Maryville, TN

SCOPE

Model: AKC-3500 Application: Activated Carbon Hydrocarbon Adsorber

OPERATING CONDITIONS

Inlet Design Flow Rate:	**3,500**	scfm, (Std. 70°F/14.7 psia)
Inlet Design Pressure:	**100**	psig (**125 psig maximum**)
Inlet Design Temperature:	**100**	° F (**120° F maximum**)
Inlet Relative Humidity:	**< 40**	% of saturation
System Design Pressure:	**150**	psig
Outlet Compressed Air Flow Rate:	**3,500**	scfm
Inlet Hydrocarbon Content at Design Conditions:	**0.03**	ppmw (mg/m^3)
Outlet Hydrocarbon Content at Design Conditions:	**≤ 0.003**	ppmw (mg/m^3)
Compressed Air Loss:	**0.11**	scfm
Decompression Air Losses:	**238**	scf
Service Life:	**8,000**	hours based on 3.0 ppmw inlet
Ambient Air Temperature:	**38**	°F (Min.); **120**°F (Max.)
System Pressure Loss with Clean, Dry Activated Carbon**:**	**2**	psid

SYSTEM COMPONENTS

Prefilter (optional):	Coalescing filter with 0.01 µm element
Condensate Drain (optional):	Zero-loss Electronic Drain
After Filter (optional):	Particulate filter with 5 µm element
Final Filter:	Not applicable
Adsorbent Type:	Coal based activated carbon, 1,000 m^2/gram BET surface area
Adsorbent Quantity:	1,260 lbs. dry
Desiccant Vessel:	ASME Section VIII Division 1, “U” stamped, 150 psig at 450°F
Controller Type:	Not applicable
Controller Model:	Not applicable
Energy Management System:	Not applicable
Residual Oil Indicator:	Johnson Controls A-4000-120 colorimetric indicator
Switching Valves:	Not applicable
Regeneration Blower:	Not applicable
Regeneration Heater:	Not applicable
Regeneration Cooler:	Not applicable
Piping:	6 In. 150 lb ANSI RF flange
Insulation:	Not insulated

DRYER ASSEMBLY

Height:	120 inches
Width:	54 inches
Depth:	50 inches
Connection Size:	6 In. 150 lb ANSI RF flange
Dryer Assembly Weight:	4,165 pounds (approximately)