

WATER COOLED CONDENSING UNITS
GENERAL SPECIFICATIONS OF WATER COOLED CONDENSING UNITS

MODEL NUMBER	WCU010DZV	WCU015DZV	WCU020DZV	WCU025DZV	WCU030DZV	WCU040DZV	WCU0450DZV	WCU050DZV	WCU070DZV
Nominal Capacity (tons) ¹	10	15	20	25	30	40	45	50	70
Refrigeration Circuits	2	2	2	2	2	2	2	2	2
Refrigerant Type	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant Charge (equipment only) ⁴	2.8	4.0	4.3	5.6	6.8	9.3	13.5	13.9	15.3
Receiver Capacity (lbs)	19	19	19	19	19	19	19	19	19
COMPRESSOR	ZP61KCE	ZP90KCE	ZP120KCE	ZP154KCE	ZP182KCE	ZP235KCE	ZP285KCE	ZP295KCE	ZP385KCE
Type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Quantity	2	2	2	2	2	2	2	2	2
Weight (lbs)	105	150	160	165	170	386	450	414	452
Nominal Hp	5.0	7.5	10.0	13.0	15.0	20.0	22.5	25.0	30.0
Power (kW)	4.1	6	7.7	10.0	11.7	15.2	17.7	19.1	24.8
CONDENSER	B3-113-46-4.5	B3-113-66-4.5	B3-113-86-4.5	B3-113-106-4.5	B3-113-126-4.5	B3-113-166-4.5	B3-210-102-4.0	B3-210-110-4.0	B3-210-146-4.0
Heat Exchanger (type)	Brazed Plate	Brazed Plate	Brazed Plate	Brazed Plate	Brazed Plate	Brazed Plate	Brazed Plate	Brazed Plate	Brazed Plate
Quantity	1	1	1	1	1	1	1	1	1
Weight (lbs)	53	70	87	104	121	154	209	223	286
Max. Working Refrigeration Pressure (PSI)	650	650	650	650	650	650	650	650	650
Max. Water Refrigeration Pressure (PSI)	300	300	300	300	300	300	300	300	300
Water Storage Volume (gal)	0.97	1.4	1.82	2.24	2.66	3.51	5.39	5.81	7.71
Water Storage Volume in 6" Headers (gal)	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Flow Rate (GPM)	30.2	47.15	64.1	76.3	88.4	114.0	133.0	142	200
Water dP (PSI)	2.68	3.12	3.56	3.44	3.31	3.51	2.74	2.69	2.95
Header Water Connections (inch) ²	6	6	6	6	6	6	6	6	6
Interconnecting Refrigerant Piping ³	50' 100'	50' 100'	50' 100'	50' 100'	50' 100'	50' 100'	50' 100'	50' 100'	50' 100'
Suction Line Size	7/8 1 1/8	1 1/8 1 1/8	1 1/8 1 3/8	1 3/8 1 3/8	1 3/8 1 5/8	1 3/8 1 5/8	1 5/8 2 1/8	1 5/8 2 1/8	2 1/8 1 3/8
Liquid Line Size	5/8 3/4	3/4 3/4	3/4 7/8	3/4 7/8	7/8 1 1/8	7/8 1 1/8	1 1/8 1 3/8	1 1/8 1 3/8	1 3/8 1 3/8
DIMENSIONS (inch)	48 1/2 x 24 1/2 x 60	48 1/2 x 24 1/2 x 60	48 1/2 x 24 1/2 x 60	48 1/2 x 24 1/2 x 60	48 1/2 x 24 1/2 x 60	48 1/2 x 24 1/2 x 72	48 1/2 x 24 1/2 x 72	48 1/2 x 24 1/2 x 72	48 1/2 x 24 1/2 x 72
WEIGHT (lbs) ⁶	950	1,050	1,100	1,120	1,150	1,610	1,800	1,810	1,950

Notes:

1. Tonnage rating conditions: 85 °F entering condenser water temperature, flow rates are 3.0 GPM per ton through the condenser with a fouling factor of 0.00025.
2. Main water header connections are Ø6" with grooved connections for SCH 40 steel pipe, recommended flow rates in 450 to 650 GPM.
3. Pipe sized based on 50' run length and 100' run length.
4. Field refrigerant charge: equipment charge + receiver charge + piping charge.
5. Condensing unit shipped with holding charge of nitrogen, will require field charging with freon.
6. Unit shipping weight includes refrigerant charge and packaging.