

Coolmate™ Series



Quick Specs



Light/Heavy Industrial Applications

Manufacturing
Aerospace
Automotive
Tube mills
Automation

Processes

TIG (GTAW)
MIG (GMAW)
Plasma cutting
Resistance welding

Input Power Single-phase

Input Voltage 120 or 240 V, 50/60 Hz

Max. Cooling Capacity 11,600–18,000 Btu/hr.



Coolant

Coolmate 1.3

Coolmate 3

Coolmate 3.5

Coolmate 4

Closed-loop design with radiator reduces coolant temperatures and prevents the system from overheating. Closed-loop design also recirculates the coolant through a fan-cooled heat exchanger.

Rustproof coolant reservoir molded of polyethylene for durability and corrosion resistance.

Standard inlet/outlet torch fittings are compatible with TIG and MIG torches having standard 5/8-18 left-hand fittings.

10-foot (3 m) power cords with plugs are longer than most power cords in the industry — providing the extra length when required.

Compatible with Miller® coolants and are ideal for warm and cold weather conditions, while providing HF or corrosion protection.



Coolant systems are warranted for one year, parts and labor.



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f t y i n



| Model | Motor Input Voltage | Maximum Current Draw | | Maximum Cooling Capacity* | Rated Cooling Capacity** | Tank Capacity | Dimensions | Weight Without Coolant |
|-----------------------------|---------------------|----------------------|-------|--|---|----------------------|---|---------------------------------|
| | | 50 Hz | 60 Hz | | | | | |
| Coolmate 1.3 | 115 V, 60 Hz | — | 4.7 A | 3,400 W (11,600 Btu/hr.) 3.8 qt./min. (3.6 L/min.) | 1,330 W (4,540 Btu/hr.) 1.1 qt./min. (1 L/min.) | 1.3 gal. (4.9 L) | H: 11.25 in. (286 mm) W: 10.38 in. (264 mm) D: 24 in. (610 mm) | Net: 43 lb. (20 kg) |
| Coolmate 3 CE | 115 V, 50/60 Hz | 5.9 A | 4.7 A | 3,820 W (13,000 Btu/hr.) 4.2 qt./min. (4.0 L/min.) | 1,420 W (4,840 Btu/hr.) 1.1 qt./min. (1 L/min.) | 3 gal. (11.4 L) | H: 13.25 in. (337 mm) W: 12.25 in. (311 mm) D: 23.25 in. (584 mm) | Net: 40 lb. (18 kg) |
| | 230 V, 50/60 Hz | 2.5 A | 3.0 A | | | | | |
| Coolmate 3.5 CE | 115 V, 50/60 Hz | 5.9 A | 4.7 A | 4,140 W (14,000 Btu/hr.) 5.0 qt./min. (4.7 L/min.) | 1,660 W (5,660 Btu/hr.) 1.1 qt./min. (1 L/min.) | 3.5 gal. (13.2 L) | H: 11.75 in. (298 mm) W: 15.75 in. (400 mm) D: 26 in. (660 mm) | Net: 64 lb. (29 kg) |
| Coolmate 4 Coolmate 4 CE | 115 V, 50/60 Hz | 5.9 A | 4.7 A | 5,500 W (18,000 Btu/hr.) 5.9 qt./min. (5.6 L/min.) | 1,780 W (6,070 Btu/hr.) 1.1 qt./min. (1 L/min.) | 4 gal. (15 L) | H: 16.25 in. (413 mm) W: 15.25 in. (387 mm) D: 18.75 in. (476 mm) | Net: 38 lb. (17 kg) |
| Coolmate 3X | 115 V, 50/60 Hz | 5.9 A | 4.7 A | 4,140 W (14,000 Btu/hr.) 5.0 qt./min. (4.7 L/min.) | 1,660 W (5,660 Btu/hr.) 1.1 qt./min. (1 L/min.) | 3 gal. (11.4 L) | H: 17 in. (432 mm) W: 27 in. (686 mm)*** D: 39 in. (991 mm) | Shipping: 158 lb. (72 kg) |

* Maximum cooling capacity is based on a 25° Celsius (77°F) environment at maximum flow with a 65° Celsius (149°F) coolant temperature rise.

** Rated IEC standard cooling capacity is based on a 25° Celsius (77°F) environment at a flow of one liter per minute with a 40° Celsius (104°F) coolant temperature rise.

*** Width measurement includes rear wheels and axle. Cooler width without rear wheels and axle is 22.25 inches (565 mm).

 All models are certified by Canadian Standards Association to both the Canadian and U.S. Standards.

 All CE models conform to the applicable parts of the IEC 60974 series of standards.

Product Descriptions

Coolmate™ 1.3



300972 120 V, 60 Hz

Light-industrial 1.3-gallon cooler designed for water-cooled torches on power sources rated up to 280 amps.*

- Designed to integrate with Dynasty 210/280 and Maxstar 280 models
- Compact horizontal design allows stacking and convenient mounting
- Weighs 43 pounds (20 kg) dry
- Equipped with power-on indicator light on front panel
- Filter and coolant filling spout are conveniently located for easy access
- Fluid level sight window
- Polyethylene-molded coolant tank and filler spout are rustproof
- Factory-set pressure-relief valve (55 psi) maintains consistent pressure during operation
- Thermally protected 1/4 hp motor guards against overheating
- Efficient fin-and-tube heat exchanger
- Brass-body positive-displacement rotary vane pump provides consistent coolant flow and pressure rating with long pump-life expectancy

*May vary with torch design and cable length.

Product Descriptions

Coolmate™ 3



043007 120 V, 50/60 Hz CE
043008 240 V, 50/60 Hz CE

Economical 3-gallon cooler designed for water-cooled torches rated up to 500 amps.*

- Compact horizontal design allows stacking and convenient mounting
- Midsize cooler weighs 40 pounds (18 kg) dry
- On/off power switch, “paddle wheel” coolant flow indicator, filter and coolant filling spout are all conveniently located on front panel
- Polyethylene-molded coolant tank, fan shroud and filler spout are rustproof
- Factory-set pressure-relief valve (55 psi) maintains consistent pressure during operation
- Thermally protected 1/4 hp motor guards against overheating
- Efficient fin-and-tube heat exchanger
- Brass-body positive-displacement rotary vane pump provides consistent coolant flow and pressure rating with long pump-life expectancy

Coolmate™ 3.5



300245 120 V, 50/60 Hz CE

Industrial 3.5-gallon cooler designed for water-cooled torches rated up to 600 amps.*

- Designed to integrate with Dynasty® 400/700 and Maxstar® 400/700
- Horizontal design allows stacking or convenient mounting onto a MIGRunner™ cart
- Weighs only 64 pounds (29 kg) dry
- Polyethylene-molded coolant tank, fan shroud and filler spout are rustproof
- Factory-set pressure-relief valve (55 psi) maintains consistent pressure during operation
- Thermally protected 1/4 hp motor guards against overheating
- Efficient fin-and-tube heat exchanger
- Equipped with internal check valves to prevent coolant flow when torch is disconnected
- Brass-body positive-displacement rotary vane pump provides consistent coolant flow and pressure rating with long pump-life expectancy

Coolmate™ 3X



Includes wheels and handles.

300419
120 V, 50/60 Hz

Industrial 3-gallon cooler designed for water-cooled torches rated up to 500 amps.*

- Includes easy-load dual cylinder rack, running gear and handles for Syncrowave® 250 DX/350 LX
- “Paddle wheel” coolant flow indicator, filter and coolant filling spout are all conveniently located on front panel
- Polyethylene-molded coolant tank, fan shroud and filler spout are rustproof
- Factory-set pressure-relief valve (55 psi) maintains consistent pressure during operation
- Thermally protected 1/4 hp motor guards against overheating
- Efficient fin-and-tube heat exchanger
- Brass-body positive-displacement rotary vane pump provides consistent coolant flow and pressure rating with long pump-life expectancy

Coolmate™ 4



042288
120 V, 50/60 Hz
042288015
120 V, 50/60 Hz CE

The best performer in its class — industrial 4-gallon cooler designed for water-cooled torches rated up to 600 amps.*

- Weighs only 38 pounds (17 kg) dry
- Tough one-piece case is portable and rustproof
- Convenient carrying handle and filler spout are molded into case
- Easily accessible coolant filter
- Factory-set pressure-relief valve (60 psi) maintains consistent pressure during operation
- Thermally protected 1/4 hp motor guards against overheating
- Efficient fin-and-tube heat exchanger
- Coolant system has a constant flow of coolant inside to keep the pump primed and to reduce algae buildup in the tank
- Brass-body positive-displacement rotary vane pump provides consistent coolant flow and pressure rating with long pump-life expectancy

**May vary with torch design and cable length.*

Water-Cooled TIG Torch Adapters



50 mm Dinse-Style with Water Return Line 195377

For Maxstar 210/280/400, Dynasty 210/280/400 and Syncrowave 250 DX/350 LX. Used with all Weldcraft™ water-cooled torches.



With gas and water return line.

50 mm Dinse-Style Flow Thru 195380

For Syncrowave 210. Used with all Weldcraft™ water-cooled torches.



50 mm Thread-Lock-Style 225028

For Maxstar 700 and Dynasty 700. Used with all Weldcraft™ water-cooled torches.



Water-Cooled TIG Block Adapter 45V11
For Miller power sources with stud-type output terminals.



Replacement Water Hose for Dinse-Style Adapter 222809 18 in. (457 mm)

Water Hoses and Connectors



Water Hose Extension 40V76R6

6 ft. (1.8 m). Hose with two male 5/8-inch 18 LH thread connections.



Water Coupler 05 020

Brass hose fitting with 5/8-inch 18 LH thread.

Coolants



Sold in multiples of four in 1-gallon recyclable plastic bottles. Miller coolants contain a base of ethylene glycol and deionized water to protect against freezing to -37° Fahrenheit (-38° C) or boiling to 227° Fahrenheit (108° C).

Low-Conductivity Coolant (clear, pre-mixed) 043810

For TIG and MIG applications. NOT for use in push-pull systems or systems where aluminum is in coolant path/circuit.

Aluminum-Protecting Coolant (green, pre-mixed) 043809

Primarily used in push-pull systems where aluminum is in coolant path/circuit and high frequency is NOT used.

Replacement Filter Assemblies



166564 filter



215667 filter

Filter Assemblies

166564 For Coolmate 1.3, 3 and 3X

215667 For Coolmate 3.5



Filter Strainer 146249

For Coolmate 4. Located inside pump assembly. See owner's manual.

Torch Kits



W-250 (WP-20) Torch Kit 300185

- Weldcraft™ W-250 25-foot (7.6 m) TIG torch with Dinse-style connector
- Torch cable cover
- Work clamp with 15-foot (4.6 m) 1/0 cable and Dinse-style connector
- Flowmeter regulator
- Gas hose (regulator to machine)
- AK4C torch accessory kit includes nozzles, collets, collet bodies and 2% ceriated tungsten electrodes (1/16, 3/32 and 1/8 inch)



W-375 Torch Kit 301268

- Weldcraft™ W-375 25-foot (7.6 m) TIG torch with Dinse-style connector
- Torch cable cover
- Work clamp with 15-foot (4.6 m) 1/0 cable and Dinse-style connector
- Flowmeter regulator
- Gas hose (regulator to machine)
- AK4C torch accessory kit includes nozzles, collets, collet bodies and 2% ceriated tungsten electrodes (1/16, 3/32 and 1/8 inch)



W-280 (WP-280) Torch Kit 300990

- Weldcraft™ W-280 25-foot (7.6 m) TIG torch with Dinse-style connector
- Torch cable cover
- Work clamp with 15-foot (4.6 m) 1/0 cable and Dinse-style connector
- Flowmeter regulator
- Gas hose (regulator to machine)
- AK4C torch accessory kit includes nozzles, collets, collet bodies and 2% ceriated tungsten electrodes (1/16, 3/32 and 1/8 inch)



W-400 (WP-18SC) Torch Kit 300186

- Weldcraft™ W-400 (WP-18SC) 25-foot (7.6 m) TIG torch with thread-lock connector
- Torch cable cover
- Work clamp with 12-foot (3.7 m) 4/0 cable with thread-lock connector
- Flowmeter regulator
- Gas hose (regulator to machine)
- AK18C torch accessory kit includes nozzles, collets, collet bodies and 2% ceriated tungsten electrodes (3/32, 1/8 and 5/32 inch)

Typical Coolmate™ Usages



Coolmate 1.3 shown with Maxstar® 280 DX TIGRunner®



Coolmate 3 shown with XMT® 350 MIGRunner™



Coolmate 3.5 shown with XMT® 350 MIGRunner™

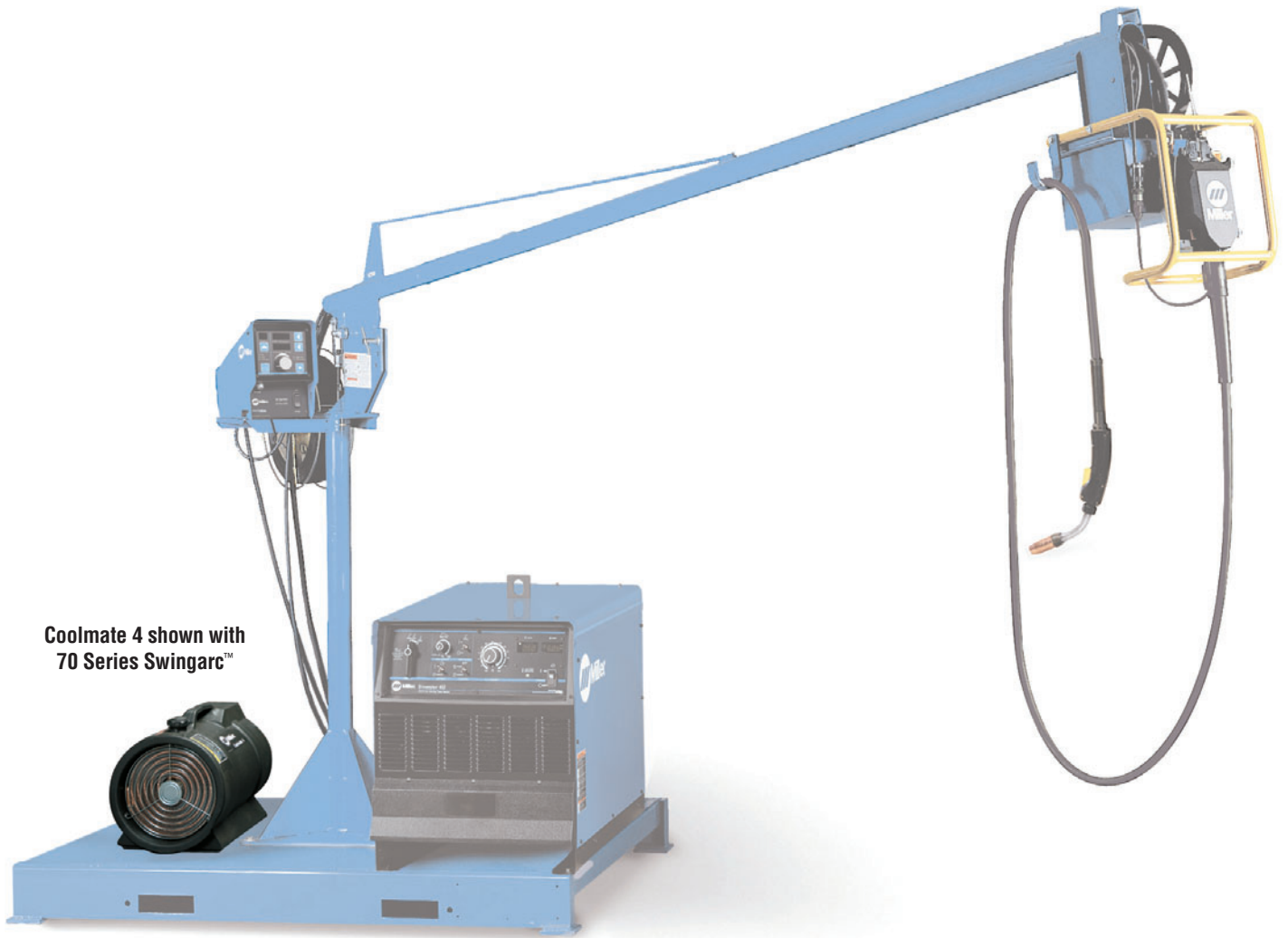


Coolmate 3.5 shown with Dynasty® 400 and 700 TIGRunners®



Coolmate 3X shown with Syncrowave® 250 DX TIGRunner®

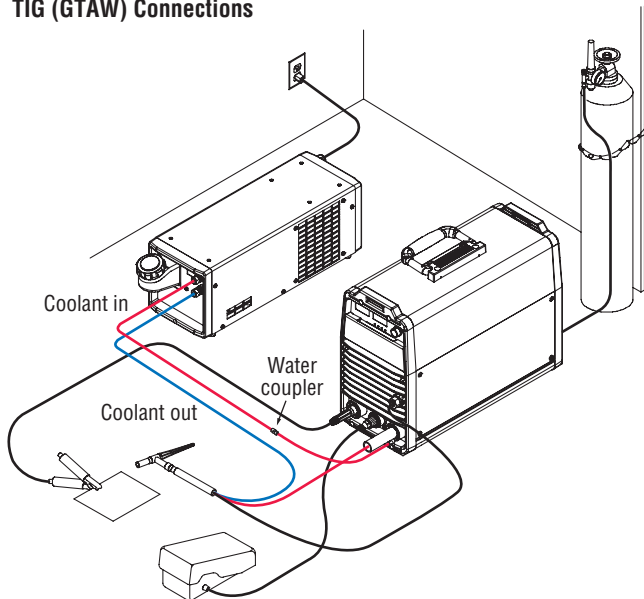
Typical Coolmate™ Usages



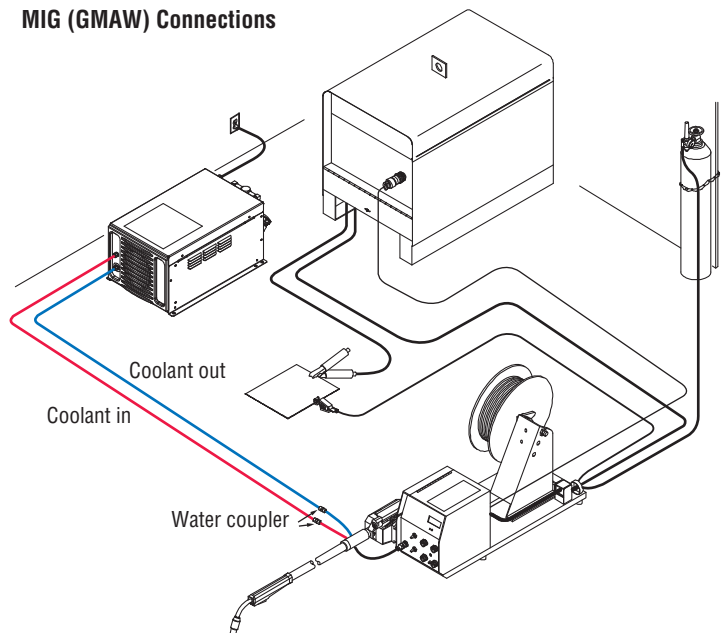
Coolmate 4 shown with 70 Series Swingarc™

Typical Coolmate™ Connections

TIG (GTAW) Connections



MIG (GMAW) Connections



Ordering Information

| Equipment and Options | Stock No. | Description | Qty. | Price |
|---|-----------|--|------|-------|
| Coolmate™ 1.3 | 300972 | 120 V, 60 Hz | | |
| Coolmate™ 3 | 043007 | 120 V, 50/60 Hz with CE | | |
| | 043008 | 240 V, 50/60 Hz with CE | | |
| Coolmate™ 3.5 | 300245 | 120 V, 50/60 Hz with CE | | |
| Coolmate™ 4 | 042288 | 120 V, 50/60 Hz | | |
| | 042288015 | 120 V, 50/60 Hz with CE | | |
| Coolmate™ 3X | 300419 | 120 V, 50/60 Hz | | |
| Accessories | | | | |
| Water-Cooled TIG Torch Adapters | 195377 | 50 mm Dinse-style with water return line | | |
| | 195380 | 50 mm Dinse-style flow thru with gas and water return line | | |
| | 225028 | 50 mm thread-lock-style | | |
| | 45V11 | Water-cooled TIG block | | |
| | 222809 | 18 in. (457 mm) replacement water hose | | |
| Water Hose Extensions | 40V76R6 | 6 ft. (1.8 m) hose with two male 5/8 in. 18 LH thread connections | | |
| Water Coupler | 057020 | Brass hose fitting with 5/8 in. 18 LH thread | | |
| Low-Conductivity Coolant (Clear, Pre-Mixed) | 043810 | For TIG and MIG applications. NOT for push-pull systems or where aluminum is in coolant path/circuit | | |
| Aluminum-Protecting Coolant (Green, Pre-Mixed) | 043809 | For push-pull systems where aluminum is in coolant path/circuit and high frequency is NOT used | | |
| Filter Assemblies | 166564 | For use with Coolmate 1.3, 3 and 3X | | |
| | 215667 | For use with Coolmate 3.5 | | |
| Filter Strainer | 146249 | For use with Coolmate 4 | | |
| Torch Kits | 300185 | 250 A with W-250 (WP20) water-cooled torch | | |
| | 300990 | 280 A with W-280 (WP280) water-cooled torch | | |
| | 301268 | 375 A with W-375 water-cooled torch | | |
| | 300186 | 400 A with W-400 (WP18SC) water-cooled torch | | |

Date:

Total Quoted Price:

Distributed by:

