

# Solelpaket extra


## Beprövad kvalitet






- **IBC monosol 280ZX** estetiska monokristallina solpaneler med linjär effektgaranti (25 år-80 %), 15 års produktgaranti, tillverkade i Europa.
- Växelriktare från **Fronius**, en Europeisk välrenommerad tillverkare. **Fronius** har 3-fas växelriktare från 3kW och uppåt.
- **IBC-solars** toppklassade montagesystem, finns till alla typer av tak.

Perfect Welding / Solar Energy / Perfect Charging

**Fronius**  
SHIFTING THE LIMITS

**FRONIUS SYMO**  
/ Maximum flexibility for the applications of tomorrow.



 / Wi-Fi based applications  
 / Ethernet network  
 / WLAN interface  
 / Bluetooth communication  
 / Smart Grid Ready


/ Operating power categories ranging from 3.0 to 20.0 kW, the transformerless Fronius Symo is the three-phase inverter for systems of every size. The high system voltage, wide input voltage range and two MPPT trackers ensure maximum flexibility in system design. The standard interface to the internet via WLAN or Ethernet and the ease of integration of third-party components make the Fronius Symo one of the most communicative inverters on the market.

**TECHNICAL DATA FRONIUS SYMO (3.0-3-S, 3.7-3-S, 4.5-3-S, 3.0-3-M, 3.7-3-M, 4.5-3-M)**

INPUT DATA	SYMO 3.0-3-S	SYMO 3.7-3-S	SYMO 4.5-3-S	SYMO 3.0-3-M	SYMO 3.7-3-M	SYMO 4.5-3-M
Max. input power (P <sub>max</sub> ) / (kW) / (VA)	3.0 / 3.0	3.7 / 3.7	4.5 / 4.5	3.0 / 3.0	3.7 / 3.7	4.5 / 4.5
Max. input power (P <sub>max</sub> ) / (kW) / (VA) / (VA)	3.0 / 3.0	3.7 / 3.7	4.5 / 4.5	3.0 / 3.0	3.7 / 3.7	4.5 / 4.5
Max. input voltage (U <sub>in</sub> ) / (V)	500 V	500 V	500 V	500 V	500 V	500 V
Max. input current (I <sub>in</sub> ) / (A)	6.0 A	7.4 A	9.0 A	6.0 A	7.4 A	9.0 A
Max. input voltage (U <sub>in</sub> ) / (V)	500 V	500 V	500 V	500 V	500 V	500 V
Max. input current (I <sub>in</sub> ) / (A)	6.0 A	7.4 A	9.0 A	6.0 A	7.4 A	9.0 A
MPPT voltage range (U <sub>mppt</sub> ) / (V) / (V)	200 - 800 V	210 - 800 V	300 - 800 V	200 - 800 V	210 - 800 V	300 - 800 V
Number of MPPT trackers	2	2	2	2	2	2
Number of DC connections	2	2	2	2	2	2
<b>OUTPUT DATA</b>	<b>SYMO 3.0-3-S</b>	<b>SYMO 3.7-3-S</b>	<b>SYMO 4.5-3-S</b>	<b>SYMO 3.0-3-M</b>	<b>SYMO 3.7-3-M</b>	<b>SYMO 4.5-3-M</b>
DC max. output power (P <sub>dc</sub> ) / (kW)	3.000 W	3.700 W	4.500 W	3.000 W	3.700 W	4.500 W
DC max. output power (P <sub>dc</sub> ) / (kW)	3.000 W	3.700 W	4.500 W	3.000 W	3.700 W	4.500 W
DC max. output power (P <sub>dc</sub> ) / (kW)	3.0 A	3.7 A	4.5 A	3.0 A	3.7 A	4.5 A
DC max. output power (P <sub>dc</sub> ) / (kW)	3.0 A	3.7 A	4.5 A	3.0 A	3.7 A	4.5 A
Max. output voltage (U <sub>out</sub> ) / (V)	200 / 100 V	200 / 100 V	200 / 100 V	200 / 100 V	200 / 100 V	200 / 100 V
Max. output voltage (U <sub>out</sub> ) / (V)	200 / 100 V	200 / 100 V	200 / 100 V	200 / 100 V	200 / 100 V	200 / 100 V
Max. output current (I <sub>out</sub> ) / (A)	15.0 A / 7.5 A	18.5 A / 9.2 A	22.5 A / 11.2 A	15.0 A / 7.5 A	18.5 A / 9.2 A	22.5 A / 11.2 A
Temperature range (U <sub>out</sub> ) / (°C)	-40 - 60 °C	-40 - 60 °C	-40 - 60 °C	-40 - 60 °C	-40 - 60 °C	-40 - 60 °C
Grid frequency (Hz)	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz
Power factor (cos φ)	0.99	0.99	0.99	0.99	0.99	0.99
Efficiency (η)	97.6 %	97.6 %	97.6 %	97.6 %	97.6 %	97.6 %
<b>GENERAL DATA</b>	<b>SYMO 3.0-3-S</b>	<b>SYMO 3.7-3-S</b>	<b>SYMO 4.5-3-S</b>	<b>SYMO 3.0-3-M</b>	<b>SYMO 3.7-3-M</b>	<b>SYMO 4.5-3-M</b>
Dimensions (Height x Width x Depth)	160 x 160 x 30 mm	160 x 160 x 30 mm	160 x 160 x 30 mm	160 x 160 x 30 mm	160 x 160 x 30 mm	160 x 160 x 30 mm
Weight	3.0 kg	3.7 kg	4.5 kg	3.0 kg	3.7 kg	4.5 kg
Degree of protection	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65
Installation category (C <sub>1</sub> ) / (M <sub>1</sub> )	2 / 1	2 / 1	2 / 1	2 / 1	2 / 1	2 / 1
High-temperature category (C <sub>2</sub> ) / (M <sub>2</sub> )	2 / 1	2 / 1	2 / 1	2 / 1	2 / 1	2 / 1
Temperature class	40/100	40/100	40/100	40/100	40/100	40/100
Installation	Transformation	Transformation	Transformation	Transformation	Transformation	Transformation
Installation	Indoor and outdoor installation	Indoor and outdoor installation	Indoor and outdoor installation	Indoor and outdoor installation	Indoor and outdoor installation	Indoor and outdoor installation
Additional temperature range	-25 - 100 °C	-25 - 100 °C	-25 - 100 °C	-25 - 100 °C	-25 - 100 °C	-25 - 100 °C
Power factor	0.99	0.99	0.99	0.99	0.99	0.99
DC connection technology	Al-TEC and Al-TEC system connection (30-10 and 30-10)	Al-TEC and Al-TEC system connection (30-10 and 30-10)	Al-TEC and Al-TEC system connection (30-10 and 30-10)	Al-TEC and Al-TEC system connection (30-10 and 30-10)	Al-TEC and Al-TEC system connection (30-10 and 30-10)	Al-TEC and Al-TEC system connection (30-10 and 30-10)
Max. connection technology	Single 10 mm terminals (30-10 and 30-10)	Single 10 mm terminals (30-10 and 30-10)	Single 10 mm terminals (30-10 and 30-10)	Single 10 mm terminals (30-10 and 30-10)	Single 10 mm terminals (30-10 and 30-10)	Single 10 mm terminals (30-10 and 30-10)
Max. connection technology	10 mm VDE 0293-40/45/46/47/48/49/50/51/52/53/54/55/56/57/58/59/60/61/62/63/64/65/66/67/68/69/70/71/72/73/74/75/76/77/78/79/80/81/82/83/84/85/86/87/88/89/90/91/92/93/94/95/96/97/98/99/100	10 mm VDE 0293-40/45/46/47/48/49/50/51/52/53/54/55/56/57/58/59/60/61/62/63/64/65/66/67/68/69/70/71/72/73/74/75/76/77/78/79/80/81/82/83/84/85/86/87/88/89/90/91/92/93/94/95/96/97/98/99/100	10 mm VDE 0293-40/45/46/47/48/49/50/51/52/53/54/55/56/57/58/59/60/61/62/63/64/65/66/67/68/69/70/71/72/73/74/75/76/77/78/79/80/81/82/83/84/85/86/87/88/89/90/91/92/93/94/95/96/97/98/99/100	10 mm VDE 0293-40/45/46/47/48/49/50/51/52/53/54/55/56/57/58/59/60/61/62/63/64/65/66/67/68/69/70/71/72/73/74/75/76/77/78/79/80/81/82/83/84/85/86/87/88/89/90/91/92/93/94/95/96/97/98/99/100	10 mm VDE 0293-40/45/46/47/48/49/50/51/52/53/54/55/56/57/58/59/60/61/62/63/64/65/66/67/68/69/70/71/72/73/74/75/76/77/78/79/80/81/82/83/84/85/86/87/88/89/90/91/92/93/94/95/96/97/98/99/100	10 mm VDE 0293-40/45/46/47/48/49/50/51/52/53/54/55/56/57/58/59/60/61/62/63/64/65/66/67/68/69/70/71/72/73/74/75/76/77/78/79/80/81/82/83/84/85/86/87/88/89/90/91/92/93/94/95/96/97/98/99/100


\* This applies to Fronius Symo 3.0-3-S, 3.7-3-S and 4.5-3-S.  
 \*\* according to IEC 62109-1.  
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**IBC SOLAR - a strong global partner for solar power**

IBC SOLAR AG has been successful for more than 30 years and is amongst the leading international energy companies, which provide high-performance system solutions in every size and for every application with intelligent photovoltaic systems. The economic strength and financial independence is confirmed by globally recognized rating agencies.

Smart Systems for Solar Power thanks to perfectly matched components. More than 1,000 highly qualified partners around the world, as well as more than 2,700 megawatts of installed power and over 150,000 photovoltaic systems all underline the high level of expertise of IBC SOLAR.

Convince yourself of the energy solutions by IBC SOLAR!





 The ideal solution for:
 


Smart Systems for Solar Power **IBC SOLAR**



**Withstands heavy snow loads**  
**IBC TopFix 200**

## Materialpaket

(Pris inkl. moms, komplett baspaket\* för driftklar installation, montage ingår ej, vi monterar gärna - begär offert) Obs! Elinstallation skall utföras under överinseende av behörig installatör.

- 5,6kW 20st 280W-paneler **75 000:-**  
(producerar ca 5300kWh/år i optimalt läge)
- 11,2kW 40st 280W-paneler **138 000:-**  
(producerar ca 10600kWh/år i optimalt läge)
- 21,3kW 76st 280W-paneler **250 000:-**  
(producerar ca20000kWh/år i optimalt läge)

\*baspaket = lämpligt för okomplicerad installation på vanligt tegeltak, korrugerat plåttak etc.