

# TECH NOTE

## Current Draw of the LDC-3926 16-Channel High Power Laser Diode Controller

### OVERVIEW

This report details results for current draw testing on the LDC-3926 mainframe.

### MEASUREMENT SETUP

An LDC-3926 mainframe was plugged into a Chroma Model 6430 Programmable AC Source. The Chroma is capable of supplying current at various line voltage and frequency levels, and measures current drawn by the instrument. The mainframe was fully loaded with either laser or TEC controller modules, and all modules were operated at 0A, 3A, and 6A output. Tests were run for Japanese, American, and European Union line voltage levels.

### RESULTS

Figures 1 and 2 show the current draw for a mainframe fully loaded at Japanese line voltage levels. Figures 3 and 4 show the current draw at American line voltage levels. Figures 5 and 6 show current draw at European Union line voltage levels.

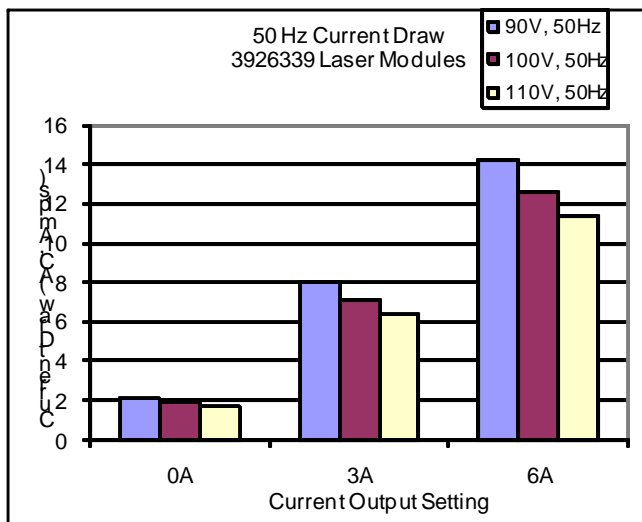


FIGURE 1 – Current Draw at 50 Hz; Japanese Voltage 3926339 Laser Control Modules

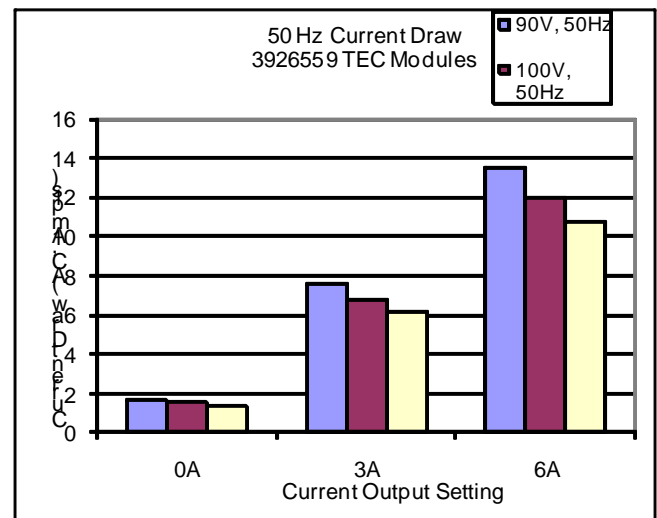


FIGURE 2 – Current Draw at 50 Hz; Japanese Voltage 3926559 Laser Control Modules

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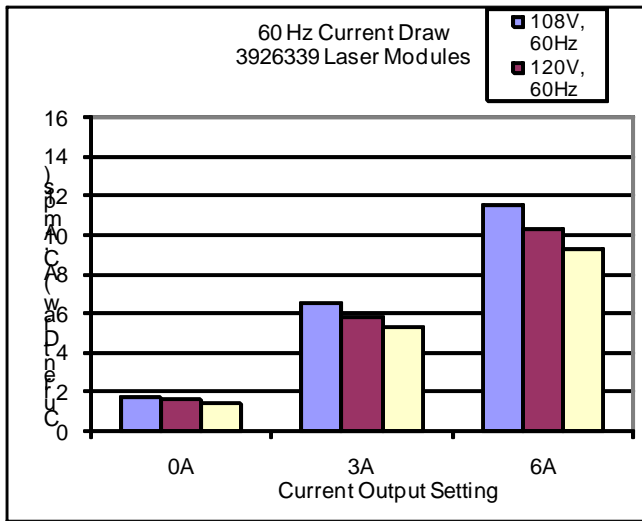


FIGURE 3 – Current Draw at 60 Hz; American Voltage 3926339 Laser Control Modules

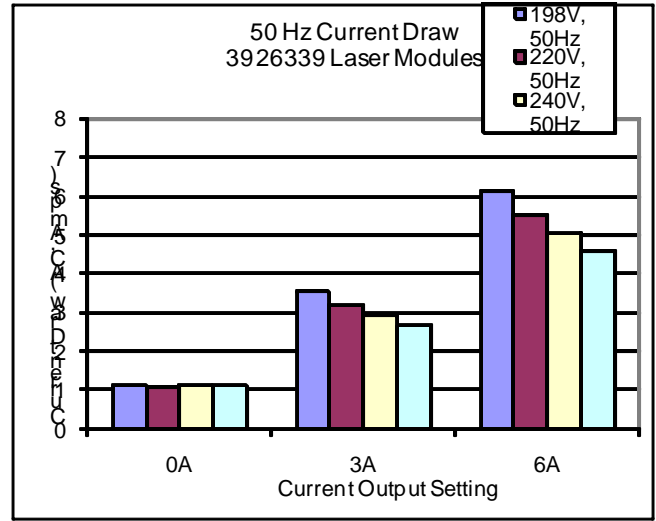


FIGURE 5 – Current Draw at 50 Hz; European Union Voltage 3926339 Laser Control Modules

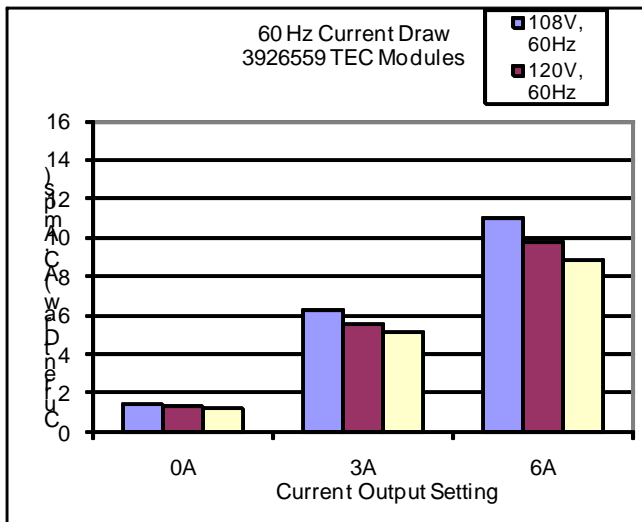


FIGURE 4 – Current Draw at 60 Hz; American Voltage 3926559 Laser Control Modules

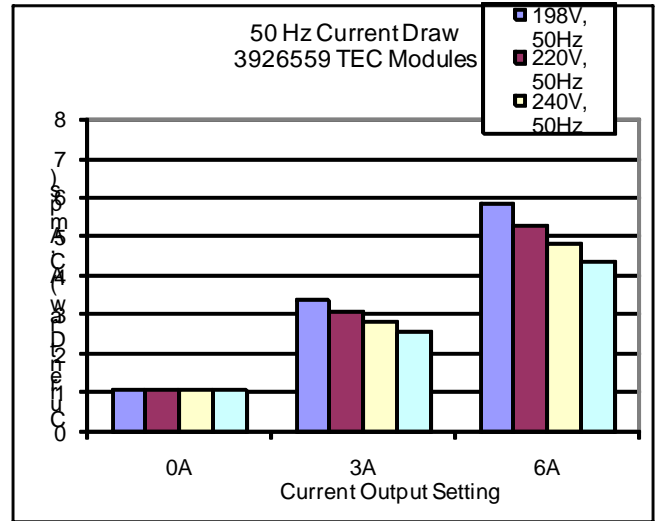


FIGURE 6 – Current Draw at 50 Hz; European Union Voltage 3926559 Laser Control Modules