FLUIDICS

Air Cooled Semi-Hermetic

Packaged & Split System Chillers

15 to 88 Nominal Tons

Intertek

J&M Fluidics Inc. Ph (888)539-1731 Fx (267) 203-8786 www.jmchillers.com

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To compliment our complete line of standard products that J&M Fluidics Inc. offers, we also have the ability and resources to custom design and build equipment to a customers specific needs. Please contact the factory or your J&M Fluidics representative for a special application.

Due to J&M Fluidics policy of continuous product improvement, J&M reserves the right to make changes without notice. Concept drawings in this booklet are representations of the equipment shown. Contact the factory for specific unit drawings.

J&M Fluidics Mission

"The J&M Fluidics mission is to provide innovative, high-quality process chillers, tank and pump skids, custom fluid cooling solutions and economizer products to the U.S. and international markets at competitive prices. J&M Fluidics strives to target medical, industrial, commercial, OEM, and residential markets and have its name in the industry become synonymous with process chillers. J&M Fluidics offers quality process fluid chillers built in the U.S. by Americans that are designed, manufactured, and delivered by quality people."

Company Profile

J&M Fluidics, Inc. was established in February 2013 with over 50+ years chiller experience between our management, sales, engineering and manufacturing team. Located in eastern Pennsylvania, our 20,000sqft facility has the equipment and personnel necessary to manufacture our chillers with the highest quality that our customers expect and deserve. Customer satisfaction is our number one priority. It starts with the initial contact and doesn't end there. Our team is passionate about our products and abilities to meet or exceed our customers expectation of product construction, performance and support. J&M Fluidics dedication to continuous product improvement is evident in the relationships we have established and cultivated.

Typical Chiller Applications

Commercial, Industrial & Residential Cooling Applications

Air Conditioning • Oil • Injection Molding • Plating Process • Welding Machine • Computer Room Air Conditioning • Laser • Dry Cleaning Machine • Jacket Cooling Water-Cooled Condenser • Printing Processing • Swimming Pool • *Aquariums • Low Temperature Process*

Medical & Pharmaceutical Applications

M.R.I. Magnet • Operating Room Air Conditioning • P.E.T. Scan • C.A.T. Scan • Lab Testing Hypothermia Pads and Blankets

Food & Beverage Industry Applications

Bakery Processing • Brewery • Winery • Drinking Water Fountain • Batch Cooling • Ice machine Pre-cool Fruit and Vegetable Washing and Processing

P= Packaged IE= Indoor Evaporator OC= Outdoor Condenser

Z= Scroll Compressor S= Semi Hermetic Compressor

A= Air Cooled W= Water Cooled Condensing Method

T= Tank Model PT= PolyTank

10= 10 Nominal Ton

S= Single Compressor D= Dual Compressor

Electrical Requirement:	E= 208/230-1-60	I= 575-3-60	N= 200-3-60
	F= 208/230-3-60	J= 220-1-60	P= 230-3-60
	G= 460-1-60	K= 200/208-3-50	
	H= 460-3-60	L= 380-3-50	

Refrigerant: 4= R134A 5= R407C 6= R404A

Caution

Low ambient, or lower leaving water temperatures, can require the recirculation of glycol solutions or other fluid blends. These solutions can effect unit capacities. Please consult the factory on these or other special applications for proper chiller and component sizing.

To properly select an air-cooled packaged chiller, the following information must be known:

1. The required cooling capacity, BTUH.
2. Delta T of entering and leaving fluid temperatures.
3. Fluid factor (ex. water = 500).
4. GPM of process fluid to be circulated.
5. Design ambient air temperature.

If you know any three of the items 1 through 4 above, you can calculate the fourth by using the formulas below.

For 100% water:

Cooling capacity (in BTUH) = GPM x Delta T x 500 GPM =Capacity (in BTUH) / Delta T x 500 Delta T = Capacity (in BTUH) / GPM x 500

Sample selection:

Select an air-cooled, packaged chiller to cool 108 GPM of 100% water from 54°F to 44°F. Design ambient air temperature 95°F.

Find:

Air-cooled chiller model.

Solution:

1. Chilled fluid Delta T = 54°F - 44°F = 10°F
2. Capacity (in BTUH) = 108 GPM x 10°F Delta T x 500 = 540,000 BTUH
3. From the PSA chiller capacity tables, it can be determined that the PSA45D has the capacity to meet the requirements.

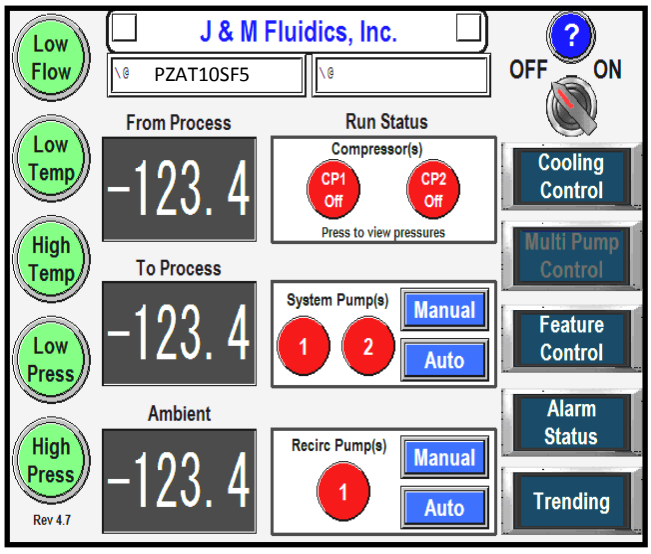
16D - 88D Semi-Hermetic Chillers

FLUIDICS

Chiller Model	Compressor Model	LWT °F	80			90			95			100			105		
			TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
16D	3DA3R10ME	**42**	17.8	15.8	10.5	16.5	17.4	9.0	15.9	18.1	8.3	15.2	18.9	7.8	14.6	19.6	7.2
		44	18.6	15.9	10.9	17.3	17.5	9.3	**16.6**	**18.2**	**8.6**	15.9	19.0	8.1	15.3	19.7	7.5
		45	19.0	15.9	11.1	17.7	17.6	9.5	16.9	18.3	8.8	16.3	19.1	8.2	15.6	19.8	7.6
		50	21.2	16.0	12.3	19.7	17.8	10.5	18.9	18.7	9.6	18.2	19.6	8.9	17.4	20.4	8.2
19D	3DB3R12ME	**42**	21.1	18.6	10.9	19.7	20.5	9.3	18.9	21.4	8.6	18.2	22.3	7.9	17.4	23.1	7.4
		44	22.0	18.7	11.4	20.5	20.7	9.7	**19.8**	**21.6**	**9.0**	19.0	22.5	8.3	18.3	23.4	7.7
		45	22.5	18.7	11.6	21.2	20.7	9.9	20.2	20.7	9.2	19.4	22.7	8.5	18.7	23.6	7.9
		50	25.0	18.8	12.8	23.3	21.0	10.8	22.4	22.1	10.0	21.3	23.2	9.2	20.7	24.2	8.5
22D	3DF3R15ME	**42**	24.8	23.1	10.7	22.9	25.2	9.2	22.1	26.2	8.5	21.2	27.2	7.9	20.3	28.2	7.3
		44	25.8	23.3	11.1	24.0	25.5	9.5	**23.0**	**26.6**	**8.8**	22.1	27.6	8.2	21.2	28.6	7.6
		45	26.4	23.3	11.3	24.5	24.6	9.6	23.5	26.7	9.0	22.6	27.8	8.3	21.7	28.8	7.7
		50	29.4	23.7	12.4	27.3	26.2	10.5	26.2	27.4	9.7	25.1	28.6	8.9	24.1	29.8	8.3
25D	3DS3R17ME	**42**	28.0	25.8	10.3	26.0	28.3	8.9	25.1	29.4	8.3	24.2	30.6	7.7	23.3	31.7	7.2
		44	29.3	26.0	10.7	27.2	28.5	9.2	**26.2**	**29.8**	**8.6**	25.3	31.0	8.0	24.3	32.2	7.4
		45	30.7	26.1	10.9	27.8	28.7	9.4	26.8	29.9	8.7	25.8	31.2	8.1	24.8	32.4	7.5
		50	33.2	26.4	12.0	30.8	29.2	10.2	29.6	30.6	9.5	28.5	32.0	8.8	27.4	33.3	8.1
33D	4DBNR20ME	**42**	35.7	33.9	10.0	32.5	36.7	8.5	31.0	38.1	7.9	29.5	39.4	7.3	28.1	40.8	6.7
		44	37.3	34.2	10.4	34.2	37.2	8.8	**32.5**	**38.6**	**8.2**	31.0	40.0	7.6	29.4	41.4	7.0
		45	38.2	34.3	10.6	34.8	37.4	9.0	33.3	38.8	8.3	31.8	40.2	7.7	30.2	41.6	7.1
		50	42.7	34.7	11.7	39.2	38.1	9.9	37.5	39.7	9.2	35.7	41.4	8.4	34.0	42.8	7.8
37D	4DHNR22ME	**42**	41.0	37.5	10.6	36.8	40.2	9.0	34.8	41.4	8.3	32.8	42.6	7.6	31.1	43.8	7.0
		44	43.2	38.0	11.0	38.7	40.8	9.3	**36.5**	**42.0**	**8.6**	34.3	43.4	7.8	32.5	44.6	7.2
		45	44.2	38.3	11.2	39.5	41.0	9.5	37.3	42.4	8.7	35.2	43.6	8.0	33.3	44.8	7.4
		50	50.2	40.8	12.3	44.7	42.6	10.3	42.0	44.0	9.5	39.5	45.4	8.7	37.2	46.6	8.0
45D	6DBNR32ME	**42**	50.8	48.0	10.7	46.8	51.6	9.2	45.2	53.4	8.6	43.8	55.4	8.1	42.7	57.4	7.6
		44	52.8	48.2	11.0	48.8	52.2	9.5	**47.2**	**54.2**	**8.9**	45.8	56.2	8.3	44.7	58.4	7.8
		45	53.8	48.4	11.2	49.8	52.4	9.7	49.0	54.4	9.0	46.7	56.6	8.5	45.7	58.8	8.0
		50	58.5	48.8	12.1	54.3	53.4	10.4	52.8	55.8	9.7	51.5	58.4	9.1	50.5	61.0	8.6
55D	6DGNR37ME	**42**	59.7	60.4	9.8	56.0	63.6	8.7	54.5	65.8	8.2	53.3	68.0	7.8	52.5	70.2	7.5
		44	62.2	60.0	10.1	58.3	64.4	9.0	**56.8**	**66.8**	**8.4**	55.7	69.0	8.0	54.8	71.4	7.7
		45	63.5	60.2	10.3	59.5	64.8	9.1	58.0	67.2	8.6	56.7	69.6	8.1	55.8	72.0	7.8
		50	70.0	61.0	11.3	65.3	66.4	9.8	63.5	69.2	9.2	62.2	72.0	8.6	61.2	74.8	8.2
62D	6DJNR40ME	**42**	74.7	65.6	11.3	67.8	71.0	9.6	64.2	73.8	8.7	60.3	76.6	7.9	56.3	79.6	7.2
		44	78.7	66.4	11.8	71.8	71.8	10.0	**68.0**	**74.8**	**9.1**	64.0	77.8	8.3	59.8	81.0	7.5
		45	80.7	66.8	12.0	73.7	72.4	10.2	69.8	75.2	9.4	65.7	78.4	8.5	61.5	81.6	7.7
		50	90.2	78.6	13.1	82.8	74.4	11.2	78.8	77.6	10.3	74.3	80.8	9.4	69.8	84.4	8.5
71D	8DP3R56M	**42**	78.3	78.0	10.2	73.2	84.8	8.9	70.7	88.2	8.3	68.0	91.4	7.7	65.5	94.6	7.2
		44	81.6	78.8	10.6	76.3	85.8	9.2	**73.6**	**89.4**	**8.5**	71.0	92.8	8.0	68.3	96.0	7.4
		45	83.3	79.2	10.7	78.0	86.4	9.3	75.2	89.8	8.7	72.5	93.4	8.1	69.7	96.8	7.5
		50	92.3	80.6	11.7	86.3	88.6	10.1	83.3	92.4	9.4	80.4	96.2	8.7	77.4	100.0	8.1
88D	8DS3R67M	**42**	94.3	100.0	9.9	88.2	107.4	8.7	85.2	111.0	8.1	82.3	114.6	7.6	79.4	117.8	7.2
		44	98.2	101.0	10.2	92.0	109.0	8.9	**88.8**	**112.6**	**8.4**	85.9	116.2	7.9	82.9	119.8	7.3
		45	100.3	101.6	10.3	93.8	109.6	9.1	90.7	113.4	8.5	87.6	117.2	8.0	84.6	120.8	7.4
		50	110.5	104.0	11.1	95.7	113.0	9.7	100.1	117.2	9.1	96.8	121.4	8.5	93.7	125.7	7.9

1. Capacities on this chart are based on refrigerant R407C. Lower leaving water or low ambient can require the use of a glycol solution or other fluid blends. These solutions affect unit capacities. Please consult the factory on these or other special fluids.
2. KW input is for compressor(s) only.
3. EER = Energy Efficiency Ratio (BTU/watt-hour). Power inputs include compressor (s), condenser fan motor (s) and control power.

J&M - Touch Screen - User Interface



J&M Touch Screen Interface - Home Screen

Description: Harness the power with an Industrial quality Human Machine Interface (HMI) that communicates with the Pentra MicroSmart Programmable Logic Controller (PLC).

Touch Screen Key Chiller Control Features:

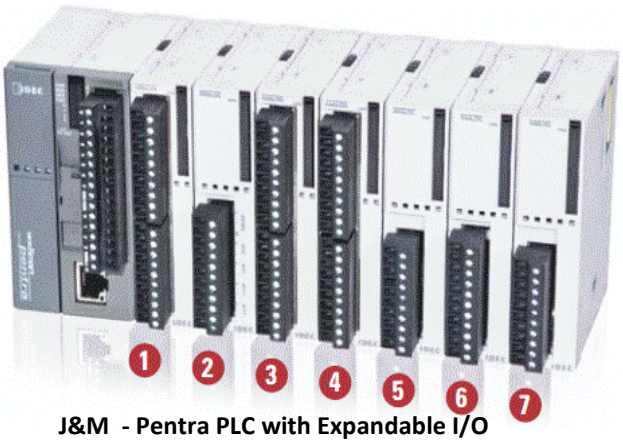
- **USB update slot for IN-PLACE HMI and PLC software updates available from JMCHILLERS.COM.**
- CE, UL Listed
- Built in Web Server
- SD slot for optional data storage
- Ultra bright display screen with auto screen saver
- Real-time Pressure and Temperature readings
- Real-Time Superheat, Subcooling, Chiller Supply and Chiller Return temperature graphical trending
- Automatic COMPRESSOR Lag/Lead with FIVE operational modes
- Automatic SYSTEM PUMP Lag/Lead with FIVE operational modes
- Factory configured for ALL J&M's available chiller options.

J&M's - Pentra Microsmart, Programmable Logic Controller (PLC)

Description: Best in class PLC now available for all J&M production chiller models. Factory installed and programmed into your next J&M Process Chiller. The Pentra PLC will seamlessly interface with our new HMI touch screen.

Pentra Key Features:

- CE, UL Listed
- Highly accurate and fast performance
- Embedded Ethernet Port
- Modbus TCP, RTU and ASCII for integration with most Building Automation Systems (BAS)
- Optional BacNet and LONWORKS communication protocols via third party bridge hardware
- Expandable I/O, ideal for custom chiller control projects.
- I/O status indicators on Pentra and I/O modules.
- Optional service alerts. Get an email or phone call about potential maintenance or service issues.



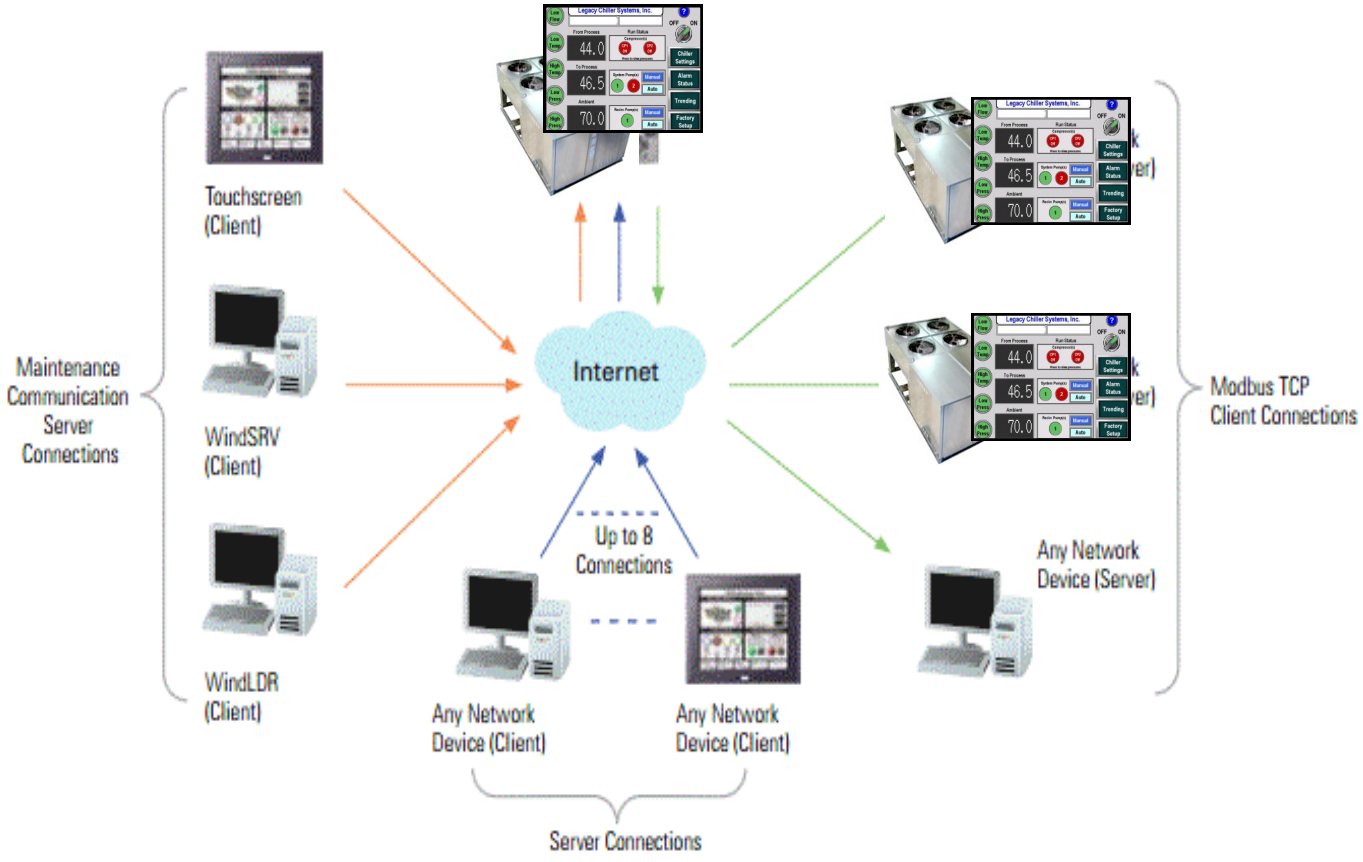
J&M - Pentra PLC with Expandable I/O

J&M - Pentra Microsmart, Programmable Logic Controller (PLC)

NOW offering extended connectivity options.

Up to 14 Simultaneous Connections

Using Maintenance Communication Server connections, up to 3 Client devices, such as an OI touchscreen, WindLDR software and SCADA OPC server such as WindSRV (KepServerEx), can simultaneously communicate with your MicroSmart Pentra PLC. Using Server Connections, an additional 8 connections can be established and each connection can be defined as Maintenance, User Communication or Modbus TCP server protocol. On top of that, another 3 connections can be configured as Modbus TCP client protocol, with a maximum of 255 requests. Each request can be for different slave devices with different IP addresses on the network.



IMPORTANT CONSIDERATION: J&M offers an optional Level 3 managed switch allowing MODBUS connectivity to the Pentra MicroSmart PLC controller. In most cases, end users firewall settings will need to be updated to allow remote WAN connectivity. J&M Fluidics can provide fee based network support for special Level 3 switch configuration.

Packaged and Split System Air-Cooled Chillers

Standard Features *(All Models)*

- **ETL listed to UL1995 & CAN/CSA C22.2 No. 236-11, 4th edition, 10/14/2011**
- **Single point power connection**
- **Idec microprocessor controller with easy to use HMI touch screen display**
- **STAINLESS STEEL**, brazed plate evaporator
- **SEMI-HEMETIC** compressor with crankcase heater and vibration spring mounting kit
- **Compressor discharge and suction pipe vibration eliminators**
- **Suction accumulator**
- Liquid sight-glass, solenoid, TXV and replaceable core drier
- **Water flow switch**
- **24V control transformer**
- Direct drive condenser fan motor
- Rust resistant, high CFM, aluminum condenser fan blade
- Condenser(s): copper tube/aluminum fin, Floating Tube™
- 5 year condenser warranty against tube sheet leaks
- Compressor motor contactor
- Individual condenser motor contactors and fusing
- Condenser control panel with factory mounted door interrupt disconnect switch
- Galvanized steel sheet metal cabinet
- 1/2" insulation on all water and refrigerant lines
- Operating Refrigerant charge from factory

Split System Models Only

- **Outdoor Condenser Section**
- Discharge and Liquid Line ball valves on indoor and outdoor equipment

Available Options *(Most Models)*

VPN Router

- **Remote Idec touchscreen control panel**
- **Industrial VPN Router**
- **5 Port Ethernet Switch**
- **BacNet Gateway**
- **Pump VFD controller**
- 4 year extended compressor warranty
- 115 volt (rain tight) service outlet
- Non Fused disconnect
- **Phase monitor**, line voltage monitor offering protection against phase loss/reversal, unbalance and hi/lo voltage
- Compressor fusing
- Fan cycle control (+40°F)
- Flooded condenser with receiver/head pressure control (0°F)
- Heated, flooded condenser with receiver/head pressure control (-20°F)
- Factory installed evaporator heat tape freeze protection
- Fused, **STAINLESS STEEL** process pump
- Dual system pump with manual changeover
- Dual system pump with auto changeover
- Pump suction isolation valve
- Water pressure gauge set
- Water flow meter
- Copper finned condenser coil *(coastal protection)*
- BohnGuard™ coated condenser coil *(coastal protection)*
- *Epoxy or Phenolic coated fins (coastal protection)*
- Auto city water make up solenoid
- Stainless steel, SCH80 PVC or Polypropylene piping for de-ionized and reverse osmosis water systems

Tank Models Only

Storage tank sight glass
Tank low liquid level indicator with dry contacts

Remote Idec Touchscreen control Panel

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Dual Circuit Packaged, Air-Cooled Chillers

Chiller Model	Nominal BTUH @ 44°F	Length Inches	Width Inches	Height Inches	Fluid Conn.	Compressor Qty.	Compressor HP	Compressor Model	RLA Ea.	LRA Ea.	Fan Motor Qty.	Fan Motor FLA ea.	MCA	M.O.P.	Chiller WT LBS
PSA16DF5									41.0	215		7	110	125	
PSA16DH5	199,200	180	45	55	2" MPT	2	8	3DA3R10ME	20.0	106	2	3.5	60	70	1700
PSA16DI5									16.4	84		2.8	45	50	
PSA19DF5									43.6	215		7	125	150	
PSA19DH5	237,600	180	45	55	2" MPT	2	10	3DB3R12ME	20.0	106	2	3.5	60	70	2000
PSA19DI5									16.5	84		2.8	45	50	
PSA22DF5	276,000	180	45	55	2" MPT	2	12.5	3DF3R15ME	48.1	275	2	7	125	150	2100
PSA22DH5									23.6	138		3.5	60	80	
PSA25DF5									59.6	275		7	175	200	
PSA25DH5	314,400	232	45	55	2" MPT	2	15	3DS3R17ME	29.0	138	3	3.5	80	100	2500
PSA25DI5									23.6	110		2.8	70	80	
PSA33DF5									85.7	374		7	225	300	
PSA33DH5	390,000	180	89	55	2" MPT	2	17	4DBNR20ME	42.9	187	4	3.5	125	150	2800
PSA33DI5									33.6	135		2.8	90	110	
PSA37DF5									107.1	428		7	300	350	
PSA37DH5	438,000	180	89	55	2" MPT	2	20	4DHNR22ME	53.6	214	4	3.5	150	175	2800
PSA37DI5									38.8	172		2.8	100	125	
PSA45DF5									122.9	565		7	350	400	
PSA45DH5	566,400	180	89	55	2.5" MPT	2	25	6DBNR32ME	57.6	283	4	3.5	150	200	4800
PSA45DI5									50.0	230		2.8	125	150	
PSA55DN5									172.9	650		7	450	600	
PSA55DP5	681,600	232	89	57	2.5"MPT	2	30	6DGNR37ME	157.9	594	6	7	400	500	5500
PSA55DH5									78.9	297		3.5	200	250	
PSA55DI5									57.5	245		2.8	150	200	
PSA62DN5									187.1	754		7	500	600	
PSA62DP5	816,000	232	89	57	2.5" MPT	2	35	6DJNR40ME	158.6	594	6	7	400	500	5600
PSA62DH5									79.3	297		3.5	200	250	
PSA62DI5									65.0	245		2.8	175	225	
PSA71DF5									180.0	1070		7	450	600	
PSA71DH5	883,200	232	89	57	2.5"MPT	2	50	8DP3R56M	90.0	535	6	3.5	225	300	6000
PSA71DI5									75.0	405		2.8	200	250	
PSA88DF5									224.3	1070		7	600	700	
PSA88DH5	1,065,600	232	89	57	2.5" MPT	2	60	8DS3R67M	112.1	535	6	3.5	300	350	6100
PSA88DI5									80.0	405		2.8	200	250	

1) The calculations for the MCA and MOP are based on requirements of NFPA 70, the National Electrical Code (NEC) and CSA C22.1, the Canadian Electrical Code (CEC). The MCA is the minimum wire size needed to guarantee that the wiring will not overheat under any operating conditions. The MOP is the maximum allowable circuit breaker size that will properly disconnect power to the equipment under any anticipated fault condition.

2) Weights are based on models with standard features only. Weights will increase with each added option. Consult factory.

Dual Circuit Split-System, Air-Cooled Chillers

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Chiller Model	Length Inches	Width Inches	Height Inches	Water Conn.	Refrig Conn		Compressor			RLA Ea.	LRA Ea.	Condenser Model	Fan Motor Qty	Fan Motor FLA ea	MCA	M.O.P.	Chiller WT LBS
					Disch	Liquid	Qty	HP	Model								
IESA16DF5	85	34	45	2" MPT	7/8"	5/8"	2	8	3DA3R10ME	41.0	215	OC16D	2	7	110	125	1050
IESA16DH5										20.0	106			3.5	60	70	
IESA16DI5										16.4	84			2.8	45	50	
IESA19DF5	85	34	45	2" MPT	1-1/8"	5/8"	2	10	3DB3R12ME	43.6	215	OC19D	2	7	125	150	1100
IESA19DH5										20.0	106			3.5	60	70	
IESA19DI5										16.5	84			2.8	45	50	
IESA22DF5	85	34	62	2" MPT	1-1/8"	5/8"	2	12.5	3DF3R15ME	48.1	275	OC22D	2	7	125	150	1200
IESA22DH5										23.6	138			3.5	60	80	
IESA25DF5	85	34	62	2" MPT	1-1/8"	5/8"	2	15	3DS3R17ME	59.6	275	0C25D	3	7	175	200	1400
IESA25DH5										29.0	138			3.5	80	100	
IESA25DI5										23.6	110			2.8	70	80	
IESA33DF5	85	34	62	2" MPT	1-3/8"	7/8"	2	17	4DBNR20ME	85.7	374	OC33D	4	7	225	300	1600
IESA33DH5										42.9	187			3.5	125	150	
IESA33DI5										33.6	135			2.8	90	110	
IESA37DF5	85	34	62	2" MPT	1-3/8"	7/8"	2	20	4DHNR22ME	107.1	428	OC37D	4	7	300	350	1700
IESA37DH5										53.6	214			3.5	150	175	
IESA37DI5										38.8	172			2.8	100	125	
IESA45DF5	110	34	62	2.5" MPT	1-5/8"	7/8"	2	25	6DBNR32ME	122.9	565	OC45D	4	7	350	400	1800
IESA45DH5										57.6	283			3.5	150	200	
IESA45DI5										50.0	230			2.8	125	150	
IESA55DN5	110	34	62	2.5" MPT	1-5/8"	1-1/8"	2	30	6DGNR37ME	172.9	650	OC55D	6	7	450	600	1900
IESA55DP5										157.9	594			7	400	500	
IESA55DH5										78.9	297			3.5	200	250	
IESA55DI5										57.5	245			2.8	150	200	
IESA62DN5	110	34	62	2.5" MPT	1-5/8"	1-1/8"	2	35	6DJNR40ME	187.1	754	OC62D	6	7	500	600	2200
IESA62DP5										158.6	594			7	400	500	
IESA62DH5										79.3	297			3.5	200	250	
IESA62DI5										65.0	245			2.8	175	225	
IESA71DF5	120	34	68	2.5" MPT	1-5/8"	1-1/8"	2	50	8DP3R56M	180.0	1070	OC71D	6	7	450	600	2500
IESA71DH5										90.0	535			3.5	225	300	
IESA71DI5										75.0	405			2.8	200	250	
IESA88DF5	120	34	68	2.5" MPT	2-1/8"	1-1/8"	2	60	8DS3R67M	224.3	1070	OC88D	6	7	600	700	2800
IESA88DH5										112.1	535			3.5	300	350	
IESA88DI5										80.0	405			2.8	200	250	

1) The calculations for the MCA and MOP are based on requirements of NFPA 70, the National Electrical Code (NEC) and CSA C22.1, the Canadian Electrical Code (CEC). The MCA is the minimum wire size needed to guarantee that the wiring will not overheat under any operating conditions. The MOP is the maximum allowable circuit breaker size that will properly disconnect power to the equipment under any anticipated fault condition.

2)Weights are based on models with standard features only. Weights will increase with each added option. Consult factory.

3) See Installation Instruction Manual Refrigerant Chart for additional refrigerant charge needed for extended pipe length.

4) See condenser specification sheet for weight and dimension specifications.

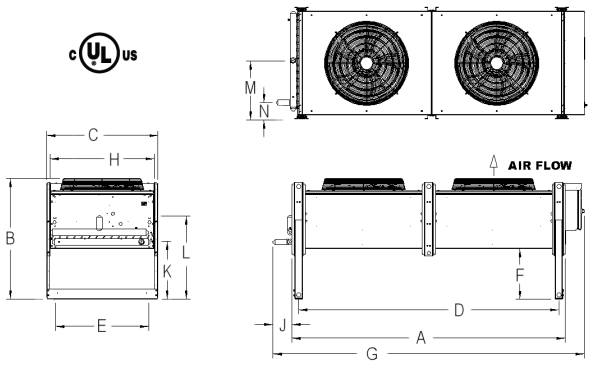
FLUIDICS

Split-System Outdoor Condenser

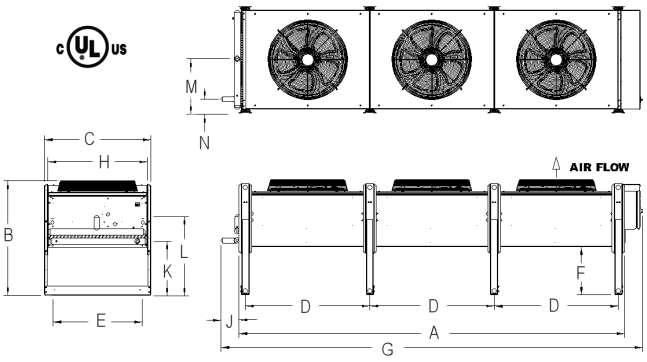
Model	Length Inches	Width Inches	Height Inches	Fan Motor		Refrigerant Conn.		Weight Pounds
				Qty	HP	Discharge	Liquid	
OC16D	127	45.56	49.13	2	1.5	7/8"	5/8"	580
OC19D	127	45.56	49.13	2	1.5	1 1/8"	5/8"	630
OC22D	127	45.56	49.13	2	1.5	1 1/8"	5/8"	680
OC25D	180	45.56	49.13	3	1.5	1 1/8"	5/8"	930
OC33D	127	88	49.13	4	1.5	1 3/8"	7/8"	1240
OC37D	127	88	49.13	4	1.5	1 3/8"	7/8"	1340
OC45D	127	88	49.13	4	1.5	1 5/8"	7/8"	1440
OC55D	180	88	49.13	6	1.5	1 5/8"	1 1/8"	1990
OC62D	180	88	49.13	6	1.5	1 5/8"	1 1/8"	1990
OC71D	180	88	49.13	6	1.5	1 5/8"	1 1/8"	2140
OC88D	180	88	49.13	6	1.5	2 1/8"	1 1/8"	2140

1) Weights are based on models with standard features only. Weights will increase with each added option. Consult factory.

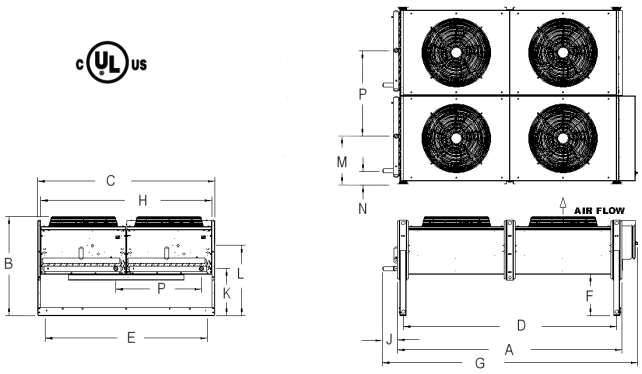
OC16D, 19D, 22D



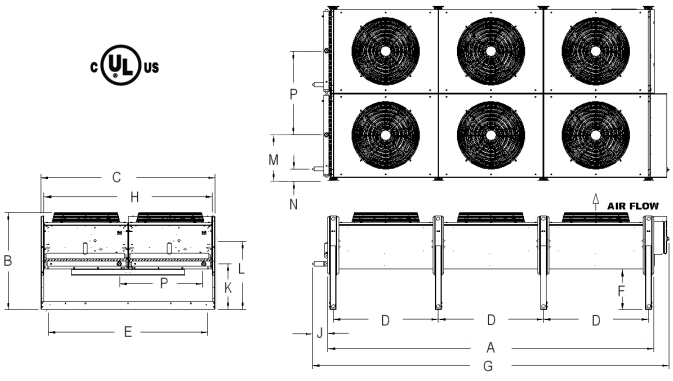
OC25D



OC33D, 37D, 45D



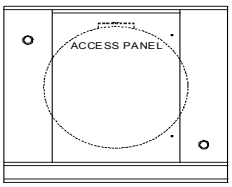
OC55D, 62D, 71D, 88D

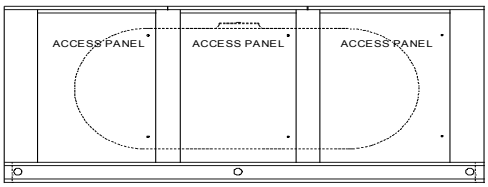


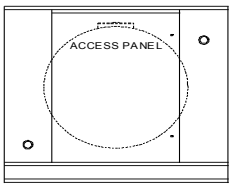
FLUIDICS

Dimensional Specifications, Features and Options

TANK MODEL	LENGTH IN.	WIDTH IN.	HEIGHT IN.	WATER CONN.	TANK VOLUME	RECIRCULATION PUMP	FLA 230/3Ø	FLA 460/3Ø	WEIGHT LBS.
RRT200	88	56	60	2" FPT	200 GALLONS	3HP	9.4	4.5	445
RRT300	88			2.5" FPT	300 GALLONS	3HP	9.4	4.5	465
RRT500	120			3" FPT	500 GALLONS	5HP	13.7	6.5	595
RRT600	120			4" FPT	600 GALLONS	5HP	13.7	6.5	625







Standard Features

- Open Vented Polyethylene tank
- 1/2" tank and fluid piping insulation
- SCH80 PVC and Polypropylene piping
- Fused evaporator fluid re-circulating **STAINLESS STEEL** pump
- Fluid pump discharge ball valve and cleanable "Y" strainer
- Control box with pump terminal block
- Galvanized steel sheet metal cabinet
- Hinged removable access panels

Available Options

- Fused, STAINLESS STEEL process pump
- Dual process pump with manual changeover
- Dual process pump with auto changeover
- Pump suction isolation valve
- Tank fluid sight glass
- Tank liquid level indicator with dry contacts
- Low flow by-pass valve
- Water flow meter
- Auto city water make up solenoid
- 1" tank and piping insulation in lieu of 1/2"
- Seal-tight electrical conduit and connections

PROPYLENE GLYCOL CAPACITY CORRECTION FACTOR TABLE							
PERCENT PROPYLENE GLYCOL BY WEIGHT	15%	20%	25%	30%	35%	40%	50%
FREEZING POINT IN °F	24	18	15	9	5	-5	-30
CAPACITY FACTOR MULTIPLIER*	0.992	0.986	0.972	0.960	0.950	0.928	0.878
PRESSURE DROP MULTIPLIER	1.04	1.08	1.13	1.21	1.26	1.47	2.79

ETHYLENE GLYCOL CAPACITY CORRECTION FACTOR TABLE							
PERCENT ETHYLENE GLYCOL BY WEIGHT	10%	15%	20%	25%	30%	35%	40%
FREEZING POINT IN °F	25	21	17	11	5	0	-10
CAPACITY FACTOR MULTIPLIER*	0.98	0.96	0.95	0.93	0.92	0.91	0.89
PRESSURE DROP MULTIPLIER	1.08	1.11	1.16	1.21	1.27	1.32	1.38

* At standard ARI 590 conditions: 54°F entering fluid temperature, 44°F leaving fluid temperature, 95°F ambient temperature, 0.0005 fouling.