



PV Pump Drives

3 Phase Motor Drives:

Empo-ni's "Solar Direct Drives" are high-grade PV powered motor inverters. Suited to a multitude of applications, they can be used on many 3-phase motors in everything from pumps, compressors, fans and simple machines to general industrial applications. They have specifically been developed for solar power and therefore are capable of dealing with the behaviour of an erratic and variable power supply. Maximum Power Point Tracking of the array is integrated into the fundamental behaviour of the drive. As the sun rises, the frequency of the motor is ramped up, to the maximum set point. As the power diminishes, the drive will ramp down again, until no load can be sustained and the drive will shut down.

Developed and manufactured in Germany, they have been tested in the harshest conditions, including in the Sahara desert. Their high IP rating means that they do not need to be enclosed and can be surface mounted. Additionally, their fan-less design means that the most common failure mode on VSDs is eliminated.

Features

Popular uses:

- Water pumping | Fans | Compressors | Simple machines



SDD1.5-425



SDD5.5-850 (M)

Now available pre-kitted from Emponi, the kits contain specially matched motors enabling best possible performance in a small array! The kits are available in 2 types, enabling the user to select the pump which best suits the well depth.

Kit part number:	Description:
SDD-1.5-550W/35M	SDD1.5 kw drive with 4" 550W motor and 35m pump
SDD-1.5-550W/85M	SDD1.5 kw drive with 4" 550W motor and 85m pump

Hydraulic performance pump type optimized for 35m pump head duty point

Pump head	2	19	25	30	37	43	49	m
Discharge	5,49	4,38	3,84	3,38	2,45	1,15	0	[m³/h]

Hydraulic performance pump type optimized for 85m pump head duty point

Pump head	35	45	60	85	95	105	120	m
Discharge	1,55	1,43	1,18	0,87	0,62	0,52	0	[m³/h]

Hydraulic System Specification

External Casing :	Stainless Steel
Pump Stages:	Polycarbonate
Impeller:	Noryl
Max. Water Temperature:	35 °C
Sand Content:	max. 50g / m³
Utilization:	EN 60335-2-41
Power Input:	550W @ 2850 rpm
Water Connection:	DNM 1"1 / 4
Bore Diameter:	DN 100mm