

ORC SERIES OUTDOOR AIR-COOLED REMOTE CONDENSERS

STANDARD FEATURES

- **TEFC PERMANENTLY LUBRICATED MOTOR**
- **COMPUTER DESIGNED CONDENSER COILS**
- **BELT DRIVE BLOWER WITH SEALED-FOR-LIFE BEARINGS**
- **FULL FLOODING SYSTEM MINUS 20° FAHRENHEIT**



WHY A REMOTE CONDENSER

The DCA Dehumidification system performs functions other than dehumidification. When dehumidifiers operate they discharge warm dry air to the conditioned space. During cold months this heating can go a long way in helping to produce a warm and comfortable room environment. When this heating is not desirable or cannot be directed to an area where it is needed, the DCA Remote Condenser provides the solution.

automatic change-over room thermostat (optional) controls the room temperature. Normally the Remote Condenser is located outdoors and is connected to the dehumidifier by two copper freon lines. Because of advanced technology, the Remote Condenser can be operated under conditions as extreme as -20°F.

THE REMOTE CONDENSER SOLUTION

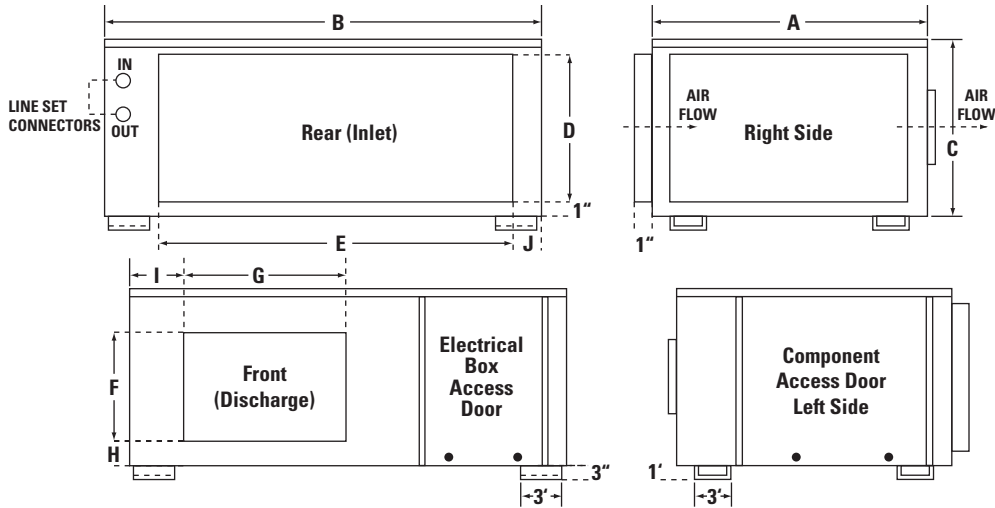
During the warm months or when the dehumidified space becomes over-heated, a DCA Remote Condenser is needed. The Remote Condenser allows the dehumidifier to discharge cool dry air to the conditioned space. An

ORC SERIES CONDENSER SELECTION GUIDE

DCA MODEL NUMBER	H.P.	LINE SETS (O.D.)		AMBIENT MODEL			MBH
		SUPPLY	RETURN	95°F	100°F	105°F	
DCA500/500WH	1.5	5/8"	3/8"	ORC-050	ORC-090	ORC-090	22.41
DCA900/DCA900WH	2	5/8"	3/8"	ORC-090	ORC-140	ORC-200	32.51
DCA1400/DCA1400WH	3	5/8"	1/2"	ORC-140	ORC-200	ORC-200	44.56
DCA2000/DCA2000WH	4	5/8"	1/2"	ORC-200	ORC-250	ORC-300	62.25
DCA2500/DCA2500WH	5	7/8"	1/2"	ORC-250	ORC-300	LORC-10	77.61
DCA3000/DCA3000WH	6	7/8"	5/8"	ORC-300	ORC-330	LORC-12	86.23
DCA3300/DCA3300WH	7.5	7/8"	5/8"	ORC-330	LORC-10	LORC-12	110.18
DCA3500/DCA3500WH	7.5	7/8"	5/8"	ORC-330	LORC-10	LORC-12	110.18

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DIAGRAMS



DIMENSIONS IN INCHES

CONDENSER MODEL #	A	B	C	D	E	F	G	H	I	J	SHIPPING WEIGHT(LBS)
ORC-050	25	28	22	20	22	10.25	9.25	5.5	4.65	2	155
ORC-090	30	45	25	20.5	28	13.5	15.625	5.5	10	2	235
ORC-140	30	45	25	20.5	28	13.5	15.625	5.5	10	2	260
ORC-200	30	45	25	22.5	40	13.5	15.625	5.5	10	2	260
ORC-250	30	45	25	22.5	40	13.5	15.625	5.5	10	2	320
ORC-300	38	46	32	30.5	40	16	18.5	8	7	2	350
ORC-330	38	46	32	30.5	40	16	18.5	8	7	2	350

BLOWER AND MOTOR DATA

		ORC-050	ORC-090	ORC-140	ORC-200	ORC-250	ORC-300	ORC-330
BLOWER HORSEPOWER		1/2	1/2	1/2	1	1.5	1.5	1.5
FLA 60 HZ	208/230 - 1 PH	4.4	4.4	4.4	6.4	8.6	8.6	8.6
	208/230 - 3 PH	N/A	2	2	3.4	4.6	4.6	4.6
	460 3 PH	N/A	1	1	1.7	2.3	2.3	2.3
	575 3 PH	N/A	N/A	N/A	1.4	1.9	1.9	1.9
MINIMUM AMPACITY	208/230 - 1 PH	5.5	5.5	5.5	8	10.75	10.75	10.75
	203/230 - 3 PH	N/A	2.5	2.5	4.2	5.75	5.75	5.75
	460 3 PH	N/A	1.25	1.25	2.1	2.9	2.9	2.9
	575 3 PH	N/A	N/A	N/A	1.75	2.2	2.2	2.2
MAX FUSE SIZE	208/230 - 1 PH	10	10	10	14	15	15	15
	208/230 - 3 PH	N/A	5	5	8	8	8	8
	460 3 PH	N/A	3	3	4	4	4	4
	575 3 PH	N/A	N/A	N/A	4	4	4	4
C.F.M.		1200	1600	2300	3200	4000	5000	5000
BLOWER SIZE		10"	12"	12"	12"	12"	15"	15"
BLOWER R.P.M.		590	428	582	591	731	563	554
MBH @ 25 DIFF.		22.412	32.506	41.263	62.248	77.609	89.825	98.378
MBH @ 30 DIFF.		26.894	39.007	49.515	74.697	86.232	107.79	118.053

W53 N550 HIGHLAND DRIVE
P.O. BOX 0917
CEDARBURG, WI 53012
PHONE: 262-377-7501
FAX: 262-377-7502

ALL ORC SERIES REMOTE CONDENSERS SPECIFICATION DATA

A. GENERAL INFORMATION

All DCA dehumidifiers are manufactured to be remote condenser ready with all valves and electrical devices in place to be connected to an outdoor remote condenser. Air cooled remote condensers are used to reject excess heat to the outdoors if the heat generated by the dehumidifier cannot be used for room air heating or pool water heating. This condenser can supplement the room A/C system or be the sole source of room cooling. This condenser shall be large enough to reject all the recovered heat outdoors without simultaneously rejecting heat into the pool water or room air. This condenser shall be capable of operation down to -20°F.

B. CABINET CONSTRUCTION

The base panel shall be 12 gauge galvanized steel with 12 gauge welded supports on the bottom side for maximum support. The frame panels, removable access doors and top panels shall be 18 to 20 gauge galvanealed steel. Removable access doors will provide fingertip access to all major and minor replaceable components of the unit. The electrical compartment shall be separated from the mechanical area with access with its own door from outside of the cabinet. This cabinet shall be for outdoor installation with the appropriate weather shielding in place.

C. PAINT AND CABINET FINISH

All metal parts shall be galvanealed coated steel in its raw state. All metal cabinet parts shall be painted by the following process.

1. Metal pretreatment using phosphate cleaning and rinsing.
2. Moisture removal via warm air oven.
3. Primer application.
4. Primer curing via high temperature oven.
5. Finish coat applied using a high solids liquid or powder coat material.
6. Finish coat cured using a high temperature curing oven.

D. CONDENSER COIL

This coil shall be constructed with seamless drawn, rifle tube design, copper tubing, hydraulically expanded into the fin collars to form a metal bond for maximum heat transfer and overall stability. Coils shall be 3/8" OD copper arranged in a staggered design. Coil fins shall be tempered aluminum with extruded collars and accurately spaced at 12 fins per inch. All headers shall be constructed from heavy wall copper tubing. Coil casing shall be made from at least 18 gauge galvanized steel. Coil testing shall be leak tested with at least 420 psig

nitrogen gas and then sealed to avoid contamination.

E. ELECTRICAL CONTROL PANEL

The electrical control panel shall be readily accessible from one side of the unit. All necessary motor starters and protection devices shall be housed in this panel.

F. AIR BLOWER ASSEMBLY

The blower shall be a double inlet, forward curve, centrifugal, low RPM type that is dynamically and statically factory balanced. Permanently lubricated ball bearings to provide at least 200,000 hours of average life. The blower shall be vibration isolated when mounted to the cabinet floor. This blower shall allow duct work to be added and provide to work against at least an external static pressure of .5' WC.

G. BLOWER MOTOR

The blower motor shall be a totally enclosed fan cooled design (TEFC) with class B insulation, continuous duty, 40 degree C ambient with overload protection. It shall have permanently lubricated ball bearings, a key slotted shaft with a rigid or resilient mount. It shall carry a UL or CSA listing. Blower motor shall be base mounted and not attached to blower mechanically other than the connecting V-belt.

H. BLOWER DRIVE COMPONENTS

The motor pulley shall be machined cast iron in construction. The motor pulley shall be a variable pitch type that is field adjustable to vary CFM and external static pressure. The pulleys shall be a single V-belt up to and including.

I. HEAD PRESSURE CONTROLS

This unit shall be equipped to operate as a full flooding system for operation down to -20°F.


J. FAN AND COIL GUARDS

Plated or painted welded wire guards will be constructed for maximum rigidity and safety protection.

K. WARRANTY

This unit shall be comprised of the finest components available which are readily available either as off the shelf replacements of replacements readily available from the factory. All components shall be warranted for a period of THREE (3) years from date of shipment.

L. APPROVAL AND AGENCY LISTINGS

This unit shall be manufactured, tested and listed to meet the most rigid standards of  Laboratories.

M. MANUFACTURER OF EQUIPMENT

This unit shall be manufactured by DEHUMIDIFIER CORPORATION OF AMERICA (DCA), Cedarburg, WI.