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# Coolmate™ Series

**Coolant Systems**

## 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.




**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.

TRUE BLUE® 1 YR. WARRANTY

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

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Certified System™
ISO 9001 Quality

# Specifications (Subject to change without notice.)

1 Phase

| Model | Motor Input Voltage | Maximum Current Draw 50 Hz | 60 Hz | Maximum Cooling Capacity* | Rated Cooling Capacity** | Tank Capacity | Dimensions | Weight Without Coolant |
|---|---|---|---|---|---|---|---|---|
| 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.*

# Genuine Miller® Accessories

## 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.*

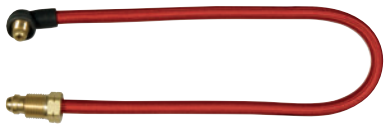
**50 mm Dinse-Style Flow Thru 195380**
*For Syncrowave 210.* Used with all Weldcraft™ water-cooled torches.



**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 057020**
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™

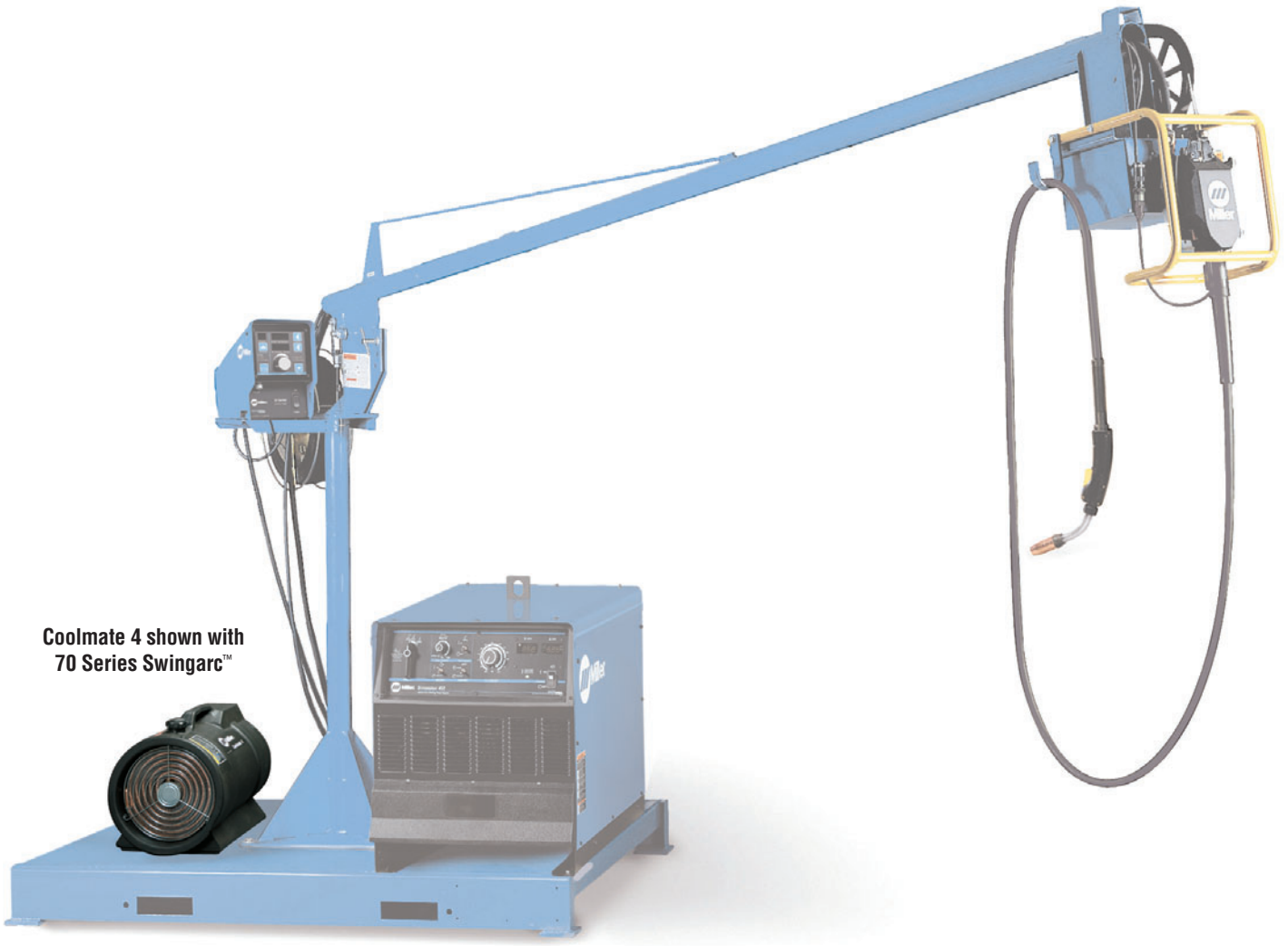


Coolmate 3.5 shown with
Dynasty® 400 TIGRunner® and 700 TIGRunner®



Coolmate 3X shown with
Syncrowave® 250 DX TIGRunner®

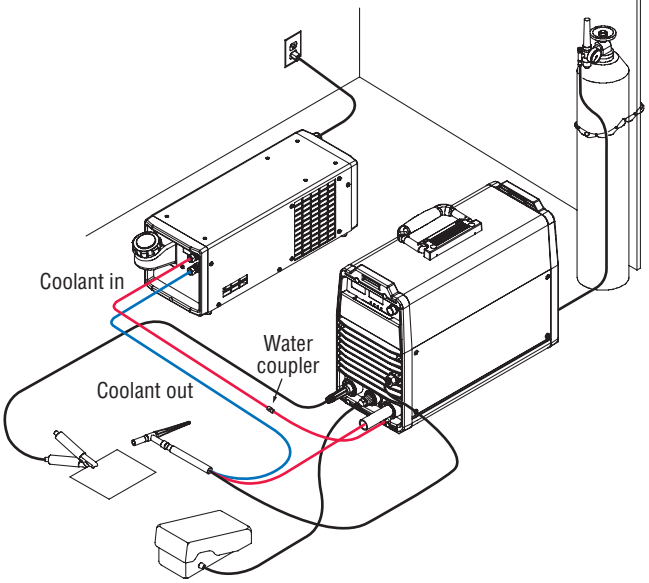
# Typical Coolmate™ Usages



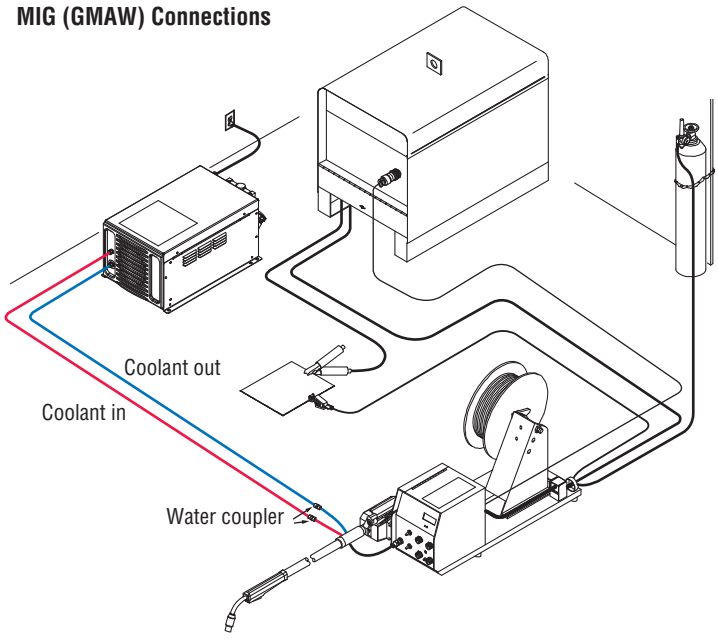
Coolmate 4 shown with
70 Series Swingarc™

# 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**<br>**043008** | 120 V, 50/60 Hz with **CE**<br>240 V, 50/60 Hz with **CE** | | |
| **Coolmate™ 3.5** | **300245** | 120 V, 50/60 Hz with **CE** | | |
| **Coolmate™ 4** | **042288**<br>**042288015** | 120 V, 50/60 Hz<br>120 V, 50/60 Hz with **CE** | | |
| **Coolmate™ 3X** | **300419** | 120 V, 50/60 Hz | | |
| **Accessories** | | | | |
| Water-Cooled TIG Torch Adapters | **195377**<br>**195380**<br>**225028**<br>**45V11**<br>**222809** | 50 mm Dinse-style with water return line<br>50 mm Dinse-style flow thru with gas and water return line<br>50 mm thread-lock-style<br>Water-cooled TIG block<br>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**<br>**215667** | For use with Coolmate 1.3, 3 and 3X<br>For use with Coolmate 3.5 | | |
| Filter Strainer | **146249** | For use with Coolmate 4 | | |
| Torch Kits | **300185**<br>**300990**<br>**301268**<br>**300186** | 250 A with W-250 (WP20) water-cooled torch<br>280 A with W-280 (WP280) water-cooled torch<br>375 A with W-375 water-cooled torch<br>400 A with W-400 (WP18SC) water-cooled torch | | |

**Date:** **Total Quoted Price:**

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