CYCLE CONTROL FOR AUTO MODE. IF IN AUTO MODE, T4:0 WILL ENERGIZE, ENERGIZING THE MOTOR. UPON ACCUMULATING FULLY, T4:1 WILL TRIGGER TO ENERGIZE, DEENERGIZING AND RESETTING THE T4:0 COUNTER.

CONTROL STATES
0 = OFF
1 = AUTO
2 = FAULTED
3 = HAND

0000

```
         EQU                      AUTO CYCLE PUMP              AUTO CYCLE PUMP RUN
        Equal                     STOP TIMER                   TIMER
        Source A      N7:3          T4:1                          TON
                       0<          ─┤/├─                      Timer On Delay        ─( EN )─
        Source B        1            EN                       Timer         T4:0
                        1<                                    Time Base      1.0    ─( DN )─
                                                              Preset         30<
                                                              Accum           0<
```

UPON T4:0 ACCUMULATING FULLY, TRIGGERS THE T4:1 COUNTER TO ENERGIZE. T4:1 WILL BE THE STOP PORTION OF OUR AUTOMATIC PUMP CYCLE. MEANING, AS LONG AS T4:1 IS ENERGIZED, OUR PUMP WILL NOT ENERGIZE AND THE PUMP RUN TIMER WILL NOT ENERGIZE.

0001

```
   AUTO CYCLE PUMP RUN                                              AUTO CYCLE PUMP
   TIMER              ONS                                           STOP TIMER TRIGGER
     T4:0             B3:9                                              B3:0
    ─┤ ├─            ─┤ONS├─                                          ─( )─
     DN                4                                                12
```

ONCE TRIGGERED, THE PUMP STOP TIMER WILL RUN UNTIL IT ACCUMULATES FULLY. AFTER IT ACCUMULATES FULLY, IT WILL DEENERGIZE UNTIL THE T4:0 TIMER, THE PUMP RUN TIMER, COMPLETES ITS CYCLE.

0002

```
   AUTO CYCLE PUMP                                          AUTO CYCLE PUMP
   STOP TIMER TRIGGER                                       STOP TIMER
     B3:0                                                       TON
    ─┤ ├─                                                   Timer On Delay        ─( EN )─
     12                                                     Timer         T4:1
                                                            Time Base      1.0    ─( DN )─
   AUTO CYCLE PUMP      AUTO CYCLE PUMP                      Preset         10<
   STOP TIMER           STOP TIMER                           Accum           0<
     T4:1                T4:1
    ─┤ ├─              ─┤/├─
     EN                  DN
```

TRIGGERS TO START PUMP. PUMP TRIGGER WILL ENERGIZE IF THE PUMP RUN TIMER IS ENERGIZED OR IF THE HAND MODE IS ENERGIZED.

0003

```
   AUTO CYCLE PUMP RUN
   TIMER                     ONS                                    PUMP START TRIGGER
     T4:0                    B3:9                                       B3:0
    ─┤ ├─                   ─┤ONS├─                                   ─( )─
     EN                      5                                         13

   HAND MODE ENERGIZED
     B3:0
    ─┤ ├─
     10
```

HOLD IN CIRCUIT FOR PUMP. WILL DEENERGIZE IF INTERRUPTED BY MULTIPLE CONDITIONS. WILL ALSO DEENERGIZE OR REFUSE TO ENERGIZE IF AN ALARM IS PRESENT.

0004

```
   PUMP START TRIGGER                       MASTER ALARM              PUMP ENERGIZE BIT
     B3:0                                     B3:1                       B3:0
    ─┤ ├─                                    ─┤/├─                      ─( )─
     13                                       6                          3

   PUMP ENERGIZE BIT     PUMP INTERRUPT
     B3:0                 B3:0
    ─┤ ├─               ─┤/├─
     3                    14
```

INTERRUPT CONDITIONS FOR PUMP CONTROL CIRCUIT. INTERRUPT WILL OCCUR IF CONTROL STATE IS MOVED TO OFF OR FAULTED, OR INTERRUPT WILL OCCUR IF THE T4:1, PUMP STOP TIMER, IS ACTIVE.

0005

AUTO CYCLE PUMP
STOP TIMER
T4:1
—| |—
EN

ONS
B3:9
—| ONS |—
6

PUMP INTERRUPT
B3:0
—( )—
14

CONTROL STATES
0 = OFF
1 = AUTO
2 = FAULTED
3 = HAND

```
——EQU ——
Equal
Source A        N7:3
                  0<
Source B          0
                  0<
```

CONTROL STATES
0 = OFF
1 = AUTO
2 = FAULTED
3 = HAND

```
——EQU ——
Equal
Source A        N7:3
                  0<
Source B          2
                  2<
```

0006 ———————————————————————————————————————⟨ END ⟩———