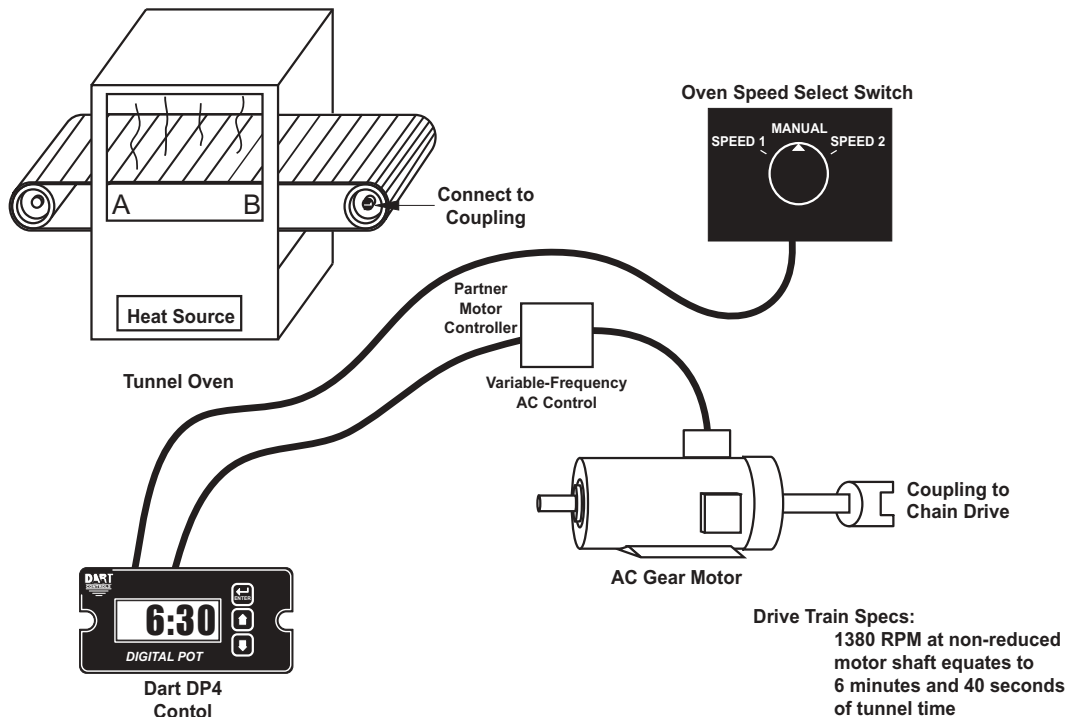


User Interface for Industrial Conveyor Oven with AC Drive

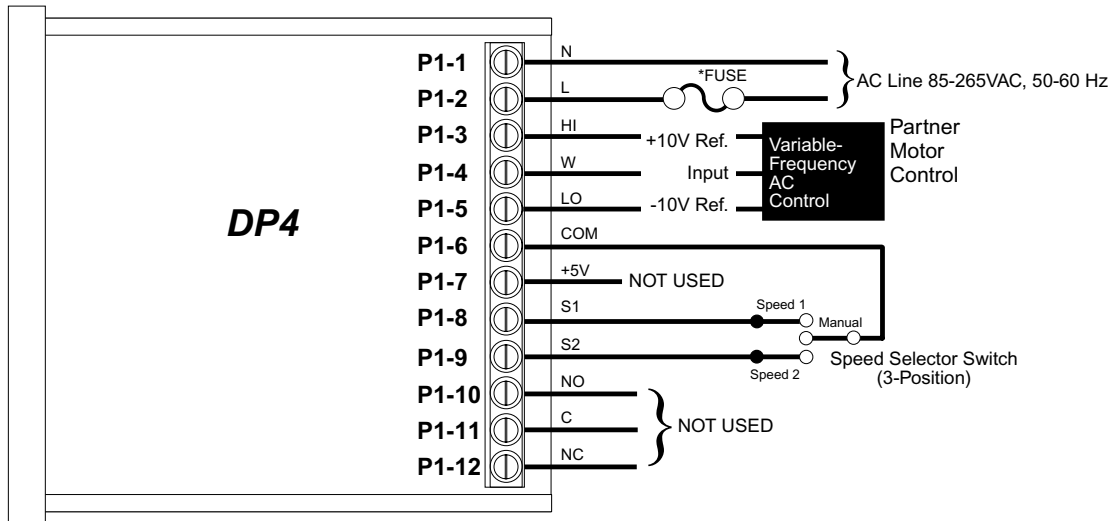
Description:

An industrial tunnel oven currently uses an AC inverter drive with an attached speedpot to control the motor which drives its train. Because the process time for the oven is known, it is preferred that the user be able to set the process time in minutes and seconds on a digital display. Using a DP4, this is quite simple and requires a minimum amount of installation and training effort to complete. In this example, a DP4 has been connected to the existing AC inverter drive and a remote speed select switch which allows the user to select from one of two preprogrammed time settings (2 or 4 minutes) or to enter a manual mode where the display of the unit can be directly adjusted using the front panel's up and down arrow buttons. The desired display range is from 90 seconds (1:30) to 600 seconds (10:00). Calibration and measurement from the previously installed speed potentiometer has shown that a voltage output of 30% - 76% of the applied reference voltage from the AC inverter will produce the desired time range.

Application Diagram:



Wiring Diagram:



* Size fuse according to unit and application. See electrical specifications for maximums.

Parameter Configuration:

Parameter	Value	Notes
10	5	Output mode set to time unipolar to support single-direction application
20	90	Display minimum set to 90 seconds (1 minute 30 seconds)
21	600	Display maximum set to 600 seconds (10 minutes)
25	30	Set output minimum to 30%
26	76	Set output maximum to 76%
30	3	Input S1 set to force jog when low
31	120	Input S1 jog setpoint set to 120 seconds (2:00 on the display)
35	3	Input S2 set to force jog when low
36	240	Input S2 jog setpoint set to 240 seconds (4:00 on the display)