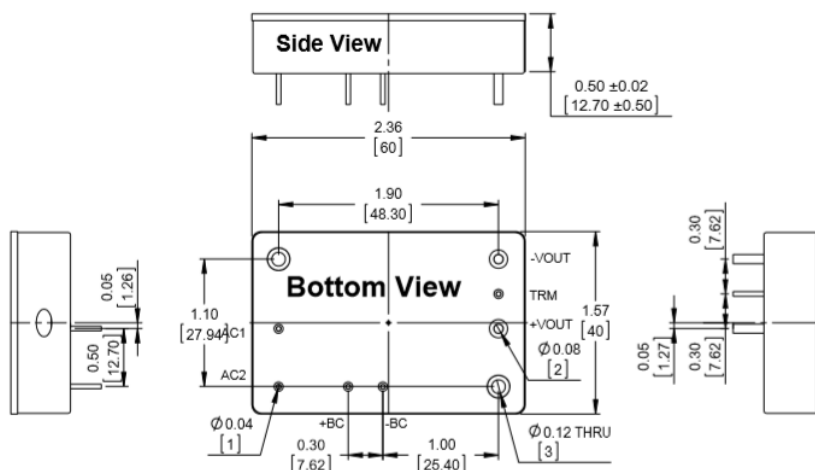


All specifications are typical at 230Vac input, 100% load at Ta25°C unless otherwise noted

| Model         | Output  |         |       | Efficiency @FL |
|---------------|---------|---------|-------|----------------|
|               | Voltage | Current | Power |                |
|               | (V)     | (A)     | (W)   | Typ.(%)        |
| ACQ100-050SV0 | 5       | 15      | 75    | 85             |

### Mechanical Dimensions & Pin Assignments

### Electrical Specifications



### Input Specifications

| Parameter                        | Notes and Conditions                       | Min.                                        | Typ         | Max.       | Unit       |
|----------------------------------|--------------------------------------------|---------------------------------------------|-------------|------------|------------|
| Operating Input Voltage ranges   |                                            | 90<br>127                                   |             | 264<br>370 | Vac<br>Vdc |
| Operating Input Frequency ranges |                                            | 47                                          |             | 60         | Hz         |
| Input Current                    | at 115VAC 100% load<br>at 230VAC 100% load |                                             | 1.0<br>0.5  |            | A          |
| Inrush Current                   | at 230VAC                                  | Limited by external components (Thermistor) |             |            |            |
| Power Factor                     | at 115VAC 100% load<br>at 230VAC 100% load |                                             | 0.95<br>0.9 |            |            |
| Leakage Current                  | at 240VAC 60Hz 100% load                   |                                             |             | 0.75       | mA         |

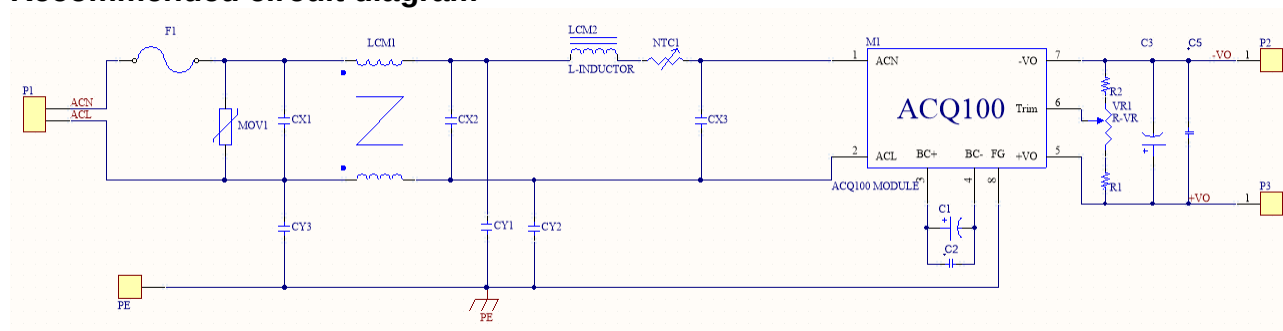
### Output Specifications

| Parameter                | Notes and Conditions                                 | Min.                                             | Typ | Max.      | Unit  |
|--------------------------|------------------------------------------------------|--------------------------------------------------|-----|-----------|-------|
| Output Voltage Accuracy  | 100% Load                                            |                                                  |     | $\pm 1.5$ | %     |
| Line Regulation          | High line to low line                                |                                                  |     | $\pm 1$   | %     |
| Load Regulation          | 0% to 100% load                                      |                                                  |     | $\pm 1$   | %     |
| Ripple and Noise         | 20MHz Bandwidth and with 10uF MLCC. Output Capacitor |                                                  |     | 150       | mVp-p |
| Minimum Load             |                                                      | 0                                                |     |           | A     |
| Hold Up Time             |                                                      | Setting by external capacitors between +BC & -BC |     |           |       |
| Overvoltage Protection   |                                                      | 110                                              |     | 140       | %     |
| Short-circuit Protection |                                                      | Hiccup mode (Auto-Recovery)                      |     |           |       |

### General Specifications

| Parameter                 | Notes and Conditions                           | Min. | Typ | Max. | Unit |
|---------------------------|------------------------------------------------|------|-----|------|------|
| Switching Frequency       |                                                |      | 130 |      | KHz  |
| Storage Temperature range |                                                | -55  |     | 125  | °C   |
| Operating Temperature     | on aluminum base plate                         | -40  |     | 100  | °C   |
| Humidity (non condensing) |                                                |      |     | 95   | %    |
| Isolation Voltage         |                                                |      |     |      |      |
| Input to Output           |                                                | 3000 |     |      | Vac  |
| Weight                    |                                                |      | 72  |      | g    |
| Dimensions                | 2.36" x 1.57" x 0.5" (60.00 x 40.00 x 12.70mm) |      |     |      |      |
| Material                  | aluminum base with plastic case                |      |     |      |      |

### Recommended circuit diagram



| No | Sch symbol  | Description         | rating        | Manufacturer/ Part number              |
|----|-------------|---------------------|---------------|----------------------------------------|
| 1  | F1          | Fuse                | 3.15A/250Vac  | Littelfuse 39213150000                 |
| 2  | MOV1        | Varistor            | 620V          | Thinking TVR10621K                     |
| 3  | CX1、CX2     | X Capacitor         | 0.47uF/310Vac | EPCOS B32922C3474K                     |
| 4  | CX3         | X Capacitor         | 0.68uF/250Vac | EPCOS B32922C3684K                     |
| 5  | LCM1        | Common Mode Choke   | 25mH/1.5A     | Amogreentech AMFN-16A-TH               |
| 6  | LCM2        | Common Mode Choke   | 200uH         | CH112147                               |
| 7  | CY1、CY2、CY3 | Y Capacitor         | 2200pF/250Vac | Murata DE1E3KX222M                     |
| 8  | NTC1        | Thermistor          | 5R            | Thinking SCK10054                      |
| 9  | C1          | PFC boost capacitor | 100uF/420Vdc  | NIPPON CHEMI-CON<br>EKXL421ELL101MM30S |
| 10 | C3          | Output Capacitor    | 820uF/16Vdc   | UPH1C821M0812                          |
| 11 | C2          | Bypass Capacitor    | 0.1uF/450Vdc  | Murata<br>GRM43DR72J104KW01L           |
|    | C5          |                     | 1uF/100Vdc    | Murata GRJ31CR72A105                   |

### Bill of materials