

TECHNICAL DATA SHEET

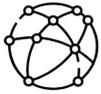
MODSECUR MT 60-200

TECHNOLOGY TRUE ON LINE Double Conversion

POWER RANGE 60 - 200 kVA/kW

NUMBER OF PHASES 3:3

APPLICATIONS



Large computer networks



Data processing centres



Industrial facilities and equipment



Laboratory equipment



Telecommunication



Automation and control systems



SPECIFICATION

Technology True On-Line Double Conversion provides excellent output voltage parameters regardless of power disturbances and the type of receivers being powered.

Rectifier IGBT the most advanced technology ensuring very low THDi and high power factor.

Modular hot swap design for both UPS power modules and a module bypass, allows maintenance or repair work without turning off the inverter. 30kW, 40kW and 50kW hot swappable power modules.

Automatic bypass - uninterrupted ensures uninterrupted power supply to critical loads such as overheating or failure.

Service bypass - enables servicing of devices without switching off powered receivers. Separate power supply Bypass track provides the ability to provide a reserve power source for receivers even in the event of a device failure or UPS protection in the main track.

Communication interfaces:

RS485, ModBus to monitor and manage the operation of the power supply and receivers; **DryContact** in/out relay contacts for cooperation with BMS systems; **SNMP** integration with NMS network management systems.

Remote switch connector against Fire (REPO) to ensure remote disconnection of power supply to receivers in the event of a fire.

Switch against Fire (EPO) on the control panel it enables immediate disconnection of power from the receivers.

Touch control and monitoring panel gives the possibility of diagnostics of parameters and operation mode of the power supply and enables registration of events. Available languages include Polish English.

Small dimensions, thanks to which a large space for installing the device is not required. Power packing at 211 kW / m2.

High efficiency of the device 96% It reduces the own losses of the device and reduces the heat emitted, making possible cooling of the rooms easier and cheaper. Compared to 80kVA devices with efficiency of 94%, annual savings of USD 7,000 are achieved (assuming energy prices of 0.5 USD / kWh).

ECO-Mode (HE) It allows for a significant reduction of the unit's operating costs and virtually eliminates heat emission.

Configured amount of batteries and charging current it enables precise selection of the required time of autonomy.

MODSECUR MT 60-200

Function Self-Aging allows you to test the device with full load, even without connected receivers.

Automatic diagnostics with FTM (Fault Trace Management) and fully digital control (32 bit DSP x2) guarantees full device efficiency, control of components and operating parameters without the need for user intervention.

High value of the input power factor limits the value of the current consumed by the device from the network.

Maximum value of the output power factor PF = 1 provides 20% more active power than standard solutions with PF = 0.8.

Maximum wide input voltage range -60% ÷ +25% in normal operation mode, it ensures stable operation of the device without the need to use batteries, which significantly affects the extension of their service life.

A wide range of input frequencies in the normal operation mode, it allows free use of the power supply in a network with unstable parameters and power supply from the generator set.

Simplicity of use ease of connection to the network and simple switching on and off of the device does not require special qualifications from the user.

Advanced battery management it guarantees optimal charging and use of batteries, increases their lifespan and lowers operating costs.

Excellent quality of output voltage achieved thanks to the use of the IGBT inverter using highly advanced PWM control technology, it provides voltage with stable parameters, regardless of the power disturbances and the type of powered equipment.

High overload provides device protection and continuity of power supply in the presence of transient transients, and reduces the need for oversizing the device in relation to the power of the receivers.

Advanced software allowing the user full control over the device and powered receivers.

Configurable work parameters nominal voltages, frequencies, preferred modes of operation, communication method - significantly broadens the range of possible applications.

Redundant configurations:

- redundant work for increased reliability
- capacitive parallel operation for increased power
- HotStandby operation (separated rectifier and bypass power supply)



MODSECUR MT 60-200

Model	MT60	MT80	MT100	MT120	MT160	MT200
Power	60kW	80kW	100kW	120kW	160kW	200kW

No. of phases in:out	3:3					
Hotswap power modules	30kVA/kW	40 kVA/kW	50 kVA/kW	40 kVA/kW	50 kVA/kW	

Input

Nominal Voltage	380 / 400 / 415 VAC					
Voltage range	92÷287 Vac (L-N) / 160÷500 Vac (L-L)					
Frequency	50/60 Hz					
Frequency range	-20% ÷ +20 %					
THDi	<3%					
Input power factor	>0,99					

Output

Nominal voltage	380 / 400 / 415 VAC					
Power factor	1,0					
Static/dynamic voltage regulation	±1% / ±3%					
THDu linear/not linear load	<1% / <3%					
Nominal frequency	50/60 Hz ±0,01 Hz					
Inverter overload resistance	105% - cont.; 115% - 60 min., 130% - 10 min., 150% - 60 sek., >151% - 0,2 sek.					
Efficiency in On-Line mode	96%					
Efficiency in Eco mode	99%					
Crest factor	3:1					

Battery

Type	Sealed maintenance-free VRLA					
No. of batteries in string	Configurable: 30 ÷ 40 psc					
Maximum charging current	20A	30A	40A	50A		
Charging time	3 - 8 hours to 90% capacity (configurable)					
Charging cycle	According to DIN 41773 with automatic shutdown of charging according to the criterion of current and voltage, with time					

Bypass

Automatic bypass	Static switch type Bypass, uninterruptible changeover					
Bypass manual mechanical	Standard					

Dimensions and weight

Dimensions and weight UPS (W x D x H)	450x840x967 mm	450 x 840 x 1400 mm			600 x 900 x 1600 mm	
	160 kg	210 kg	212 kg	242 kg	320 kg	342 kg

Signaling and communication ports

Work status indicator	4.3-7.0 "touch display, LED indicators, audible alarm					
Standard communication	3 x Smart Slot for additional communication cards, 2 x REPO (NO/NC), 3 x Dry Contact Out, RS485, Modbus					

Environmental conditions

Noise level	<60 dB					
Permissible operating temperature	0°C ÷ 40°C					
Recommended working temperature	15°C ÷ 25°C					
Storage temperature	-25°C ÷ 55°C					
Humidity	0 ÷ 95% (without condensation)					

Standards

Resistance to interference	EN 62040-2:2005, EN 62040-2:2006					
Safety	IEC62040-1-1, CE					

Options

<ul style="list-style-type: none"> - SNMP card, - RS 232 - Uninterruptible Bypass External - Additional Dry Contact card 	<ul style="list-style-type: none"> - Output transformer for galvanic separation - Batteries in rack or in battery modules - Sensor for battery voltage compensation - Remote signaling panel - Backfeed protection contactor
--	---

FOR MORE INFORMATION: www.maxiglobal.pt