



Note: If 74HC86 used do load U7 & U8 do not load the 33R resistors R34-R38
 If 74AC86 used do not load U7 & U8 do load the 33R resistors R34-R37
 The 74AC and some other types have a 24mA or more output, check specs first.

U7 & U8 = TC4424 or TC4427
 (LCSC HX4424-P or HX4427-P)

The Variac draws 1.5W at idle (Vout set at 0) and ~ 10W set at 240V no load.
 It will start and run from 10V up supply, but maximum Vout is ~ 50V for 10V in.
 Having said that, 16V up should be minimum.
 This project could also be a handy small inverter for a soldering iron Fridge etc if mains fails.
 Has provision for thermistor on heatsink and Fan output.

Front Panel On/Off LEDs & Reset O/C

Title		
WG45-Rev2 Nano Variac Controller		
Size	Number	Revision
A4		
Date:	26/05/2024	Sheet of
File:	G:\Variac\Rev1\VariacNano R1.SchDoc	Drawn By: