Now In Production



1

Spirit, Kinston, NC

A custom pad mounted 550 Tons of DX cooling with twin air cooled condensing sections. R-134A Refrigerant

Representative : H C Sharp Company. 8301D Crest Industrial Drive St. Louis, MO 63123 Mike Haas, P 314-351-6900; F 314-351-6901



The base is constructed with 8 inch welded structural steel and it is sprayed with 4 inches of polyurethane foam insulation.



The unit consists of two air cooled condensing sections with eight (8) eighty ton screw compressors.



4500 Industrial Access Road Douglasville, GA 770-489-0716 P ; 770-489-2938 F ; www.seasons4.net

Now In Production



Spirit, Kinston, NC 80,000 cfm of fresh air is conditioned down to 54.8/54.3 deg F.

Representative : H C Sharp Company. 8301D Crest Industrial Drive St. Louis, MO 63123 Mike Haas, P 314-351-6900; F 314-351-6901



Hot gas reheat coil, sub-cool reheat coil, 126 KW electric heat ,

COLD FOG atomizing humidifier and stainless steel liners downstream of coiling coil section are some of the special features of the unit.





Four (4) direct drive airfoil plenum blowers with VFDs and four (4) Power Burners with drum and tube heat exchangers are additional features of the unit.



Now In Production



Spirit, Kinston, NC 10,000 mbh indirect natural gas heat section.

Representative : H C Sharp Company. 8301D Crest Industrial Drive St. Louis, MO 63123 Mike Haas, P 314-351-6900; F 314-351-6901



The unit is built in 6 sections for shipping, but it is designed so that all circuits are intact when the unit is shipped.



Aluminum exterior panels are insulated with 2" polyurethane foam insulation. The unit is completely tested and shipped to the jobsite.



JOB NAME SPIRIT LOCATION KINSTON, NC DATE PREPARED Revised: 12/07/09 SEASONS-4 REFERENCE # A513-DX UNIT MODEL # 3SZT49-5518-MN100-80HU UNIT DESIGNATION RTU-1 SYSTEM VOLTAGE 460/3/60 DESIGN DATA TOTAL COOLING CAPACITY (BTUH) 6,619,164 SENSIBLE CAPACITY (BTUH) 3,564,834 OUTDOOR AIR (CFM) 24,000 OUTDOOR AIR (CFM) 80,000 OUTDOOR AIR (CFM) 24,000 NET TOTAL COOLING CAPACITY (BTUH) 5,971,484* NET TOTAL COOLING CAPACITY (BTUH) 5,971,484* NET TOTAL COOLING CAPACITY (BTUH) 2,917,154* * DESIGN DATA CAPACITIES INCLUDE EFFECTS OF SUBCOOL COIL REHEAT COMPRESSOR: COPELAND SCREW NUMBER STAGES OF CAPACITY COMPRESSOR: TYPE COMPRESSOR: TYPE COMPRESSOR: TYPE COLE ACCE AREA/ROWS/FPI 709,6/6/10 DESIGN AMBIENT TEMPERATURE (FDB): 95,0 CONDENSER FAIST: TYPE		
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COIL LEAVING AIR TEMP (FDB/FWB) 72.9/67.9		
CONDITIONED AIR (CFM) 80,000		
	CONDITIONED AIR (CFM)	80,000

DEHUMIDIFICATION COIL SECTION

FACE AREA (SQ-FT)	165.0
ROWS/FPI	6/10
COIL CIRCUITS (NUMBER)	4
TOTAL CAPACITY (BTUH)	3,395,472
SENSIBLE CAPACITY (BTUH)	1,597,405
ENTERING AIR TEMP (FDB/FWB)	72.9/67.9
COIL LEAVING AIR TEMP (FDB/FWB)	54.8/54.3
CONDITIONED AIR (CFM)	80,000

SUBCOOLING COIL SECTION

FACE AREA (SQ-FT)	165.0
ROWS/FPI	2/10
REHEAT CAPACITY (BTUH)	571,671
ENTERING AIR TEMP (FDB/FWB)	54.8/54.3
LEAVING AIR TEMP (FDB/FWB)	61.3/57.0
CONDITIONED AIR (CFM)	80,000

HOT GAS REHEAT COIL SECTION

FACE AREA (SQ-FT)	165.0
ROWS/FPI	2/10
COIL CIRCUITS (NUMBER)	2
REHEAT CAPACITY (BTUH)	1,198,447
ENTERING AIR TEMP (FDB/FWB)	61.3/57.0
LEAVING AIR TEMP (FDB/FWB)	75.0/62.1
CONDITIONED AIR (CFM)	80,000
AIR PRESSURE DROP	0.16
AIR PRESSURE DROP	0.1

SUPPLY AIR BLOWER SECTION

TYPE	AF SWSI PLENUM
NUMBER/SIZE	4/PLCD300
AIRFLOW (CFM)	80,000
TOTAL STATIC PRESSURE (TSP) IN WC	6.55
EXTERNAL STATIC (ESP) IN WC	2.00
DESIGN FAN SPEED (RPM)	1,770
FAN BHP (INCLUDING DRIVE LOSSES)	4 @ 28.1
MOTOR HP	4 @ 30
MOTOR DRIVE	DIRECT DRIVE

PRE-FILTER SECTION

TYPE	2" PLEATED
NUMBER/SIZE	40/24×24
TOTAL FACE AREA (SQ-FT)	160.0
FACE VELOCITY (FPM)	500

PRE-FILTER SECTION 2

TYPE	19" D70 PUROLATOR, 8 POCKET BAG FILTERS
NUMBER/SIZE	40/24x24
TOTAL FACE AREA (SQ-FT)	160.0
FACE VELOCITY (FPM)	500

FINAL FILTER SECTION

TYPE	DROPLET FILTER; PROVIDED BY HUMIDIFIER MANUFACTURER
NUMBER/SIZE	40/24x24
TOTAL FACE AREA (SQ-FT)	160.0
FACE VELOCITY (FPM)	500

GAS HEAT SECTION

TYPE	NATURAL GAS; POWER BURNER
INPUT CAPACITY (BTUH)	10,000,000
OUTPUT CAPACITY (BTUH)	8,000,000
CONDITIONED AIR (CFM)	80,000
CONDITIONED AIR TR (F)	93
STAGING	MODULATING
GAS CONNECTION SIZE (MPT)	2 @ 2-1/2"
MIN GAS PRESSURE (IN-WC)	7"
MAX GAS PRESSURE (IN-WC)	14"

ELECTRIC HEAT SECTION

TYPE	OPEN WIRE
INPUT CAPACITY (KW)	126
CONDITIONED AIR (CFM)	80,000
CONDITIONED AIR TR (F)	5.0
STAGING	SCR

HUMIDIFIER

TYPE	FOG HUMIDIFIER
CAPACITY (LB/HR)	2250.0
CONDITIONED AIR (SCFM)	80,000
STAGING CONTROLS	3(30%-70%-100%)
SUPPLY CONNECTION SIZE	3/4"
DRAIN CONNECTION SIZE	1"
PUMP (QTY/HP)	1/5.0

UNIT SECTION WEIGHTS

SECTION A WEIGHT (LBS)	10200
SECTION B WEIGHT (LBS)	11500
SECTION C WEIGHT (LBS)	32600
SECTION D WEIGHT (LBS)	32600
SECTION E WEIGHT (LBS)	11800
SECTION F WEIGHT (LBS)	9000

UNIT WEIGHT (LBS)

107,700

ELECTRICAL DATA

JOB NAME						SPIRIT
LOCATION KINSTON, N						(INSTON, NC
DATE PREPARED Revised: 12/07/09						sed: 12/07/09
SEASONS-4 REF NUMBER		A513-DX_PWR1		EL 3S2	ZT49-5518-I	MN100-80HU
UNIT DESIGNATION						RTU-1
SYSTEM VOLTAGE	460	CONTROL VOLTAGE	120	EXT. \	/OLTAGE	24
ITEM	<u>QTY</u>	HP	<u>FLA</u>	<u>LRA</u>	KW	TYPE
SA FAN EXH FAN HUMIDIFIER PUMP MOTOR ELECT HEAT CONTROL CIRCUIT CONVENIENCE OUTLET VEST. HEAT F/HUMDIFIER DRAFT EXHAUSTER TOTALS (COOL)	4 2 1 1 4 7	30.0 30.0 5 1.5 ***	35.0 35.0 6.6 158.3 6.5 6.5 6.3 3.0 229.6	223.6 223.6 51	21.6 126.0 5.0 	Bald Bald Open 20 Amps
TOTALS (HEAT)	13	186.5	406.3		217.3	
M.C.A.	417 450		D PROTEC			
M.O.P.	450 65,000	(MAXIMUM OVERLOAI (SHORT CIRCUIT CUR				

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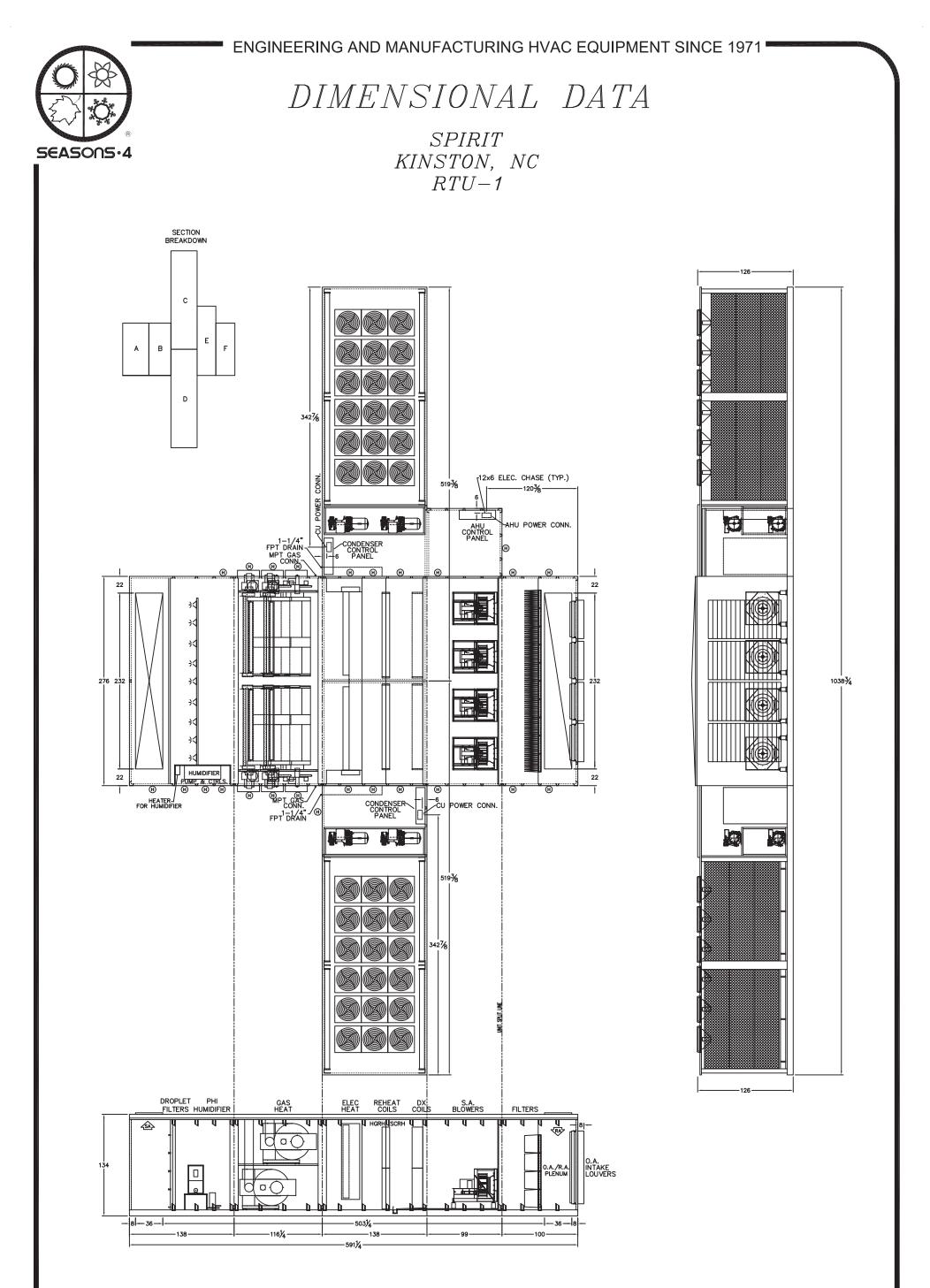
ELECTRICAL DATA

JOB NAME						SPIRIT
LOCATION					I	KINSTON, NC
DATE PREPARED					Rev	ised: 12/07/09
SEASONS-4 REF NUMBER	र	A513-DX_PWR2		DEL 3S	ZT49-5518-	MN100-80HU
UNIT DESIGNATION						RTU-1
SYSTEM VOLTAGE	460	CONTROL VOLTAGE	120	EXT.	OLTAGE	24
ITEM	QTY	HP	<u>FLA</u>	<u>LRA</u>	KW	TYPE
COMP 5,6 PRECOOL COMP 1 DEHUMID COMP 3 DEHUMID COND FAN CONTROL CIRCUIT	2 1 1 18	*** *** 1.5	120.0 120.0 120.0 2.7 6.5	485.0 485.0 485.0 16.2	53.0 50.8 50.8 1.4	SCA2-700E SCA2-700E SCA2-700E
CONVENIENCE OUTLET TOTALS (COOL)	 22	***	6.5 541.6		233.0	20 Amps
TOTALS (HEAT)			13.0			
M.C.A.	572		MPACITY)			
M.O.P.	600 (MAXIMUM OVERLOAD PROTECTION)					
S.C.C.R.	65,000		RENT RA	TING)		

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ELECTRICAL DATA

JOB NAME						SPIRIT
LOCATION					I	KINSTON, NC
DATE PREPARED					Rev	ised: 12/07/09
SEASONS-4 REF NUMBE	२	A513-DX_PWR3		EL 38	SZT49-5518-	MN100-80HU
UNIT DESIGNATION						RTU-1
SYSTEM VOLTAGE	460	CONTROL VOLTAGE	120	EXT.	VOLTAGE	24
ITEM	QTY	HP	<u>FLA</u>	<u>LRA</u>	KW	TYPE
COMP 7,8 PRECOOL COMP 2 DEHUMID COMP 4 DEHUMID COND FAN CONTROL CIRCUIT CONVENIENCE OUTLET	2 1 1 18	*** *** 1.5	120.0 120.0 120.0 2.7 6.5 6.5	485.0 485.0 485.0 16.2	53.0 50.8 50.8 1.4	SCA2-700E SCA2-700E SCA2-700E 20 Amps
TOTALS (COOL)	22	***	541.6		233.0	
TOTALS (HEAT)			13.0			
M.C.A.	572		(PACITY)			
M.O.P.	600 (MAXIMUM OVERLOAD PROTECTION)					
S.C.C.R.	65,000	(SHORT CIRCUIT CUR	RENT RA	TING)		



REV. 3: 12/07/2009 JDP REV. 2: 11/20/2009 JDP REV. 1: 09/16/2009 JDP 08/18/2009 JDP A513D00JP

HINGED ACCESS DOOR

NOTE: O.A./E.A. LOUVERS, FURNACE VENT CAPS, ETC. MAY REQUIRE FIELD INSTALLATION

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