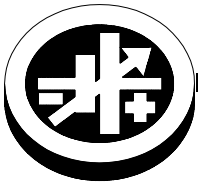


# INSTRUCTION SHEET



**KEPCO** An ISO 9001 Company.

## EL LOAD OPERATING CURVES

### EL ELECTRONIC LOAD OPERATING CURVES

#### I — INTRODUCTION

Kepeco EL Series loads may be operated at any point within a boundary defined by the following characteristics of each model: rated power, rated voltage, rated current, and the minimum resistance.

The constant voltage (CV) boundary starts at rated voltage and near zero current. As source current increases, voltage stays constant until a point is reached at which the rated power dictates that increasing current must have a corresponding decrease in voltage: this is the start of the constant power (CP) boundary. Once source current increases to the rated current of the model, this is the start of the constant current (CI) boundary, where current stays at the rated value while source voltage decreases until the load

reaches its minimum resistance. This is the start of the constant resistance (CR) boundary, where decreases in source current or source voltage must decrease the available power.

#### II — HOW TO USE THE CURVES.

The load may be operated at any given input condition that is within the red line boundary shown below for Model 5K-400-420. For example: If a 300 Volt source is to be tested with a Model 5K-400-420, select the 300 Volt line (blue) and note the range of current allowable along that line. In this example, the load may be operated in CV mode at currents from near zero to a maximum of 16.6 Amperes @300V.

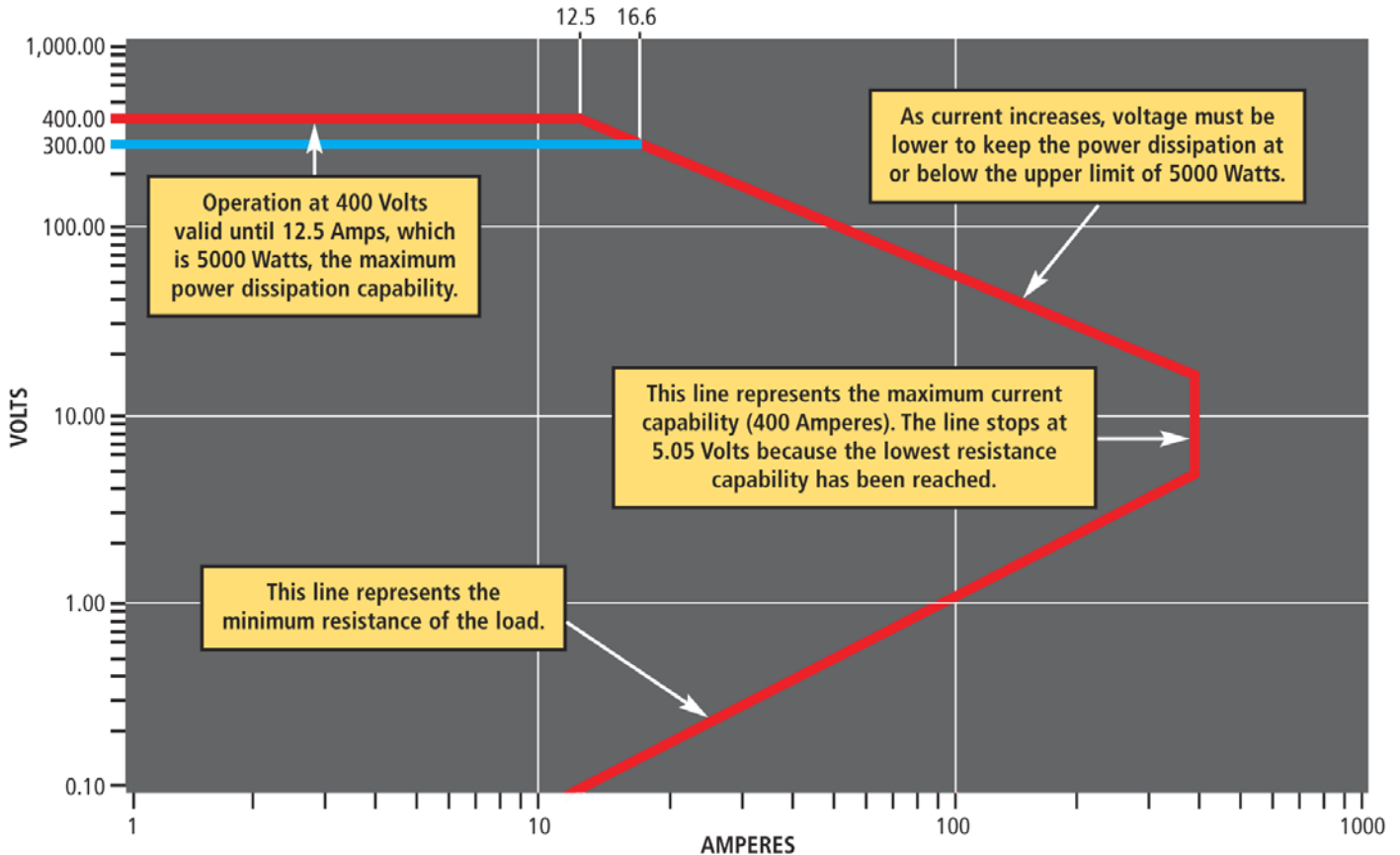


FIGURE 1. EXAMPLE OF SAFE OPERATING AREA FOR EL 5K-400-420

# EL 1KW MODELS

EL 1K-50-125

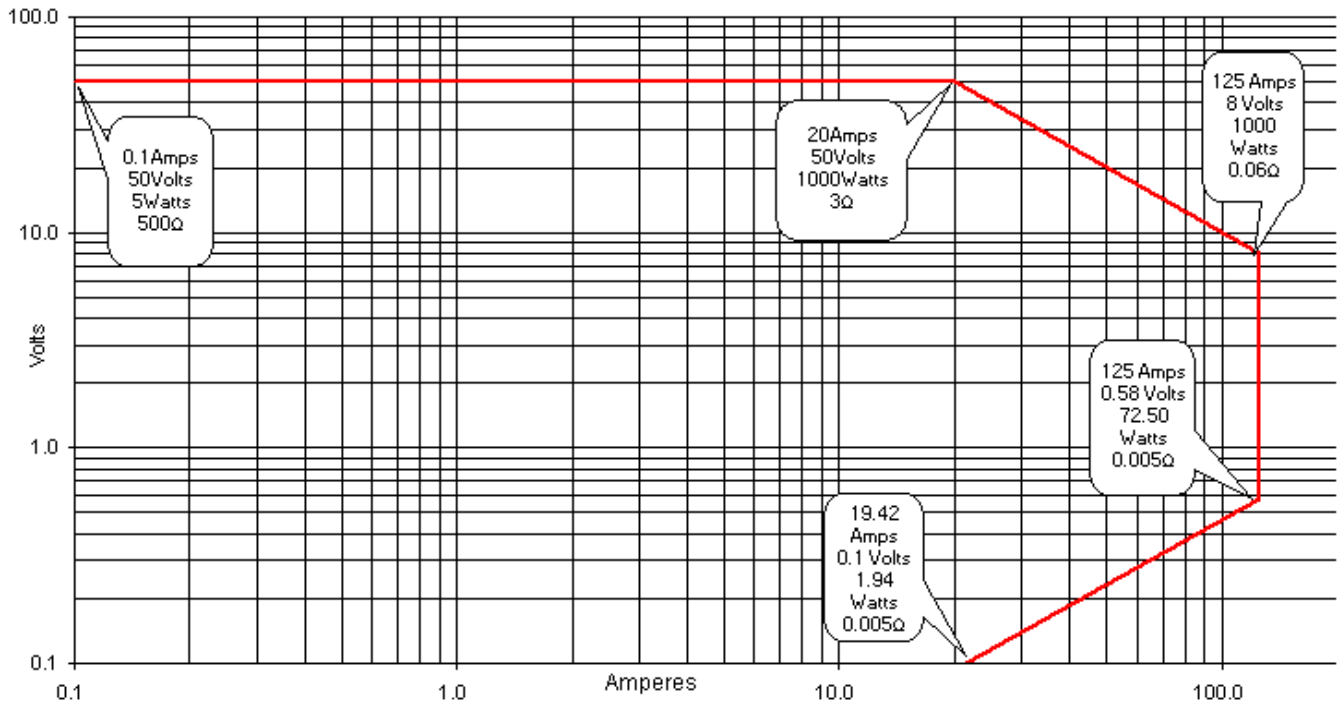


FIGURE 2. MODEL EL 1K-50-125: 1000 WATTS, 50 VOLTS, 125 AMPERES

EL 1K-200-100

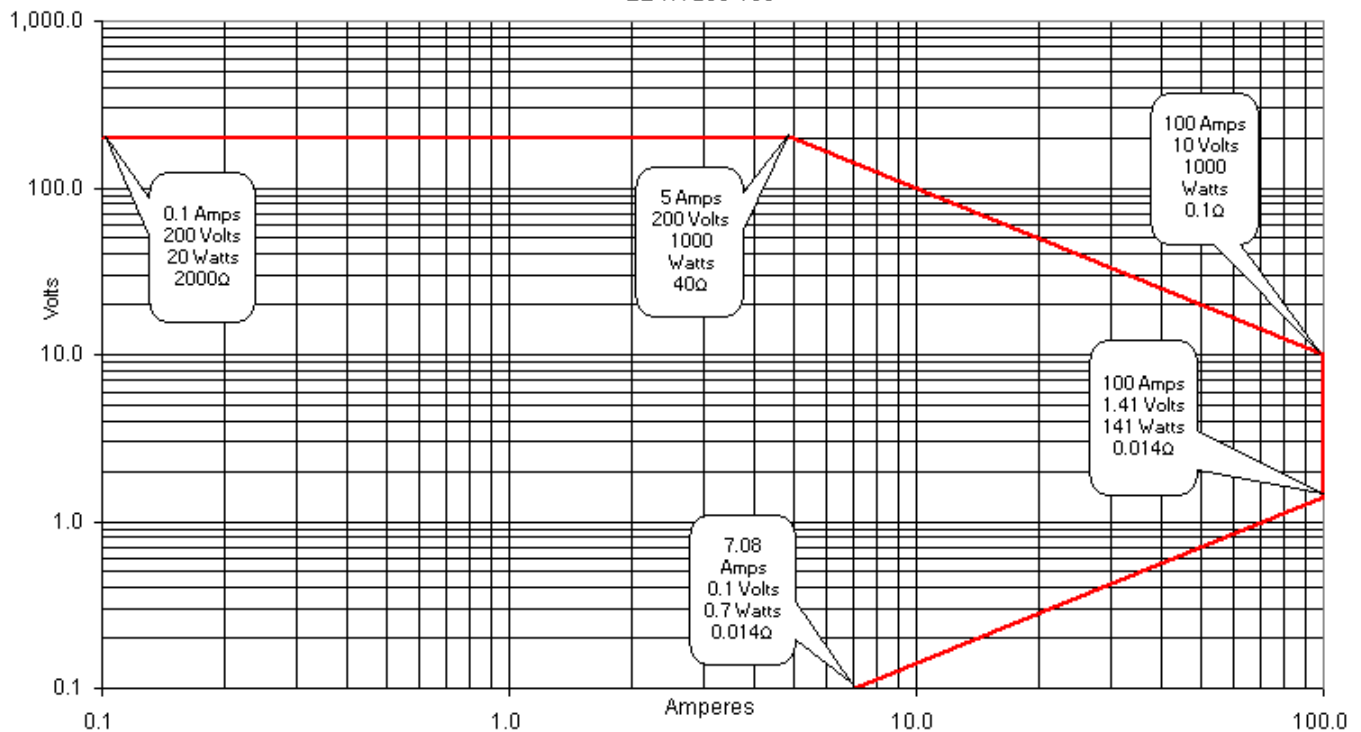
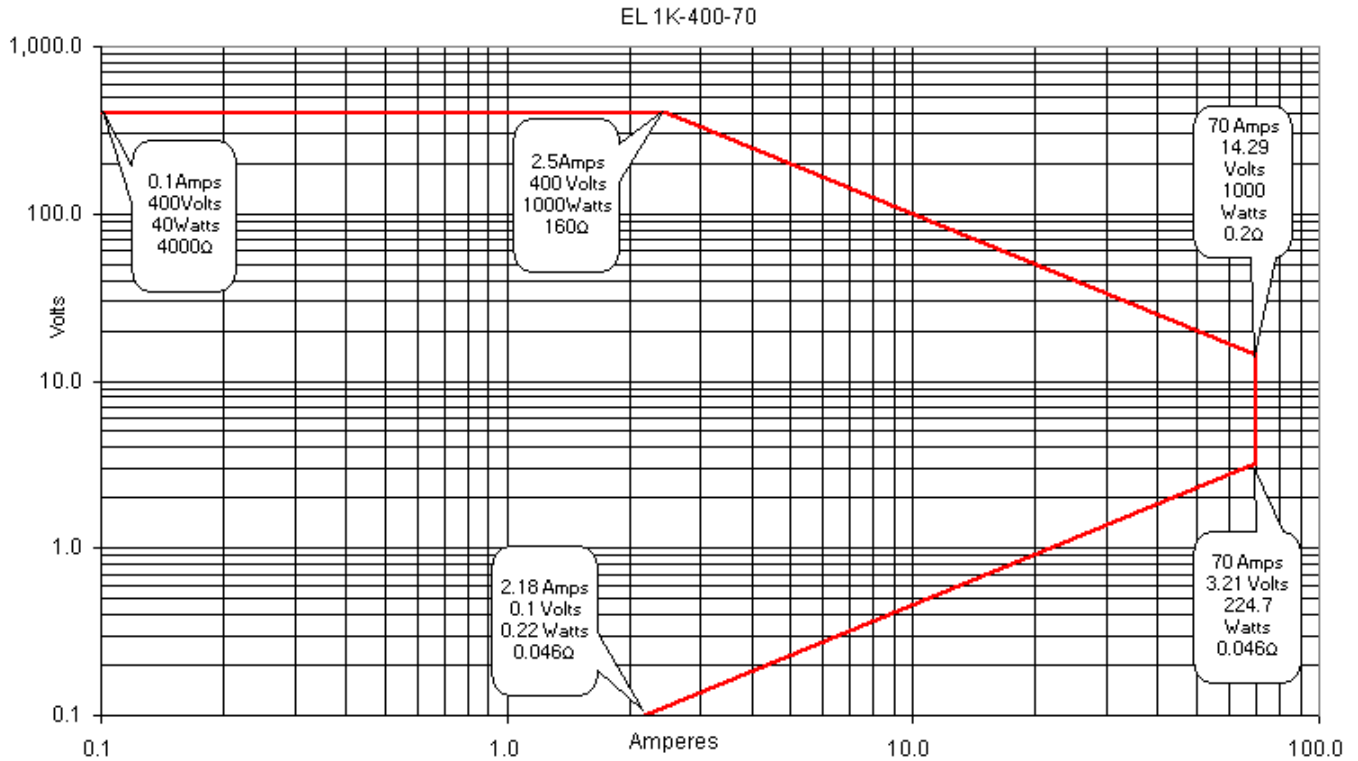
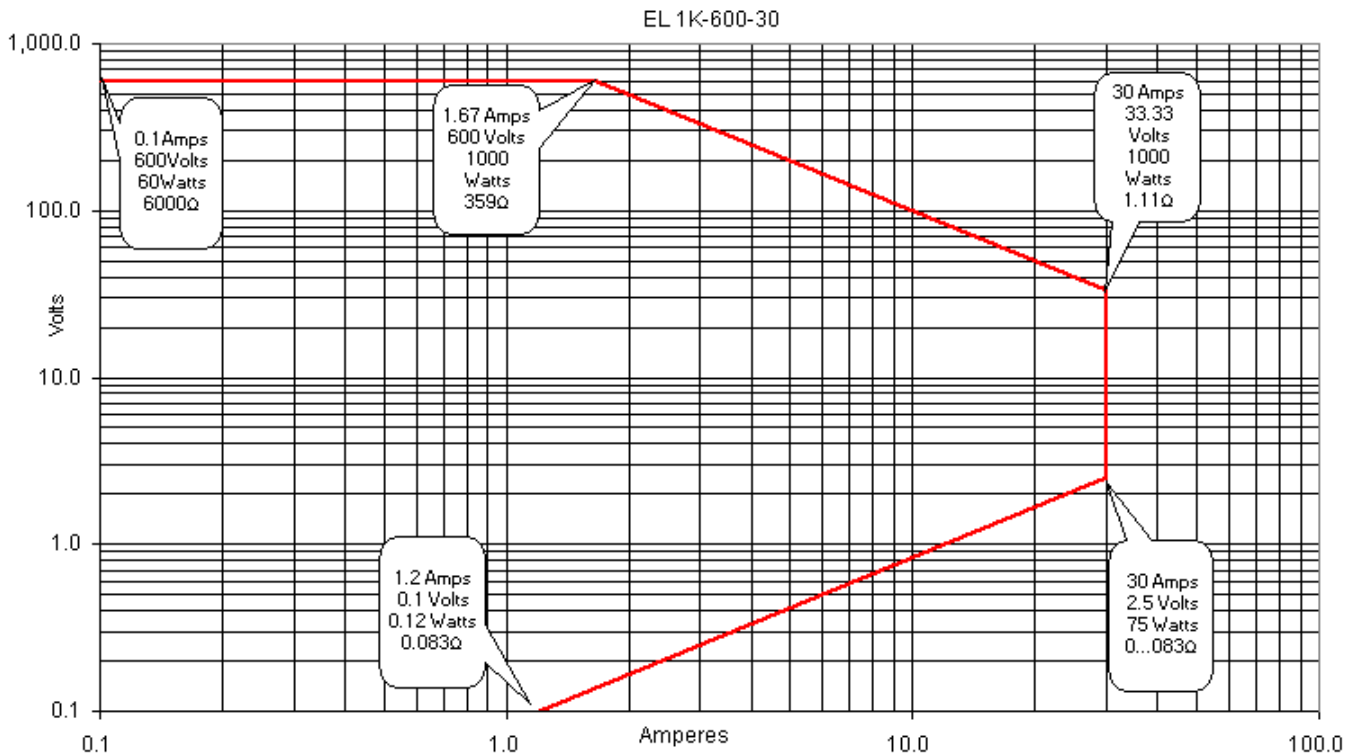


FIGURE 3. MODEL EL 1K-200-100: 1000 WATTS, 200 VOLTS, 100 AMPERES

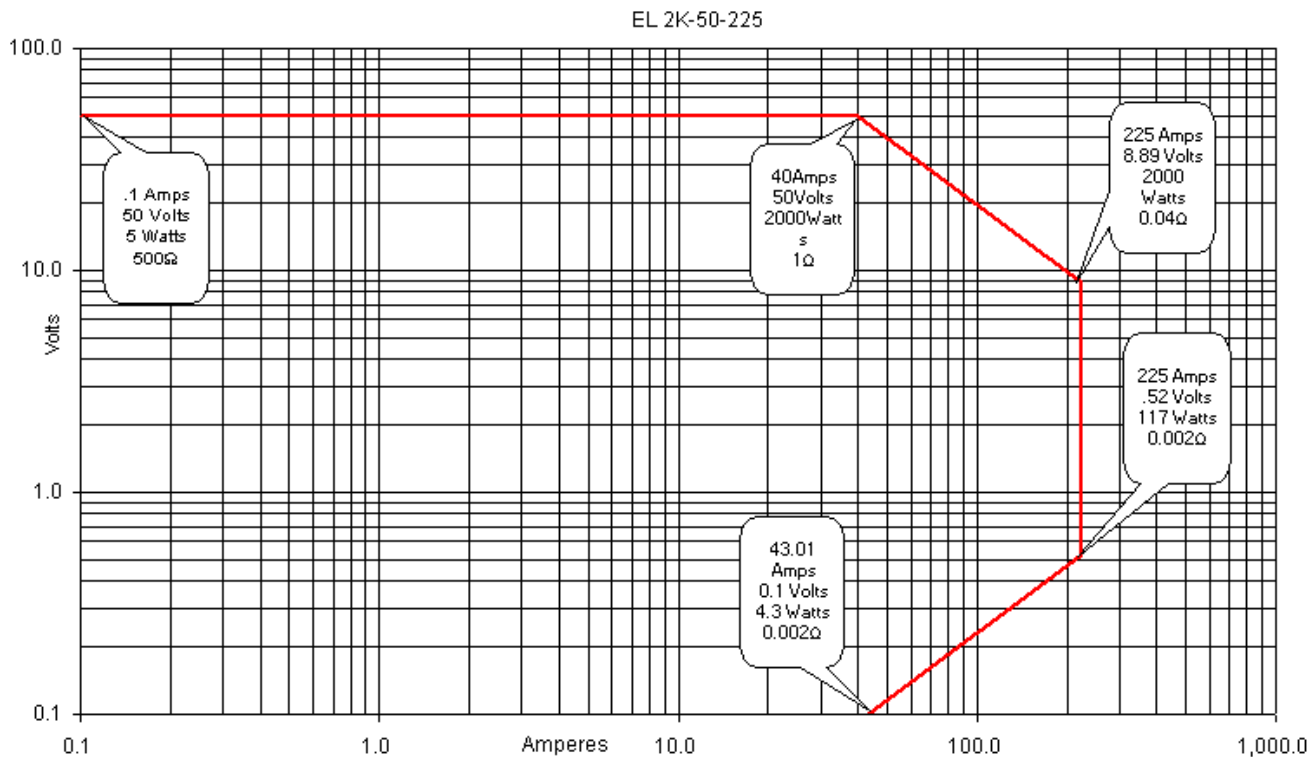


**FIGURE 4. MODEL EL 1K-400-70: 1000 WATTS, 400 VOLTS, 70 AMPERES**

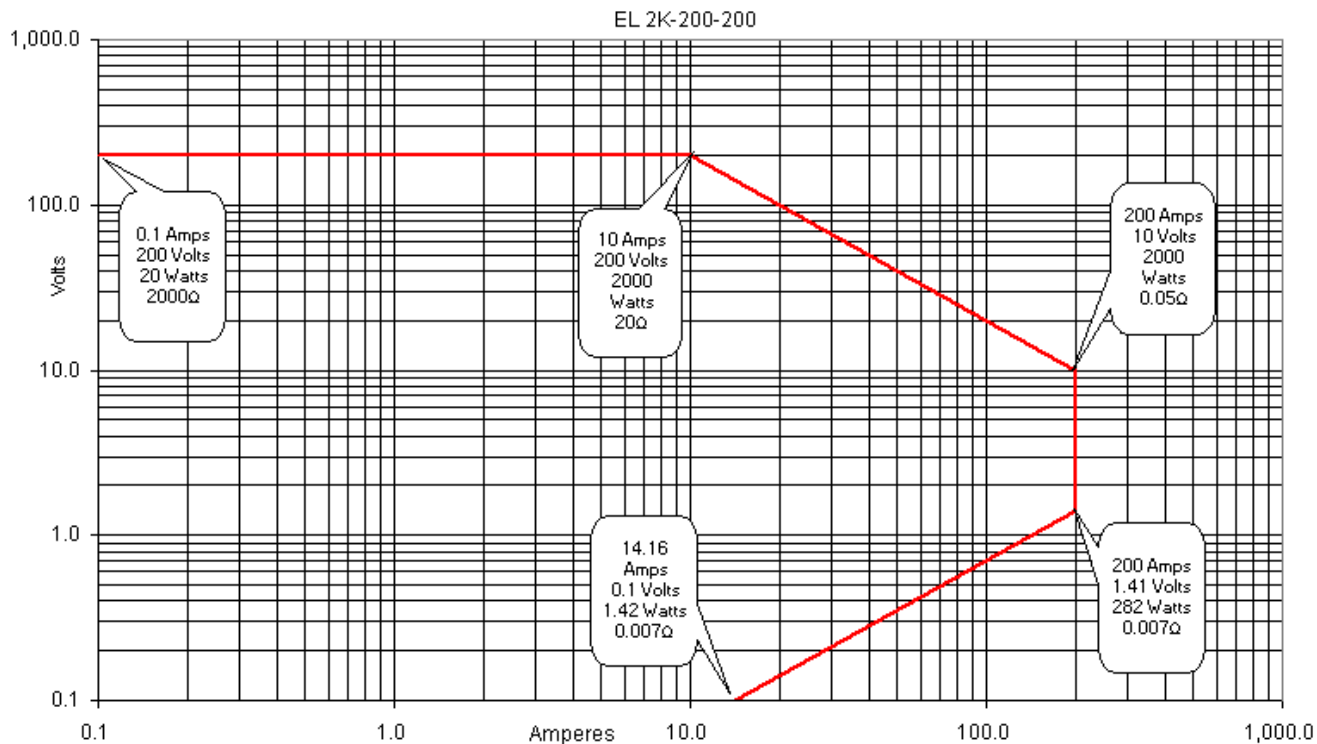


**FIGURE 5. MODEL EL 1K-600-30: 1000 WATTS, 600 VOLTS, 30 AMPERES**

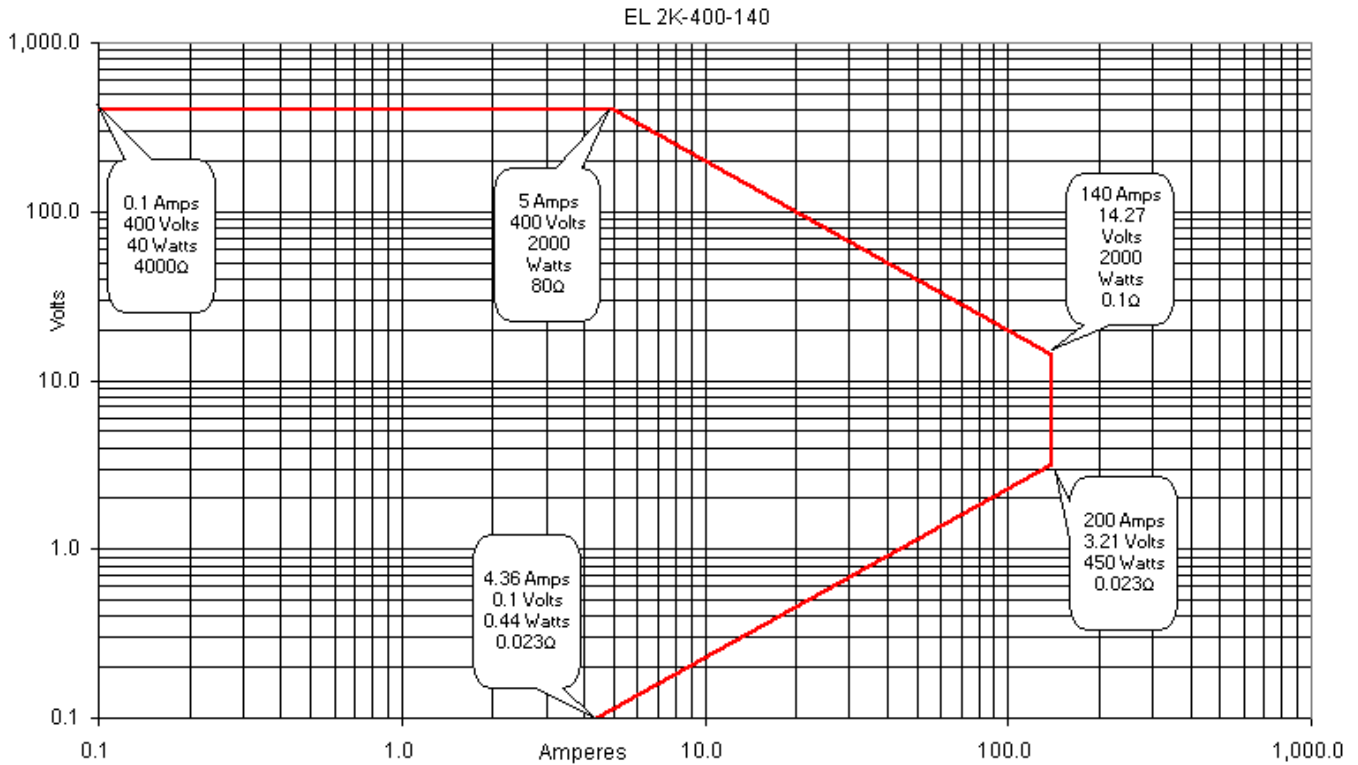
**EL 2KW MODELS**



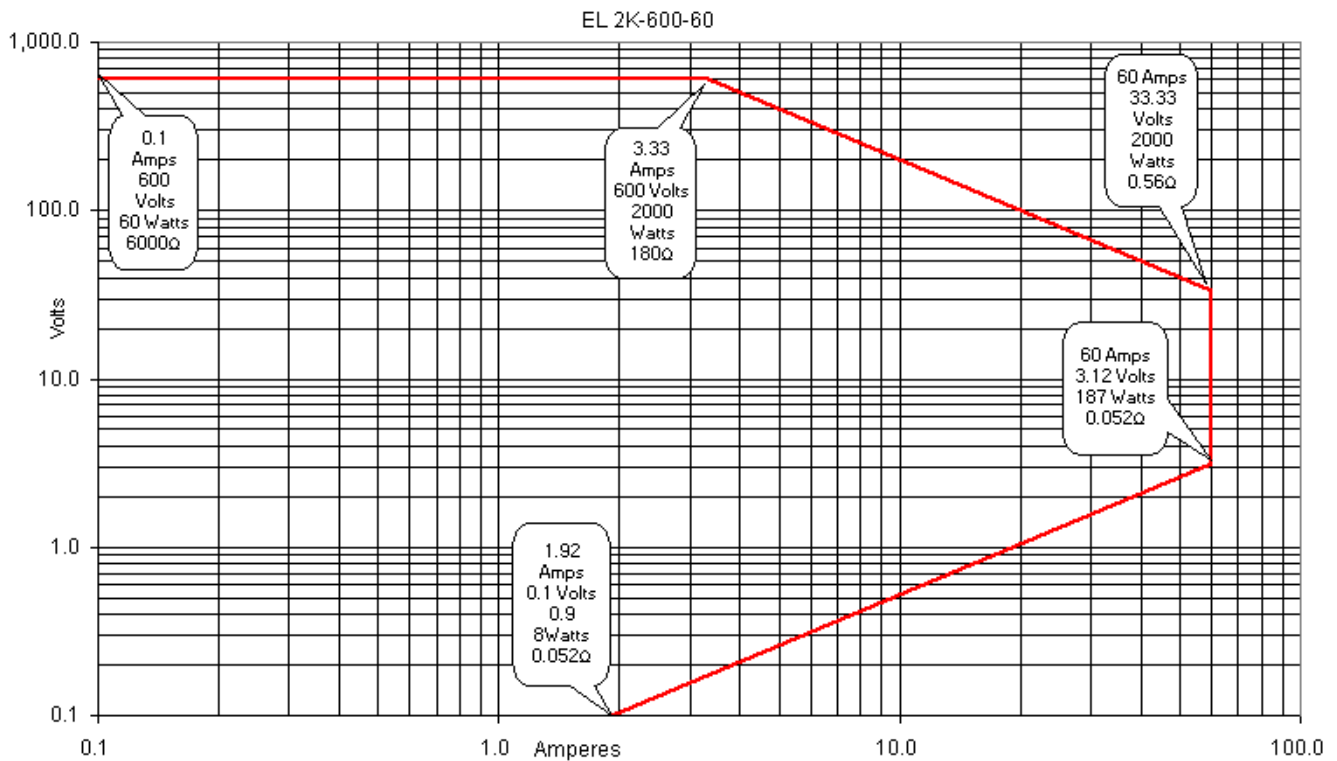
**FIGURE 6. MODEL EL 2K-50-250: 2000 WATTS, 50 VOLTS, 250 AMPERES**



**FIGURE 7. MODEL EL 2K-200-200: 2000 WATTS, 200 VOLTS, 200 AMPERES**

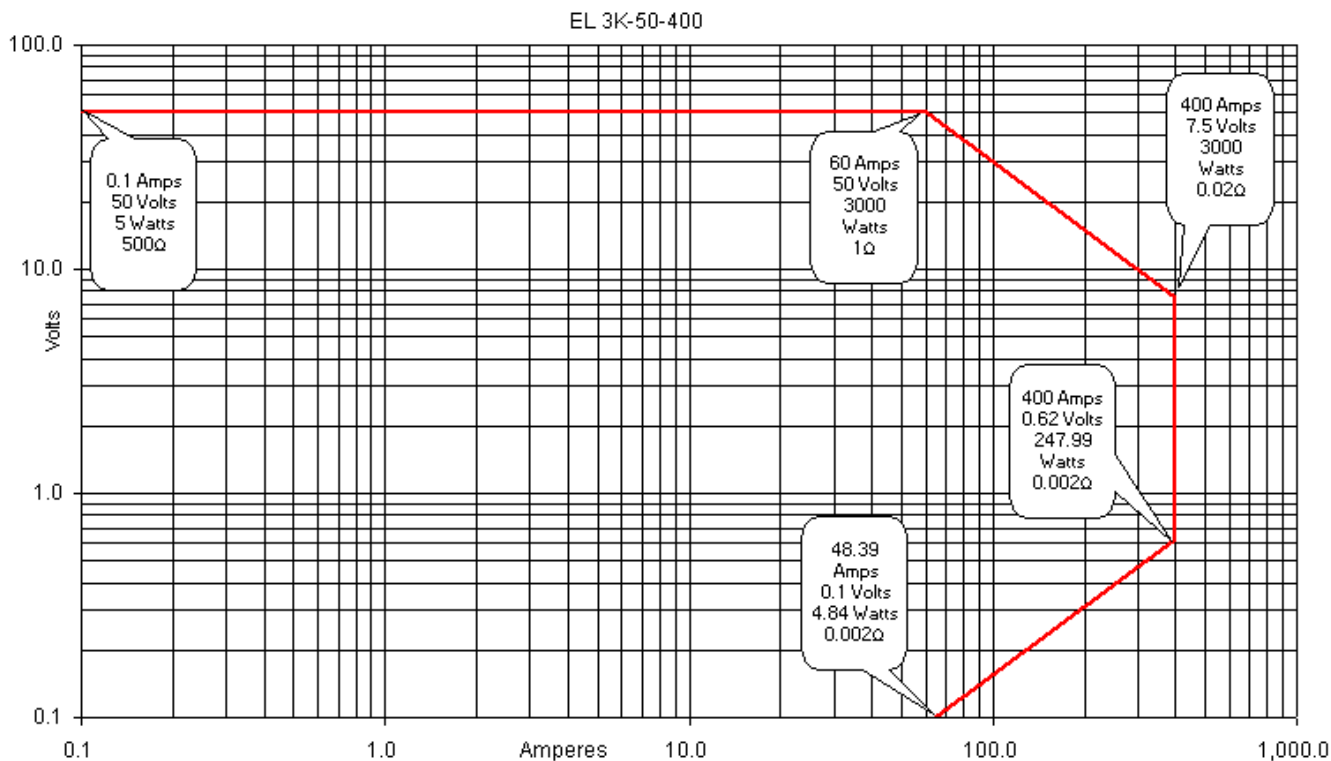


**FIGURE 8. MODEL EL 2K-400-140: 2000 WATTS, 400 VOLTS, 140 AMPERES**

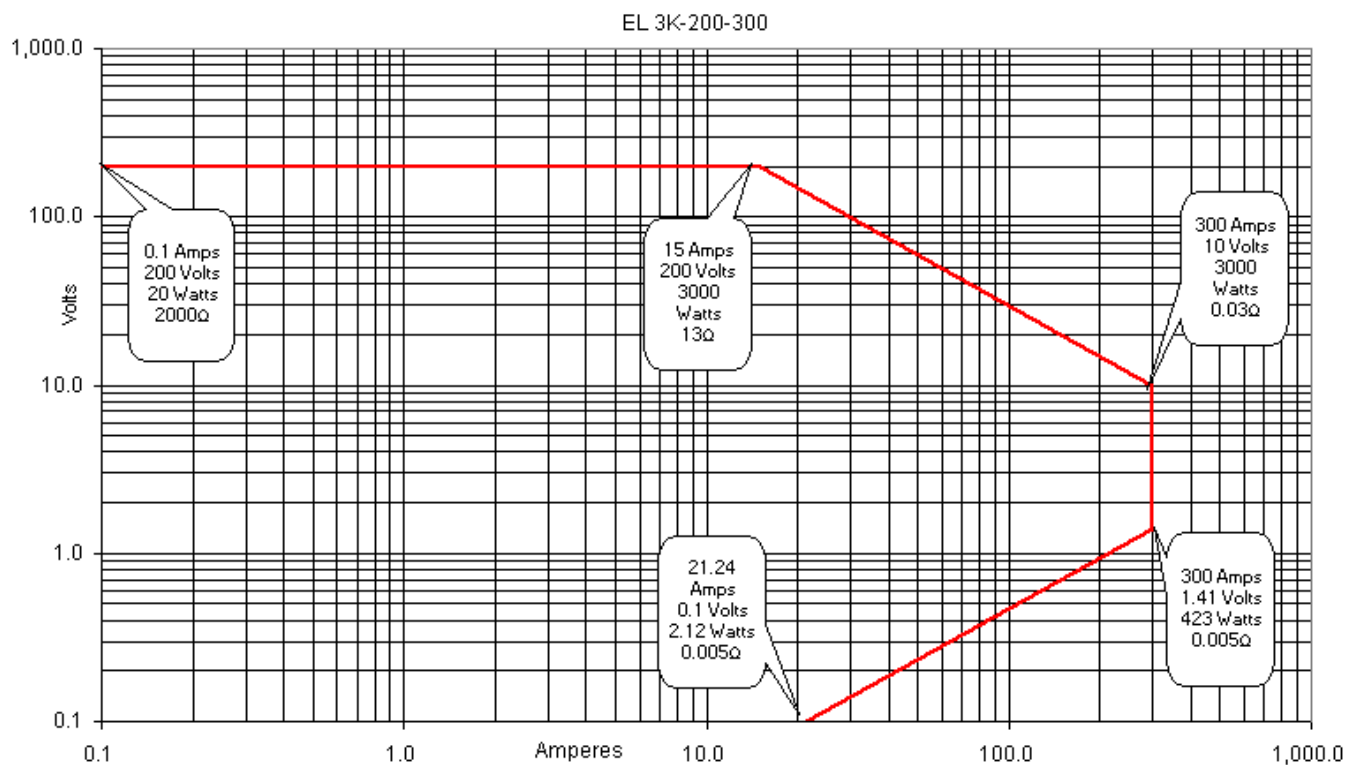


**FIGURE 9. MODEL EL 2K-600-60: 2000 WATTS, 600 VOLTS, 60 AMPERES**

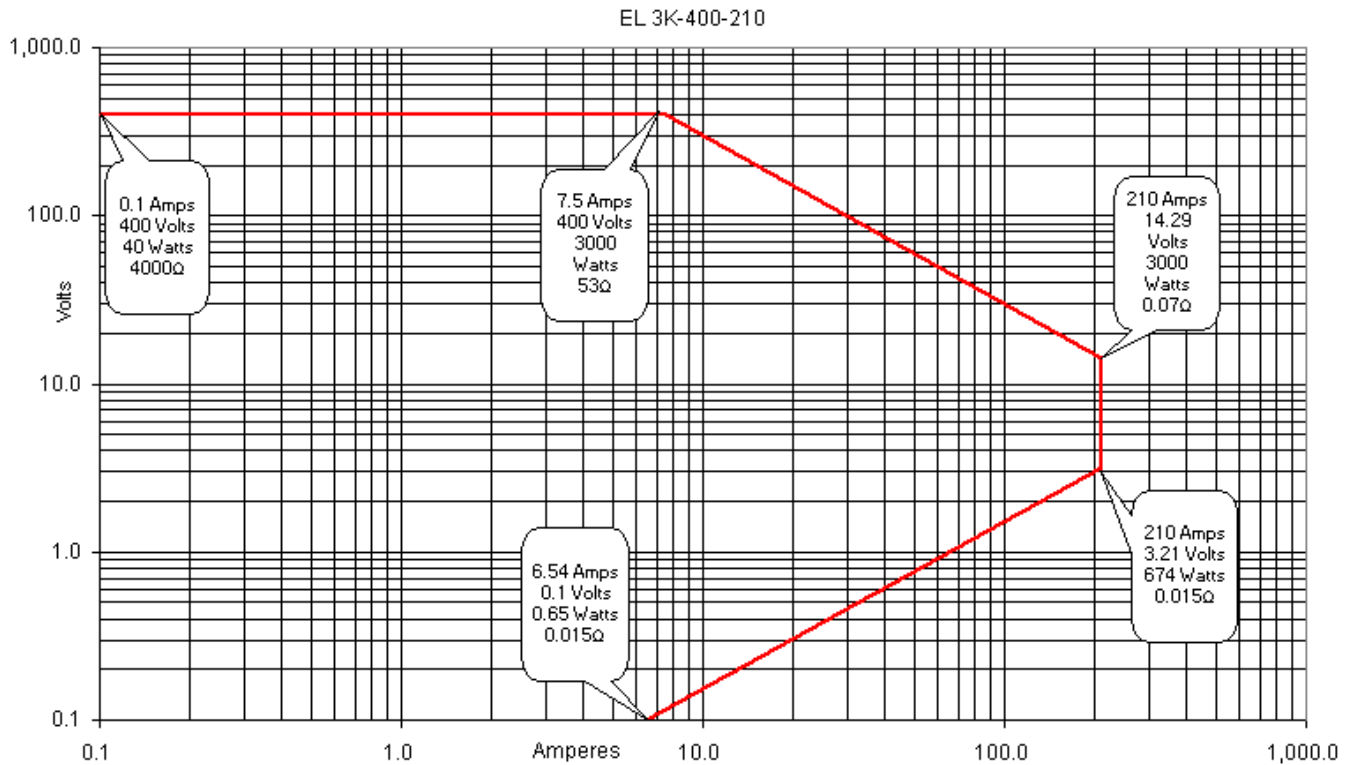
# EL 3KW MODELS



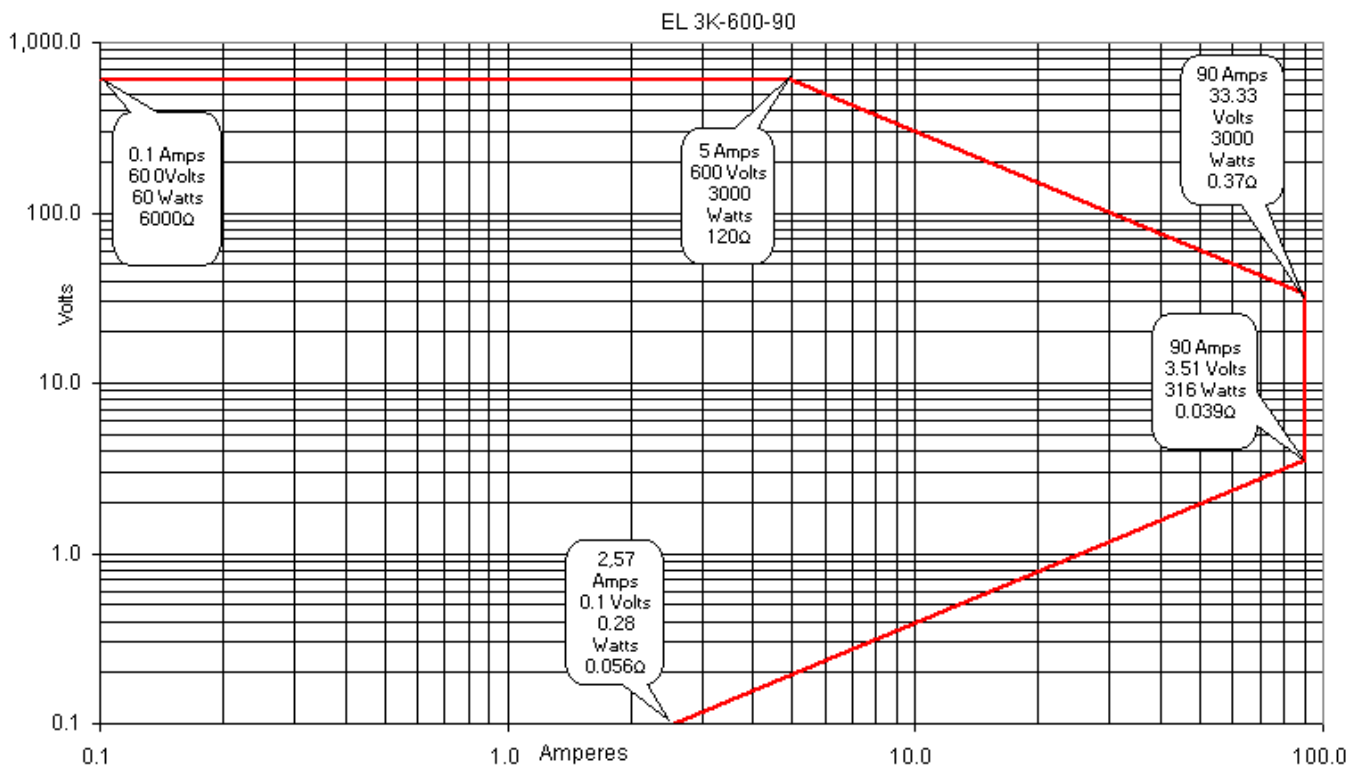
**FIGURE 10. MODEL EL 3K-50-400: 3000 WATTS, 50 VOLTS, 400 AMPERES**



**FIGURE 11. MODEL EL 3K-200-300: 3000 WATTS, 200 VOLTS, 300 AMPERES**

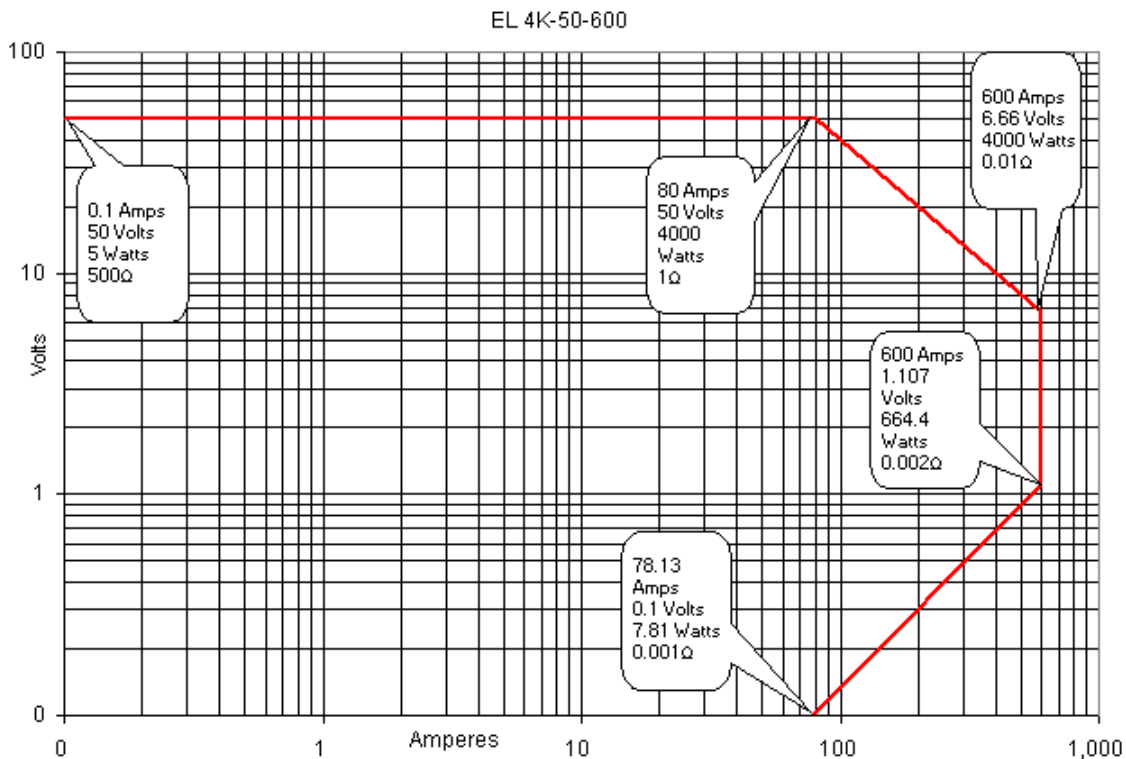


**FIGURE 12. MODEL EL 3K-400-210: 3000 WATTS, 400 VOLTS, 210 AMPERES**

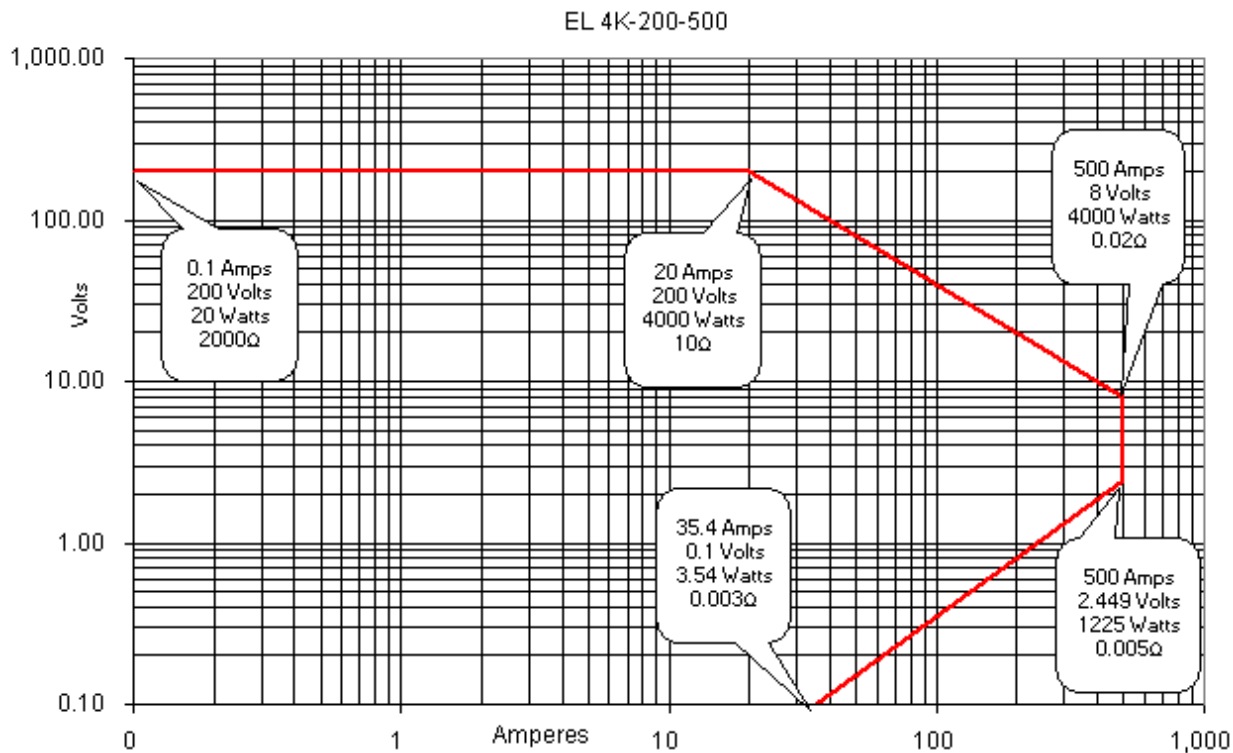


**FIGURE 13. MODEL EL 3K-600-90: 3000 WATTS, 600 VOLTS, 90 AMPERES**

**EL 4KW MODELS**

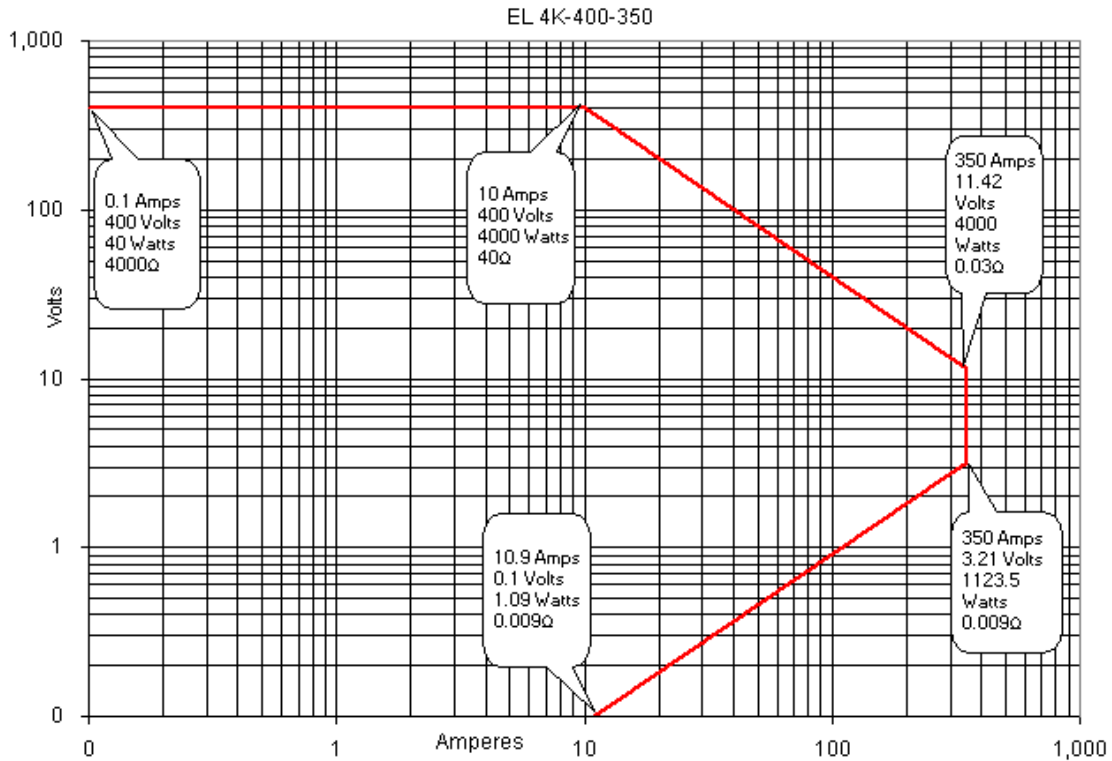


**FIGURE 14. MODEL EL 4K-50-600: 4000 WATTS, 50 VOLTS, 600 AMPERES**

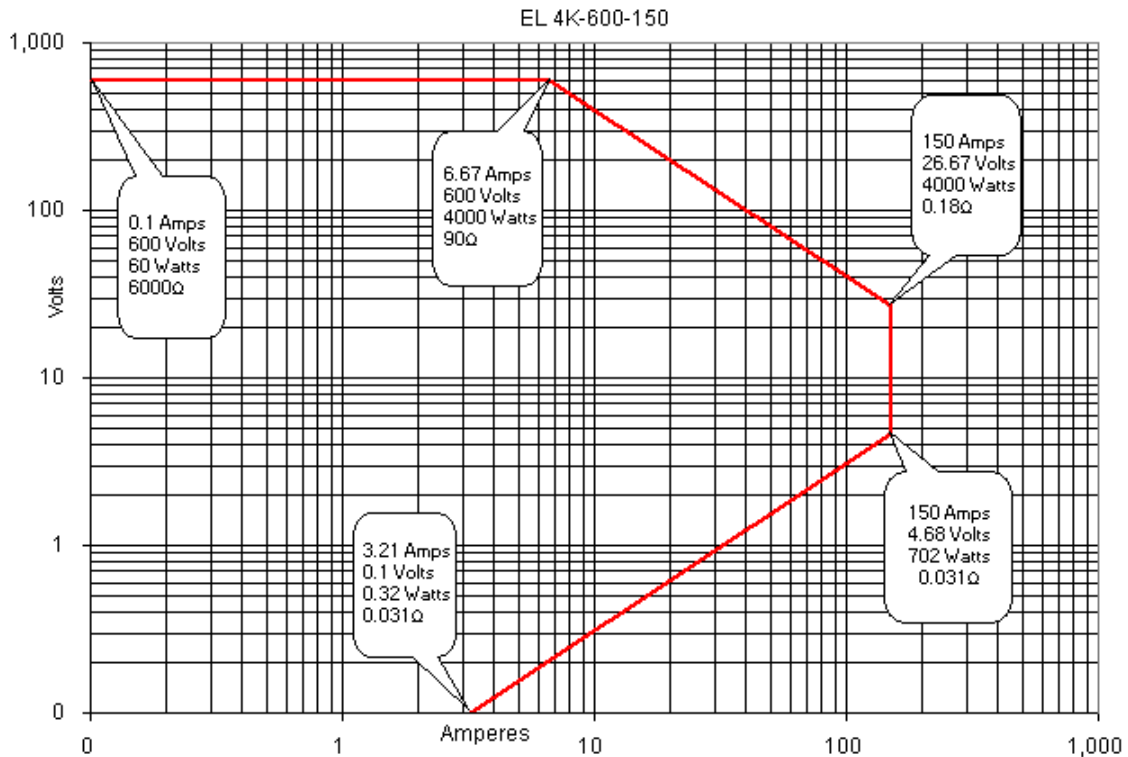


**FIGURE 15. MODEL EL 4K-200-500: 4000 WATTS, 200 VOLTS, 500 AMPERES**





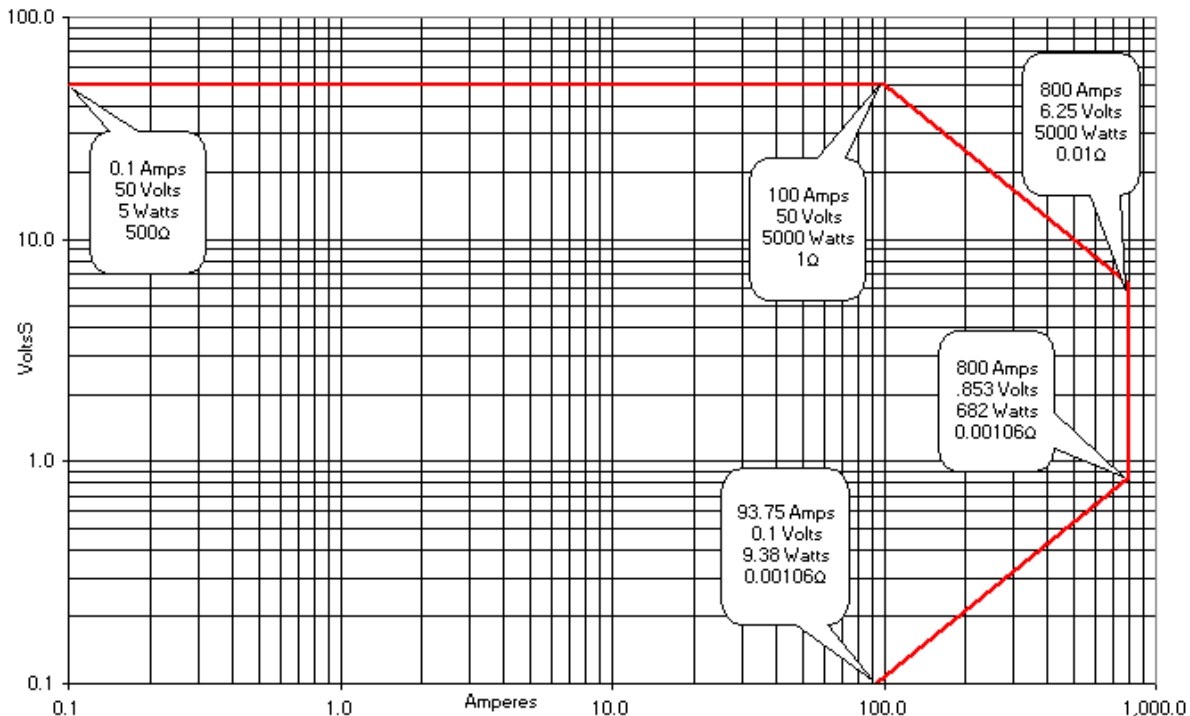
**FIGURE 16. MODEL EL 4K-400-350: 4000 WATTS, 400 VOLTS, 350 AMPERES**



**FIGURE 17. MODEL EL 4K-600-150: 4000 WATTS, 600 VOLTS, 150 AMPERES**

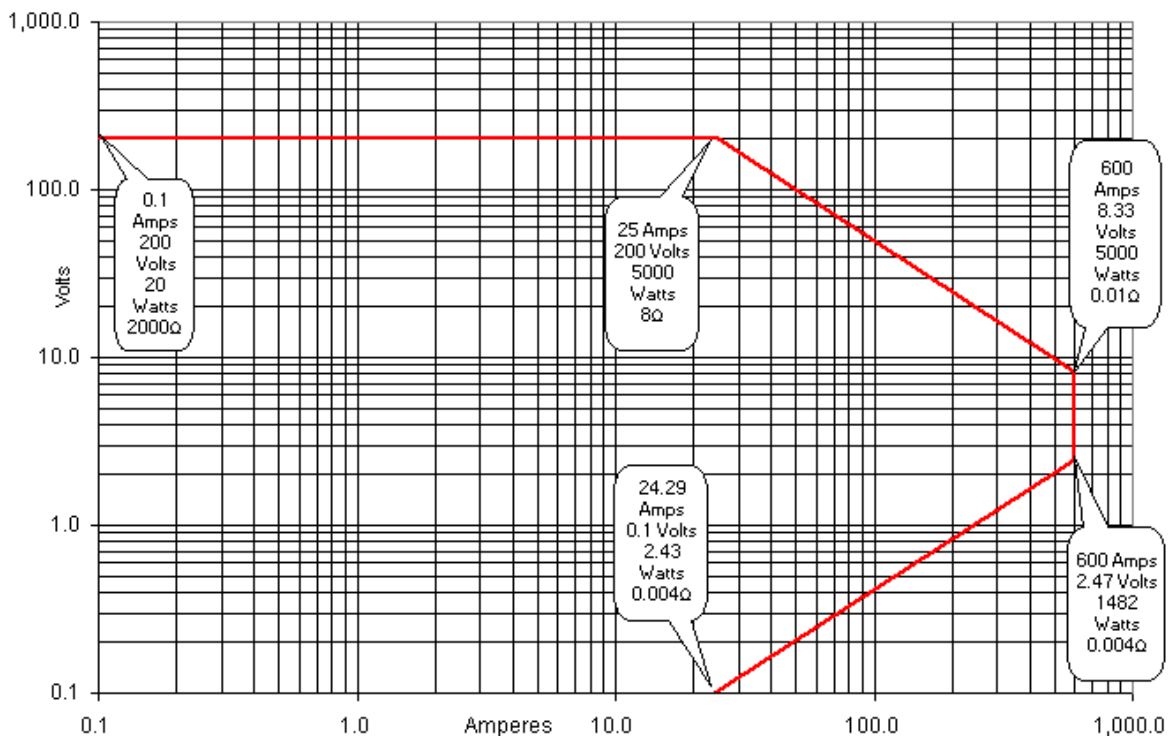
**EL 5KW MODELS**

EL 5K-50-800

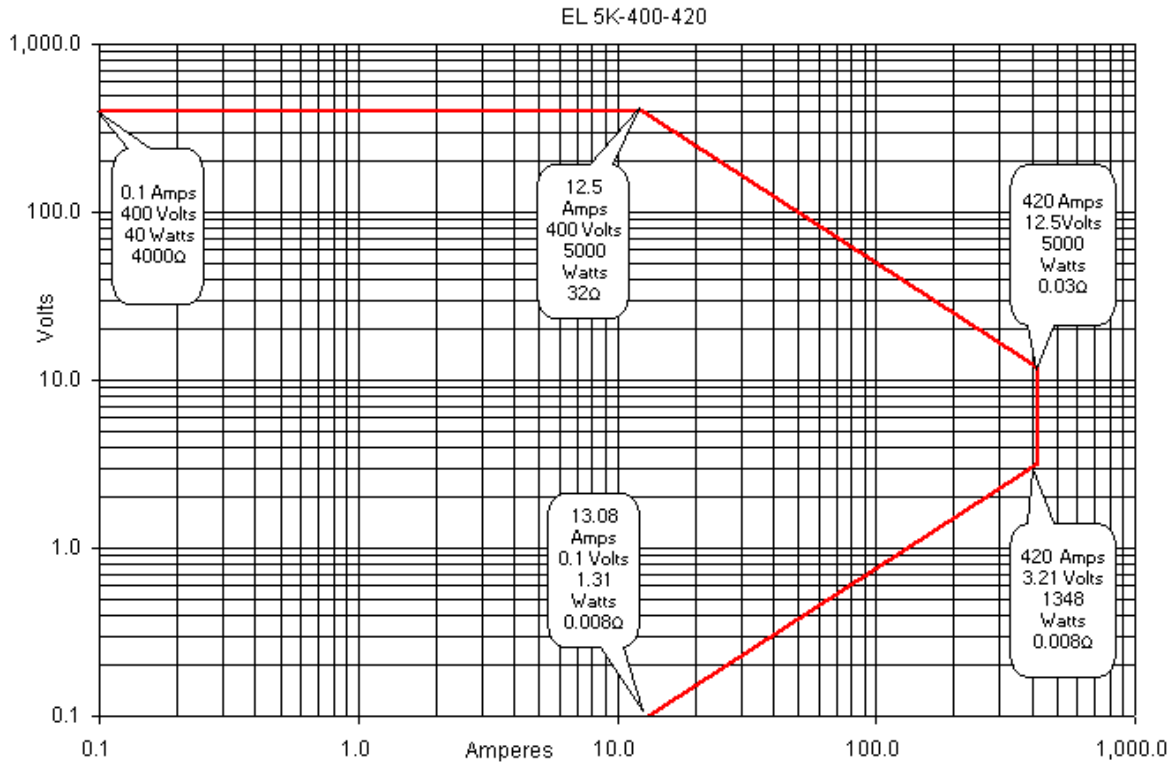


**FIGURE 18. MODEL EL 5K-50-800: 5000 WATTS, 50 VOLTS, 800 AMPERES**

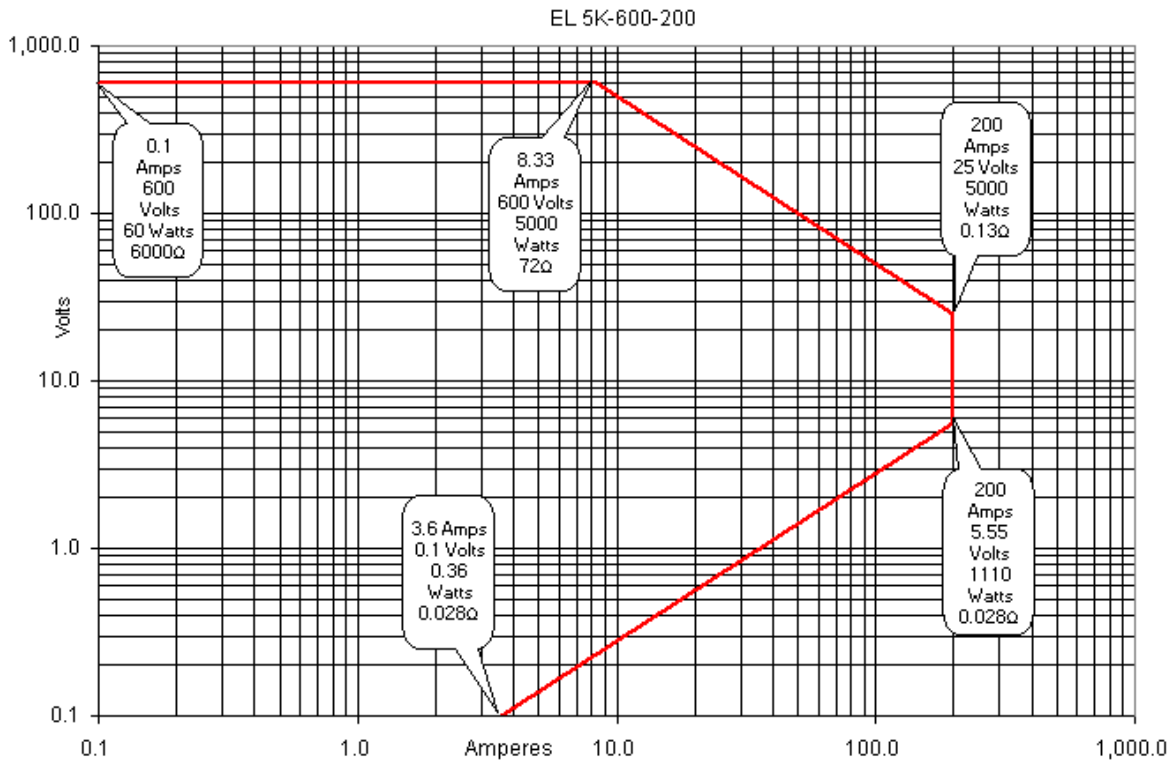
EL 5K-200-600



**FIGURE 19. MODEL EL 5K-200-600: 5000 WATTS, 200 VOLTS, 600 AMPERES**



**FIGURE 20. MODEL EL 5K-400-420: 5000 WATTS, 400 VOLTS, 420 AMPERES**



**FIGURE 21. MODEL EL 5K-600-200: 5000 WATTS, 600 VOLTS, 200 AMPERES**