

### SINVERT 60 M

#### Description:

Power conditioning unit with three-phase output for grid parallel operation; consisting of IGBT inverter, DC/AC distribution, isolating transformer and SIMATIC S7 controller; MPP tracking for optimum utilisation of PV field power; VAR control in three-phase network (optional); integrated control panel with display of operating states and actual values; manual/automatic switch-over by integrated key-switch; isolation monitoring with selective fault allocation and safety disconnection; visualization and service software PowerProtect solar; interface for process visualization and integration in management systems via Ethernet (optional), for example for WinCC; Data logger with mini webserver (optional); cabinets for floor mounting; forced ventilation by fan; air intake through lower cabinet front and cabinet bottom; air discharge through the cabinet roof; cable entry at base from below. According standard EN 60439-1.

#### Technical data:

Grid interface	3~ 230/400 V; 50 Hz	
Rated output power (AC)	65 kVA	(at 450 V DC, 30 °C, cos phi = 1)
Rated output current (AC)	94 A	
MPP voltage range (DC)	450 - 750 V	
Maximum system voltage (DC)	900 V	(no inverter operation)
Rated input power (DC)	68 kW	(at 450 V DC)
Rated input current (DC)	149 A	
Number of DC inputs	2	
Maximum current per DC input	80 A	
Eta EU	94,1 %	
Eta max	95,7 %	
Power consumption at night	15 W	
Max. current auxiliary power (AC)	2 A (optional)	(per machine)
Number of machines	1	
Dimension (H x W x D)	1902 x 918 x 834 mm	(per machine)
Weight	690 kg	(per machine)
Colour	ergogrey (RAL 7044)	
Temperature range	0 - 50 °C	(up to 1000 m above sea level)
Air consumption	1500 m <sup>3</sup> /h	(per machine)
Climate rating	EN 60721-3-3 (3K3)	
Degree of protection	IP 20	
Noise level	< 65 dB (A)	(per machine)
EMC - immunity	EN 61000-6-2	
EMC - emission	EN 61000-6-4	
Harmonics	EN 61000-3-4	

### SINVERT 80 M LV

#### Description:

Power conditioning unit with three-phase output for grid parallel operation; consisting of IGBT inverter, DC/AC distribution, isolating transformer and SIMATIC S7 controller; MPP tracking for optimum utilisation of PV field power; VAR control in three-phase network (optional); integrated control panel with display of operating states and actual values; manual/automatic switch-over by integrated key-switch; isolation monitoring with selective fault allocation and safety disconnection; visualization and service software PowerProtect solar; interface for process visualization and integration in management systems via Ethernet (optional), for example for WinCC; Data logger with mini webserver (optional); cabinets for floor mounting; forced ventilation by fan; air intake through lower cabinet front and cabinet bottom; air discharge through the cabinet roof; cable entry at base from below. According standard EN 60439-1.

#### Technical data:

Grid interface	3~ 230/400 V; 50 Hz	
Rated output power (AC)	77 kVA	(at 350 V DC, 35 °C, cos phi = 1)
Rated output current (AC)	111 A	
MPP voltage range (DC)	350 - 750 V	
Maximum system voltage (DC)	900 V	(no inverter operation)
Rated input power (DC)	80 kW	(at 350 V DC)
Rated input current (DC)	176 A	
Number of DC inputs	3	
Maximum current per DC input	80 A	
Eta EU	92,4 %	
Eta max	96,2 %	
Power consumption at night	15 W	
Max. current auxiliary power (AC)	2 A (optional)	(per machine)
Number of machines	1	
Dimension (H x W x D)	1902 x 918 x 834 mm	(per machine)
Weight	830 kg	(per machine)
Colour	ergogrey (RAL 7044)	
Temperature range	0 - 50 °C	(up to 1000 m above sea level)
Air consumption	1500 m <sup>3</sup> /h	(per machine)
Climate rating	EN 60721-3-3 (3K3)	
Degree of protection	IP 20	
Noise level	< 66 dB (A)	(per machine)
EMC - immunity	EN 61000-6-2	
EMC - emission	EN 61000-6-4	
Harmonics	EN 61000-3-4	

### SINVERT 100 M - 1DC

#### Description:

Power conditioning unit with three-phase output for grid parallel operation; consisting of IGBT inverter, DC/AC distribution, isolating transformer and SIMATIC S7 controller; MPP tracking for optimum utilisation of PV field power; VAR control in three-phase network (optional); integrated control panel with display of operating states and actual values; manual/automatic switch-over by integrated key-switch; isolation monitoring with selective fault allocation and safety disconnection; visualization and service software PowerProtect solar; interface for process visualization and integration in management systems via Ethernet (optional), for example for WinCC; Data logger with mini webserver (optional); cabinets for floor mounting; forced ventilation by fan; air intake through lower cabinet front and cabinet bottom; air discharge through the cabinet roof; cable entry at base from below. According standard EN 60439-1.

#### Technical data:

Grid interface	3~ 230/400 V; 50 Hz	
Rated output power (AC)	105 kVA	(at 450 V DC, 35 °C, cos phi = 1)
Rated output current (AC)	153 A	
MPP voltage range (DC)	450 - 750 V	
Maximum system voltage (DC)	900 V	(no inverter operation)
Rated input power (DC)	111 kW	(at 450 V DC)
Rated input current (DC)	243 A	
Number of DC inputs	1	
Maximum current per DC input	250 A	
Eta EU	94,9 %	
Eta max	96,2 %	
Power consumption at night	15 W	
Max. current auxiliary power (AC)	2 A (optional)	(per machine)
Number of machines	1	
Dimension (H x W x D)	1902 x 918 x 834 mm	(per machine)
Weight	850 kg	(per machine)
Colour	ergogrey (RAL 7044)	
Temperature range	0 - 50 °C	(up to 1000 m above sea level)
Air consumption	1500 m <sup>3</sup> /h	(per machine)
Climate rating	EN 60721-3-3 (3K3)	
Degree of protection	IP 20	
Noise level	< 66 dB (A)	(per machine)
EMC - immunity	EN 61000-6-2	
EMC - emission	EN 61000-6-4	
Harmonics	EN 61000-3-4	

### SINVERT 100 M - 3DC

#### Description:

Power conditioning unit with three-phase output for grid parallel operation; consisting of IGBT inverter, DC/AC distribution, isolating transformer and SIMATIC S7 controller; MPP tracking for optimum utilisation of PV field power; VAR control in three-phase network (optional); integrated control panel with display of operating states and actual values; manual/automatic switch-over by integrated key-switch; isolation monitoring with selective fault allocation and safety disconnection; visualization and service software PowerProtect solar; interface for process visualization and integration in management systems via Ethernet (optional), for example for WinCC; Data logger with mini webserver (optional); cabinets for floor mounting; forced ventilation by fan; air intake through lower cabinet front and cabinet bottom; air discharge through the cabinet roof; cable entry at base from below. According standard EN 60439-1.

#### Technical data:

Grid interface	3~ 230/400 V; 50 Hz	
Rated output power (AC)	105 kVA	(at 450 V DC, 35 °C, cos phi = 1)
Rated output current (AC)	153 A	
MPP voltage range (DC)	450 - 750 V	
Maximum system voltage (DC)	900 V	(no inverter operation)
Rated input power (DC)	111 kW	(at 450 V DC)
Rated input current (DC)	243 A	
Number of DC inputs	3	
Maximum current per DC input	80 A	
Eta EU	94,9 %	
Eta max	96,2 %	
Power consumption at night	15 W	
Max. current auxiliary power (AC)	2 A (optional)	(per machine)
Number of machines	1	
Dimension (H x W x D)	1902 x 918 x 834 mm	(per machine)
Weight	850 kg	(per machine)
Colour	ergogrey (RAL 7044)	
Temperature range	0 - 50 °C	(up to 1000 m above sea level)
Air consumption	1500 m <sup>3</sup> /h	(per machine)
Climate rating	EN 60721-3-3 (3K3)	
Degree of protection	IP 20	
Noise level	< 66 dB (A)	(per machine)
EMC - immunity	EN 61000-6-2	
EMC - emission	EN 61000-6-4	
Harmonics	EN 61000-3-4	

### SINVERT 160 MS LV

#### Description:

Power conditioning unit with three-phase output for grid parallel operation; consisting of IGBT inverter, DC/AC distribution, isolating transformer and SIMATIC S7 controller; MPP tracking for optimum utilisation of PV field power; VAR control in three-phase network (optional); integrated control panel with display of operating states and actual values; manual/automatic switch-over by integrated key-switch; isolation monitoring with selective fault allocation and safety disconnection; visualization and service software PowerProtect solar; interface for process visualization and integration in management systems via Ethernet (optional), for example for WinCC; Data logger with mini webserver (optional); cabinets for floor mounting; forced ventilation by fan; air intake through lower cabinet front and cabinet bottom; air discharge through the cabinet roof; cable entry at base from below. According standard EN 60439-1.

#### Technical data:

Grid interface	3~ 230/400 V; 50 Hz	
Rated output power (AC)	154 kVA	(at 350 V DC, 35 °C, cos phi = 1)
Rated output current (AC)	222 A	
MPP voltage range (DC)	350 - 750 V	
Maximum system voltage (DC)	900 V	(no inverter operation)
Rated input power (DC)	160 kW	(at 350 V DC)
Rated input current (DC)	352 A	
Number of DC inputs	6	
Maximum current per DC input	80 A	
Eta EU	93,2 %	
Eta max	96,2 %	
Power consumption at night	25 W	
Max. current auxiliary power (AC)	2 A (optional)	(per machine)
Number of machines	2	
Dimension (H x W x D)	1902 x 918 x 834 mm	(per machine)
Weight	830 kg	(per machine)
Colour	ergogrey (RAL 7044)	
Temperature range	0 - 50 °C	(up to 1000 m above sea level)
Air consumption	1500 m <sup>3</sup> /h	(per machine)
Climate rating	EN 60721-3-3 (3K3)	
Degree of protection	IP 20	
Noise level	< 66 dB (A)	(per machine)
EMC - immunity	EN 61000-6-2	
EMC - emission	EN 61000-6-4	
Harmonics	EN 61000-3-4	

### SINVERT 200 MS - 2DC

#### Description:

Power conditioning unit with three-phase output for grid parallel operation; consisting of IGBT inverter, DC/AC distribution, isolating transformer and SIMATIC S7 controller; MPP tracking for optimum utilisation of PV field power; VAR control in three-phase network (optional); integrated control panel with display of operating states and actual values; manual/automatic switch-over by integrated key-switch; isolation monitoring with selective fault allocation and safety disconnection; visualization and service software PowerProtect solar; interface for process visualization and integration in management systems via Ethernet (optional), for example for WinCC; Data logger with mini webserver (optional); cabinets for floor mounting; forced ventilation by fan; air intake through lower cabinet front and cabinet bottom; air discharge through the cabinet roof; cable entry at base from below. According standard EN 60439-1.

#### Technical data:

Grid interface	3~ 230/400 V; 50 Hz	
Rated output power (AC)	210 kVA	(at 450 V DC, 35 °C, cos phi = 1)
Rated output current (AC)	306 A	
MPP voltage range (DC)	450 - 750 V	
Maximum system voltage (DC)	900 V	(no inverter operation)
Rated input power (DC)	222 kW	(at 450 V DC)
Rated input current (DC)	486 A	
Number of DC inputs	2	
Maximum current per DC input	250 A	
Eta EU	95,6 %	
Eta max	96,2 %	
Power consumption at night	25 W	
Max. current auxiliary power (AC)	2 A (optional)	(per machine)
Number of machines	2	
Dimension (H x W x D)	1902 x 918 x 834 mm	(per machine)
Weight	850 kg	(per machine)
Colour	ergogrey (RAL 7044)	
Temperature range	0 - 50 °C	(up to 1000 m above sea level)
Air consumption	1500 m <sup>3</sup> /h	(per machine)
Climate rating	EN 60721-3-3 (3K3)	
Degree of protection	IP 20	
Noise level	< 66 dB (A)	(per machine)
EMC - immunity	EN 61000-6-2	
EMC - emission	EN 61000-6-4	
Harmonics	EN 61000-3-4	

### SINVERT 200 MS - 6DC

#### Description:

Power conditioning unit with three-phase output for grid parallel operation; consisting of IGBT inverter, DC/AC distribution, isolating transformer and SIMATIC S7 controller; MPP tracking for optimum utilisation of PV field power; VAR control in three-phase network (optional); integrated control panel with display of operating states and actual values; manual/automatic switch-over by integrated key-switch; isolation monitoring with selective fault allocation and safety disconnection; visualization and service software PowerProtect solar; interface for process visualization and integration in management systems via Ethernet (optional), for example for WinCC; Data logger with mini webserver (optional); cabinets for floor mounting; forced ventilation by fan; air intake through lower cabinet front and cabinet bottom; air discharge through the cabinet roof; cable entry at base from below. According standard EN 60439-1.

#### Technical data:

Grid interface	3~ 230/400 V; 50 Hz	
Rated output power (AC)	210 kVA	(at 450 V DC, 35 °C, cos phi = 1)
Rated output current (AC)	306 A	
MPP voltage range (DC)	450 - 750 V	
Maximum system voltage (DC)	900 V	(no inverter operation)
Rated input power (DC)	222 kW	(at 450 V DC)
Rated input current (DC)	486 A	
Number of DC inputs	6	
Maximum current per DC input	80 A	
Eta EU	95,6 %	
Eta max	96,2 %	
Power consumption at night	25 W	
Max. current auxiliary power (AC)	2 A (optional)	(per machine)
Number of machines	2	
Dimension (H x W x D)	1902 x 918 x 834 mm	(per machine)
Weight	850 kg	(per machine)
Colour	ergogrey (RAL 7044)	
Temperature range	0 - 50 °C	(up to 1000 m above sea level)
Air consumption	1500 m <sup>3</sup> /h	(per machine)
Climate rating	EN 60721-3-3 (3K3)	
Degree of protection	IP 20	
Noise level	< 66 dB (A)	(per machine)
EMC - immunity	EN 61000-6-2	
EMC - emission	EN 61000-6-4	
Harmonics	EN 61000-3-4	

### SINVERT 240 MS LV

#### Description:

Power conditioning unit with three-phase output for grid parallel operation; consisting of IGBT inverter, DC/AC distribution, isolating transformer and SIMATIC S7 controller; MPP tracking for optimum utilisation of PV field power; VAR control in three-phase network (optional); integrated control panel with display of operating states and actual values; manual/automatic switch-over by integrated key-switch; isolation monitoring with selective fault allocation and safety disconnection; visualization and service software PowerProtect solar; interface for process visualization and integration in management systems via Ethernet (optional), for example for WinCC; Data logger with mini webserver (optional); cabinets for floor mounting; forced ventilation by fan; air intake through lower cabinet front and cabinet bottom; air discharge through the cabinet roof; cable entry at base from below. According standard EN 60439-1.

#### Technical data:

Grid interface	3~ 230/400 V; 50 Hz	
Rated output power (AC)	231 kVA	(at 350 V DC, 35 °C, cos phi = 1)
Rated output current (AC)	333 A	
MPP voltage range (DC)	350 - 750 V	
Maximum system voltage (DC)	900 V	(no inverter operation)
Rated input power (DC)	240 kW	(at 350 V DC)
Rated input current (DC)	528 A	
Number of DC inputs	9	
Maximum current per DC input	80 A	
Eta EU	93,3 %	
Eta max	96,2 %	
Power consumption at night	35 W	
Max. current auxiliary power (AC)	2 A (optional)	(per machine)
Number of machines	3	
Dimension (H x W x D)	1902 x 918 x 834 mm	(per machine)
Weight	830 kg	(per machine)
Colour	ergogrey (RAL 7044)	
Temperature range	0 - 50 °C	(up to 1000 m above sea level)
Air consumption	1500 m <sup>3</sup> /h	(per machine)
Climate rating	EN 60721-3-3 (3K3)	
Degree of protection	IP 20	
Noise level	< 66 dB (A)	(per machine)
EMC - immunity	EN 61000-6-2	
EMC - emission	EN 61000-6-4	
Harmonics	EN 61000-3-4	

### SINVERT 300 MS - 3DC

#### Description:

Power conditioning unit with three-phase output for grid parallel operation; consisting of IGBT inverter, DC/AC distribution, isolating transformer and SIMATIC S7 controller; MPP tracking for optimum utilisation of PV field power; VAR control in three-phase network (optional); integrated control panel with display of operating states and actual values; manual/automatic switch-over by integrated key-switch; isolation monitoring with selective fault allocation and safety disconnection; visualization and service software PowerProtect solar; interface for process visualization and integration in management systems via Ethernet (optional), for example for WinCC; Data logger with mini webserver (optional); cabinets for floor mounting; forced ventilation by fan; air intake through lower cabinet front and cabinet bottom; air discharge through the cabinet roof; cable entry at base from below. According standard EN 60439-1.

#### Technical data:

Grid interface	3~ 230/400 V; 50 Hz	
Rated output power (AC)	315 kVA	(at 450 V DC, 35 °C, cos phi = 1)
Rated output current (AC)	459 A	
MPP voltage range (DC)	450 - 750 V	
Maximum system voltage (DC)	900 V	(no inverter operation)
Rated input power (DC)	333 kW	(at 450 V DC)
Rated input current (DC)	729 A	
Number of DC inputs	3	
Maximum current per DC input	250 A	
Eta EU	95,7 %	
Eta max	96,2 %	
Power consumption at night	35 W	
Max. current auxiliary power (AC)	2 A (optional)	(per machine)
Number of machines	3	
Dimension (H x W x D)	1902 x 918 x 834 mm	(per machine)
Weight	850 kg	(per machine)
Colour	ergogrey (RAL 7044)	
Temperature range	0 - 50 °C	(up to 1000 m above sea level)
Air consumption	1500 m <sup>3</sup> /h	(per machine)
Climate rating	EN 60721-3-3 (3K3)	
Degree of protection	IP 20	
Noise level	< 66 dB (A)	(per machine)
EMC - immunity	EN 61000-6-2	
EMC - emission	EN 61000-6-4	
Harmonics	EN 61000-3-4	

### SINVERT 300 MS - 9DC

#### Description:

Power conditioning unit with three-phase output for grid parallel operation; consisting of IGBT inverter, DC/AC distribution, isolating transformer and SIMATIC S7 controller; MPP tracking for optimum utilisation of PV field power; VAR control in three-phase network (optional); integrated control panel with display of operating states and actual values; manual/automatic switch-over by integrated key-switch; isolation monitoring with selective fault allocation and safety disconnection; visualization and service software PowerProtect solar; interface for process visualization and integration in management systems via Ethernet (optional), for example for WinCC; Data logger with mini webserver (optional); cabinets for floor mounting; forced ventilation by fan; air intake through lower cabinet front and cabinet bottom; air discharge through the cabinet roof; cable entry at base from below. According standard EN 60439-1.

#### Technical data:

Grid interface	3~ 230/400 V; 50 Hz	
Rated output power (AC)	315 kVA	(at 450 V DC, 35 °C, cos phi = 1)
Rated output current (AC)	459 A	
MPP voltage range (DC)	450 - 750 V	
Maximum system voltage (DC)	900 V	(no inverter operation)
Rated input power (DC)	333 kW	(at 450 V DC)
Rated input current (DC)	729 A	
Number of DC inputs	9	
Maximum current per DC input	80 A	
Eta EU	95,7 %	
Eta max	96,2 %	
Power consumption at night	35 W	
Max. current auxiliary power (AC)	2 A (optional)	(per machine)
Number of machines	3	
Dimension (H x W x D)	1902 x 918 x 834 mm	(per machine)
Weight	850 kg	(per machine)
Colour	ergogrey (RAL 7044)	
Temperature range	0 - 50 °C	(up to 1000 m above sea level)
Air consumption	1500 m <sup>3</sup> /h	(per machine)
Climate rating	EN 60721-3-3 (3K3)	
Degree of protection	IP 20	
Noise level	< 66 dB (A)	(per machine)
EMC - immunity	EN 61000-6-2	
EMC - emission	EN 61000-6-4	
Harmonics	EN 61000-3-4	

### SINVERT 350 M

#### Description:

Power conditioning unit with three-phase output for grid parallel operation; consisting of IGBT inverter, DC/AC distribution, isolating transformer and SIMATIC S7 controller; MPP tracking for optimum utilisation of PV field power; VAR control in three-phase network (optional); integrated control panel with display of operating states and actual values; manual/automatic switch-over by integrated key-switch; isolation monitoring with selective fault allocation and safety disconnection; visualization and service software PowerProtect solar; interface for process visualization and integration in management systems via Ethernet (optional), for example for WinCC; Data logger with mini webserver (optional); cabinets for floor mounting; forced ventilation by fan; air intake through the cabinet bottom; air discharge through the cabinet roof; cable entry at base from below. According standard EN 60439-1.

#### Technical data:

Grid interface	3~ 230/400 V; 50 Hz	
Rated output power (AC)	358 kVA	(at 450 V DC, 30 °C, cos phi = 1)
Rated output current (AC)	516 A	
MPP voltage range (DC)	450 - 750 V	
Maximum system voltage (DC)	900 V	(no inverter operation)
Rated input power (DC)	372 kW	(at 450 V DC)
Rated input current (DC)	828 A	
Number of DC inputs	4	
Maximum current per DC input	250 A	
Eta EU	95,5 %	
Eta max	96,5 %	
Power consumption at night	15 W	
Max. current auxiliary power (AC)	6 A (optional)	(per machine)
Number of machines	1	
Dimension (H x W x D)	2002 x 2718 x 834 mm	(per machine)
Weight	2025 kg	(per machine)
Colour	light grey (RAL 7035)	
Temperature range	0 - 50 °C	(up to 1000 m above sea level)
Air consumption	5400 m <sup>3</sup> /h	(per machine)
Climate rating	EN 60721-3-3 (3K3)	
Degree of protection	IP 20	
Noise level	< 78 dB (A)	(per machine)
EMC - immunity	EN 61000-6-2	
EMC - emission	EN 61000-6-4	
Harmonics	EN 61000-3-4	

### SINVERT 400 MS - 4DC

#### Description:

Power conditioning unit with three-phase output for grid parallel operation; consisting of IGBT inverter, DC/AC distribution, isolating transformer and SIMATIC S7 controller; MPP tracking for optimum utilisation of PV field power; VAR control in three-phase network (optional); integrated control panel with display of operating states and actual values; manual/automatic switch-over by integrated key-switch; isolation monitoring with selective fault allocation and safety disconnection; visualization and service software PowerProtect solar; interface for process visualization and integration in management systems via Ethernet (optional), for example for WinCC; Data logger with mini webserver (optional); cabinets for floor mounting; forced ventilation by fan; air intake through lower cabinet front and cabinet bottom; air discharge through the cabinet roof; cable entry at base from below. According standard EN 60439-1.

#### Technical data:

Grid interface	3~ 230/400 V; 50 Hz	
Rated output power (AC)	420 kVA	(at 450 V DC, 35 °C, cos phi = 1)
Rated output current (AC)	612 A	
MPP voltage range (DC)	450 - 750 V	
Maximum system voltage (DC)	900 V	(no inverter operation)
Rated input power (DC)	444 kW	(at 450 V DC)
Rated input current (DC)	972 A	
Number of DC inputs	4	
Maximum current per DC input	250 A	
Eta EU	95,8 %	
Eta max	96,2 %	
Power consumption at night	45 W	
Max. current auxiliary power (AC)	2 A (optional)	(per machine)
Number of machines	4	
Dimension (H x W x D)	1902 x 918 x 834 mm	(per machine)
Weight	850 kg	(per machine)
Colour	ergogrey (RAL 7044)	
Temperature range	0 - 50 °C	(up to 1000 m above sea level)
Air consumption	1500 m <sup>3</sup> /h	(per machine)
Climate rating	EN 60721-3-3 (3K3)	
Degree of protection	IP 20	
Noise level	< 66 dB (A)	(per machine)
EMC - immunity	EN 61000-6-2	
EMC - emission	EN 61000-6-4	
Harmonics	EN 61000-3-4	

### SINVERT 400 MS - 12DC

#### Description:

Power conditioning unit with three-phase output for grid parallel operation; consisting of IGBT inverter, DC/AC distribution, isolating transformer and SIMATIC S7 controller; MPP tracking for optimum utilisation of PV field power; VAR control in three-phase network (optional); integrated control panel with display of operating states and actual values; manual/automatic switch-over by integrated key-switch; isolation monitoring with selective fault allocation and safety disconnection; visualization and service software PowerProtect solar; interface for process visualization and integration in management systems via Ethernet (optional), for example for WinCC; Data logger with mini webserver (optional); cabinets for floor mounting; forced ventilation by fan; air intake through lower cabinet front and cabinet bottom; air discharge through the cabinet roof; cable entry at base from below. According standard EN 60439-1.

#### Technical data:

Grid interface	3~ 230/400 V; 50 Hz	
Rated output power (AC)	420 kVA	(at 450 V DC, 35 °C, cos phi = 1)
Rated output current (AC)	612 A	
MPP voltage range (DC)	450 - 750 V	
Maximum system voltage (DC)	900 V	(no inverter operation)
Rated input power (DC)	444 kW	(at 450 V DC)
Rated input current (DC)	972 A	
Number of DC inputs	12	
Maximum current per DC input	80 A	
Eta EU	95,8 %	
Eta max	96,2 %	
Power consumption at night	45 W	
Max. current auxiliary power (AC)	2 A (optional)	(per machine)
Number of machines	4	
Dimension (H x W x D)	1902 x 918 x 834 mm	(per machine)
Weight	850 kg	(per machine)
Colour	ergogrey (RAL 7044)	
Temperature range	0 - 50 °C	(up to 1000 m above sea level)
Air consumption	1500 m <sup>3</sup> /h	(per machine)
Climate rating	EN 60721-3-3 (3K3)	
Degree of protection	IP 20	
Noise level	< 66 dB (A)	(per machine)
EMC - immunity	EN 61000-6-2	
EMC - emission	EN 61000-6-4	
Harmonics	EN 61000-3-4	

### SINVERT 420 M

#### Description:

Power conditioning unit with three-phase output for grid parallel operation; consisting of IGBT inverter, DC/AC distribution, isolating transformer and SIMATIC S7 controller; MPP tracking for optimum utilisation of PV field power; VAR control in three-phase network (optional); integrated control panel with display of operating states and actual values; manual/automatic switch-over by integrated key-switch; isolation monitoring with selective fault allocation and safety disconnection; visualization and service software PowerProtect solar; interface for process visualization and integration in management systems via Ethernet (optional), for example for WinCC; Data logger with mini webserver (optional); cabinets for floor mounting; forced ventilation by fan; air intake through the cabinet bottom; air discharge through the cabinet roof; cable entry at base from below. According standard EN 60439-1.

#### Technical data:

Grid interface	3~ 230/400 V; 50 Hz	
Rated output power (AC)	435 kVA	(at 470 V DC, 30 °C, cos phi = 1)
Rated output current (AC)	630 A	
MPP voltage range (DC)	450 - 750 V	
Maximum system voltage (DC)	900 V	(no inverter operation)
Rated input power (DC)	465 kW	(at 470 V DC)
Rated input current (DC)	1022 A	
Number of DC inputs	4	
Maximum current per DC input	250 A	
Eta EU	95,7 %	
Eta max	96,5 %	
Power consumption at night	15 W	
Max. current auxiliary power (AC)	8 A (optional)	(per machine)
Number of machines	1	
Dimension (H x W x D)	2002 x 2718 x 834 mm	(per machine)
Weight	2540 kg	(per machine)
Colour	light grey (RAL 7035)	
Temperature range	0 - 50 °C	(up to 1000 m above sea level)
Air consumption	6000 m <sup>3</sup> /h	(per machine)
Climate rating	EN 60721-3-3 (3K3)	
Degree of protection	IP 20	
Noise level	< 80 dB (A)	(per machine)
EMC - immunity	EN 61000-6-2	
EMC - emission	EN 61000-6-4	
Harmonics	EN 61000-3-4	

### SINVERT 700 MS

#### Description:

Power conditioning unit with three-phase output for grid parallel operation; consisting of IGBT inverter, DC/AC distribution, isolating transformer and SIMATIC S7 controller; MPP tracking for optimum utilisation of PV field power; VAR control in three-phase network (optional); integrated control panel with display of operating states and actual values; manual/automatic switch-over by integrated key-switch; isolation monitoring with selective fault allocation and safety disconnection; visualization and service software PowerProtect solar; interface for process visualization and integration in management systems via Ethernet (optional), for example for WinCC; Data logger with mini webserver (optional); cabinets for floor mounting; forced ventilation by fan; air intake through the cabinet bottom; air discharge through the cabinet roof; cable entry at base from below. According standard EN 60439-1.

#### Technical data:

Grid interface	3~ 230/400 V; 50 Hz	
Rated output power (AC)	716 kVA	(at 450 V DC, 30 °C, cos phi = 1)
Rated output current (AC)	1032 A	
MPP voltage range (DC)	450 - 750 V	
Maximum system voltage (DC)	900 V	(no inverter operation)
Rated input power (DC)	744 kW	(at 450 V DC)
Rated input current (DC)	1656 A	
Number of DC inputs	8	
Maximum current per DC input	250 A	
Eta EU	96 %	
Eta max	96,5 %	
Power consumption at night	25 W	
Max. current auxiliary power (AC)	6 A (optional)	(per machine)
Number of machines	2	
Dimension (H x W x D)	2002 x 2718 x 834 mm	(per machine)
Weight	2025 kg	(per machine)
Colour	light grey (RAL 7035)	
Temperature range	0 - 50 °C	(up to 1000 m above sea level)
Air consumption	5400 m <sup>3</sup> /h	(per machine)
Climate rating	EN 60721-3-3 (3K3)	
Degree of protection	IP 20	
Noise level	< 78 dB (A)	(per machine)
EMC - immunity	EN 61000-6-2	
EMC - emission	EN 61000-6-4	
Harmonics	EN 61000-3-4	

### SINVERT 850 MS

#### Description:

Power conditioning unit with three-phase output for grid parallel operation; consisting of IGBT inverter, DC/AC distribution, isolating transformer and SIMATIC S7 controller; MPP tracking for optimum utilisation of PV field power; VAR control in three-phase network (optional); integrated control panel with display of operating states and actual values; manual/automatic switch-over by integrated key-switch; isolation monitoring with selective fault allocation and safety disconnection; visualization and service software PowerProtect solar; interface for process visualization and integration in management systems via Ethernet (optional), for example for WinCC; Data logger with mini webserver (optional); cabinets for floor mounting; forced ventilation by fan; air intake through the cabinet bottom; air discharge through the cabinet roof; cable entry at base from below. According standard EN 60439-1.

#### Technical data:

Grid interface	3~ 230/400 V; 50 Hz	
Rated output power (AC)	870 kVA	(at 470 V DC, 30 °C, cos phi = 1)
Rated output current (AC)	1260 A	
MPP voltage range (DC)	450 - 750 V	
Maximum system voltage (DC)	900 V	(no inverter operation)
Rated input power (DC)	930 kW	(at 470 V DC)
Rated input current (DC)	2044 A	
Number of DC inputs	8	
Maximum current per DC input	250 A	
Eta EU	96,2 %	
Eta max	96,5 %	
Power consumption at night	25 W	
Max. current auxiliary power (AC)	8 A (optional)	(per machine)
Number of machines	2	
Dimension (H x W x D)	2002 x 2718 x 834 mm	(per machine)
Weight	2540 kg	(per machine)
Colour	light grey (RAL 7035)	
Temperature range	0 - 50 °C	(up to 1000 m above sea level)
Air consumption	6000 m <sup>3</sup> /h	(per machine)
Climate rating	EN 60721-3-3 (3K3)	
Degree of protection	IP 20	
Noise level	< 80 dB (A)	(per machine)
EMC - immunity	EN 61000-6-2	
EMC - emission	EN 61000-6-4	
Harmonics	EN 61000-3-4	

### SINVERT 1000 MS

#### Description:

Power conditioning unit with three-phase output for grid parallel operation; consisting of IGBT inverter, DC/AC distribution, isolating transformer and SIMATIC S7 controller; MPP tracking for optimum utilisation of PV field power; VAR control in three-phase network (optional); integrated control panel with display of operating states and actual values; manual/automatic switch-over by integrated key-switch; isolation monitoring with selective fault allocation and safety disconnection; visualization and service software PowerProtect solar; interface for process visualization and integration in management systems via Ethernet (optional), for example for WinCC; Data logger with mini webserver (optional); cabinets for floor mounting; forced ventilation by fan; air intake through the cabinet bottom; air discharge through the cabinet roof; cable entry at base from below. According standard EN 60439-1.

#### Technical data:

Grid interface	3~ 230/400 V; 50 Hz	
Rated output power (AC)	1074 kVA	(at 450 V DC, 30 °C, cos phi = 1)
Rated output current (AC)	1548 A	
MPP voltage range (DC)	450 - 750 V	
Maximum system voltage (DC)	900 V	(no inverter operation)
Rated input power (DC)	1116 kW	(at 450 V DC)
Rated input current (DC)	2484 A	
Number of DC inputs	12	
Maximum current per DC input	250 A	
Eta EU	96,1 %	
Eta max	96,5 %	
Power consumption at night	35 W	
Max. current auxiliary power (AC)	6 A (optional)	(per machine)
Number of machines	3	
Dimension (H x W x D)	2002 x 2718 x 834 mm	(per machine)
Weight	2025 kg	(per machine)
Colour	light grey (RAL 7035)	
Temperature range	0 - 50 °C	(up to 1000 m above sea level)
Air consumption	5400 m <sup>3</sup> /h	(per machine)
Climate rating	EN 60721-3-3 (3K3)	
Degree of protection	IP 20	
Noise level	< 78 dB (A)	(per machine)
EMC - immunity	EN 61000-6-2	
EMC - emission	EN 61000-6-4	
Harmonics	EN 61000-3-4	

### SINVERT 1300 MS

#### Description:

Power conditioning unit with three-phase output for grid parallel operation; consisting of IGBT inverter, DC/AC distribution, isolating transformer and SIMATIC S7 controller; MPP tracking for optimum utilisation of PV field power; VAR control in three-phase network (optional); integrated control panel with display of operating states and actual values; manual/automatic switch-over by integrated key-switch; isolation monitoring with selective fault allocation and safety disconnection; visualization and service software PowerProtect solar; interface for process visualization and integration in management systems via Ethernet (optional), for example for WinCC; Data logger with mini webserver (optional); cabinets for floor mounting; forced ventilation by fan; air intake through the cabinet bottom; air discharge through the cabinet roof; cable entry at base from below. According standard EN 60439-1.

#### Technical data:

Grid interface	3~ 230/400 V; 50 Hz	
Rated output power (AC)	1305 kVA	(at 470 V DC, 30 °C, cos phi = 1)
Rated output current (AC)	1890 A	
MPP voltage range (DC)	450 - 750 V	
Maximum system voltage (DC)	900 V	(no inverter operation)
Rated input power (DC)	1395 kW	(at 470 V DC)
Rated input current (DC)	3066 A	
Number of DC inputs	12	
Maximum current per DC input	250 A	
Eta EU	96,2 %	
Eta max	96,5 %	
Power consumption at night	35 W	
Max. current auxiliary power (AC)	8 A (optional)	(per machine)
Number of machines	3	
Dimension (H x W x D)	2002 x 2718 x 834 mm	(per machine)
Weight	2540 kg	(per machine)
Colour	light grey (RAL 7035)	
Temperature range	0 - 50 °C	(up to 1000 m above sea level)
Air consumption	6000 m <sup>3</sup> /h	(per machine)
Climate rating	EN 60721-3-3 (3K3)	
Degree of protection	IP 20	
Noise level	< 80 dB (A)	(per machine)
EMC - immunity	EN 61000-6-2	
EMC - emission	EN 61000-6-4	
Harmonics	EN 61000-3-4	

### SINVERT 1400 MS

#### Description:

Power conditioning unit with three-phase output for grid parallel operation; consisting of IGBT inverter, DC/AC distribution, isolating transformer and SIMATIC S7 controller; MPP tracking for optimum utilisation of PV field power; VAR control in three-phase network (optional); integrated control panel with display of operating states and actual values; manual/automatic switch-over by integrated key-switch; isolation monitoring with selective fault allocation and safety disconnection; visualization and service software PowerProtect solar; interface for process visualization and integration in management systems via Ethernet (optional), for example for WinCC; Data logger with mini webserver (optional); cabinets for floor mounting; forced ventilation by fan; air intake through the cabinet bottom; air discharge through the cabinet roof; cable entry at base from below. According standard EN 60439-1.

#### Technical data:

Grid interface	3~ 230/400 V; 50 Hz	
Rated output power (AC)	1432 kVA	(at 450 V DC, 30 °C, cos phi = 1)
Rated output current (AC)	2064 A	
MPP voltage range (DC)	450 - 750 V	
Maximum system voltage (DC)	900 V	(no inverter operation)
Rated input power (DC)	1488 kW	(at 450 V DC)
Rated input current (DC)	3312 A	
Number of DC inputs	16	
Maximum current per DC input	250 A	
Eta EU	96,1 %	
Eta max	96,5 %	
Power consumption at night	45 W	
Max. current auxiliary power (AC)	6 A (optional)	(per machine)
Number of machines	4	
Dimension (H x W x D)	2002 x 2718 x 834 mm	(per machine)
Weight	2025 kg	(per machine)
Colour	light grey (RAL 7035)	
Temperature range	0 - 50 °C	(up to 1000 m above sea level)
Air consumption	5400 m <sup>3</sup> /h	(per machine)
Climate rating	EN 60721-3-3 (3K3)	
Degree of protection	IP 20	
Noise level	< 78 dB (A)	(per machine)
EMC - immunity	EN 61000-6-2	
EMC - emission	EN 61000-6-4	
Harmonics	EN 61000-3-4	

### SINVERT 1700 MS

#### Description:

Power conditioning unit with three-phase output for grid parallel operation; consisting of IGBT inverter, DC/AC distribution, isolating transformer and SIMATIC S7 controller; MPP tracking for optimum utilisation of PV field power; VAR control in three-phase network (optional); integrated control panel with display of operating states and actual values; manual/automatic switch-over by integrated key-switch; isolation monitoring with selective fault allocation and safety disconnection; visualization and service software PowerProtect solar; interface for process visualization and integration in management systems via Ethernet (optional), for example for WinCC; Data logger with mini webserver (optional); cabinets for floor mounting; forced ventilation by fan; air intake through the cabinet bottom; air discharge through the cabinet roof; cable entry at base from below. According standard EN 60439-1.

#### Technical data:

Grid interface	3~ 230/400 V; 50 Hz	
Rated output power (AC)	1740 kVA	(at 470 V DC, 30 °C, cos phi = 1)
Rated output current (AC)	2520 A	
MPP voltage range (DC)	450 - 750 V	
Maximum system voltage (DC)	900 V	(no inverter operation)
Rated input power (DC)	1860 kW	(at 470 V DC)
Rated input current (DC)	4088 A	
Number of DC inputs	16	
Maximum current per DC input	250 A	
Eta EU	96,3 %	
Eta max	96,5 %	
Power consumption at night	45 W	
Max. current auxiliary power (AC)	8 A (optional)	(per machine)
Number of machines	4	
Dimension (H x W x D)	2002 x 2718 x 834 mm	(per machine)
Weight	2540 kg	(per machine)
Colour	light grey (RAL 7035)	
Temperature range	0 - 50 °C	(up to 1000 m above sea level)
Air consumption	6000 m <sup>3</sup> /h	(per machine)
Climate rating	EN 60721-3-3 (3K3)	
Degree of protection	IP 20	
Noise level	< 80 dB (A)	(per machine)
EMC - immunity	EN 61000-6-2	
EMC - emission	EN 61000-6-4	
Harmonics	EN 61000-3-4	