

# ADP Series Power Adapters

## 12V 25W/36W/66W

# ADP 12V

### Highlights & Features

- Energy Star Compliance (Level VI)
- IT safety approvals
- 100k Hours MTBF
- Over-Voltage/Load/Temperature & Short Circuit protections



### Model Information

#### ADP Series Power Adapters

| Model Number | Input Voltage Range | Output Voltage | Output Current |
|--------------|---------------------|----------------|----------------|
| ADP-25FW BB  | 90-264Vac           | 12Vdc          | 2.1A           |
| ADP-36PH BH  | 90-264Vac           | 12Vdc          | 3A             |
| ADP-66CR BE  | 90-264Vac           | 12Vdc          | 5.5A           |

### Specifications

#### Input Ratings / Characteristics

|                                     | 25W                                                 | 36W                                                    | 66W                                    |
|-------------------------------------|-----------------------------------------------------|--------------------------------------------------------|----------------------------------------|
| Nominal Input Voltage               | 115/230Vac                                          | 100-240Vac                                             | 115/230Vac                             |
| Input Voltage Range                 | 90-264 Vac                                          |                                                        |                                        |
| Nominal Input Frequency             | 50-60Hz                                             |                                                        |                                        |
| Input Frequency Range               | 47-63Hz                                             |                                                        |                                        |
| Input Current                       | 1A Max @ 100Vac<br>600mA @ 240Vac                   | 1A Max at 100Vac input voltage                         | 2A Max at 100Vac input voltage         |
| Inrush Current(Cold Start)          | <50A at 120VAC                                      | No Damage at 240Vac                                    | <90A at 230Vac                         |
| Efficiency at nominal input voltage | 86% @ 115Vac                                        | 84% min, max load and measured at the end of DC cable. | 83%                                    |
| Active Mode Efficiency @ 115Vac     | 86.38%                                              | >87.4%                                                 | 88%                                    |
| Active Mode Efficiency @ 230Vac     | N/A                                                 | >84.78                                                 | 88%                                    |
| No Load Power Consumption           | <0.1W @115Vac                                       | <0.1W @ 115Vac/60Hz and 230Vac/50Hz                    | 0.21w                                  |
| Hold Up Time at maximum load        | >16.7milliseconds@115Vac<br>>20 milliseconds@230Vac | 5milliseconds@100Vac                                   | 10milliseconds minimum at 100Vac/50Hz. |

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### Output Ratings / Characteristics

|                                                                                                               | 25W                                                                                                                        | 36W                                                                                                 | 66W                                                                      |
|---------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| Rated Voltage                                                                                                 | 12V                                                                                                                        |                                                                                                     |                                                                          |
| Voltage Range(All Models)                                                                                     | 11.4 ~ 12.6V                                                                                                               |                                                                                                     |                                                                          |
| Current                                                                                                       | 0-2.1A                                                                                                                     | 0-3A                                                                                                | 0-5.5A                                                                   |
| Output Ripple and Noise @20MHz. BW, with 0.1uF ceramic and 47uF Electrolytic Caps connected parallel to load. | <120mVp-p                                                                                                                  | 450mV pk-pk                                                                                         | 120mV pk-pk                                                              |
| Turn On delay time                                                                                            | 2 seconds @ 120Vac                                                                                                         | 5 seconds @ 100-240Vac                                                                              | 3 seconds @ 90Vac/60Hz and -0°C to +45°C; OR 10 seconds at -20°C to 0°C. |
| Rise Time                                                                                                     | <20ms                                                                                                                      | 30mS                                                                                                | 30ms                                                                     |
| Max Load Capacitance (microfarads)                                                                            | 1000                                                                                                                       | 470                                                                                                 | 1000                                                                     |
| Load Transient Response                                                                                       | 0%-50%-0% and 50%-100%-50% of full nominal load. frequency is 60Hz, 50% duty cycle and the slew rate shall be at 0.02A/us. | 0.1~1.5A & 1.5A~3A load at 2.5A/us slew rate , 50% Duty cycle , Frequency be operated 100Hz ~ 10KHz | 25 % step load change at 1 A/s.at frequency 500Hz with 50% duty.         |

### Environment, EMI and Immunity

|                                                    | 25W                                                                                                             | 36W                                                                                                      | 66W                                                                                                      |
|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Operating Temperature                              | 0 °C to +40 °C                                                                                                  |                                                                                                          | -20 °C to +45 °C                                                                                         |
| Shipping/Storage Temperature                       | -20 °C to +75 °C                                                                                                | -30 °C to +80 °C                                                                                         | -40 °C to +85 °C                                                                                         |
| Operating Humidity                                 | Up to 95%                                                                                                       | 8% to 90% RH (Non-Condensing)                                                                            | 10% to 95% RH (Non-Condensing)                                                                           |
| Shipping/Storage Humidity                          | 5% to 95% RH (Non-Condensing)                                                                                   |                                                                                                          | 10-95% RH (Non-Condensing)                                                                               |
| Operating Altitude                                 | Maximum of 3700 meters (12000 feet)                                                                             | Maximum of 5000 meters                                                                                   | -150 to 3000 meters (-500 to 10000 feet)                                                                 |
| Lightning Surge Immunity<br>Per IEC-1000-4-5       | L-N, L-G, N-G, IEEE C62.41.2, 0.5 μs – 100 kHz Ring Wave, 1.2/50 μs - 8/20 μs Combination Wave 6KV, Criterion B | Line –Neutral 1KV/1.2 * 50us Level 3 Criteria A                                                          | L-N, L-G, N-G Combination Wave 6KV, Criterion B                                                          |
| Electric Fast Transients (EFT)                     | EN61000-4-4 +/-1kV on input power lines; Criterion B                                                            | IEC-1000-4-4/1995 (EN 61000-4-4) Level 3 requirements                                                    | EN61000-4-4 +/-1kV on input power lines; Criterion B                                                     |
| Electrostatic Discharge (ESD)<br>Per IEC-61000-4-2 | Contact discharge : ±8KV<br>Air discharge : ±15KV                                                               |                                                                                                          | +/-8kV air discharge; +/-6kV contact discharge;                                                          |
| Dielectric Withstand Voltage (HI-POT)              | 3KV AC RMS from AC Input to Output                                                                              |                                                                                                          |                                                                                                          |
| Leakage Current                                    | <250uA at 264 Vac                                                                                               | <100uA at 240Vac/50Hz                                                                                    | <250uA at 264 Vac                                                                                        |
| Insulation Resistance                              | The insulation resistance shall be not less than 4M ohms after application of 500Vdc/10mA for 1 minute.         | The insulation resistance shall be not less than 30M ohms after application of 500Vdc/10mA for 1 minute. | The insulation resistance shall be not less than 10M ohms after application of 500Vdc/10mA for 1 minute. |
| Electromagnetic Interference (EMI)                 | CISPR 22/EN55022 Class B.                                                                                       | (a) FCC Class B<br>(b) CISPR 22 Class B<br>(c) VCCI Class B                                              | CISPR 22 : 1997/EN55022(1998) Class B.                                                                   |
| MTBF                                               | 200,000 hours of continuous operation at 25°C                                                                   | 80,000 hours of continuous operation at 25°C                                                             | 150,000 hours of operation at 90% confidence level at 25degC                                             |
| Electrolytic Capacitor Operating Life              | 7 years at 115VAC, 40C and 100% rated load                                                                      | 3 years at 115 Vac and 230 Vac, and 25degC 100% rated load                                               | 5 years at 115 Vac and 230 Vac, and 25degC 100% rated load                                               |

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Protections

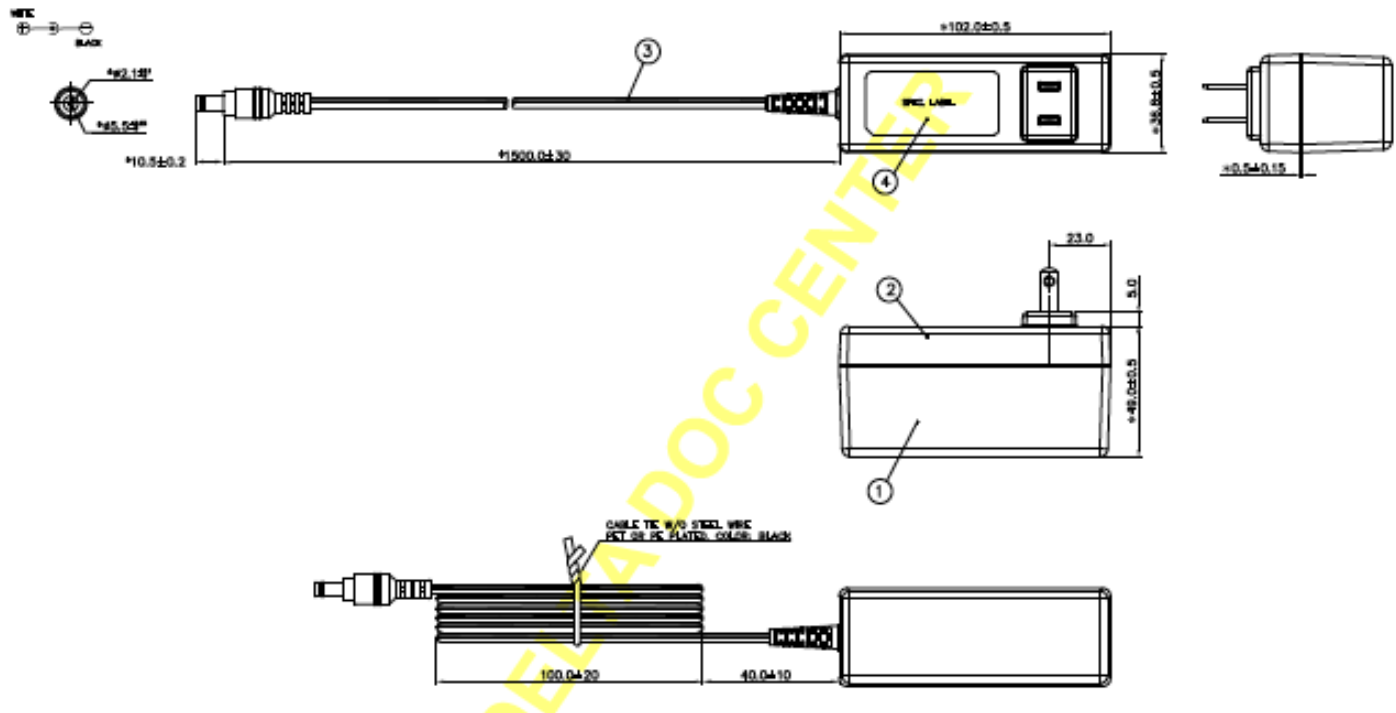
|                        | 25W                                             | 36W           | 66W           |
|------------------------|-------------------------------------------------|---------------|---------------|
| Overvoltage            | <150% of nominal output voltage (Recovery mode) | Latch Mode    | Latch Mode    |
| Overload / Overcurrent | <150% maximum load current (Recovery mode)      | Auto-Recovery | Auto-Recovery |
| Over Temperature       | Recovery mode                                   | Latch Mode    | Auto-Recovery |
| Short Circuit          | Recovery mode                                   | Auto-Recovery | Auto-Recovery |

Mechanical

|                                | 25W                   | 36W                     | 66W                |
|--------------------------------|-----------------------|-------------------------|--------------------|
| Color                          | Black                 |                         |                    |
| Outline Dimensions (L x W x D) | 102 * 36.8 * 49 mm    | 89.5.0 * 37.0 * 26.5 mm | 132 * 62 * 34.1 mm |
| AC Inlet Type                  | Fixed 2 pin AC Blades | Socket C6 type          | Socket C14 Type    |
| DC Cable Type                  | UL2468 #AWG20         | UL1571 #AWG17           | UL1571 #AWG14      |
| DC Cable Length                | 1500 mm               | 1800 mm                 | 1500 mm            |
| DC Connector - OD              | 2.1 mm                | 4.75 mm                 | 2.5 mm             |
| DC Connector - ID              | 5.5 mm                | 1.7 mm                  | 5.5 mm             |
| DC Connector - Length          | 10.5 mm               | 12.5 mm                 | 9.5 mm             |

Mechanical

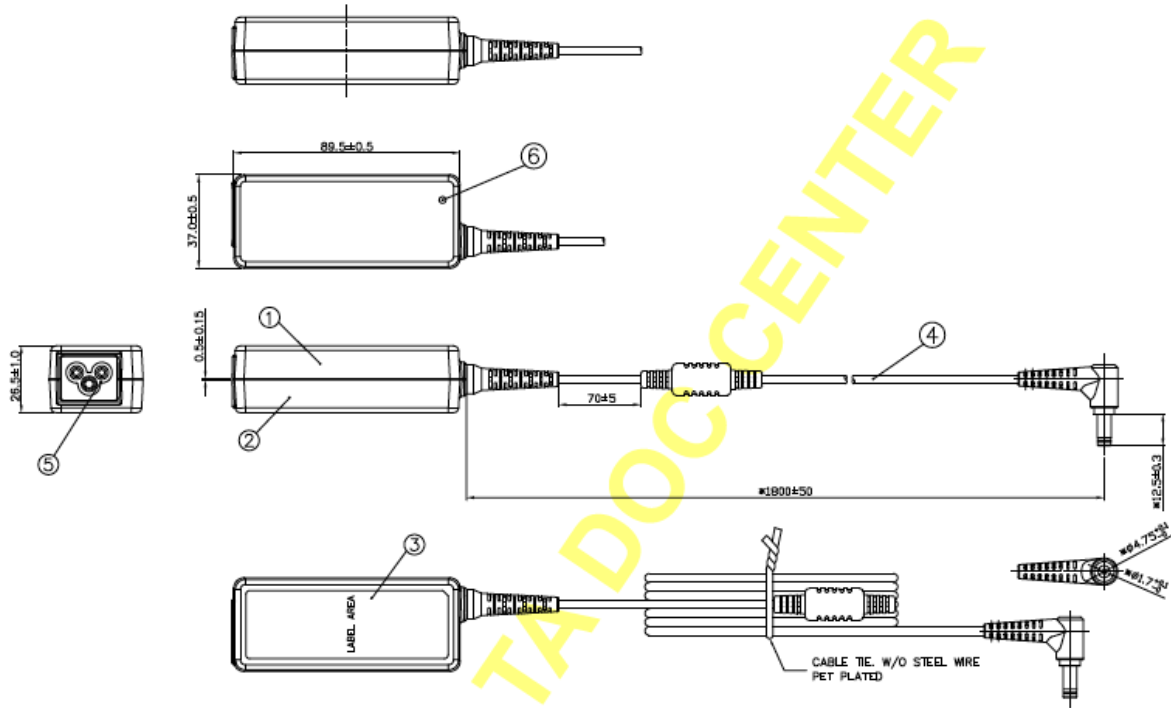
ADP-25FW BB



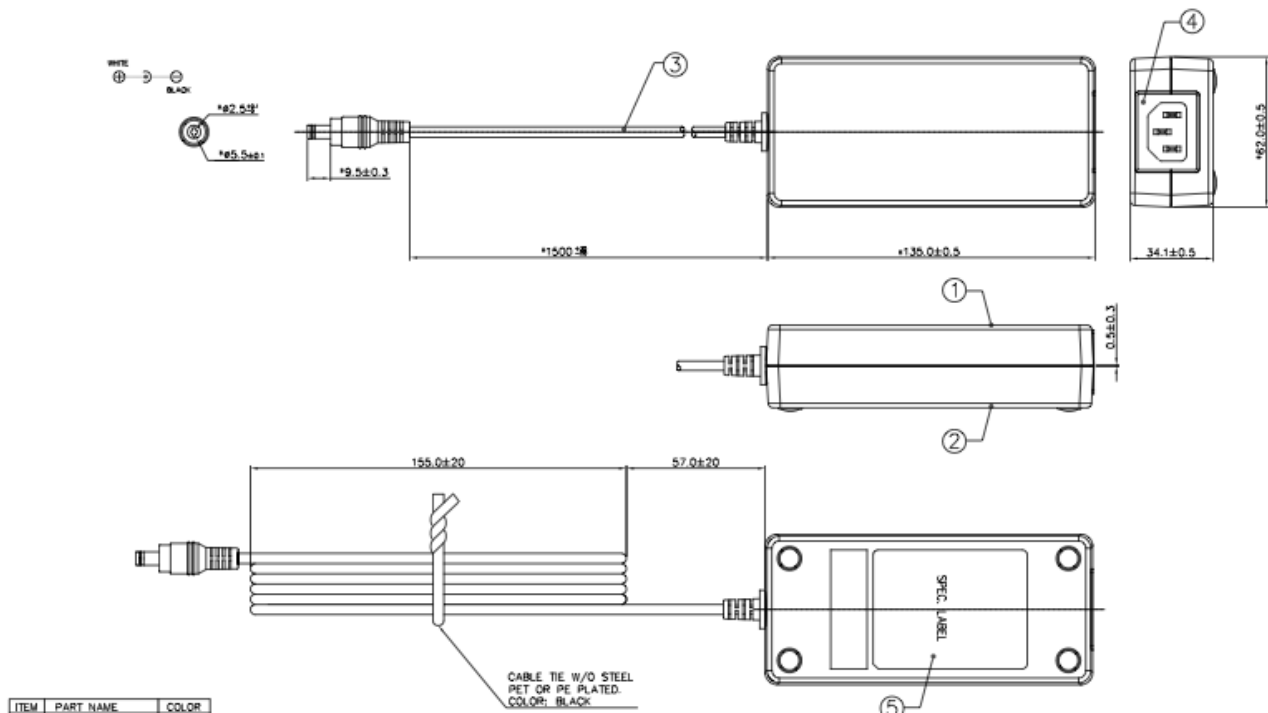
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### ADP-36PH BH



### ADP-66CR BE





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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