

# SOLAR DIRECT DRIVE

## PV off-grid applications



EMPO-NI Solar Direct Drives are passively cooled robust "stand alone" solutions that provide a rapidly paying-off substitute for Diesel and propane gas-powered generators. Solar Direct Drives are used for PV-pumping applications as well as for ventilation and also for flour milling and oil pressing - wherever a 3-phase motor needs independent energy. Solar Direct Drives are operated from a single PV string and drive 3-phase induction motors with 85V, 110V, 160V, 230V or 400V phase to phase voltage up to 5.5kW.

### Solar Direct Drive SDD5.5kW-850V (with GSM modem option)



Performance range	550W...5,5kW 3-phase 230V, 400V, 50Hz/60Hz
Voltage range	300V...850V (input); 300V...750V (MPPT range)
Features	IP54 (IP65), LC-Display, GSM Modem-Option, digital in / outputs, sensorless dry running protection, passive cooling, MPP- tracking

- ◆ Replacing Diesel generators for PV-pumps, irrigation systems, ventilation, grain and oil mills
- ◆ Suitable for 3-phase induction motors of up to 5.5 kW and solar panel arrays with max. 850Volt open circuit voltage
- ◆ **Suitable for all 3-phase induction motors with 230V or 400V phase to phase voltage**
- ◆ Protection against low pump speed with restart timer function etc.
- ◆ Passive cooling for up to 45°C (50°C) ambient temperature without any rotating fan
- ◆ Sensorless dry-run protection option for pumps
- ◆ Remote control / remote monitoring through the optionally built-in GSM option

### The "small" Solar Direct Drive SDD1.5kW-425V (**NEW:** with GSM modem option)

- ◆ Replacing diesel generators for pumps, irrigation systems, ventilation, grain and oil mills
- ◆ For "small" 3-phase induction motors of up to 1.5 kW and a solar panel array of max. 425 Volt (o.c.)
- ◆ **Suitable for all 3-phase induction motors of 65V, 85V, 110V, 160V or 230V phase-phase voltage**
- ◆ Protection against low pump speed with timer function and "Automatic restart function"
- ◆ Passive cooling for up to 45°C (50°C) temperature without any rotating fan
- ◆ Sensorless dry-run protection option for pumps
- ◆ IP54 (IP65) protection



Performance range	0...1,5kW (3-phase 85V,110V, 160V and 230V, for 50Hz and 60Hz motor types)
Voltage range	75V ...425V (input), 90V...400V (MPPT range)



### Other customized models and solutions on request