Pluto 0

I0.0=HVTurboUnder10	;HEX Vacuum Gauge for interlock safety VHX-UTT-GCC-01 Relay 2 (<10 Torr NO)U
I0.3=CVTurboUnder10	;Cryostat Turbo Vac VCR-UTT-GCC-01 Relay 2 (<10 Torr NO)
I0.6=HVTurboPumpOFF	;
I0.7=CVTurboPumpOFF	;
I0.30=MainVcrVgcOpen	;CVR-UTT-VGC-00 Open
I0.31=MainVcrVgcClose	;CVR-UTT-VGC-00 Close
I0.32=MainVhxVgcOpen	;VHX-UTT-VCC-01 Open
I0.33=MainVhxVgcClose	;VHX-UTT-VCC-01 Close
I0.34=MKS925	;Roughing Pump
I0.35=CV01	;VCR-UTT-GCC-00 Relay 1 (<0.1 Torr NO) and VCR-UTT-GCC-01 Relays 1 (<0.001 Torr NO)
I0.36=CV0001	;VCR-UTT-GCC-00 Relay 2 (<0.001 Torr NO)
I0.37=HV01	;VHX-UTT-GCC-00 Relay 1 (<0.1 Torr NO) and VHX-UTT-GCC-01 Relays 1 (<0.001 Torr NO)
I0.40=HV0001	;VHX-UTT-GCC-00 Relay 2 (<0.001 Torr NO)
Q0.0=CVStat	;Cryostat Vacuum Status PRT-UTT-PLC-03/I6
Q0.1=HVStat	;HEX-Can Vacuum Status PRT-UTT-PLC-03/I5
Q0.2=MainVcrVcc	;Cryostat VCR-UTT-VCC-00
Q0.3=MainVhxVcc	;HEX-Can VHX-UTT-VCC-01
Q0.4=VcrPumpPerm	;Cryo Turbo Pump Permit VCR-UTT-PCT-00/J1-3
Q0.5=VhxPumpPerm	;HEX-Can Turbo Pump Permit VHX-UTT-PCT-01/J1-3
Q0.10=APower	;VCR-UTT-VCC-00
Q0.11=BPower	;VHX-UTT-VGC-00
Q0.12=CPower	;roufhing pump contact
Q0.20=VcrVcc01	;VCR-UTT-VCC-01
Q0.21=VcrVcc02	;VCR-UTT-VCC-02
Q0.22=VcrVcc03	;VCR-UTT-VCC-03
Q0.23=VcrVcc04	;VCR-UTT-VCC-04
M0.0=VcrVcc01Open	;
M0.1=VcrVcc01Close	;
M0.2=VcrVcc02Open	;
M0.3=VcrVcc02Close	;
M0.4=VcrVcc03Open	;
M0.5=VcrVcc03Close	;
M0.6=VcrVcc04Open	;
M0.7=VcrVcc04Close	;
M0.15=HVInterlockHigh	;
M0.16=CVInterlockHigh	;
M0.17=HVInterlockHighFilter	;
M0.20=CVInterlockHighFilter	;
M0.21=HVInterlockHighLatchStatus	;
M0.22=CVInterlockHighLatchStatus	;
M0.23=HVStatLatchReset	;
M0.24=CVStatLatchReset	;
M0.25=CVStatkBlock	;
M0.26=HVStatBlock	;
M0.32=HVTurboPumpON	;
M0.34=CVTurboPumpON	;
M0.40=OpenMainVcrVcc	;
M0.41=CloseMainVcrVcc	;
M0.42=MainVcrVccAlowedOpen	;
M0.43=MainVcrVccAllowedOpenLatch	;
M0.44=MainVcrVccAllowedOpenLatchStatus	;
M0.45=MainVcrVccAllowedOpenLatchReset	;
M0.46=MainVcrVccForcedClose	;
M0.47=MainVcrVccNotForcedCloseLatch	;

M0.48=MainVcrVccNotForcedCloseLatchStatus ;
M0.49=MainVcrVccNotForcedCloseReset ;
M0.50=VcrPumpPermLatchStatus ;
M0.51=VcrPumpPermReset ;
M0.52=VcrPumpPermBlock ;
M0.60=OpenMainVhxVcc ;
M0.61=CloseMainVhxVcc ;
M0.62=MainVhxVccAlowedOpen ;
M0.63=MainVhxVccAllowedOpenLatch ;
M0.64=MainVhxVccAllowedOpenLatchStatus ;
M0.65=MainVhxVccAllowedOpenLatchReset ;
M0.66=MainVhxVccForcedClose ;
M0.67=MainVhxVccNotForcedCloseLatch ;
M0.68=MainVhxVccNotForcedCloseLatchStatus ;
M0.69=MainVhxVccNotForcedCloseReset ;
M0.70=VhxPumpPermLatchStatus ;
M0.71=VhxPumpPermReset ;
M0.72=VhxPumpPermBlock ;
M0.80=CVInterlockHighLatchNeedsReset ;
M0.81=MainVcrVccNotForcedCloseLatchNeedsReset ;
M0.82=MainVcrVccAllowedOpenLatchNeedsReset ;
M0.83=VcrPumpPermLatchNeedsReset ;
M0.84=HVInterlockHighLatchNeedsReset ;
M0.85=MainVhxVccNotForcedCloseLatchNeedsReset ;
M0.86=MainVhxVccAllowedOpenLatchNeedsReset ;
M0.87=VhxPumpPermLatchNeedsReset ;
M0.100=ToGate0 ;
M0.101=ToGate1 ;
M0.102=ToGate2 ;
M0.103=ToGate3 ;
M0.104=ToGate4 ;
M0.105=ToGate5 ;
M0.106=ToGate6 ;
M0.107=ToGate7 ;
M0.108=ToGate8 ;
M0.109=ToGate9 ;
M0.110=ToGate10 ;
M0.111=ToGate11 ;
M0.112=ToGate12 ;
M0.113=ToGate13 ;
M0.114=ToGate14 ;
M0.115=ToGate15 ;
M0.116=ToGate16 ;
M0.117=ToGate17 ;
M0.118=ToGate18 ;
M0.119=ToGate19 ;
DR0.22=ap0 ;
DR0.36=apt1 ;
DR0.38=apt2 ;
DR0.40=apt22 ;
DR0.42=apt3 ;
DR0.44=apt33 ;
DR0.46=apt333 ;
DR0.48=final0 ;
DR0.50=final1 ;
DR0.52=final2 ;

DR0.54=final3	;
DR0.62=In	;
DR0.64=In0	;
DR0.66=In1	;
DR0.68=In11	;
DR0.70=In2	;
DR0.72=In22	;
DR0.74=In111	;
SM0.3=SM_1Hz	;1Hz pulses, On during one cycle
SM0.4=SM_10Hz	;10Hz pulses, On during one cycle