XMT® Series

The Power of Blue.

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

*With optional controls only — not available with XMT 350 VS model.

Input Power
- 304/350: Requires 3- or 1-Phase Power
- 456: Requires 3-Phase Power

Output Power
- 304: 10 – 35 V, 5 – 400 A
- 456: 10 – 38 V, 5 – 600 A

Weight
- 304: Net: 79.5 lb (36.1 kg)  Ship: 88.6 lb (40.2 kg)
- 350: Net: 80 lb (36.3 kg)  Ship: 89.1 lb (40.4 kg)
- 456: Net: 118 lb (53.5 kg)  Ship: 129 lb (58.5 kg)

Heavy Industrial Applications
- Construction
- Shipbuilding
- Railroad
- Truck/Trailer Manufacturing
- Fabrication
- Repair Shops
- Rental Fleets

Quick Specs

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

Miller Electric Mfg. Co.
An Illinois Tool Works Company
1635 West Spencer Street
Appleton, WI 54914 USA

International Headquarters
Phone: 920-735-4505
USA FAX: 920-735-4134
Canadian FAX: 920-735-4169
International FAX: 920-735-4125

Web Site
www.MillerWelds.com
XMT® 304 CC/CV Specifications (Subject to change without notice.)

<table>
<thead>
<tr>
<th>Input Power</th>
<th>Rated Output at 60% Duty Cycle</th>
<th>Voltage Range in CV Mode</th>
<th>Amperage Range in CC Mode</th>
<th>Max. Open-Circuit Voltage</th>
<th>Amps Input at Rated Load Output, 60 Hz</th>
<th>Dimensions</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three-Phase</td>
<td>300 A at 32 VDC</td>
<td>10–35 V</td>
<td>5–400 A</td>
<td>90 VDC</td>
<td>33.7 30.5 17 18.9 15.2 12.2 11.6</td>
<td>H: 17 in (432 mm) W: 12-1/2 in (318 mm) D: 24 in (610 mm)</td>
<td>79.5 lb (36.1 kg)</td>
</tr>
<tr>
<td>Single-Phase</td>
<td>225 A at 29 VDC</td>
<td>10–35 V</td>
<td>5–400 A</td>
<td>90 VDC</td>
<td>52.4 47.4 — 24.5 — 11.3 7.6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

XMT® 304 CC/CV Control Panel

Additional Features

Auto-Link® circuit automatically links the power source to primary voltage being applied (230/460 or 460/575 VAC, single- or three-phase).

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

International-style weld disconnects provide high-quality weld cable connections. (Two connectors supplied with each unit.)

XMT® 304 CC/CV Performance Data

1. Voltmeter
2. Power On/Off Switch
3. Inductance/Dig Control
4. Process Selector Switch (Rotary Switch)
5. Ammeter
6. Voltage/Amperage Adjustment Control
7. Voltage/Amperage Control Switch
XMT® 350 Specifications  (Subject to change without notice.)

<table>
<thead>
<tr>
<th>Input Power</th>
<th>Rated Output at 60% Duty Cycle</th>
<th>Voltage Range in CV Mode</th>
<th>Amperage Range in CC Mode</th>
<th>Max. Open-Circuit Voltage</th>
<th>Amps Input at Rated Load Output, 60 Hz</th>
<th>Dimensions</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three-Phase</td>
<td>350 A at 34 VDC</td>
<td>10–38 V</td>
<td>5–425 A</td>
<td>75 VDC</td>
<td>40.4 36.1 20.6 17.8 14.1 12.2 13.9</td>
<td>H: 17 in (432 mm) W: 12-1/2 in (318 mm) D: 24 in (610 mm)</td>
<td>CC/CV Model</td>
</tr>
<tr>
<td>Single-Phase</td>
<td>300 A at 32 VDC</td>
<td>10–38 V</td>
<td>5–425 A</td>
<td>75 VDC</td>
<td>60.8 54.6 29.7 24.5 19.9 11.7 11.2</td>
<td>VS Model</td>
<td>80 lb (36.3 kg)</td>
</tr>
</tbody>
</table>

XMT® 350 CC/CV and VS Control Panels

Additional Features

Available in CC/CV and VS models. Both models feature true CC/CV welding processes, but VS model does not include remote control receptacle.

Auto Remote Sense enables unit to automatically use remote control if connected to remote control receptacle (CC/CV models only).

Auto-Line™ Power Management Technology allows for any input voltage hook-up (208 – 575 V) with no manual linking required, providing convenience in any job setting. Ideal solution for dirty or unreliable input power.

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.

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.

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

International-style weld disconnects provide high-quality weld cable connections. (Two connectors supplied with CC/CV unit.)

Optional gas solenoid for TIG welding.

XMT® 350 Performance Data

DUTY CYCLE CHART

CC VOLT/AMP CURVE

CV VOLT/AMP CURVE

NOTE: CC/CV model is equipped with Dinse-style output connector.

NOTE: VS model is equipped with Tweco-style output connector.


XMT® 350 XMT 350 Specifications XMT 350 CC/CV and VS Control Panels XMT® 350 Performance Data 3

Manufactured Under the Following US Patents:

5,601,741  5,642,260  5,902,150
6,002,103  6,115,273  6,193,548
6,239,407  6,266,257  6,625,046
6,611,189  6,426,888

Other Patents Pending
### XMT® 456 CC/CV Specifications (Subject to change without notice.)

<table>
<thead>
<tr>
<th>Input Power</th>
<th>Rated Output</th>
<th>Voltage Range in CV Mode</th>
<th>Amperage Range in CC Mode</th>
<th>Max. Open-Circuit Voltage</th>
<th>Amps Input at Rated Load Output, 60 Hz</th>
<th>Dimensions</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three-Phase</td>
<td>450 A at 38 VDC, 100% Duty Cycle</td>
<td>10–38 V</td>
<td>5–600 A</td>
<td>95 VDC</td>
<td>50.8 31 27.8 24.4 21.2 19.2</td>
<td>H: 17 in (432 mm)</td>
<td>118 lb (53.5 kg)</td>
</tr>
<tr>
<td></td>
<td>565 A at 43 VDC, 60% Duty Cycle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>W: 14-1/2 in (368 mm)</td>
<td></td>
</tr>
</tbody>
</table>

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

### XMT® 456 CC/CV Control Panel

#### Additional Features

**Primary voltage display** shows what primary voltage the power source is linked for without removing the side panels. Saves time and assures you that the power source has been correctly linked for available input voltage.

**Unique case design** helps protect internal components from dirt and dust. To connect input power cord and/or set unit up for correct input power, remove the easy-to-handle panel (1/3 case). The remaining two-thirds of the case never needs to be removed!

**Optional remote on/off** provides ability to turn power source on or off when it is located away from your work.

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### XMT® 456 CC/CV Performance Data

**Volt/amp curves** show minimum and maximum voltage and amperage output capabilities of unit. Curves of other settings fall between curves shown.

**Duty Cycle Chart**

**CV Volt/Amp Curves**

**CC Volt/Amp Curves**
### XMT® MIGRunner™ Components

**XMT® 304 MIGRunner™ #907 061**

**XMT® 350 CC/CV MIGRunner™ #907 233**

Comes Complete With:
- XMT 304 or 350 CC/CV power source
- 22A wire feeder
- Roughneck®™ C-4015 gun
- Consumables
- .035 and .045 in drive roll kit
- Regulator/flow gauge with gas hose
- MIGRunner Cart with cylinder rack
- Bottom tray will hold optional Coolmate 3 (sold separately)

**XMT® 350 Python® MIGRunner™ Components**

**XMT® 350 CC/CV Python® MIGRunner™ #907 235**

Comes Complete With:
- XMT 350 CC/CV power source
- XR Control
- 25 ft (7.6 m) Python® gun (air-cooled)
- Consumables (.035 and 3/64 in contact tips)
- Regulator/flow gauge with gas hose
- MIGRunner Cart with cylinder rack
- Bottom tray will hold optional Coolmate 3 (sold separately)

*Python® is a registered trademark of MK Products, Irvine, CA USA*

### XMT® 350 XR™-Edge MIGRunner™ Components

**XMT® 350 CC/CV XR™-Edge MIGRunner™ #907 234**

**XMT® 350 CC/CV XR™-Edge PULSERunner™ #951 033**

Comes Complete With:
- XMT 350 CC/CV power source
- XR-Control
- 30 ft (9 m) XR-A Edge gun (air-cooled)
- Consumables
- .035 and .047 in drive roll kit
- Regulator/flow gauge with gas hose
- MIGRunner Cart with cylinder rack
- Bottom tray will hold optional Coolmate 3 (sold separately)
- Optima Pulse control (PULSERunner #951 033 only)

*Optima™ Pulse Control (comes with PULSERunner #951 033)*
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 304/350 CC/CV power sources and any Miller wire feeder, including automatic feeders and spool guns. Includes a 25 ft (7.6 m) cord with 14-pin plug.

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)

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.

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.

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.

HF-251D-1
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.

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.

Inverter Racks
Four or Six-Arc Welding System
The Inverter Rack conveniently houses multiple XMT power sources for multiple welders. Both 4-pack and 6-pack models are available. Features include:
- Provision to parallel power sources or common work connections
- Two lifting eyes for transportation
- Rugged skids for dragging or pushing
- Customer can install up to a maximum of 4 XMT 456 power sources

For detailed information on customized Inverter Rack systems see Lit. Index No. DC/18.81.

Running Gear

MIGRunner™ Cart #195 445 (For 304/350 models only)
MIGRunner™ XL Cart #195 246 (For all models)
Small footprint and easily maneuverable, with cylinder rack low enough that you do not have to lift bottles.

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.

Universal Carrying Cart and Cylinder Rack #042 934 (For 304/350 models only)
Holds power source, and gas cylinder up to 56 in (142.2 cm) high measuring 6 to 9 in (15.2 to 22.8 cm) in diameter.
Genuine Miller Accessories (continued)

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.

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 12in (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   #194 938
SuitCase™ 12RC   #194 940
Lightweight, portable wire feeder for a variety of wires up to .062 in. Holds up to an 8 in (8RC) or 12in (12RC) spool of wire. Operates using 14-pin control receptacle. See Lit. Index No. M/6.5.

XR Control   #181 538

S-74 DX   #195 059
Wire feeder features process and weld control and handles a variety of wires up to 1/8 in. See Lit. Index No. M/3.0.

60M Series
S-60M   #131 794
D-60M   #131 796
Semiautomatic pulsed-MIG and standard CV-MIG feeder equipped with eight synergic pulse programs. Handles .023 to 1/8 in wires and up to 60 lb spool. Optional data cards for program storage and transfer. Pulse arc characteristics are fully customizable. See Lit. Index No. M/2.4.

Coolmate™ V3   #043 009 115 VAC
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   #042 288 115 VAC
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 304/350 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 #1 or #2 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 size cable. 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 #1 or #2 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.
### Power Source and Options

<table>
<thead>
<tr>
<th>Stock No.</th>
<th>Description</th>
<th>Qty.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>#903 471</td>
<td>208-230/460 VAC with Auto-Link&lt;sup&gt;®&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#903 471-01-1</td>
<td>208-230/460 VAC with Auto-Link&lt;sup&gt;®&lt;/sup&gt; and Auxiliary Power</td>
<td></td>
<td></td>
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<tr>
<td>#903 473</td>
<td>460/575 VAC with Auto-Link&lt;sup&gt;®&lt;/sup&gt;</td>
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<tr>
<td>#903 472</td>
<td>400 VAC, 50/60 Hz with Auxiliary Power and CE</td>
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<tr>
<td>#907 161</td>
<td>208 – 575 VAC with Auto-Line™</td>
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<tr>
<td>#907 161-01-1</td>
<td>208 – 575 VAC with Auto-Line™ and Auxiliary Power</td>
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<tr>
<td>#907 161-01-2</td>
<td>230 – 460 VAC with Auto-Line™ and Auxiliary Power</td>
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<tr>
<td>#907 161-01-4</td>
<td>208 – 575 VAC with Auto-Line™ and Teco connectors</td>
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<tr>
<td>#907 224</td>
<td>208 – 575 VAC (without 14-pin, Teco connectors)</td>
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<tr>
<td>#907 010</td>
<td>230/460 VAC</td>
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<tr>
<td>#907 010-01-1</td>
<td>230/460 VAC with Remote On/Off</td>
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<tr>
<td>#907 011</td>
<td>575 VAC</td>
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<tr>
<td>#907 012</td>
<td>400 VAC with CE</td>
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</tr>
</tbody>
</table>

### MIGRunner™ Packages
See page 5 for different packages and components

### PULSERunner™ Packages
See page 5 for different packages and components

### Inverter Racks (full or empty)
See Lit. Index No. DC/18.81

### Accessories
- **Optima™ MIG Pulse Control**
  - #043 389
  - For CC/CV models only
- **Optima™ Extension Cords**
  - See page 6
- **WC-24**
  - #137 549
  - For use with Spoolmatic 30A and power sources with 14-pin
- **WC-115A**
  - #137 546-01-1
  - For use with Spoolmatic 30A and power sources without 14-pin
- **Process Selector Control**
  - #042 872
- **Gas Solenoid Kit**
  - #195 286
  - For XMT 350 models only
- **HF-251D-1 HF Starter/Stabilizer**
  - #042 388
  - See Lit. Index No. AY/5.1
- **RFS-14**
  - #043 554
  - Foot control
- **RHC-14**
  - #129 340
  - Hand control
- **RML-14**
  - #129 337
  - Rocker switch
- **RCC-14**
  - #151 086
  - Fingertip control
- **RCCS-14**
  - #043 688
  - Fingertip control
- **Extension Cords (For 24 VAC wire feeders and remote controls)**
  - See page 6. Not to be used with Optima, 60M or XR-M

### Running Gear
- **MIGRunner™ Cart**
  - #195 445
  - For XMT 304/350 models only
- **MIGRunner™ XL Cart**
  - #195 246
  - For all models
- **XMT Cylinder Cart**
  - #042 537
  - For all models
- **Universal Carrying Cart and Cylinder Rack**
  - #042 934
  - For XMT 304/350 models only

### Protective Cover
- #195 478

### Wire Feeders/Guns
- **SuitCase™ 8VS / X-TREME™ 12VS**
  - #194 890 / #195 500
  - See Lit. Index No. M/6.4 and M/6.41
- **SuitCase™ 8RC / 12RC**
  - #194 938 / #194 940
  - See Lit. Index No. M/6.5
- **XR Control**
  - #181 538
  - See Lit. Index No. M/1.7
- **S-74 DX**
  - #195 059
  - See Lit. Index No. M/3.0
- **60M Series**
  - #131 794 / #131 796
  - See Lit. Index No. M/2.4
- **Spoolmatic™ 30A Spool Gun**
  - #138 831
  - Includes 30 ft (9.1 m) cable assembly
- **Roughneck™ C-Series MIG Guns**
  - See Lit. Index No. AY/17.0
- **Ironmate™ Flux Cored Guns**
  - See Lit. Index No. AY/16.0

### Water Coolant Systems
See page 7. See Lit. Index No. AY/7.2

### International-Style Connectors
See page 7