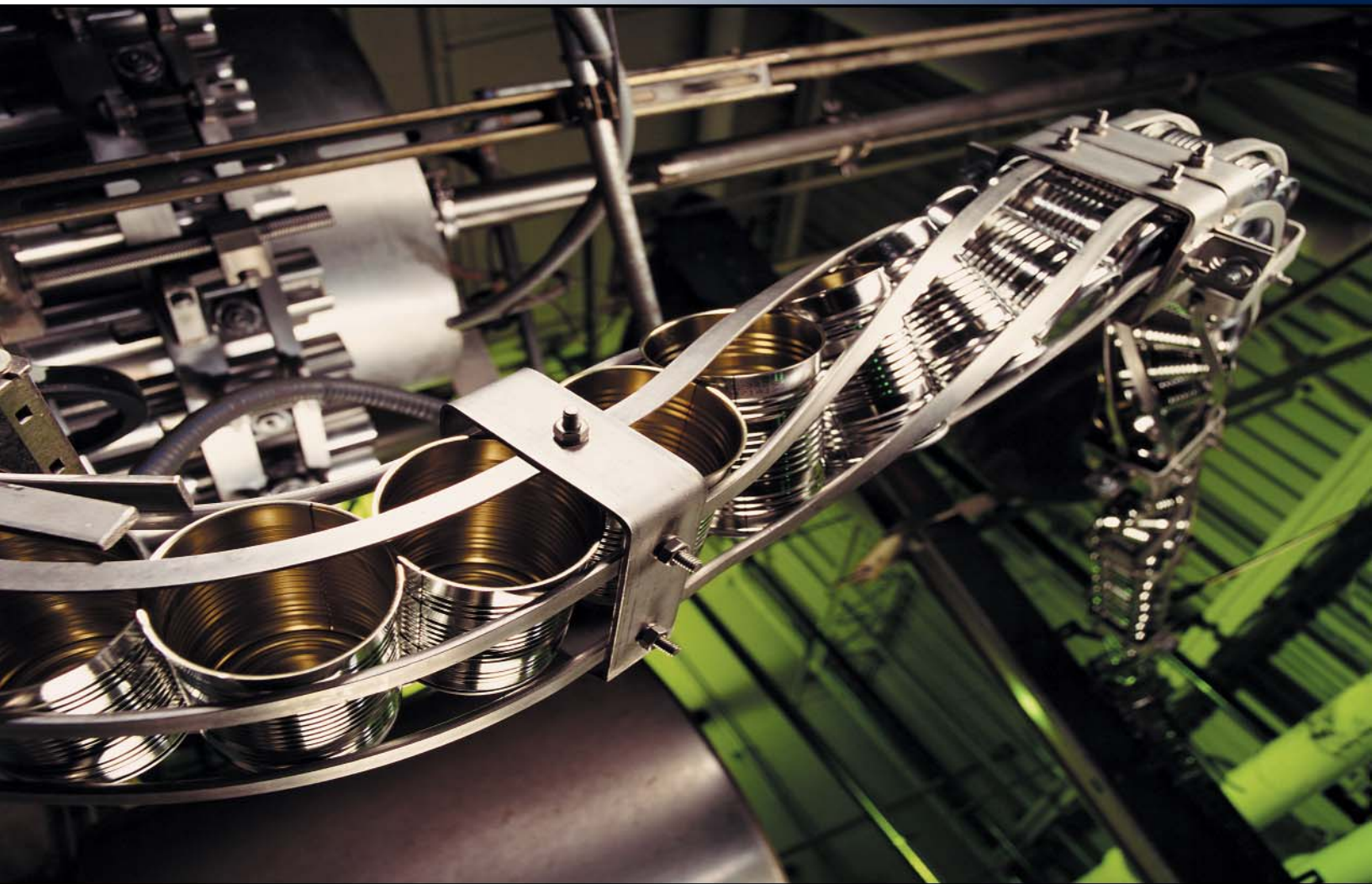


# ***DIN RAIL POWER PRODUCTS***



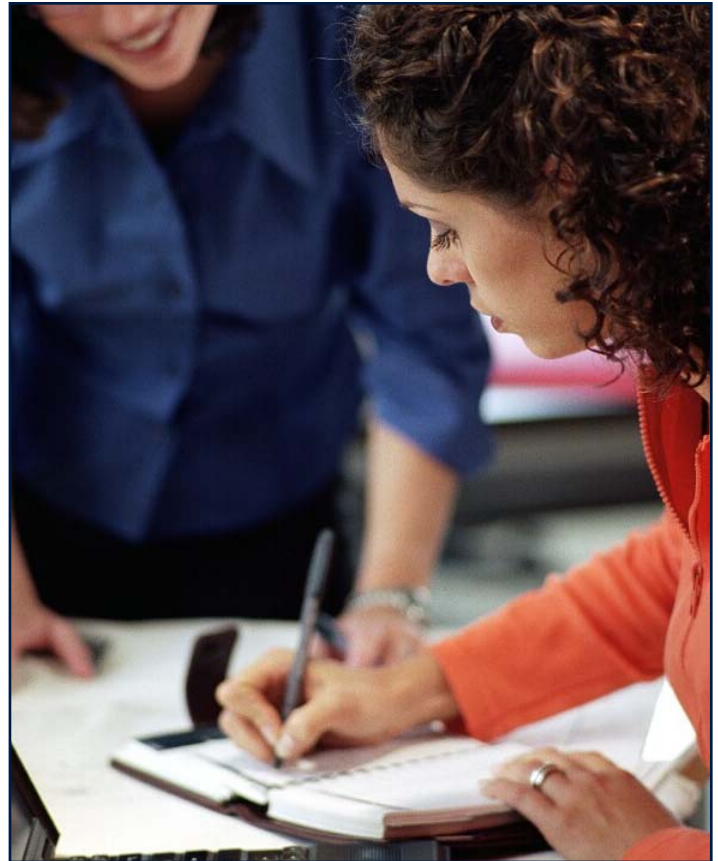
***Solutions for factory automation***

***TDK·Lambda***

TDK-Lambda is a world class leader in the design, manufacture and marketing of power supplies to the Industrial, Telecom, Datacom, Medical and Test and Measurement sectors. Founded in 1948 we have developed a worldwide reputation and heritage for high quality, robust power supplies.

**One thing** has remained consistent over the last half century though, the need for change.

- ◆ As our Customer's product requirements become more diverse, we responded by broadening our product range from low cost 5W open frame **AC-DC** power supplies to 7,500W hot swap units.
- ◆ We developed a large **DC-DC converter** portfolio to power many applications in the recent growth of communications, and we continue to launch leading edge products to support that market.
- ◆ The need for fast customization has been met by our **New York Custom Product Solutions** Engineering Team. A wide variety of products can be developed, ranging from simple modifications, value added solutions, or complete 'ground up' custom products.



- ◆ Not all of our Customer needs are product based though. **Financial stability** and the resources to continue to invest even in down markets, play a key factor in partner selection. Backed by the resources of a multi billion dollar company, we have increased our R&D and capital expenditures to offer our customers the latest in leading edge technologies.
- ◆ The end products that use TDK-Lambda power supplies are often designed on one continent and built in another. We can truly provide that **global support** with nine manufacturing sites, eight R&D facilities, sales and service offices across the world, and our authorized distribution network.
- ◆ The desire for **information** - 24/7. Our web site has a huge library of data, from legacy products that were designed decades ago to the latest generation products.
- ◆ As we launch new products, our printed catalog quickly becomes outdated. We encourage you to **check** for updates through our website [us.tdk-lambda.com/lp](http://us.tdk-lambda.com/lp)

AC Input Power Supplies		Output Power (W)									
Series	Input	10	15	30	50-75	100	120	180	240	480	960
DPP15-100	Single Phase										
DPP120-240	Single or 3 Phase										
DPP480	Single or 3 Phase										
DPP960	3 Phase										
DSP	Single Phase										
DRB	Single Phase										
DRF	Single Phase										

DC Input Power Supplies		Output Power (W)					# of Outputs
Series	Input	15	20	30	40	60	
DPX15W*	9.5-36V or 18-75V						1 or 2
DPX20W*	9.5-36V or 18-75V						1 or 2
DPX30W*	10-40V or 18-75V						1 or 2
DPX40W	9.5-36V or 18-75V						1 or 2
DPX40	9-18V, 18-36V or 36-75V						1, 2 or 3
DPX60	18-36V or 36-75V						1

\*Special order



## Easy Mounting



# DPP15 - 100 Series

## 15W to 100W DIN Rail Mount Power Supplies

- ◆ Universal Input 85 - 264VAC
- ◆ 5V to 48V outputs
- ◆ -10 to +71°C operation (derating applies)
- ◆ Class I (insulated case)
- ◆ EN/UL60950-1, UL508, UL1310, UL1604 -Class I, Div II (select models, see datasheet)
- ◆ Parallel capable (DPP100 only, droop mode)



Model	Output Voltage	Adjust Range	Maximum Current	Power	Height	Width	Depth
DPP25-5	5V	5 - 6V	5A	25W	2.95"	1.77"	3.58"
DPP30-12	12V	9.9 - 12.1V	2.5A	30W	2.95"	1.77"	3.58"
DPP50-15	15V	11.9 - 15.1V	3.4A	50W	2.95"	1.77"	3.58"
DPP15-24	24V	22.5 - 28.5V	0.63A	15W	2.95"	0.9"	3.81"
DPP30-24	24V	22.5 - 28.5V	1.3A	30W	2.95"	1.77"	3.58"
DPP50-24	24V	22.5 - 28.5V	2.1A	50W	2.95"	1.77"	3.58"
DPP100-24	24V	22.5 - 28.5V	4.2A	100W	2.95"	2.86"	3.81"
DPP50-48	48V	48 - 56V	1.05A	50W	2.95"	1.77"	3.58"

See website datasheet for complete and latest product details. [us.tdk-lambda.com/lp/products/dpp-series.htm](http://us.tdk-lambda.com/lp/products/dpp-series.htm)

# DPP120 - 240 Series

## 120W and 240W DIN Rail Mount Power Supplies

- ◆ Single Phase: Auto Select Input 90-132 / 180-264VAC
- ◆ Three Phase: 340 - 575VAC
- ◆ 12V to 48V outputs
- ◆ -40 to +71°C operation (derating applies, -35°C DPP120))
- ◆ Class I (Metal case)
- ◆ EN/UL60950-1, UL508
- ◆ Parallel capable (240W)



Model	Input Voltage	Output Voltage	Adjust Range	Maximum Current	Power	Height	Width	Depth
DPP120-12-1	90-132 / 180-264VAC 1ph	12V	11.4 - 14.5V	10A	120W	4.92"	2.5"	4.59"
DPP120-24-1	90-132 / 180-264VAC 1ph	24V	22.5 - 28.5V	5A	120W	4.92"	2.5"	4.59"
DPP120-48-1	90-132 / 180-264VAC 1ph	48V	45 - 55V	2.5A	120W	4.92"	2.5"	4.59"
DPP240-24-1	90-132 / 180-264VAC 1ph	24V	22.5 - 28.5V	10A	240W	4.92"	3.27"	4.57"
DPP240-48-1	90-132 / 180-264VAC 1ph	48V	45 - 55V	5A	240W	4.92"	3.27"	4.57"
DPP120-12-3	340 - 575VAC 3ph	12V	11.4 - 14.5V	10A	120W	4.88"	2.92"	4.68"
DPP120-24-3	340 - 575VAC 3ph	24V	22.5 - 28.5V	5A	120W	4.88"	2.92"	4.68"
DPP240-24-3	340 - 575VAC 3ph	24V	22.5 - 28.5V	10A	240W	4.88"	3.5"	4.68"
DPP240-48-3	340 - 575VAC 3ph	48V	47 - 56V	5A	240W	4.88"	3.5"	4.68"

See website datasheet for complete and latest product details. [us.tdk-lambda.com/lp/products/dpp-series.htm](http://us.tdk-lambda.com/lp/products/dpp-series.htm)

# DPP480-960 Series

## 480W and 960W DIN Rail Mount Power Supplies

- ◆ Universal Input 90 - 264VAC single phase or 340 - 575VAC 3 phase
- ◆ 24V & 48V outputs
- ◆ -40 to +71°C operation (derating applies, -30°C DPP480 3ph)
- ◆ Class I (metal case)
- ◆ EN/UL60950-1, UL508
- ◆ Parallel capable (droop mode)
- ◆ DC Good relay signal



Model	Input Voltage	Output Voltage	Adjust Range	Maximum Current	Power	Height	Width	Depth
DPP480-24-1	90 - 264VAC 1ph	24V	22.5 - 28.5V	20A	480W	4.92"	6.89"	4.6"
DPP480-48-1	90 - 264VAC 1ph	48V	47 - 56V	10A	480W	4.92"	6.89"	4.6"
DPP480-24-3	340 - 575VAC 3ph	24V	22.5 - 28.5V	20A	480W	4.88"	5.91"	4.68"
DPP480-48-3	340 - 575VAC 3ph	48V	47 - 56V	10A	480W	4.88"	5.91"	4.68"
DPP960-24-3	340 - 575VAC 3ph	24V	22.5 - 28.5V	40A	960W	4.97"	10.86"	4.68"
DPP960-48-3	340 - 575VAC 3ph	48V	47 - 56V	20A	960W	4.97"	10.86"	4.68"

See website datasheet for complete and latest product details. [us.tdk-lambda.com/lp/products/dpp-series.htm](http://us.tdk-lambda.com/lp/products/dpp-series.htm)

## Droop Mode Current Share

If two power supplies are to be connected together to produce more power or share the load, then a parallel capable model should be selected. TDK-Lambda's DPP100, 120, 240 and 480 models are all parallel capable.

On the front of each power supply is a small black switch. For parallel operation this switch should be set to "parallel" (Fig. 1).



Fig. 1

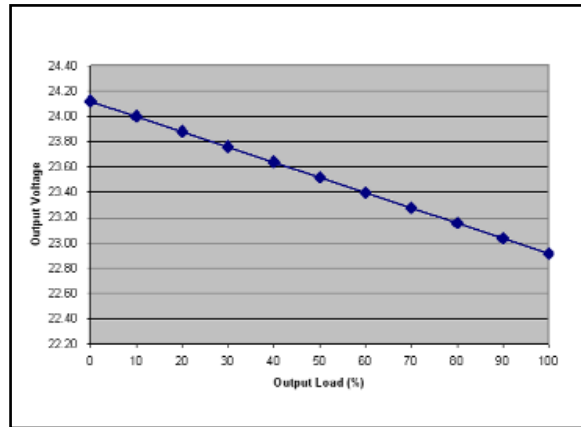


Fig. 2

In single mode the load regulation (the amount the output voltages changes with load) is minimal, the difference being less than 0.24V from zero load to full load for a 24V output power supply.

In parallel mode that load regulation is artificially increased to 1.2V using internal circuitry (Fig. 2).

The extra voltage drop or "droop" is proportional to the load drawn, so that when two or more power supplies are connected in parallel the output load is shared between the power supplies. If one of the paralleled power supplies tries to provide more current, its output will droop slightly and the other supplies will balance.

For optimal performance, all power supplies should have their outputs set to the same voltage.

# DSP Series

## 7.5W to 100W DIN Rail Mount Power Supplies

- ◆ Universal Input 90 - 264VAC
- ◆ 5V to 24V outputs
- ◆ -25 to +71°C operation (derating applies)
- ◆ Class II, no ground required (insulated case)
- ◆ EN/UL60950-1, UL508, UL1310 (select models, see datasheet)



Model	Output Voltage	Adjust Range	Maximum Current	Power	UL1310 Class 2	Height	Width	Depth
DSP10-5	5V	None	1.5A	7.5W	Yes	3.58"	0.71"	2.19"
DSP30-5	5V	5 - 5.5V	3A	15W	Yes	3.58"	2.09"	2.19"
DSP60-5	5V	5 - 5.5V	7A	35W	-	3.58"	2.8"	2.19"
DSP10-12	12V	None	0.83A	10W	Yes	3.58"	0.71"	2.19"
DSP30-12	12V	12 - 14V	2.1A	25.2W	Yes	3.58"	2.09"	2.19"
DSP60-12	12V	12 - 14V	4.5A	54W	Yes	3.58"	2.8"	2.19"
DSP100-12	12V	12 - 14V	6A	72W	-	3.58"	3.54"	2.19"
DSP10-15	15V	None	0.67A	10.1W	Yes	3.58"	0.71"	2.19"
DSP30-15	15V	13.5 - 16.5V	2A	30W	Yes	3.58"	2.09"	2.19"
DSP60-15	15V	13.5 - 16.5V	4A	60W	Yes	3.58"	2.8"	2.19"
DSP100-15	15V	13.5 - 16.5V	5A	75W	-	3.58"	3.54"	2.19"
DSP10-24	24V	None	0.42A	10.1W	Yes	3.58"	0.71"	2.19"
DSP30-24	24V	24 - 28V	1.3A	31.2W	Yes	3.58"	2.09"	2.19"
DSP60-24	24V	24 - 28V	2.5A	60W	Yes	3.58"	2.8"	2.19"
DSP100-24/C2	24V	20 - 24.2V	3.8A	91.2W	Yes	3.58"	3.54"	2.19"
DSP100-24	24V	24-28V	4.2A	100.8W	-	3.58"	3.54"	2.19"

See website datasheet for complete and latest product details. [us.tdk-lambda.com/lp/products/dsp-series.htm](http://us.tdk-lambda.com/lp/products/dsp-series.htm)

# DRF Series

## 120W to 480W Full Function DIN Rail Mount Power Supplies

- ◆ Universal Input 85 - 265VAC (300VAC for 5s)
- ◆ 24V output
- ◆ -25 to +70°C operation (derating applies above 60°C)
- ◆ 150% Peak Power (4s)
- ◆ High Efficiency (90-92%), low standby power draw
- ◆ Current share, remote on/off, voltage programming, pcb coating (/HL models)
- ◆ EN/UL60950-1, UL508, GL, IECEx, ATEX (select models, see below)



Model	Output Voltage	Adjust Range	Maximum Current	Power	GL, IECEx, ATEX	Height	Width	Depth
DRF120-24-1	24V	24 - 28V	5A (7.5A Pk)	120W	-	4.86"	1.44"	4.53"
DRF120-24-1/HL	24V	24 - 28V	5A (7.5A Pk)	120W	Yes	4.86"	1.44"	4.53"
DRF240-24-1	24V	24 - 28V	10A (15A Pk)	240W	-	4.86"	1.93"	4.53"
DRF240-24-1/HL	24V	24 - 28V	10A (15A Pk)	240W	Yes	4.86"	1.93"	4.53"
DRF480-24-1	24V	24 - 28V	20A (30A Pk)	480W	-	4.86"	3.23"	4.53"
DRF480-24-1/HL	24V	24 - 28V	20A (30A Pk)	480W	Yes	4.86"	3.23"	4.53"

See website datasheet for complete and latest product details [us.tdk-lambda.com/lp/products/drif-series.htm](http://us.tdk-lambda.com/lp/products/drif-series.htm)

# DRB Series

## 15W to 100W DIN Rail Mount Power Supplies

- ◆ Universal Input 85-264VAC (300VAC for 5 seconds)
- ◆ 5V, 12-15, 24V or 48V outputs
- ◆ -20 to +70°C operation (derating applies)
- ◆ Class I (Plastic case)
- ◆ EN/UL60950-1, UL508
- ◆ High efficiency, low off-load power draw (<0.5W)



Model	Output Voltage	Adjust Range	Maximum Current	Power	Height	Width	Depth
DRB50-5-1	5V	5 - 5.5V	6.0A	30W	2.95"	1.18"	3.54"
DRB30-12-1	12V	12 - 15V	2.5A	30W	2.95"	0.83"	3.54"
DRB50-12-1	12V	12 - 15V	4.2A	50.4W	2.95"	1.18"	3.54"
DRB15-24-1	24V	24 - 28V	0.63A	15.1W	2.95"	0.71"	3.54"
DRB30-24-1	24V	24 - 28V	1.25A	30W	2.95"	0.83"	3.54"
DRB50-24-1	24V	24 - 28V	2.1A	50.4W	2.95"	1.18"	3.54"
DRB100-24-1	24V	24 - 28V	4.2A	100.8W	2.95"	1.77"	3.94"
DRB50-48-1	48V	48 - 52.8V	1.05A	50.4W	2.95"	1.18"	3.54"

See website datasheet for complete and latest product details. [us.tdk-lambda.com/lp/products/drbs-series.htm](http://us.tdk-lambda.com/lp/products/drbs-series.htm)

# DPX Series

## 40W to 60W DIN Rail Mount DC-DC Converters

- ◆ 12V, 24V or 48V Nominal Inputs
- ◆ Single, dual or triple output models
- ◆ -40 to +85°C operation (derating applies)
- ◆ 1600VDC Input to Output Isolation
- ◆ CE Marked
- ◆ 2.27" x 0.97" x 4.92" Package



Model	Input Voltage	Output Voltage	Adjust Range	Maximum Current	Power
<b>Single Output</b>					
DPX4024WS05	9.5 - 36VDC	5V	4.5 - 5.5V	8A	40W
DPX4024WS12	9.5 - 36VDC	12V	10.8 - 13.2V	3.33A	40W
DPX4024WS15	9.5 - 36VDC	15V	13.5 - 16.5V	2.67A	40W
DPX4048WS05	18 - 75VDC	5V	4.5 - 5.5V	8A	40W
DPX4048WS12	18 - 75VDC	12V	10.8 - 13.2V	3.33A	40W
DPX4048WS15	18 - 75VDC	15V	13.5 - 16.5V	2.67A	40W
DPX6024S05	18 - 36VDC	5V	4.5 - 5.5V	12A	60W
DPX6024S12	18 - 36VDC	12V	10.8 - 13.2V	5A	60W
DPX6024S15	18 - 36VDC	15V	13.5 - 16.5V	4A	60W
DPX6048S05	36 - 75VDC	5V	4.5 - 5.5V	12A	60W
DPX6048S12	36 - 75VDC	12V	10.8 - 13.2V	5A	60W
DPX6048S15	36 - 75VDC	15V	13.5 - 16.5V	4A	60W
<b>Dual Output</b>					
DPX4024WD12	9.5 - 36VDC	+/-12	Fixed	1.667A	40W
DPX4024WD15	9.5 - 36VDC	+/-15	Fixed	1.333A	40W
DPX4048WD12	18 - 75VDC	+/-12	Fixed	1.667A	40W
DPX4048WD15	18 - 75VDC	+/-15	Fixed	1.333A	40W
<b>Triple Output</b>					
DPX4012T0512	9.5 - 18VDC	+5V, +/-12V	Fixed	6, +/-0.4A	40W
DPX4012T0515	9.5 - 18VDC	+5V, +/-15V	Fixed	6, +/-0.3A	40W
DPX4024T0512	18 - 36VDC	+5V, +/-12V	Fixed	6, +/-0.4A	40W
DPX4024T0515	18 - 36VDC	+5V, +/-15V	Fixed	6, +/-0.3A	40W
DPX4048T0512	36 - 75VDC	+5V, +/-12V	Fixed	6, +/-0.4A	40W
DPX4048T0515	36 - 75VDC	+5V, +/-15V	Fixed	6, +/-0.3A	40W

See website datasheet for complete and latest product details. [us.tdk-lambda.com/lp/products/dpx-series.htm](http://us.tdk-lambda.com/lp/products/dpx-series.htm)

# TDK-Lambda Selector Guide



\*Contact factory for assistance in configuring / see website for details.