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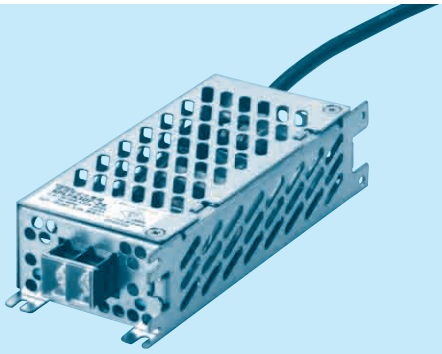
COSEL AC-DC Power Supplies Open Frame/Enclosed Value-added Type

# SPLFA30F

**Ordering information**

SPLF ① A ② 30 ③ F ④ -□ ⑤ -□ ⑧



①Series name
②Single output
③Output wattage
④Universal input
⑤Output voltage
⑧Optional
C : with Coating

SPLFA

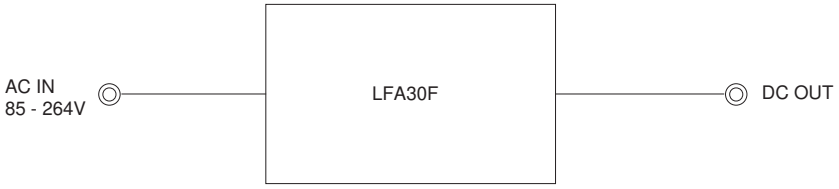
| MODEL | SPLFA30F-5 | SPLFA30F-12 | SPLFA30F-24 |
|---|---|---|---|
| MAX OUTPUT WATTAGE[W] | 30.0 | 30.0 | 31.2 |
| DC OUTPUT | 5V 6A | 12V 2.5A | 24V 1.3A |

## 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 | 78.0typ | 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 | 24 |
| | CURRENT[A] | | 6.0 | 2.5 | 1.3 |
| | LINE REGULATION[mV] ∗5 | | 20max | 48max | 96max |
| | LOAD REGULATION[mV] ∗5 | | 100max | 100max | 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] | | 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 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 +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 NOISE REGULATIONS | AGENCY APPROVALS | | DEN-AN | | |
| | CONDUCTED NOISE/POWER | | Complies with DEN-AN | | |
| | HARMONIC ATTENUATOR ∗4 | | Complies with IEC61000-3-2 class A (Not built-in to active filter) | | |
| OTHERS | CASE SIZE/WEIGHT | | 61×36×150mm [2.40×1.42×5.91 inches] (W×H×D) / 370g max | | |
| | COOLING METHOD | | Convection | | |

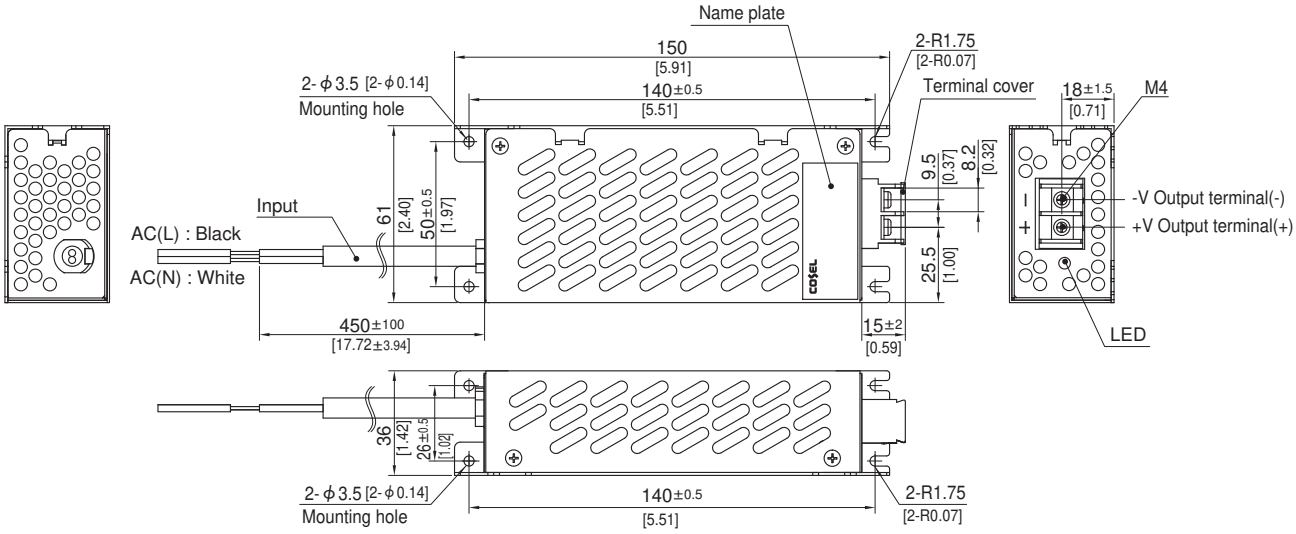
∗1 Measured by 20MHz oscilloscope or Ripple-Noise meter (Equivalent to KEISOKU-GIKEN: RM103).
∗2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25℃, with the input voltage held constant at the rated input/output.
∗3 Derating is required.
∗4 When two or more units are operating it may not comply with the IEC61000-3-2. Please contact us about another class.
∗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



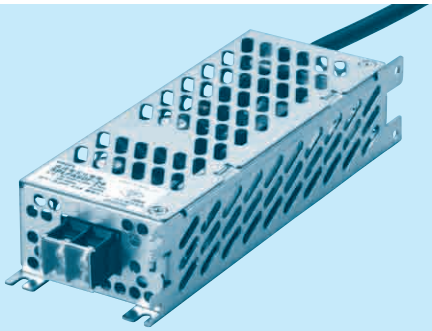

※ Tolerance : ±1 [±0.04]
※ Weight : 370g max
※ PCB material/thickness : CEM3 / 1.6mm [0.06]
※ Chassis and cover material : Electric galvanizing steel board
※ Dimensions in mm, [ ]=inches
※ Mounting torque : M4 : 1.6N · m (16.9kgf · cm) max
※ Input wire : VCTF 0.75sq×2C

COSEL AC-DC Power Supplies Open Frame/Enclosed Value-added Type

# SPLFA50F

## Ordering information

SPLF ① A ② 50 ③ F ④ -□ ⑤ -□ ⑧



①Series name
②Single output
③Output wattage
④Universal input
⑤Output voltage
⑧Optional
C : with Coating

SPLFA

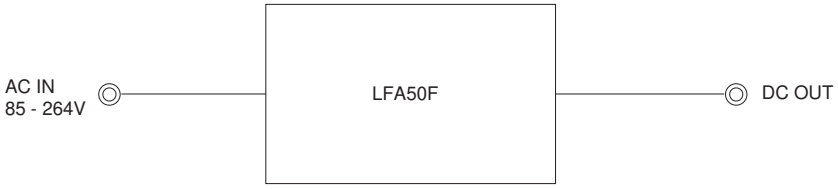
| MODEL | SPLFA50F-5 | SPLFA50F-12 | SPLFA50F-24 |
|---|---|---|---|
| MAX OUTPUT WATTAGE[W] | 50 | 51.6 | 50.4 |
| DC OUTPUT | 5V 10A | 12V 4.3A | 24V 2.1A |

## SPECIFICATIONS

| | MODEL | | SPLFA50F-5 | SPLFA50F-12 | SPLFA50F-24 |
|---|---|---|---|---|---|
| INPUT | VOLTAGE[V] | | AC85 - 264 1φ (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%) | | |
| | 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 ∗5 | | Complies with IEC61000-3-2 (class A) | | |
| OTHERS | CASE SIZE/WEIGHT | | 61×36×174mm [2.40×1.42×6.85 inches] (W×H×D) / 440g max | | |
| | COOLING METHOD | | Convection | | |

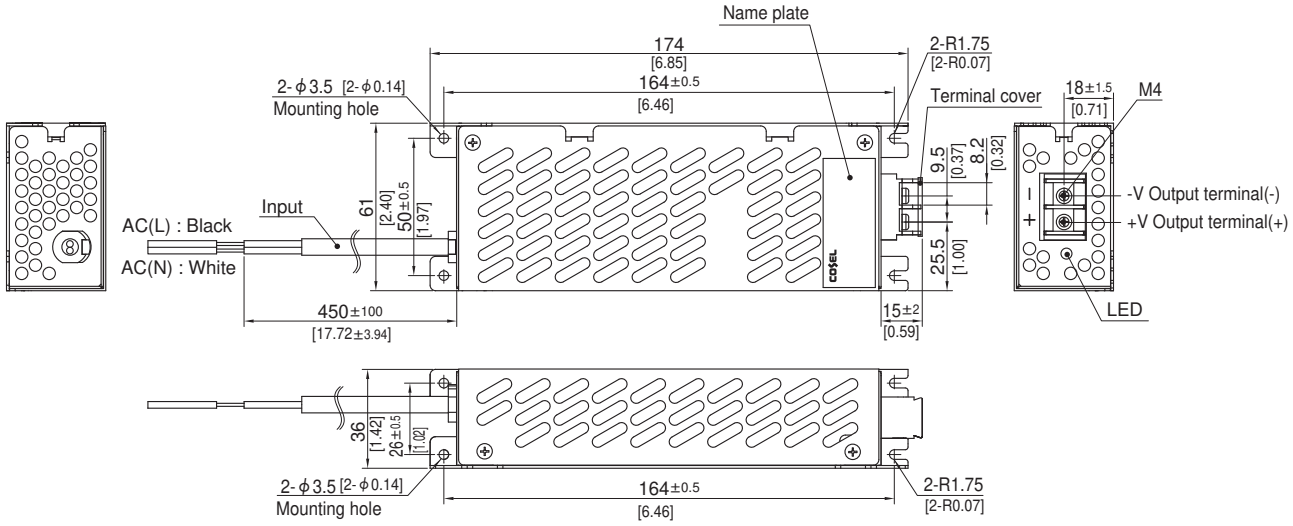
∗1 Measured by 20MHz oscilloscope or Ripple-Noise meter (Equivalent to KEISOKU-GIKEN: RM103).
∗2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25℃, with the input voltage held constant at the rated input/output.
∗3 Derating is required.
∗4 Please contact us about dynamic load and input response.
∗5 When two or more units are operating it may not comply with the IEC61000-3-2. Please contact us about another class.
∗ 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



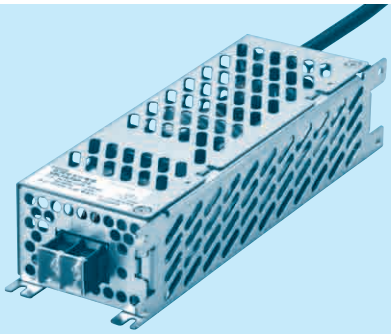

※ Tolerance : ±1 [±0.04]
※ Weight : 440g max
※ PCB material/thickness : CEM3 / 1.6mm [0.06]
※ Chassis and cover material : Electric galvanizing steel board
※ Dimensions in mm, [ ]=inches
※ Mounting torque : M4 : 1.6N・m (16.9kgf・cm) max
※ Input wire : VCTF 0.75sq×2C

COSEL AC-DC Power Supplies Open Frame/Enclosed Value-added Type

# SPLFA75F

## Ordering information

SPLF ① A ② 75 ③ F ④ -□ ⑤ -□ ⑧



①Series name
②Single output
③Output wattage
④Universal input
⑤Output voltage
⑧Optional
C : with Coating

SPLFA

| 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

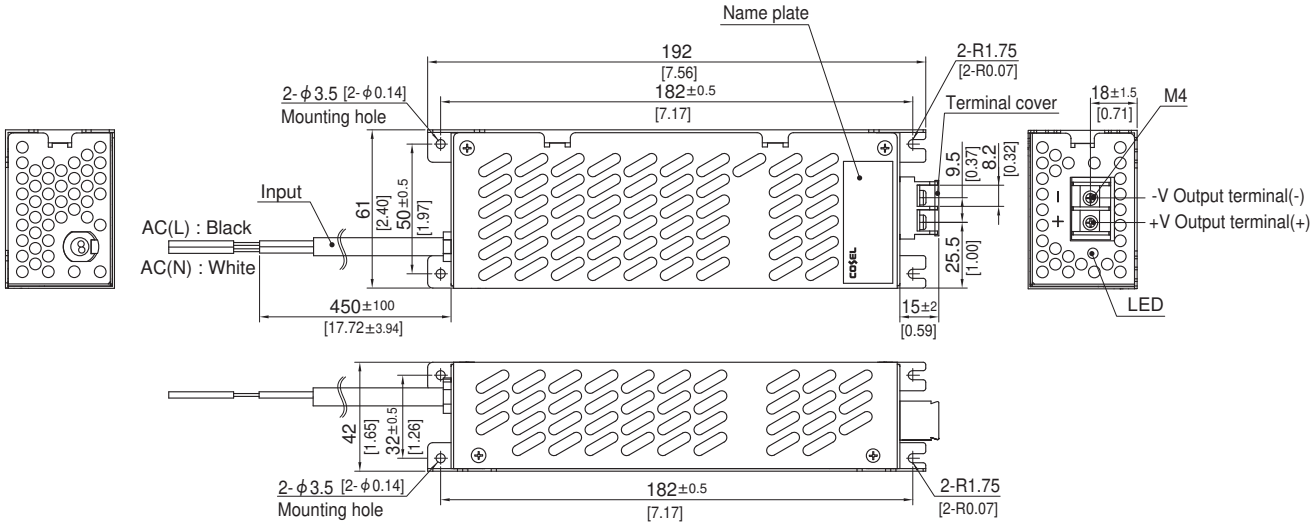
| | MODEL | | SPLFA75F-5 | SPLFA75F-12 | SPLFA75F-24 |
|---|---|---|---|---|---|
| INPUT | VOLTAGE[V] | | AC85 - 264 1φ (Refer to Instruction Manual 1.1 and 3.1) ∗3 | | |
| | CURRENT[A] | ACIN 100V | 1.00typ (Io=100%) | | |
| | | ACIN 200V | 0.50typ (Io=100%) | | |
| | FREQUENCY[Hz] | | 50 / 60 (47 - 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 ∗5 | | Complies with IEC61000-3-2 (class A) | | |
| 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℃, with the input voltage held constant at the rated input/output.
∗3 Derating is required.
∗4 Please contact us about dynamic load and input response.
∗5 When two or more units are operating it may not comply with the IEC61000-3-2. Please contact us about another class.
∗ 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



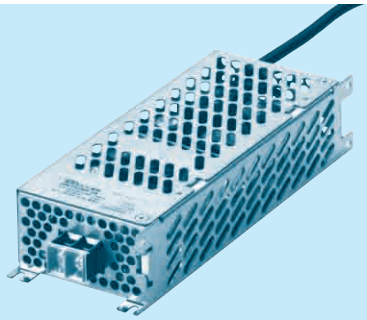

※ Tolerance : ±1 [±0.04]
※ Weight : 540g max
※ PCB material/thickness : CEM3 / 1.6mm [0.06]
※ Chassis and cover material : Electric galvanizing steel board
※ Dimensions in mm, [ ]=inches
※ Mounting torque : M4 : 1.6N・m (16.9kgf・cm) max
※ Input wire : VCTF 0.75sq×2C

COSEL AC-DC Power Supplies Open Frame/Enclosed Value-added Type

# SPLFA100F

**Ordering information**

SPLF ① A ② 100 ③ F ④ -□ ⑤ -□ ⑧



①Series name
②Single output
③Output wattage
④Universal input
⑤Output voltage
⑧Optional
C : with Coating

SPLFA

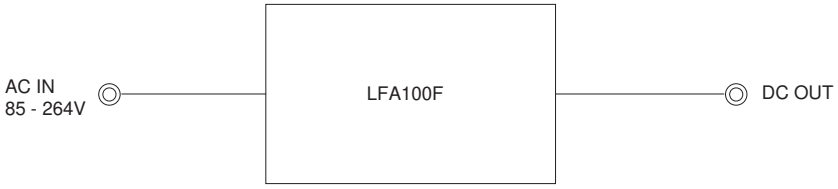
| MODEL | SPLFA100F-12 | SPLFA100F-24 |
|---|---|---|
| MAX OUTPUT WATTAGE[W] | 102.0 | 103.2 |
| DC OUTPUT | 12V 8.5A | 24V 4.3A |

## SPECIFICATIONS

| | MODEL | | SPLFA100F-12 | SPLFA100F-24 |
|---|---|---|---|---|
| INPUT | VOLTAGE[V] | | AC85 - 264 1φ (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 CIRCUIT AND 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 NOISE REGULATIONS | AGENCY APPROVALS | | DEN-AN | |
| | CONDUCTED NOISE/POWER | | Complies with DEN-AN | |
| | HARMONIC ATTENUATOR ∗5 | | Complies with IEC61000-3-2 (class A) | |
| OTHERS | CASE SIZE/WEIGHT | | 73×42×197mm [2.87×1.65×7.76 inches] (W×H×D) / 670g max | |
| | COOLING METHOD | | Convection | |

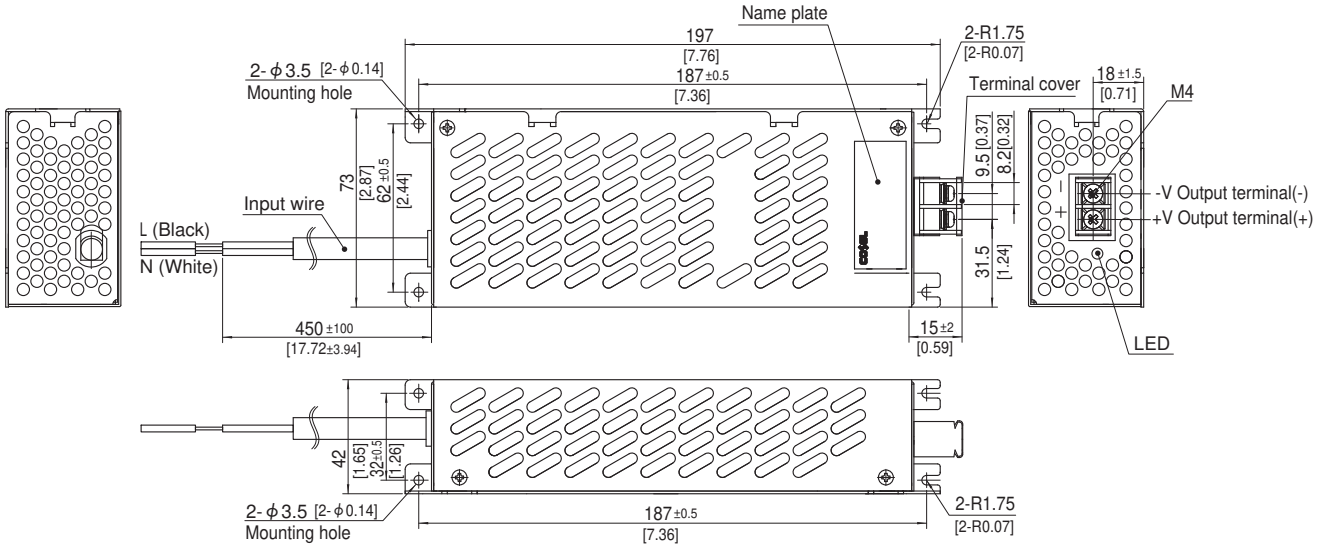
∗1 Measured by 20MHz oscilloscope or Ripple-Noise meter (Equivalent to KEISOKU-GIKEN: RM103).
∗2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25℃, with the input voltage held constant at the rated input/output.
∗3 Derating is required.
∗4 Please contact us about dynamic load and input response.
∗5 When two or more units are operating it may not comply with the IEC61000-3-2. Please contact us about another class.
∗ 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



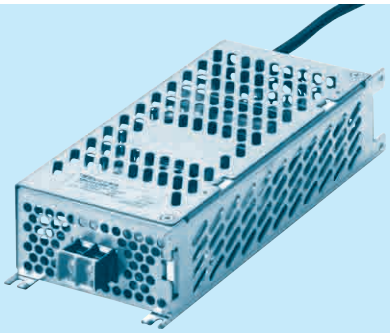

※ Tolerance : ±1 [±0.04]
※ Weight : 670g max
※ Dimensions in mm, [ ]=inches
※ Chassis material : Galvanized Steel board
※ Screw tightening torque : M4 : 1.6N・m (16.9kgf・cm) max
※ Input wire : VCTF 0.75sq×2C

COSEL AC-DC Power Supplies Open Frame/Enclosed Value-added Type

# SPLFA150F

**Ordering information**

SPLF ① A ② 150 ③ F ④ -□ ⑤ -□ ⑧



①Series name
②Single output
③Output wattage
④Universal input
⑤Output voltage
⑧Optional
C : with Coating

SPLFA

| 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 1φ (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 | 84.0typ |
| | | ACIN 200V | 84.0typ | 86.5typ |
| | 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] | | 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℃∗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 CIRCUIT AND 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 NOISE REGULATIONS | AGENCY APPROVALS | | DEN-AN | |
| | CONDUCTED NOISE/POWER | | Complies with DEN-AN | |
| | HARMONIC ATTENUATOR ∗5 | | Complies with IEC61000-3-2 (class A) | |
| 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℃, with the input voltage held constant at the rated input/output.
∗3 Derating is required.
∗4 Please contact us about dynamic load and input response.
∗5 When two or more units are operating it may not comply with the IEC61000-3-2. Please contact us about another class.
∗ To meet the specifications. Do not operate over-loaded condition.
∗ Parallel operation is not possible.
∗ Derating is required when operated with chassis and cover.
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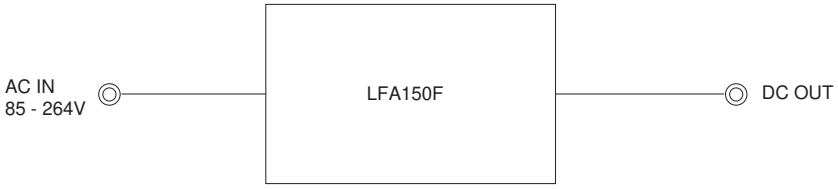
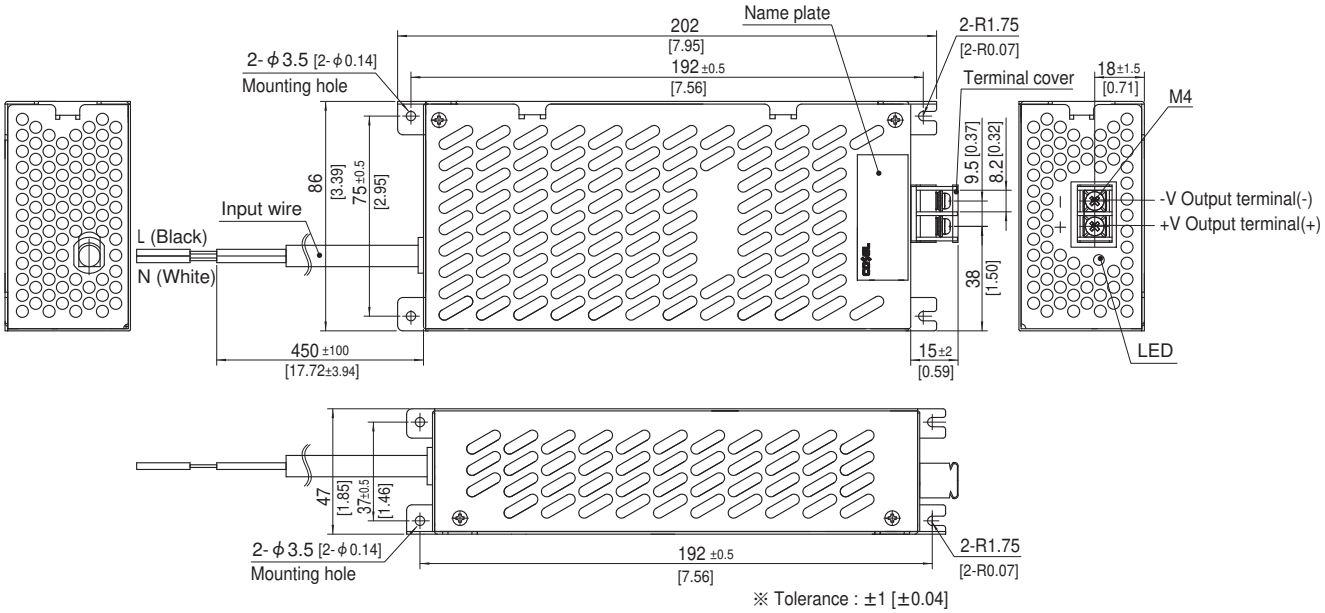
## Block diagram






## External view




※ Tolerance : ±1 [±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×2C