



# Compact Industrial Power Supplies

- Single-phase
- DIN rail mountable
- Short circuit protection
- Internal input filter
- Wide input voltage range
- Power Factor Correction
- Parallel operation/Redundant
- High efficiency
- Adjustable output voltage
- RoHS compliant

## Welcome to Lutze

We can draw on 45 years of experience in developing and building electronic and electro-mechanical components for control systems and machine tools.

We are widely recognized as a system supplier offering a comprehensive and complementary product range.

Close co-operation between our development engineers and clients enables us to offer successful and relevant products at the right price.

Our extraordinary delivery capability is based on our advanced logistics system and custom-made stockholding facilities.

## Lutze Delta Series Power Supplies

- Durable housings for rough industrial environment
- Wide range input voltage for global applications
- Class 2 up to 100 W
- Work temperatures from -10°C to 70°C (from 14 to 158 degrees Fahrenheit)
- Adjustable output voltage
- Low ripple voltage
- Sustained protection against short circuit, over voltage and temperature peaks
- Parallel Support
- International Standards
  - CE
  - EN 50081-1 / EN 65022 for EMI
  - EN 50082-1 / EN 65024 for EMS
  - UL/cUL: UL508 / UL1310 / UL1950
  - TÜV: EN 60950
  - FCC: Class B

Power supplies play an important role in electric systems and are the heart of most control enclosures. The majority of our Delta Power Supplies come with a voltage of DC 24V, which is the most commonly used standard voltage world wide to supply electrical components. Other voltages are also readily available to meet different application requirements.

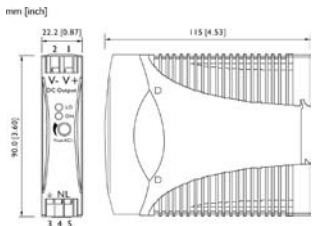
In order to achieve a reliable and safe function of the attached components, the appropriate power supply must be selected carefully based on the existing application.

The primary switched power supplies are above all efficient, highly reliable and suitable even for rough industrial environments.

Excellent electrical specifications, employment of high-quality components and a high insensitivity in relation to disturbances of all types make these devices the first choice. This applies in particular to the machine and equipment industry but to the automation industry as well. Convenient snap-on mounting onto DIN rails makes the installation simple and trouble-free.

All Lutze Power Supplies meet the current EMC standards for industrial environments and international safety permissions according to IEC 60950, UL 508/UL 1310 listed as well as to FCC Class B.

# Industrial Power Supplies 10 - 240 Watt

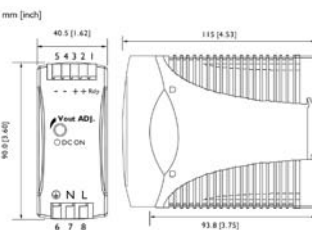


## Compact 35 mm DIN rail mountable switched DC power supplies

Single-phase DS-Power Supplies 10 - 18 W				Page 5
Part Number	722761	728766	722762	
Type	DRA 10-05	DRA 10-12	DRA 18-05	
Input voltage	AC 90-265 V	AC 90-265 V	AC 90-265 V	
Output voltage	DC 5 V	DC 12 V	DC 5 V	
Output current	2 A	0,84 A	1,5 A	
Output wattage	10 W	10 W	18 W	
Status indication	LED	LED	LED	
Dimensions (HxWxD, mm)	90 x 22,5 x 115	90 x 22,5 x 115	90 x 22,5 x 115	
Approvals	UL (UL 508 Listed, UL 1310) / cUL, CE / TÜV, FCC			

## Single-phase DS-Power Supplies 10 - 18 W

Single-phase DS-Power Supplies 10 - 18 W			Page 6
Part Number	722751	722752	
Type	DRA 10-24	DRA 18-24	
Input voltage	AC 90-265 V	AC 90-265 V	
Output voltage	DC 24 V	DC 24 V	
Output current	0,42 A	0,75 A	
Output wattage	10 W	18 W	
Status indication	LED	LED	
Dimensions (HxWxD, mm)	90 x 22,5 x 115	90 x 22,5 x 115	
Approvals	UL (UL 508 Listed, UL 1310) / cUL, CE / TÜV, FCC		

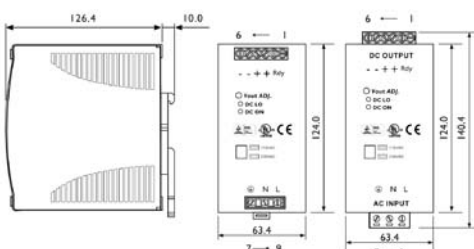


## Single-phase DS-Power Supplies 30 - 60 W

Single-phase DS-Power Supplies 30 - 60 W				Page 7
Part Number	722763	722768	722769	
Type	DRA 30-05	DRA 30-12	DRA 60-12	
Input voltage	AC 90-265 V	AC 90-265 V	AC 90-265 V	
Output voltage	DC 5 V	DC 12 V	DC 12 V	
Output current	6 A	2,5 A	5 A	
Output wattage	30 W	30 W	60 W	
Status indication	LED	LED	LED	
Dimensions (HxWxD, mm)	90 x 40,5 x 115	90 x 40,5 x 115	90 x 40,5 x 115	
Approvals	UL (UL 508 Listed, UL 1950) / cUL, CE / TÜV			

## Single-phase DS-Power Supplies 30 - 60 W

Single-phase DS-Power Supplies 30 - 60 W			Page 8
Part Number	722753	722754	
Type	DRA 30-24	DRA 60-24	
Input voltage	AC 90-265 V	AC 90-265 V	
Output voltage	DC 24 V	DC 24 V	
Output current	1,25 A	2,5 A	
Output wattage	30 W	60 W	
Status indication	LED	LED	
Dimensions (HxWxD, mm)	90 x 40,5 x 115	90 x 40,5 x 115	
Approvals	UL (UL 508 Listed, UL 1950) / cUL, CE / TÜV		



## Single-phase DS-Power Supplies 120-240 W

Single-phase DS-Power Supplies 120-240 W			Page 9 - 10
Part Number	722758	722781	
Type	DRA 120-24	DRA 240-24 redundant	
Input voltage	AC 93-182 / 186-264 V	AC 93-182 / 186-264 V	
Output voltage	DC 24 V	DC 24 V	
Output current	5 A	10 A	
Output wattage	120 W	240 W	
Status indication	LED	LED	
Dimensions (HxWxD, mm)	142 x 63,5 x 126,4	142 x 83 x 126,4	
Approvals	UL (UL 508 Listed) / cUL, CE / TÜV, FCC		

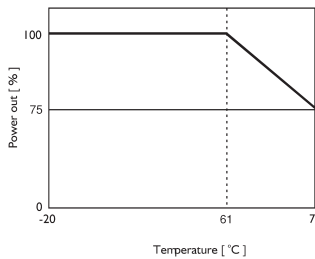
Select Lutze Delta Series Power Supplies are available with screw terminals or cage clamps. Additional output voltages: 5 V / 12 V / 15 V / 24 V / 48 V, please call for part numbers. Detailed data sheets available upon request.

# Single-phase Delta Series 5 V and 12 V DC Power Supplies

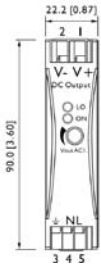


**Lutze Delta Series**  
 Single-phase, 10 - 18 W  
 DIN rail mountable  
 Short circuit protection  
 Internal input filter  
 Wide input voltage range  
 High efficiency  
 Adjustable output voltage

### Derating



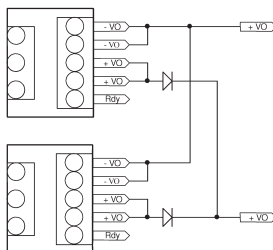
### Front view



### PIN Configuration/Assignment

- 1 V+ Positive output
- 2 V- Negative output
- 3 ⏚ Ground this to minimize high-frequency emissions
- 4 N Input
- 5 L Input

### Parallel operation



Part No.	Input voltage	Output voltage	Output wattage	Output current	Efficiency
722761	90 - 265 VAC	5 V	10 W	2 A	73 %
728766	90 - 265 VAC	12 V	10 W	0,84 A	75 %
722762	90 - 265 VAC	5 V	18 W	1,5 A	75 %

Part-No.	722761	728766	722762
Type	DRA 10-05	DRA 10-12	DRA 18-05
<b>Input detail</b>			
Rated input voltage	AC 100 - 240 V	AC 100 - 240 V	AC 100 - 240 V
Line frequency	47 - 63 Hz	47 - 63 Hz	47 - 63 Hz
Inrush current	Vi: AC 115 V Vi: AC 230 V	10 A 18 A	10 A 18 A

<b>Output detail</b>			
Output voltage accuracy	± 1 %	± 1 %	± 1 %
Line regulation	± 1 %	± 1 %	± 1 %
Load regulation	± 2 %	± 2 %	± 2 %
Transient recovery time	300∞µS	300∞µS	300∞µS
Temperature coefficient	± 0,02 %/°C	± 0,02 %/°C	± 0,02 %/°C
Ripple & noise	50 mV	50 mV	50 mV
Hold up time	Vi: AC 115 V Vi: AC 230 V	25 ms 100 ms	20 ms 75 ms

Voltage trim range	- 10 - + 15 %	- 10 - + 15 %	- 10 - + 15 %
DC ON indicator	≥ DC 4,5 V green LED	≥ DC 10,8 V green LED	≥ DC 4,5 V green LED
DC LOW indicator	DC 3,75 - 4,5 V red LED	DC 9 - 10,8 V red LED	DC 3,75 - 4,5 V red LED
Parallel operation <sup>2</sup>	possible	possible	possible
Efficiency	73 %	75 %	75 %
Rated over load protection	110 - 135 %	110 - 135 %	110 - 135 %
Over voltage protection	125 - 145 %	125 - 145 %	125 - 145 %
Output short circuit	Hiccup-Mode	Hiccup-Mode	Hiccup-Mode

### General

Switching frequency	min. 100 KHz	min. 100 KHz	min. 100 KHz
Isolation voltage	AC 3 kV	AC 3 kV	AC 3 kV
Isolation resistance	100 MΩ	100 MΩ	100 MΩ
Ambient temperature	- 10 - + 71 °C	- 10 - + 71 °C	- 10 - + 71 °C
Derating	-2 %/°C at 61°C	-2 %/°C at 61°C	-2 %/°C at 61°C
Storage temperature	- 25 - + 85°C	- 25 - + 85°C	- 25 - + 85°C
M.T.B.F.	210.000 h	210.000 h	195.000 h
Relative humidity	20 - 95 % RH	20 - 95 % RH	20 - 95 % RH
Dimensions (HxWxD, mm)	90 x 22,5 x 115	90 x 22,5 x 115	90 x 22,5 x 115
Cooling	Air convection	Air convection	Air convection
Case material	Plastic	Plastic	Plastic
Mounting position	vertical	vertical	vertical
Protection Level	IP20	IP20	IP20
Safety	class 2	class 2	class 2
Weight	120 g / 0.265 lbs	120 g / 0.265 lbs	150 g / 0.331 lbs
Connection device	0.2 - 2.0 mm <sup>2</sup>	0.2 - 2.0 mm <sup>2</sup>	0.2 - 2.0 mm <sup>2</sup>
Connection system	screw	screw	screw

### Control and protection

DC-ON monitoring (Rdy)	-	-	-
Relay contact closed	-	-	-
Relay contact open	-	-	-
Isolation voltage (relay)	-	-	-
Breaking capacity	-	-	-

### Approvals and standards

UL/cUL	UL508 / ULI310 / ULI950
TUV	EN60950
CE	EN50081-1 / EN55022 EN50082-1 / EN55024
FCC	Class B

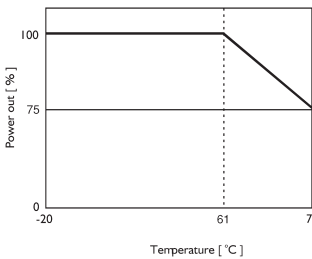
<sup>2</sup> At parallel operation the output voltage is fixed and not adjustable.

# Single-phase Delta Series 24 V DC Power Supplies

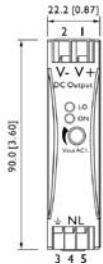


**Lutze Delta Series**  
 Single-phase, 10 - 18 W  
 DIN rail mountable  
 Short circuit protection  
 Internal input filter  
 Wide input voltage range  
 High efficiency  
 Adjustable output voltage

### Derating



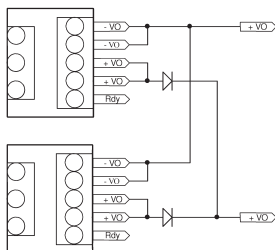
### Front view



### PIN Configuration/Assignment

- |   |    |  |
|---|----|--|
| 1 | V+ | Positive output                                  |
| 2 | V- | Negative output                                  |
| 3 | ⏚  | Ground this to minimize high-frequency emissions |
| 4 | N  | Input  |
| 5 | L  | Input  |

### Parallel operation



Part No.	Input voltage	Output voltage	Output wattage	Output current	Efficiency
722751	90 - 265 VAC	24 V	10 W	0.42 A	76 %
722752	90 - 265 VAC	24 V	18 W	0.75 A	77 %

Part No.	722751		722752	
Type	DRA 10-24		DRA 18-24	
<b>Input detail</b>				
Rated input voltage	AC 100 - 240 V		AC 100 - 240 V	
Line frequency	47 - 63 Hz		47 - 63 Hz	
Inrush current	Vi: AC 115 V	10 A	Vi: AC 230 V	18 A
<b>Output detail</b>				
Output voltage accuracy	± 1 %		± 1 %	
Line regulation	± 1 %		± 1 %	
Load regulation	Parallel Operation	± 2 %	Single Operation	± 2 %
Transient recovery time	300∞µS		300∞µS	
Temperature coefficient	± 0.02 %/°C		± 0.02 %/°C	
Ripple & noise	50 mV		50 mV	
Hold up time	Vi: AC 115 V	25 ms	Vi: AC 230 V	100 ms
Voltage trim range	- 10 - + 20 %		- 10 - + 20 %	
DC ON indicator	DC 21.6 V green LED		DC 21.6 V green LED	
DC LOW indicator	DC 18 - 21.6 V red LED		DC 18 - 21.6 V red LED	
Parallel operation <sup>2</sup>	max. 3 units		max. 3 units	
Efficiency	76 %		77 %	
Rated over load protection	110 - 135 %		110 - 135 %	
Over voltage protection	125 - 145 %		125 - 145 %	
Output short circuit	Hiccup-Mode		Hiccup-Mode	
<b>General</b>				
Switching frequency	min. 100 KHz		min. 100 KHz	
Isolation voltage	AC 3 kV		AC 3 kV	
Isolation resistance	100 MΩ		100 MΩ	
Ambient temperature	- 10 - + 71 °C		- 10 - + 71 °C	
Derating	2 %/°C at 61°C		2 %/°C at 61°C	
Storage temperature	- 25 - + 85°C		- 25 - + 85°C	
M.T.B.F.	210,000 h		195,000 h	
Relative humidity	20 - 95 % RH		20 - 95 % RH	
Dimensions (HxWxD, mm)	90 x 22.5 x 115		90 x 22.5 x 115	
Cooling	Air convection		Air convection	
Case material	Plastic		Plastic	
Mounting position	vertical		vertical	
Protection Level	IP20		IP20	
Safety	class 2		class 2	
Weight	120 g / 0.265 lbs		150 g / 0.331 lbs	
Connection device	0.2 - 2.0 mm <sup>2</sup>		0.2 - 2.0 mm <sup>2</sup>	
Connection system	cage clamp		cage clamp	
<b>Control and protection</b>				
Input fuse	T2A / AC 250 V intern		T2A / AC 250 V intern	
DC-ON monitoring (Rdy)	-		-	
Relay contact closed	-		-	
Relay contact open	-		-	
Isolation voltage (relay)	-		-	
Breaking capacity	-		-	
<b>Approvals and standards</b>				
UL/cUL	UL508 / ULI310 / ULI950		UL508 / ULI310 / ULI950	
TUV	EN60950		EN60950	
CE	EN50081-1 / EN55022		EN50081-1 / EN55022	
FCC	Class B		Class B	

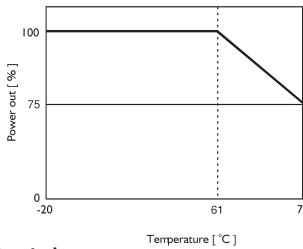
<sup>2</sup> At parallel operation the output voltage is fixed and not adjustable.

# Single-phase Delta Series 5 V and 12 V DC Power Supplies

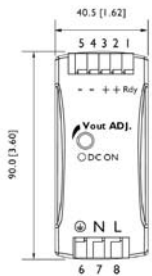


**Lutze Delta Series**  
 Single-phase, 30 - 60 W  
 DIN rail mountable  
 Short circuit protection  
 Internal input filter  
 Wide input voltage range  
 Parallel operation  
 High efficiency  
 Adjustable output voltage

### Derating



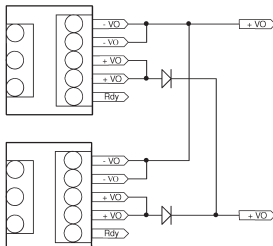
### Front view



### PIN Configuration/Assignment

- |   |     |  |
|---|-----|--|
| 1 | RDY | DC OK output for relay                           |
| 2 | +   | Positive output                                  |
| 3 | +   | Positive output                                  |
| 4 | -   | Negative output                                  |
| 5 | -   | Negative output                                  |
| 6 | ⏏   | Ground this to minimize high-frequency emissions |
| 7 | N   | Input: neutral conductor                         |
| 8 | L   | Input: phase conductor                           |

### Parallel operation



Part No.	Input voltage	Output voltage	Output wattage	Output current	Efficiency
722763	90 - 265 VAC	5 V	30 W	6 A	79 %
722768	90 - 265 VAC	12 V	30 W	2,5 A	81 %
722769	90 - 265 VAC	12 V	60 W	5 A	84 %

Part No.	722763	722768	722769
Type	DRA 30-05	DRA 30-12	DRA 60-12
<b>Input detail</b>			
Rated input voltage	AC 100 - 240 V DC 120 - 370 V	AC 100 - 240 V DC 120 - 370 V	AC 100 - 240 V DC 120 - 370 V
Line frequency	47 - 63 Hz	47 - 63 Hz	47 - 63 Hz
Inrush current	Vi: AC 115 V Vi: AC 230 V	16 A 32 A	16 A 32 A
<b>Output detail</b>			
Output voltage accuracy	± 2 %	± 2 %	± 2 %
Line regulation	± 1 %	± 1 %	± 1 %
Load regulation	± 2 %	± 2 %	± 2 %
Transient recovery time	300∞µS	300∞µS	300∞µS
Temperature coefficient	± 0,02 %/°C	± 0,02 %/°C	± 0,02 %/°C
Ripple & noise	50 mV	50 mV	50 mV
Hold up time	Vi: 115 VAC Vi: 230 VAC	20 ms 70 ms	20 ms 75 ms
Voltage trim range	DC 5 - 5,5 V	DC 12 - 14 V	DC 12 - 14 V
DC ON indicator	green LED	green LED	green LED
DC LOW indicator	-	-	-
Parallel operation	yes	yes	yes
Efficiency	79 %	81 %	84 %
Rated over load protection	105 - 125 %	105 - 125 %	105 - 125 %
Output short circuit	Hiccup-Mode	Hiccup-Mode	Hiccup-Mode

<b>General</b>			
Switching frequency	50 KHz	50 KHz	50 KHz
Isolation voltage	AC 3 kV	AC 3 kV	AC 3 kV
Isolation resistance	100 MΩ	100 MΩ	100 MΩ
Ambient temperature	- 10 / + 71 °C	- 10 / + 71 °C	- 10 / + 71 °C
Derating	-2,5 %/°C at 61°C	-2,5 %/°C at 61°C	-2,5 %/°C at 61°C
Storage temperature	- 25 - + 85°C	- 25 - + 85°C	- 25 - + 85°C
M.T.B.F.	200.000 h	200.000 h	167 .000 h
Relative humidity	20 - 90 % RH	20 - 90 % RH	90 % RH
Dimensions (HxWxD, mm)	90 x 40,5 x 115	90 x 40,5 x 115	90 x 40,5 x 115
Cooling	Air convection	Air convection	Air convection
Case material	Plastic	Plastic	Plastic
Mounting position	vertical on TS 35	vertical on TS 35	vertical on TS 35
Protection Level	IP20	IP20	IP20
Safety		Class 2	Class 2
Weight	290 g / 0.639 lbs	290 g / 0.639 lbs	360 g / 0.794 lbs
Connection device	0.2-2.0 mm <sup>2</sup> (AWG 24-14)	0.2-2.0 mm <sup>2</sup> (AWG 24-14)	0.2-2.0 mm <sup>2</sup> (AWG 24-14)
Connection system	screw	screw	screw

<b>Control and protection</b>			
DC-ON monitoring (Rdy)	-	-	-
Start delay	-	-	-
Switching voltage	-	-	-
Switching current	-	-	-
Breaking capacity	-	-	-

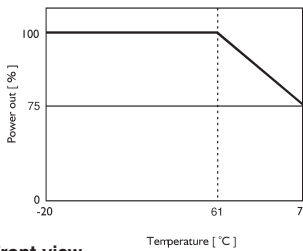
<b>Approvals and standards</b>	
UL/cUL	UL508 / ULI310 / ULI950
TUV	IEC60950
EMC	EN50081-1 / EN55022 Class B
CE	EN50082-1 / EN55024

# Single-phase Delta Series 24 V DC Power Supplies

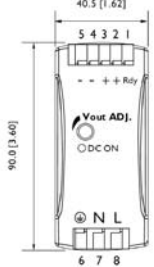


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 Wide input voltage range  
 Parallel operation  
 High efficiency  
 Adjustable output voltage

### Derating



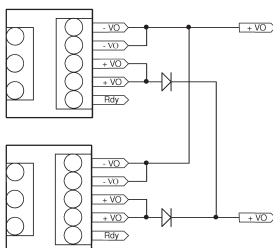
### Front view



### PIN Configuration/Assignment

- |   |     |  |
|---|-----|--|
| 1 | RDY | DC OK output for relay                           |
| 2 | +   | Positive output                                  |
| 3 | +   | Positive output                                  |
| 4 | -   | Negative output                                  |
| 5 | -   | Negative output                                  |
| 6 | ⏏   | Ground this to minimize high-frequency emissions |
| 7 | N   | Input: neutral conductor                         |
| 8 | L   | Input: phase conductor                           |

### Parallel operation



Part No.	Input voltage	Output voltage	Output wattage	Output current	Efficiency
722753	AC 90 - 265 V	24 V	30 W	1.25 A	84 %
722754	AC 90 - 265 V	24 V	60 W	2.5 A	86 %

Part No.	722753	722754
Type	DRA 30-24	DRA 60-24

Input detail		
Rated input Voltage	AC 90 - 265 V	
Line frequency	47 - 63 Hz	
Inrush current	Vi: AC 115 V	16 A
	Vi: AC 230 V	32 A

Output detail		
Output voltage accuracy	± 2 %	± 2 %
Line regulation	± 1 %	± 1 %
Load regulation	parallel operation	± 2 %
	single operation	± 2 %
Temperature coefficient	± 0.02 %/°C	
Ripple & noise	50 mV	
Hold up time	Vi: 115 VAC	20 ms
	Vi: 230 VAC	70 ms
Voltage trim range	DC 24 - 28 V	
DC ON indicator	green LED	
DC LOW indicator	-	
Parallel operation	max. 3 units	
Efficiency	84 %	86 %
Rated over load protection	105 - 125 %	
Over voltage protection	105 - 125 %	
Output short circuit	Hiccup-Mode	

General		
Switching frequency	min. 50 KHz	min. 50 KHz
Isolation voltage	AC 3 kV	AC 3 kV
Isolation resistance	100 MΩ	100 MΩ
Ambient temperature	- 10 - + 71 °C	- 10 - + 71 °C
Derating	2 %/°C at 61°C	2 %/°C at 61°C
Storage temperature	- 25 - + 85°C	- 25 - + 85°C
M.T.B.F.	200,000 h	167,000 h
Relative humidity	90 % RH	90 % RH
Dimensions (HxWxD, mm)	90 x 40.5 x 115	90 x 40.5 x 115
Cooling	Air convection	Air convection
Case material	Plastic	Plastic
Mounting position	vertical on TS 35	vertical on TS 35
Protection Level	IP20	IP20
Safety	Class 2	Class 2
Weight	290 g / 0.639 lbs	360 g / 0.794 lbs
Connection device	0.2-2.0 mm <sup>2</sup>	0.2-2.0 mm <sup>2</sup>
	(AWG 24-14)	(AWG 24-14)
Connection system	screw	screw

Control and protection		
Input fuse	T2A / AC 250 V intern	T2A / AC 250 V intern
DC-ON monitoring (Rdy)	typical DC 22 V open collector	typical DC 22 V
Relay contact closed	-	-
Relay contact open	-	-
Isolation voltage (relay)	-	-
Breaking capacity	-	-

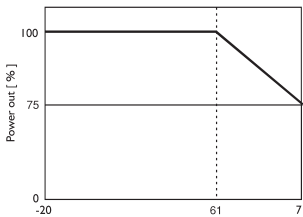
Approvals and standards	
UL/cUL	UL508 / ULI310 / ULI950
TUV	IEC60950
EMC	EN50081-1 / EN55022 Class B
CE	EN50082-1 / EN55024

# Single-phase Delta Series 24 V DC Power Supplies

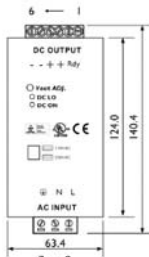


**Lutze Delta Series**  
 Single-phase, 120 - 240 W  
 DIN rail mountable  
 Short circuit protection  
 Internal input filter  
 Wide input voltage range  
 Power Factor Correction (PFC)  
 Parallel operation  
 High efficiency  
 Adjustable output voltage

**Derating**



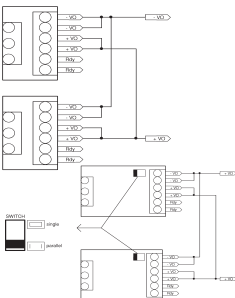
**Front view**



**PIN Configuration/Assignment**

- 1 RDY Normal open relay contact for DC ON level control
- 2
- 3 V+ Positive output
- 4 V+ Positive output
- 5 V- Negative output
- 6 V- Negative output
- 7 ⏚ Ground this to minimize high-frequency emissions
- 8 L Input: phase conductor
- 9 N Input: neutral conductor

**Parallel operation**



Part No.	Input voltage	Output voltage	Output wattage	Output current	Efficiency
722758	AC 115 / 230 V	24 V	120 W	5 A	86 %
<b>Part No.</b>		<b>722758</b>			
<b>Type</b>		<b>DRA 120-24</b>			
<b>Input detail</b>					
Nominal voltage			AC 115 / 230 V		
Rated input voltage			115 V AC 93 - 132 V 230 V AC 186 - 264 V		
Line frequency			47 - 63 Hz		
Inrush current			Vi: AC 115 V 24 A Vi: AC 230 V 48 A		
<b>Output detail</b>					
Output voltage accuracy			± 1 %		
Line regulation			± 0.5 %		
Load regulation			Parallel operation ± 1 % Single operation ± 5 %		
Temperature coefficient			± 0.3 %/°C		
Ripple & noise			BW = 20 MHz 50 mV		
Hold up time			Vi: AC 115 V 25 ms Vi: AC 230 V 30 ms		
Voltage trim range <sup>2</sup>			DC 22.5 - 30 V		
DC ON indicator			DC 21 - 22 V green LED		
DC LOW indicator			DC 20.5 - 22,5 V red LED		
Parallel operation <sup>2</sup>			max. 3 units		
Efficiency			86 %		
Rated over load protection			105 - 135 %		
Over voltage protection			125 - 145 %		
Output short circuit			current limited		
<b>General</b>					
Switching frequency			80 KHz		
Isolation voltage			AC 3 kV		
Isolation resistance			100 MΩ		
Ambient temperature			- 10 - + 71 °C		
Derating			2,5 %/°C at 61°C		
Storage temperature			- 25 - + 85°C		
M.T.B.F.			200,000 Hrs		
Relative humidity			20 - 95 % RH		
Dimensions (HxWxD, mm)			142 x 63,5 x 126,4		
Cooling			Air convection		
Case material			Metal		
Mounting position			vertical		
Protection Level			IP20		
Weight			860 g / 1.895 lbs		
Connection device			0.2 - 2.0 mm <sup>2</sup> (AWG 24 - 14)		
Connection system			screw		
<b>Control and protection</b>					
Input fuse			T4A / AC 250 V intern		
DC-ON monitoring (Rdy)			typical DC 22 V		
Relay contact closed			DC 21.1 - 23.1 V		
Relay contact open			DC 20.6 - 19 V		
Isolation voltage (relay)			DC 500 V		
Breaking capacity			DC 60 V / 0.3 A		
<b>Approvals and standards</b>					
UL/cUL			UL508 / UL1310 / ULI950		
TUV			IEC60950		
EMC			EN50081-1 / EN50082-2 / EN61000-4-2 EN61000-4-3 / EN61000-4-4 / EN61000-4-5 EN61000-4-6 / EN61000-4-8		

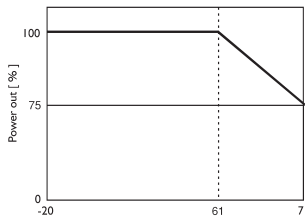
<sup>2</sup> At parallel operation the output voltage is fixed and not adjustable.

# Single-phase Delta Series 24 V DC Power Supplies

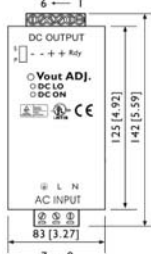


**Lutze Delta Series**  
 Single-phase, 120 - 240 W  
 DIN rail mountable  
 Short circuit protection  
 Internal input filter  
 Wide input voltage range  
 Power Factor Correction (PFC)  
 Parallel operation  
 High efficiency  
 Adjustable output voltage

### Derating



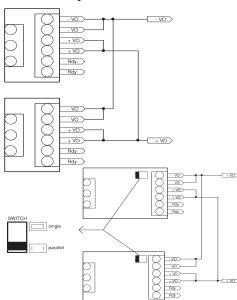
### Front view



### PIN Configuration/Assignment

- | Pin | Label | Description                                       |
|-----|-------|---|
| 1   | RDY   | Normal open relay contact for DC ON level control |
| 2   |       |   |
| 3   | V+    | Positive output                                   |
| 4   | V+    | Positive output                                   |
| 5   | V-    | Negative output                                   |
| 6   | V-    | Negative output                                   |
| 7   | ⏚     | Ground this to minimize high-frequency emissions  |
| 8   | L     | Input: phase conductor                            |
| 9   | N     | Input: neutral conductor                          |

### Parallel operation



Part No.	Input voltage	Output voltage	Output wattage	Output current	Efficiency
722781	AC 115 / 230 V	24 V	240 W	10 A	90 %
<b>Part No.</b>		<b>722781</b>			
<b>Type</b>		<b>DRA 240-24B redundant operation</b>			
<b>Input detail</b>					
Nominal voltage		AC 115 / 230 V			
Rated input voltage		115 V	AC 93 - 132 V		
		230 V	AC 186 - 264 V		
Line frequency		47 - 63 Hz			
Inrush current Vi:		AC 115 V	30 A		
		AC 230 V	60 A		
<b>Output detail</b>					
Output voltage accuracy		0 - 1 %			
Line regulation		± 0.5 %			
Load regulation		Parallel operation	± 1 %		
		Single operation	± 5 %		
Transient recovery time		-			
Temperature coefficient		± 0.3 %/°C			
Ripple & noise		BW = 20 MHz	50 mV		
Hold up time		Vi: 115 VAC	25 ms		
		Vi: 230 VAC	30 ms		
Voltage trim range <sup>2</sup>		DC 22.5 - 28.5 V			
DC ON indicator		DC 21 - 22 V green LED			
DC LOW indicator		< DC 19.4 V red LED			
Parallel operation <sup>2</sup>		max. 3 units			
Efficiency		90 %			
Rated over load protection		105 - 145 %			
Over voltage protection		120 - 145 %			
Output short circuit		Current limit			
<b>General</b>					
Switching frequency		80 KHz			
Isolation voltage		AC 3 kV			
Isolation resistance		100 MΩ			
Ambient temperature		- 10 - + 71 °C			
Derating		2.5 %/°C at 61°C			
Storage temperature		- 25 - + 85°C			
M.T.B.F.		200,000 Hrs			
Relative humidity		20 - 95 % RH			
Dimensions (HxWxD, mm)		142 x 83 x 126			
Cooling		Air convection			
Case material		Metal			
Mounting position		vertical			
Protection level		IP20			
Weight		1,000 g / 2.204 lbs			
Connection device		0.2 - 2.0 mm <sup>2</sup> (AWG 24 - 14)			
Connection system		screw			
Input fuse		T6.3A / AC 250 V intern			
DC-ON monitoring (Rdy)		typical DC 22 V			
Relay contact closed		DC 17.6 - 19.4 V			
Relay contact open		< DC 17.6 V			
Isolation voltage (relay)		DC 500 V			
Breaking capacity		DC 60 V / 0.3 A			
<b>Approvals and standards</b>					
UL/cUL		UL508 / UL1310 / UL1950			
TUV		IEC60950			
EMC		EN50081-1 / EN50082-2 / EN61000-4-2 / EN61000-4-3 EN61000-4-4 / EN61000-4-5 / EN61000-4-6 / EN61000-4-8			

<sup>2</sup> At parallel operation the output voltage is fixed and not adjustable.

# Product Overview

## Machine and System Installation Technology



1

Lutze products fulfill the highest demands. Thanks to the wide choice of cables on offer, all your needs throughout your plant can be met – even those for the toughest jobs. We also offer a variety of cable assemblies, cable fittings (suitable also for difficult EMC environments) and cable conduits that create the optimal connection for all your applications.

## LSC-Wiring Systems



2

The LSC wiring system consists of an aluminium frame that replaces the conventional back panel and cable trunking. The LSC frame is installed in existing control cabinets and facilitates optimal mounting and wiring of all the electrical components.

## Suppression Technology, Interfacing and Converting Technology, Power Supplies



3

In the area of suppression modules for contactors, valves and motors, we offer the corresponding components to increase EMC throughout the whole installation. We can meet all normal requirements in the field of power supplies with our power supply units, incorporating primary switching technology and control-power transformers. Interface technology is represented in the Lutze product range by a wide variety of different components that can be used to create just about any interface needed in your application.

## Automation



4

Increasingly complex communication structures are being created as a result of the evergrowing demands on automation systems. In this dynamic market you have a knowledgeable and experienced partner in Lutze, who is able to implement current trends quickly and proficiently. Lutze can supply you with all the necessary products, from Ethernet cables suitable for use in C-tracks to hubs and switches that can be mounted on DIN rails. This expertise is mirrored in the application examples that overlap more than one industrial field.

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### Lutze systems for the highest industrial standards:

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C-track systems
- ▶ Lütze-LSC-wiring  
systems for all  
standard control  
panels
- ▶ Powerful module- and  
interface-technology
- ▶ Reliable suppression  
technology
- ▶ Efficient power  
supplies
- ▶ Automation systems  
for harsh environments

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