



**Features:**

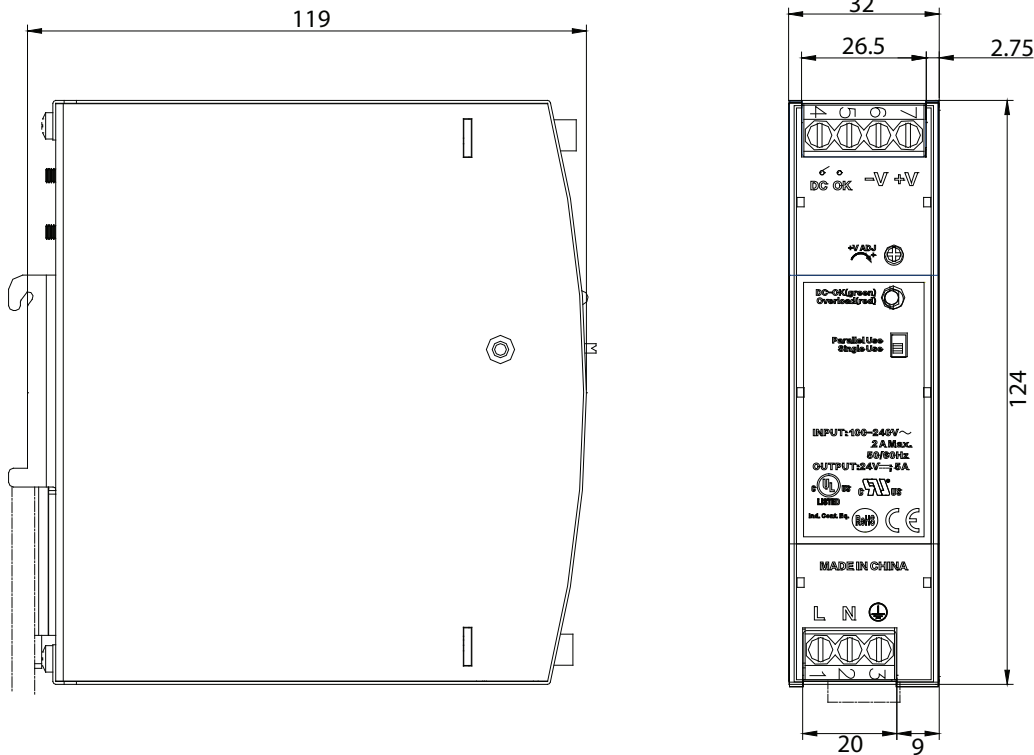
- Universal AC input/ Full range
- Support 1+1 or N+1 Redundant System (Recommended to use Redundancy Modules)
- Built-in Active PFC, PF>0.95
- High Efficiency up to 92%
- Built-in Current Sharing Function
- Built-in Current Limiting Circuit
- Output Protections: OLP/OVP/SCP/OTP
- Wide operating ambient temperature (-25°C~70°C)
- 150% (180W) Peak Load Capacity
- Easy Fuse Tripping from High Overload Current
- Excellent Partial Load Efficiency
- Built-in DC OK Relay Contact
- Can be installed on TS-35/7.5 or TS-35/15
- 100% Full Load Burn-in Test
- Suitable for critical applications
- Ultra-slim 32mm width
- 3 Year Warranty



Model	QDG-120-12	QDG-120-24	QDG-120-48
<b>Output Characteristics</b>			
DC Output	12V	24V	48V
Rated Current	10A	5A	2.5A
Current Range (Note 1)	0~10A	0~5A	0~2.5A
Ripple and	0~70°C	≤100mV	≤120mV
Noise (Note 2)	-25~0°C	≤200mV	≤240mV
Voltage ADJ. Range	12V~14V	24V~28V	48V~56V
Voltage Accuracy	±1.0%		
Line Regulation	±0.5%		
Load Regulation	±1.0%		
Set-up Time	≤250ms (230VAC input) ≤500ms (100VAC input)		
Hold-up Time	≥20ms (230VAC input, full load)		
Temperature Coefficient	±0.03%/°C		
Overshoot and Undershoot	<5.0%		
<b>Input Characteristics</b>			
Voltage Range	85VAC~264VAC		
Frequency Range	47Hz-63Hz		
Power Factor (Typical)	0.99/100VAC 0.95/230VAC		
Efficiency (Typical)	89.5%	91%	92%
AC Current (max)	≤1.5A/100VAC ≤0.65A/230VAC		
Inrush Current (Typical)	<30A@100VAC Cold start <60A@230VAC Cold start		
Leakage Current	Input-Output: <0.25mA Input-PG: <3.5mA		
<b>Protection</b>			
Over Load (OLP)	110%~150% of rated current, CC limiting (150%@3S), shutdown for 7S, @7S Load ≤ Rated Current auto recovery		
Over Power (OVP)	15~18V	29~33V	58~65V
	Protection Type: Hiccup Mode, Auto recovery		
Over Temperature (OTP)	100 ± 5°C detect on heatsink of Power Transistor, shutdown O/P, auto recovery when temperature reduces		
Short Circuit (SCP)	Long-term mode, auto recovery		
<b>Environmental Characteristics</b>			
Operating Amb. Temp. & Hum	-25°C~70°C; 20%~90% RH Non-Condensing		
Storage Temp. & Hum	-40°C~85°C; 5%-95% RH Non-Condensing		
Safety Standards	UL60950; EN60950; UL508		
Withstand Voltage	Primary-Secondary: 3.0KVAC;≤10mA, Primary-PG: 2.5KVAC;≤10mA, Secondary-PG: 0.5KVAC;≤10mA,		
Isolation Resistance	≥100M ohms		
EMC Emission	Compliance to EN55022, EN55024, FCC Part 15 Class B		
Harmonic Current	Compliance to EN61000-3-2, Class A		
EMC Immunity	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; EN55024 light industry level		

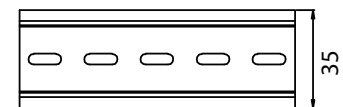
Model	QDG-120-12	QDG-120-24	QDG-120-48
<b>General Characteristics</b>			
MTBF (MIL-HDBK-217F)	More than 300,000Hrs (25°C, Full load)		
Dimension (LxWxH)	124x119x32mm		
Packing	28PCS/CTN		
Cooling Method	Cooling by free air convection		
<b>Additional Functions</b>			
Power Boost	150% of Rated Current		
Parallel Function	Supported		
DC OK	V On: When Output voltage is up to 90% of rated output voltage		
	V Off: When output voltage is down to 80% of rated output voltage		
DC OK Relay Contact Rating	Max 30V/1A or 60V/0.3A, or 30VAC/0.3A Resistive Load		
Note	1. All parameters NOT specially mentioned are measured at rated input, rated load, and 25°C of ambient temperature 2. Measured at 20MHz of bandwidth by using a 12" Twisted pair wire terminated with a 0.1uF & 47uF parallel capacitor 3. The SPS is considered a component which will be installed into final equipment. The equipment must be re-confirmed that it still meets EMC directives.		

## MECHANICAL SPECIFICATIONS



### AC CONNECTION TERMINAL BLOCK

	Pin No.	Assignment	Cable Conductor Size	Recommended Torque
CON1	1	AC-L	20 AWG - 10 AWG	1 N m
	2	AC-N		
	3	⊕		



MOUNTING RAIL:  
TS35/7.5 OR TS35/15

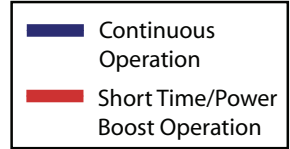
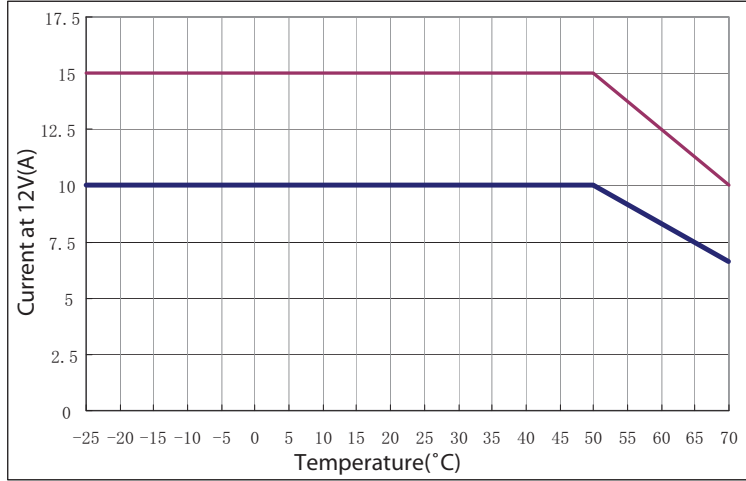
### DC CONNECTION TERMINAL BLOCK

	Pin No.	Assignment	Cable Conductor Size	Recommended Torque
CON2	4/5	DC OK/RELAY CONTACT	20 AWG - 10 AWG	1 N m
	6	-V		
	7	+V		

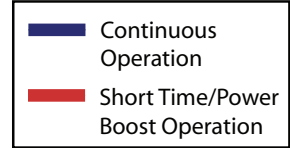
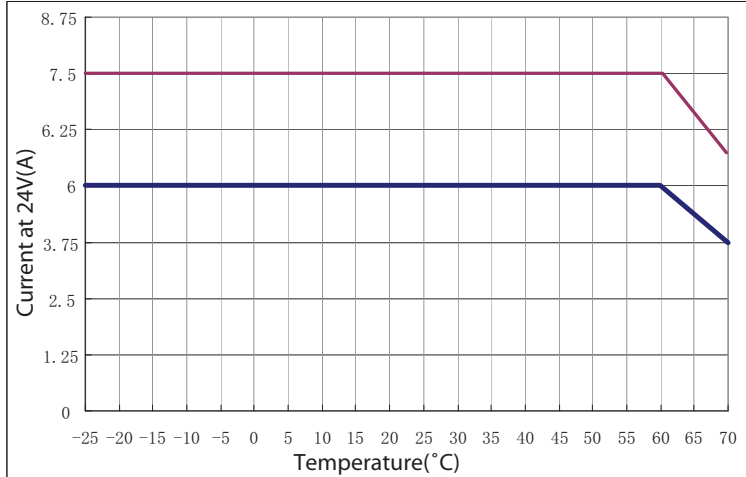
UNIT: mm

### DERATING CURVE

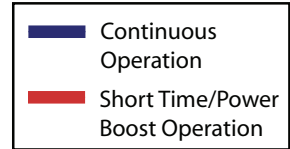
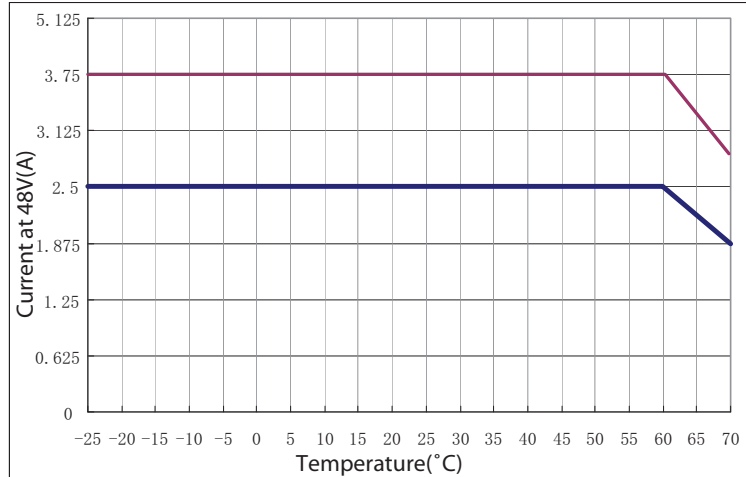
#### QDG-120-12



#### QDG-120-24



#### QDG-120-48



UNIT: mm