

OC-55 Oxygen Concentrator System
SPECIFICATIONS

OXYGEN CONCENTRATORS	
brand	ON ₂ On Site Gas System
type	Vacuum Pressure Swing Adsorption (VPSA)
model	OC 55
output	210 LPM at 85 psi
purity	95% oxygen (+/-1%) @ Rated Capacity
crn #	T2148.40
voltage	3 Ph/208V/575V/60Hz (Vacuum Pump), other voltage/frequencies available 1 Phase - 120 Volt (Concentrator Controls).
dimensions	W 34" x H 83.5" x L 105"
weight	3590 lbs.
regulatory standards	<ul style="list-style-type: none"> o CAN/CSA-Z10083-08 o ISO 10083:2006-07-15
FEED AIR REQUIREMENTS	
volume	92 SCFM @ 20°C @ 1 atmosphere
pressure	125 psig (optimum) - 115 psig (minimum)
temperature	20°C. above Ambient (maximum)
particulate	As per C.S.A. Z305.6 - Section 8.2 & 11.1
clearance required	Front = 36", Sides = 24", Rear = 12"

VACUUM PUMP	
capacity	29.3" Hg
electrical	7.5 HP (3 PH Standard/208V/575V/60Hz) Starter/Overload Included (Controls integrated to Oxygen Concentrator's PLC).
sound level	79 dBA @ 1 metre
heat rejection	19083 Btu/hr
dimensions	Built into Oxygen Concentrator and therefore included in overall dimensions of Oxygen Concentrator.

SYSTEM CONTROLS – MONITORS – ALARMS	
operating system controls	<ul style="list-style-type: none"> o PLC (Programmable Logic Controller)
operating valves	<ul style="list-style-type: none"> o Pilot Air Operation o Solenoid Valve Activated
pressure gauges	<ul style="list-style-type: none"> o T1 & T2 Pressure/Vacuum o O₂ Mix Tank Pressure o Vacuum o O₂ Storage Tank Pressure o Air Supply Pressure
sensors	<ul style="list-style-type: none"> o Vacuum Low o Zeolite Towers Pressure Low o O₂ Storage Pressure (Start/Stop)
controls	<ul style="list-style-type: none"> o Power On/Off o Automatic Start/Stop o Hours Run o Manual Purge Mode o Analyzers Calibration Mode o In Start Cycle o System On-Line
system indicators	<ul style="list-style-type: none"> o In Manual Purge o System Calibrating
system alarms	<ul style="list-style-type: none"> o Low Oxygen % o Low Vacuum o Low Tower Pressure o Alarm Reset Switch

OXYGEN ANALYZERS	
quantity	2 (per Oxygen Concentrator)
controls	At low O ₂ % (less than 93%) will automatically: <ul style="list-style-type: none"> o Isolate concentrator from Storage Tank o Alarm locally and remotely o Shut OC down
calibration	Gases Required <ul style="list-style-type: none"> o 1 – CGA 540 O₂ Cylinder o 1 – CGA 580 N₂ Cylinder
automatic compensating	Barometric and Temperature (As per CAN/CSA-Z10083-08, ISO 10083:2006-07-15, Section 6.3.5)
Each analyzer is fully independent of the other and integrates to the PLC independently	

COMPRESSED AIR SYSTEM	
The compressed air system is a separate package with the only connection to the concentrator being the compressed air supply line.	
OIL-LUBRICATED COMPRESSED AIR SYSTEM "OIL-FREE AIR"	
Compressor – Oil Free	
capacity	103 CFM @ 125 psi
electrical	<ul style="list-style-type: none"> o 25.0 H.P. o Voltage: 3PH Standard/208V/575V/60Hz
controls	<ul style="list-style-type: none"> o Auto Start/Stop, Load/Unload o Discharge Air Temperature Gauge o High Temperature Shutoff o Oil Level Sight Tube
dimensions	W 31.5" x H 53.2" x L 53.2"
weight	1122 lbs.
heat rejection	70860 Btu/hr
sound level	69 dBA @ 1 Meter
discharge pipe	3/4" NPT
min/max ambient temp.	0°C(32°F) min - 45°C(113°F) max
filter	Heavy Duty, Dry - 10 Micron
clearance required	Front & Sides = 36" Rear = 12"

Air Receiver	
capacity	120 (US) Gallons
rating	ASME Rated c/w CRN
dimensions	H 68", Dia 24" (Separate from Compressor Pack)
weight	393 lbs
clearance required	2' Around Circumference
Oil/Particulate Removal Filters	
pre-filter	127 SCFM / Particulate removal down to 1.0 Micron
coalescing	127 SCFM / Particulate removal down to 0.01 Micron

OXYGEN STORAGE TANKS	
capacity	660 (US) Gallons)
rating	ASME Rated c/w CRN
dimensions	H 117", Dia 42"
weight	1340 lbs.
clearance required	2' Around Circumference
oxygen line filter	0.3µm, 99% efficiency filter

OPTIONAL EQUIPMENT - AIRDRYER	
capacity	125 SCFM
rating	Voltage: 115/1/60, 208-230/1/60
dimensions	W 29" x H 38" x L 20"
weight	281 lbs.
horse power	¾ hp
discharge pipe	1" NPT
min/max ambient temp.	7°C(45°F) min - 43°C(110°F) max
clearance required	Front & Sides = 24" Rear = 12"

RECOMMENDED ROOM SIZE	
dimensions	W 14' x H 8' x L 12'
minimum area	168 ft ²
minimum height	8'

ROOM COOLING REQUIREMENTS (EQUIPMENT HEAT REJECTION)
<ul style="list-style-type: none"> o 89943 Btu/hr

Please Note: In accordance with ON₂ Solutions' policy on Continued Development; Specifications may change without notice