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i4 Automation Ltd
Innovative Solutions for Industry

Inverter push button control

The Unitronics range of inverters can be controlled by connecting 24VDC to the terminals on the front of the control board, as standard the 24VDC needs to be permanently connected for forward or reverse rotation. In some applications the inverter is controlled by means of a normally open START push button and a normally closed STOP push button, this requires the terminals to be reconfigured for tri-linear or three wire control.

Equipment used: UMI-0004BE-B1

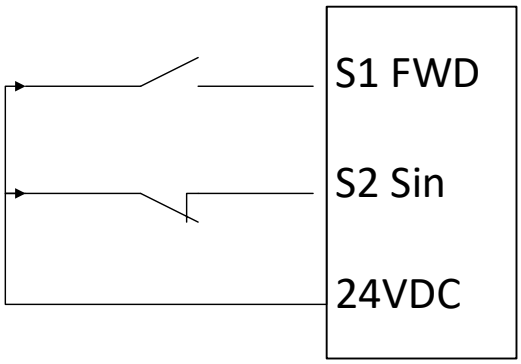
Jumper position: PW-COM Uses internal 24VDC power supply PNP
Terminal S1: START push button (normally open) connects 24VDC to S1
Terminal S2: STOP push button (normally closed) connects 24VDC to S2

Parameters

P05.01: Set to 1 (FWD rotation)
P05.02: Set to 3 (Tri-linear/Three wire control) This sets S2 to Sin
P05.13: Set to 2

Operation

24VDC is permanently applied to S2 via the STOP NC push button and a pulse to S1 via the START NO push button will set the inverter to rotate in the forward direction. When the START button is released the inverter will continue in the forward direction until the 24VDC is momentarily removed from S2 by pushing the STOP push button, at which point the inverter will decelerate to a stop.



Please note that there are additional aspects to this control method should they be required, please refer to the inverter manual parameter section 5.

Tony Spearing
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