

# WT6000 MFDC

## Latest Generation of Resistance Welding Inverters

The WT6000 Medium Frequency DC control powered by GEN6 technology offers flexible intuitive programming for customization of your welding process. Combined with the guidance of built in diagnostic tools, the WT6000 will support process control of your resistance welding application



WT6000 MFDC powered by  
GEN6 inverter technology

- Up to 255 Weld Programs
- Multi-Language Programming
- Web Based Interface
- Free Format Programming for Various Applications
- Configurable I/O
- Network Ready (Weld Gateway / RAFT™ Gateway)
- Various I/O Connectivity
  - DIO, Device Net, Ethernet IP, ProfiNet, ProfiBus
- Weld Tool Efficiency Monitoring
- Weld Transformer Protection (Flux Control)
- Weld Transformer Diode Failure Detection
- Duty Cycle of Inverter Monitoring
- Laptop or DEP Interface for Programming and Data Acquisition
- Secondary Current & Voltage Monitoring
- Oscilloscope Quality Data Archiving
- 220v-480VAC 50/60hz Mains (600VAC optional)
- Programmable Output Frequency (400-2000 hertz)

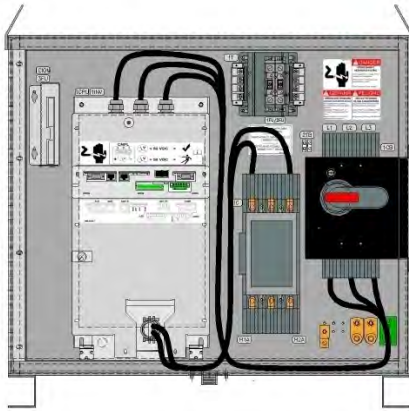
*Supported Languages:*

*English, German, French, Spanish, Portuguese, Chinese, Korean, Polish*



# wtec

# WT6000 Single Pack Designs



**WT60TN Top mount**

## WT60TN Top Mount MFDC

- 150 Amp, 3 Pole Circuit Breaker with Magnetic, Thermal, and External Shunt Trip
- Size 4 Isolation Contactor
- 250VA Control Transformer
- CIOM for Shunt Trip, Isolation Contactor, Control Stop
- GEN6 Inverter - 600/500 Amp - Water/Air Cooled @10% Duty Cycle
- Integrated 6000 Processor Module
- Dimensions (610H x 737W x 432D (mm)) (24"H x 29"W x 17"D)
- Device-Net, EIP, ProfiBus or ProfiNet Connectivity
- Tip Dress Control & Monitor - RAFT Feature (Optional)

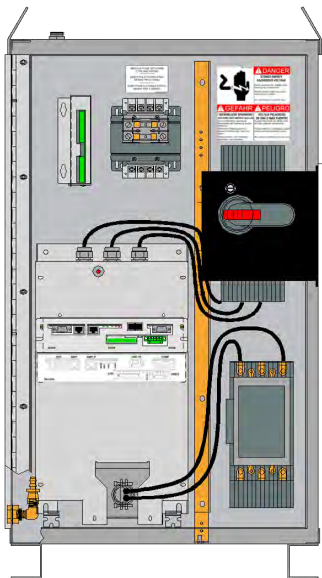
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## WT60MN MiniPak MFDC

- 100 Amp, 3 Pole Circuit Breaker with Magnetic, Thermal, and External Shunt Trip
- Size 3 Isolation Contactor
- 250VA Control Transformer
- GEN6 Inverter Rated 400 Amp Water/Air Cooled @10% Duty Cycle
- Integrated 6000 Processor Module
- Dimensions (300H x 670W x 505D (mm)) (12"H x 26.5"W x 20"D)
- Device-Net, EIP, ProfiBus, or ProfiNet Connectivity
- RAFT Feature (Optional)

## **WT60MN MiniPak**

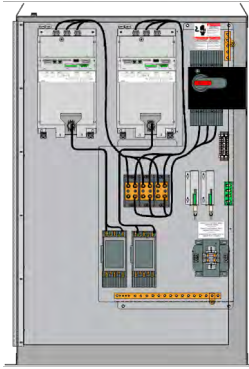


**WT600N-A1 Stand**

## WT600N-A1 Stand MFDC

- 150 amp, 3-Pole Circuit Breaker with Magnetic, Thermal, and External Shunt Trip
- Size 4 Isolation Contactor
- 250VA Control Transformer
- CIOM for Shunt Trip, Isolation Contactor, Control Stop
- GEN6 Inverter - 600/500 Amp - Water/Air Cooled @10% Duty Cycle
- Integrated 6000 Processor Module
- Dimensions (950H x 510W x 410D (mm)) (37.4"H x 20"W x 16"D)
- Device-Net, EIP or Discrete I/O connectivity
- Tip Dress Control & Monitor - RAFT Feature (Optional)

# WT6000 Multi-Pack Designs



## WT600N-A2 Dual Pack MFDC

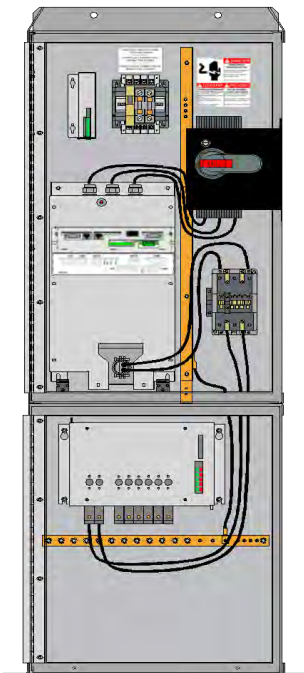
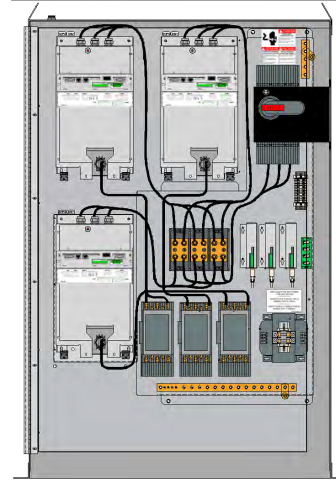
- 250 amp, 3 Pole Circuit Breaker with Magnetic, Thermal, and External Shunt Trip
- Two Size 4 Isolation Contactors
- 500VA Control Transformer
- CIOM for Shunt Trip, Isolation Contactor, Control Stop
- Two GEN6 Inverters - 600/500 Amp - Water/Air Cooled @10% Duty Cycle
- Two Integrated 6000 Processor Modules
- Dimensions (1500H x 990W x 550D (mm)) (59"Hx39"Wx21.6"D)
- Device-Net, EIP, ProfiBus or ProfiNet Connectivity

## **WT600N-A2 Dual Pack**

## **WT600N-A3 Tri-Pack**

### WT600N-A3 Tri-Pack MFDC

- 400 amp, 3 Pole Circuit Breaker with Magnetic, Thermal, and External Shunt Trip
- Three Size 4 Isolation Contactors
- 600VA Control Transformer
- CIOM for Shunt Trip, Isolation Contactor, Control Stop
- Three GEN6 inverters - 600/500 Amp - Water/Air Cooled @10% Duty Cycle
- Three Integrated 6000 Processor Modules
- Dimensions (1500H x 990W x 550D (mm)) (59"H x 39"W x 21.6"D)
- Device-Net, EIP, ProfiBus or ProfiNet Connectivity

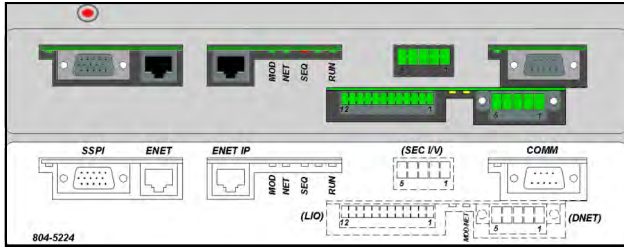


### WT600N-A13 Three Cascade MFDC

- 150 Amp, 3 Pole Circuit Breaker with Magnetic, Thermal, and External Shunt Trip
- Size 4 Isolation Contactor
- 250VA Control Transformer
- CIOM for Shunt Trip, Isolation Contactor, Control Stop
- GEN6 Inverter - 600/500 Amp - Water/Air Cooled @10% Duty Cycle
- Integrated 6000 Processor Module
- Solid state switching for 3 cascade loads
- Dimensions (1500H x 510W x 410D (mm)) (59"H x 20"W x 16"D)
- Device-Net, EIP, ProfiBus or ProfiNet Connectivity

## **WT600N-A13 Cascade**

# WT6000



WT6000 Processor

## WT6000 Connectivity

- SSPI port
- Two (2) 100BASE T Ethernet Ports
- Local I/O Port
- Device-Net, EIP, ProfiBus or ProfiNet Connectivity
- Secondary Current & Voltage Channels
- Serial RS485 Port
- Discrete I/O Options

Power Source	
Voltage:	3-Phase AC 220V - 480V (± 10%)
Line Power Frequency:	50/60Hz (Automatic Selection)
Alternate Configuration:	Optional: 575V (± 10%)
Output Frequency:	1,000 Hz (Programmable Range = 400Hz - 2,000Hz)
Output Current at 10% Duty Cycle:	600/500 Amps, Water/Air Cooled
Device Type:	IGBT
Power Consumption:	70VA (Idling Condition)
Processor	
Weld Processor:	WT6000 Integrated
I/O Protocol:	Ethernet IP 10/100BASE T
Optional I/O Protocol:	Device Net, DIO, PROFINET, PROFIBUS
Onboard Inputs:	2 x 24VDC
Onboard Outputs:	3 x 120VAC
Number of weld schedules:	255
Number of steps:	32
Processor Storage Type:	F-RAM (No Battery Required)
Weld Processor Languages:	English, French, German, Spanish, Portuguese, Chinese, Korean, Polish

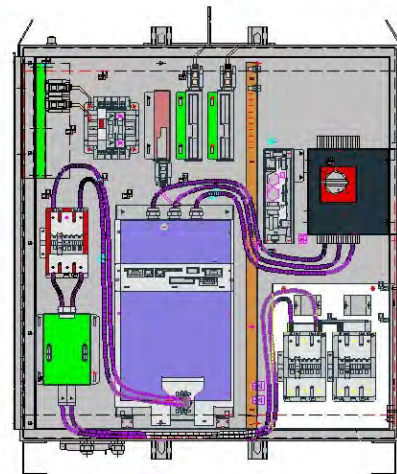
## WT6000 Welding Applications

Multi-Pack Configurations  
 Automated Cascade Configurations  
 DCIT Gun Station Controls  
 Seam Welding  
 Robotic Welding  
 Projection Welding  
 External Control Interfaces (ECI)

## Optional Devices

Data Entry Panels (DEP100,300)  
 Weld Interface Laptop Software  
 Weld / RAFT Gateway Network Software

Monitoring and Control Functions	
Firing Control:	Fixed Frequency, Pulse Width Modulation
Firing modes:	Primary Constant Current Secondary Constant Current Voltage Control
Primary Current Range:	20A to Rated Current Level
Primary Current Accuracy:	± 1% Setting, ± .5% Repeatability
DC Bus Voltage Measurement Accuracy:	± 1% Setting, ± .5% Repeatability
Secondary Current Accuracy:	± 2% Setting, ± 1% Repeatability
Secondary Voltage Accuracy:	± 3%
Secondary Resistive Accuracy:	± 3%
MFDC Transformer Flux Protection:	Included
Digital Scope Function:	1 MHz Equivalent Uploads to PC
Duty Cycle Protection:	Inverter and Weld Transformer Duty Cycle
MFDC Weld Transformer Monitoring:	Diode Monitoring



DCIT Gun Station Control with Ground Safety Monitoring & 10 - 30mA Personnel Protection System