Category: 98% Air Dryer Series / Smart Controller Series
Air Compressor
UPC: 850053943539

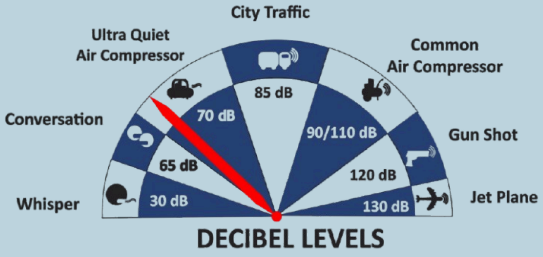


SPECIFICATION SHEET

Model: 10020HDSMADC

PRODUCT OVERVIEW

The CALIFORNIA AIR TOOLS 10020HDSMADC **Ultra Quiet** 2 Hp Oil-Free 10-Gallon Air Compressor, with Automatic Drain Valve, is designed to be one of the quietest 2.0 horse power air compressors in the industry having only 70 decibels of sound.



FEATURES

- The MDR2i OLED Smart Controller may be connected to mobile phones, tablets, notebooks, or computers. The controller can be used as an access point or can be connected to a Wi-Fi network. Compressor features and parameters may be entered and controlled comfortably along with remote monitoring.

Includes MDR2i OLED Smart Pressure Controller for remote monitoring and control:

- Programmable ON/OFF Times
- Pressure ON Level
- Pressure OFF Level
- Unloader Relay Delay
- Auto Drain Time
- Drain Valve Time
- Overcurrent Limit
- Pressure Units
- Total Active (Motor-Pump) Running Hours



- The powerful 2.0 HP motor operates at only 1680 RPM creating less noise, vibration and creating less wear. The Oil-Free Dual Piston Pump System is engineered for longevity, high performance and durability.
- The SP-9421 Motor/Pump is tested for a minimum pump life of 3000 hours before service. 30% more life before repair. The SP Series of Ultra Quiet Air Compressor Motors have been designed to increase duty cycle and allow for longer continuous run times.*





BENEFITS

The 98% Air Dryer is specially designed to remove the water vapor from the air to protect sensitive tools and machinery.

- ISO 8573 2.3.1 Compliant (class 2/3 dry air):
- Water Pressure Dew Point (PDP) performance range (-20′ F. to -51′ F.)
- Air Quality: ISO 8573 – Class 2.3.1
- 5 um and 0.01 um particulate filtering.

PARTICLE: Class 2–3: Moderate filtration, particle size up to 1 µm (Class 2) or 5 µm (Class 3). Common in food & beverage, chemical processing, and precision engineering where clean air prevents product contamination and equipment wear.

WATER CONTENT: Class 2–3: Pressure dew point between −40 °C and −20 °C. Common in food & beverage processing, chemical plants, and medical applications where low moisture prevents contamination and corrosion.

OIL CONTAMINATION: Class 1: Allows a maximum of 0.01 mg/m³, required in industries like food, beverage, or healthcare.

Air Quality classes defined in ISO 8573

There are standardized compressed air quality classes which makes easier for manufactures to define required air quality to ensure trouble free operation of their equipment.

The ISO specify 3 major contaminants of compressed air - **solid particles**, **water,** and **oil**. These contaminants are specified by 3 digits that are referring to purity class from table below.
Particle size and density - Definition of the size and concentration of solid matter particles like dirt or rust that may remain in the compressed air.
Pressure dew point - Definition of the temperature to which the compressed air can be cooled without condensation of the moisture it contains. The pressure dew point changes with the air pressure.
Oil content - Definition of the residual quantity of aerosols and hydrocarbons contained in the compressed air.

Class	Solid particles per m3			Water	Oil
	0.1 - 0.5 micron	0.5 - 1 micron	1 - 5 micron	Pressure dew point in °C	Residual oil content in mg/m³
1	100	1	0	-70	0,01
2	100 000	1000	10	-40	0,1
3	-	10 000	50	-20	1
4	-	-	1000	+3	5
5	-	-	2000	+7	-
6	-	-	-	+10	-

Selecting an air purity class of 2.3.1, would specify the following air quality when operating at the standard's reference conditions:

Class 2 Particles
In each cubic meter of compressed air, no more than 100,000 particles in the 0.1 - 0.5-micron size range are allowed. In each cubic meter of compressed air, no more than 1,000 particles in the 0.5 - 1 micron size range is allowed. In each cubic meter of compressed air, no more than 10 particles in the 1 - 5-micron size range is allowed.

Class 3 Water
A pressure dewpoint of -20°C

Class 1 Oil
In each cubic meter of compressed air, not more than 0.01mg of oil is allowed. This is a combined level for both oil aerosol and oil vapor.

To dry the air from the air compressor an Aftercooler and 98% Air Dryer are utilized. The aftercooler is a heat exchanger for cooling the discharge air from the air compressor. The water vapor from the compressed air is condensed into liquid form and pushed into the Air Dryer.

The easy to replace "Spin-On" 98% Air Dryer Cannister/Cartridge has a regenerating High-Temperature Molecular Sieve Desiccant to dry the air. This cartridge dryer has a life of 2-years before replacement. The large 10 Gallon Horizontal Steel Air Tank is just the right size to fit under a bench, desk or cabinet.

The California Air Tools EZ-1 Automatic Drain Valve has been designed to eliminate manually draining your air compressor air tank. The manually set timer allows you to set the time for both the frequency and duration of the draining process.

The Easy Start Valve feature allows for a easier start up using less starting amps. The Easy Start Valve releases a small amount of air from the pump at start up to produce a no-load condition allowing the motor to spin freely. This no-load start up requires less amps for a easier start up in cold temperatures.

Designed for the person looking for Power, 98% Dry Air and Less Service with at Least 30% Less Noise! Ideal for Dental, Milling, Bio-Tech, Manufacturing, Packaging, Restaurant and General Engineering Applications.

SPECIFICATIONS

Specification	Details
Material	Alloy Steel
Color	White
Weight	100 Pounds
Height	26 inches
Item Dimensions L x W x H	20"L x 28"W x 26"H
Capacity	10 Gallons
Maximum Current	14 Amps
Voltage	110 Volts
Noise Level	70 dB
Horsepower	2.0 Hp
CFM 40 PSI	6.40
CFM 90 PSI	5.30

FEATURES

1. **Ultra Quiet – Only 70 decibels**
2. Oil-Free Pump (Class 1) – Cleaner air for better tool operation.
3. – Less maintenance and Costs.
4. Regulated Output Air Pressure gauge (1-120 PSI) with 5um (micron) filtration
5. One – Female Industrial Female “Push to Connect” quick connector (1/4″ NPT)
6. 0.01 Micron Dry Air Prefilter
7. Easy Start Valve – For Less Starting Amperage
8. MDR2i OLED Smart Controller for remote monitoring and output pressure control
9. Thermal Overload Protector
10. Working Pressure 90-120 PSI (+/-5 PSI). Adjustable up to 105 PSI Kick-On; 130 PSI Kick-Off maximum.
11. 110v / 60 Hz
12. Low Amp Draw – Only 14.0 Amps
13. Time to fill tank from empty to full – 120 Seconds
14. Recovery time from 95 PSI to 125 PSI – 25 Seconds
15. Duty Cycle – 70/30*
16. L (20″) x W (28″) x H (26″)
17. Weight: 100 lbs.
18. Air Dryer Cartridge uses a High-Temperature Molecular Sieve Desiccant
19. Easy to remove (spin off) and replace every 2 years

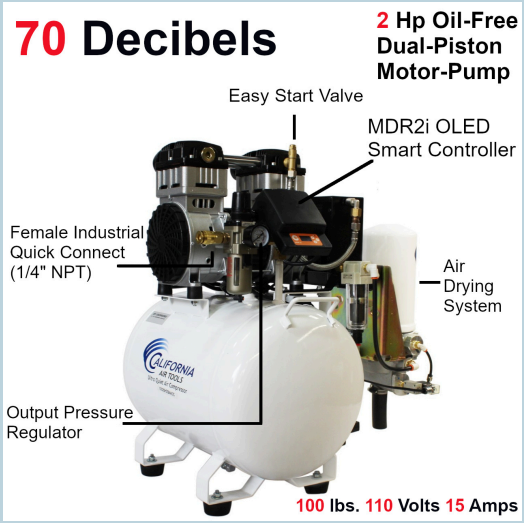
20. Aftercooler (condenser)
21. PDP performance range (-20′ F. to -51′ F.)
22. Air Quality: ISO 8573 – Class 2.3.1
23. EZ-1-2321 Auto Drain Valve Factory Installed
24. Comes complete (2) Air Filters
25. 1 Year Limited Warranty
26. Manufactured in Mexico-USA. Assembled in USA using global components
27. Non-ASME Air Tank
28. Commercial Use: Refer to State & City Codes

Product Overview:

[California Air Tools 10020HDSMADC Website]

COMPATIBLE ACCESSORIES

- 8mm PTFE Black Hose Tubing (10 feet long) to connect to Automatic Drain Valve
- 16 Piece Air Hose & Air Tool Accessory Kit (CAT-376)
- California Air Tools Hybrider Flex 1/4in 25 Foot Hybrid Air Hose



Part Number	CAT- 10020HDSMADC
UPC	850053943539
Shipping Dimensions	48”L x 40"W x 38"H
Shipping Weight	166 lbs
Shipping Class	85
Ship Type	LTL
Cage Code	7VRJ0
HTSUS	8414.80.1685
Country of Origin	USA