

MasterSol CS20TL



Central String inverter
with high efficiency

Outstanding
functional design

Fully compatible with
any type of PV module

Quick & straightforward
installation

Easy maintenance

Maximum efficiency functional design





MasterSol CS20TL: Central String inverter that fits your system

State-of-the-art specifications

Based on Mastervolt's experience, know how and ongoing development the MasterSol CS20TL provides you with a very high efficiency of more than 98%. Two MPP trackers and a broad input voltage range (1000 V) gives you ultimate flexibility when designing your system. For outdoor mounting the MasterSol is equipped with an IP65 sealed electronics compartment to provide optimal protection against water and dust. A clear, graphical display with 365 day datalogger informs you about performance and historical data.

Quick installation, easy maintenance

The MasterSol CS20TL comes with a waterproof AC plug for quick and flexible installation. The integrated handles assist you to move the CS20TL with great ease and assure simple installation. A mounting bracket for quick wall mounting is also included. Once the MasterSol CS20TL is installed it requires very little maintenance. The fan module is removable for easy cleaning; the communication drawer is fully removable for easy wiring.

Flexible and compatible

The MasterSol CS20TL is compatible with any type of PV module and with amorphous and thin-film solutions using optional transformers when required. The OPTIMA COOLING system provides improved efficiency and a long life. Two MPP trackers and a high input voltage provides optimal design flexibility and minimizes the number of strings.

Options

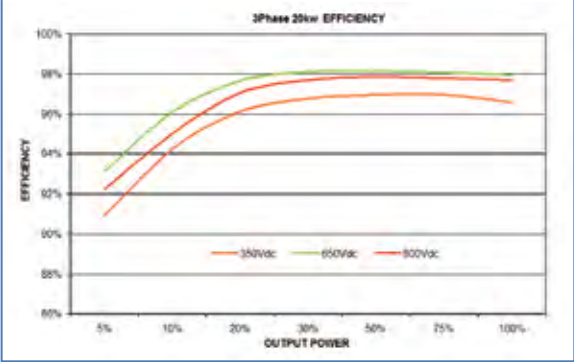
- DC distribution box with integrated DC switch and string current monitoring;
- Transformer option in ruggedized enclosure;
- Mastervolt monitoring solutions available.

More information?

Feel free to contact Mastervolt or one of our business partners, or visit www.mastervolt.com

MasterSol CS20TL

supreme benefits



High efficiency of > 98 %.



Mounting bracket: Quick and easy wall mounting.



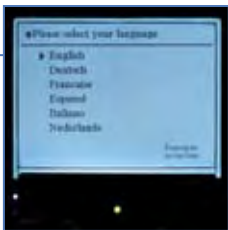
Integrated handles: Easy installation for two persons.



Sealed IP65 electronics compartment. The OPTIMA COOLING system improves efficiency.



Waterproof AC plug included for quick and flexible commissioning.



Graphical display with full datalogger functionality.



Removable communication drawer.



Easy maintenance: Removable fan module.



Full range of monitoring solutions available.

Technical specifications



MasterSol CS20TL

Article number

131200200

GENERAL

Operating temperature	-20 °C to 60 °C (full power up to 50 °C ambient)
Enclosure	powder coated aluminum
Protection degree	IP65 electronics for outdoor application
Relative humidity	0–90% non condensing, protective PCB coating
Safety class	class I
Galvanic isolation	no (optional transformer available)
Weight	65 kg
Dimensions (h x w x d)	1000 x 650 x 250 mm

SOLAR INPUT (DC)

Recommended PV power range	18–25 kWp
Maximum power	22 kW DC
Start-up power	20 W
Operating voltage	250–950 V
MPP voltage range @ nom. power	350–800 V
Nominal voltage	650 V
Absolute max. voltage	1000 V
Number of inputs	2 MPP trackers and 2 inputs 4 Multi Contact 4mm connectors
Rated current	2 x 30 A (can be paralleled)
Typical string configurations	4 inch: 5 or 6 strings per input 5 inch: 3 or 4 strings per input 6 inch: 2 or 3 strings per input
String connections	string (2x6) box with DC switch, string fuses, surge protection and string current (optional)
PV array grounding	yes with optional transformer box

GRID OUTPUT (AC)

Voltage	400 V x 3 Ph -20% / +20% (3-phase, 3 wire)
Nominal power	20 kW @ 400 V \pm 10%
Maximum power	21 kW
Nominal current	3 x 30 A
Frequency	50 Hz / 60 Hz
Power factor	> 0.99 at full power
Harmonic distortion	< 3%
DC current injection	disconnection
Stand-by power	< 2 W
EU efficiency	> 97%
Maximum efficiency	> 98%
AC connector	IP67 3-phase AC plug included 3 Ph + PE; suitable for 4 mm ² and 6 mm ²
Fuse	internal PCB fuses

REGULATIONS & DIRECTIVES

CE conformity	yes
Nat. grid requirements	VDEW; VDE0126-1-I; DK5940; RD1663; G59

SYSTEM INFORMATION / DIAGNOSTICS / COMMUNICATION

User interface	multi-language graphical LCD display
Diagnostics	365 days datalogger and real time clock
Communication	2x RS485 connections / MasterBus field service interface / MasterBus string box interface

Subject to alterations. For our complete product range please visit www.mastervolt.com