

unitz Series D/E3000



Single-phase Phase Control Type Thyristor type feedback control type



Features

- 1 For stable control of halogen lamp heaters, pure metal heaters, SiC, carbon heaters, etc.
- 2 Suppresses miscontrol problems when transformers are loaded
- 3 Can be used in poor power supply environment such as power supply voltage fluctuation, instantaneous power failure, power surge, square wave, rectangular wave, etc.
- 4 Allowable power supply fluctuation range 30-440V
※ Need be set up

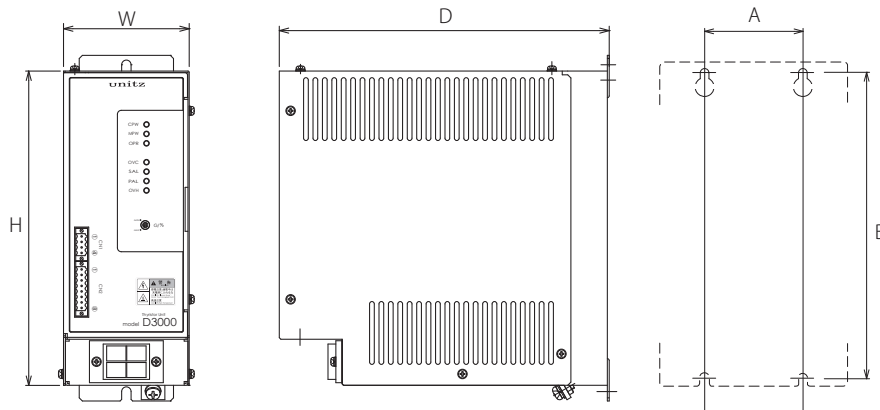
Application

- Use in areas where power supply fluctuations are severe, such as Southeast Asia.
- Adopted in semiconductor devices that require safety, reliability, and stability
- Ideal for near infrared heaters that require stable output performance

Main Specification

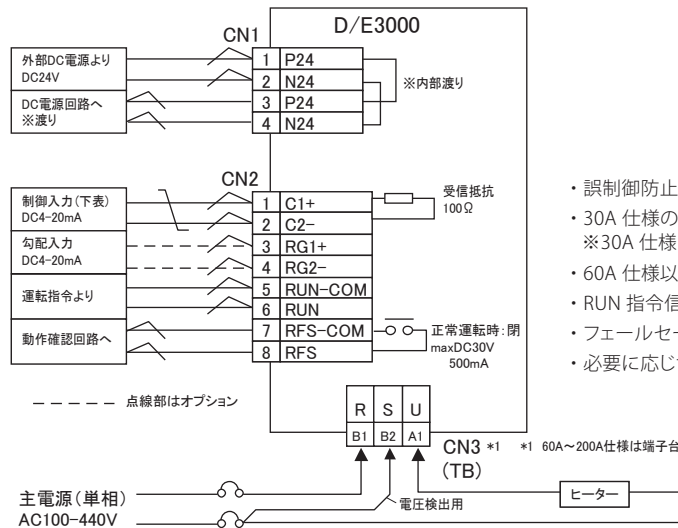
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|--|---|--|
| ◆ Main circuit power | Single Phase AC100 440V Less than 100A | Large Voltage AC110-220-440V Factory setting |
| ◆ Control circuit power | DC24V±10% | Consumption current 30A ~ 120A Spec : 100mA 200A Spec : 350mA |
| ◆ Power control method | Thyristor AC phase | D Type : Voltage feedback E Type : Current feedback |
| ◆ Control input signal | DC4-20mA | Receive resistance 100Ω |
| | DC0-5V | |
| | DC0-10V | |
| ◆ Output adjust method | Front POWER VR 0-100% | External remote gain adjustment input / 0-100% (OPTION) |
| ◆ Alarm output | Dry contact output | RUN (GATE ON) Signal Input |
| ◆ Answer back output | Dry contact output | RUN: Output during normal operation(OFF when an alarm occurs)※max DC30V Less than 0.5A |
| ◆ Safety protection function | Alarm action | RUN Stop output |
| | MTA Over current protection | Main circuit overcurrent detection action when above130% |
| | Equipment abnormality protection | ユニット故障検出 正常運転不能な状態で動作 |
| | Power failure protection | 電源電圧異常検出 |
| | MTF Overheat protection | 機器異常温度検出 SCR直近温度にて 100℃で動作 *200Aは 80℃で動作 |
| | Protective action | 定格電流 110%を超える過電流を検出した場合、自動で電流抑制制御運転中に瞬時停電が発生した場合、出力停止→自動起動を実施 |
| | Output current limit function | ・ IEC61000-4-3 RF conducted immunity |
| ◆ Noise resistance | Instantaneous power failure protection | |
| | EMC immunity requirements | ・ IEC61000-4-4 Fast transient burst immunity |
| | | ・ IEC61000-4-5 Lightning surge immunity |
| | | ・ IEC61000-4-11 Voltage dip, instantaneous power failure, voltage fluctuation immunity |
| | SEMI requirement conformity | ・ Voltage sag immunity Fail-safe design compliant |
| ◆ Environmental specifications | RoHS | |
| ◆ Withstand voltage /dielectric strength | Between Power - Chassis more than DC500V 100MΩ / Between Power - Chassis AC2500V 1 min | |
| ◆ Usage environment | Temp. : 0 ~ 50℃ (Reduce load current to 85% above 40℃) Humidity : Below90% (non-condensing) | |

外形・寸法



| | 取付寸法 (mm) | | 取付ネジ |
|------|-----------|-----|------|
| | A | B | |
| 3030 | 0 | 210 | M4×2 |
| 3060 | 0 | 220 | M4×2 |
| 3120 | 75 | 230 | M5×4 |
| 3200 | 100 | 235 | M5×4 |

接続例



- ・誤制御防止のため信号配線はシールド線をご使用下さい
- ・30A仕様の電源配線(S)はAWG12～AWG10で配線して下さい
※30A仕様は、コネクタ接続
- ・60A仕様以上の電源配線(S)はAWG14～AWG18で配線して下さい
- ・RUN指令信号用接点は微小電流用接点を使用して下さい
- ・フェールセーフ出力への接続はDC30V500mA未満でご使用下さい
- ・必要に応じサイリスタ保護用ブレーカー・フューズを設置して下さい

型式・コード表

| コード | 機器仕様 | | 外形寸法 (mm) | 質量 | 標準価格 (税抜) |
|----------------|--------------------------|------------------------------|----------------|--------|-----------|
| D3 | 定電圧フィードバック方式 交流位相制御電力調整器 | | | | |
| E3 | 定電流フィードバック方式 交流位相制御電力調整器 | | | | |
| 電流容量 | 03 | 30A | W80×H200×D210 | 2.2 kg | ¥70,000 |
| | 06 | 60A | W90×H210×D250 | 3.2 kg | ¥90,000 |
| | 12 | 120A | W115×H220×D270 | 4.7 kg | ¥130,000 |
| | 20 | 200A | W150×H227×D285 | 6.1 kg | ¥150,000 |
| 使用電源電圧 ※出荷時設定値 | 1 | AC110V (AC100-120V) | | | — |
| | 2 | AC220V (AC200-240V) | | | — |
| | 4 | AC440V (AC380-440V) | | | — |
| 制御入力種類 | -1 | DC4-20mA (受信抵抗 100Ω) | | | — |
| | -2 | DC0-5V | | | — |
| | -3 | DC0-10V | | | — |
| オプション | -R | リモートゲイン入力 (外部勾配設定) 制御入力種類と同種 | | | ¥10,000 |
| | -G | 勾配ボリューム | | | ¥10,000 |
| | -RG | R, Gを同時選択 | | | ¥20,000 |

※通信機能をオプションにてご用意しております。詳細は別途ご相談下さい。

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