



SOLAR DRIVE PSD15 • PSD30

With Pentair Pentek Solar Drives, using the sun's energy to power your day-to-day operations has never been simpler. From dawn to dusk, the Pentair Pentek Solar Drive PSD15 and PSD30 maximize solar energy to power water systems for livestock watering, crop irrigation and remote, off-grid well pumping. Pair it with standard AC Pentair motors for a cost effective solution. Reach more installation opportunities with the unique ability to retrofit to existing pump systems.



FEATURES

- ◆ **Retrofit existing systems** with one-of-a-kind 4" AC pump and motor combination
- ◆ **Efficient** use of solar panels and simple installation
- ◆ **Cost savings** with Pentair's traditional 4" AC pumps versus third-party DC pumps
- ◆ **Buy only what you need** with this configurable system

GENERAL APPLICATIONS

- ◆ Crop irrigation
- ◆ Livestock watering
- ◆ Off-grid



TECHNICAL SPECIFICATIONS

Electrical	PSD15	PSD30	Mechanical	PSD15	PSD30
MPPT operating voltage	100-380V	100-380V	Degree of protection	NEMA4/IP66	NEMA3/IP65
Max PV panels open circuit voltage	400V	400V	Enclosure material	Aluminum	Aluminum
Minimum operating PV voltage	100V	100V	Operating temperature	- 40°C to 50°C	- 40°C to 50°C
Maximum PV panel current	9A	15A	Dimensions	10"x5.5"x4"	18"x10"x5"
Single-phase max AC motor power	-	12A	Solar terminal	AWG#10-14	AWG#10-14
Three-phase max AC motor power	7A	10A	Motor terminal	AWG#10-14	AWG#10-14
			Sensor terminal	AWG#14-18	AWG#14-18
			Cooling	Passive/no fan	Passive/no fan

ENVIRONMENTAL

Compliance with IEC 60068

IEC 60068-2-2 - Cold
IEC 60068-2-2 - Dry Heat

IEC 60068-2-14 - Change of temperature
IEC 60068-2-30 - Damp Heat

SOLAR ARRAY CONFIGURATOR

Service Factor Nominal Pump Current				Recommended Solar PV Capacity		
Model	1-ph; 120 Vac (Amps)	1-ph; 230 Vac (Amps)	3-ph; 230 Vac (Amps)	Recommended PV Power Capacity (Watts)	Minimum Solar MPP Voltage (min/Vmpp)	Absolute Maximum Open Circuit Voltage (max Voc.)
PSD15	4-6	2-4	2-3	750-1000	80/120	400
PSD15	6-8	4-5	3-4	1000-1500	100/150	400
PSD15	8-10	5-6	4-5	1500-2000	150	400
PSD30	8-10	6-8	6-7	2500-3500	220	400
PSD30	10-12	8-10	7-8	3500-4000	250	400
PSD30	-	10-12	8-10	4500-6000	270	400

HIGHLIGHTS

- ◆ Universal controller for ½ - 1½ HP motors - Three Phase, 50/60Hz, 120V/240Vac (PSD15)
- ◆ Universal controller for 1½ - 3HP motors - Single/Three Phase, 50/60Hz, 120V/240Vac (PSD30)
- ◆ Simple hook up, weather proof, durable and automatic starting capacity
- ◆ Changes a 1 or 2 speed motor/pump into a soft start, VFD (Variable Frequency Drive)
- ◆ VFD will run motors even at low solar output extending the useful operating time
- ◆ Integrated DC Disconnect (PSD30) and PV Parallel Junction

PROTECTIONS

- ◆ Automatic Dry or Built-In Dry Well
- ◆ Pump Locked Rotor
- ◆ Over-Current and Overload
- ◆ Over-Temperature
- ◆ Short Circuit and Open Circuit
- ◆ Solar Input Reverse Polarity
- ◆ Overvoltage
- ◆ Dry Well Protections



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