

#### Features:

- Wide input range
- Stable voltage output
- Efficiency >93%
- Waterproof enclosure IP68
- Over-current protection
- Over-voltage protection
- Over-temperature protection
- Short circuit protection
- No cooling fan
- Surface mountable

#### Electrical specifications DR30-DD model

	DR30-DD12-A					
Input DC	12V 24V 36V					
Input DC min.	8V					
Input DC max.	40V					
Output DC	12V					
Current output	3A					
Power	36W					
Ripple	120mVpp					
Efficiency	93%					

#### Electrical specifications DR60-DD model

	DR60-DD12-A	DR60-DD12-F	DR60-DD24-A	DR60-DD36-B		
Input DC	12V 24V 36V	48V	12V 24V 36V	12V		
Input DC min.	8V	38V	9V	11V		
Input DC max.	40V	56V	40V	16V		
Output DC	12V	12V	24V	36V		
Current output	6A	5A	2.5A	2A		
Power	72W	60W	60W	70W		
Ripple	120mVpp	120mVpp	300mVpp	380mVpp		
Efficiency	93%	95%	93%	94%		

### Electrical specifications DR120-DD model

	DR120-DD12-A	DR120-DD12-G	DR120-DD12-E	DR120-DD24-F	DR120-DD24-A	DR120-DD48-B
Input DC	12V 24V 36V	60V 72V	48V	48V	12V 24V 36V	12V
Input DC min.	8V	50V	30V	38V	9V	11V
Input DC max.	40V	90V	60V	56V	40V	16V
Output DC	12V	12V	12V	24V	24V	48V
Current output	10A	10A	10A	5A	6A	3A
Power	120W	120W	120W	120W	144W	144W
Ripple	120mVpp	120mVpp	120mVpp	250mVpp	300mVpp	550mVpp
Efficiency	93%	93%	95%	93%	93%	94%

### Electrical specifications DR180-DD model

	DR180-DD5-C	DR180-DD12-E	DR180-DD24-B	DR180-DD36-B		
Input DC	12V 24V	36V 48V	12V	12V		
Input DC min.	11V	30V	11V	11V		
Input DC max.	30V	60V	16V	16V		
Output DC	5V	12V	24V	36V		
Current output	30A	15A	8A	5A		
Power	150W	180W	192W	180W		
Ripple	50mVpp	120mVpp	240mVpp	380mVpp		
Efficiency	95%	95%	94%	94%		

### Electrical specifications DR240-DD model

	DR240-DD12-E	DR240-DD24-F	DR240-DD48-D			
Input DC	36V 48V	48V	24V			
Input DC min.	30V	38V	18V			
Input DC max.	60V	56V	35V			
Output DC	12V	24V	48V			
Current output	20A	10A	4A			
Power	240W	240W	240W			
Ripple	120mVpp	250mVpp	550mVpp			
Efficiency	95%	93%	94%			

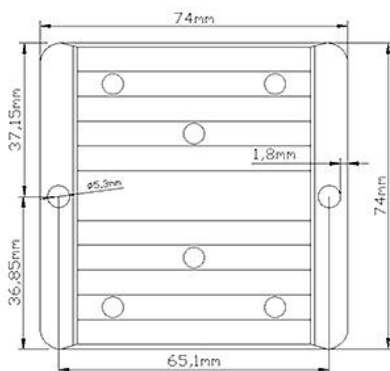
#### General specifications

	All models
Voltage accuracy	±1.5%
Line regulation	±0.2%
Load regulation	±0.2%
Overload	110 – 140%, constant current limiting
Working temp.	-20 - 60°C
Dimensions	74 x 74 x 31mm (L x W x H)
Weight	±0.35kg
IP rating	IP68
EMC standards	Compliance to: EN50498:2010 EN61000-6-3:2007/A1:2011/AC:2012 EN61000-6-2:2005/AC:2005 EN61000-6-1:2007 EN55014-1:2006/A2:2011 EN55014-2:1997/A2:2008
Low Voltage Directive	Compliance to: EN60950-1:2006/AC2011 EN62109-1:2010

#### Connections

Yellow wire:	Output +
Black wire:	Output -
Black wire:	Input -
Red wire:	Input +

#### Mechanical specification



#### Derating curve

