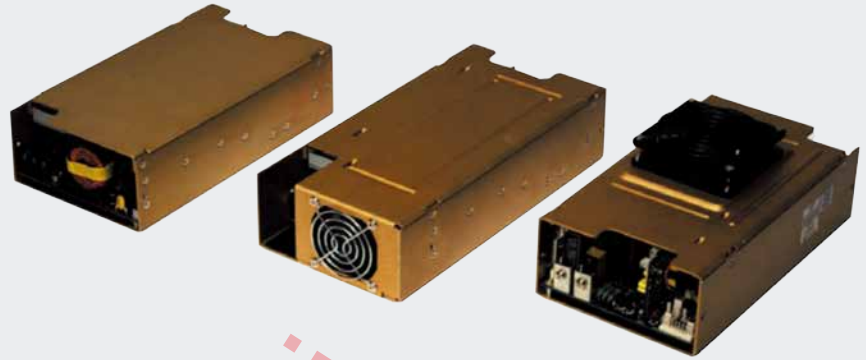


ARTESYN LPQ350 SERIES

350 Watts



XXXX

DATA SHEET

Total Power:

350 Watts

Input Voltage:

85 - 264 Vac

120 - 300 Vdc

of Outputs:

Quad

SPECIAL FEATURES

- Active power factor correction
- IEC EN61000-3-2 compliance
- Remote sense on 1st and 4th output
- Power fail and remote inhibit
- Single wire current sharing
- Built-in EMI filter
- Adjustable floating 4th output
- Two supervisory outputs: 5 V and 12 V
- Overvoltage protection
- Overload protection
- Thermal overload protection
- DC power good
- 135 khz switching frequency
- RoHS compliant

- Cover -C
- Optional with fan cover -CF
- Optional end-mounted fan -CEF

SAFETY

- VDE 60950
21310-3336-0001
- UL 60950
- CSA CSA 22.2-234 Level 5
LR109492C
- NEMKO EN 60950/EMKO-TUE
P97102061 (74-sec) 203
- BAPT EN60950/BS7002 607019
- CB Certificate and report
4048, 4049
- CE Mark (LVD)

ELECTRICAL SPECIFICATIONS

Input	
Input range	85 - 264 Vac; 120-300 Vdc
Frequency	47 - 440 Hz
Inrush current	38 A max, cold start @ 25 °C
Efficiency	75% typical at full load
EMI filter	FCC Class B conducted and radiated CISPR 22 Class B conducted and radiated EN55022 Class B conducted and radiated VDE 0878 PT3 Class B conducted and radiated
Power factor	0.99 typical
Safety ground leakage current	0.5 mA @ 50/60 Hz, 264 Vac input
Output	
Maximum power	With cover: 350 W with 30 CFM forced air, (-C) (-CF) (-CEF)
Adjustment range	± 5% min. on main: 3.3-24 V on output 4
Supervisory output	5 V @ 500 mA regulated, 12 @ 150 mA x2
Hold-up time	20 ms @ 350 W load, 115 Vac nominal line
Overload protection	Short circuit protection on all outputs. Case overload protected @ 110-145% above peak rating
Overvoltage protection	5 V output: 5.7 - 6.7 Vdc

LOGIC CONTROL

Power fail	TTL logic signal goes high 50 - 150 msec after 5 V output. It goes low at least 4 msec before loss of regulation
Remote on/off	Requires an external contact (N.O or N.C) to inhibit outputs
DC-OK	TTL logic goes high 50 - 150 msec after 5 V output. It goes low when there is loss of regulation
Remote sense	Compensates for 0.5 V lead drop min. Will operate without remote sense connected. Reverse connection protected

ENVIRONMENTAL SPECIFICATIONS

Operating temperature	0° to 50 °C ambient; derate each output at 2.5% per degree from 50° to 70 °C
Storage temperature	-40 °C to +85 °C
Temperature coefficient	± 0.4% per °C
Electromagnetic susceptibility	Designed to meet IEC 801, -2, -3, -4, -5, -6, Level 3
Humidity	Operating; non-condensing 5% to 95%
Vibration	Three orthogonal axes, sweep at 1 oct/min, 5 min. dwell at four major resonances 0.7 G peak 5Hz to 500Hz, operational
MTBF demonstrated	> 550,000 hours at full load and 25 °C ambient conditions

ORDERING INFORMATION

Model Number	Output Voltage	Minimum Load	Maximum Load	Peak Load ¹	Regulation ²	Ripple P/P(PARD) ³
LPQ352-C	+5 V	5 A	50 A	60 A	±2%	50 mV
	+12 V	0 A	12 A	14 A	±3%	120 mV
	-12 V	0 A	6 A	8 A	±3%	120 mV
	3.3 - 24 V	*1 A	6 A	8 A	±3%	240 mV ₁ max.
LPQ353-C	+5 V	5 A	50 A	60 A	±2%	50 mV
	+15 V	0 A	12 A	14 A	±3%	150 mV
	-15 V	0 A	6 A	8 A	±3%	150 mV
	3.3 - 24 V	*1 A	6 A	8 A	±3%	240 mV ₁ max.

1. Peak current lasting < 30 seconds with a maximum 10% duty cycle.

2. At 25 °C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.

3. Peak-to-peak with 20 MHz bandwidth and 10 µF in parallel with a 0.1 µF capacitor at rated line voltage and load ranges.

4. 4th output 3.3 - 24 V factory set at 5 V.

5. *Minimum load required when the output is set below 5 volts.

6. If optional CF or CEF fans are not used, 30CFM forced air cooling needs to be provided and is required through the length of the power supply. Not convection rated.

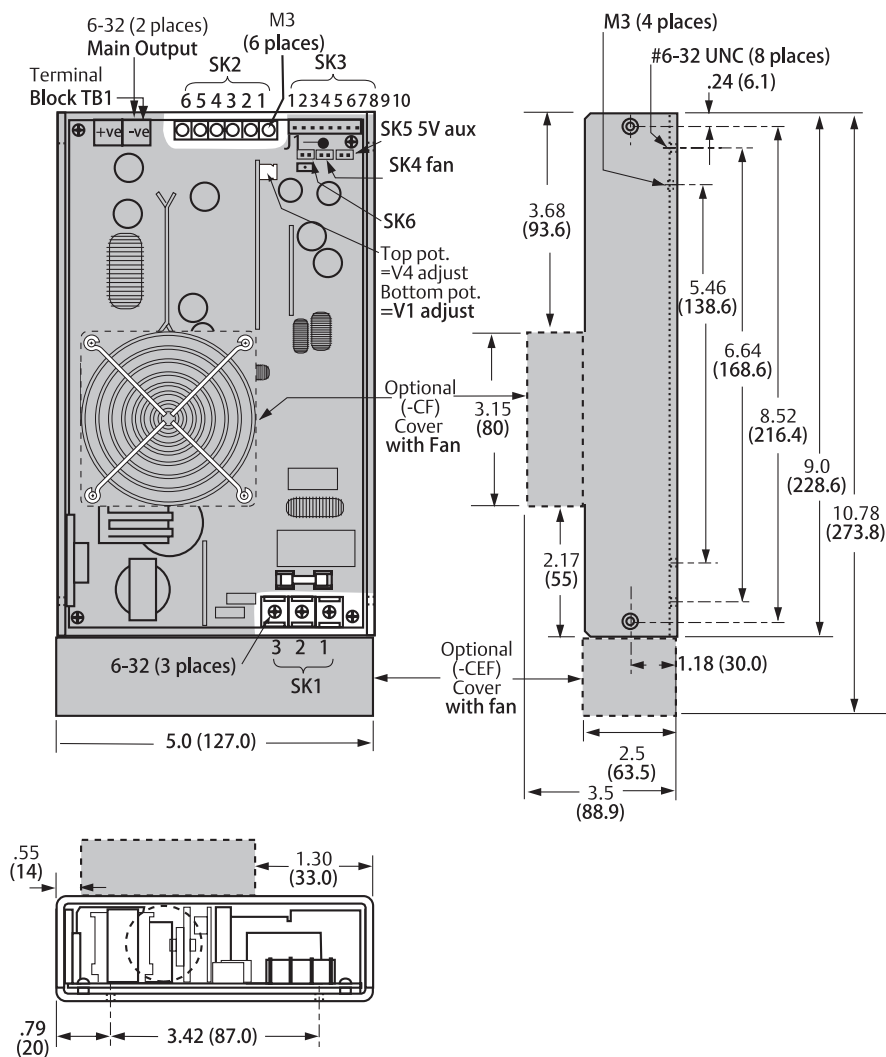
7. Remote inhibit resets OVP latch

8. This product is a Component Power Supply and is only for inclusion by professional installers within other equipment and must not be operated as a standalone product. EMC compliance to appropriate standards must be verified at the system level. This product is for sale to OEMs and System Integrators, including through Distribution Channels. It is not intended for sale to End Users.

Note: -CF suffix added to the model number indicates cover with fan,

-CEF suffix added to model number indicates end-mounted fan chassis.

MECHANICAL DRAWING



Notes:

1. Specifications subject to change without notice.
2. All dimensions in inches (mm), tolerance $\pm .02$ ".
3. Specifications are at factory settings
4. To enable normally closed Remote Inhibit, cut Jumper J1.
5. Mounting maximum insertion depth is 0.12".
6. Warranty: 2 year
7. Weight: 4 lb./1.8kg.

PIN ASSIGNMENTS

SK1	PIN 1	Neutral
	PIN 2	Line
	PIN 3	Ground
SK2	PIN 1	+ 12/15V
	PIN 2	Common
	PIN 3	Common
	PIN 4	- 12/15 V
	PIN 5	3.3-25 V RET Float
	PIN 6	3.3-25 V Float
SK3	PIN 1	+ Sense V 4
	PIN 2	- Sense V 4
	PIN 3	+Sense V 1
	PIN 4	-Sense V 1
	PIN 5	POK
	PIN 6	C.Share
	PIN 7	DC-OK
	PIN 8	Inhibit (N.O.)
	PIN 9	Inhibit (N.C.)
	PIN 10	COM
SK4	PIN 1	+ Fan 1 (12V@150mA)
	PIN 2	- Common
SK5	PIN 1	+ 5V aux (5V@100mA)
	PIN 2	- Common
SK6	PIN 1	+ Fan 2 (12V@150mA)
	PIN 2	- Common

MATING CONNECTORS

SK3	Molex: 51191-1000 PINS: 50802-9101
SK4	Molex: 22-01-3027 PINS: 08-50-0114
SK5	Molex: 22-01-3027 PINS: 08-50-0114
SK6	Molex: 22-01-3027 PINS: 08-50-0114

Astec Connector Kit #70-841-011, includes all of the above.



For international contact information,
visit advancedenergy.com.

powersales@aei.com (Sales Support)
productsupport.ep@aei.com (Technical Support)
+1 888 412 7832

ABOUT ADVANCED ENERGY

Advanced Energy (AE) has devoted more than three decades to perfecting power for its global customers. AE designs and manufactures highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes.

Our products enable customer innovation in complex applications for a wide range of industries including semiconductor equipment, industrial, manufacturing, telecommunications, data center computing, and medical. With deep applications know-how and responsive service and support across the globe, we build collaborative partnerships to meet rapid technological developments, propel growth for our customers, and innovate the future of power.

PRECISION | POWER | PERFORMANCE

Specifications are subject to change without notice. Not responsible for errors or omissions. ©2020 Advanced Energy Industries, Inc. All rights reserved. Advanced Energy®, AE® and Artesyn™ are U.S. trademarks of Advanced Energy Industries, Inc.