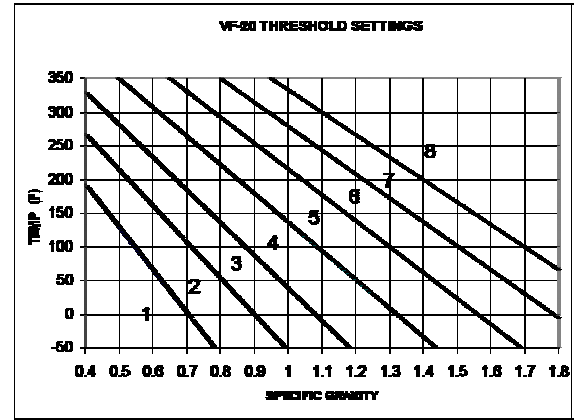


FIGURE 2

Integral LED indicator conditions:

- a) *on* continuously when relay is energized.
- b) *blink* continuously when relay is not energized.
- c) **** off** completely if there is a fail condition (see below)
- 4) Apply power to unit after all electrical connections are made.
- 5) **** Possible fail conditions from continuous self test:**
 - a) Too much build up on the fork (the forks are bridged and can not vibrate)
 - b) Fork is broken
 - c) Wire is broken
 - d) Circuit is damaged
 - e) Fork is too close to side of vessel (within 1/2 inch)
- 5) **** TIME DELAY (TD) adjustment**
Adjusting the time delay will change the time it takes to switch from one state to another.
10 second delay; TD adjusted fully clockwise
100 millisecond delay; TD adjusted fully counter clockwise
- 6) **THRESHOLD (TH) adjustment**
Factory setting works fine, but for optimal switching (switching when 50% of fork is covered) adjust the threshold adjustment according to FIGURE 2.
- 7) Check out the unit by raising and lowering the liquid in the vessel. Verify that the contacts switch upon WET or DRY fork sensor conditions.

* WARNING: Use supply wires suitable for 61° C above surrounding ambient
** only the VF-30 has a time delay and continuous self test with a fail mode

K-TEK

18321 Swamp Road
Prairieville, LA 70769
(225) 673-6100, Fax (225) 673-2525

