

## DESCRIPTION

The series of AC-DC switching power supplies in a package of 40.0 x 33.5 x 22.0 mm are capable of delivering 6 watts. They are designed for industry control application, AC motor control application.

## FEATURES

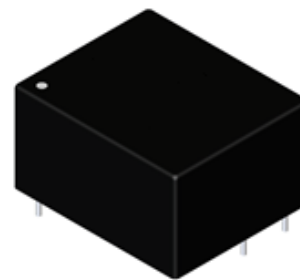
- Universal input 90~264VAC, 47~63Hz
- High efficiency up to 80%
- Continuous short circuit protection
- Over load protection
- Over voltage protection
- Low standby power consumption 0.05W max
- 3750 VAC isolation voltage

## WATTAGE

Wattage: 6W

## DIMENSION

Dimension: 40.0(L) x 33.5(W) x 22.0(H) mm



## SAFETY STANDARD APPROVAL

Meet 60950 / 60335-1

## ENVIRONMENTAL SPECIFICATION

Operating temperature: -25°C to +85°C

Storage temperature: -25°C to +85°C

## SELECTION GUIDE

| Part number | Input voltage | Output voltage | Output current<br>@ full load | Efficiency <sup>(1)</sup><br>(typ.) | Capacitive load <sup>(2)</sup><br>(max.) |
|-------------|---------------|----------------|-------------------------------|-------------------------------------|------------------------------------------|
| A06-XE2-3.3 | 90-264 Vac    | 3.3Vdc         | 1500mA                        | 70%                                 | 15000uF                                  |
| A06-XE2-05  |               | 5Vdc           | 1200mA                        | 75%                                 | 6800uF                                   |
| A06-XE2-12  |               | 12Vdc          | 500mA                         | 79%                                 | 2500uF                                   |
| A06-XE2-24  |               | 24Vdc          | 250mA                         | 80%                                 | 1400uF                                   |

1. The efficiency measured at full load at 115Vac/60Hz and 230Vac/50Hz after warm-up.
2. The capacitive load measured at full load at 115Vac/60Hz, Ta=25°C with constant resistant mode.
3. The product information and specifications are subject to change without prior notice.
4. All specifications valid at nominal input voltage(115/230VAC), full load and 25°C after warm-up time unless otherwise stated.

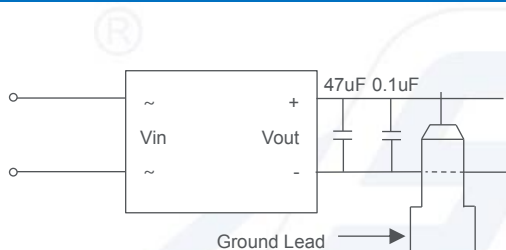
## SPECIFICATION

|             | Parameter                            | Conditions                                   | Min.                           | Typ. | Max.     | Unit     |
|-------------|--------------------------------------|----------------------------------------------|--------------------------------|------|----------|----------|
| Input       | Input voltage range                  | See derating curve                           | 90                             |      | 264      | VAC      |
|             | Input frequency                      | For AC input                                 | 47                             |      | 63       | Hz       |
|             | Inrush current<br>(cold start @25°C) | 115VAC<br>230VAC                             |                                |      | 20<br>40 | A<br>A   |
|             | Start-up time                        |                                              |                                |      | 1        | S        |
|             | No load power consumption            |                                              |                                |      | 0.05     | W        |
|             | External fuse (or internal)          |                                              | Internal wire wound resistor   |      |          |          |
| Output      | Output voltage accuracy              |                                              |                                |      | ±6       | %        |
|             | Line regulation                      | LL-HL at full load                           |                                |      | ±1.25    | %        |
|             | Load regulation                      | 10%~100% load                                |                                |      | ±2       | %        |
|             | Ripple & noise <sup>(1)</sup>        |                                              |                                | 100  | 130      | mVp-p    |
|             | Operating frequency                  |                                              |                                | 80   |          | KHz      |
|             | Minimum load                         |                                              | 0                              |      |          | %        |
|             | Hold up time                         | 115VAC<br>230VAC                             | 8<br>72                        |      |          | ms<br>ms |
|             | Leakage current                      | 264VAC                                       |                                |      | 0.25     | mA       |
| Environment | Operating temperature                | With derating                                | -25                            |      | 85       | °C       |
|             | Storage temperature                  |                                              | -25                            |      | 85       | °C       |
|             | Relative Humidity                    |                                              |                                |      | 95       | %RH      |
|             | Vibration                            |                                              | MIL-STD-202G                   |      |          |          |
| Function    | Isolation voltage                    | 1 minute, Pri to Sec<br>cut-off current: 5mA | 3750                           |      |          | VAC      |
|             | Isolation capacitance                |                                              |                                | 1100 |          | pF       |
|             | Isolation resistance                 | DC 500V                                      | 1                              |      |          | GΩ       |
|             | MTBF (MIL-HDBK-217F)                 | 115VAC @25°C                                 |                                | 1800 |          | KHours   |
|             | Short circuit protection             |                                              | Continuous, Automatic recovery |      |          |          |
|             | Over load protection                 |                                              | Automatic recovery             |      |          |          |
|             | Over voltage protection              |                                              | Zener diode clamp              |      |          |          |
|             | Safety                               |                                              | Meet 60950/60335-1             |      |          |          |
| Physical    | Potting material                     |                                              | Copolyamide                    |      |          |          |
|             | Dimension                            | (L x W x H)                                  | 40.0 x 33.5 x 22.0 mm          |      |          |          |
|             | Weight                               |                                              |                                | 38.0 |          | g        |
| EMC         | EMI                                  | EN 55032                                     | Class B                        |      |          |          |
|             | ESD                                  | IEC61000-4-2                                 | Criteria A                     |      |          |          |
|             | EFT                                  | IEC61000-4-4                                 | Criteria A                     |      |          |          |
|             | Surge                                | IEC61000-4-5                                 | Criteria A                     |      |          |          |

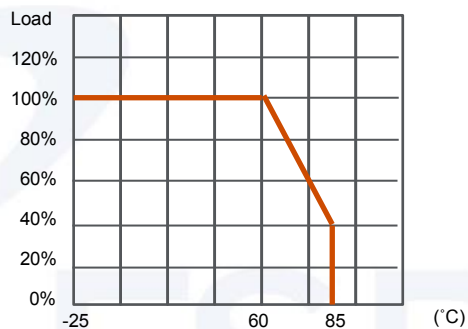
This content is subject to change, please refer to specification for more detail.  
FSP reserve the right to change the content without prior notice.

1. Ripple & Noise is test with E-Cap 47uF low ESR and 0.1uF MLCC across outputs at 20MHz bandwidth.
2. All specifications valid at nominal input voltage, full load and 25°C after warm-up time unless otherwise stated.

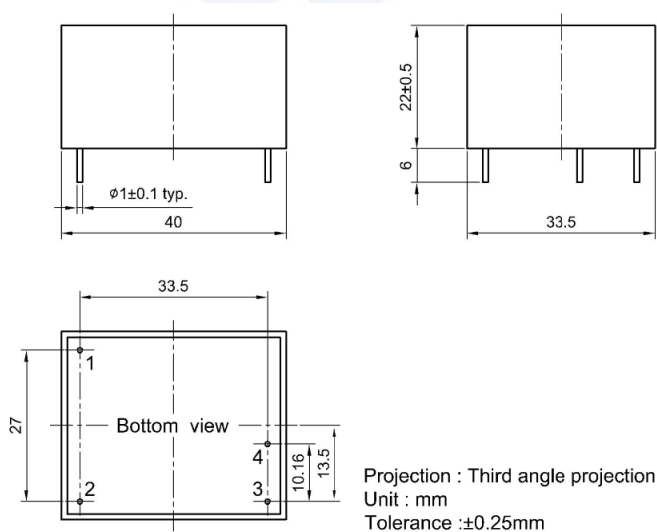
## RIPPLE & NOISE



## DERATING CURVE

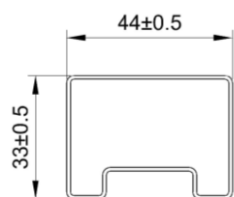


## MECHANICAL SPECIFICATION



| Pin | Single  |
|-----|---------|
| 1   | Vin (N) |
| 2   | Vin (L) |
| 3   | +Vout   |
| 4   | -Vout   |

## PACKAGE



UNIT:mm  
1 Tube = 14 pcs  
Length:520±2mm