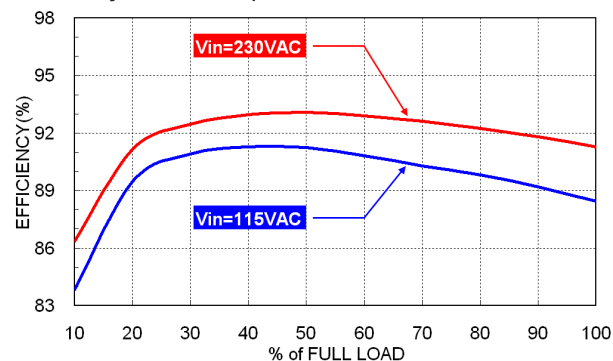


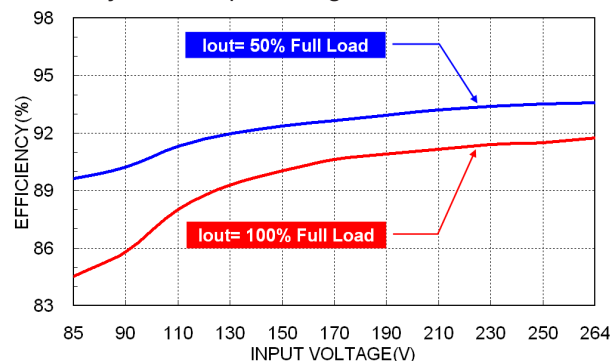
Characteristic Curves

TPP 450-112-M TPP 450-112B-M

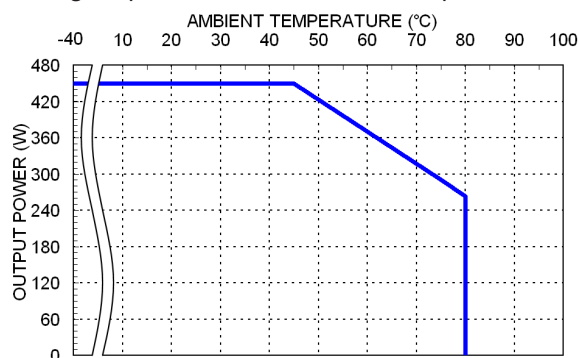
Efficiency versus Output Load



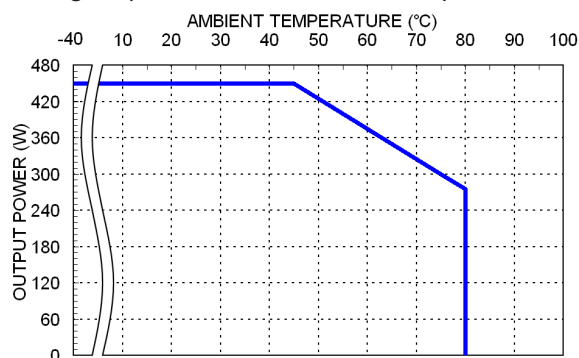
Efficiency versus Input Voltage



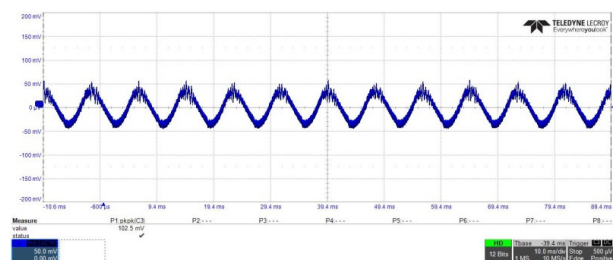
Derating Output Load versus Ambient Temperature at 115 Vin



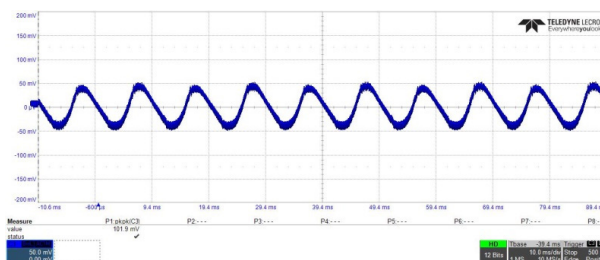
Derating Output Load versus Ambient Temperature at 230 Vin



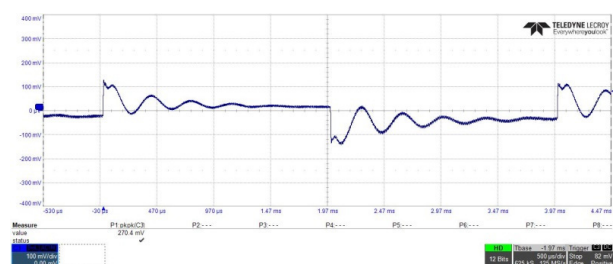
Typical Output Ripple and Noise at 115 Vin



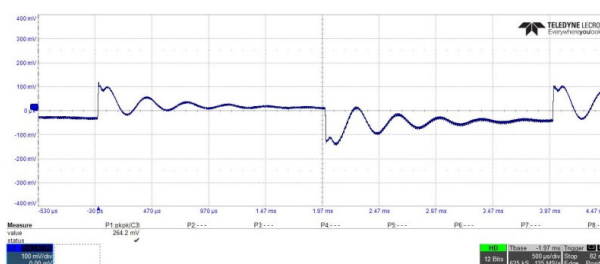
Typical Output Ripple and Noise at 230 Vin



Transient Response (25% load step) at 115 Vin

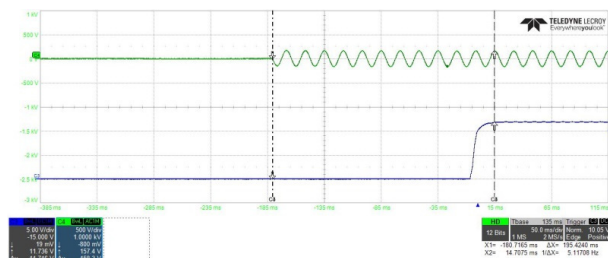


Transient Response (25% load step) at 230 Vin

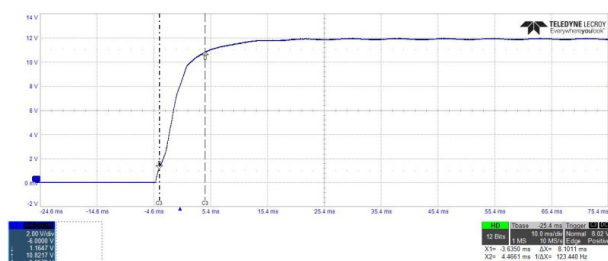


TPP 450-112-M
TPP 450-112B-M

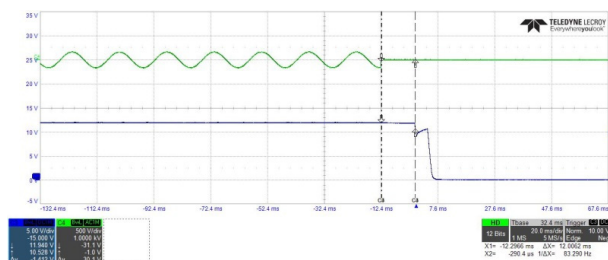
Typical Input Start-Up Characteristic at 115 Vin



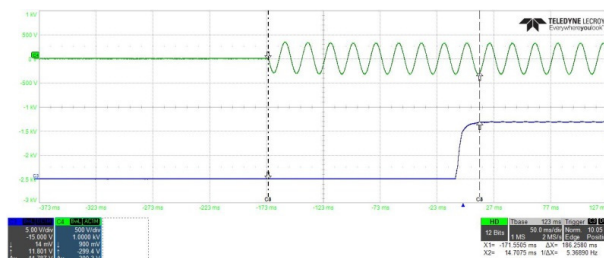
Typical Output Rise Characteristic at 115 Vin



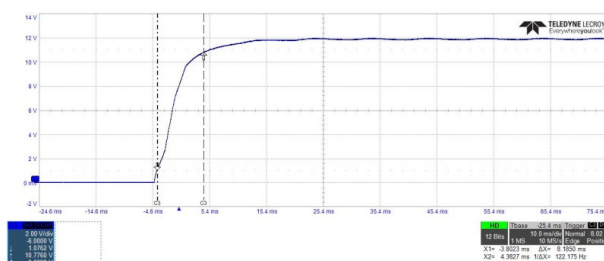
Typical Hold-Up Characteristic at 115 Vin



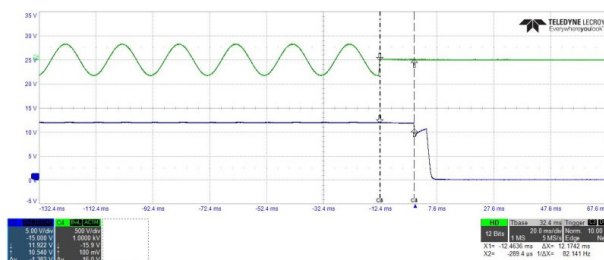
Typical Input Start-Up Characteristic at 230 Vin



Typical Output Rise Characteristic at 230 Vin



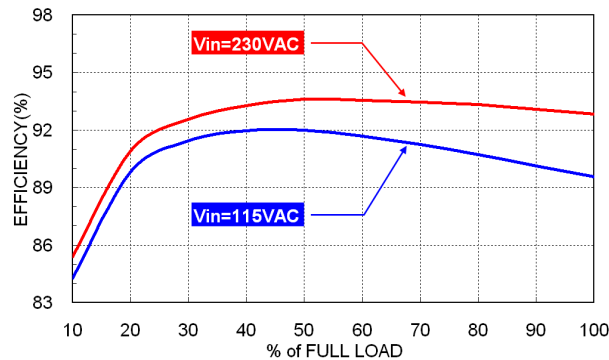
Typical Hold-Up Characteristic at 230 Vin



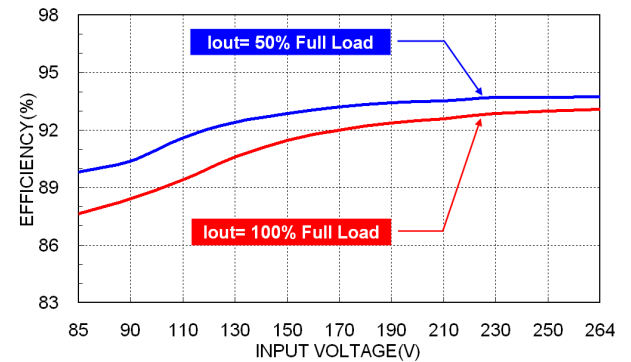
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

TPP 450-115-M TPP 450-115B-M

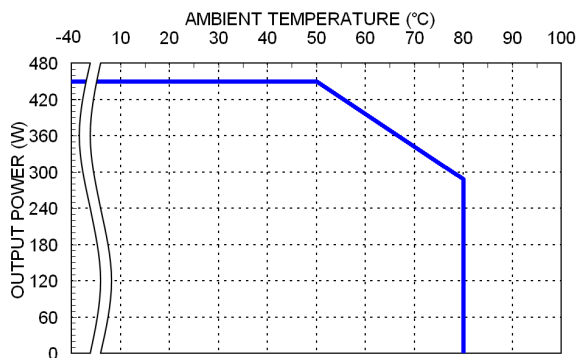
Efficiency versus Output Load



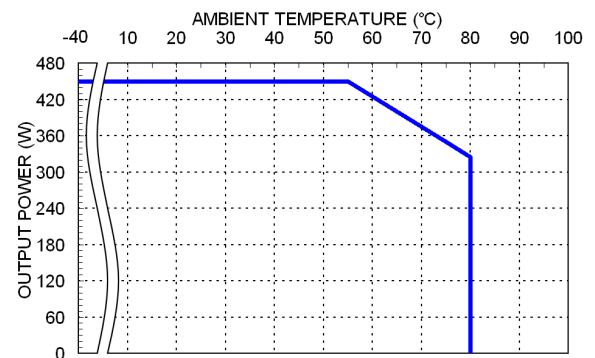
Efficiency versus Input Voltage



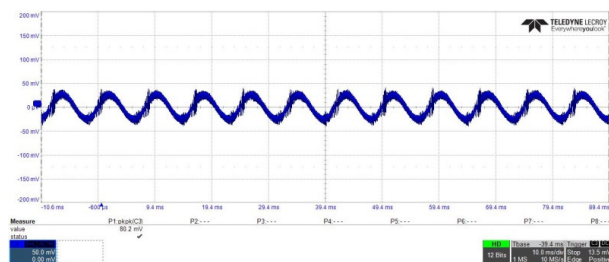
Derating Output Load versus Ambient Temperature at 115 Vin



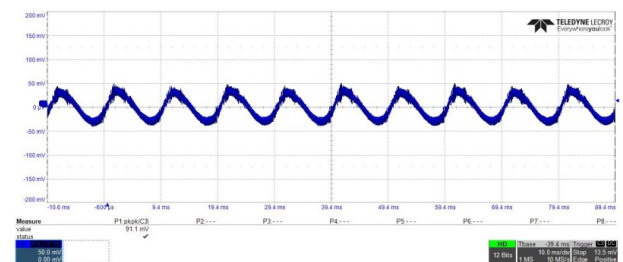
Derating Output Load versus Ambient Temperature at 230 Vin



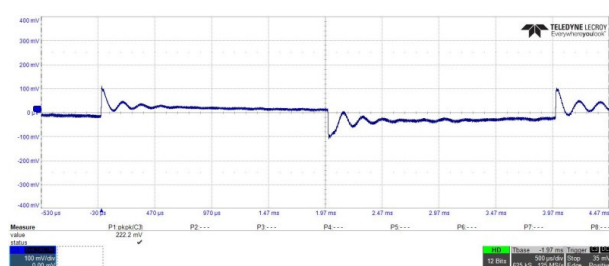
Typical Output Ripple and Noise at 115 Vin



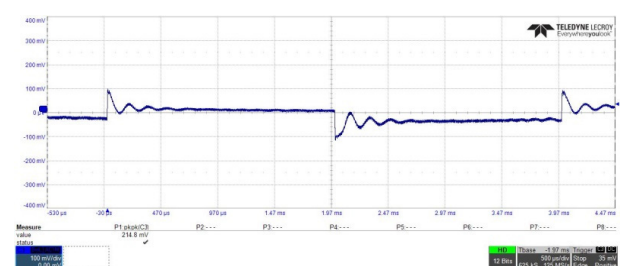
Typical Output Ripple and Noise at 230 Vin



Transient Response (25% load step) at 115 Vin



Transient Response (25% load step) at 230 Vin



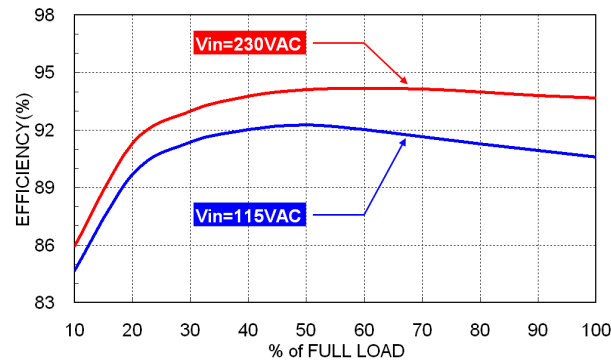
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

Typical Input Start-Up Characteristic at 115 Vin

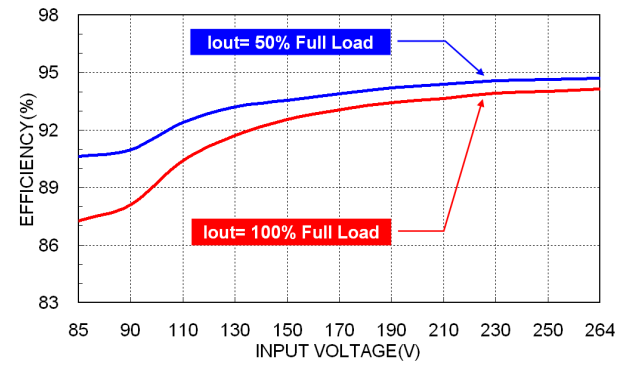


TPP 450-124-M TPP 450-124B-M

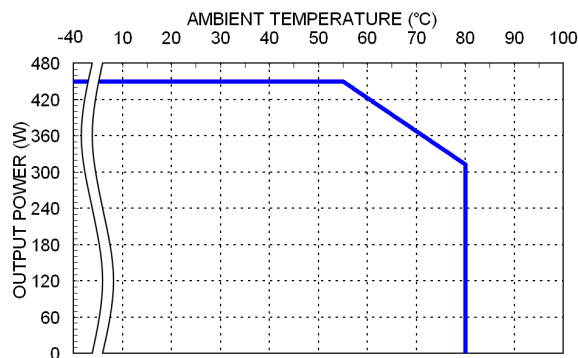
Efficiency versus Output Load



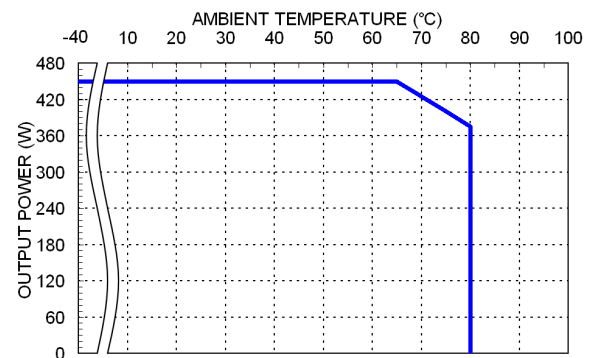
Efficiency versus Input Voltage



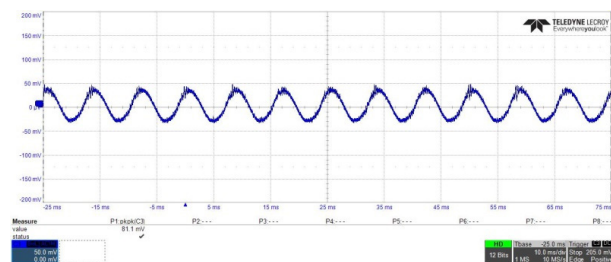
Derating Output Load versus Ambient Temperature at 115 Vin



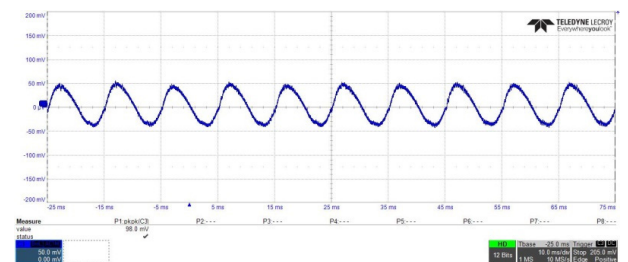
Derating Output Load versus Ambient Temperature at 230 Vin



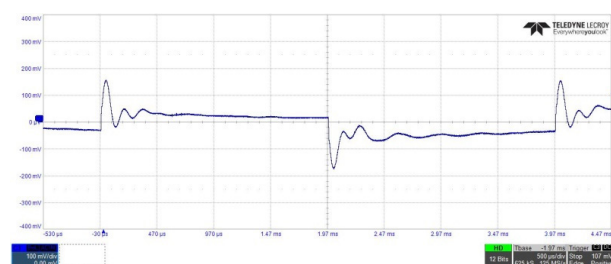
Typical Output Ripple and Noise at 115 Vin



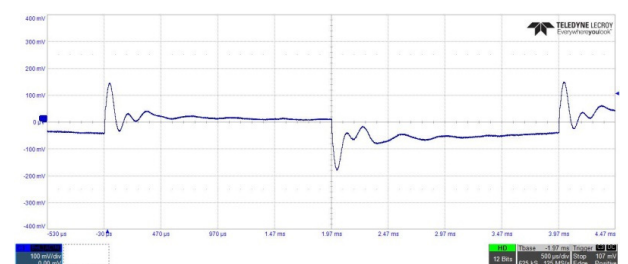
Typical Output Ripple and Noise at 230 Vin



Transient Response (25% load step) at 115 Vin



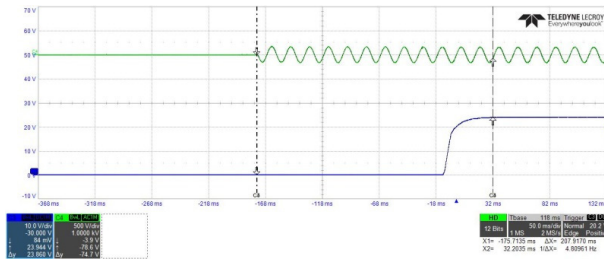
Transient Response (25% load step) at 230 Vin



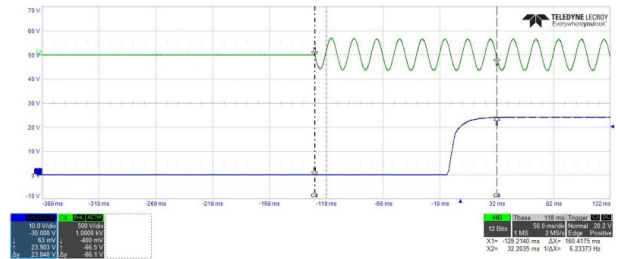
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

TPP 450-124-M TPP 450-124B-M

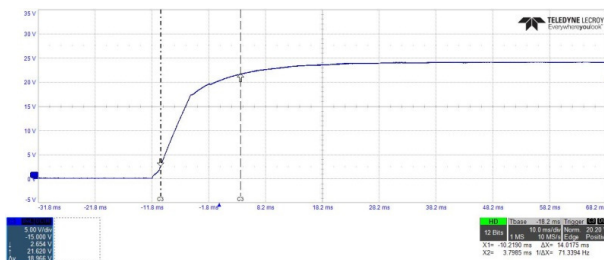
Typical Input Start-Up Characteristic at 115 Vin



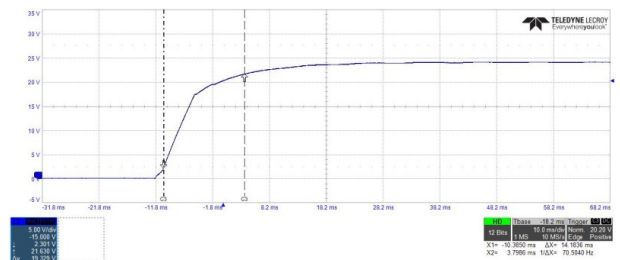
Typical Input Start-Up Characteristic at 230 Vin



Typical Output Rise Characteristic at 115 Vin



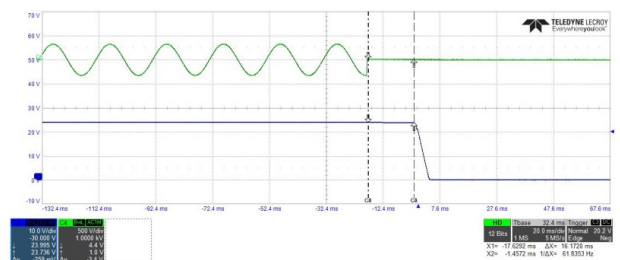
Typical Output Rise Characteristic at 230 Vin



Typical Hold-Up Characteristic at 115 Vin

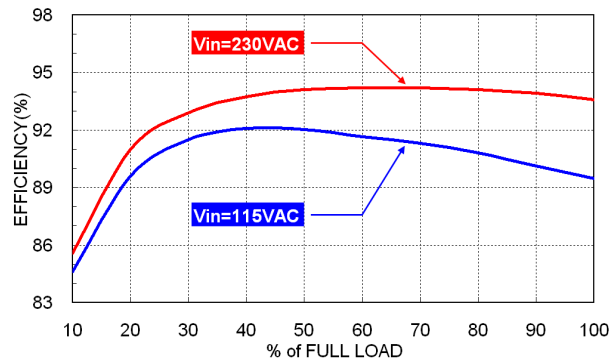


Typical Hold-Up Characteristic at 230 Vin

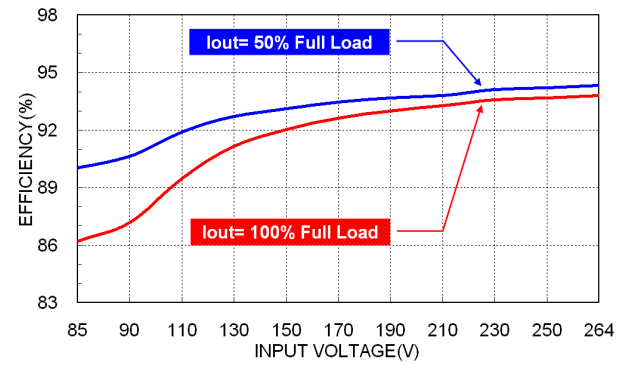


TPP 450-136-M TPP 450-136B-M

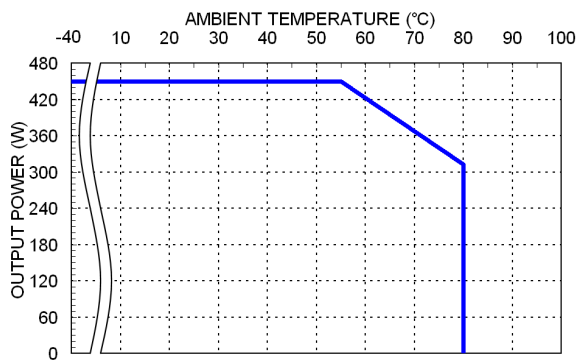
Efficiency versus Output Load



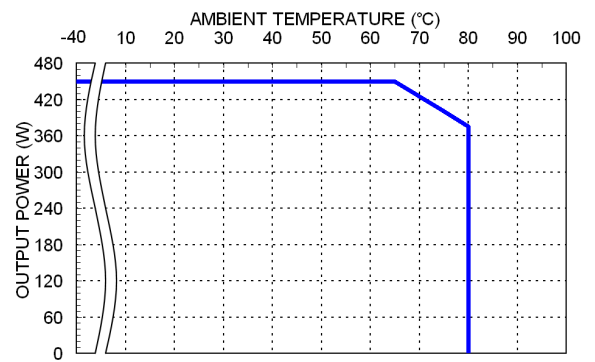
Efficiency versus Input Voltage



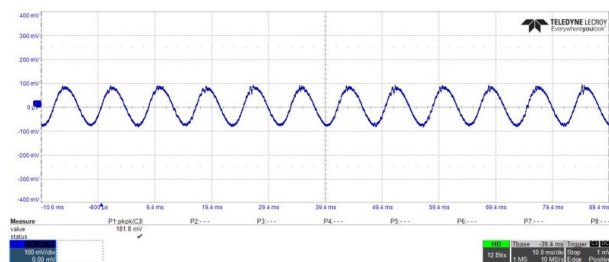
Derating Output Load versus Ambient Temperature at 115 Vin



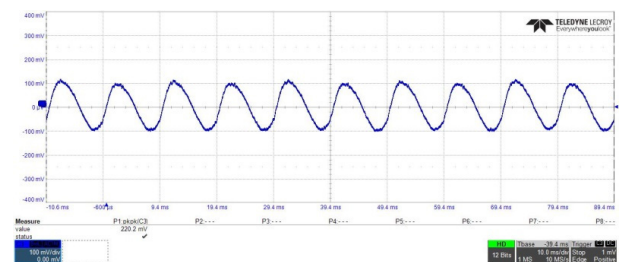
Derating Output Load versus Ambient Temperature at 230 Vin



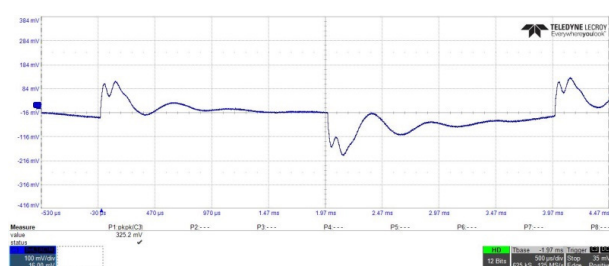
Typical Output Ripple and Noise at 115 Vin



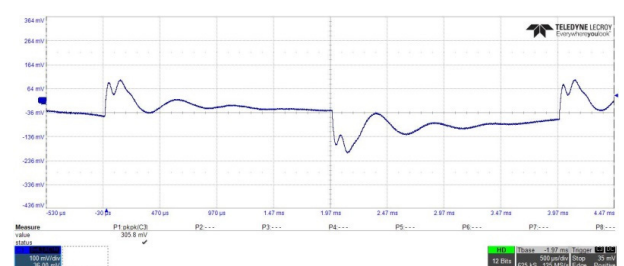
Typical Output Ripple and Noise at 230 Vin



Transient Response (25% load step) at 115 Vin

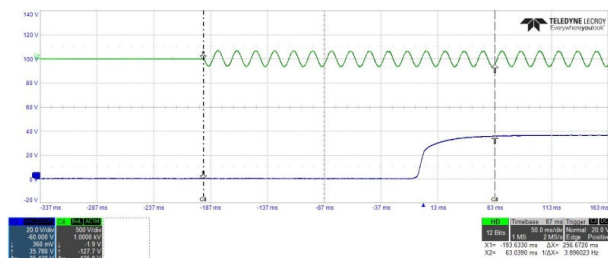


Transient Response (25% load step) at 230 Vin

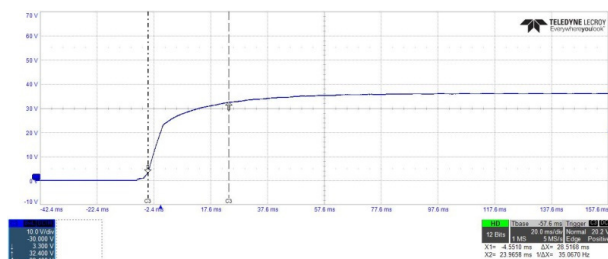


All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

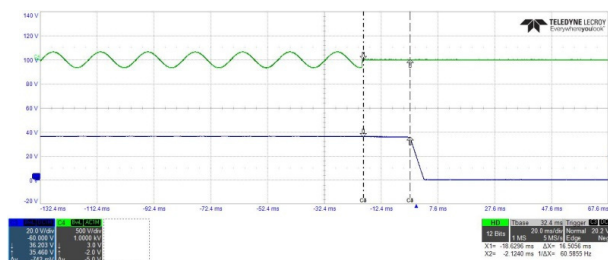
Typical Input Start-Up Characteristic at 115 Vin



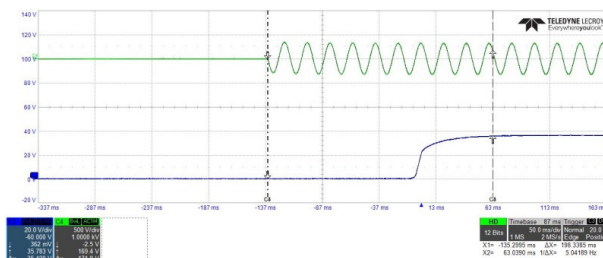
Typical Output Rise Characteristic at 115 Vin



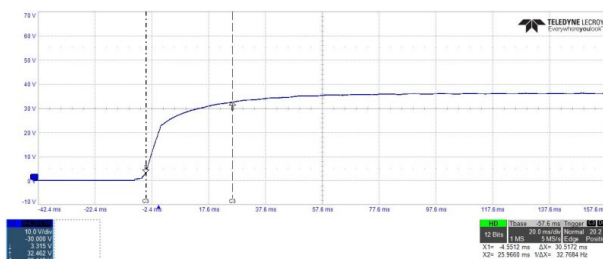
Typical Hold-Up Characteristic at 115 Vin



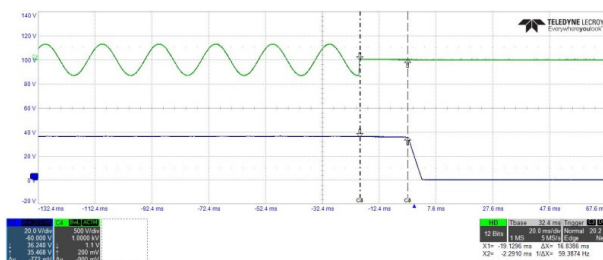
Typical Input Start-Up Characteristic at 230 Vin



Typical Output Rise Characteristic at 230 Vin



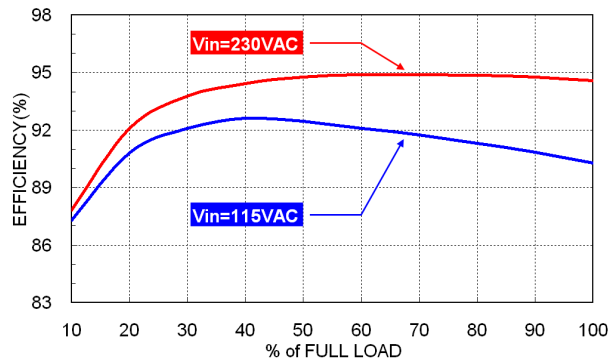
Typical Hold-Up Characteristic at 230 Vin



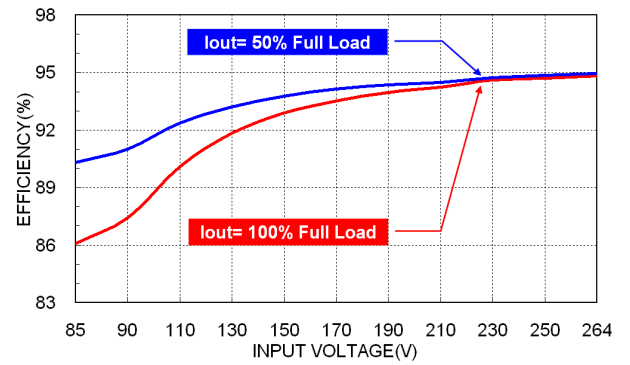
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

TPP 450-148-M TPP 450-148B-M

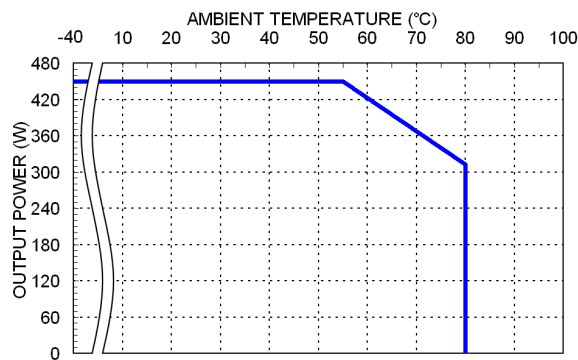
Efficiency versus Output Load



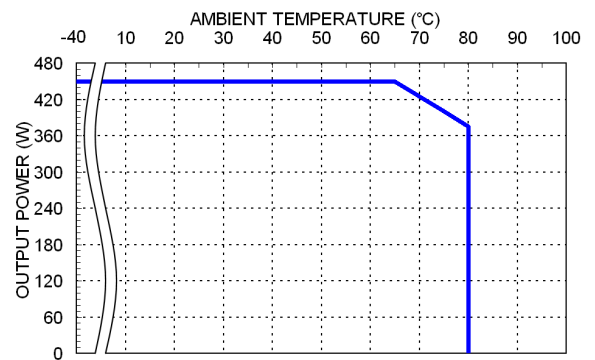
Efficiency versus Input Voltage



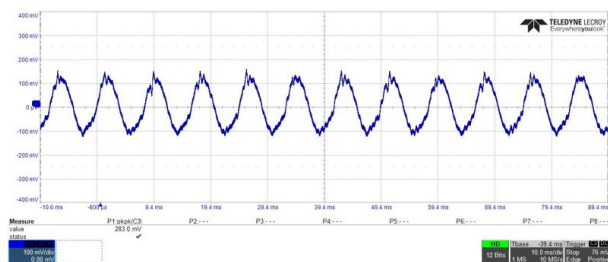
Derating Output Load versus Ambient Temperature at 115 Vin



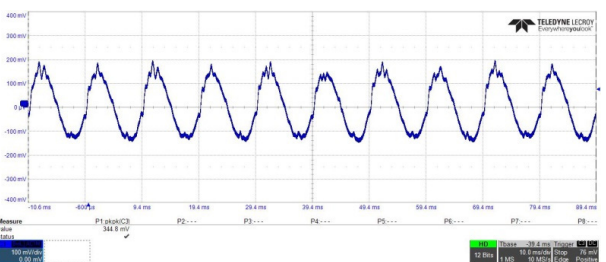
Derating Output Load versus Ambient Temperature at 230 Vin



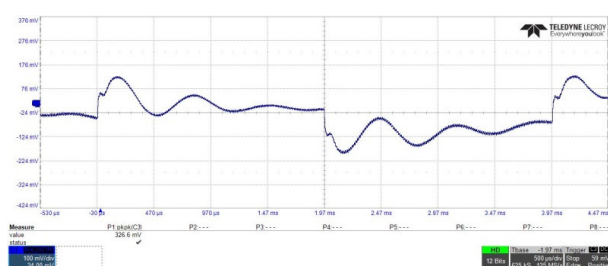
Typical Output Ripple and Noise at 115 Vin



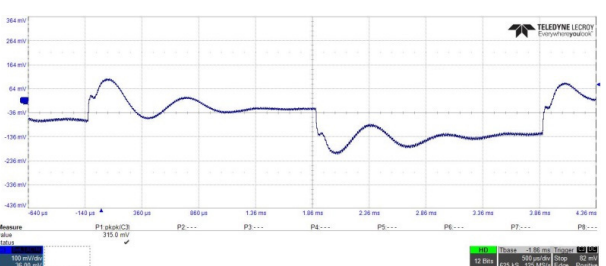
Typical Output Ripple and Noise at 230 Vin



Transient Response (25% load step) at 115 Vin



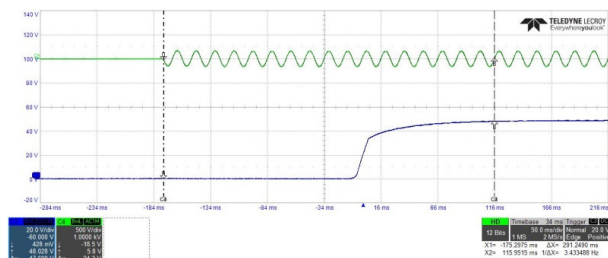
Transient Response (25% load step) at 230 Vin



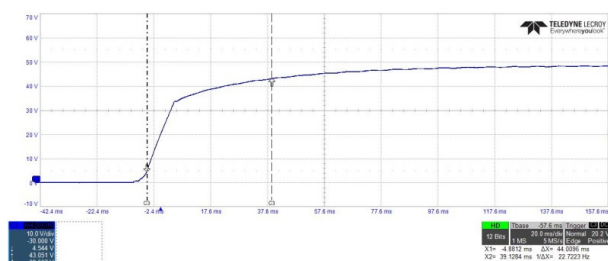
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

TPP 450-148-M
TPP 450-148B-M

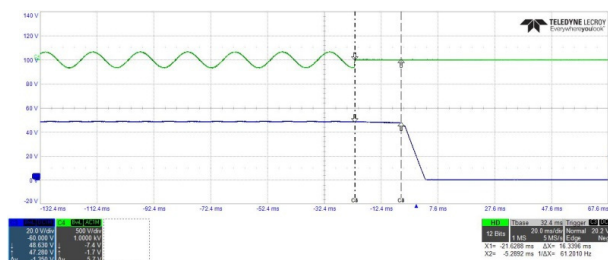
Typical Input Start-Up Characteristic at 115 Vin



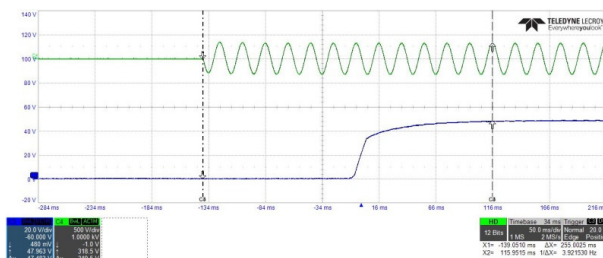
Typical Output Rise Characteristic at 115 Vin



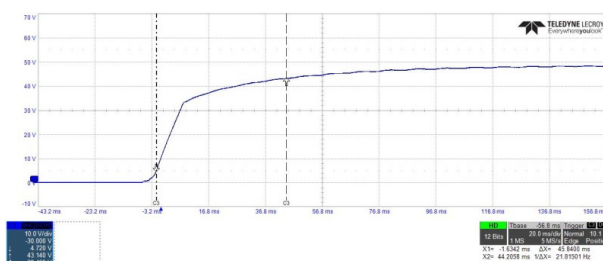
Typical Hold-Up Characteristic at 115 Vin



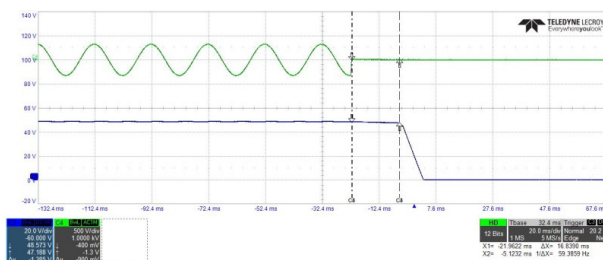
Typical Input Start-Up Characteristic at 230 Vin



Typical Output Rise Characteristic at 230 Vin



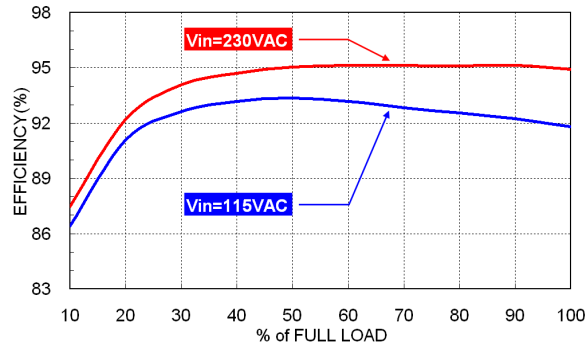
Typical Hold-Up Characteristic at 230 Vin



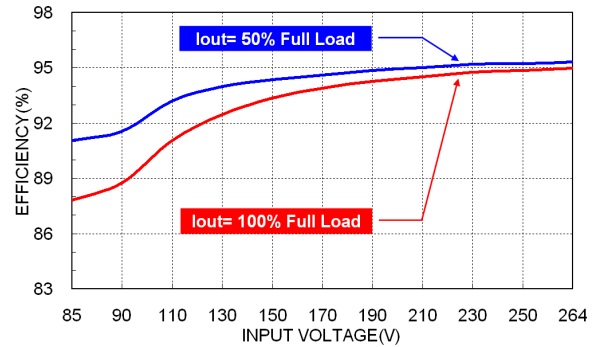
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

TPP 450-153-M TPP 450-153B-M

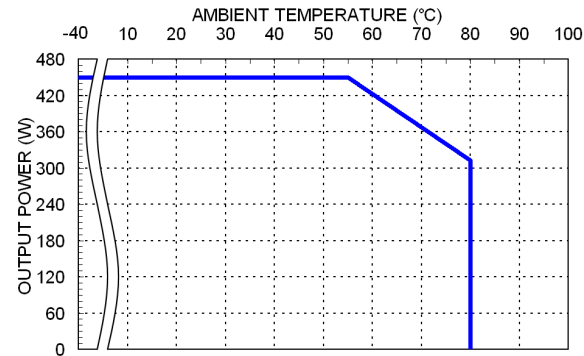
Efficiency versus Output Load



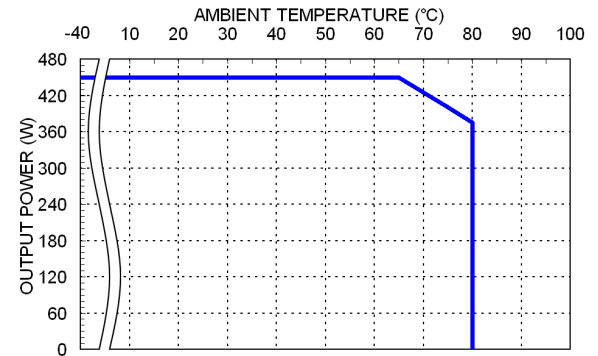
Efficiency versus Input Voltage



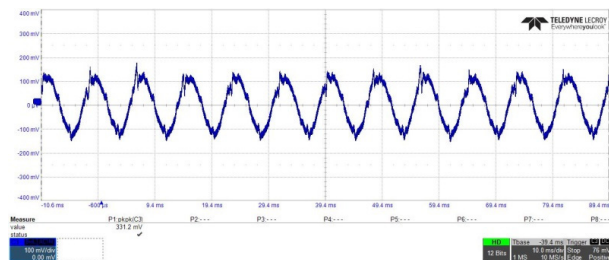
Derating Output Load versus Ambient Temperature at 115 Vin



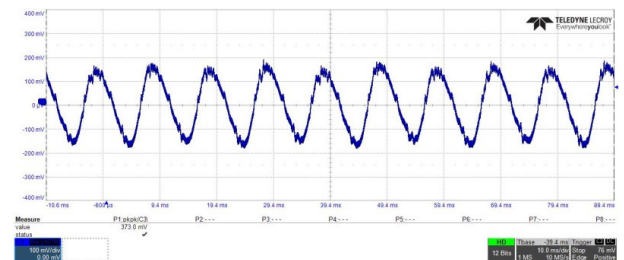
Derating Output Load versus Ambient Temperature at 230 Vin



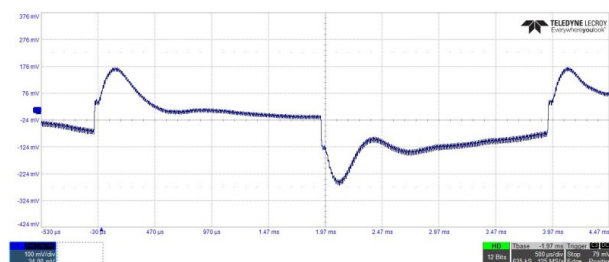
Typical Output Ripple and Noise at 115 Vin



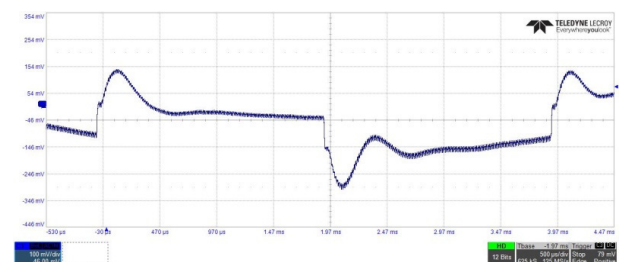
Typical Output Ripple and Noise at 230 Vin



Transient Response (25% load step) at 115 Vin



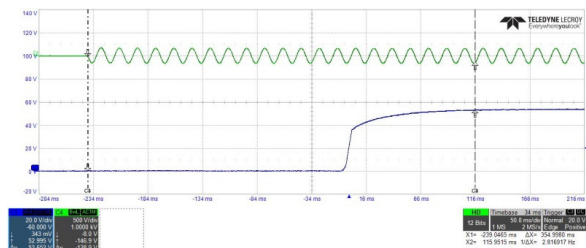
Transient Response (25% load step) at 230 Vin



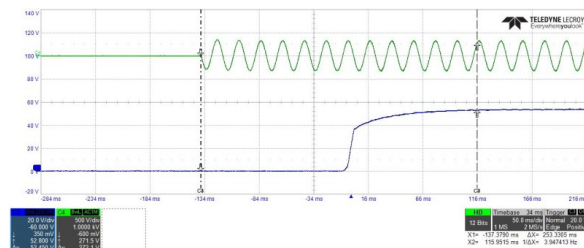
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

TPP 450-153-M TPP 450-153B-M

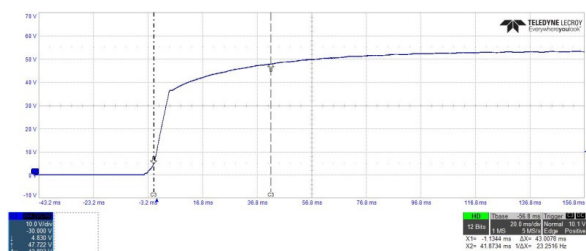
Typical Input Start-Up Characteristic at 115 Vin



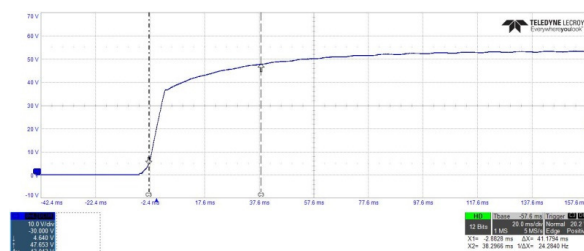
Typical Input Start-Up Characteristic at 230 Vin



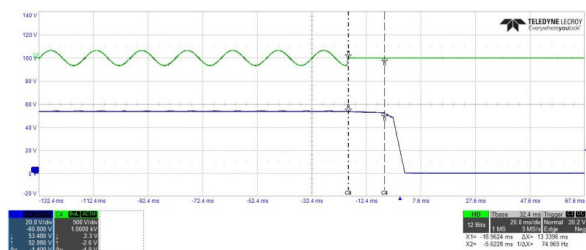
Typical Output Rise Characteristic at 115 Vin



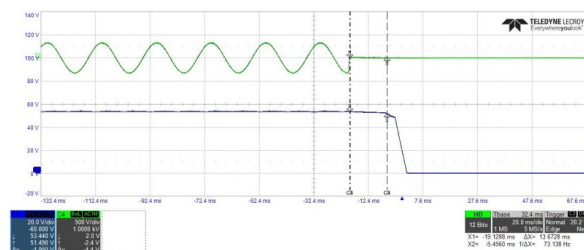
Typical Output Rise Characteristic at 230 Vin



Typical Hold-Up Characteristic at 115 Vin



Typical Hold-Up Characteristic at 230 Vin



Comment

The thermal considerations refer to the test setup (horizontal mounting) for certification.