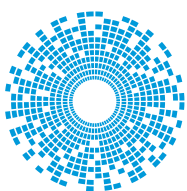
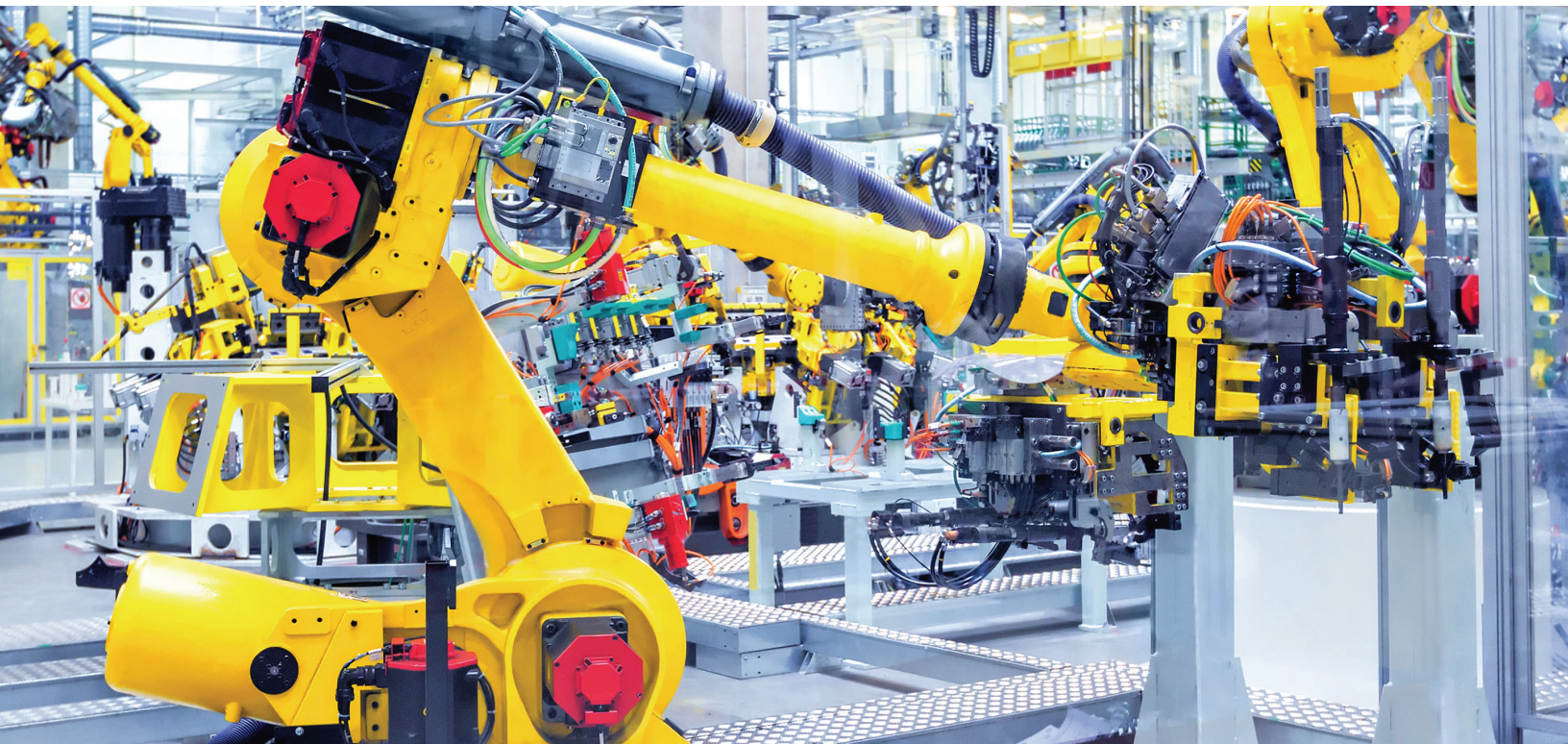




# DIN Rail Product Selection Guide



**bel** POWER  
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## LDN Series: SINGLE PHASE, GENERAL PURPOSE

### The flat power supply for small cabinets

Class II, LDN20/40/80 Power Supplies are suitable for low power applications from 20 to 80 W. The units are hosted in a rugged plastic housing, compliant with the installation in standard cabinets.

MODEL	INPUT VOLTAGE RANGE	OUTPUT VOLTAGE	OUTPUT CURRENT	OUTPUT POWER	DIMENSIONS (W x D x H)	EFFICIENCY
LDN20-12	90 - 264 VAC (110 - 345 VDC)	12 VDC	1.65 A	20 W	35 x 61.5 x 90 mm	>80%
LDN20-24		24 VDC	0.85 A			
LDN40-12D	90 - 264 VAC (110 - 345 VDC)	2x 12 - 16 VDC	1.0 A	40 W	72 x 61.5 x 90 mm	>83%
LDN40-12		12 -15 VDC	3.5 A - 3.0 A			>86%
LDN40-24		24 VDC	2.0 A			>85%
LDN80-12		12 -15 VDC	6 - 5 A			>86%
LDN80-24	90 - 264 VAC (110 - 345 VDC)	24 VDC	3.3 A	80 W	72 x 61.5 x 90 mm	>87%



### Applications

- Industrial automation
- Process control
- Heavy duty applications
- Building automation

### High efficiency in minimum size

Class I, LDN85/120/240/480/481 Switching Mode Power Supplies were specifically designed for medium power industrial automation applications. Output voltages up to 72 VDC (model dependent) are available in a compact size, with important overload capability.

MODEL*	INPUT VOLTAGE RANGE	OUTPUT VOLTAGE	OUTPUT CURRENT	OUTPUT POWER	DIMENSIONS (W x D x H)	EFFICIENCY
LDN85-5	90 - 264 VAC (110 - 345 VDC)	5 VDC	8.5 A	85 W	40 x 110 x 115 mm	75%
LDN85-24		24 VDC	3.5 A			88%
LDN85-24P		24 VDC	3.5 A			87%
LDN120-12	90 - 264 VAC (110 - 345 VDC)	12 VDC	7 A	120 W	40 x 110 x 115 mm	>84%
LDN120-24		24 VDC	5 A			>87%
LDN120-24P		24 VDC	5 A			>85%
LDN120-48P		48 VDC	2.5 A			>86%
LDN240-12	90 - 132 / 187 - 264 VAC Settable with Voltage Input Selector (270 - 345 VDC)	12 VDC	16 A	240 W	63 x 117 x 140 mm	>84%
LDN240-24		24 VDC	10 A			>88%
LDN240-24P		24 VDC	10 A			>86%
LDN240-48P		48 VDC	5 A			>88%
LDN240-72P		72 VDC	3.5 A			
LDN480-24	187 - 264 VAC (250 - 375 VDC)	24 VDC	20 A	480 W	73 x 125 x 140 mm	>91%
LDN481-24	90 - 132 / 187 - 264 VAC	24 VDC	20 A	480 W	80 x 137.5 x 127 mm	> 91%
LDN481-48	Settable with Voltage Selector Bridge (270 - 345 VDC)	48 VDC	10 A			> 91.5%
LDN481-72		72 VDC	6.7 A			> 92%

\* "P" models include internal ORing MOSFET



## LDW Series: SINGLE, DUAL AND THREE PHASE, COMPACT, WIDE INPUT RANGE

### Top flexibility in premium size

DIN Rail Power Supplies with universal input 187 – 550 VAC with single, dual and three phase wiring or DC (250 – 725 VDC), for powers from 120 to 480 W, without any derating. They fit many applications, including renewable energy and decrease considerably the material management costs.

MODEL*	INPUT VOLTAGE RANGE	OUTPUT VOLTAGE	OUTPUT CURRENT	OUTPUT POWER	DIMENSIONS (W x D x H)	EFFICIENCY
LDW25-12S	90 - 550 VAC (150 - 725 VDC) 1ph or 2ph	12 VDC	2.0 - 1.6 A	25 W	72 x 61.5 x 90 mm	> 81.5%
LDW25-24S		24 VDC	1 A			> 84.5%
LDW25-48S		48 VDC	0.5 A			> 84%
LDW120-12	187 - 550 VAC (250 - 725 VDC) 1ph or 2ph	12 - 15 VDC	8 - 7 A	120 W	40 x 110 x 115 mm	>81%
LDW120-24		24 VDC	5 A			>88%
LDW120-48P		48 VDC	2.5 A			>86%
LDW240-12	187 - 550 VAC (250 - 725 VDC) 1ph, 2ph, 3ph	12 - 15 VDC	15 - 12 A	240 W	54 x 110 x 115 mm	>89%
LDW240-24		24 VDC	10 A			>93%
LDW240-48P		48 VDC	5 A			>91%
LDW240-72P		72 VDC	3.5 A			>92%
LDW480-24	187 - 550 VAC (250 - 725 VDC) 1ph, 2ph, 3ph	24 VDC	20 A	480 W	73 x 125 x 140 mm	>92%
LDW480-48		48 VDC	10 A			>91%
LDW480-72		72 VDC	6 A			

\* "P" models include internal Oring MOSFET





## LDC Series: SINGLE PHASE, ULTRA-COMPACT

### High flexibility in industrial environment

DIN Rail Power Supplies with active PFC for optimal efficiency, specially designed for space sensitive and demanding applications. They have user settable current limitation algorithm (Hiccup or Constant Current) and are easy parallelable for power increase or redundancy (with optional internal ORing).

MODEL*	INPUT VOLTAGE RANGE	OUTPUT VOLTAGE	OUTPUT CURRENT	OUTPUT POWER	DIMENSIONS (W x D x H)	EFFICIENCY
LDC120-24 / LDC120-24P	90 - 264 VAC	24 VDC	5 A	120 W	35 x 104 x 103 mm	>90% / >89%
LDC120-48 / LDC120-48P	(110 - 345 VDC)	48 VDC	2.5 A			>90% / >89%
LDC240-12 / LDC240-12P(H)	90 - 264 VAC (110 - 345 VDC)	12 VDC	15 A	240 W	40 x 110 x 115 mm	>90%
LDC240-24 / LDC240-24P(H)		24 VDC	10 A			>93%
LDC240-36 / LDC240-36P(H)		36 VDC	7.5 A			>93%
LDC240-48P / LDC240-48H		48 VDC	5 A			>93.5%
LDC240-72P / LDC240-72H		72 VDC	3.3 A			
LDC480-24 / LDC480-24P	90 - 264 VAC (110 - 345 VDC)	24 VDC	20 A	480 W	56 x 117 x 140 mm	>93%
LDC480-36 / LDC480-36P		36 VDC	15 A			
LDC480-48 / LDC480-48P		48 VDC	10 A			
LDC480-72 / LDC480-72P		72 VDC	6.7 A			

\* "P" models include internal ORing MOSFET

"H" models with enhanced transient overvoltage protection (> 6kV); For models with suffix H consult factory.



### Applications

- Industrial machine control
- Process control
- Telecom
- Renewable energy
- High reliability applications

## LDT Series: THREE PHASE, HIGH POWER

### High power in a small size

Switching Mode Power Supplies with 3-phase input 340 – 550 VAC for powers from 480 to 2400 W, covering from 12 to 170 V (model dependent). They fit demanding applications where compactness and high power are needed.

MODEL	INPUT VOLTAGE RANGE	OUTPUT VOLTAGE	OUTPUT CURRENT	OUTPUT POWER	DIMENSIONS (W x D x H)	EFFICIENCY
LDT480-24	340 - 550 VAC (470 - 725 VDC)	24 VDC	20 A	480 W	73 x 125 x 140 mm	92%
LDT720-24	340 - 550 VAC (520 - 725 VDC)	24 VDC	30 A	720 W	80 x 137.5 x 127 mm	>91%
LDT720-48		48 VDC	15 A			>93%
LDT960-24		24 VDC	40 A			>90.5%
LDT960-48	340 - 550 VAC (520 - 725 VDC)	48 VDC	20 A	960 W	80 x 137.5 x 127 mm	>92.5%
LDT960-72		72 VDC	13.3 A			>93%
LDT2400-24	340 - 550 VAC (520 - 725 VDC)	24 VDC	100 A	2400 W	233 x 101 x 160 mm	>92%
LDT2400-48		48 VDC	50 A			>93%
LDT2400-72		72 VDC	33 A			
LDT2400-170		170 VDC	14 A			>92%



### Applications

- Process control
- Conveyors
- DC back-up, battery charging
- Packing equipment
- Semiconductor manufacturing
- Renewable energy





## LDP Series: PROGRAMMABLE, WIDE INPUT AND OUTPUT RANGE

### Extremely versatile

LDP Series models are the first user programmable units with active PFC, offering unmatched flexibility for many applications. Digitally controlled, they provide two user programmable voltage steps with settable duration, covering wide input and output voltages.

MODEL	INPUT VOLTAGE RANGE	OUTPUT VOLTAGE	OUTPUT POWER	DIMENSIONS (W x D x H)	EFFICIENCY
LDP200-200	170 - 550 VAC (250 - 725 VDC)	36 - 205 VDC	200 W	80 x 100 x 120 mm	>87%
LDP200-120	170 - 550 VAC (250 - 725 VDC)	24 - 120 VDC (User settable)	200 W	80 x 100 x 120 mm	> 82% to > 90% (Vout dependent)



### Applications

- Industrial Control
- Communication
- Renewable Energy Systems
- Instrumentation Equipment

## LDD Series: DC/DC CONVERTERS

### Wide choice for voltage adapting

DC-DC converters have optimal response to applications where compactness and high reliability are requested. All are isolated and offer a wide range of input and output voltages.

MODEL	INPUT VOLTAGE RANGE	OUTPUT VOLTAGE	OUTPUT CURRENT	OUTPUT POWER	DIMENSIONS (W x D x H)	EFFICIENCY
LDD240-11024	90 - 148 VDC	24 VDC	10 A	240 W	54 x 110 x 115 mm	>88%
LDD240-WU	11 - 55 VDC	5 - 55 VDC (Programmable)	10 A	240 W	40 x 110 x 115 mm	77 - 92%
LDD960-UU	10 - 60 VDC	12 - 48 VDC	20 A	960 W	54 x 110 x 115 mm	96 - 98%



### Applications

- Industrial machine control
- Energy management
- Remote control systems
- Railway applications

## Melcher DIN Rail Products

The Melcher LX / LW Series of Industrial / Transportation DIN Rail power supply units have been designed for rugged and harsh environments, where reliability is critical, featuring single or dual outputs and battery charging options.



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The Power Partners.

MODEL	INPUT VOLTAGE RANGE	OUTPUT VOLTAGE	OUTPUT CURRENT	OUTPUT POWER	EFFICIENCY
LW-Series, single	85-264 VAC, 90-350 VDC	12, 24, 36, 48 VDC	2.5 to 14 A	125 W	83, 87, 88%
LW-Series, dual	85-264 VAC, 90-350 VDC	2x 12, 2x 24, 2x 36, 2x 48 VDC	5 to 2x 7 A	250 W	83, 87, 89%
LX-Series, triple	85-264 VAC, 90-350 VDC	24, 36, 48 VDC	7.5 to 20 A	375W	87-88%
LX-Series, quad	85-264 VAC, 90-350 VDC	2x 24, 2x 36, 2x 48 VDC	10 to 2x10 A	500 W	87-88%
EW- Series, single / dual	66-150 VDC	24 or 2x 24 VDC	5 or 2x 5 A	120, 240 W	87%



# Back-up and Redundancy Solutions

## LDX-B20: 150J BUFFER MODULE

### Key Features & Benefits

- Microprocessor controlled short-term back-up unit
- Input / Output range 12 - 85 VDC (user settable or auto detect)
- Provides 500 W for 0.3 sec
- > 150 Joules energy storage
- Reliable topology, based on standard electrolytic capacitors
- Integrates step-down (buck) / step-up (boost) converter to discharge / charge the capacitor bank



## LDX-C120 Series: BATTERY CHARGER / DC UPS MODULE

### Key Features & Benefits

- Accessory for the charging 12 / 24 VDC battery
- Suitable for power supplies with adjustable output
- For Lead Acid batteries or LiFePO4 batteries compatible with Lead Acid batteries
- Allows to feed the load and to charge the battery at once
- Built-in battery protection fuse
- "Low battery" cut-off system



## LDX-D20 / LDX-D50: ACTIVE ORING CONTROLLERS

### Key Features & Benefits

- Ultra Compact Redundancy Modules
- CPU controlled
- Wide input voltage range: 2x 12 – 85 VDC (on a single model)
- Out: 20 A / 50 A
- Extremely low loss up to 99% efficiency
- Up to 75°C operating temperature with no derating



## LDX-L30: SEALED LEAD-ACID BATTERY PACK

### Key Features & Benefits

- User Settable Output Voltage 12 / 24 VDC (2.4 / 1.2 Ah)
- Sealed Lead Acid Battery
- Integrated Self Resettable Overcurrent Protection
- Dimensions: 54 x 115 x 110 mm



## LDB120 Series: 120 W INTEGRATED PS / BATTERY CHARGER / DC UPS

### Key Features & Benefits

- Input voltage range 90 - 264 VAC
- Output: 12 or 24 VDC
- Usable with Lead Acid or LiFePO4 batteries
- Efficiency up to 86%
- Protections against battery reverse polarity, deep discharge, shortcircuit / overload



## LDX-U20 Series: BATTERY CHARGER / DC UPS UNIT

### Key Features & Benefits

- Compliant with 12 / 24 VDC systems - user settable
- Usable with various battery chemistries with optional temperature sensor
- LCD display and keys
- USB communication port for remote monitoring and configuration
- Allows user settable charge algorithm
- Remote monitoring through POWERMASTER application





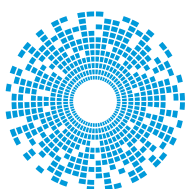


## DIN Rail Products by Bel Power Solutions

Bel Power Solutions offers a variety of DIN rail power supplies suitable for SELV and PELV circuitry. Products are designed to be mounted on DIN rail and installed inside a protective enclosure.

By implementing simple technologies and digital solutions, system can be guaranteed maximum safety. Thanks to a power boost by 50%, remote control, monitoring software, diagnosis tools and various protection circuitry, most of the critical operating conditions are well covered.

Bel Power Solutions & Protection are ISO9001 and ISO14001 certified.



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