



MOEBIUS | TRIO S
Intelligent PV Inverters

SOLAR PV INVERTER



Threephase
2 MPPT

DATASHEET

TRIO S-5 KVA-2 | TRIO-S-6 KVA-2 |
TRIO-S-8 KVA-2 | TRIO-S-10 KVA-2

Designed and manufactured by



DARWIN
RENEWABLE ENERGY INNOVATOR



<i>Efficiency</i>	TRIO S-5 KVA-2	TRIO-S-6 KVA-2	TRIO-S-8 KVA-2	TRIO-S-10 KVA-2
Max. Efficiency	98,2%	98,2%	98,2%	98,2%
EU. Efficiency	97,8%	97,8%	97,8%	97,8%
Input (PV)				
Max. Input Voltage	1100 V	1100 V	1100 V	1100 V
Max. PV configuration (STC)	160,00%	160,00%	160,00%	160,00%
Max. PV Power (W)	8000 W	8000 W	8000 W	16000 W
Rated Input Voltage	620 V	620 V	620 V	620 V
Max. Input Current	2 * 15 A	2 * 15 A	2 * 15 A	2 * 15 A
Max. Short Circuit Current	2 * 20 A	2 * 20 A	2 * 20 A	2 * 20 A
Start Input Voltage	180 V	180 V	180 V	180 V
MPPT Operating Voltage Range	160V - 1000V	160V - 1000V	160V - 1000V	160V - 1000V
Max. Number of PV Strings	2 (1/1)	2 (1/1)	2 (1/1)	2 (1/1)
No. of MPPTs	2	2	2	2
Output (Grid)				
Rated AC Active Power	5000 W	6000 W	8000 W	10000 W
Max. AC Apparent Power	5500 VA	6600 VA	8800 VA	11000 VA
Max. AC Active Power (PF=1)	5500 W	6600 W	8800 W	11000 W
Max. AC Output Current	3*8,4A	3*10,1A	3*13,4A	3*16,8A
Rated AC Voltage	380V/400V/415V, 3W + N + PE	380V/400V/415V, 3W + N + PE	380V/400V/ 415V, 3W + N + PE	380V/400V/415V,3W + N + PE
AC Voltage Range (1)	260V - 510V (Adjustable)	260V - 510V (Adjustable)	260V - 510V (Adjustable)	260V - 510V (Adjustable)
Rated Grid Frequency	50 Hz / 60 Hz	50 Hz / 60 Hz	50 Hz / 60 Hz	50 Hz / 60 Hz
Grid Frequency Range (2)	45Hz-55Hz / 55 Hz-65 Hz (Adjustable)	45Hz-55Hz / 55 Hz-65 Hz (Adjustable)	45Hz-55Hz / 55 Hz-65 Hz (Adjustable)	45Hz-55Hz / 55 Hz-65 Hz (Adjustable)
THDI	<3% @Rated Power	<3% @Rated Power	<3% @Rated Power	<3% @Rated Power
DC Current Injection	<0,5% @Rated Current	<0,5% @Rated Current	<0.5% @Rated Current	<0,5% @Rated Current
Power Factor	>0,99 Rated Power (Adjustable 0,8 LD-0,8 LG)	>0,99 Rated Power (Adjustable 0,8 LD-0,8 LG)	>0.99 Rated Power (Adjustable 0,8 LD-0,8 LG)	>0,99 Rated Power (Adjustable 0,8 LD-0,8 LG)

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<i>General</i>		<i>Packaging & logistics</i>	
Topology	Transformerless	Carton packaging dimension (W x H x D)	500 x 470 x 361 mm
IP Rating	IP66	G.W. (Gross Weight)	26,5
Night Self Consumption	< 1 W	Qty per pallet (pcs)	8+12
Cooling	Natural Cooling	Pallet Dimension (W x H x D)	1200 x 1000 x 2063 mm
Operating Temperature Range	-25°C - 60°C	Pallet m ³ (CBM)	2,5 m ³
Relative Humidity Range	0 - 100 %	20 ft cont. Pallet Qty (Plt) / product Qty (pcs)	20 pallets / 180 pallets
Max. Operating Altitude	4000 m	40 ft cont. Pallet Qty (Plt) / product Qty (pcs)	40 pallets / 400 pallets
Noise (typical)	<30 dB		
Dimensions (W x H x D)	398 x 460 x 190 mm		
N.W. (Netto Weight)	23 kg		



Protection

DC switch	Support
Anti-islanding protection	Support
AC Overcurrent protection	Support
AC short current protection	Support
DC reverse connection	Support
Surge Arrester	AC Type III (Type II optional) / DC Type III (Type II Optional)
Insulation detection	Support
Leakage current protection	Support

HMI & COM

Display	Wireless & APP + LED, LCD (Optional)
Communication	RS485, Optional WiFi / GPRS / 4G

Warranty

5 years, 10 years when installed by
Darwin registered installer

Certification

Safety	IEC62109-1, IEC62109-2
Grid Code	VDE-AR-N 4105, EN 50549-1, CEI 0-21, UNE 206006/206007-1, UNE 217001 IEC 61727/62116, AS4777.2

