General Data	
Room Type	General Freezer
Room Location	Outdoor
Room Temperature (deg. F)	-10.0
Ambient Temperature (deg. F)	95.0
Room Shape	Rectangle
Total Room Volume (cu.ft)	30,256

Total Load		107,440 BTU/H
Wall Load	27,117	25.0%
Infiltration Load	34,866	32.0%
Product Load	15,128	14.0%
Miscellaneous Load	20,562	19.0%
Safety Load* (10%)	9,767	9.0%
Run-time (Hrs)	18.0	

Room Dimensions

	Wall #1	Wall #2	Wall #3	Wall #4
Length(ft)	61.0	31.0	61.0	31.0
Height(ft)	16.0			

Detail

Room Load Data — 27,117 BTU/H

	Temperature (deg. F)	Insulation	Thickness (in)	K-Value	R-Value	Surface Area (sq. ft)
Wall #1	95.0	Foam-in-Place	4.0	0.12	33.33	976.0
Wall #2	95.0	Foam-in-Place	4.0	0.12	33.33	496.0
Wall #3	95.0	Foam-in-Place	4.0	0.12	33.33	976.0
Wall #4	95.0	Foam-in-Place	4.0	0.12	33.33	496.0
Ceiling	115.0	Foam-in-Place	4.0	0.12	33.33	1891.0
Floor	60.0	Foam-in-Place	4.0	0.12	33.33	1891.0

Infiltration Load Data — 34,866 BTU/H

Total Room Volume (cu.ft)	30,256
A.S.H.R.A.E Recommendation	2.2
Usage Factor	3

Product Load Data — 15,128 BTU/H

	Quantity	Inventory	Max Load	Entering Temperature (deg. F)	Final Temperature (deg. F)	Pulldown Time	Load Time
Miscellaneous	1		60512.0	0.0	-10.0	24.0	24.0

Miscellaneous Load Data — 20,562 BTU/H

	Quantity	Load	Load Units
Lighting	1.00	8,623	BTU/H
Personnel	1.21	2,259	BTU/H
Forklifts	0.00	0	BTU/H
Motors	1.00	9,680	BTU/H
Others	0.00	0	WATTS

Calculated load is based on pulldown data as provided by user, it is the responsibility of the user to ensure appropriate product packaging and air flow conditions prevail to allow product pulldown temperature within this time period.

** The TOTAL LOAD includes a contingency safety factor to cover the possibility of unforeseen high load conditions, excessive ambient temperatures, unexpected increases of business, or product packaging changes.*

Equipment Detail

Line Item	Tag:	Material Number	Description	QTY
1000		SPLITSYS	Split System Based on No of Systems : 2 Room Temp : -10 °F Evap TD : 10.95 Line Loss : 2 Balanced Capacity : 47085.0 BTU/H Run Time : 20.54 Hours Refrigerant Type : R448A	2
1010	System Ship Loose	28963301	CONTROL-ELECTRONIC TEMP (A421AEC-222C)	2
1020	System Ship Loose	5804E	SOL. VALVE 7/8 IN 120/240V* (E19S270)	2
1030		HCH0120LCACDA0303	CU CH SEMI 12.0HP 208-230/3/60 LOW Ambient Temp : 95 °F Suction Temp : -22.95 °F Voltage : 208-230/3/60 AWEF Value : 3.15	2
	FACTORY	Defrost Timer Options	TIMER AND CONTACTOR HIGH AMPS	1 per unit
1040		HEM0225BS4EMA	UC MP ELEC 2FAN 208-230/1 STD S 1 Evap. Temp : -22.95 °F Voltage : 208-230/1/60 Cooler AWEF > 32 : N/A Freezer AWEF <= 32 : 4.15	4
	FACTORY	Coil Mechanical Option	Sporlan TXV	1 per unit

Notes

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General Product Information

Product Family:	HCH
Application:	Outdoor
Temperature Range:	Low Temp
Voltage: (Volts/Ph/Hz)	208-230/3/60
Refrigerant Type:	R448A
Piping:	Standard

Compressor Brand:	Copeland
Compressor Type:	Discus TM
Compressor Hp:	12
Compressor Model:	4DBNF54KE
Number of Compressor(s):	1
Coil Type:	Standard Round Tube

Technical Information

Performance Data

Ambient Temperature (°F)	Saturated Suction Temperature (°F)	Application Capacity* (BTU/H)	Altitude (ft)	AWEF Value
95	-22.95	47085.0	0	3.15

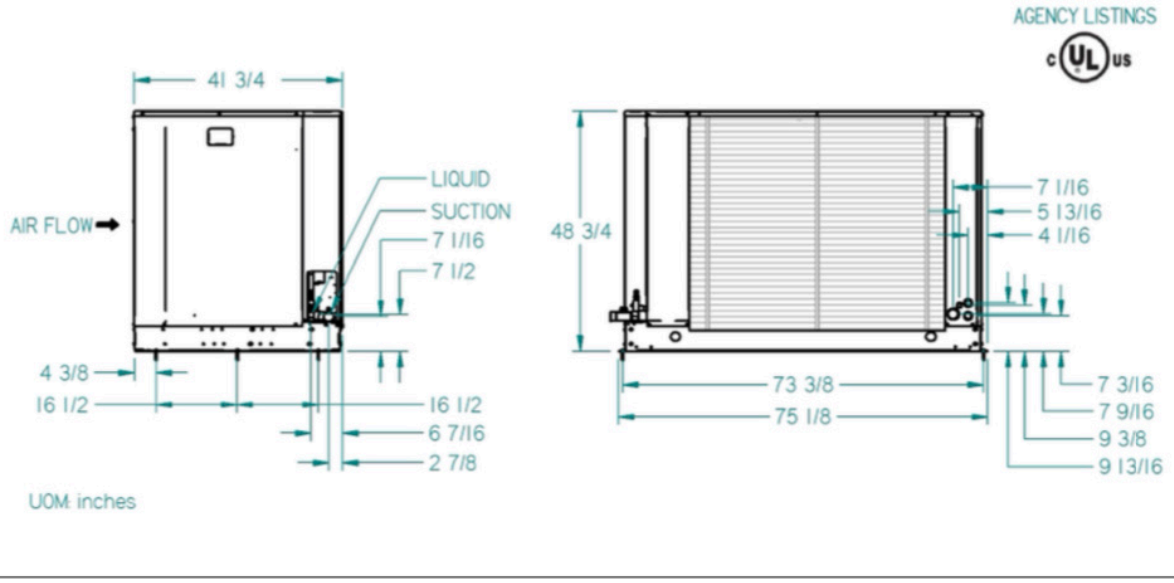
Electrical Data

Compressor(s)		Fan Motor(s)			Electric Ratings						
RLA	LRA	Quantity	Hp	FLA	Defrost Type	High or Low Amps?	Number of Contactors	MCA	MOPD	Evap.Fan Amps	Defrost Heater Amps
46	220	2	3/4	4.4	ELECTRIC DEFROST	High Amps	1	87.5	125	20	70

Unit Specifications

Connections (in.)		Receiver 90% Full (lbs)		Fan Blade(s) Diameter (in)	Sound Data (dB)	Approx. Net Weight (lbs)
Liquid Line	Suction	Standard	Over Sized			
0.875	1.625	87	98	24	82	1199

Dimensional Drawing(s)



Standard Features

QUALITY AND PERFORMANCE

- ALL JOINTS ARE SWEAT TYPE CONNECTIONS, NO MECHANICAL JOINTS TO LEAK

SERVICEABILITY

- CONVENIENT ACCESS PANELS TO EASILY SERVICE INTERNAL COMPONENTS
- LARGE ELECTRICAL PANEL TO FACILITATE EASE OF ACCESS
- MANUAL PUMPDOWN SWITCH ON ALL UNITS

COMPONENTS

- RECEIVERS ARE SIZED FOR SUFFICIENT PUMPDOWN CAPACITY WITH INLET AND OUTLET SERVICE VALVES
- SIGHT GLASS AND PERMANENT LINE FILTER

CABINET AND CONSTRUCTION

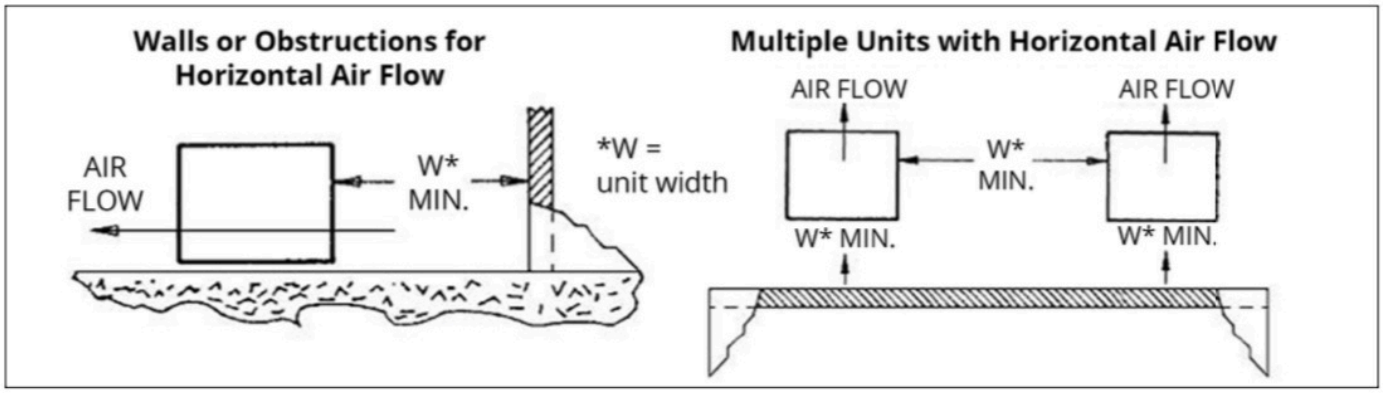
- ALL UNITS FEATURE THE FLOATING TUBE ™ COIL DESIGN WHICH ELIMINATES TUBE SHEET LEAKS
- PAINTED STEEL CABINET FOR SUPERIOR STRENGTH AND CORROSION RESISTANCE
- FIXED HIGH PRESSURE SWITCH ELIMINATES CAPILLARY TUBES
- PIPING IS LAID OUT TO MINIMIZE STRESS AND VIBRATION AND IS PRE-BENT TO ELIMINATE BRAZE JOINTS WHERE POSSIBLE TO REDUCE LEAK POTENTIAL
- PRESSURE RELIEF VALVE ON RECEIVER
- REFRIGERATION DUTY, RIFLED COPPER CONDENSER TUBING
- SEPARATE SUBCOOLING CIRCUIT IN CONDENSER FOR ADDED CAPACITY AND VAPOR FREE LIQUID
- SERVICEMATE™ DIAGNOSTIC MODULE STANDARD ON ALL NON-BEACON™ CONDENSING UNITS
- SIGHT GLASS IS EASILY VIEWABLE
- DISCUS COMPRESSORS ARE SPRING MOUNTED WITH SUCTION AND DISCHARGE ELIMINATORS

Options

Mounted Options

- Preferred Package Code - A0303
- Motor - FIXED SPEED EC
- Receiver Options - STANDARD
- Liquid Line Options - FILTER DRIER AND SIGHT GLASS
- Discharge Line Options - HEAD PRESSURE VALVE 100#
- Fused Disconnect - NO FUSED DISCONNECT
- Crankcase Heater - CRANKCASE HEATER
- Hail Guard Factory Installed - NONE
- Fusing OPTIONS - NO
- Compressor Unload OPTIONS - NO
- Brand Label - CHANDLER
- Coil Selection - ALUMINUM FIN - COPPER TUBE
- Defrost Timer Options - TIMER AND CONTACTOR HIGH AMPS
- Suction Line Options - SUCTION TUBE ONLY
- Cabinet Selection - Painted
- Pressure Options - ADJUSTABLE LOW - FIXED HIGH
- Phase Loss Monitor - NONE
- Electric Box Options - STANDARD EBOX
- DEMAND COOLING OPTIONS - YES
- COMPRESSOR FUSING OPTIONS - NO

Minimum Unit Clearances



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General Product Information

Product Family:	HEM	*Motor type*	2 SPEED EC
Defrost Type:	Electric	*Number of Fans:*	2
Voltage: (Volts/Ph/Hz)	208-230/1/60	*Fan HorsePower*	1/4
Refrigerant Type:	R448A	*Fins per Inch*	4

Technical Information

Performance Data

Capacity			*Air Flow*				*Altitude (ft)*	*AWEF Value*	
TD (°F)	*SST (°F)*	*Application Capacity* (BTU/H)*	*CFM*	*Fan Diameter (in.)*	*Air Throw (ft)*				
					Standard	*w/Collar*		*Cooler > 32*	*Freezer <= 32*
10.95	*-22.95*	*21,500*	*4750*	*18*	*45*	*60*	*0*	*N/A*	*4.15*

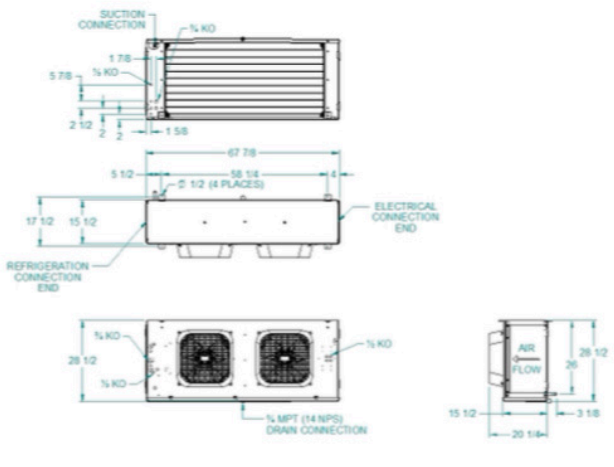
Electrical Data

Fan Motor(s)		*Defrost Heater(s)*		*Drain Pan Heater(s)*	
Watts	*Amps*	*Watts*	*Amps*	*Watts*	*Amps*
417	*3.5*	*5350*	*23.3*		

Unit Specifications

Connections (in.)						*Approx. Net Weight (lbs)*
Coil Inlet	*Suction*	*External Equalizer*	*Drain*	*Side Port*	*Hot Gas Drain Pan*	
7/8	*1-3/8*	*1/4*	*3/4*			*165*

Dimensional Drawing(s)



AGENCY LISTINGS

U/M INCHES

Standard Features

EASE OF INSTALLATION SERVICE

- ALL ELECTRICAL COMPONENTS FACTORY WIRED TO TERMINAL BOARD AND IDENTIFIED, MAKING IT EASY TO FIELD WIRE THE UNIT

PERFORMANCE

- EXTERNAL EQUALIZER CONNECTION
- INTERNAL PANELS ARE ISOLATED FOR QUIET OPERATION

RELIABLE DURABLE

- SWEAT CONNECTIONS TO REDUCE POTENTIAL FOR LEAKS

VERSATILE

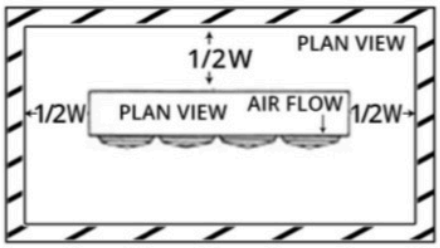
- VARIETY OF MOTOR AND VOLTAGE OPTIONS AVIALABLE TO FIT MOST APPLICATION NEEDS
- LARGE DIAMETER DRAIN FITTING (3/4 ID)
- HINGED/REMOVABLE ACCESS PANELS FOR EASY ACCESS TO REFRIGERATION AND CONTROL COMPONENTS
- FRONT HINGED DRAIN PAN FOR EASY ACCESS
- LIQUID LINE SOLENOID WIRE HARNESS IS FACTORY-INSTALLED FOR QUICK INSTALLATION
- MOTORS PLUG INTO WIRING HARNESS FOR EASIER SERVICING
- SCHRADER VALVE PROVIDED FOR SUCTION PRESSURE MEASUREMENT
- HEAVY GAUGE TEXTURED ALUMINUM CABINET
- HEAVY PLASTIC MOLDED FAN GUARDS FOR EXTENDED AIR THROW
- PATENTED THERMO-FLEX COIL DESIGN ALLOWS THE COIL TO FLEX DURING PERIODS OF DEFROST RESULTING IN EXPANSION OF THE COIL SURFACE COMES WITH A 5-YEAR WARRANTY

Options

Mounted Options

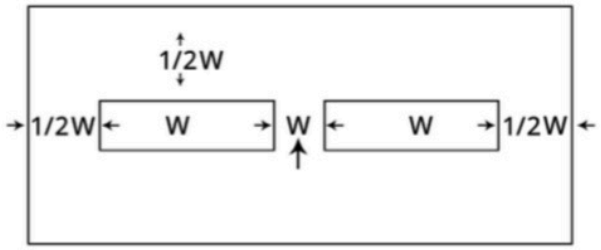
- Brand Label - CHANDLER
- Drain Pan Defrost Voltage - 208-230/1/60
- Fan Blade - Standard
- Cabinet Type - Stucco
- Controller Option - None
- Coil Mechanical Option - Sporlan TXV
- Liquid Temperature - 95
- Customer Specified Valve Type - TXV
- Crating Option - Standard Crating
- Motor - 2 Speed EC
- DTFD Option - Fixed
- Fan Guard - Molded
- Drain Pan Type - Stucco
- Fin Material - Aluminum
- Saturated Suction Temperature - -20
- N/A - N/A
- Valve Family - G
- Heater Limit Switch - Included

Minimum Unit Clearances



One Evaporator

NOTE:
W =Total Width evaporator coil surface.



Two Evaporators

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