

# XMT<sup>®</sup> 425 Series

Issued August 2007 • Index No. EX/18.84

**Multiprocess Welding  
Power Source** 

## Quick Specs



### Heavy Industrial Applications

Construction  
Shipbuilding  
Railroad  
Truck/Trailer Manufacturing  
Fabrication  
Repair Shops  
Rental Fleets  
Power Generation Plants

### Processes

**MIG (GMAW)/Pulsed MIG (GMAW-P)\***  
Stick (SMAW)  
TIG (GTAW)  
Flux Cored (FCAW)  
Air Carbon Arc Cutting and Gouging (CAC-A)

*\*XMT 425 CC/CV requires optional control;  
not available with XMT 425 VS model.*

**Input Power** Requires 3- or 1-Phase Power,  
208–460 VAC, 50/60 Hz CE

**Rated Output** 10–38 V, 5–425 A

**Weight** Net: 80 lb (36.3 kg)  
Ship: 89.1 lb (40.4 kg)

## The Power of Blue.<sup>®</sup>

**Wind Tunnel Technology™** protects electrical components and PC boards from contamination.

**Fan-On-Demand™** cooling system operates only when needed, reducing noise, energy use and the amount of contaminants pulled through machine.

**Lift-Arc™** allows TIG starting without the use of high-frequency. Starts the arc without contaminating the weld with tungsten.

**Adaptive Hot Start™** increases the output amperage at the start of a weld if necessary, eliminating electrode sticking.

**Lightweight, aerospace-grade aluminum case** offers protection with the benefit of reduced weight.

**Auto-Line™** Power Management Technology allows for any input voltage hook-up (208–460 V) with no manual linking required, providing convenience in any job setting. Ideal solution for dirty or unreliable input power.

**Inverter arc control technology** provides greater puddle control for superior 6010 Stick electrode performance, and outstanding MIG weld performance.

**Process selector switch** reduces the number of control setup combinations without reducing any features.



XMT 425 CC/CV

XMT 425 VS

The XMT 425 Series is packed with features to meet the most demanding welding needs.

**Line voltage compensation** keeps welding output constant even if input power varies by +/-10%. XMT 425 models further expand line voltage compensation on 460 VAC to an amazing +37%, -59%.

**Large, dual digital meters** are easy to view and are presettable to ease setting weld output.

**Exceptional electrical efficiency.** At 400 A, efficiency is 87.24%!

**350 A of welding output** at 60% duty cycle with superior low-end performance.

**Power factor of .95** enables smaller fuses/breakers and primary wiring. Primary amperage draw at rated output is 25% less than the competition.

**Ultra-tough, polycarbonate-blended cover for control panel** protects front controls from damage.

**Low OCV Stick** — A built-in, selectable feature, that reduces the Stick mode open-circuit voltage (OCV) to nearly 15 volts when the welding power source is not in use. Eliminates the need for add-on voltage reducers.

**Dinse International-style weld disconnects** provide high-quality weld cable connections.

### Additional Features for XMT 425 CC/CV

**Auto Remote Sense™** enables unit to automatically use remote control if connected to remote control receptacle.

**115 VAC auxiliary power** provides 10 amps of circuit-breaker-protected power for water circulators. Available on CE model.

**Pulsed MIG (GMAW-P) capabilities** with optional Optima™ control reduces spatter and distortion, allows better out-of-position puddle control, and provides potential reduction of fume particle emission.



Power source is warranted for 3 years, parts and labor.  
Original main power rectified parts are warranted for 5 years.  
Gun warranted for 90 days, parts and labor.

MADE IN **USA**  
APPLETON, WI **USA**



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**Web Site**  
www.MillerWelds.com



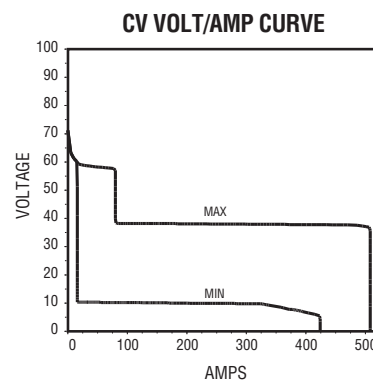
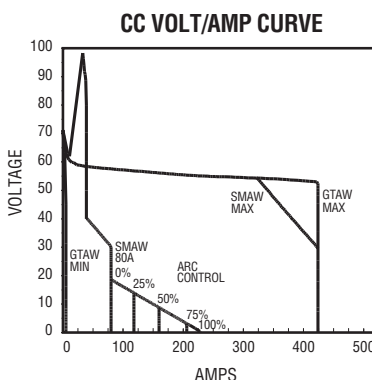
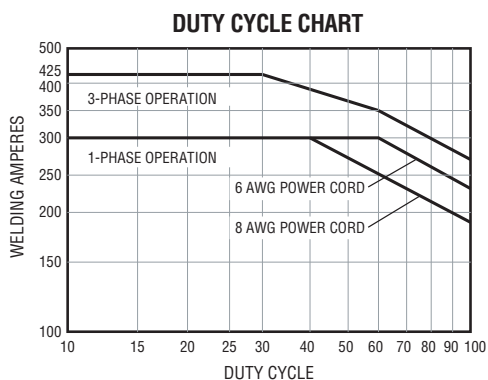
# XMT® 425 Specifications (Subject to change without notice.)



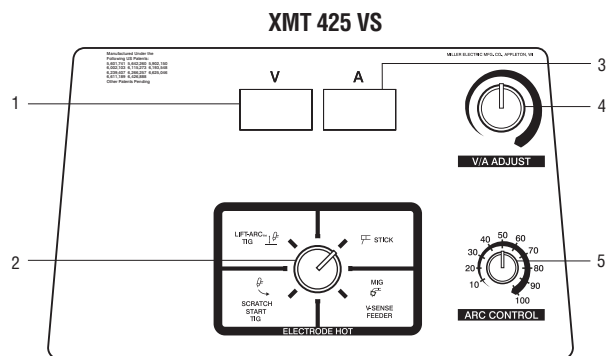
Input Power	Rated Output at 60% Duty Cycle	Voltage Range in CV Mode	Amperage Range in CC Mode	Max. Open-Circuit Voltage	Amps Input at Rated Load Output, 60 Hz, 208 V 230 V 400 V 460 V 575 V KVA KW	Dimensions	Weight
Three-Phase	350 A at 34 VDC	10–38 V	5–425 A	75 VDC	40.4 36.1 20.6 17.8 14.1 14.2 13.6	H: 17 in (432 mm) W: 12-1/2 in (318 mm) D: 24 in (610 mm)	80 lb (36.3 kg)
Single-Phase	300 A at 32 VDC	10–38 V	5–425 A	75 VDC	60.8 54.6 29.7 24.5 19.9 11.7 11.2		

Certified to both the Canadian and U.S. Standards for welding equipment.

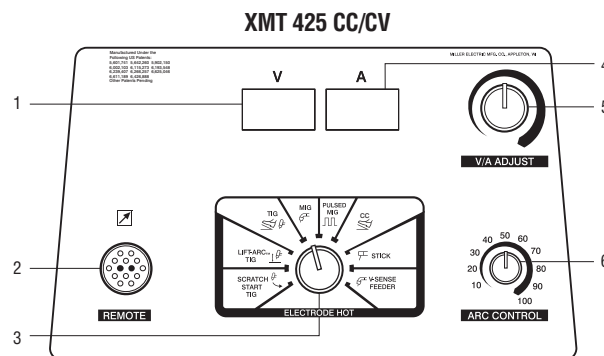
## XMT® 425 Performance Data



## Control Panels



1. Voltmeter
2. Process Selector Switch (Rotary Switch)
3. Ammeter
4. Voltage/Amperage Adjustment Control
5. Arc Control



1. Voltmeter
2. Remote Control Receptacle
3. Process Selector Switch (Rotary Switch)
4. Ammeter
5. Voltage/Amperage Adjustment Control
6. Arc Control

## Genuine Miller Accessories



### Optima™ #043 389

A multipurpose, microprocessor-based pulse control for both synergic MIG (wire welding or GMAW) or manual MIG pulsing. Use this control with the XMT 425 CC/CV power source and any

Miller wire feeder, including automatic feeders and spool guns. Includes a 25 ft (7.6 m) cord with 14-pin plug. (Not for use with XMT 425 VS model.)

### Extension Cords for Optima

- #043 725 25 ft (7.6 m)
- #043 726 50 ft (15.2 m)
- #043 727 75 ft (22.9 m)

### Gas Solenoid Kit #195 286

Easy to install, optional gas solenoid kit for TIG welding applications.

### Process Selector Control #042 872

Designed for use with dual wire feeders, applications where electrical isolation and/or polarity reversing of weld current is required, and for welding process changes. Includes 115 VAC/2 amp receptacle, two 14-pin receptacles and a 10 ft (3 m) 14-pin cord.



### WC-24 Weld Control #137 549

Designed for use with Miller CV power sources supplying 24 VAC and 14-pin receptacles. For use with Spoolmatic 30A spool gun.



### WC-115A Weld Control #137 546-01-1

Operates on 115 VAC and is designed for power sources without a 14-pin receptacle. For use with Spoolmatic 30A spool gun. Includes 10 ft (3 m) wall-type plug and power cord.

# Genuine Miller Accessories



**HF-251D-1**  
**High-Frequency Arc**  
**Starter and Stabilizer**  
**#042 388**

Portable 250 amp, 60% duty cycle unit adds high frequency to the welding circuit to help start the arc when using the DC TIG (GTAW) process. Operates on 115 VAC, 50/50 Hz. See Lit. Index No. AY/5.1.



**RFCS-14 Foot Control**  
**#043 554**

Heavy-duty foot current and contactor control. Includes 20 ft (6 m) cord and 14-pin plug.



**RHC-14 Hand Control**  
**#129 340**

Miniature hand control for remote current and contactor control.

Dimensions: 4 x 4 x 3-1/4 in (102 x 102 x 82 mm). Includes 20 ft (6 m) cord and 14-pin plug.



**RMLS-14 #129 337**

14-pin plug. Momentary- and maintained-contact

rocker switch for contactor control. Push forward for maintained contact and back for momentary contact. Includes 20 ft (6 m) cord.



**RCC-14 Remote**  
**Contactor and Current**  
**Control #151 086**

14-pin plug. Rotary-motion fingertip control fastens to TIG torch using two Velcro® straps. Includes 28 ft (8.5 m) control cord.



**RCCS-14 Remote**  
**Contactor and Current**  
**Control #043 688**

Up-and-down rotary-motion fingertip control. Great for applications that require a finer amperage control. Includes 28 ft (8.5 m) control cord.

## Extension Cords for Remote Controls and 24 VAC Wire Feeders

**#122 973** 25 ft (7.6 m)

**#122 974** 50 ft (15.2 m)

**#122 975** 75 ft (22.8 m)

14-pin plug to 14-pin socket.

*Note: Not for use with Optima or 60M Series.*

## Protective Cover



**Protective Cover**  
**#195 478**

Mildew and water resistant, odor-free cover protects your machine's finish. For 300/350 A inverters: XMT, Maxstar and Dynasty.

## Running Gear



**XMT Cylinder Cart**  
**#042 537**

Carries two 160 lb (72.6 kg) gas cylinders, or one gas cylinder and one coolant system for TIG (GTAW) welding. Feeder mounts to tray above power source.

## Wire Feeders/Guns

**SuitCase™ 8VS #194 890**

**SuitCase™ X-TREME™ 12VS #195 500**

Lightweight, portable wire feeder for a variety of wires up to .062 in. Holds up to an 8 in (8VS) or 12 in (12VS) spool of wire. Operates on open-circuit voltage eliminating the need for a control/power cord. See Lit. Index No. M/6.4 and M/6.41.

**SuitCase™ 8RC/12RC #194 938/#194 940**

Lightweight, portable wire feeder for a variety of wires up to .062 in. Holds up to an 8 in (8RC) or 12 in (12RC) spool of wire. Operates using 14-pin control receptacle. See Lit. Index No. M/6.5.

**XR™-Control #181 538**

Push-pull wire feed system offers unparalleled performance for aluminum MIG welding. See Lit. Index No. M/1.7.

## 70 Series

**S-74S #195 057**

**S-74D #195 058**

**S-74DX #195 059**

Wire feeder features Posifeed™ wire drive assembly and handles a variety of wires up to 1/8 in. Comes with FREE Bernard® Q™-Gun. See Lit. Index No. M/3.0.



**Spoolmatic® 30A**  
**#130 831**

A 1-lb, air-cooled spool gun that extends the weld process range by adding a handy

portable system for small wire MIG. Rated 200 A at 100% duty cycle. Includes 30 ft (9.1 m) cable assembly. (WC-24 #137 549 for 14 pin.)

## Ironmate™ Flux Cored Guns

See Lit. Index No. AY/16.0.

**FC-1260**

**#195 732** 10 ft (3 m)

**#195 729** 15 ft (4.6 m)

**FC-1260LM**

**#194 912** 10 ft (3 m)

**#194 911** 15 ft (4.6 m)

**FC-1150**

**#194 864** 10 ft (3 m)

**#194 863** 15 ft (4.6 m)

## Water Coolant Systems

For more information, see the Miller Coolant Systems literature sheet, Index No. AY/7.2.

### Coolmate™ 3

**#043 007** 115 VAC

**#043 008** 230 VAC

For use with water-cooled torches rated up to 600 amps. Unique paddle-wheel indicator, external filter and easy-fill spout.

### Coolmate™ V3 #043 009

For use with water-cooled torches rated up to 500 amps. Vertical design conveniently mounts to Miller cylinder rack in place of one cylinder.

### Coolmate™ 4 #042 288

For use with water-cooled torches rated up to 600 amps. Tough molded polyethylene case with carrying handle.

**Coolant #043 810** Sold in cases of four 1-gallon recyclable plastic bottles. Miller coolants contain a base of ethylene glycol and deionized water to protect against freezing to -37°F (-38°C) or boiling to 227°F (108°C). Also contains a compound that resists algae growth.

## International-Style Connectors

*Note: XMT 425 power sources are equipped with International-style connectors for secondary connections. (Power source is shipped with two 50-mm male International-style plugs for use with #1 or #2 AWG size cable.)*



**International/Tweco® Adapter**  
**#042 465**  
**International/Cam-Lok Adapter**  
**#042 466**

One-piece adapter with International-style male plug (to power source) on one end and female receptacle (Tweco or Cam-Lok for weld cable connection) on other end.

### International-Style Connector Kit

**#042 418** 50 mm

Accepts #4 or #1/0 AWG cable size. Required if male plugs shipped with power source must be replaced, or if additional plugs are needed.

**#042 533** 70 mm

Accepts #1/0 or #2/0 AWG cable size. Required if #1/0 or #2/0 AWG size cable is to be used.

Kit includes one International-style male plug which attaches to the work and/or weld cables and plugs into the International-style receptacles on the power source.

### Extension Kit for International-Style Cable Connectors

**#042 419** 50 mm

Accepts #4 or #1/0 AWG size cable.

**#042 534** 70 mm

Accepts #1/0 or #2/0 AWG size cable.

Used to adapt or extend weld and/or work cables. Kit includes one male International-style plug and one in-line female International-style receptacle.

# Ordering Information

Power Source and Options	Stock No.	Description	Qty.	Price
<b>XMT® 425 CC/CV</b>	<b>#907 386</b>	208 – 575 VAC with Auto-Line™		
	<b>#907 386-01-1</b>	230 – 460 VAC with Auto-Line™ and Auxiliary Power and <b>CE</b>		
<b>XMT® 425 VS</b>	<b>#907 387</b>	208 – 575 VAC with Auto-Line™		
<b>Accessories</b>				
Optima™ MIG Pulse Control	<b>#043 389</b>	For CC/CV models only. Not for use with XMT 425 VS		
Optima™ Extension Cords		See page 4		
Gas Solenoid Kit	<b>#195 286</b>			
Process Selector Control	<b>#042 872</b>			
WC-24	<b>#137 549</b>	For use with Spoolmatic® 30A and power sources <b>with</b> 14-pin		
WC-115A	<b>#137 546-01-1</b>	For use with Spoolmatic® 30A and power sources <b>without</b> 14-pin		
HF-251D-1 HF Starter/Stabilizer	<b>#042 388</b>	See Lit. Index No. AY/5.1		
RFCS-14	<b>#043 554</b>	Foot control		
RHC-14	<b>#129 340</b>	Hand control		
RMLS-14	<b>#129 337</b>	Rocker switch		
RCC-14	<b>#151 086</b>	Fingertip control		
RCCS-14	<b>#043 688</b>	Fingertip control		
Extension Cords (For 24 VAC wire feeders and remote controls)		See page 4. Not to be used with Optima, 60M or XR-M		
<b>Protective Cover</b>	<b>#195 478</b>			
<b>Running Gear</b>				
XMT Cylinder Cart	<b>#042 537</b>			
<b>Wire Feeders/Guns</b>				
SuitCase™ 8VS/X-TREME™ 12VS	<b>#194 890/#195 500</b>	See Lit. Index No. M/6.4 and M/6.41		
SuitCase™ 8RC/12RC	<b>#194 938/#194 940</b>	See Lit. Index No. M/6.5		
XR™-Control	<b>#181 538</b>	See Lit. Index No. M/1.7		
70 Series	<b>#195 057</b>	S-74S. See Lit. Index No. M/3.0		
	<b>#195 058</b>	S-74D. See Lit. Index No. M/3.0		
	<b>#195 059</b>	S-74DX. See Lit. Index No. M/3.0		
Spoolmatic® 30A Spool Gun	<b>#130 831</b>	Includes 30 ft (9.1 m) cable assembly		
Ironmate™ Flux Cored Guns		See Lit. Index No. AY/16.0		
<b>Water Coolant Systems</b>		See page 6. See Lit. Index No. AY/7.2		
<b>International-Style Connectors</b>		See page 6		

Date:

Total Quoted Price:



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