



## Models and Ratings

**DNR05-60 XP**

Output Voltage	Input Current (typ.)		Output Voltage Trim	Output Current	Efficiency (typ.)	Model Number
	115 VAC	230 VAC				
5 V	0.12 A	0.08 A	4.50-5.75 V	1.000 A	69%	DNR05US05 <sup>(1)</sup> †
12 V	0.12 A	0.08 A	10.80-13.80 V	0.420 A	72%	DNR05US12 <sup>(1)</sup> †
15 V	0.12 A	0.08 A	13.50-17.25 V	0.340 A	72%	DNR05US15 <sup>(1)</sup>
24 V	0.12 A	0.08 A	21.60-28.80 V	0.210 A	72%	DNR05US24 <sup>(1)</sup> †
5 V	0.20 A	0.13 A	4.50-5.75 V	2.000 A	73%	DNR10US05 <sup>(1)</sup> †
12 V	0.20 A	0.13 A	10.80-13.80 V	0.840 A	75%	DNR10US12 <sup>(1)</sup> †
15 V	0.20 A	0.13 A	13.50-17.25 V	0.670 A	76%	DNR10US15 <sup>(1)</sup>
24 V	0.20 A	0.13 A	21.60-28.80 V	0.420 A	76%	DNR10US24 <sup>(1)</sup> †
5 V	0.36 A	0.21 A	4.50-5.75 V	3.000 A	75%	DNR18US05 <sup>(1)</sup> †
12 V	0.36 A	0.21 A	10.80-13.80 V	1.500 A	77%	DNR18US12 <sup>(1)</sup> †
15 V	0.36 A	0.21 A	13.50-17.25 V	1.200 A	77%	DNR18US15 <sup>(1)</sup> †
24 V	0.36 A	0.21 A	21.60-28.80 V	0.750 A	77%	DNR18US24 <sup>(1)</sup> †
5 V	0.56 A	0.33 A	5.00-5.50 V	6.000 A	79%	DNR30US05 <sup>(1,3,4)</sup> †
12 V	0.56 A	0.33 A	12.00-14.00 V	2.500 A	84%	DNR30US12 <sup>(1,3,4)</sup> †
24 V	0.56 A	0.33 A	24.00-28.00 V	1.250 A	86%	DNR30US24 <sup>(1,3,4)</sup> †
48 V	0.56 A	0.33 A	48.00-55.00 V	0.625 A	86%	DNR30US48 <sup>(1,3,4)</sup> †
5 V	1.10 A	0.59 A	5.00-5.50 V	10.000 A	79%	DNR60US05 <sup>(1,3,4)</sup> †
12 V	1.10 A	0.59 A	12.00-14.00 V	5.000 A	86%	DNR60US12 <sup>(1,3,4)</sup> †
24 V	1.10 A	0.59 A	24.00-28.00 V	2.500 A	89%	DNR60US24 <sup>(1,3,4)</sup> †
48 V	1.10 A	0.59 A	48.00-55.00 V	1.250 A	89%	DNR60US48 <sup>(1,3,4)</sup> †

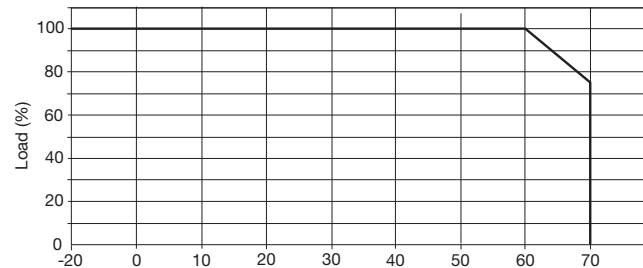
### Notes

1. Add suffix '-S' for spring clamp connection option.
2. 30-60 W models are suitable for battery-charging applications.

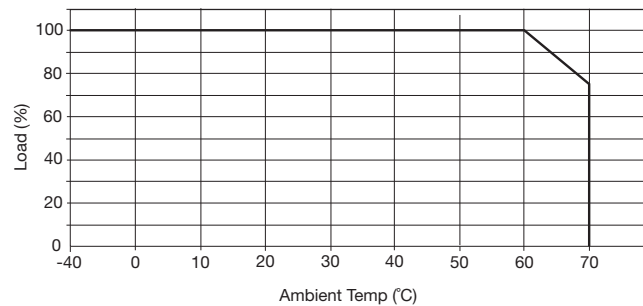
3. Approved to UL1310, but 5 & 12 V not Class 2 Power recognised.
4. SEMI F47 compliant.

## Derating Curves

### DNR05-18 W Models

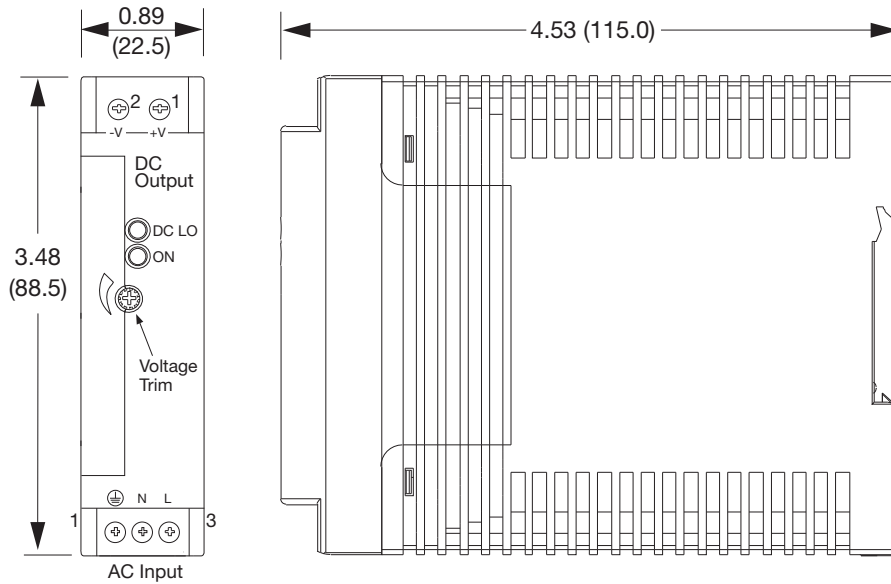


### DNR30-60 W Models



# Mechanical Details

## DNR05/10/18 W Models



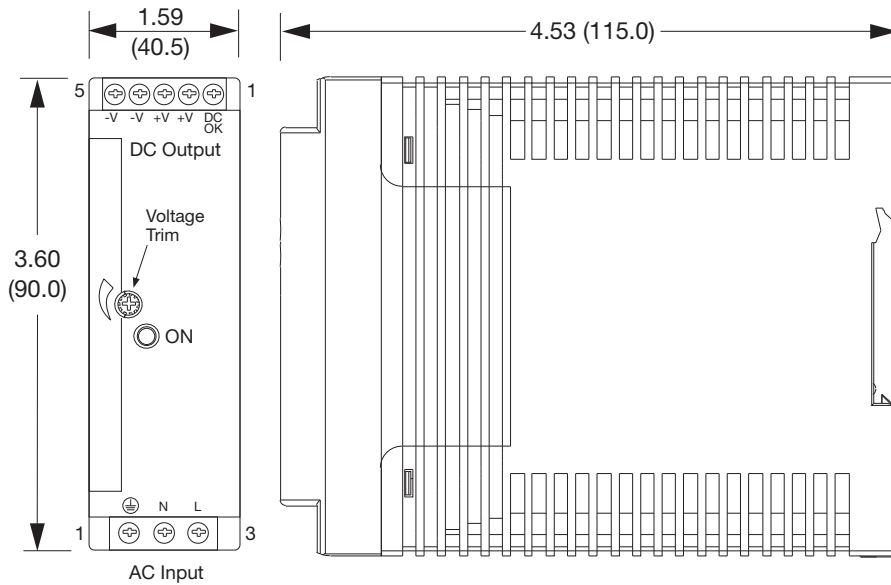
### Notes

1. All dimensions in inches (mm).
2. Weight 0.33 lb (150 g) approx.
3. Tolerance:  $\pm 0.02$  (0.5) maximum.

4. Connection screw maximum torque:  
Input: 9 lbs-in (1.0 Nm), Output: 5.5 lbs-in (0.6 Nm)

DNR05, 10, 18 Connections		
Conn	Pin	Designation
AC Input	1	Ground
	2	Neutral
	3	Line
DC Output	1	Positive
	2	Negative

## 30/60 W Models



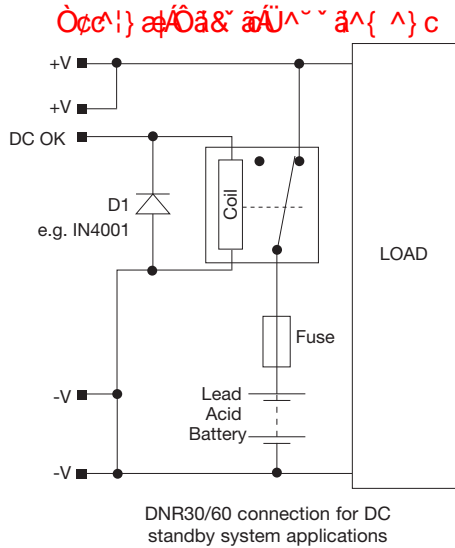
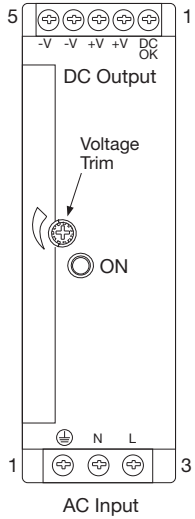
### Notes

1. All dimensions in inches (mm).
2. Weight 0.8 lb (350 g) approx.
3. Tolerance:  $\pm 0.02$  (0.5) maximum.

4. Connection screw maximum torque:  
Input: 9 lbs-in (1.0 Nm), Output: 5.5 lbs-in (0.6 Nm)

DNR30/60 Connections		
Conn	Pin	Designation
AC Input	1	Ground
	2	Neutral
	3	Line
DC Output	1	DC OK*
	2	Positive
	3	Positive
	4	Negative
	5	Negative

\* 24 V and standby models only.



Maximum current drain from battery by PSU when inactive 22 mA

DNR30/60 Connections		
Conn	Pin	Designation
AC Input	1	Ground
	2	Neutral
	3	Line
DC Output	1	DC OK
	2	Positive
	3	Positive
	4	Negative
	5	Negative

**Notes**

1. With AC in, unit provides power to the load and to charge the battery. The DC OK signal acts by sensing a voltage on +V and holds the relay closed.
2. With loss of AC in, battery voltage is present on +V. DC OK signal holds the relay closed. Battery supplies power to the load.
3. As the battery discharges, its voltage falls. When this falls below the level shown in the table below the DC OK signal switches off to allow the relay to open to disconnect and protect the battery.

Output Set Voltages For Standby Versions				
Model <sup>(1)</sup>	Voltage	Current	DC OK Signal Off	Efficiency
DNR30US12#	13.6 V	2.20 A	10.30-11.30 V	84%
DNR30US24#	27.2 V	1.10 A	21.10-22.10 V	86%
DNR30US48#	54.5 V	0.55 A	42.70-43.70 V	86%
DNR60US12# <sup>(2)</sup>	13.6 V	4.40 A	10.30-11.30 V	86%
DNR60US24#	27.2 V	2.20 A	21.10-22.10 V	89%
DNR60US48#	54.5 V	1.10 A	42.70-43.70 V	89%

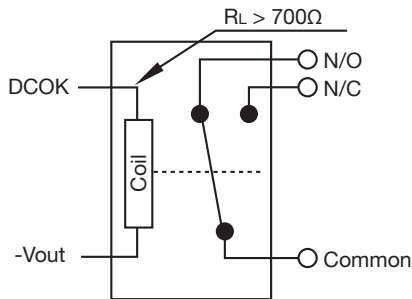
**Notes**

1. Suffix # indicates standby version.
2. Not UL1310 approved.

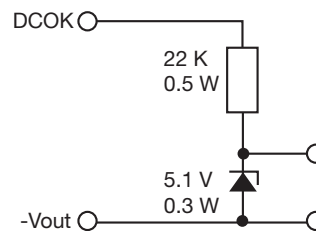
**DC OK**

**30/60 W Models**

Output good = 24 V Output not good = 0 V



Example using external relay to create volt-free contact



Example using external components to create TTL signal

Standard on 24 V models, 30-60 W only.