Isolated Inverter Platform

Revision History

Rev 1: Initial Draft
1. Add pull down resistors R184-R189 on PWM channels
2. Change C14 to 10uF and added C145,C146 10uF in parallel
3. Add D23 100kΩ at the DC bus voltage input
4. Add toggle switch SW2, SW3 for start/stop and control mode select and connect to PA08 and PA09
5. Add momentary switch SW4 for manual reset and connect to TRIP_RESET with pull up and pull down resistor R192, R193
6. Add pull down resistor R196, R191 to PA08 and PA09 for start/Stop and control mode signals
7. Install R148-R151, R175 to 0 Ω by default
8. Change D18-D20 to LG L29K-G221-24-2 green LED and D17, D21 to LS L29K-HL12-1-2 for the same series red LED
9. Change U27 to NOR gate 74LVC1G02GW,125
10. Change R140 and R110 to 100kΩ
11. Update netlist error on page 6 change +7.5VPhaseW to +7.5PhaseW

Rev 2: 1. Add pull down resistors R184-R189 on PWM channels
2. Change C14 to 10uF and added C145,C146 10uF in parallel
3. Add D23 100kΩ at the DC bus voltage input
4. Add toggle switch SW2, SW3 for start/stop and control mode select and connect to PA08 and PA09
5. Add momentary switch SW4 for manual reset and connect to TRIP_RESET with pull up and pull down resistor R192, R193
6. Add pull down resistor R196, R191 to PA08 and PA09 for start/Stop and control mode signals
7. Install R148-R151, R175 to 0 Ω by default
8. Change D18-D20 to LG L29K-G221-24-2 green LED and D17, D21 to LS L29K-HL12-1-2 for the same series red LED
9. Change U27 to NOR gate 74LVC1G02GW,125
10. Change R140 and R110 to 100kΩ
11. Update netlist error on page 6 change +7.5VPhaseW to +7.5PhaseW
12. Change R148-R151, R175 to 0 Ω by default
13. Change D18-D20 to LG L29K-G221-24-2 green LED and D17, D21 to LS L29K-HL12-1-2 for the same series red LED
14. Change U27 to NOR gate 74LVC1G02GW,125
15. Change R140 and R110 to 100kΩ
16. Update netlist error on page 6 change +7.5VPhaseW to +7.5PhaseW

Rev 3: Replace P1 to new 40 pin connector
CURRENT SENSE RESOLUTION: 6.67A/V1.8V -> 12A

CURRENT TRIP: 12A

GAIN = 30

CURRENT TRIP LATCH AND RESET

HEAT SINK FOR IGBTs