SPECIFICATIONS	CCS-100/202	CCS-100/204	CCS-150	CCS-450	CCS-350	CCS-350S	CCS-250	CCS-350T	CCS-350ST
Temperature Range	11 K - 325 K	9 K - 325 K	10 K - 325	10 K - 500	10 K - 325 K				
		(optional 6.5 K - 325 K	K	K					
		with CCS-100/204N)							
Sample Environment	Vacuum	Vacuum	Vacuum	Vacuum	Vacuum	Vacuum	Vacuum	Vacuum	Vacuum
Sample Change Time	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Refrigeration Capacity (bare cold head only,			2 W @ 20 K	0.5 W @ 20 K	2 W @ 20 K	1 W @ 20 K	2 W @ 20 K	2 W @ 20 K	1 W @ 20 K
excluding heat load)			20 K	20 K	20 K	20 K	20 K	20 K	20 K
60 Hz	0.5 W @ 10 K	2.0 W @ 10 K							
00112	2.5 W @ 20 K	9.0 W @ 20 K							
	10.0 W @ 77 K	17.0 W @ 77 K							
50 Hz		7.5 W @ 20 K							
	8.3 W @ 77 K	14.0 W @ 77 K							
(Initial) Cooldown Time									
(typical)									
60 Hz	90 minutes to	50 minutes to 10 K	~ 75	~ 2 hours	~ 75 minutes		~ 75 minutes	~ 75 minutes	~ 90 minutes
	11 K		minutes to	to 10 K	to 10 K	to 10 K	to 10 K	to 10 K	to 10 K
			10 K						
System Weight			82 kg (180		82 kg				
Campus 2004	75 km (405 lba)	75 les (405 lbs)	lbs.)	lbs.)	(180 lbs.)	(180 lbs.)	(180 lbs.)	(180 lbs.)	(180 lbs.)
Compressor	75 kg (165 lbs)	75 kg (165 lbs)	59 kg (140 lbs.)	59 kg (140 lbs.)	59 kg (140 lbs.)	59 kg (140 lbs.)	59 kg (140 lbs.)	59 kg (140 lbs.)	59 kg (140 lbs.)
Cold head (not including	6.8 kg (15 lbs)	7.7 kg (17 lbs)	6.6 kg	6.6 kg	6.6 kg	6.6 kg	6.6 kg	6.6 kg	6.6 kg
cryostat parts)	0.0 kg (13 lbs)	7.7 kg (17 lb3)	(15 lbs)	(15 lbs)	(15 lbs)	(15 lbs)	(15 lbs)	(15 lbs)	(15 lbs)
Cryostat			10 kg	10 kg	10 kg	10 kg	10 kg	10 kg	10 kg
ory colar			(22 lbs.)	(22 lbs.)	(22 lbs.)	(22 lbs.)	(22 lbs.)	(22 lbs.)	(22 lbs.)
Power Supply			(== ::00:)	(== ::••:)	(== :::::)	(== 1001)	(== 1001)	(== 1001)	(== :::0:)
Volts (VAC±5%) /	208	/230 / 1 / 60	208/220	208/220	208/220	208/220	208/220	208/220	208/220
Phase (Ø) /	200 / 1 / 50		VAC, 1Ø,	VAC, 1Ø,	VAC, 1Ø,	VAC, 1Ø,	VAC, 1Ø,	VAC, 1Ø,	VAC, 1Ø,
Frequency (Hz)	230/240 / 1 / 50		50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Power Requirements			2.0 kW,	2.0 kW,		2.0 kW, 8.5A			
	60 Hz and 2.6 kW, 13 amperes full load at		8.5A	8.5A	(water-	(water-	(water-	(water-	(water-
	200 V~, 50 Hz. 58 amperes starting current, 68 amperes locked-rotor current.		(water-	(water-	cooled)	cooled)	cooled)	cooled)	cooled)
			cooled)	cooled)	2.1 kW, 10A				
	юскес	i-rotor current.	2.1 kW, 10A (air-	2.1 kW, 10A (air-	(air-cooled)	(air-cooled)	(air-cooled)	(air-cooled)	(air-cooled)
			cooled)	cooled)					
Water-cooled Compressor			coolea)	coolea)					
Requirements									
Flow	2.7 lt	om (0.7 gpm)	3.8 +/- 1.9	3.8 +/- 1.9	3.8	3.8	3.8	3.8	3.8
	,	···· (•·· 9F···)	lpm (1.0 +/-		+/- 1.9 lpm				
			0.5 gpm)	0.5 gpm)	(1.0	(1.0	(1.0	(1.0	(1.0
				• ,	+/- 0.5 gpm)	+/- 0.5 gpm)		+/- 0.5 gpm)	+/- 0.5 gpm)
Temperature	Temperature 4-27 °C		32 C	32 C	32 C (90 F)				
		(90 F)	(90 F)	max,	max,	max,	max,	max,	
			max,	max,	10 C (50 F)				
			10 C	10 C	min	min	min	min	min
			(50 F)	(50 F)					
0.111		(44 000 BTH")	min	min			N1/2	N1/2	N1/2
Chiller Requirement	3.2 kW	(11,000 BTU/hr)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pressure	2/	100 paig				See table on p	000 2		
Vibrational Line Broadening	N/A	0-100 psig N/A	N/A	N/A	N/A	N/A	age ∠. N/A	N/A	N/A
VIDIATIONAL LINE DIVACENTING	IN/A	IN/A	IN/A	IN/A	IN/A	IN/A	IN/A	IN/A	IN/A



Cooling Water: Flow and Pressure Requirements

Use graphs Figure 3-3: "8200 Compressor Cooling Water Flow and Pressure Requirements" and Figure 3-4: "8200 Compressor Water Cooling Requirements" to determine the minimum acceptable cooling water supply pressure at different flow rates and temperatures.

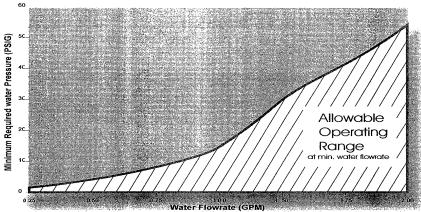


Figure 3-3: 8200 Compressor Cooling Water Flow and Pressure Requirements

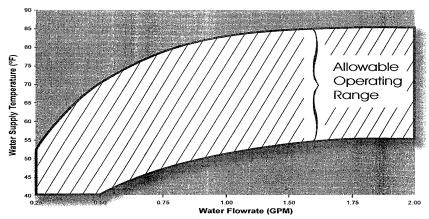


Figure 3-4: 8200 Compressor Water Cooling Requirements