PACKAGED TERMINAL HEAT PUMP UNIT SCHEDULE

UNIT NO.	LOCATION	AREA SERVED	SUPPLY – FAN DATA					COOLING CAPACITY				HEATING CAPACITY		POWER/ RATINGS						WEIGHT (LBS.)	UNIT POWER	GE MODELS NUMBER	NOTES
			LOW CFM	HI CFM	VENT FULL OPEN	VENT PART OPEN	SET O.A. CFM TO	REFRIG TYPE	TOTAL B.T.U.H	EER BTU/WATT	DEHUMID PINTS/HR	TOTAL B.T.U.H	COP	POWER FACTOR	S HEAT RATIO	COOLING WATTS	COOLING AMPS	HEATING WATTS	HEATING AMPS				
PTU–1	SEE PLANS	SEE PLANS	212	360	70	45	0	410A	9,200	12.7	2.7	8,100	3.8	92%	75%	725	3.8	630	3.3	105	208V/1PH	AZ61H09D	1–9
PTU–2	SEE PLANS	SEE PLANS	284	370	75	45	0	410A	11,600	12.1	3.5	10,400	3.7	92%	70%	960	5.0	835	4.5	105	208V/1PH	AZ61H12D	1–9

NOTES:
1. PROVIDE WITH LINE CORD CONNECTION KIT
2. PROVIDE WALL SLEEVE
3. PROVIDE OUTSIDE GRILLE TYPE PER DIRECTION OF ARCHITECT
4. PROVIDE OUTSIDE GRILLE COLOR PER DIRECTION OF ARCHITECT
5. PROVIDE WITH REMOTE THERMOSTAT
6. PROVIDE OTHER ACCESSORIES AS NEEDED FOR A COMPLETE INSTALLATION WITH PROPER UNIT FUNCTIONS

LOUVER SCHEDULE

L–1 – RELIEF LOUVER
RUSKIN MODEL ELF375DX – 24" WIDE x 18" TALL

ELF3750X IS A STATIONARY LOUVER, EXTRUDED ALUMINUM CONTUCTION. PROVIDE LOUVER TO MATCH WALL CONSTRUCTION TYPE.

650 CFM, 1.33 SF (50%) FREE AREA, 490 FPM RELIEF VELOCITY, 0.03" PRESSURE DROP.

PROVIDE L–3 LOUVER WITH: ① ② ③ ④

L–2 – EXHAUST LOUVER
RUSKIN MODEL ELF375DX – 18" WIDE x 12" TALL

ELF3750X IS A STATIONARY LOUVER, EXTRUDED ALUMINUM CONTUCTION. PROVIDE LOUVER TO MATCH WALL CONSTRUCTION TYPE.

250 CFM (MAX), 0.41 SF (41% FREE AREA LOUVER), 610 FPM EXHAUST VELOCITY, 0.05" PRESSURE DROP.

PROVIDE LOUVER L–2 WITH: ① ② ③

L–3 – EXHAUST LOUVER
RUSKIN MODEL ELF375DX – 12" WIDE x 12" TALL

ELF375DX IS A STATIONARY LOUVER, EXTRUDED ALUMINUM CONTUCTION. PROVIDE LOUVER TO MATCH WALL CONSTRUCTION TYPE.

50 CFM, 0.26 SF (26% FREE AREA LOUVER), 192 FPM EXHAUST VELOCITY, 0.06" PRESSURE DROP.

PROVIDE LOUVER L–3 WITH: ① ② ③

ACCESSORIES:
① INSECT SCREEN ② KYNAR FINISH ③ COLOR AS DIRECTED BY ARCHITECT ④ BACKDRAFT DAMPER

SWIMMING POOL UNIT - SPLIT SYSTEM

DRY-O-TRON by Dectron

Load Summary and DRY-O-TRON® Selection

NORMAL MODE SUMMARY

Page 1 of 1
September 11, 2013

Project Information

Project Name	Hampton Inn & Suites - Monroe, LA				
Location	Monroe, LA				
			Summer		Winter
Altitude	79 ft	Outdoor Dry Bulb	96.0	°F	22.0 °F
Active Hours	14 hrs	Outdoor Wet Bulb	78.0	°F	18.0 °F

	Dry Bulb		Heat Index					
Room Temperature	82	°F	82.77	°F	Relative Humidity Range	Occupied 50 %	Unoccupied 50 %

Refrigerant

R407C

Load Sources	Load Active	Load Inactive	Surface	Activity Factor	Water Temp	Primary Water Heater
Hotel	29.4	18.4	600	0.80	84	Dry-O-Tron
Outdoor Air	9.2	- - -	449 CFM			
Spectators	0.0	- - -	0@0.1550			
Total Dehumidification Load Lb/h	38.6	18.4	Summer Design Day Runtime			77 %

DRY-O-TRON® SELECTION:

1 x DS-042 LBX Indoor Horizontal Conventional Pool Dehumidification & A/C Unit(s)
Unit(s) complete with:
- **3300 CFM @ 1.00" TOTAL ESP 1 x Forward Curve DWDI supply fan(s) (1 x 3 HP ODP motor)**
- **2 scroll compressor(s) / 2 circuit(s) / 2 stage(s)**
- **107.9 MBH Nominal Capacity**
- **Refrigerant R-407c**
- **39.4 lbs/Hr Moisture Removal Capacity @ 82 °F @ 50% RH**
- **68.3 MBH Gross Sensible Cooling Cap. @ 82 °F @ 50% RH**
- **Refrigerant Hot-Gas 'main' pool water heat exchanger**
- **Full Sized Refrigerant Hot-Gas air reheat coil**
- **Electric Heater (Unit Mounted) (38 kW) - 2 Stage Single Point Power**
- **Remote (Split) Outdoor Air Cooled Air Conditionning (1 x KVG082)**
- **Outdoor Air Cooled Condenser Distance : 75 / 75 feet**
- **449 CFM outdoor air opening (with Damper, filters, actuator and 7-day timeclock)**
- **¾" Insulation**
- **Drain Pan Coating: Standard(Resin)**
- **Blower Coating: Standard (Epoxy)**
- **Enclosure Coating: Powder**
- **Coil Coating: Standard: Fins = HyPoxy + End sheets = galvanized**
- **Supervisaire Microprocessor**
- **2 Year Standard Coil Warranty**
- **5 Year Extended Compressor Warranty**
- **2 Year Standard Major Component Warranty**
- **Unit Mounted Sensors:**
  - **-Return Air Temperature (Standard)**
  - **-Return Air Humidity (Standard)**
  - **-Pool Water Temperature (Standard)**
- **Unit Mounted (Operator Panel #1)**
- **Filtration Package :**
  - **2" MERV-8 Extended Surface, Pleated Filter with Antimicrobial**

Dry-O-Tron will heat a maximum of two (2) pools, selected for the highest load

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DRY-O-TRON by Dectron — Dehumidifier Unit Schedule — 9/11/2013

Job Information

Job Name	Hampton Inn & Suites - Monroe, LA (Monroe, LA)		
Description		Room Volume	13,500 ft³
Model Number	DS-042 (Conventional)	Cabinet Size	042 LBX
Nomenclature	DSH042ZAZX13337Q3452ZLZDZZZ188		

Supply Fan(s)

Blower Model	CFM	Type	Pole	Motor Type	Nom. HP	Act. BHP	FLA	VFD	VFD Amp.
ATLI 12 - 9 T2	3,300	FC DWDI		ODP	3.00	2.06	7.80	No	0.00
					89.50 % Eff				

Unit Supply Air Changes

Per Unit	Total	CFM	E.S.P SA	RA	Total
14.70	14.70	3,300	0.80	0.20	1.00

ASHRAE Recommends 4 to 8 air changes.

Exhaust Fan #1 (Minimum Exhaust)

Total CFM	Mounting Location	E.S.P EA	RA	Total	OA CFM
494	Remote*	0.00	0.00	0.00	449

* = Remote Fan By Others. OA must be preheated to 35°F during normal mode.

Return Air Filtration Package

Description	Dimensions	Quantity
2" MERV-8 Extended Surface, Pleated Filter with Antimicrobial	20" x 20" x 2"	4

Outdoor Air Filters

Description	Dimensions	Quantity
Standard 2" MERV-2 permanent washable and reusable	N/A	N/A

Compressor(s)

Refrigerant R-407C # of Compressor 2 Stages 2 # of Independent Refrigerant Circuits 2

Compressor Number	LRA	RLA	kW	Capacity (btu/h)	Compressor Type
Compressor #1	91	14.7	3.3	54,000	scroll
Compressor #2	91	14.7	3.3	54,000	scroll

* Please validate all information with DECTRON engineering — 1 — 2100000889-0-210-0

DRY-O-TRON by Dectron — Dehumidifier Unit Schedule — 9/11/2013

Job Information

Job Name	Hampton Inn & Suites - Monroe, LA (Monroe, LA)		
Description		Room Volume	13,500 ft³
Model Number	DS-042 (Conventional)	Cabinet Size	042 LBX
Nomenclature	DSH042ZAZX13337Q3452ZLZDZZZ188		

Refrigerant Coil Data

	Minimum RH	Maximum RH	Selected RH
Space Temperature (°F)	82.0		
Full Reheat Coil Capacity (btu/h)	127,158		
Relative Humidity (%RH)	50	60	50
Moisture Removal Capacity (lb/h)	39.40	48.91	39.40
Evaporator Coil Sensible Capacity (btu/h)	68,280	59,280	68,280
Net Sensible Capacity Including Outside Air Load (btu/h)	49,645	40,645	49,645
Net Sensible Capacity Not Including Outside Air Load (btu/h)	58,434*	57,434*	58,434*

Pool Water Heater Condenser / Unit Mounted

Heater	Type	Capacity (btu/h) Per Unit	GPM	Connection Information(s) Type	Size	Max PD PSIG	FT
#1	CuNi Vented Coax.	89,933	12.00	CPVC Schedule 80 Connections	1 1/2	6.00	13.86

Pool Water Auxiliary Heater

Auxiliary	Type	Capacity (btu/h) Per Unit	Location
#1		0	Remote By Others

Space Heating Coil Electric Heater

			Normal Mode	Dectron Purge®
Location	Unit Mounted			
Capacity (btu/h)	129,700			
kW	38.0	Entering Air Temp. (°F)	73.8	
Power Supply	Single Point	Leaving Air Temp. (°F)	110.2	
Control / Stages	2 Stages			
Temperature Rise per Stage	16.2			

Leaving Air Temperatures (Not Including Outside Air)

Dehumidification Mode (°F)	100.7	Air Conditioning Mode (°F)	66.7
Pool Water Heating Mode (°F)	82.0	Recirculation Mode (°F)	84.1

Electrical Data

	Unit Rating
MCA (Amps)	161
MOP (Amps)	175
Nominal unit kW	46
EER (Energy Efficiency Ratio)	13.24
Voltage	230
Phase	3
Hertz	60

* Please validate all information with DECTRON engineering — 2 — 2100000889-0-210-0

DRY-O-TRON by Dectron — Dehumidifier Unit Schedule — 9/11/2013

Job Information

Job Name	Hampton Inn & Suites - Monroe, LA (Monroe, LA)		
Description		Room Volume	13,500 ft³
Model Number	DS-042 (Conventional)	Cabinet Size	042 LBX
Nomenclature	DSH042ZAZX13337Q3452ZLZDZZZ188		

Air Cooled Condenser #1 (Stages #1 & #2)

Model	KVG082		
Location	Remote (Split)		
Tag			
Air Flow	Vertical		
Ambient Temp.	100 °F	Voltage	230/3/60
Condensing Temp	120 °F	Power per Motor	1.4/0.95 kW
TD	20 °F	FLA per Motor	6.20
Condenser Capacity	210,800 Btu/hr	RPM per Motor	550/780 RPM rpm
Fan Arrangement	2 x 1	Total MCA	14.00
Total Condenser Weight	1,130.00 lbs	Total Fuse/MOP	15
		Refrigerant Type	R-407C

Control Panel	P52 - Contactor(s) without control, twin speed Ziehl-abegg
Control Panel Voltage	24/1/60
Control Panel Options	N - None

Dry-O-Tron refrigerant circuits capacity, charge and line sizes summary :

Circuits Number	Capacity (btu/hr)	Factory	Field	System	Distance	Liquid Riser	Gas Riser	Liquid	Hot Gas
Circuit #1 THR	63,579	20.39	44.69	65.08	75	0	0	5/8"	7/8"
Circuit #2 THR	63,579	20.39	44.69	65.08	75	0	0	5/8"	7/8"
Total THR	127,158								

Line Sizes must be same size as UNIT Connections and will be size adjusted at the point of connection to the Outdoor Air Cooled Condenser
+/- 10% Refer to unit nameplate for confirmation.

* Please validate all information with DECTRON engineering — 3 — 2100000889-0-210-0

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REVISIONS		
No.	Date	Description

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STATE OF LOUISIANA — GEORGE WILLIS ASTILLO — PROFESSIONAL ENGINEER IN MECHANICAL ENGINEERING
11-21-2013

KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

5400 I-20 & Frontage Rd.
Monroe, LA 71201

Drawing Title
Mechanical HVAC Schedules

Phase
FOR CONSTRUCTION

Project No.	12-111
Prepared by	CDC
Checked by	GWA
Date	September 16, 2013

Sheet No. M102

Released for

Hampton Inn and Suites