



Industrial DIN Rail Power Supply

Force-GT Series

www.DeltaPSU.com





About Power and System Business Group (PSBG)

- World's leading provider of power products and solutions
- First power product launched in 1983



Power Conversion



Smart Drive & Control



Battery Charger



Green Energy

About Delta

Delta, founded in 1971, is a global provider of power and thermal management solutions. Its mission statement, "To provide innovative, clean and energy-efficient solutions for a better tomorrow," focuses on addressing key environmental issues such as global climate change. As an energy-saving solutions provider with core competencies in power electronics and automation, Delta's business categories include Power Electronics, Automation, and Infrastructure.

Delta offers some of the most energy efficient power products in the industry, including switching power supplies with efficiency over 90%, telecom power with up to 98%, and PV inverters with up to 99.2% efficiency. We have also developed the world's first server power supply certified as 80 Plus Titanium.

In response to the challenge of climate change, Delta will remain committed to the research and development of innovative, energy-saving products, solutions and services that contributing substantially to the sustainable development of mankind.

Business Categories



Power Electronics

- Components
- Power and System
- Fan & Thermal Management
- Automotive Electronics
- **Innertek**



Automation

- Industrial Automation
- Building Automation



Infrastructure

- ICT Infrastructure
- Energy Infrastructure & Industrial Solutions
- **vivitek**
VIVID COLOR. VIVID LIFE.

Empowering Your Life

PSBG offers cutting-edge power products and system to innovate cloudcomputing, network connectivity, client devices, industrial and medical industry, lighting, and appliances and e-mobility with global customers.





Industrial DIN Rail Power Supply Force-GT Series


Ultra Slim, Remarkable Efficiency


Force-GT Series offers single and three phase input models, a wide 120W ~ 960W power range, and high power efficiency of up to 95%. Its two single phase 480W models were certified with world-leading 80 PLUS 115V Industrial Platinum. The Series complies with multiple international safety certifications and is suitable for semiconductor manufacturing, precision machinery, industrial robots, and renewable energy facilities.


 Ultra-slim design

 Wide operating temperature and cold start.

 Conformal coating on PCBAs

 Full load temperature of up to 60°C

 Built-in DC OK relay

 High power density and efficiency



Specifications

■ 1 Phase ■ 3 Phase

1 Phase



Output Power:
120W
Output Voltage:
12V / 24V / 48V



Output Power:
240W
Output Voltage:
12V / 24V / 48V



Output Power:
480W
Output Voltage:
24V / 48V

12V	Rated Power	120W	240W
Input	Input Voltage Range	90 ~ 264V _{AC}	
	Efficiency @ Full Load	93.0 % typ.@230 V _{AC}	93.5 % typ.@230 V _{AC}
Output	Output Voltage Range	12.0 ~ 14.0 V _{DC}	
	Output Current	10.0A	20.0A
Protection	OVP / OCP / OTP	OVP : Latch mode / OCP : Auto-Recovery, CC mode / OTP : Latch mode	
Dimensions / H x W x D		123.6 x 30 x 116.8 mm	123.6 x 40 x 116.8 mm
Operation Temperature		-30 °C ~ +70 °C (-40 °C Cold Start)	

24V	Rated Power	120W	240W	480W
Input	Input Voltage Range	90 ~ 264V _{AC}		
	Efficiency @ Full Load	93.5 % typ.@230 V _{AC}	94.5 % typ.@230 V _{AC}	95.0 % typ.@230 V _{AC}
Output	Output Voltage Range	24.0 ~ 28.0 V _{DC}		
	Output Current	5.0A	10.0A	20.0A
Protection	OVP / OCP / OTP	OVP : Latch mode / OCP : Auto-Recovery, CC mode / OTP : Latch mode		
Dimensions / H x W x D		123.6 x 30 x 116.8 mm	123.6 x 40 x 116.8 mm	123.6 x 56 x 116.8 mm
Operation Temperature		-30 °C ~ +70 °C (-40 °C Cold Start)		

48V	Rated Power	120W	240W	480W
Input	Input Voltage Range	90 ~ 264V _{AC}		
	Efficiency @ Full Load	93.0 % typ.@230 V _{AC}	94.5 % typ.@230 V _{AC}	95.5 % typ.@230 V _{AC}
Output	Output Voltage Range	48.0 ~ 55.0 V _{DC}		
	Output Current	2.5A	5.0A	10.0A
Protection	OVP / OCP / OTP	OVP : Latch mode / OCP : Auto-Recovery, CC mode / OTP : Latch mode		
Dimensions / H x W x D		123.6 x 30 x 116.8 mm	123.6 x 40 x 116.8 mm	123.6 x 56 x 116.8 mm
Operation Temperature		-30 °C ~ +70 °C (-40 °C Cold Start)		

3 Phase



Output Power:
120W
Output Voltage:
24V



Output Power:
240W
Output Voltage:
24V



Output Power:
480W
Output Voltage:
24V



Output Power:
960W
Output Voltage:
24V

24V	Rated Power	120W	240W	480W	960W
Input Voltage	Input Voltage Range	3 x 320 ~ 575V _{AC} (3 Phase) or 2 x 340 ~ 575 (2 Phase)			
	Efficiency @ Full Load 3 x 400 V _{AC} & 500 V _{AC}	> 87.5 % typ.	> 90.5 % typ.	> 94 % typ.	> 94.5 % typ.
Output Voltage	Output Voltage Range	24.0 ~ 28.0 V _{DC}			
	Output Current	5.0A	10.0A	20.0A	40.0A
Protection	OVP / OCP / OTP	OVP : Auto-Recovery / OCP : Auto-Recovery, CC mode / OTP : Auto-Recovery			
Dimensions / H x W x D		124 x 38 x 125.3 mm	124 x 50 x 125.3 mm	124 x 65 x 127.3 mm	124 x 110 x 128.7 mm
Operation Temperature		-25 °C ~ +70 °C (-40 °C Cold Start)			



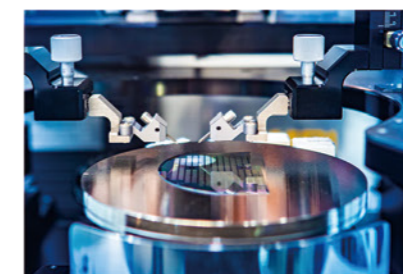
Semiconductor Equipment



Features

- Design complies with SEMI F47 for semiconductor equipment application.
- Long life electrolytic capacitor increases product lifetime and reliability.
- Ultra-slim design saves space for control cabinets.
- Built-in DC OK relay offers instant warning when output is abnormal.
- High efficiency and low no-load power reduce energy consumption.
- Full load operating temperature up to 60°C ensures stable power output under high-temperature environments.

Applications



Semiconductor process equipment



Semiconductor automation



Industrial Robots

Features

- Ultra-slim design saves space for control cabinets.
- Conformal coating on PCBAs enhances harsh industrial environments resistance.
- Long life electrolytic capacitor to increase product lifetime and reliability.
- High efficiency and low no-load power reduce energy consumption and cost.
- Full load operating temperature up to 60°C ensures stable power output under high-temperature environments.
- Built-in DC OK relay offers instant warning when output is abnormal.

Applications



Robotic arms



Collaborative robots (Cobots)



Process Automation

Features

- Ultra-slim design saves space for control cabinets.
- Conformal coating on PCBAs enhances harsh industrial environments resistance.
- Full load operating temperature up to 60°C ensures stable power output under high-temperature environments.
- Built-in DC OK relay offers instant warning when output is abnormal.
- Long life electrolytic capacitor increases product lifetime and reliability.
- High efficiency and low no-load power reduce energy consumption and cost.

Applications



Petrochemical industry



Oil refinery

Renewable Energy Facilities



Features

- Ultra-slim design saves space for cabinets.
- Supports wide -30°C to 70°C operating temperature and -40°C cold start.
- Conformal coating on PCBAs enhances harsh industrial environments resistance.
- Full load operating temperature up to 60°C ensures stable power output under high-temperature environments.
- Long life electrolytic capacitor increases product lifetime and reliability.
- Film capacitors (X cap) with high temperature high humidity bias (THB) level evaluation improve outdoor durability.

Applications



Solar power facilities



Wind power facilities





EV Chargers

Features

- Conformal coating on PCBAs enhances harsh industrial environments resistance.
- Supports wide -30°C to 70°C operating temperature and -40°C cold start.
- Ultra-slim design saves space for control cabinets.
- Built-in DC OK relay offers instant warning when output is abnormal.
- High efficiency and low no-load power reduce energy consumption and cost.
- Full load operating temperature up to 60°C ensures stable power output under high-temperature environments.
- Film capacitors (X cap) with high temperature high humidity bias (THB) level evaluation improve outdoor durability.

Applications



AC EV chargers



DC EV chargers

Product Selection Guide



DIN Rail Power Supply Model Numbering

DR	F-	XXV	XXXW	□	G	B	A
DIN Rail	Product Series F - Force-GT Series	Output Voltage	Output Power	Input Phase 1- Single Phase 3- Three Phase	G - General Type	B - Screw Terminal	A - Delta Standard

Product Selection Guide

Model	Phase			PFC	Output voltage	Output current	Output power	Input voltage range	Dimensions (H x W x D)
	1	2	3						
DRF-12V120W1GBA	•			•	12V	10.0A	120W	90-264V _{AC}	123.6 x 30 x 116.8mm (4.87" x 1.18" x 4.60")
DRF-12V240W1GBA	•			•		20.0A	240W		123.6 x 40 x 116.8mm (4.87" x 1.57" x 4.60")

Model	Phase			PFC	Output voltage	Output current	Output power	Input voltage range	Dimensions (H x W x D)
	1	2	3						
DRF-24V120W1GBA	•			•	24V	5.0A	120W	90 - 264V _{AC}	123.6 x 30 x 116.8mm (4.87" x 1.18" x 4.60")
DRF-24V240W1GBA	•			•		10.0A	240W		123.6 x 40 x 116.8mm (4.87" x 1.57" x 4.60")
DRF-24V480W1GBA	•			•		20.0A	480W		123.6 x 56 x 116.8mm (4.87" x 2.20" x 4.60")
DRF-24V120W3GBA		•	•			3 x 320-575V _{AC} (3 Phase) or 2 x 340-575V _{AC} (2 Phase)	5A	120W	124 x 38 x 125.3mm (4.88" x 2.20" x 4.93")
DRF-24V240W3GBA		•	•				10.0A	240W	124 x 50 x 125.3mm (4.88" x 1.97" x 4.93")
DRF-24V480W3GBA		•	•	•			20.0A	480W	124 x 65 x 127.3mm (4.88" x 2.56" x 5.01")
DRF-24V960W3GBA		•	•	•	40.0A		960W	124 x 110 x 128.7mm (4.88" x 4.33" x 5.07")	
DRF-48V120W1GBA	•			•	48V	2.5A	120W	90 - 264V _{AC}	123.6 x 30 x 116.8mm (4.87" x 1.18" x 4.60")
DRF-48V240W1GBA	•			•		5.0A	240W		123.6 x 40 x 116.8mm (4.87" x 1.57" x 4.60")
DRF-48V480W1GBA	•			•		10.0A	480W		123.6 x 56 x 116.8mm (4.87" x 2.20" x 4.60")

*The power supply can work with DC input

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