

KEY FEATURES

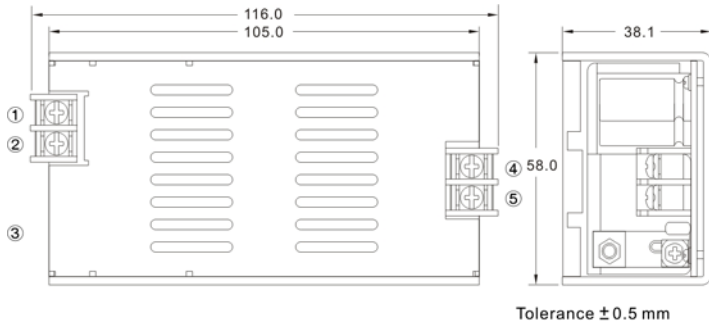
- Enclosed Switching Power Supply
- Universal Input: 85-265 VAC
- Single Output
- 5 VDC to 48 VDC Output
- 5700 VDC Input to Output Isolation
- 2-Year Warranty


ELECTRICAL SPECIFICATIONS

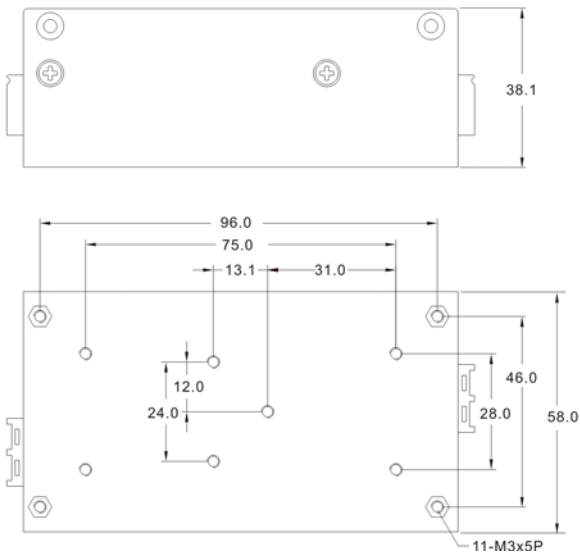
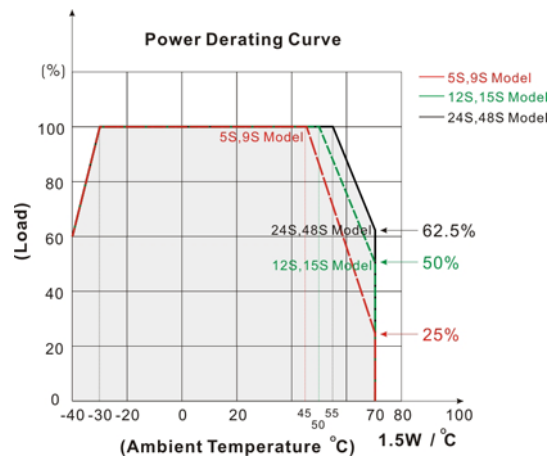
Model No.	QES50-C-5S	QES60-C-9S	QES60-C-12S	QES60-C-15S	QES50-C-24S	QES60-C-48S
Max Output Wattage (W)	50W	60W	60W	60W	60W	60W
Input	Voltage					
	85-265 VAC or 100-370 VDC					
	Frequency (Hz)					
	47-65 Hz					
	Current (Full load)					
2 A max. (115 VAC) / 1 A max. (230 VAC)						
Inrush Current (<2ms)						
30 A max. (115 VAC) / 50 A max. (230 VAC)						
Leakage Current						
0.5 mA max.						
Output	Voltage (V.DC.)					
	5V	9V	12V	15V	24V	48V
	Voltage Accuracy					
	±2%					
	Current (mA) max					
	10,000	6,660	5,000	4,000	2,500	1,250
	Line Regulation (LL-HL) (typ.)					
	±1%					
	Load Regulation (5-100%) (typ.)					
	±1%					
	Minimum Load					
	1%					
	Maximum Capacitive Load					
470-23,000µF depending on model						
Ripple						
<0.2% Vout +40mV max (Vp-p)						
Noise						
<0.5% Vout +50mV max (Vp-p)						
Efficiency (at 230V)						
82%	84%	86%	86%	86%	86%	
Trim						
±10%						
Hold-up Time						
10 ms min.						
Switching Frequency						
100 kHz						
Protection	Over Power Protection					
	Auto recovery					
	Over Voltage Protection					
Zener diode clamp						
Short Circuit Protection						
Auto recovery						
Isolation	Input-Output (V.DC)					
	5700V					
	Input-FG (V.DC)					
2900V						
Output-FG (V.DC)						
710V						
Environment	Operating Temperature					
	-40°C...+70°C (with derating)					
	Storage Temperature					
	-50°C...+85°C					
	Temperature coefficient					
±0.02%/°C						
Humidity						
95% RH						
MTBF						
>130,000 h @ 25°C (MIL-HDBK-217F)						
Physical	Dimension (L x W x H)					
	4.13 x 2.28 x 1.5 Inches (105.0 x 58.0 x 38.1 mm) Tolerance ±0.5 mm					
	Weight					
260 g						
Cooling Method						
Free air convection						
Safety	Agency Approvals					
CE, UL						
EMC	EMI (Conducted & Radiated Emission)					
	EN 55022 class B					
EMS (Noise Immunity)						
EN 55024						

All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

Measured with 0.1µ 50V // 47µ 50V Ceramic Cap. Cross to output

MECHANICAL DIMENSION (Top View)


PIN#	SINGLE
1	AC IN (N)
2	AC IN (L)
3	FG
4	+DC OUT
5	-DC OUT


DERATING

BLOCK DIAGRAM
