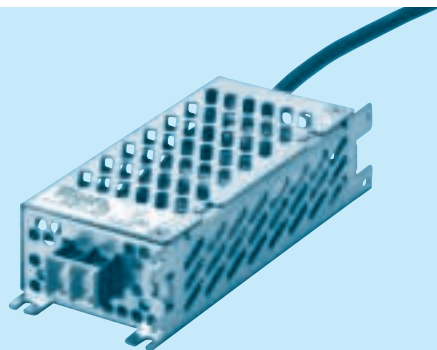


# SPLFA30F

SPLF A 30 F - -

① ② ③ ④ ⑤ ⑥



- ① Series name  
② Single output  
③ Output wattage  
④ Universal input  
⑤ Output voltage  
⑥ Optional  
C : with Coating

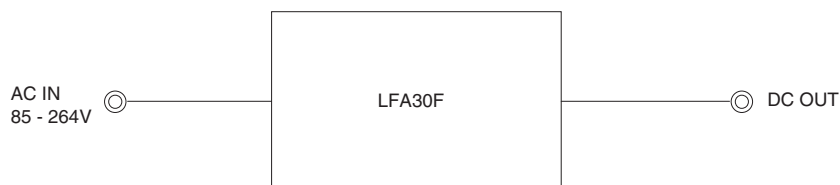
| MODEL                 | SPLFA30F-5 | SPLFA30F-12 | SPLFA30F-24 |
|-----------------------|------------|-------------|-------------|
| MAX OUTPUT WATTAGE[W] | 30.0       | 30.0        | 31.2        |
| DC OUTPUT             | 5V 6A      | 12V 2.5A    | 24V 1.3A    |

## SPECIFICATIONS

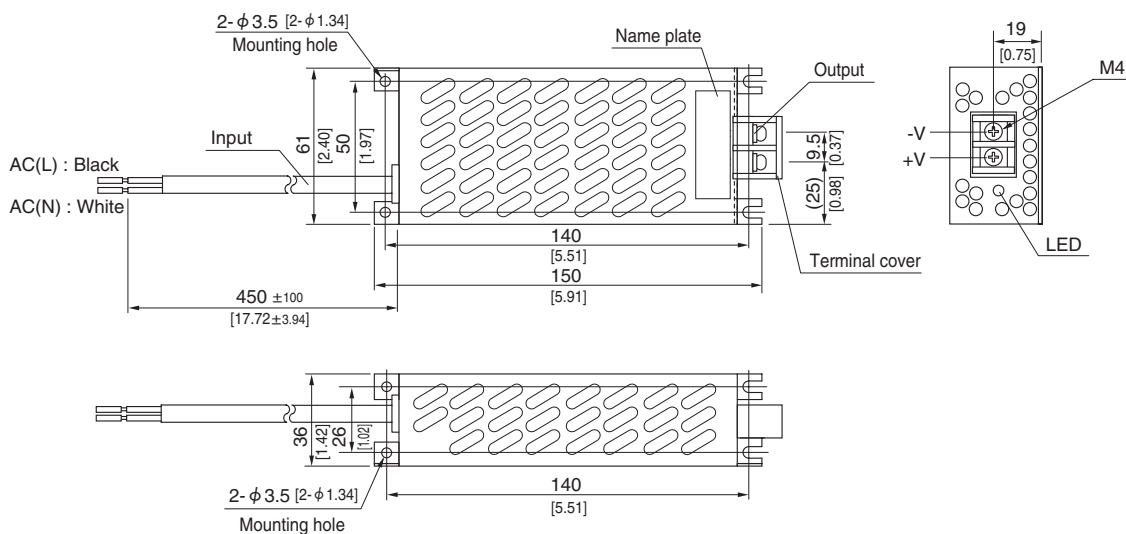
|                                     | MODEL                                | SPLFA30F-5                                                                          | SPLFA30F-12                                                                                                          | SPLFA30F-24    |
|-------------------------------------|--------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|----------------|
| INPUT                               | VOLTAGE[V]                           |                                                                                     | AC85 - 264 1 φ (Refer to Instruction Manual 1.1 and 3.1) *3                                                          |                |
|                                     | CURRENT[A]                           | ACIN 100V                                                                           | 0.65typ (Io=100%)                                                                                                    |                |
|                                     |                                      | ACIN 200V                                                                           | 0.35typ (Io=100%)                                                                                                    |                |
|                                     | FREQUENCY[Hz]                        |                                                                                     | 50 / 60 (47 - 440)                                                                                                   |                |
|                                     | EFFICIENCY[%]                        | ACIN 100V                                                                           | 75.0typ                                                                                                              | 81.0typ        |
|                                     |                                      | ACIN 200V                                                                           | 77.0typ                                                                                                              | 80.0typ        |
|                                     | 83.0typ                              |                                                                                     |                                                                                                                      |                |
| INRUSH CURRENT[A]                   | ACIN 100V                            | 15typ (Io=100%) (At cold start) (Ta=25℃)                                            |                                                                                                                      |                |
|                                     | ACIN 200V                            | 30typ (Io=100%) (At cold start) (Ta=25℃)                                            |                                                                                                                      |                |
| LEAKAGE CURRENT[mA]                 |                                      | 0.30 / 0.65max (ACIN 100V / 240V 60Hz, Io=100%, According to IEC60950-1 and DEN-AN) |                                                                                                                      |                |
| OUTPUT                              | VOLTAGE[V]                           |                                                                                     | 5                                                                                                                    | 12             |
|                                     | CURRENT[A]                           |                                                                                     | 6.0                                                                                                                  | 2.5            |
|                                     | LINE REGULATION[mV] *5               |                                                                                     | 20max                                                                                                                | 48max          |
|                                     | LOAD REGULATION[mV] *5               |                                                                                     | 100max                                                                                                               | 100max         |
|                                     | RIPPLE[mVp-p]                        | 0 to +50℃ *1                                                                        | 100max                                                                                                               | 120max         |
|                                     |                                      | -10 - 0℃ *1                                                                         | 140max                                                                                                               | 160max         |
|                                     | RIPPLE NOISE[mVp-p]                  | 0 to +50℃ *1                                                                        | 250max                                                                                                               | 250max         |
|                                     |                                      | -10 - 0℃ *1                                                                         | 300max                                                                                                               | 300max         |
|                                     | TEMPERATURE REGULATION[mV]           | 0 to +50℃                                                                           | 50max                                                                                                                | 120max         |
|                                     |                                      | -10 to +50℃                                                                         | 60max                                                                                                                | 150max         |
|                                     | DRIFT[mV] *2                         |                                                                                     | 20max                                                                                                                | 48max          |
|                                     | START-UP TIME[ms]                    |                                                                                     | 150typ (ACIN 100V, Io=100%)                                                                                          |                |
|                                     | HOLD-UP TIME[ms]                     |                                                                                     | 20typ (ACIN 100V, Io=100%)                                                                                           |                |
| OUTPUT VOLTAGE SETTING[V]           |                                      | 4.90 to 5.30                                                                        | 11.50 to 12.50                                                                                                       |                |
|                                     |                                      |                                                                                     | 23.00 to 25.00                                                                                                       |                |
| PROTECTION<br>CIRCUIT AND<br>OTHERS | OVERCURRENT PROTECTION               |                                                                                     | Works over 105% of rating and recovers automatically                                                                 |                |
|                                     | OVERVOLTAGE PROTECTION[V]            |                                                                                     | 5.75 to 7.00                                                                                                         | 13.80 to 16.80 |
|                                     |                                      |                                                                                     |                                                                                                                      | 27.60 to 33.60 |
|                                     | OPERATING INDICATION                 |                                                                                     | LED (Green)                                                                                                          |                |
|                                     | REMOTE SENSING                       |                                                                                     | Not provided                                                                                                         |                |
| REMOTE ON/OFF                       |                                      | Not provided                                                                        |                                                                                                                      |                |
| ISOLATION                           | INPUT-OUTPUT                         |                                                                                     | AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)                                       |                |
|                                     | INPUT-FG                             |                                                                                     | AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)                                       |                |
|                                     | OUTPUT-FG                            |                                                                                     | AC500V 1minute, Cutoff current = 25mA, DC500V 50MΩ min (At Room Temperature)                                         |                |
| ENVIRONMENT                         | OPERATING TEMP., HUMID. AND ALTITUDE |                                                                                     | -10 to +60℃, 20 - 90%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max *3                       |                |
|                                     | STORAGE TEMP., HUMID. AND ALTITUDE   |                                                                                     | -20 to +75℃, 20 - 90%RH (Non condensing), 9,000m (30,000feet) max                                                    |                |
|                                     | VIBRATION                            |                                                                                     | 10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis                                      |                |
|                                     | IMPACT                               |                                                                                     | 196.1m/s² (20G), 11ms, once each X, Y and Z axis                                                                     |                |
| SAFETY AND<br>NOISE<br>REGULATIONS  | AGENCY APPROVALS                     |                                                                                     | DEN-AN                                                                                                               |                |
|                                     | CONDUCTED NOISE/POWER                |                                                                                     | Complies with DEN-AN                                                                                                 |                |
|                                     | HARMONIC ATTENUATOR                  |                                                                                     | Complies with IEC61000-3-2 class A (Not built-in to active filter *4. Please contact us for the details of class C.) |                |
| OTHERS                              | CASE SIZE/WEIGHT                     |                                                                                     | 61×36×150mm [2.40×1.42×5.91 inches] (W×H×D) / 370g max                                                               |                |
|                                     | COOLING METHOD                       |                                                                                     | Convection                                                                                                           |                |

- \*1 Measured by 20MHz oscilloscope or Ripple-Noise meter (Equivalent to KEISOKU-GIKEN: RM103).  
\*2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.  
\*3 Derating is required.  
\*4 When two or more units are operating it may not comply with the IEC61000-3-2. Please contact us for details.  
\*5 Please contact us about dynamic load and input response.  
\* To meet the specifications. Do not operate over-loaded condition.  
\* Parallel operation is not possible.  
\* Derating is required when operated with chassis and cover.  
\* Sound noise may be generated by power supply in case of pulse load.

## Block diagram



## External view

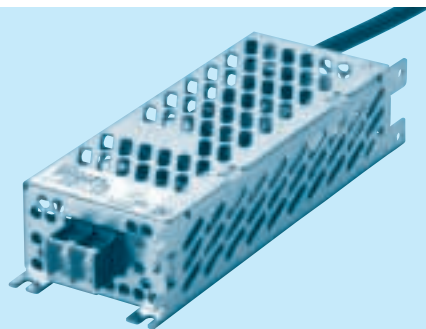


- ※ Tolerance :  $\pm 1$  [ $\pm 0.04$ ]
- ※ Weight : 370g max
- ※ PCB material/thickness : CEM3 / 1.6mm [0.06]
- ※ Chassis and cover material : Electric galvanizing steel board
- ※ Dimensions in mm, [ ]=inches
- ※ Mounting torque : M4 : 1.6N · m (16.9kgf · cm) max
- ※ Input wire : VCTF 0.75sq X2C

## SPLFA50F

SPLF A 50 F -□ -□

① ② ③ ④ ⑤ ⑥



- ① Series name  
 ② Single output  
 ③ Output wattage  
 ④ Universal input  
 ⑤ Output voltage  
 ⑥ Optional  
 C : with Coating

| MODEL                 | SPLFA50F-5 | SPLFA50F-12 | SPLFA50F-24 |
|-----------------------|------------|-------------|-------------|
| MAX OUTPUT WATTAGE[W] | 50         | 51.6        | 50.4        |
| DC OUTPUT             | 5V 10A     | 12V 4.3A    | 24V 2.1A    |

## SPECIFICATIONS

|                               | MODEL                                | SPLFA50F-5                                                                          | SPLFA50F-12                                                                                    | SPLFA50F-24    |                |
|-------------------------------|--------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------|----------------|
| INPUT                         | VOLTAGE[V]                           |                                                                                     | AC85 - 264 1 φ (Refer to Instruction Manual 1.1 and 3.1) *3                                    |                |                |
|                               | CURRENT[A]                           | ACIN 100V                                                                           | 0.67typ (Io=100%)                                                                              |                |                |
|                               |                                      | ACIN 200V                                                                           | 0.36typ (Io=100%)                                                                              |                |                |
|                               | FREQUENCY[Hz]                        |                                                                                     | 50 / 60 (47 - 63)                                                                              |                |                |
|                               | EFFICIENCY[%]                        | ACIN 100V                                                                           | 76.5typ                                                                                        | 79.0typ        | 80.5typ        |
|                               |                                      | ACIN 200V                                                                           | 78.0typ                                                                                        | 80.5typ        | 82.0typ        |
|                               | POWER FACTOR (Io=100%)               | ACIN 100V                                                                           | 0.97typ                                                                                        |                |                |
|                               |                                      | ACIN 200V                                                                           | 0.90typ                                                                                        |                |                |
| INRUSH CURRENT[A]             | ACIN 100V                            | 15typ (Io=100%) (At cold start) (Ta=25℃)                                            |                                                                                                |                |                |
|                               | ACIN 200V                            | 30typ (Io=100%) (At cold start) (Ta=25℃)                                            |                                                                                                |                |                |
| LEAKAGE CURRENT[ma]           |                                      | 0.40 / 0.75max (ACIN 100V / 240V 60Hz, Io=100%, According to IEC60950-1 and DEN-AN) |                                                                                                |                |                |
| OUTPUT                        | VOLTAGE[V]                           |                                                                                     | 5                                                                                              | 12             | 24             |
|                               | CURRENT[A]                           |                                                                                     | 10.0                                                                                           | 4.3            | 2.1            |
|                               | LINE REGULATION[mV] *4               |                                                                                     | 20max                                                                                          | 48max          | 96max          |
|                               | LOAD REGULATION[mV] *4               |                                                                                     | 150max                                                                                         | 150max         | 150max         |
|                               | RIPPLE[mVp-p]                        | 0 to +50℃ *1                                                                        | 100max                                                                                         | 120max         | 120max         |
|                               |                                      | -10 - 0℃ *1                                                                         | 140max                                                                                         | 160max         | 160max         |
|                               | RIPPLE NOISE[mVp-p]                  | 0 to +50℃ *1                                                                        | 250max                                                                                         | 250max         | 250max         |
|                               |                                      | -10 - 0℃ *1                                                                         | 300max                                                                                         | 300max         | 300max         |
|                               | TEMPERATURE REGULATION[mV]           | 0 to +50℃                                                                           | 50max                                                                                          | 120max         | 240max         |
|                               |                                      | -10 to +50℃                                                                         | 60max                                                                                          | 150max         | 290max         |
|                               | DRIFT[mV] *2                         |                                                                                     | 20max                                                                                          | 48max          | 96max          |
|                               | START-UP TIME[ms]                    |                                                                                     | 350typ (ACIN 100V, Io=100%)                                                                    |                |                |
| HOLD-UP TIME[ms]              |                                      | 20typ (ACIN 100V, Io=100%)                                                          |                                                                                                |                |                |
| PROTECTION CIRCUIT AND OTHERS | OUTPUT VOLTAGE SETTING[V]            |                                                                                     | 4.90 to 5.30                                                                                   | 11.50 to 12.50 | 23.00 to 25.00 |
|                               | OVERCURRENT PROTECTION               |                                                                                     | Works over 105% of rating and recovers automatically                                           |                |                |
|                               | OVERVOLTAGE PROTECTION[V]            |                                                                                     | 5.75 to 7.00                                                                                   | 13.80 to 16.80 | 27.60 to 33.60 |
|                               | OPERATING INDICATION                 |                                                                                     | LED (Green)                                                                                    |                |                |
|                               | REMOTE SENSING                       |                                                                                     | Not provided                                                                                   |                |                |
| REMOTE ON/OFF                 |                                      | Not provided                                                                        |                                                                                                |                |                |
| ISOLATION                     | INPUT-OUTPUT                         |                                                                                     | AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)                 |                |                |
|                               | INPUT-FG                             |                                                                                     | AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)                 |                |                |
|                               | OUTPUT-FG                            |                                                                                     | AC500V 1minute, Cutoff current = 25mA, DC500V 50MΩ min (At Room Temperature)                   |                |                |
| ENVIRONMENT                   | OPERATING TEMP., HUMID. AND ALTITUDE |                                                                                     | -10 to +50℃, 20 - 90%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max *3 |                |                |
|                               | STORAGE TEMP., HUMID. AND ALTITUDE   |                                                                                     | -20 to +75℃, 20 - 90%RH (Non condensing), 9,000m (30,000feet) max                              |                |                |
|                               | VIBRATION                            |                                                                                     | 10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis                |                |                |
|                               | IMPACT                               |                                                                                     | 196.1m/s² (20G), 11ms, once each X, Y and Z axis                                               |                |                |
| SAFETY AND NOISE REGULATIONS  | AGENCY APPROVALS                     |                                                                                     | DEN-AN                                                                                         |                |                |
|                               | CONDUCTED NOISE/POWER                |                                                                                     | Complies with DEN-AN                                                                           |                |                |
|                               | HARMONIC ATTENUATOR                  |                                                                                     | Complies with IEC61000-3-2 (Please contact us for the details of class C.)                     |                |                |
| OTHERS                        | CASE SIZE/WEIGHT                     |                                                                                     | 61×36×174mm [2.40×1.42×6.85 inches] (W×H×D) / 440g max                                         |                |                |
|                               | COOLING METHOD                       |                                                                                     | Convection                                                                                     |                |                |

\*1 Measured by 20MHz oscilloscope or Ripple-Noise meter (Equivalent to KEISOKU-GIKEN: RM103).

\*2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.

\*3 Derating is required.

\*4 When two or more units are operating it may not comply with the IEC61000-3-2. Please contact us for details.

\*5 Please contact us about dynamic load and input response.

\* To meet the specifications. Do not operate over-loaded condition.

\* Parallel operation is not possible.

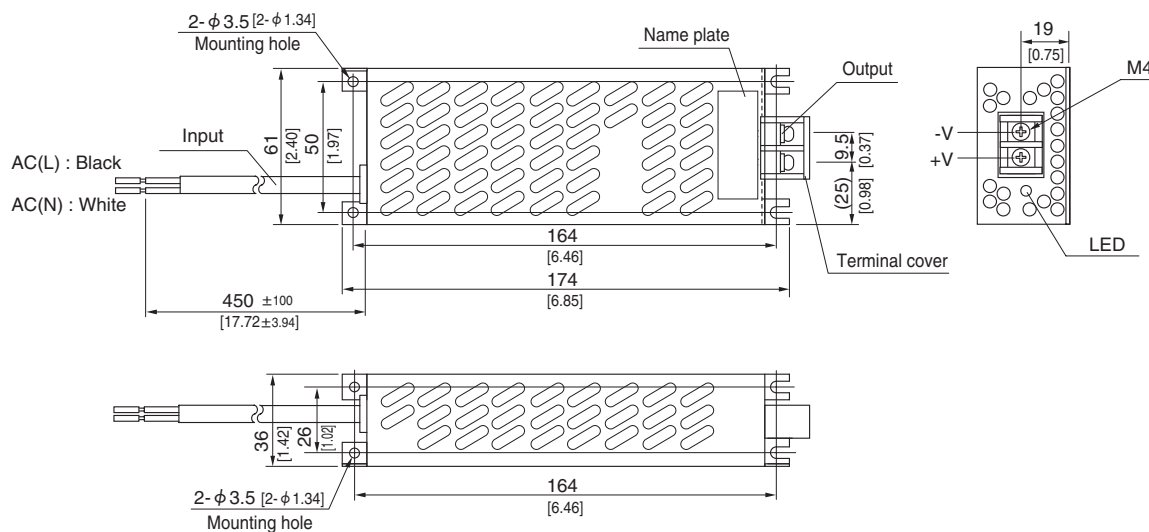
\* Derating is required when operated with chassis and cover.

\* Sound noise may be generated by power supply in case of pulse load.

## Block diagram



## External view

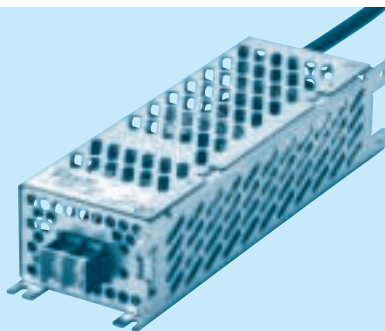


- ※ Tolerance : ±1 [±0.04]
- ※ Weight : 440g max
- ※ PCB material/thickness : CEM3 / 1.6mm [0.06]
- ※ Chassis and cover material : Electric galvanizing steel board
- ※ Dimensions in mm, [ ]=inches
- ※ Mounting torque : M4 : 1.6N · m (16.9kgf · cm) max
- ※ Input wire : VCTF 0.75sq×2C

# SPLFA75F

SPLF A 75 F -□ -□

① ② ③ ④ ⑤ ⑥



- ① Series name
- ② Single output
- ③ Output wattage
- ④ Universal input
- ⑤ Output voltage
- ⑥ Optional
- C : with Coating

| MODEL                 | SPLFA75F-5 | SPLFA75F-12 | SPLFA75F-24 |
|-----------------------|------------|-------------|-------------|
| MAX OUTPUT WATTAGE[W] | 75         | 75.6        | 76.8        |
| DC OUTPUT             | 5V 15A     | 12V 6.3A    | 24V 3.2A    |

## SPECIFICATIONS

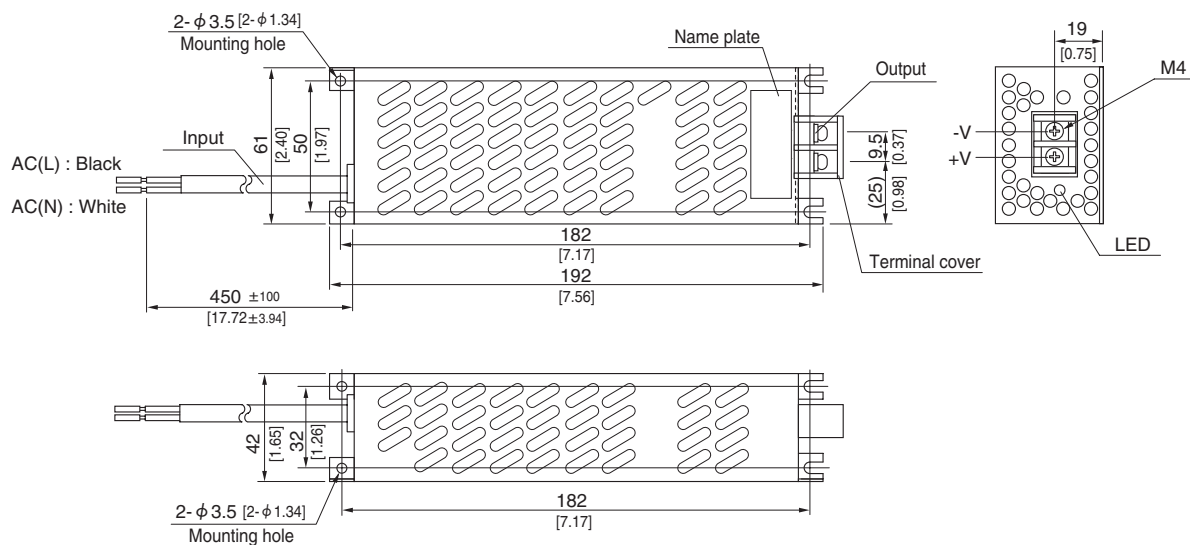
|                               | MODEL                                | SPLFA75F-5                                                                          | SPLFA75F-12                                                                                    | SPLFA75F-24    |                |
|-------------------------------|--------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------|----------------|
| INPUT                         | VOLTAGE[V]                           |                                                                                     | AC85 - 264 1 φ (Refer to Instruction Manual 1.1 and 3.1) *3                                    |                |                |
|                               | CURRENT[A]                           | ACIN 100V                                                                           | 1.00typ (Io=100%)                                                                              |                |                |
|                               |                                      | ACIN 200V                                                                           | 0.50typ (Io=100%)                                                                              |                |                |
|                               | FREQUENCY[Hz]                        |                                                                                     | 50 / 60 (47 - 63)                                                                              |                |                |
|                               | EFFICIENCY[%]                        | ACIN 100V                                                                           | 75.0typ                                                                                        | 80.0typ        | 81.5typ        |
|                               |                                      | ACIN 200V                                                                           | 77.0typ                                                                                        | 82.0typ        | 83.5typ        |
|                               | POWER FACTOR (Io=100%)               | ACIN 100V                                                                           | 0.97typ                                                                                        |                |                |
|                               |                                      | ACIN 200V                                                                           | 0.90typ                                                                                        |                |                |
| INRUSH CURRENT[A]             | ACIN 100V                            | 15typ (Io=100%) (At cold start) (Ta=25℃)                                            |                                                                                                |                |                |
|                               | ACIN 200V                            | 30typ (Io=100%) (At cold start) (Ta=25℃)                                            |                                                                                                |                |                |
| LEAKAGE CURRENT[ma]           |                                      | 0.40 / 0.75max (ACIN 100V / 240V 60Hz, Io=100%, According to IEC60950-1 and DEN-AN) |                                                                                                |                |                |
| OUTPUT                        | VOLTAGE[V]                           |                                                                                     | 5                                                                                              | 12             | 24             |
|                               | CURRENT[A]                           |                                                                                     | 15.0                                                                                           | 6.3            | 3.2            |
|                               | LINE REGULATION[mV] *4               |                                                                                     | 20max                                                                                          | 48max          | 96max          |
|                               | LOAD REGULATION[mV] *4               |                                                                                     | 150max                                                                                         | 150max         | 150max         |
|                               | RIPPLE[mVp-p]                        | 0 to +50℃ *1                                                                        | 100max                                                                                         | 120max         | 120max         |
|                               |                                      | -10 - 0℃ *1                                                                         | 140max                                                                                         | 160max         | 160max         |
|                               | RIPPLE NOISE[mVp-p]                  | 0 to +50℃ *1                                                                        | 250max                                                                                         | 250max         | 250max         |
|                               |                                      | -10 - 0℃ *1                                                                         | 300max                                                                                         | 300max         | 300max         |
|                               | TEMPERATURE REGULATION[mV]           | 0 to +50℃                                                                           | 50max                                                                                          | 120max         | 240max         |
|                               |                                      | -10 to +50℃                                                                         | 60max                                                                                          | 150max         | 290max         |
|                               | DRIFT[mV] *2                         |                                                                                     | 20max                                                                                          | 48max          | 96max          |
|                               | START-UP TIME[ms]                    |                                                                                     | 350typ (ACIN 100V, Io=100%)                                                                    |                |                |
|                               | HOLD-UP TIME[ms]                     |                                                                                     | 20typ (ACIN 100V, Io=100%)                                                                     |                |                |
|                               | OUTPUT VOLTAGE SETTING[V]            |                                                                                     | 4.90 to 5.30                                                                                   | 11.50 to 12.50 | 23.00 to 25.00 |
| PROTECTION CIRCUIT AND OTHERS | OVERCURRENT PROTECTION               |                                                                                     | Works over 105% of rating and recovers automatically                                           |                |                |
|                               | OVERVOLTAGE PROTECTION[V]            |                                                                                     | 5.75 to 7.00                                                                                   | 13.80 to 16.80 | 27.60 to 33.60 |
|                               | OPERATING INDICATION                 |                                                                                     | LED (Green)                                                                                    |                |                |
|                               | REMOTE SENSING                       |                                                                                     | Not provided                                                                                   |                |                |
|                               | REMOTE ON/OFF                        |                                                                                     | Not provided                                                                                   |                |                |
| ISOLATION                     | INPUT-OUTPUT                         |                                                                                     | AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)                 |                |                |
|                               | INPUT-FG                             |                                                                                     | AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)                 |                |                |
|                               | OUTPUT-FG                            |                                                                                     | AC500V 1minute, Cutoff current = 25mA, DC500V 50MΩ min (At Room Temperature)                   |                |                |
| ENVIRONMENT                   | OPERATING TEMP., HUMID. AND ALTITUDE |                                                                                     | -10 to +50℃, 20 - 90%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max *3 |                |                |
|                               | STORAGE TEMP., HUMID. AND ALTITUDE   |                                                                                     | -20 to +75℃, 20 - 90%RH (Non condensing), 9,000m (30,000feet) max                              |                |                |
|                               | VIBRATION                            |                                                                                     | 10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis                |                |                |
|                               | IMPACT                               |                                                                                     | 196.1m/s² (20G), 11ms, once each X, Y and Z axis                                               |                |                |
| SAFETY AND NOISE REGULATIONS  | AGENCY APPROVALS                     |                                                                                     | DEN-AN                                                                                         |                |                |
|                               | CONDUCTED NOISE/POWER                |                                                                                     | Complies with DEN-AN                                                                           |                |                |
|                               | HARMONIC ATTENUATOR                  |                                                                                     | Complies with IEC61000-3-2 (Please contact us for the details of class C.)                     |                |                |
| OTHERS                        | CASE SIZE/WEIGHT                     |                                                                                     | 61 × 42 × 192mm [2.40 × 1.65 × 7.56 inches] (W × H × D) / 540g max                             |                |                |
|                               | COOLING METHOD                       |                                                                                     | Convection                                                                                     |                |                |

- \*1 Measured by 20MHz oscilloscope or Ripple-Noise meter (Equivalent to KEISOKU-GIKEN: RM103).
- \*2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.
- \*3 Derating is required.
- \*4 When two or more units are operating it may not comply with the IEC61000-3-2. Please contact us for details.
- \*5 Please contact us about dynamic load and input response.
- \* To meet the specifications. Do not operate over-loaded condition.
- \* Parallel operation is not possible.
- \* Derating is required when operated with chassis and cover.
- \* Sound noise may be generated by power supply in case of pulse load.

## Block diagram



## External view

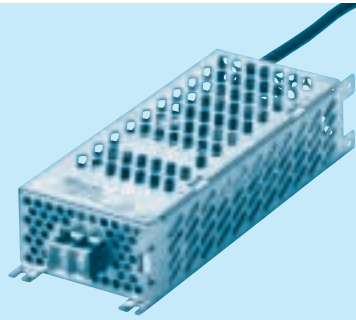


- ※ Tolerance :  $\pm 1$  [ $\pm 0.04$ ]
- ※ Weight : 540g max
- ※ PCB material/thickness : CEM3 / 1.6mm [0.06]
- ※ Chassis and cover material : Electric galvanizing steel board
- ※ Dimensions in mm, [ ]=inches
- ※ Mounting torque : M4 : 1.6N · m (16.9kgf · cm) max
- ※ Input wire : VCTF 0.75sq×2C

## SPLFA100F

SPLF A 100 F - -

① ② ③ ④ ⑤ ⑥



- ① Series name  
 ② Single output  
 ③ Output wattage  
 ④ Universal input  
 ⑤ Output voltage  
 ⑥ Optional  
 C : with Coating

|                       |              |              |
|-----------------------|--------------|--------------|
| MODEL                 | SPLFA100F-12 | SPLFA100F-24 |
| MAX OUTPUT WATTAGE[W] | 102.0        | 103.2        |
| DC OUTPUT             | 12V 8.5A     | 24V 4.3A     |

## SPECIFICATIONS

|                                     | MODEL                                |                                                                                     | SPLFA100F-12                                                                                   | SPLFA100F-24   |
|-------------------------------------|--------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------|
| INPUT                               | VOLTAGE[V]                           |                                                                                     | AC85 - 264 1 φ (Refer to Instruction Manual 1.1 and 3.1) *3                                    |                |
|                                     | CURRENT[A]                           | ACIN 100V                                                                           | 1.3typ (Io=100%)                                                                               |                |
|                                     |                                      | ACIN 200V                                                                           | 0.7typ (Io=100%)                                                                               |                |
|                                     | FREQUENCY[Hz]                        |                                                                                     | 50 / 60 (47 - 63)                                                                              |                |
|                                     | EFFICIENCY[%]                        | ACIN 100V                                                                           | 80.5typ                                                                                        | 83.0typ        |
|                                     |                                      | ACIN 200V                                                                           | 83.5typ                                                                                        | 86.0typ        |
|                                     | POWER FACTOR (Io=100%)               | ACIN 100V                                                                           | 0.97typ                                                                                        |                |
|                                     |                                      | ACIN 200V                                                                           | 0.90typ                                                                                        |                |
|                                     | INRUSH CURRENT[A]                    | ACIN 100V                                                                           | 15typ (Io=100%) (At cold start) (Ta=25℃)                                                       |                |
| ACIN 200V                           |                                      | 30typ (Io=100%) (At cold start) (Ta=25℃)                                            |                                                                                                |                |
| LEAKAGE CURRENT[ma]                 |                                      | 0.40 / 0.75max (ACIN 100V / 240V 60Hz, Io=100%, According to IEC60950-1 and DEN-AN) |                                                                                                |                |
| OUTPUT                              | VOLTAGE[V]                           |                                                                                     | 12                                                                                             | 24             |
|                                     | CURRENT[A]                           |                                                                                     | 8.5                                                                                            | 4.3            |
|                                     | LINE REGULATION[mV] *4               |                                                                                     | 48max                                                                                          | 96max          |
|                                     | LOAD REGULATION[mV] *4               |                                                                                     | 150max                                                                                         | 150max         |
|                                     | RIPPLE[mVp-p]                        | 0 to +50℃ *1                                                                        | 120max                                                                                         | 120max         |
|                                     |                                      | -10 - 0℃ *1                                                                         | 160max                                                                                         | 160max         |
|                                     | RIPPLE NOISE[mVp-p]                  | 0 to +50℃ *1                                                                        | 250max                                                                                         | 250max         |
|                                     |                                      | -10 - 0℃ *1                                                                         | 300max                                                                                         | 300max         |
|                                     | TEMPERATURE REGULATION[mV]           | 0 to +50℃                                                                           | 120max                                                                                         | 240max         |
|                                     |                                      | -10 to +50℃                                                                         | 150max                                                                                         | 290max         |
|                                     | DRIFT[mV] *2                         |                                                                                     | 48max                                                                                          | 96max          |
|                                     | START-UP TIME[ms]                    |                                                                                     | 350typ (ACIN 100V, Io=100%)                                                                    |                |
|                                     | HOLD-UP TIME[ms]                     |                                                                                     | 20typ (ACIN 100V, Io=100%)                                                                     |                |
| OUTPUT VOLTAGE SETTING[V]           |                                      | 11.50 to 12.50                                                                      | 23.00 to 25.00                                                                                 |                |
| PROTECTION<br>CIRCUIT AND<br>OTHERS | OVERCURRENT PROTECTION               |                                                                                     | Works over 105% of rating and recovers automatically                                           |                |
|                                     | OVERVOLTAGE PROTECTION[V]            |                                                                                     | 13.80 to 16.80                                                                                 | 27.60 to 33.60 |
|                                     | OPERATING INDICATION                 |                                                                                     | LED (Green)                                                                                    |                |
|                                     | REMOTE SENSING                       |                                                                                     | Not provided                                                                                   |                |
|                                     | REMOTE ON/OFF                        |                                                                                     | Not provided                                                                                   |                |
| ISOLATION                           | INPUT-OUTPUT                         |                                                                                     | AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)                 |                |
|                                     | INPUT-FG                             |                                                                                     | AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)                 |                |
|                                     | OUTPUT-FG                            |                                                                                     | AC500V 1minute, Cutoff current = 25mA, DC500V 50MΩ min (At Room Temperature)                   |                |
| ENVIRONMENT                         | OPERATING TEMP., HUMID. AND ALTITUDE |                                                                                     | -10 to +50℃, 20 - 90%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max *3 |                |
|                                     | STORAGE TEMP., HUMID. AND ALTITUDE   |                                                                                     | -20 to +75℃, 20 - 90%RH (Non condensing), 9,000m (30,000feet) max                              |                |
|                                     | VIBRATION                            |                                                                                     | 10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis                |                |
|                                     | IMPACT                               |                                                                                     | 196.1m/s² (20G), 11ms, once each X, Y and Z axis                                               |                |
| SAFETY AND<br>NOISE<br>REGULATIONS  | AGENCY APPROVALS                     |                                                                                     | DEN-AN                                                                                         |                |
|                                     | CONDUCTED NOISE/POWER                |                                                                                     | Complies with DEN-AN                                                                           |                |
|                                     | HARMONIC ATTENUATOR                  |                                                                                     | Complies with IEC61000-3-2 (Please contact us for the details of class C.)                     |                |
| OTHERS                              | CASE SIZE/WEIGHT                     |                                                                                     | 73×42×197mm [2.87×1.65×7.76 inches] (W×H×D) / 670g max                                         |                |
|                                     | COOLING METHOD                       |                                                                                     | Convection                                                                                     |                |

\*1 Measured by 20MHz oscilloscope or Ripple-Noise meter (Equivalent to KEISOKU-GIKEN: RM103).

\*2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.

\*3 Derating is required.

\*4 When two or more units are operating it may not comply with the IEC61000-3-2. Please contact us for details.

\*5 Please contact us about dynamic load and input response.

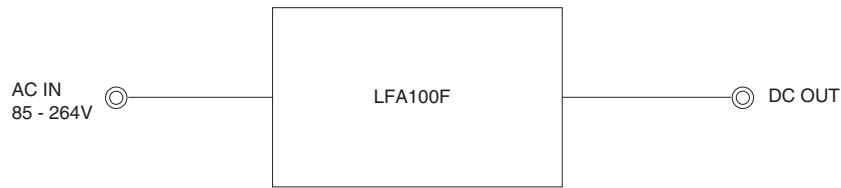
\* To meet the specifications. Do not operate over-loaded condition.

\* Parallel operation is not possible.

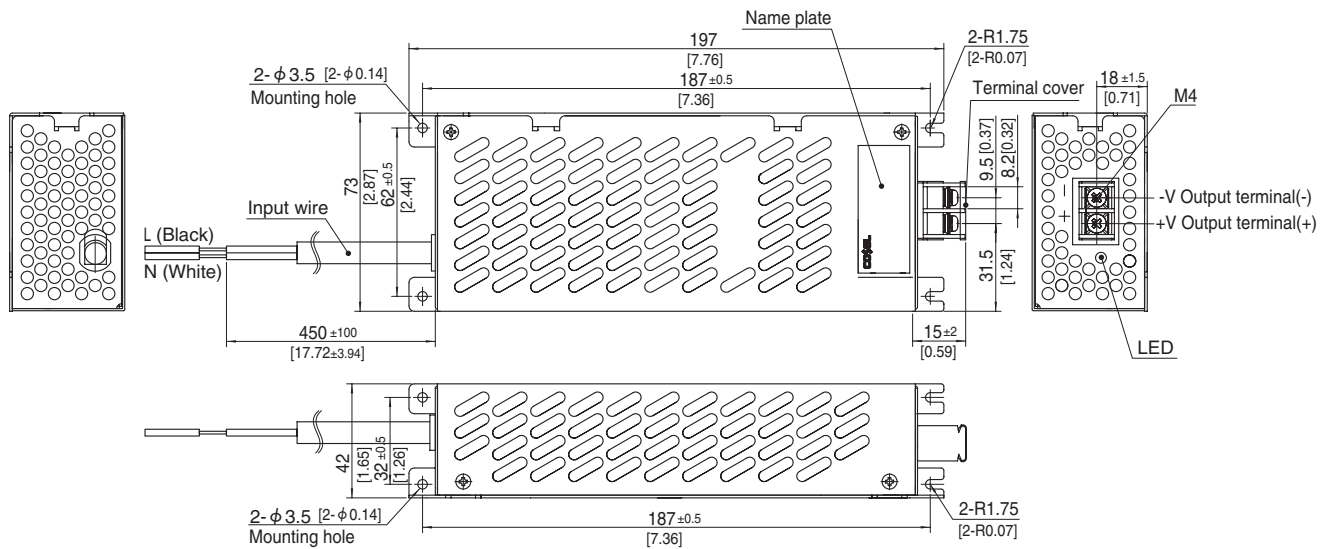
\* Derating is required when operated with chassis and cover.

\* Sound noise may be generated by power supply in case of pulse load.

## Block diagram



## External view

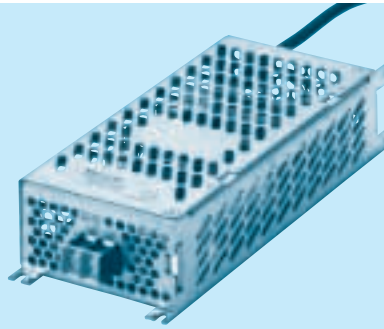


- ※ Tolerance :  $\pm 1$  [ $\pm 0.04$ ]
- ※ Weight : 670g max
- ※ Dimensions in mm, [ ]=inches
- ※ Chassis material : Galvanized Steel board
- ※ Screw tightening torque : M4 : 1.6N · m (16.9kgf · cm) max
- ※ Input wire : VCTF 0.75sq X 2C

## SPLFA150F

SPLF A 150 F - -

① ② ③ ④ ⑤ ⑥



- ① Series name  
 ② Single output  
 ③ Output wattage  
 ④ Universal input  
 ⑤ Output voltage  
 ⑥ Optional  
 C : with Coating

|                       |              |              |
|-----------------------|--------------|--------------|
| MODEL                 | SPLFA150F-12 | SPLFA150F-24 |
| MAX OUTPUT WATTAGE[W] | 150          | 151.2        |
| DC OUTPUT             | 12V 12.5A    | 24V 6.3A     |

## SPECIFICATIONS

|                                     | MODEL                                | SPLFA150F-12                                                                                    | SPLFA150F-24                              |
|-------------------------------------|--------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------|
| INPUT                               | VOLTAGE[V]                           | AC85 - 264 1 $\phi$ (Refer to Instruction Manual 1.1 and 3.1) *3                                |                                           |
|                                     | CURRENT[A]                           | ACIN 100V                                                                                       | 2.0typ (Io=100%)                          |
|                                     |                                      | ACIN 200V                                                                                       | 1.0typ (Io=100%)                          |
|                                     | FREQUENCY[Hz]                        | 50 / 60 (47 - 63)                                                                               |                                           |
|                                     | EFFICIENCY[%]                        | ACIN 100V                                                                                       | 81.0typ                                   |
|                                     |                                      | ACIN 200V                                                                                       | 84.0typ                                   |
|                                     | POWER FACTOR (Io=100%)               | ACIN 100V                                                                                       | 0.97typ                                   |
|                                     |                                      | ACIN 200V                                                                                       | 0.90typ                                   |
| OUTPUT                              | INRUSH CURRENT[A]                    | ACIN 100V                                                                                       | 15typ (Io=100%) (At cold start) (Ta=25°C) |
|                                     |                                      | ACIN 200V                                                                                       | 30typ (Io=100%) (At cold start) (Ta=25°C) |
|                                     | LEAKAGE CURRENT[ma]                  | 0.40 / 0.75max (ACIN 100V / 240V 60Hz, Io=100%, According to IEC60950-1 and DEN-AN)             |                                           |
|                                     | VOLTAGE[V]                           | 12                                                                                              | 24                                        |
|                                     | CURRENT[A]                           | 12.5                                                                                            | 6.3                                       |
|                                     | LINE REGULATION[mV] *4               | 48max                                                                                           | 96max                                     |
|                                     | LOAD REGULATION[mV] *4               | 150max                                                                                          | 150max                                    |
|                                     | RIPPLE[mVp-p]                        | 0 to +50°C *1                                                                                   | 120max                                    |
|                                     |                                      | -10 - 0°C *1                                                                                    | 160max                                    |
|                                     | RIPPLE NOISE[mVp-p]                  | 0 to +50°C *1                                                                                   | 250max                                    |
|                                     |                                      | -10 - 0°C *1                                                                                    | 300max                                    |
| PROTECTION<br>CIRCUIT AND<br>OTHERS | TEMPERATURE REGULATION[mV]           | 0 to +50°C                                                                                      | 120max                                    |
|                                     |                                      | -10 to +50°C                                                                                    | 150max                                    |
|                                     | DRIFT[mV] *2                         | 48max                                                                                           | 96max                                     |
|                                     | START-UP TIME[ms]                    | 350typ (ACIN 100V, Io=100%)                                                                     |                                           |
|                                     | HOLD-UP TIME[ms]                     | 20typ (ACIN 100V, Io=100%)                                                                      |                                           |
|                                     | OUTPUT VOLTAGE SETTING[V]            | 11.50 to 12.50                                                                                  | 23.00 to 25.00                            |
|                                     | OVERCURRENT PROTECTION               | Works over 105% of rating and recovers automatically                                            |                                           |
|                                     | OVERVOLTAGE PROTECTION[V]            | 13.80 to 16.80                                                                                  | 27.60 to 33.60                            |
|                                     | OPERATING INDICATION                 | LED (Green)                                                                                     |                                           |
|                                     | REMOTE SENSING                       | Not provided                                                                                    |                                           |
| ISOLATION                           | REMOTE ON/OFF                        | Not provided                                                                                    |                                           |
|                                     | INPUT-OUTPUT                         | AC3,000V 1minute, Cutoff current = 10mA, DC500V 50M $\Omega$ min (At Room Temperature)          |                                           |
|                                     | INPUT-FG                             | AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M $\Omega$ min (At Room Temperature)          |                                           |
| ENVIRONMENT                         | OUTPUT-FG                            | AC500V 1minute, Cutoff current = 25mA, DC500V 50M $\Omega$ min (At Room Temperature)            |                                           |
|                                     | OPERATING TEMP., HUMID. AND ALTITUDE | -10 to +50°C, 20 - 90%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max *3 |                                           |
|                                     | STORAGE TEMP., HUMID. AND ALTITUDE   | -20 to +75°C, 20 - 90%RH (Non condensing), 9,000m (30,000feet) max                              |                                           |
|                                     | VIBRATION                            | 10 - 55Hz, 19.6m/s <sup>2</sup> (2G), 3minutes period, 60minutes each along X, Y and Z axis     |                                           |
|                                     | IMPACT                               | 196.1m/s <sup>2</sup> (20G), 11ms, once each X, Y and Z axis                                    |                                           |
| SAFETY AND<br>NOISE<br>REGULATIONS  | AGENCY APPROVALS                     | DEN-AN                                                                                          |                                           |
|                                     | CONDUCTED NOISE/POWER                | Complies with DEN-AN                                                                            |                                           |
|                                     | HARMONIC ATTENUATOR                  | Complies with IEC61000-3-2 (Please contact us for the details of class C.)                      |                                           |
| OTHERS                              | CASE SIZE/WEIGHT                     | 86×47×202mm [3.39×1.85×7.95 inches] (W×H×D) / 850g max                                          |                                           |
|                                     | COOLING METHOD                       | Convection                                                                                      |                                           |

\*1 Measured by 20MHz oscilloscope or Ripple-Noise meter (Equivalent to KEISOKU-GIKEN: RM103).

\*2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.

\*3 Derating is required.

\*4 When two or more units are operating it may not comply with the IEC61000-3-2. Please contact us for details.

\*5 Please contact us about dynamic load and input response.

\* To meet the specifications. Do not operate over-loaded condition.

\* Parallel operation is not possible.

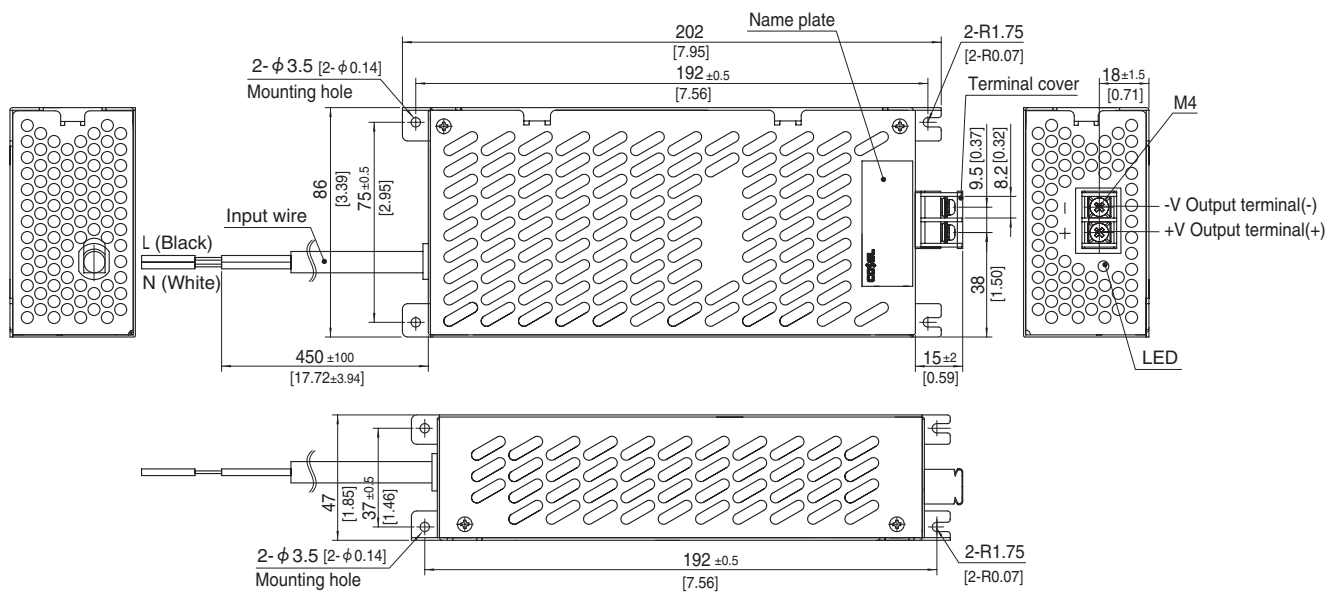
\* Derating is required when operated with chassis and cover.

\* Sound noise may be generated by power supply in case of pulse load.

## Block diagram



## External view



- ※ Tolerance :  $\pm 1$  [ $\pm 0.04$ ]
- ※ Weight : 850g max
- ※ Dimensions in mm, [ ]=inches
- ※ Chassis material : Galvanized Steel board
- ※ Screw tightening torque : M4 : 1.6N · m (16.9kgf · cm) max
- ※ Input wire : VCTF 0.75sq X 2C

# Mouser Electronics

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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;
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- 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:

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- 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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