

Programming

Programming the ProTech 203 system consists of entering values for all of the tunable parameters. The procedure for programming each speed-sensing unit is as follows:



WARNING—TRIP POINT PROGRAMMING

In order to ensure proper functioning of the ProTech 203 system, it is imperative that the tunable parameters in each of the units are programmed to result in identical trip points. Failure to do so could result in inadvertent trips or failure to trip at appropriate speed resulting in property damage, injury, or death.

1. Switch the keyswitch to the PROGRAM position.
2. Press the MENU key to step through the parameter menu to the first tunable parameter, TRIP SPEED SETPOINT.
3. Use the CURSOR RIGHT, ADJ UP, and ADJ DOWN keys to enter the proper rpm for your preferred TRIP SPEED SETPOINT.
4. Press the MENU key to step to the next tunable parameter, MPU FAILED SETPOINT.
5. Use the CURSOR RIGHT, ADJ UP, and, ADJ DOWN to enter the proper rpm for your preferred MPU FAILED SETPOINT.
6. Press the MENU key to step to the next tunable parameter, MPU FAILED TIMEOUT.
7. Use the CURSOR RIGHT, ADJ UP, and, ADJ DOWN keys to enter the appropriate time interval.
8. Press the MENU key to step to the next tunable parameter, MPU GEAR TEETH.
9. Use the CURSOR RIGHT, ADJ UP, and ADJ DOWN keys to enter the number of gear teeth on the gear being monitored by the MPU connected to this unit.
10. Press the MENU key to step to the next tunable parameter, TRIP ON MPU FAILURE.
11. Use the ADJ UP or ADJ DOWN key to enter a “yes” or “no” response.
12. Press the MENU key to step to the NEXT tunable parameter, TIMER STARTS ON RESET
13. Use the ADJ UP or ADJ DOWN key to enter a “yes” or “no” response.
14. Press the MENU key to step to the last tunable parameter, ALARM IF SPEED < MPU FAIL SETPOINT.
15. Use the ADJ UP or ADJ DOWN key to enter a “yes” or “no” response.
16. Duplicate this procedure for the other two units.

17. Return the keyswitch to the monitor position. The LCD displays CHANGES SAVED for two seconds.

For your convenience, a programming worksheet is provided on the next page. The worksheet should help ensure proper programming and provide you with a hard copy record of the values entered. Feel free to copy the worksheet for future use.

ProTech 203 Programming Worksheet

UNIT A	UNIT B	UNIT C
TRIP SPEED SETPOINT	TRIP SPEED SETPOINT	TRIP SPEED SETPOINT
Prime mover speed in rpm at which user expects unit to de-energize its alarm relay, turn on the TRIP LED, and energize/de-energize, (depending upon the version chosen) its voter relays.		
MPU FAILED SETPOINT	MPU FAILED SETPOINT	MPU FAILED SETPOINT
The prime mover speed must exceed this value within the MPU FAILED TIMEOUT period or the unit will trip. If the TIMER STARTS on RESET option is set to "Yes", the speed must also exceed this value whenever the contact input is open or the unit will trip.		
MPU FAILED TIMEOUT	MPU FAILED TIMEOUT	MPU FAILED TIMEOUT
Time period after a reset, during which the prime mover speed must exceed the MPU FAILED SETPOINT or unit will trip.		
MPU GEAR TEETH	MPU GEAR TEETH	MPU GEAR TEETH
Number of gear teeth the MPU is looking at.		
TRIP ON MPU FAILURE	TRIP ON MPU FAILURE	TRIP ON MPU FAILURE
"Yes" or "No" option. If an MPU loss-of-signal occurs, the MPU FAIL LED turns on and the alarm relay de-energizes. If the TRIP ON MPU FAILURE option is set to "Yes", the unit trips. This option applies only to a sudden loss of MPU signal while running. Trips due to an MPU timer timeout or an open contact input are not affected by this option.		
TIMER STARTS ON RESET	TIMER STARTS ON RESET	TIMER STARTS ON RESET
"Yes" or "No" option. If set to "No", the MPU fail timer starts when start key is pressed or when the contact input opens. If set to "Yes", the MPU fail timer starts when the reset key is pressed or remote reset is momentarily closed.		
ALARM IF SPEED < MPU FAIL SETPOINT	ALARM IF SPEED < MPU FAIL SETPOINT	ALARM IF SPEED < MPU FAIL SETPOINT
This option only applies when the "TIMER STARTS ON RESET" option is set to "Yes". If this option is set to "Yes", the alarm relay de-energizes whenever speed is below the MPU fail set point.		