

T600/T500 Scrub Controller Board

Changelog: REV A--Initial concept. REV B--Eliminate contactor driver and precharge. --Q25058-001 Mule boards. REV C--Change TVS on wand pump driver. --025058-002 P1.5 boards. --Delete MODEM IN RANGE signal from main micro. --Add new multivibrator U78 for vac drive. --Change bias pullups on current amps to 560K. --Change gate drive resistors on half and full bridge drivers to 10 ohms,. REV D--Change connection of Vbat pin to Vdd. 025058-003 P2.5 board. --R175 increased to 1K for more ESD protection. --Change L1 to a larger size. --Replace U42 with higher current part. --Replace wand pump driver with higher 16A cpability driver. --Some TVS diodes were 45V, some were 48V. Change them all to 48V in anticipation of using this board in a 36V machine. --Add RC filter to SHUNT_CURRENT and SHUNT_REFERENCE. --Add 470uF bulk capacitor to WAND_PUMP_HIGH. --Add capacitor on I-drive enable output. REV E--025058-003 Prod boards same PCB as P2.5.. --Update DNI items for generating production BOM. REV F--Populate C434 with 150pF.. REFERENCE SCHEMATIC 026008-001 Paraguay Changes: Q26033-001 REV A --- REV BITS on both micros set to 010. -- Bulk Capacitors set to 63V capacity with same footprint -- TVS diodes verified to support higher VBATT -- Resistors changed to accomodat higher VBATT: R192 124K -> 169K R199 44.2K -> 66.5K R171 200K -> 267K Paraguay Changes: Q26033-002 REV A --- REV BITS on micro U64 set to 011 -- Added note to place Ground lines around RESET DRIVERS line to remove coupling issues. -- Changed All Half and full bridges Rg from 10ohm to 3ohm. All Half and full bridges Cgs for top FETs to DNI. All Reset Driver lines changed from 100kohms to 1kohms with 0.1uf capacitance to ground. Reset Driver Pull up resistor from 1K to 250 ohms with 0.1uf capacitance to ground.































