

3360F 系列 高電壓直流電子負載



特 性

- 5位數之數位電壓、電流以及功率錶
- 高速量測及通訊傳輸速率
- 大型 LCD Display、可用飛梭旋鈕或按鍵調整設定值
- 可同時顯示電壓值、電流值、瓦特值
- 具有150組 儲存/呼叫 記憶
- 適用於功率因數調整器(PFC)測試用
- 可自動執行OCP、OPP測試
- 可設定開機狀態值
- 定電流、定電阻、定電壓、定功率、動態及短路模式
- 於短路測試時可設定短路時間
- 過電壓、電流、功率及溫度保護
- 電壓極性顯示可設成正值(“+”)或負值(“-”)
- 可選用介面： GPIB、RS232、USB、LAN

說 明

- 3360F系列具有獨立的控制及顯示面板、定電流/定電阻/定電壓/定功率/動態模式，配合面板上的150組 儲存/呼叫 記憶，能有效地控制所有負載的設定，更可透過RS232、Ethernet、USB和GPIB等介面進行遠端控制。
- 具備短路測試功能及設定短路時間，並可量測短路電壓及電流。
- 在定電流及定功率模式下，可做動態負載之模擬，其電流上升、下降斜率均為獨立可調，另具有一外部輸入任意波形之動態負載功能。
- 具有OCP、OPP單鍵測試功能，使得OCP、OPP之測試更有效率及準確。
- 可設定的吃載/停止吃載 (LOAD ON/OFF) 電壓點及良/不良 (GO/NG) 的比較判斷功能、電壓極性顯示可正可負及150組 儲存/呼叫 記憶，使得負載更適用於各種不同的應用。
- 多達150組測試參數及狀態的儲存功能，讓其可根據自動測試 (auto sequence) 需求，隨時將儲存記憶調出來任意使用。
- 因其耐壓高達500V，故而非常適用於功率因數調整器 (PFC) 的測試應用。

應 用

- 電壓/電流源測試
- 交換式電源供應器暫態響應
- 定電壓模式供限流測試及模擬電池
- 電池放電
- 電池充電
- 研發、品管
- ATE系統
- 生產測試
- 功率因數調整器(PFC)測試

規 格

MODEL	3360F	3361F	3362F	3367F	33611F	33621F
Power	600W	1200W	1800W	1800W	2400W	3600W
Current	0 ~ 20A	0 ~ 40A	0 ~ 60A	0 ~ 12A	0 ~ 80A	0 ~ 120A
Voltage	0 ~ 500V	0 ~ 500V	0 ~ 500V	0 ~ 500V	0 ~ 500V	0 ~ 500V
Min.Operation Voltage	4V @ 20A	4V @ 40A	4V @ 60A	6V @ 12A	4V @ 80A	4V @ 120A
CC MODE						
Range *1	0 ~ 2A / 20A	0 ~ 4A / 40A	0 ~ 6A / 60A	0 ~ 1.2A / 12A	0 ~ 8A / 80A	0 ~ 12A / 120A
Resolution	0.033mA / 0.33mA	0.066mA / 0.66mA	0.1mA / 1mA	0.02mA / 0.2mA	0.133mA / 1.33mA	0.2mA / 2mA
Accuracy	± 0.1% OF (Setting + Range)					
CR MODE						
Range	0.5~30~1800KΩ	0.25~15~900KΩ	0.1666~10~600KΩ	0.8333~50~3000KΩ	0.125~7.5~450KΩ	0.833~5~300KΩ
Resolution	0.5mΩ/0.55μS	0.25mΩ/1.1μS	0.1666mΩ/0.032mS	0.8333mΩ/0.333μS	0.125mΩ/0.0022mS	0.0833mΩ/0.00033mS
Accuracy	± 0.2% OF (Setting + Range)					
CV MODE						
Range	60V / 500V					
Resolution	1mV / 10mV	1mV / 10mV	1mV / 10mV	1mV / 10mV	1mV / 10mV	1mV / 10mV
Accuracy	± 0.05% OF (Setting + Range)					
CP MODE						
Range	60W / 600W	120W / 1200W	180W / 1800W	180W / 1800W	0 ~ 240W / 2400W	0~360W / 3600W
Resolution	1mW / 10mW	2mW / 20mW	3mW / 30mW	3mW / 30mW	4mW / 40mW	6mW / 60mW
Accuracy	± 0.5% OF (Setting + Range)					
DYNAMIC MODE - CC						
Timing						
Thigh & Tlow	0.050 ~ 9.999 / 99.99 / 999.9 / 9999mS					
Resolution	0.001 / 0.01 / 0.1 / 1mS					
Accuracy	1μS / 10μS / 100μS / 1mS + 50ppm					
Slew rate	1.6mA~100mA/μS 16mA~1000mA/μS	3.2mA~200mA/μS 32mA~2000mA/μS	4.8mA~300mA/μS 48mA~3000mA/μS	0.96mA~60mA/μS 9.6mA~600mA/μS	6.4mA~400mA/μS 64mA~4000mA/μS	9.6mA~600mA/μS 96mA~6000mA/μS
Resolution	0.4 / 4 mA/μS	0.8 / 8 mA/μS	1.2 / 12 mA/μS	0.24 / 2.4 mA/μS	1.6 / 16 mA/μS	2.4 / 24 mA/μS
Accuracy	(5% of setting) ± 10 μS					
Min. Rise Time	20μS (typical)					
Current						
Range	2 / 20A	4 / 40A	6 / 60A	1.2 / 12A	8 / 80A	12 / 120A
Resolution	0.033mA/0.33mA	0.066mA/0.66mA	0.1mA/1mA	0.02mA/0.2mA	0.133mA/1.33mA	0.2mA / 2mA
Accuracy	± 0.1% OF (Setting + Range)					
MEASUREMENT						
Voltage Read Back						
Range (5 Digital)	0 ~ 60V / 600V					
Resolution	0.001V / 0.01V					
Accuracy	± 0.025% OF (Reading + Range)					
Current Read Back						
Range (5 Digital)	0 ~ 2A / 20A	0 ~ 4A / 40A	0 ~ 6A / 60A	0 ~ 1.2A / 12A	0 ~ 8A / 80A	0 ~ 12A / 120A
Resolution	0.033mA/0.33mA	0.066mA/0.66mA	0.1mA/1mA	0.02mA / 0.2mA	0.133mA/1.33mA	0.2mA / 2mA
Accuracy	± 0.1% OF (Reading + Range)					
Power Read Back						
Range (5 Digital)	0 ~ 60W / 600W	0 ~ 120W / 1200W	0 ~ 180W / 1800W	0 ~ 180W / 1800W	0 ~ 240W / 2400W	0 ~ 360W / 3600W
Resolution	0.03W					
Accuracy	± 0.125% OF (Reading + Range)					
PROTECTIONS						
Over Power	105% of Rated Power					
Over Current	105% of Rated Current					
Over Voltage	105% of Rated Voltage					
Over Temp.	Yes					
OTHERS						
Load ON Voltage						
Range	0.4 ~ 100.0V					
Resolution	0.4V					
Accuracy	1% of Setting + 2.5V					
Load OFF Voltage						
Range	0 ~ 100V					
Resolution	Same as Voltage Meter					
Accuracy	Same as Voltage Meter					
GENERAL						
Short Circuit						
Current	20A	40A	60A	12A	80A	120A
Temperature Coefficient	100ppm / °C (typical)					
Power consumption	100Wmax	100Wmax	100Wmax	100Wmax	100Wmax	200Wmax
Operating Temperature *2	0 ~ 40°C					
Dimension (HxWxD)	177 x 440 x 445 mm				889x596x600mm	889x596x600mm
Weight	15.2 kg	19.4 Kg	23.6 kg	23.6 Kg	72.8 Kg	81.2 kg
Safety & EMC	CE					

輸入電源：115/230 Vac ±10% , 50/60Hz
冷卻方式：智慧型風扇冷卻

註 *1 : CC Mode 可強制於 range II

註 *2 : 操作溫度範圍為 0~40°C, 此規格表內之精確度僅適用於 25°C±5°C

訂 購 方 式

選購介面：

- ① GPIB Card
- ② RS232 Card
- ③ USB Card
- ④ LAN Card



3360F 500V · 20A · 600W

3361F 500V · 40A · 1200W

3362F 500V · 60A · 1800W

3367F 500V · 12A · 1800W

33611F 500V · 80A · 2400W

33621F 500V · 120A · 3600W

規 格

MODEL	33671F	33622F	33672F	33623F	33624F	33674F
Power	3600W	5400W	5400W	7200W	9000W	9000W
Current	0 ~ 24A	0 ~ 180A	0 ~ 36A	0 ~ 240A	0 ~ 300A	0 ~ 60A
Voltage	0 ~ 500V	0 ~ 500V	0 ~ 500V	0 ~ 500V	0 ~ 500V	0 ~ 500V
Min.Operation Voltage	6V @ 24A	4V @ 180A	6V @ 36A	4V @ 240A	4V @ 300A	6V @ 60A
CC MODE						
Range *1	2.4A / 24A	0 ~ 18A / 180A	0 ~ 3.6A / 36A	0 ~ 24A / 240A	0 ~ 30A / 300A	0 ~ 6A / 60A
Resolution	0.02mA / 0.2mA	0.3mA / 3mA	0.06mA / 0.6mA	0.4mA / 4mA	0.5mA / 5mA	0.1mA / 1mA
Accuracy	± 0.1% OF (Setting + Range)					
CR MODE						
Range	0.416~25~1500KΩ	0.0555~3.3333~200KΩ	0.2775~16.66~100KΩ	0.0416~2.5~150KΩ	0.0333~2~120KΩ	0.1666~10~600KΩ
Resolution	0.416mΩ/0.00066mS	0.0555mΩ/0.00033mS	0.2775mΩ/0.01mS	0.0416mΩ/0.0066mS	0.0333mΩ/0.128mS	0.1666mΩ/0.0016mS
Accuracy	± 0.2% OF (Setting + Range)					
CV MODE						
Range	60V / 500V					
Resolution	1mV / 10mV	1mV / 10mV	1mV / 10mV	1mV / 10mV	1mV / 10mV	1mV / 10mV
Accuracy	± 0.05% OF (Setting + Range)					
CP MODE						
Range	0~360W / 3600W	540W / 5400W	540W / 5400W	720W / 7200W	900W / 9000W	900W / 9000W
Resolution	6mW / 60mW	9mW / 90mW	9mW / 90mW	12mW / 120mW	15mW / 150mW	15mW / 150mW
Accuracy	± 0.5% OF (Setting + Range)					
DYNAMIC MODE - CC						
Timing						
Thigh & Tlow	0.050 ~ 9.999 / 99.99 / 999.9 / 9999mS					
Resolution	0.001 / 0.01 / 0.1 / 1mS					
Accuracy	1μS / 10μS / 100μS / 1mS + 50ppm					
Slew rate	1.92mA~120mA/μS 19.2mA~1200mA/μS	14.4mA~900mA/μS 144mA~9000mA/μS	2.88mA~180mA/μS 28.8mA~1800mA/μS	0.0192A~1.2A/μS 0.192A~12A/μS	0.024A~1.5A/μS 0.24A~15A/μS	4.8mA~300mA/μS 48mA~3000mA/μS
Resolution	0.48 / 4.8mA/μS	3.6 / 36mA/μS	0.72 / 7.2mA/μS	0.0048 / 0.048A/μS	0.006 / 0.06A/μS	1.2 / 12mA/μS
Accuracy	(5% of setting) ± 10μS					
Min. Rise Time	20μS (typical)					
Current						
Range	2.4A / 24A	18 / 180A	3.6A / 36A	24 / 240A	30A / 300A	6 / 60A
Resolution	0.02mA / 0.2mA	0.3mA / 3mA	0.06mA / 0.6mA	0.4mA / 4mA	0.5mA / 5mA	0.1mA / 1mA
Accuracy	± 0.1% OF (Setting + Range)					
MEASUREMENT						
Voltage Read Back						
Range (5 Digital)	0 ~ 60V / 500V					
Resolution	0.001V / 0.01V					
Accuracy	± 0.025% OF (Reading + Range)					
Current Read Back						
Range (5 Digital)	2.4A / 24A	0 ~ 18A / 180A	0 ~ 3.6A / 36A	0 ~ 24A / 240A	0 ~ 30A / 300A	0 ~ 6A / 60A
Resolution	0.02mA / 0.2mA	0.3mA / 3mA	0.06mA / 0.6mA	0.4mA / 4mA	0.5mA / 5mA	0.1mA / 1mA
Accuracy	± 0.1% OF (Reading + Range)					
Power Read Back						
Range (5 Digital)	0 ~ 360W / 3600W	0 ~ 540W / 5400W	0 ~ 540W / 5400W	0 ~ 720W / 7200W	0 ~ 900W / 9000W	0 ~ 900W / 9000W
Resolution	0.06W	0.09W	0.09W	0.12W	0.15W	0.15W
Accuracy	± 0.125% OF (Reading + Range)					
PROTECTIONS						
Over Power	105% of Rated Power					
Over Current	105% of Rated Current					
Over Voltage	105% of Rated Voltage					
Over Temp.	Yes					
OTHERS						
Load ON Voltage						
Range	0.4 ~ 100.0V					
Resolution	0.4V					
Accuracy	1% of Setting + 2.5V					
Load OFF Voltage						
Range	0 ~ 100V					
Resolution	Same as Voltage Meter					
Accuracy	Same as Voltage Meter					
GENERAL						
Short Circuit						
Current	24A	180A	36A	240A	300A	60A
Temperature Coefficient	100ppm/°C (typical)					
Power consumption	200Wmax	300Wmax	300Wmax	400Wmax	500Wmax	500Wmax
Operating Temperature *2	0~40°C					
Dimension (HxWxD)	889x596x600mm	889x596x600mm	889x596x600mm	1556x596x600mm	1556x596x600mm	1556x596x600mm
Weight	81.2 Kg	104.8 Kg	104.8 Kg	161.4 kg	185Kg	185 Kg
Safety & EMC	CE					

輸入電源：115/230 Vac ±10% , 50/60Hz

冷卻方式：智慧型風扇冷卻

註 *1 : CC Mode 可強制於 range II

註 *2 : 操作溫度範圍為 0~40°C, 此規格表內之精確度僅適用於 25°C±5°C

訂 購 方 式

選購介面：

- ① GPIB Card
- ② RS232 Card
- ③ USB Card
- ④ LAN Card



33671F 500V , 24A , 3600W

33622F 500V , 180A , 5400W

33672F 500V , 36A , 5400W

33623F 500V , 240A , 7200W

33624F 500V , 300A , 9000W

33674F 500V , 60A , 9000W

規 格

MODEL	33625F	33675F	33626F	33627F
Power	10800W	10800W	12600W	14400W
Current	0 ~ 360A	0 ~ 72A	0 ~ 420A	0 ~ 500A
Voltage	0 ~ 500V	0 ~ 500V	0 ~ 500V	0 ~ 500V
Min. Operation Voltage	4V @ 360A	6V @ 72A	4V @ 420A	4V @ 500A
CC MODE				
Range *1	0 ~ 36A / 360A	0 ~ 7.2A / 72A	0 ~ 42A / 420A	0 ~ 50A / 500A
Resolution	0.6mA / 6mA	0.12mA / 1.2mA	0.7mA / 7mA	0.84mA / 8.4mA
Accuracy	± 0.1% OF (Setting + Range)			
CR MODE				
Range	0.0277 ~ 1.6666 ~ 100KΩ	0.8333 ~ 8.333 ~ 500KΩ	0.0238 ~ 1.4285 ~ 85.71KΩ	0.02 ~ 1.2 ~ 72KΩ
Resolution	0.0277mΩ / 0.00033mS	0.138mΩ / 0.0166mS	0.0238mΩ / 0.00033mS	0.02mΩ / 0.0138mS
Accuracy	± 0.2% OF (Setting + Range)			
CV MODE				
Range	60V / 500V			
Resolution	1mV / 10mV	1mV / 10mV	1mV / 10mV	1mV / 10mV
Accuracy	± 0.05% OF (Setting + Range)			
CP MODE				
Range	0 ~ 1080W / 10800W	1080W / 10800W	1260W / 12600W	1440W / 14400W
Resolution	18mW / 180mW	18mW / 180mW	21mW / 210mW	24mW / 240mW
Accuracy	± 0.5% OF (Setting + Range)			
DYNAMIC MODE - CC				
Timing				
Thigh & Tlow	0.050 ~ 9.999 / 99.99 / 999.9 / 9999mS			
Resolution	0.001 / 0.01 / 0.1 / 1mS			
Accuracy	1μS / 10μS / 100μS / 1mS + 50ppm			
Slew rate	0.0288A ~ 1.8A/μS 0.288A ~ 18A/μS	5.76mA ~ 360mA/μS 57.6mA ~ 3600mA/μS	0.0336A ~ 2.1A/μS 0.336A ~ 21A/μS	0.04A ~ 2.5A/μS 0.4A ~ 25A/μS
Resolution	0.0072 / 0.072A/μS	1.44 / 14.4mA/μS	0.0084 / 0.084A/μS	0.01 / 0.1A/μS
Accuracy	(5% of setting) ± 10μS			
Min. Rise Time	20μS (typical)			
Current				
Range	36A / 360A	7.2 / 72A	42A / 420A	50A / 500A
Resolution	0.6mA / 6mA	0.12mA / 1.2mA	0.7mA / 7mA	0.84mA / 8.4mA
Accuracy	± 0.1% OF (Setting + Range)			
MEASUREMENT				
Voltage Read Back				
Range (5 Digital)	0 ~ 60V / 500V			
Resolution	0.001V / 0.01V			
Accuracy	± 0.025% OF (Reading + Range)			
Current Read Back				
Range (5 Digital)	0 ~ 36A / 360A	0 ~ 7.2A / 72A	0 ~ 42A / 420A	0 ~ 50A / 500A
Resolution	0.6mA / 6mA	0.12mA / 1.2mA	0.7mA / 7mA	0.84mA / 8.4mA
Accuracy	± 0.1% OF (Reading + Range)			
Power Read Back				
Range (5 Digital)	0 ~ 1080W / 10800W	0 ~ 1080W / 10800W	0 ~ 1260W / 12600W	0 ~ 1440W / 14400W
Resolution	0.18W	0.18W	0.21W	0.24W
Accuracy	± 0.125% OF (Reading + Range)			
PROTECTIONS				
Over Power	105% of Rated Power			
Over Current	105% of Rated Current			
Over Voltage	105% of Rated Voltage			
Over Temp.	Yes			
OTHERS				
Load ON Voltage				
Range	0.4 ~ 100.0V			
Resolution	0.4V			
Accuracy	1% of Setting + 2.5V			
Load OFF Voltage				
Range	0~100V			
Resolution	Same as Voltage Meter			
Accuracy	Same as Voltage Meter			
GENERAL				
Short Circuit				
Current	360A	72A	420A	504A
Temperature Coefficient	100ppm / °C (typical)			
Power consumption	600Wmax	600Wmax	700Wmax	800Wmax
Operating Temperature *2	0 ~ 40°C			
Dimension (HxWxD)	1556 x 596 x 600 mm	1556 x 596 x 600 mm	1556 x 596 x 600 mm	1778 x 596 x 600 mm
Weight	208.6 kg	208.6 Kg	232.2 kg	268.8 kg
Safety & EMC	CE			

輸入電源：115/230 Vac ±10% · 50/60Hz
冷卻方式：智慧型風扇冷卻

註 *1：CC Mode 可強制於 range II

註 *2：操作溫度範圍為 0~40°C，此規格表內之精確度僅適用於 25°C±5°C

訂 購 方 式

選購介面：

- ① GPIB Card
- ② RS232 Card
- ③ USB Card
- ④ LAN Card



33625F 500V · 360A · 10800W



33675F 500V · 72A · 10800W



33626F 500V · 420A · 12600W



33627F 500V · 500A · 14400W