

PTP LAB WORKBOOK

"ACS 501"

SECTION #1 ACS 501 Preliminary - Static (no power applied)

1. • Hardware, IC's and Connectors Seated Properly? _____
 • S1 & S2 jumpers in proper setting? _____
 • S3 & S4 jumpers in proper setting? _____

2. Input Fuses _____ (ohms)

3. Input Diode Bridge: + - / - +

U₁ to + Buss _____ / _____ (ohms)

V₁ to + Buss _____ / _____ (ohms)

W₁ to + Buss _____ / _____ (ohms)

U₁ to - Buss _____ / _____ (ohms)

V₁ to - Buss _____ / _____ (ohms)

W₁ to - Buss _____ / _____ (ohms)

4. Output IGBT'S: + - / - +

U₂ to + Buss _____ / _____ (Vdc)

V₂ to + Buss _____ / _____ (Vdc)

W₂ to + Buss _____ / _____ (Vdc)

U₂ to - Buss _____ / _____ (Vdc)

V₂ to - Buss _____ / _____ (Vdc)

W₂ to - Buss _____ / _____ (Vdc)

Section #2 ACS 501 Preliminary - Dynamic
(before enabling)

1. Input Voltage _____ (Vac) _____ (Vac) _____ (Vac)
2. Buss Voltage _____ (Vdc)
_____ (Vac ripple content on DC Buss)
3. Power Supplies:
 - +5 _____ (Vdc)
 - +8 _____ (Vdc)
 - +24 _____ (Vdc)

SECTION #3 ACS 501 Preliminary - Dynamic
(enabled)

1. Drive at zero speed (Keypad Control)
 - a. Input Voltage _____ VAC _____ VAC _____ VAC
 - b. Buss voltage _____ (Vdc)
_____ (Vac ripple content)
 - c. Output Voltage _____ (Vac) _____ (Vac) _____ (Vac)
2. Drive at 5Hz
 - a. Input Voltage _____ VAC _____ VAC _____ VAC
 - b. Buss voltage _____ (Vdc)
_____ (Vac ripple content)
 - c. Output Voltage _____ (Vac) _____ (Vac) _____ (Vac)

3. Drive at 30Hz

a. Input Voltage _____ VAC _____ VAC _____ VAC

b. Buss voltage _____ (Vdc)
_____ (Vac ripple content)

c. Output Voltage _____ (Vac) _____ (Vac) _____ (Vac)

4. Drive at 60Hz

a. Input Voltage _____ VAC _____ VAC _____ VAC

b. Buss voltage _____ (Vdc)
_____ (Vac ripple content)

c. Output Voltage _____ (Vac) _____ (Vac) _____ (Vac)

d. DC buss to Output Voltage: $\begin{matrix} + & - \\ \hline \end{matrix}$ / $\begin{matrix} - & + \\ \hline \end{matrix}$

U₂ to + Buss _____ / _____ (Vdc)

V₂ to + Buss _____ / _____ (Vdc)

W₂ to + Buss _____ / _____ (Vdc)

U₂ to - Buss _____ / _____ (Vdc)

V₂ to - Buss _____ / _____ (Vdc)

W₂ to - Buss _____ / _____ (Vdc)

5. Drive at any extended frequency

a. Input Voltage _____ VAC _____ VAC _____ VAC

b. Buss voltage _____ (Vdc)
_____ (Vac ripple content)

c. Output Voltage _____ (Vac) _____ (Vac) _____ (Vac)