# Fuente alimentación / *Power supply*

**FAH**
100

Fuente de alimentación de tensión constante.
Funciona desde 100 ~ 305VAC.
Consigue una alta eficiencia sin ventilador, hasta un 88% gracias a un diseño optimizado y es capaz de funcionar desde -40ºC ~ +90ºC.

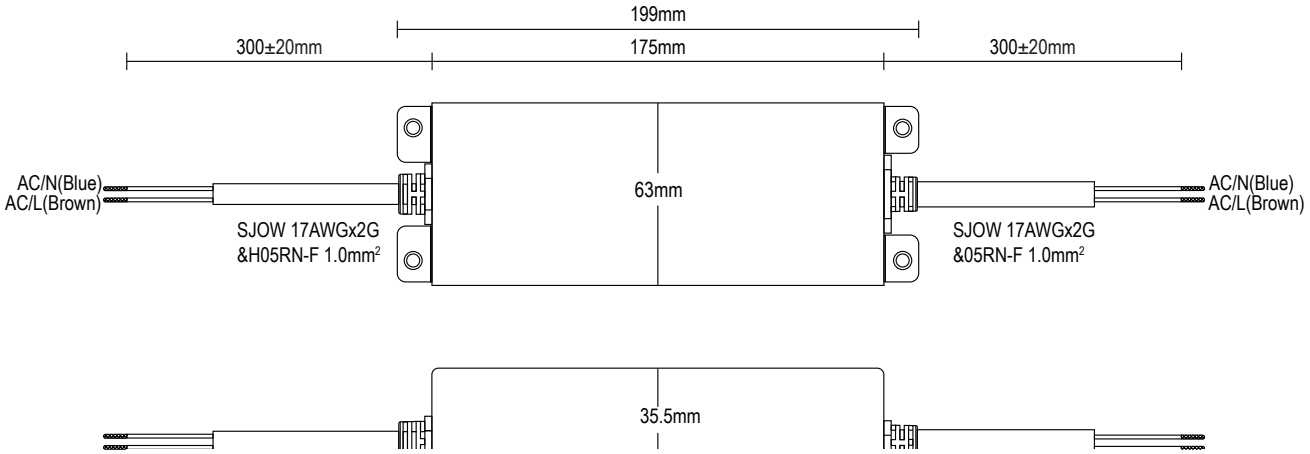
*Constant coltage power supply.*
*Operates from 100 ~ 305VAC.*
*It achieves high efficiency without fan, up to 88% to an optimized design and is capable of operating from -40ºC ~ +90ºC.*

**5** Warranty Years

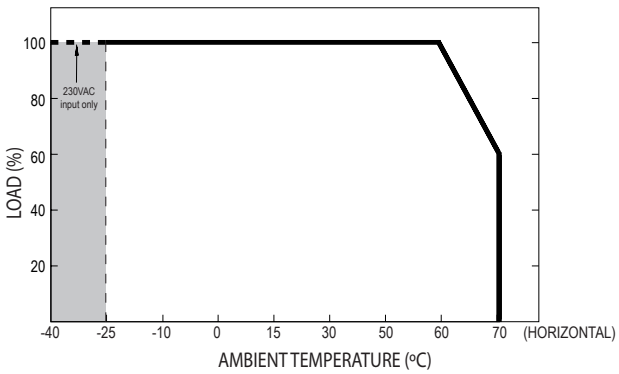
12-24 V DC

IP20

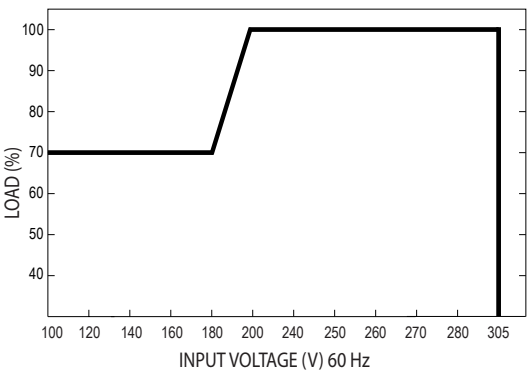
- **Medidas** / *Dimensions*




- **Carga de salida vs temperatura**/*Output load vs temperature*




- **Características estáticas** / *Static characteristics*




SELV

RoHS

## • **Características** / *Characteristics*

| **MODEL** | | **FH100-24** |
|---|---|---|
| **OUTPUT** | **DC VOLTAGE** | 24V |
| | **CONSTANT CURRENT** (2) | 12 ~ 24V |
| | **RATED CURRENT** | 4A |
| | **RATED POWER** | 200VAC ~ 305VAC |
| | | 96W |
| | | 100VAC ~ 180VAC |
| | | 70W |
| | **RIPPLE & NOISE** (max.) (3) | 200mVp-p |
| | **VOLTAGE TOLERANCE** (4) | ±3.0% |
| | **LINE REGULATION** | ±0.5% |
| | **LOAD REGULATION** | ±1.0% |
| | **SETUP, RISE TIME** (6) | 1000ms, 80ms / 115VAC 500ms, 100ms/230VAC |
| | **HOLD UP TIME** | 15ms / 115VAC 10ms/ 230VAC |
| **INPUT** | **VOLTAGE RANGE** (5) | 100 ~ 305VAC 142 ~ 431VDC continue, 320VAC for 24Hrs; 360VAC for 1Hr |
| | **FREQUENCY RANGE** | 47 ~ 63Hz |
| | **POWER FACTOR** | PF≥0.97/115VAC, PF≥0.95/230VAC, PF≥0.92/277VAC @ full load |
| | **TOTALLY HARMONIC DISTORTION** | THD< 20%(@load≥50%/115VC; @load≥60%/230VAC; @load≥75%/277VAC) |
| | **EFFICIENCY** | 88% |
| | **AC CURRENT** | 1.1A / 115VAC 0.6A / 230VAC 0.5A / 277VAC |
| | **INRUSH CURRENT** | COLD START 60A(twidth=850μ s measured at 50% Ipeak) at 230VAC; Per NEMA 410 |
| | **MAX. No. of PSUs on 16A CIRCUIT BREAKER** | 3 units (circuit breaker of type B) / 6 units (circuit breaker of type C) at 230VAC |
| | **LEAKAGE CURRENT** | <0.75mA / 277VCA |
| | **NO LOAD POWER CONSUMPTION** | No load power consumption <0.5W |
| **PROTECTION** | **OVER CURRENT** | 95 ~ 108% |
| | | Constant current limiting, recovers automatically after fault condition is removed |
| | **SHORT CIRCUIT** | Hiccup mode, recovers automatically after fault condition is removed |
| | **OVER VOLTAGE** | 28 ~ 34V |
| | | Shut down and latch off o/p voltage, re-power on to recover |
| | **OVER TEMPERATURE** | Shut down and latch off o/p voltage, re-power on to recover |
| **ENVIRONMENT** | **WORKING TEMP.** | Tcase= -40 ~ +90ºC |
| | **MAX. CASE TEMP.** | Tcase= +90ºC |
| | **WORKING HUMIDITY** | 20 ~ 95% RH non-condensing |
| | **STORAGE TEMP., HUMIDITY** | -40 ~ +80ºC, 10 ~ 95% RH |
| | **TEMP. COEFFICIENT** | ±0.03%/ºC (0 ~ 60ºC) |
| | **VIBRATION** | 10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes |
| **SAFETY & EMC** | **SAFETY STANDARDS** | CSA C22.2 No. 250.13-12; IEC/EN/AS/NZS 61347-1, IEC/EN/AS/NZS 61347-2-13 independent, EN62384; EAC TP TC 004; BIS IS15885; GB19510.1, GB19510.14; IP65 or IP67; KC61347-1,KC61347-2-13 approved |
| | **WITHSTAND VOLTAGE** | I/P-O/P: 3.75KVAC I/P-FG: 2KVAC O/P-FG: 1.5KVAC |
| | **ISOLATION RESISTANCE** | I/P-O/P, I/P-FG, O/P-FG: 100M Ohms /500VDC / 25ºC / 70% RH |
| | **EMC EMISSION** | Compliance to EN55015, EN61000-3-2 Class C (@load≥60%); EN61000-3-3;GB17743, GB17625.1;EAC TP TC 020; KC KN15,KN61547 |
| | **EMC IMMUNITY** | Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, light industry level (surge immunity Line-Earth 6KV, Line-Line 4KV);EAC TP TC 020; KC KN15,KN61547 |

| **MODEL** | | **FH100-24** |
|---|---|---|
| **OTHERS** | **MTBF** | 978.2K hrs min. Telcordia SR-332 (Bellcore) 282.9Khrs min. MIL-HDBK-217F (25ºC) |
| | **DIMENSION** | 199*63*35.5mm (L*W*H) |
| | **PACKING** | 0.85Kg; 16pcs/14.2Kg/0.72CUFT |

**NOTE**

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25ºC of ambient temperature.
2. Please refer to "DRIVING METHODS OF LED MODULE".
3. Ripple & noise are measured at 20MHz of banswidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
4. Tolerance: includes set up tolerance, line regulation and load regulation.
5. De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" section details.
6. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.
7. The driver is considered as a component that will be operated in combination with final equipament. Since EMC performance will be affected by the complete installation the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.
8. This series meets the typical life expectancy of >62,000 hours of operation when Tcase, particulary (tc) point (or TMP, per DLC), is about 75ºC or less.
10. The ambient temperature derating of 3.5ºC/100m with fanless models and of 5ºC/1000m with fan models for operating altitude higher than 2000m(6500ft).