



Instruction List Scripts



OpIntfc

```
(*
  Description: Example 13.4 - Operator interface For tank control

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*)
(* Check for T428_Min less than min or greater than max *)
    LT_REAL( T428_Min, 2.1)
    JMPCN TUprr
    ADD_REAL(0.0, 2.1)
    ST_REAL T428_Min
TUprr:   GT_REAL( T428_Min, 13.4)
    JMPCN DoAdd
    ADD_REAL(0.0, 13.4)
    ST_REAL T428_Min
(* Max level is min level +1.5 *)
DoAdd:   ADD_REAL( T428_Min, 1.5)
    ST_REAL      T428_Max
(* Low level lamp when level < 4 feet *)
    LT_REAL( LT428_Val, 4.0)
    ST_BOOL   T428_LOLA
(* Level below 2.0 activates horn *)
    LT_REAL( LT428_Val, 2.0)
    ST_BOOL   T428_Hrn_Act
    PT        Hrn_Ons
(* Detect Ack transition *)
    LD_BOOL   Alm_Ack
    PT        Ack_Ons
    ST_BOOL   AckTrig
(* Horn activated when level drops below 2.0 or has
   remained below 2.0 for 5 minutes. Acknowledge button
   silences it. *)
    LD_BOOL   Hrn_Ons
    OR        Ack_Tmr_Dn
    OR(
    LD_BOOL   T428_HORN
    ANDN     AckTrig
    )
    ST_BOOL   T428_HORN
(* Time 5 minutes level stays below 2.0 after horn ackd *)
    LD_BOOL   AckTrig
    OR        Ack_Tmr_En
    AND       T428_Hrn_Act
    ANDN     Ack_Tmr_Dn
    ST_BOOL   Ack_Tmr_En
    TMR_TENTHS(Ack_Tmr, 3000)
    ST_BOOL   Ack_Tmr_Dn
```



TankCtl

```

(*)
  Description: Example 13.3 - Tank Control

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*)
(* Convert analog input to level      *)
  INT_TO_REAL(LT428_MEAS)
  ST_REAL TmpR
  DIV_REAL( TmpR, 32000.0)
  ST_REAL TmpR
  SUB_REAL( 15.0, 1.0)
  ST_REAL TmpR2
  MUL_REAL(TmpR, TmpR2)
  ST_REAL TmpR
  ADD_REAL( TmpR, 1.0)
  ST_REAL LT428_Val
(* Comparisons for low and high levels *)
  LT_REAL(LT428_Val,T428_Min)
  ST_BOOL T428_Low
  GT_REAL(LT428_Val, T428_Max)
  ST_BOOL T428_High
(* Control of tank level *)
  LD_BOOL T428_Low
  OR      XV427_OPEN
  ANDN    T428_High
  AND     T428_Cntrl
  ST_BOOL XV427_OPEN

```