

# ARCTIC COMMANDER 2.0

RECOVERY/RECYCLE/RECHARGE MACHINES



INTUITIVE **DESIGN**, ELEVATED **EFFICIENCY**, IMPROVED **PERFORMANCE**



**Mastercool**<sup>®</sup> Inc.  
*"World Class Quality"*



Introducing Mastercool's enhanced Arctic Commander 2.0 line of R/R/R machines, the culmination of years of expertise in the industry. Our team of engineers have focused on intuitive design, elevated efficiency, and improved performance to set a higher standard.

Experience effortless navigation through detailed function screens with the spacious 10" color touchscreen command center. Through the expansion of internal plumbing and reduction of restrictions, we've achieved remarkable improvements in recovery and charge times. These units will recover 98.5% of the refrigerant in a vehicle which exceeds the SAE standards for purity and is the fastest in the industry.

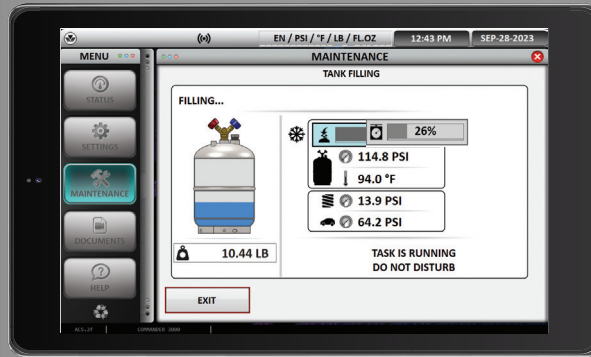
Don't take our word for it, the Arctic Commander 2.0 has undergone rigorous ETL testing, affirming its position as one of the most precise machines on the market. Official test results demonstrate an astonishing accuracy level, with desired charge and recovery quantities achieved with an impressive 1 gram deviation.

Step into the future of R/R/R machines by bidding farewell to outdated models. Replace your aging equipment with the cutting-edge Arctic Commander 2.0 and experience the next level of performance.

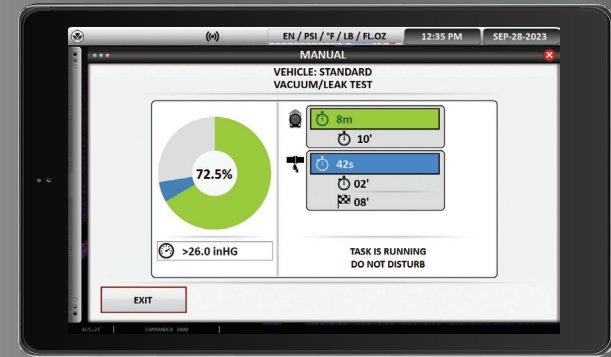
# Fully responsive 10" touch screen command center...



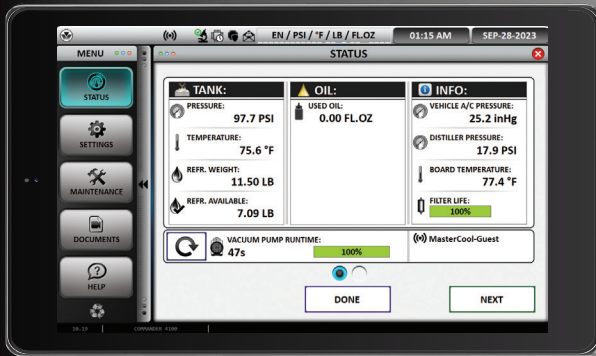
**Home Screen**  
allows for quick touch selection of options



**Tank Fill Screen**  
allows for visual, real time progress of tank filling process



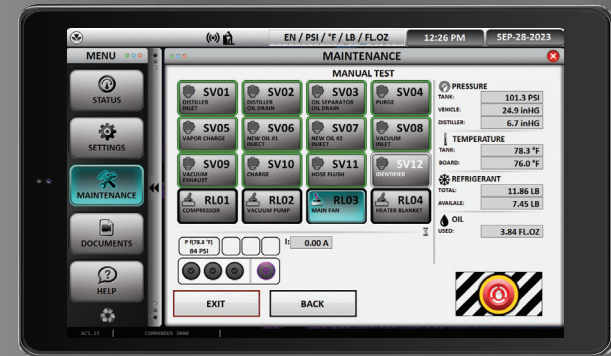
**Vacuum/Leak Test Screen**  
fully customizable options allows the user to personalize the times of vacuum and leak testing



**Status Screen**  
for quick reference of resources



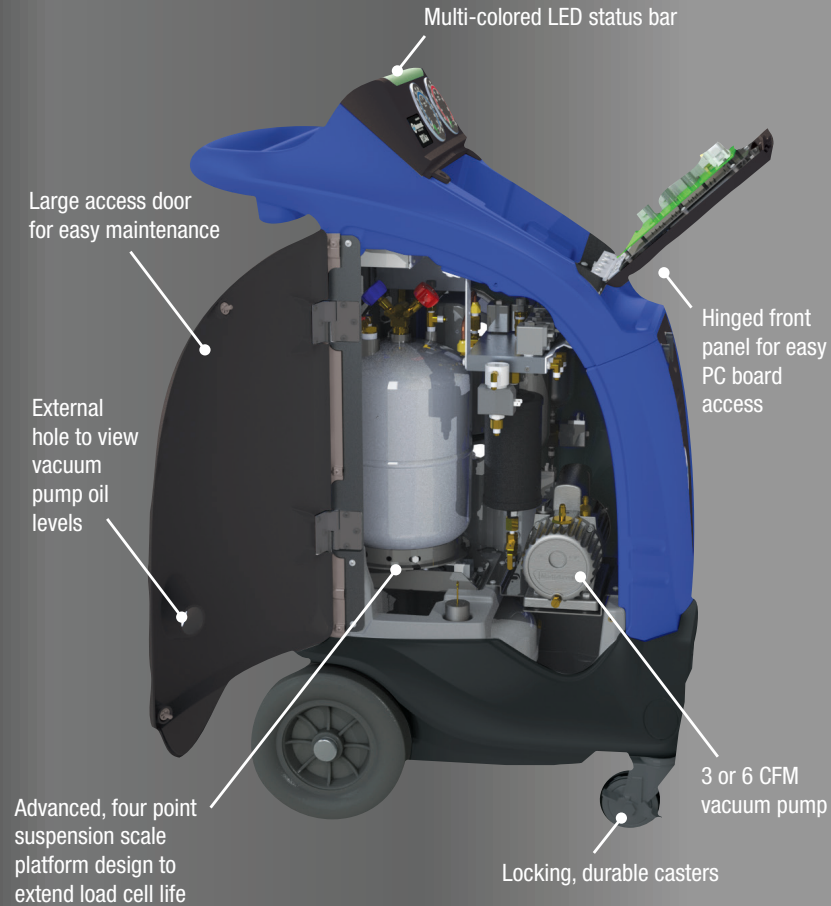
**Settings Screen**  
allows the user to select a default language, units, temperature, volume and weight measurement



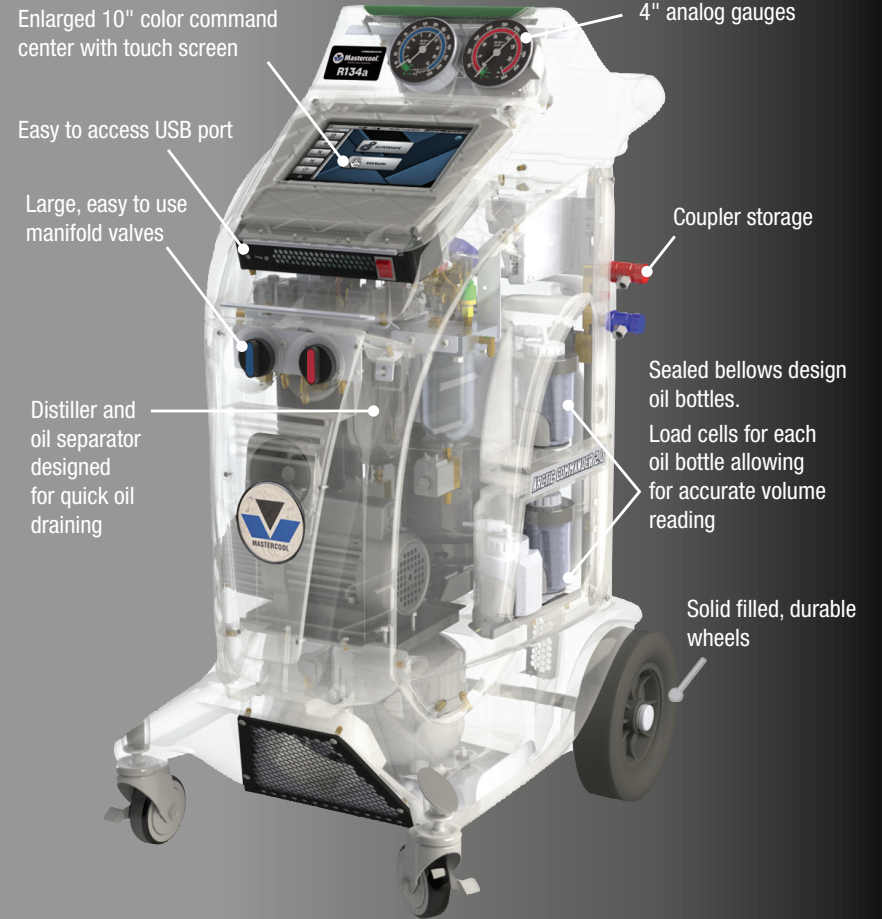
**Maintenance Screen**  
offered only to authorized service technicians allowing for quick and easy diagnosis

# Take a look under our hood...

**EXCEEDS SAE STANDARDS FOR PURITY AT 98.5%**



<p><b>WI-FI</b> Wi-Fi capability allows for real time, interactive communication and troubleshooting</p>	<p><b>ON-BOARD UNITS CONVERSION CALCULATOR</b> Easily convert between different units of measure</p>	<p><b>SELF-DIAGNOSTIC CHECK</b> Upon start-up, unit checks all of the integral functions of the machine</p>
<p><b>COMPACT DESIGN</b> The machine's compact design makes it easy to maneuver and requires minimal shop space</p>	<p><b>TANK HEATER</b> Provides quick charging at high or low temperatures</p>	<p><b>COOLING FAN</b> Dedicated PC board cooling fan keeps the PC board consistently cool</p>



<p><b>ALARMS</b> <b>AUTO FILTER ALARM</b> Warns that a filter change is required</p> <p><b>FULL TANK ALARM</b> Notifies when tank is full</p> <p><b>LOW REFRIGERANT ALARM</b> Notifies when refrigerant is low</p>	<p><b>AUTOMATIC OIL DISCHARGE</b> Oil is automatically discharged during the recovery process. If oil is present, it will drain into a graduated container clearly displaying the amount of oil that was removed</p>	<p><b>AUTOMATIC VACUUM LEAK TEST</b> Checks for leaks during the vacuum phase. The operation will be interrupted and a warning will appear if leaks are found</p>

# R1234yf & HYBRID

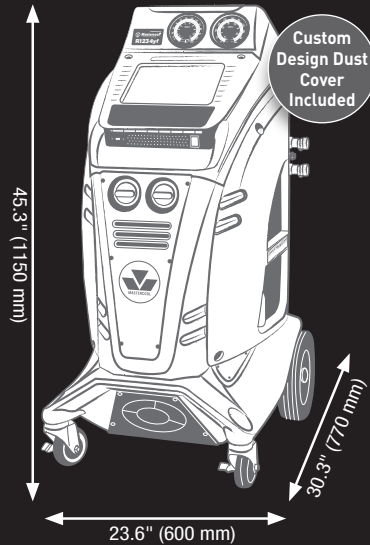
- › **COMMANDER4100** (110V)
- › **COMMANDER4100-E** (220V)

› **COMMANDER4100-E-X** (220V)  
without a refrigerant identifier

›› **DESIGN CERTIFIED FOR COMPLIANCE WITH SAE J2843** ‹‹

## SPECIFICATIONS:

- Type of Refrigerant: R1234yf
- Service Procedure: Fully automatic or manual
- Voltage: 110 V / 60 Hz or 220 V / 50/60 Hz
- Scale Resolution: 0.02 lb (10 g)
- Oil Scale Resolution: 0.01 lb (5 g)
- Working Temperature Range: 50/120°F (10/49°C)
- Filter System: 1 filter for cleaning and water removal
- Vacuum Pump: 6 CFM (142 liter/min)
- Compressor: Hermetically sealed, 12cc, high pressure
- Recovery: 98.5% at 70 to 75°F (21 to 24°C) <30 minutes
- Recovery Cylinder: 30 lb (12.5 liters), refillable
- Charge Accuracy: ±0.5 oz. at 70 to 75°F (±15 g at 21 to 24°C)
- Hoses: 96" (250 cm)
- Couplers: R1234yf Manual
- Pressure Gauges: Class 1.0
- Cylinder Temperature Sensor: Integrated
- Cylinder Heater: Standard Equipment
- Shipping Dimensions (mm): 1346 (h) x 813 (w) x 965 (d)



## FEATURES:

- 10" Color Command Center with Touch Screen
- Automatic and Manual Procedures
- Vehicle Refrigerant Database
- Automatic Vacuum Leak Test: Programmable
- Auto Oil Discharge
- Auto and Manual Air Purge
- Auto Filter and Full Tank Alarm
- Low Refrigerant Alarm
- Auto Oil Injection (220V models only)
- E-Printing Capability
- Hose Flushing
- Vehicle A/C System Flushing
- Cylinder Heater

- 6 CFM Vacuum Pump
- Refrigerant Identifier
- Wi-Fi Capable
- Multiple Languages
- On-Board Unit Conversion Calculator
- Cabinet Designed for Increased Air Flow
- Large Analog Gauges
- Hard Wired Power Cord
- Hose Coupler Storage
- Solid Durable Wheels with Locking Casters
- Multi-Colored LED Status Bar
- Automatic Self-Diagnostic Check
- Made in USA



### REFRIGERANT IDENTIFIER

Integrated state-of-the-art refrigerant identifier.



### HOSE FLUSHING

Eliminates the chance of excess (non-insulating) oils being injected into the A/C system.

Utilized for service of hybrid vehicles.



### E-PRINTING CAPABILITY

For a comprehensive, emailed report.



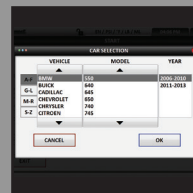
### ONE BOTTLE\*

One used oil bottle.



### STATUS LIGHT

Multi-colored LED status bar offers visual confirmation of machine progress.



### REFRIGERANT DATABASE

Refrigerant capacities for US, European, Japanese and Korean makes and models.

## COMMANDER4100 Automatic R1234yf & Hybrid R/R/R Machine



\* 220 V models will include 3 bottles. Two sealed bellows design bottles for selection of oils or dyes and one used oil bottle.



# R134a & HYBRID

**COMMANDER3100 (110V) ◀**  
**COMMANDER3100-E (220V) ◀**

## COMMANDER3100 Automatic R134a & Hybrid R/R/R Machine



### HOSE FLUSHING

Eliminates the chance of excess (non-insulating) oils being injected into the A/C system.

Utilized for service of hybrid vehicles.



### E-PRINTING CAPABILITY

For a comprehensive, emailed report.



### ONE BOTTLE\*

One used oil bottle.



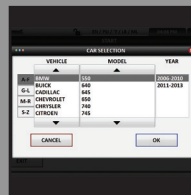
### STATUS LIGHT

Multi-colored LED status bar offers visual confirmation of machine progress.



### REFRIGERANT DATABASE

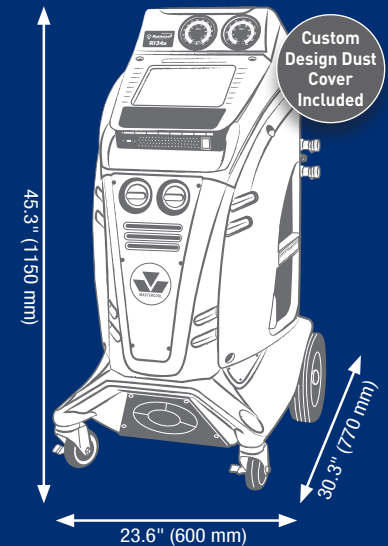
Refrigerant capacities for US, European, Japanese and Korean makes and models.



» DESIGN CERTIFIED FOR COMPLIANCE WITH SAE J2788 ◀◀

### SPECIFICATIONS:

- Type of Refrigerant: R134a
- Service Procedure: Fully automatic or manual
- Voltage: 110 V / 60 Hz or 220 V / 50/60 Hz
- Scale Resolution: 0.02 lb (10 g)
- Oil Scale Resolution: 0.01 lb (5 g)
- Working Temperature Range: 50/120°F (10/49°C)
- Filter System: 2 filters for cleaning and water removal
- Vacuum Pump: 6 CFM (142 liter/min)
- Compressor: Hermetically sealed, 12cc, high pressure
- Recovery: 98.5% at 70 to 75°F (21 to 24°C) <30 minutes
- Recovery Cylinder: 30 lb (12.5 liters), refillable
- Charge Accuracy: ±0.5 oz. at 70 to 75°F (±15 g at 21 to 24°C)
- Hoses: 96" (250 cm)
- Couplers: R134a Manual
- Pressure Gauges: Class 1.0
- Cylinder Temperature Sensor: Integrated
- Cylinder Heater: Standard Equipment
- Shipping Dimensions (mm): 1346 (h) x 813 (w) x 965 (d)



### FEATURES:

10" Color Command Center with Touch Screen	6 CFM Vacuum Pump
Automatic and Manual Procedures	Wi-Fi Capable
Refrigerant Database	Multiple Languages
Automatic Vacuum Leak Test: Programmable	On-Board Unit Conversion Calculator
Auto Oil Discharge	Cabinet Designed for Increased Air Flow
Auto and Manual Air Purge	Large Analog Gauges
Auto Filter and Full Tank Alarm	Hard Wired Power Cord
Low Refrigerant Alarm	Hose Coupler Storage
Auto Oil Injection (220V models only)	Solid Durable Wheels with Locking Casters
E-Printing Capability	Multi-Colored LED Status Bar
Hose Flushing	Automatic Self-Diagnostic Check
Vehicle A/C System Flushing	Made in USA
Cylinder Heater	

\* 220 V models will include 3 bottles. Two sealed bellows design bottles for selection of oils or dyes and one used oil bottle.

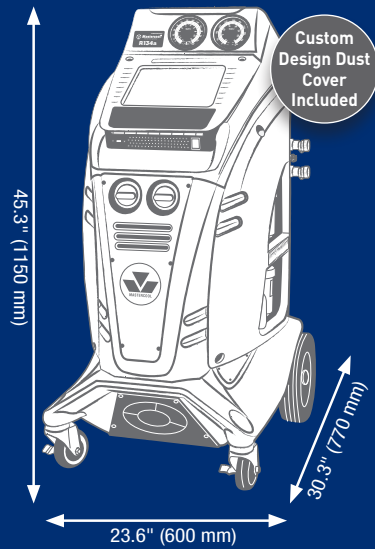
# R134a Fully Automatic

- › **COMMANDER2100** (110V)
- › **COMMANDER2100-E** (220V)

›› **DESIGN CERTIFIED FOR COMPLIANCE WITH SAE J2788** ‹‹

## SPECIFICATIONS:

- Type of Refrigerant: R134a
- Service Procedure: Fully automatic or manual
- Voltage: 110 V / 60 Hz or 220 V / 50/60 Hz
- Scale Resolution: 0.02 lb (10 g)
- Oil Scale Resolution: 0.01 lb (5 g)
- Working Temperature Range: 50/120°F (10/49°C)
- Filter System: 2 filters for cleaning and water removal
- Vacuum Pump: 6 CFM (142 liter/min)
- Compressor: Hermetically sealed, 12cc, high pressure
- Recovery: 98.5% at 70 to 75°F (21 to 24°C) <30 minutes
- Recovery Cylinder: 30 lb (12.5 liters), refillable
- Charge Accuracy: ±0.5 oz. at 70 to 75°F (±15 g at 21 to 24°C)
- Hoses: 96" (250 cm)
- Couplers: R134a Manual
- Pressure Gauges: Class 1.0
- Cylinder Temperature Sensor: Integrated
- Cylinder Heater: Standard Equipment
- Shipping Dimensions (mm): 1346 (h) x 813 (w) x 965 (d)



## FEATURES:

10" Color Command Center with Touch Screen
Automatic and Manual Procedures
Refrigerant Database
Automatic Vacuum Leak Test: Programmable
Auto Oil Discharge
Auto and Manual Air Purge
Auto Filter and Full Tank Alarm
Low Refrigerant Alarm
Auto Oil Injection
Cylinder Heater
6 CFM Vacuum Pump

Wi-Fi Capable
Multiple Languages
On-Board Unit Conversion Calculator
Cabinet Designed for Increased Air Flow
Large Analog Gauges
Hard Wired Power Cord
Hose Coupler Storage
Solid Durable Wheels with Locking Casters
Multi-Colored LED Status Bar
Automatic Self-Diagnostic Check
Made in USA



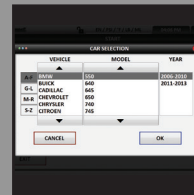
## THREE BOTTLES

Two sealed bellows design bottles for selection of oils or dyes.  
One used oil bottle.



## STATUS LIGHT

Multi-colored LED status bar offers visual confirmation of machine progress.



## REFRIGERANT DATABASE

Refrigerant capacities for US, European, Japanese and Korean makes and models.

## OPTIONAL UPGRADES:



## E-PRINTING CAPABILITY

For a comprehensive, emailed report.

# COMMANDER2100

## Fully Automatic R134a R/R/R Machine



*E-Printer Factory Upgrade:*  
**COMMANDER2100-P** (110V)  
**COMMANDER2100-EP** (220V)

*E-Printer Field Upgrade:*  
**COMMANDER-EPRINTER**



# R134a Semi-Automatic

**COMMANDER1100** (110V) ◀  
**COMMANDER1100-E** (220V) ◀

## COMMANDER1100 Semi-Automatic R134a R/R/R Machine

**ONE BOTTLE**  
One used oil bottle.



### OPTIONAL UPGRADES:

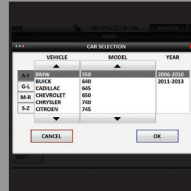
#### E-PRINTING CAPABILITY

For a comprehensive, emailed report.



#### REFRIGERANT DATABASE

Refrigerant capacities for US, European, Japanese and Korean makes and models.



*E-Printer Factory Upgrade:*  
**COMMANDER1100-P** (110V)  
**COMMANDER1100-EP** (220V)

*E-Printer Field Upgrade:*  
**COMMANDER-EPRINTER**

*Refrigerant Database Factory Upgrade:*  
**COMMANDER1100-D** (110V)  
**COMMANDER1100-ED** (220V)

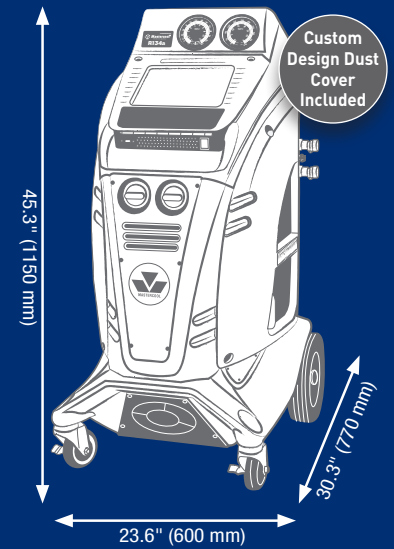
*Refrigerant Database Field Upgrade:*  
**COMMANDER-DB**

*E-Printer and Refrigerant Database Factory Upgrade:*  
**COMMANDER1100-PD** (110V)  
**COMMANDER1100-EPD** (220V)

>> DESIGN CERTIFIED FOR  
COMPLIANCE WITH SAE J2788 <<

### SPECIFICATIONS:

- Type of Refrigerant: R134a
- Service Procedure: Manual
- Voltage: 110 V / 60 Hz or 220 V / 50/60 Hz
- Scale Resolution: 0.02 lb (10 g)
- Working Temperature Range: 50/120°F (10/49°C)
- Filter System: 2 filters for cleaning and water removal
- Vacuum Pump: 3 CFM (70 liter/min)
- Compressor: Hermetically sealed, 12cc, high pressure
- Recovery: 98.5% at 70 to 75°F (21 to 24°C) <30 minutes
- Recovery Cylinder: 30 lb (12.5 liters), refillable
- Charge Accuracy: ±0.5 oz. at 70 to 75°F (±15 g at 21 to 24°C)
- Hoses: 96" (250 cm)
- Couplers: R134a Manual
- Pressure Gauges: Class 1.0
- Cylinder Temperature Sensor: Integrated
- Cylinder Heater: Standard Equipment
- Shipping Dimensions (mm): 1346 (h) x 813 (w) x 965 (d)



### FEATURES:

10" Color Command Center with Touch Screen	Multiple Languages
Manual Procedures	On-Board Unit Conversion Calculator
Automatic Vacuum Leak Test: Programmable	Cabinet Designed for Increased Air Flow
Auto Oil Discharge	Large Analog Gauges
Auto and Manual Air Purge	Hard Wired Power Cord
Auto Filter and Full Tank Alarm	Hose Coupler Storage
Low Refrigerant Alarm	Solid Durable Wheels with Locking Casters
Cylinder Heater	Automatic Self-Diagnostic Check
3 CFM Vacuum Pump	Wi-Fi Capable
Made in USA	

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