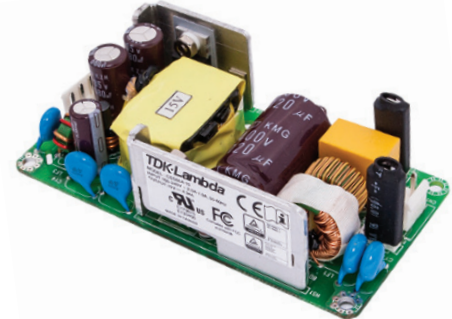




## 2 x4" 40-65W AC-DC Medical & ITE Power Supplies

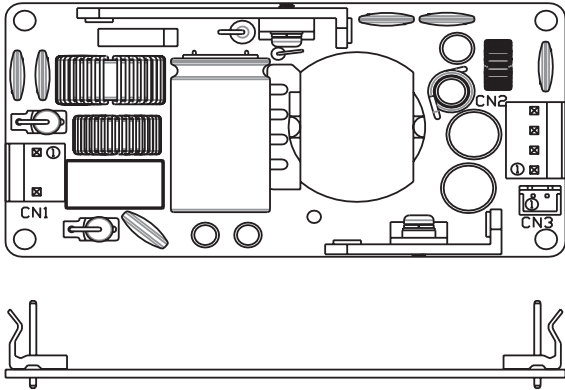
| Features                      | Benefits                        |
|-------------------------------|---------------------------------|
| • Industry Standard Footprint | • Availability to Second Source |
| • Wide Range AC Input         | • Global Operation              |
| • Dual Input Fuses            | • Easier System Compliance      |



| Specification               |        |   |
|-----------------------------|--------|---|
| Model                       | CSS65A |   |
| Input Voltage Range         | -      | 90 - 264VAC (47 - 63Hz)   |
| Inrush Current (115/230VAC) | A      | Less than 45A / 90A, 25°C ambient cold start  |
| Input Current (115/230VAC)  | A      | 2 / 1   |
| Leakage Current             | uA     | <250uA 264VAC 63Hz  |
| Touch Current               | uA     | <100uA 264VAC 63Hz  |
| Hold Up Time (Typ)          | ms     | >10ms at 115VAC input   |
| Off-Load Power Consumption  | W      | <75mW   |
| Average Efficiency          | %      | 5V: 86%, 12-54V: 89%  |
| Temperature Coefficient     | %/°C   | ±0.05%/°C   |
| Output Voltage Accuracy     | %      | ±1%   |
| Output Adjustment Range     | -      | None  |
| Remote Sense                | -      | Yes   |
| Minimum Load                | A      | None  |
| Output Regulation           | %      | 5V: ±5%, 12-28V: ±3%, 48-54V: ±2%   |
| Ripple & Noise              | %      | See Model Selector  |
| Overcurrent Protection      | -      | 110 - 180%, Auto-Recovery   |
| Overvoltage Protection      | V      | 110 - 130% of nominal (Cycle input power to reset)  |
| Operating Temperature       | °C     | 0°C to +70°C derate linearly to 50% load from 50°C to 70°C  |
| Storage Temperature         | °C     | -40°C to +85°C  |
| Humidity (non condensing)   | %RH    | 10 - 90%RH  |
| Cooling                     | -      | Convection  |
| Withstand Voltage           | VAC    | Input to Ground 1.5kVAC, Input to Output 4kVAC (Reinforced)<br>(2 x MOPPS), Output to Ground 1.5kVAC (1xMOPPS). |
| Isolation Resistance        | MΩ     | >20MΩ at 25°C & 70%RH, Output to Ground 500VDC  |
| Vibration (non operating)   | -      | 23.52m/s <sup>2</sup> (10 - 55Hz: constant sweep 1 min X, Y, Z for 1 hour)                                      |
| Shock                       | -      | < 196.1 m/s <sup>2</sup> (20G)  |
| Safety Agency Approvals     | -      | UL/CSA/IEC/EN60601-1, ANSI/AAMI ES60601-1, UL/CSA/IEC/EN60950-1,<br>UL/CSA/IEC/EN62368-1, CE Mark               |
| Conducted & Radiated EMI    | -      | EN55011-B, FCC Class B  |
| Immunity                    | -      | EN60601-1-2, IEC61000-4   |
| Altitude                    | m      | Medical: 3,000m, ITE: 5,000m  |
| Weight (Typ)                | g      | 136g  |
| Size (WxLxH)                | mm     | 50.8 x 101.6 x 30.5 (including underside components)  |
| Warranty                    | yrs    | 3   |

## Outline Drawing CSS65A Series

### Input/Output Connectors (Molex)



CN1: Input Connector (Molex)  
Mates with 5265 09-76-1020 or equivalent

| Pin # | Signal     |
|-------|------------|
| 1     | AC Line    |
| 2     | AC Neutral |

CN2: Output Connector (Molex)  
Mates with 5239 09-52-4044 or equivalent

| Pin # | Signal |
|-------|--------|
| 1     | +Vout  |
| 2     | +Vout  |
| 3     | 0V     |
| 4     | 0V     |

CN3: Remote Sense (JST Only)

| Pin # | Signal   |
|-------|----------|
| 1     | +V sense |
| 2     | 0V sense |

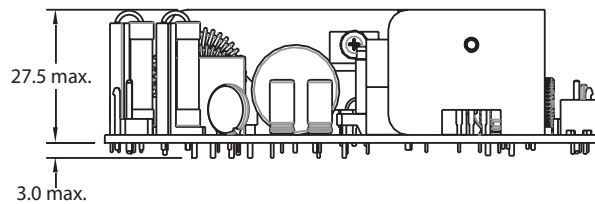
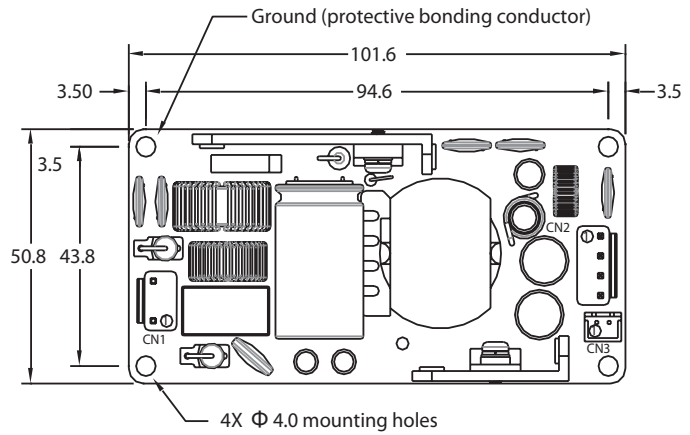
CN1: Input Connector (JST)  
Mates with JST VHR-3N or equivalent

| Pin # | Signal     |
|-------|------------|
| 1     | AC Neutral |
| 2     | AC Line    |

CN2: Output Connector (JST)  
Mates with JST VHR-4N or equivalent

| Pin # | Signal |
|-------|--------|
| 1     | 0V     |
| 2     | 0V     |
| 3     | +Vout  |
| 4     | +Vout  |

### JST Input/Output Connectors shown (/J option)



## Model Selector

| Model     | Output (V) | Maximum Output (A) | Maximum Power (W) | Ripple and Noise Full Load (mV) | Ripple and Noise <30% Load (mV) (1) |
|-----------|------------|--------------------|-------------------|---------------------------------|-------------------------------------|
| CSS65A-5  | 5          | 8.0                | 40                | 100                             | 200                                 |
| CSS65A-12 | 12         | 5.42               | 65                | 120                             | 200                                 |
| CSS65A-15 | 15         | 4.34               | 65                | 120                             | 300                                 |
| CSS65A-19 | 19         | 3.43               | 65                | 120                             | 300                                 |
| CSS65A-24 | 24         | 2.71               | 65                | 200                             | 300                                 |
| CSS65A-28 | 28         | 2.33               | 65                | 200                             | 350                                 |
| CSS65A-48 | 48         | 1.36               | 65                | 200                             | 480                                 |
| CSS65A-54 | 54         | 1.21               | 65                | 200                             | 480                                 |

Notes: (1) Ripple level increases at light loading to meet new efficiency standards

## Options

| Suffix | Description                       |
|--------|-----------------------------------|
| Blank  | Molex Input and Output Connectors |
| /J     | JST Input and Output Connectors   |



## TDK-Lambda France SAS

3 Avenue du Canada  
Parc Technopolis  
Bâtiment Sigma  
91940 les Ulis  
France  
Tel: +33 1 60 12 71 65  
Fax: +33 1 60 12 71 66  
france@fr.tdk-lambda.com  
www.emea.lambda.tdk.com/fr



## Italy Sales Office

Via Giacomo Matteotti 62  
20092 Cinisello Balsamo (MI)  
Italy  
Tel: +39 02 61 29 38 63  
Fax: +39 02 61 29 09 00  
info.italia@it.tdk-lambda.com  
www.emea.lambda.tdk.com/it



## Netherlands

info@nl.tdk-lambda.com  
www.emea.lambda.tdk.com/nl



## TDK-Lambda Germany GmbH

Karl-Bold-Strasse 40  
77855 Achern  
Germany  
Tel: +49 7841 666 0  
Fax: +49 7841 5000  
info.germany@de.tdk-lambda.com  
www.emea.lambda.tdk.com/de



## Austria Sales Office

Aredstrasse 22  
2544 Leobersdorf  
Austria  
Tel: +43 2256 655 84  
Fax: +43 2256 645 12  
info@at.tdk-lambda.com  
www.emea.lambda.tdk.com/at



## Switzerland Sales Office

Eichtalstrasse 55  
8634 Hombrechtikon  
Switzerland  
Tel: +41 44 850 53 53  
Fax: +41 44 850 53 50  
info@ch.tdk-lambda.com  
www.emea.lambda.tdk.com/ch



## Nordic Sales Office

Haderslevvej 36B  
DK-6000 Kolding  
Denmark  
Tel: +45 8853 8086  
info@dk.tdk-lambda.com  
www.emea.lambda.tdk.com/dk



## TDK-Lambda UK Ltd.

Kingsley Avenue  
Ilfracombe  
Devon EX34 8ES  
United Kingdom  
Tel: +44 (0) 12 71 85 66 66  
Fax: +44 (0) 12 71 86 48 94  
powersolutions@uk.tdk-lambda.com  
www.emea.lambda.tdk.com/uk



## TDK-Lambda Ltd.

1 Alexander Yanai  
Segula  
Petah-Tikva  
Israel  
Tel: +9 723 902 4333  
Fax: +9 723 902 4777  
info@tdk-lambda.co.il  
www.emea.lambda.tdk.com/il



## C.I.S.

**Commercial Support:**  
Tel: +7 (495) 665 2627  
**Technical Support:**  
Tel: +7 (812) 658 0463  
info@tdk-lambda.ru  
www.emea.lambda.tdk.com/ru

## Local Distribution

