Test Procedure for the NCP5181 Evaluation Board

ON Semiconductor®

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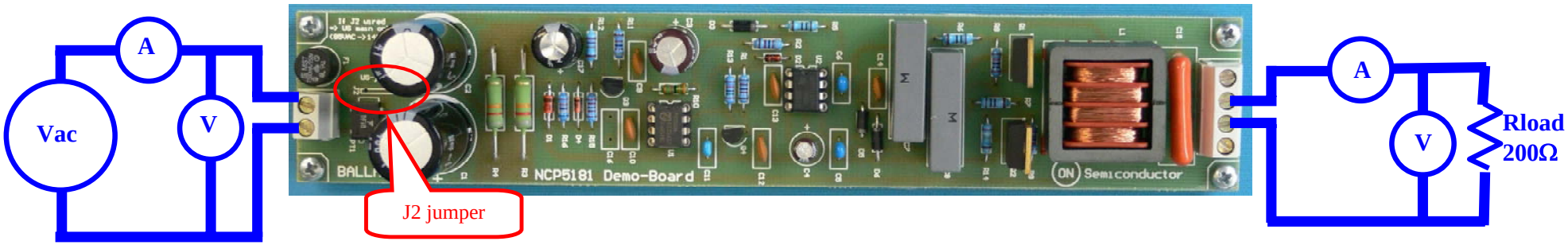

Table 1: Required Equipment

AC power source can be able to deliver 230Vrms or 110Vrms	two volt-meters	two ampere-meters
1 resistive load: 200 Ω / 50 W	One NCP5181 Evaluation Board	

Test Procedure:

1. **First of all check if you need jumper #2 (J2 on the board close the diode bridge). This jumper must be removed for use with European mains (230 Vac input voltage), and must be in place when using US mains (110 Vac). This jumper is used to build a voltage doubler just after the bridge diode in case one is using US mains input voltage range.**

2. **Connect the test setup as shown above:**
   - **AC source**
   - **Voltmeter and Ampmeter on the load**
   - **Load on the output**

3. **Apply 230 Vac for European mains or 110 Vac for US mains on the input connector.**

4. **Check Iload and Vload with the appropriate value in the table below.**

5. **If you get the correct output and input voltage, you can then connect a 36 W fluorescent tube on the output (see the ballast connection figure).**

Test results:

Input mains	J2	Vin (Vrms)	Iin (Arms)	Vload (Vrms)	Iload (Arms)
European	Removed	230 V	278 mA	303 V	370 mA
US	Yes ➔ max input voltage: 132 Vrms	110 V	514 mA	263 V	340 mA

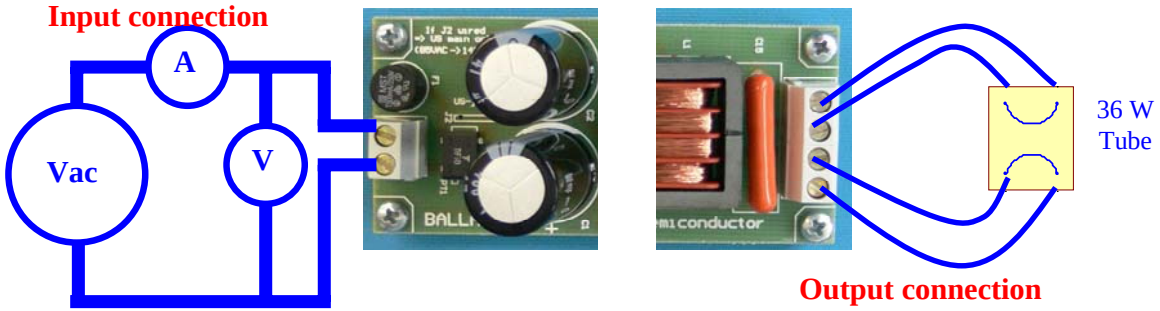

Figure 1: Ballast connection