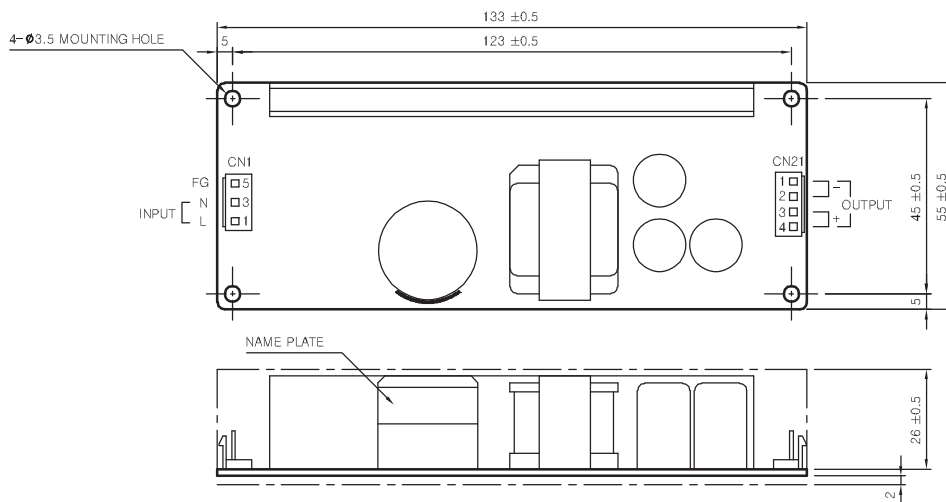


### ESF30-S SPECIFICATIONS

| MODEL                 |                                | ESF30-05  | ESF30-09                    | ESF30-12 | ESF30-15 | ESF30-24 |
|-----------------------|--------------------------------|---|-----------------------------|----------|----------|----------|
| INPUT                 | VOLTAGE, FREQUENCY             | AC100-240V (AC85 ~ 264V or DC125 ~ 370V), 50/60Hz (47 ~ 440Hz) Universal Input                      |                             |          |          |          |
|                       | CURRENT                        | 110V  | 0.65 (I <sub>b</sub> =100%) |          |          |          |
|                       |                                | 220V  | 0.35 (I <sub>b</sub> =100%) |          |          |          |
|                       | EFFICIENCY                     | 110V  | 70 typ                      | 71 typ   | 72 typ   | 73 typ   |
| 220V                  |                                |   |                             |          |          |          |
| INRUSH CURRENT        |                                | 20A typ(AC IN 110V, I <sub>b</sub> =100%), 40A typ(AC IN 220V, I <sub>b</sub> =100%) at cold start. |                             |          |          |          |
| OUTPUT                | VOLTAGE [V]                    | 5   | 9                           | 12       | 15       | 24       |
|                       | CURRENT [A]                    | 6   | 3.3                         | 2.5      | 2        | 1.3      |
|                       | REGULATION, LINE [mV]          | 25 Max  | 45 Max                      | 60 Max   | 75 Max   | 120 Max  |
|                       | REGULATION, LOAD [mV]          | 50 Max  | 90 Max                      | 120 Max  | 150 Max  | 240 Max  |
|                       | RIPPLE [mVp-p]                 | 50 Max  | 90 Max                      | 120 Max  | 150 Max  | 240 Max  |
|                       | RIPPLE, NOISE [mVp-p]          | 100 Max   | 140 Max                     | 170 Max  | 200 Max  | 290 Max  |
|                       | TEMPERATURE DRIFT 0~+50°C [mV] | 75 Max  | 135 Max                     | 180 Max  | 225 Max  | 360 Max  |
|                       | RISE TIME [ms]                 | 100 Max (AC IN 85V I <sub>b</sub> =100%)  |                             |          |          |          |
|                       | HOLDING TIME [ms]              | 10 typ (AC IN 85V I <sub>b</sub> =100%)   |                             |          |          |          |
| PROTECTION CIRCUIT    | OVER CURRENT PROTECTION        | Works over 110% of rating and recovers automatically  |                             |          |          |          |
|                       | OVER VOLTAGE PROTECTION        | -   |                             |          |          |          |
| ELECTRICALLY ISOLATED | INPUT-OUTPUT                   | AC 1,500V 1 minute current 10mA, DC 500V 100MΩ (At room temperature & Humidity)                     |                             |          |          |          |
|                       | INPUT-CASE, FG                 | AC 1,500V 1 minute current 10mA, DC 500V 100MΩ (At room temperature & Humidity)                     |                             |          |          |          |
|                       | OUTPUT-CASE, FG                | AC 500V 1 minute current 10mA, DC 500V 100MΩ (At room temperature & Humidity)                       |                             |          |          |          |
| ENVIRONMENT           | OPERATING TEMP AND HUMID       | -10°C ~ +50°C, 20 ~ 90% RH(Non condensing)  |                             |          |          |          |
|                       | STORAGE TEMP AND HUMID         | -20 ~ +75°C, 20 ~ 90% RH(Non condensing)  |                             |          |          |          |
|                       | VIBRATION                      | 10 ~ 55Hz at 1G, 3 minutes period, 30 minutes along X, Y and Z axis                                 |                             |          |          |          |
|                       | IMPACT                         | 10G for 20ms once on each X, Y and Z axis   |                             |          |          |          |
| SAFETY                | SAFETY REGULATION              | -   |                             |          |          |          |
|                       | LINE CONDUCTED RF VOLTAGE      | -   |                             |          |          |          |

### ESF30-S EXTERNAL VIEW



- \* Weight : 300g
- \* Tolerance : ±1
- \* PCB t=1.6
- \* Dimensions in mm

| CN1  | 1    | AC (L)   |
|------|------|----------|
|      | 3    | AC (N)   |
|      | 5    | FG       |
| CN21 | 1, 2 | OUTPUT - |
|      | 3, 4 | OUTPUT + |

|      | I/O Connector | Mating Connector | Terminal | Manufacturer |
|------|---------------|------------------|----------|--------------|
| CN1  | YW396-05V     | YH396-05V        | YT396    | 연호전자         |
| CN21 | YW396-04V     | YH396-04V        | YT396    | 연호전자         |