

## Features

Universal Input 90~264VDAC  
 Direct UK Fixed Plugtop Adapters  
 Approved to UKCA, CE & RoHS  
 BS EN IEC 62368-1 Safety Approved  
 Meets Efficiency Level VI & (EU) 2019/1782  
 EMC Class B Certified  
 Single Output 5V DC  
 OVP, OLP, SCP



## 56YS6B-xy-RS Series

6W External AC/DC UK Plugtop Adapter Power Supply



The 56YS6B-xy-RS Series is a regulated and reliable 6W External AC/DC UK Plugtop Adapter Power Supply. Designed for use in applications such as system-critical media and control infrastructure.. This series is supplied with a UK Fixed input connection and supports input voltages of 90~264V AC 50~60Hz.

### Model Number Information

|        |   |   |    |
|--------|---|---|----|
| 56YS6B | 6 | B | xx |
|--------|---|---|----|

|             |               |              |                |
|-------------|---------------|--------------|----------------|
| Series Name | Rated Wattage | British Plug | Output Voltage |
|-------------|---------------|--------------|----------------|

### Models

| Model Number          | DC Voltage (V) | Rated Current (A) | Rated Power (W) | Efficiency (%) | Ripple & Noise(max.) (mVp-p) |
|-----------------------|----------------|-------------------|-----------------|----------------|------------------------------|
| 56YS6-0501000B-D1J-RS | 5              | 1                 | 5               | 80             | 240                          |
| 56YS6-2400250B-RS     | 24             | 0.25              | 6               | 80             | 240                          |

| Input Specifications |                                     |                                     |
|----------------------|-------------------------------------|-------------------------------------|
| Rated Voltage Range  | 100-240VAC                          |                                     |
| Voltage Range        | 90-264VAC                           |                                     |
| Frequency Range      | 50/60Hz                             |                                     |
| AC Current           | 0.2A/115VAC                         | 0.15A/230VAC                        |
| Efficiency           | 80%                                 |                                     |
| Inrush Current       | Cold Start 50A/200us at 230VAC 50Hz | Cold Start 30A/200us at 115VAC 50Hz |
| Leakage Current      | <0.25mA/230VAC                      |                                     |
| No Load Power        | <0.1W                               |                                     |

| Output Specifications   |                                     |                                     |
|-------------------------|-------------------------------------|-------------------------------------|
| DC Voltage              | 5V                                  | 24V                                 |
| Rated Current           | 1A                                  | 0.25A                               |
| Rated Power             | 5W                                  | 6W                                  |
| Ripple & Noise(max.)    | 240mVp-p                            |                                     |
| Voltage Tolerance       | 5%                                  |                                     |
| Line Regulation         | 5%                                  |                                     |
| Load Regulation         | 3%                                  |                                     |
| Setup,Rise,Hold up Time | 1.0s,30ms,25ms/230VAC(at full load) | 2.0s,30ms,12ms/115VAC(at full load) |

| Protection    |   |
|---------------|---|
| Over Load     | 105~150%<br>Hiccup mode, recovers automatically after fault condition is removed. |
| Short Circuit | Shut down o/p voltage, re-power on to recover.                                    |
| Over Voltage  | 120~180%<br>Shut down o/p voltage, re-power on to recover.                        |

| Environmental Characteristics |   |
|-------------------------------|---|
| Working Temp                  | -20 ~ +70°C(Please refer to "Derating Curve"section)  |
| Working Humidity              | 20 ~ 95%RH Non-condensing   |
| Storage Temp., Humidity       | -40 ~ +85°C, 10 ~ 95%RH Non-condensing  |
| Temp. Coefficient             | 0.03%/(0 ~ 40°C)  |
| MTBF                          | 10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes -(56YS6-0501000B-D1J-RS)<br>245.8Khrs min. MIL-HDBK-217F (25°C) – (56YS6-2400250B-RS) |

| Safety & EMC         |   |                     |  |
|----------------------|---|---------------------|--|
| Safety Standards     | BS EN IEC 62368-1                         |                     |  |
| Withstand Voltage    | I/P-O/P: 3KVAC/1min                       |                     |  |
| Isolation Resistance | I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH |                     |  |
| EMC Emission         | Parameter                                 | Standard            | Test Level                                 |
|                      | Conducted                                 | BS EN55032(CISPR32) | CLASS B                                    |
|                      | Radiated                                  | BS EN55032(CISPR32) | CLASS B                                    |
|                      | Harmonic Current                          | BS EN61000-3-2      | CLASS B                                    |
|                      | Voltage flicker                           | BS EN61000-3-3      | CLASS B                                    |
| EMC Immunity         | Parameter                                 | Standard            | Test Level                                 |
|                      | ESD                                       | BS EN61000-4-2      | Level 3, 8KV air, criteria A               |
|                      | Radiated Susceptibility                   | BS EN61000-4-3      | Level 3, criteria A                        |
|                      | EFT/Burest                                | BS EN61000-4-4      | Level 3, criteria A                        |
|                      | Surge                                     | BS EN61000-4-5      | Level 4, 2KV/L-N, criteria A               |
|                      | Conducted                                 | BS EN61000-4-6      | Level 3, criteria A                        |
|                      | Magnetic Field                            | BS EN61000-4-8      | Level 4, criteria A                        |
|                      | Voltage Dips and interruptions            | BS EN61000-4-11     | > 95% dip 0.5 periods, 30% dip 25 periods, |

#### Notes:

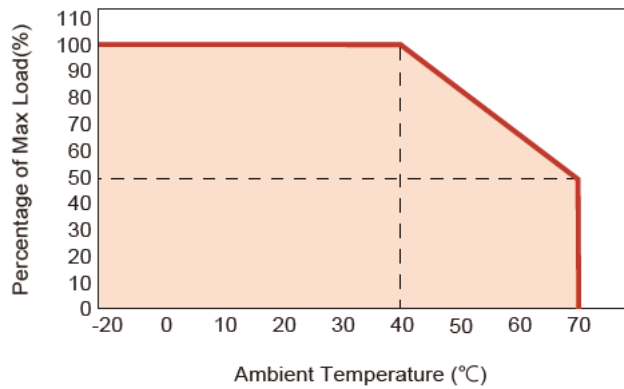
1. Tolerance: includes set up tolerance, line regulation and load regulation.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
- 3.Line regulation is measured from low line to high line at rated load.
- 4.Load regulation is measured from 0% to 100% rated load.
5. All parameters NOT specially mentioned are measured at nominal voltage input, rated load and 25°C of ambient temperature.
6. De-rating may be needed under low input voltages. Please refer to "Static Characteristic" sections for details.
7. The power supply is considered as a component that will be operated in combination with final equipment.Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.

| Dimensions & Weight |                 |          |
|---------------------|-----------------|----------|
|                     | Measurements    | Weight   |
| 56YS6B-xy Series    | 62 x 48 x 38 mm | 120g Pcs |

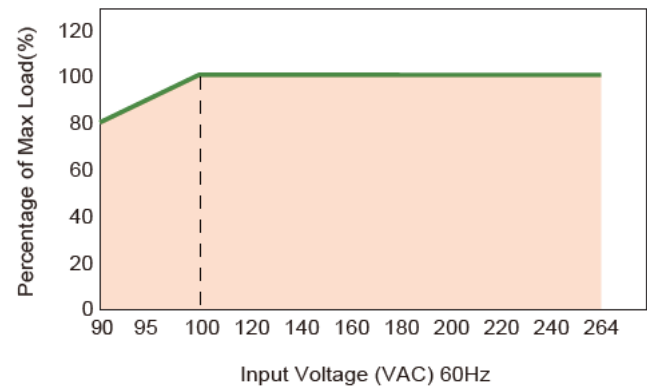
| Packaging                |                            |                        |
|--------------------------|----------------------------|------------------------|
| Carton Size              | 120g/pcs; 62 x 48 x 38 cm; |                        |
| Master Carton Quantities | 500pcs/Carton              | -56YS6-0501000B-D1J-RS |
|                          | 100pcs/carton              | -56YS6-2400250B-RS     |

## Derating Curves

## 1. Derating Curve

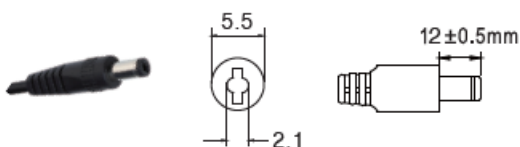
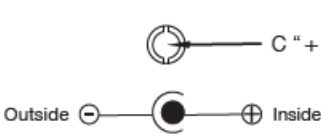


## 2. Static Characteristics



## Derating Curves

## Standard Model : D1J

| D1J   | Pin Assignment   |
|---|--|
|  |  |