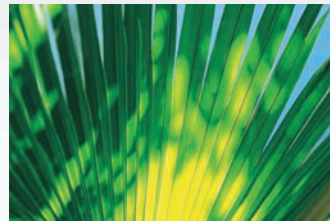




CR Series 50/60Hz

CR Fan Coil Units

Air Volume: 100 to 1940 cfm (176 to 3300 m³/hr)



CR-CC



CR-CB



CR-WM



CR-FB



CR-CE

DUNHAM-BUSH®

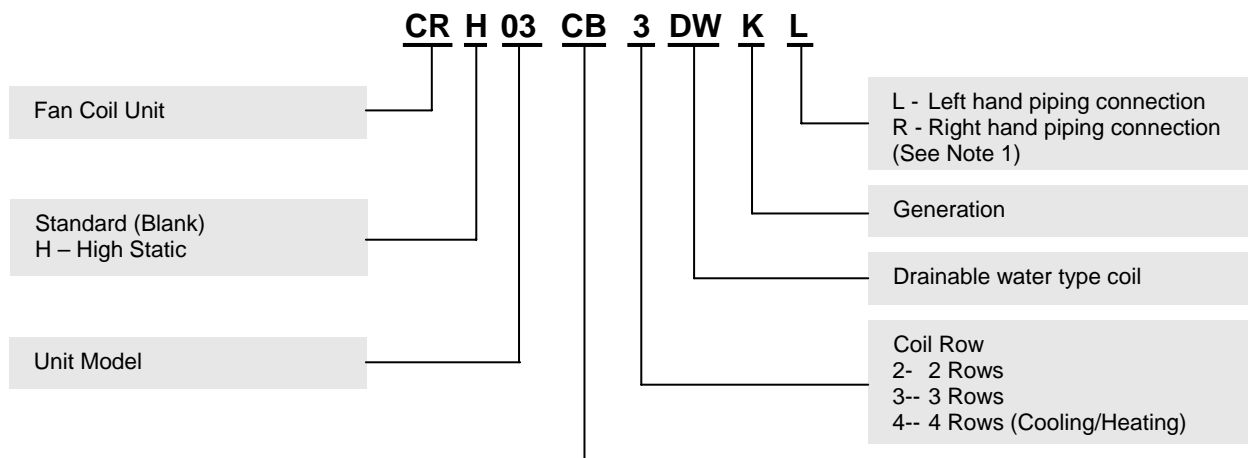
Products that perform...By people who care

GENERAL DESCRIPTION

For more than 100 years, Dunham-Bush has focused on innovative product development. Today, we provide a full portfolio of HVAC/R products from Fan Coil Units to large centrifugal chillers as well as many other innovative green solutions. Our commitment to innovation, matched with an aggressive attitude toward growth, makes Dunham-Bush a leader in global markets. Our product development is tailored to meet the specific needs of customers, building-by-building, country-by-country and region-by-region. No other HVAC/R manufacturer takes this approach to meeting your performance expectations.

CR Series, chilled water fan coil units, have an air volume range from 100 to 1940 cfm (176 to 3300 m³/hr) in 50/60Hz version with 3 basic types (blow through ceiling concealed units, blow through ceiling concealed with back return air plenum units and blow through ceiling concealed with bottom return air plenum units). The entire product line features compact construction, design flexibility, high performance and low noise. All fan coil units are completely factory packaged with blower, motor, cooling/ heating coil and terminated pipe connections. They are completely factory assembled and ready for field installation.

NOMENCLATURE



Type	Description
CB	- Ceiling concealed (static pressure 12Pa)
CBP	- Ceiling concealed with back return air plenum (static pressure 0Pa)
CBPD	- Ceiling concealed with bottom return air plenum (static pressure 0Pa)
HB	- Ceiling concealed (static pressure 30Pa)
HBP	- Ceiling concealed with back return air plenum (static pressure 20Pa)
HBPD	- Ceiling concealed with bottom return air plenum (static pressure 20Pa)
HBS	- Ceiling concealed (static pressure 50Pa)
HBSP	- Ceiling concealed with back return air plenum (static pressure 40Pa)
HBSPD	- Ceiling concealed with bottom return air plenum (static pressure 40Pa)
HBZ	- Ceiling concealed (static pressure 70Pa)
HBZP	- Ceiling concealed with back return air plenum (static pressure 60Pa)
HBZPD	- Ceiling concealed with bottom return air plenum (static pressure 60Pa)
CE	- Ceiling exposed type
FB	- Floor standing vertical type
WM	- Wall mounted type
CCIIH-Y	- Cassette Type II luxury model

Notes: 1. Left hand or Right hand piping connection is determined by facing the supply air.
 2. Standard fan coil inlet/ outlet pipe connection will be on the same side with drain pan pipe and wiring box.
 3. Motor is 220V (±10%) / 1PH/ 50-60Hz.

SPECIFICATIONS AND FEATURES

Casing

Fan coil units are constructed from galvanized steel sheet features a compact structure and aesthetically appearance. PE foam is lined in between panels to guard against leaks of conditioned air and assure vibration free operation. Casing panels are easily removable for service and repair.

Fan Assemblies

The light weight double-width double inlet metal forward curved centrifugal fan is robust for durable application condition. It features low sound levels, vibration-free operation, even air distribution and minimum power requirement. Motors are 3-speed single-phase permanent split capacitor type with built-in thermal overload protection.

Coils

All coils are of 3/8" seamless copper tubes, with corrugated hydrophilic coated fins for improved condensed draining and giving excellent heat transfer. Units for cooling are available with 2 or 3 rows coils as well as optional for cooling and heating application with (3 + 1 rows) or (2 + 2 rows) combination. All coils are leak tested at 2.4MPa air pressure and are suitable for up to 1.6MPa working pressure. Coils are optional for left or right hand water piping connection of threaded 3/4" FBSPT which is field convertible.

All standard units are furnished with a special designed leak proof one-piece formed extended drain pan without welding. It is externally covered with PE insulation. Additional extension is also available as an option.

Optional Accessories

To meet customers' different needs, optional accessories are also available,

- Thermostat – LCD or Mechanical.
- 2-way / 3-way motorized valve (shipped loose).
- Extended drain pan.
- Positive Temperature Coefficient (PTC) heater.
- 10mm Nylon Filter (for return plenum model only).
- Electric Heater.

SPECIFICATIONS

CR-CB/ HB/ HBS/ HBZ/ FB Cooling/ Heating - 2 Rows & 3 Rows

Model		02	03	04	05	06	07	08	10	12	14
2 Rows											
Air Flow (m³/h)	High Speed	360	532	683	875	1035	1272	1362	1704	2050	2380
	Medium Speed	270	406	518	661	770	964	1016	1307	1552	1770
	Low Speed	176	261	348	447	509	651	687	880	1009	1173
Noise Level dB(A)	CB- 12Pa, CBP/ CBPD- 0Pa	35.5	36.5	38.5	42	44.2	46	46	48	49	52
	HB- 30Pa, HBP/ HBPD- 20Pa	39.5	41	42.5	45.5	46	48	48	50	52	54
	HBS- 50Pa, HBSP/ HBSPD- 40Pa	42	44	45	47	48	50	50	52	54	56
	HBZ- 70Pa, HBZP/ HBZPD- 60Pa	44	46.5	48	49	50	53	53	54	56	58
Sensible Cooling	(kW)	1.2	1.7	2.1	2.6	3.0	3.6	4.0	4.7	5.8	6.8
Total Cooling	(kW)	1.8	2.5	3.2	4.1	4.5	5.5	6.0	7.0	9.0	10.7
Heating	(kW)	3.0	4.3	5.4	6.7	7.7	9.3	10.4	12.0	14.9	17.4
Water Flowrate	(l/min)	5.0	7.3	9.3	11.6	13.0	16.0	17.1	20.1	25.7	30.9
Water Pressure Drop	(kPa)	5.1	11.1	19.7	30.0	14.8	23.9	14.6	20.1	37.8	50.0
Blower Qty		1	2	2	2	2	2	4	4	4	4
Motor Qty		1	1	1	1	1	1	2	2	2	2
Power Supply		220V/1P/50Hz									
Power Input (W)	CB- 12Pa, CBP/ CBPD- 0Pa	27	40	60	83	103	139	132	155	203	236
	HB- 30Pa, HBP/ HBPD- 20Pa	43	57	72	93	109	155	148	180	224	257
	HBS- 50Pa, HBSP/ HBSPD- 40Pa	48	65	81	102	116	150	171	193	243	293
	HBZ- 70Pa, HBZP/ HBZPD- 60Pa	55	71	92	111	126	173	183	211	277	306
Power Supply		220V/1P/60Hz									
Power Input (W)	CB- 12Pa, CBP/ CBPD- 0Pa	44	56	70	109	124	152	147	195	239	294
	HB- 30Pa, HBP/ HBPD- 20Pa	45	65	75	115	117	168	156	195	247	303
	HBS- 50Pa, HBSP/ HBSPD- 40Pa	49	76	102	126	131	188	197	224	278	315
	HBZ- 70Pa, HBZP/ HBZPD- 60Pa	58	77	101	121	156	182	192	243	293	366
Unit Weight (kg)	Ceiling Concealed without R/A Plenum	9.3	10.9	15.8	16.6	17.5	20.0	25.6	28.2	32.8	34.6
	Ceiling Concealed with R/A Plenum	13.4	15.4	20.7	21.9	23.2	26.3	32.7	35.6	41.5	44.1
3 Rows											
Air Flow (m³/h)	High Speed	360	532	683	875	1035	1272	1362	1704	2050	2380
	Medium Speed	270	406	518	661	770	964	1016	1307	1552	1770
	Low Speed	176	261	348	447	509	651	687	880	1009	1173
Noise Level dB(A)	CB- 12Pa, CBP/ CBPD- 0Pa	35.5	36.5	38.5	42	44.2	46.5	45.5	48	49	52
	HB- 30Pa, HBP/ HBPD- 20Pa	39.5	41	42.5	45.5	46	48.6	47	50	52	54
	HBS- 50Pa, HBSP/ HBSPD- 40Pa	42	44	45	47	48	51	49	52	54	56
	HBZ- 70Pa, HBZP/ HBZPD- 60Pa	44	46.5	48	49	50	53.4	53	54	56	58
Sensible Cooling	(kW)	1.4	2.0	2.6	3.1	3.5	4.4	5.1	6.0	7.1	8.4
Total Cooling	(kW)	2.2	3.2	4.1	4.8	5.4	6.7	7.9	9.4	11.1	13.1
Heating	(kW)	3.6	5.1	6.4	7.9	9.3	11.1	12.5	14.9	17.9	20.9
Water Flowrate	(l/min)	6.5	9.0	11.6	13.9	15.7	19.3	22.6	27.0	31.7	37.8
Water Pressure Drop	(kPa)	11.8	24.3	30.0	22.1	27.2	22.6	34.2	40.0	25.8	39.5
Blower Qty		1	2	2	2	2	2	4	4	4	4
Motor Qty		1	1	1	1	1	1	2	2	2	2
Power Supply		220V/1P/50Hz									
Power Input (W)	CB- 12Pa, CBP/ CBPD- 0Pa	27	40	60	83	103	139	132	155	203	236
	HB- 30Pa, HBP/ HBPD- 20Pa	43	57	72	93	109	155	148	180	224	257
	HBS- 50Pa, HBSP/ HBSPD- 40Pa	48	65	81	102	116	150	171	193	243	293
	HBZ- 70Pa, HBZP/ HBZPD- 60Pa	55	71	92	111	126	173	183	211	277	306
Power Supply		220V/1P/60Hz									
Power Input (W)	CB- 12Pa, CBP/ CBPD- 0Pa	44	56	70	109	124	152	147	195	239	294
	HB- 30Pa, HBP/ HBPD- 20Pa	45	65	75	115	117	168	156	195	247	303
	HBS- 50Pa, HBSP/ HBSPD- 40Pa	49	76	102	126	131	188	197	224	278	315
	HBZ- 70Pa, HBZP/ HBZPD- 60Pa	58	77	101	121	156	182	192	243	293	366
Unit Weight (kg)	Ceiling Concealed without R/A Plenum	10.2	11.9	16.8	17.8	19.2	22.2	27.6	30.2	35.3	38.1
	Ceiling Concealed with R/A Plenum	14.3	16.4	21.7	23.1	24.9	28.5	34.7	37.6	44.0	47.6

- Notes:
- 1) High speed air flow corresponds to the respective external static pressure which is measured with unit without R/A plenum.
 - 2) Cooling capacity is based on entering air temperature 27°C DB/ 19.5°C WB and water inlet/ outlet temperature 7°C/ 12°C, at high speed airflow.
 - 3) Heating capacity is based on entering air temperature 21°C and water entering temperature 60°C. Water flowrate and airflow are identical to cooling mode.
 - 4) Refer to Page 23: Total Capacity Correction Factor for other airflow.
 - 5) Noise data is based on high speed under lab testing condition.

Cooling/ Heating - 4 Rows

Model		02	03	04	05	06	07	08	10	12	14
Noise Level dB(A)	CB- 12Pa, CBP/ CBPD- 0Pa	36.5	37	41	43	44	46	46	48	50	52
	HB- 30Pa, HBP/ HBPD- 20Pa	40	41	43	46	46	47	48	50	52	54
	HBS- 50Pa, HBSP/ HBSPD- 40Pa	42	44	46	47	49	50	50	52	54	56
	HBZ- 70Pa, HBZP/ HBZPD- 60Pa	43.5	46.4	46.4	48.5	49.7	52	53	54.3	55.1	57
Power Supply		220V/1P/50Hz									
Power Input (W)	CB- 12Pa, CBP/ CBPD- 0Pa	27	46	59	80	98	134	132	152	205	244
	HB- 30Pa, HBP/ HBPD- 20Pa	42	60	77	85	112	147	144	184	213	278
	HBS- 50Pa, HBSP/ HBSPD- 40Pa	48	63	90	100	118	172	164	214	253	310
	HBZ- 70Pa, HBZP/ HBZPD- 60Pa	53	79	91	106	143	168	182	226	256	299
Power Supply		220V/1P/60Hz									
Power Input (W)	CB- 12Pa, CBP/ CBPD- 0Pa	46	62	71	111	125	153	152	205	252	313
	HB- 30Pa, HBP/ HBPD- 20Pa	47	74	84	118	114	173	165	210	259	320
	HBS- 50Pa, HBSP/ HBSPD- 40Pa	53	84	95	127	152	174	189	230	309	374
	HBZ- 70Pa, HBZP/ HBZPD- 60Pa	62	90	100	113	149	173	190	233	314	388
Unit Weight (kg)	Ceiling Concealed without R/A Plenum	11.1	12.9	17.8	19	20.4	23.8	29.8	32.2	37.8	41.6
	Ceiling Concealed with R/A Plenum	15.2	17.4	22.7	24.3	26.1	30.1	36.9	39.6	46.5	51.1

- Notes:
- 1) 4 Rows model includes type 2+2 and 3+1. Refer to respective tables of 1 row, 2 rows and 3 rows cooling/ heating coils for the airflow, capacity, water flowrate and water pressure drop.
 - 2) Noise data is based on high speed under lab testing condition.

SPECIFICATIONS

CR-CCIIH-Y

Model			02	03	04	05	06	08	10	12	14
Cooling	High Speed	kW	2.0	2.7	3.7	4.7	5.8	7.2	9.2	11.0	12.6
	Medium Speed	kW	1.7	2.3	2.8	3.8	4.6	5.8	8.0	9.0	10.5
	Low Speed	kW	1.1	1.4	2.0	2.7	3.9	4.3	6.5	7.0	9.0
	Water Flowrate	l/h	345	470	640	808	995	1240	1580	1890	2160
	Water Pressure Drop	kPa	15	27	15	12	16	21	37	40	47
Heating	High Speed	kW	2.8	4.2	5.6	7.0	8.4	11.2	13.9	16.7	19.5
	Medium Speed	kW	2.5	3.5	4.2	5.7	6.9	8.7	12.0	13.5	15.7
	Low Speed	kW	1.7	2.1	3.0	4.0	5.8	6.4	9.7	10.5	13.5
Air Flow	High Speed	m ³ /h	340	510	680	850	1020	1360	1700	2040	2380
	Medium Speed	m ³ /h	280	390	520	680	790	1030	1400	1500	1850
	Low Speed	m ³ /h	180	260	350	490	520	590	950	1030	1500
Blower Fan	Type	Centrifugal Fan									
	Diameter Ø	mm	315	315	315	380	380	380	476	476	476
	Quantity		1	1	1	1	1	1	1	1	1
Electric Parameter	Power Supply	220V/1Ph/50-60Hz									
	Input Power	W	39	52	62	76	96	132	152	189	220
	Current	A	0.18	0.24	0.27	0.35	0.45	0.58	0.78	0.80	1.07
Noise Level	dB (A)	37	39	41	43	45	46	47	50	52	
Control Mode	Remote control or wired wall pad										
Unit Dimension	L x W x H	mm	582x582x265			712x712x290			827x827x290		
Net Weight		kg	20			26			36		
Water Connection	In	Inch	ZG3/4"								
	Out	inch	ZG3/4"								
	Drain Pipe (OD.)	mm	26								

- Notes:
- 1) Air volume is defined as external pressure 0 Pa.
 - 2) Cooling capacity is based in water inlet/outlet temperature of 7°C/ 12°C, air entering temperature 27°C DB/ 19.5°C WB, and air volume during high speed (external pressure as 0Pa) standard.
 - 3) Heating capacity is based on water entering temperature of 60°C and air entering temperature 21°C.
 - 4) Total cooling load, sensible heating cooling load and total heating load under different air volume can be obtained according to correction factor chart.
 - 5) Noise data is based on high speed testing condition.
 - 6) Auto-restart features with detachable panel for easy maintenance and servicing. Fresh Air Intake option is available.

CR-CE

Model			03	04	05	06	08	10	12
Capacity	Total Cooling	kW	2.7	3.8	4.5	5.5	7.4	9.0	10.8
	Heating	kW	4.0	5.4	6.7	8.0	10.8	13.5	15.0
	Water Flowrate	l/min	7.7	10.8	12.8	17.2	20.0	25.8	30.8
	Water Pressure Drop	kPa	17	16	18	23	29	38	40
Air Flow	High Speed	m ³ /h	510	680	850	1020	1360	1700	2040
	Medium Speed	m ³ /h	420	550	680	850	1020	1360	1700
	Low Speed	m ³ /h	360	450	550	650	850	1100	1360
Noise Level	dB (A)	39	41	43	45	46	48	50	
Blower Qty.		1	2	2	3	3	4	4	
Power Supply	220V/ 1P/ 50-60Hz								
Motor	Qty		1	1	1	1	1	2	2
	Power Input	W	65	67	95	105	156	183	190
Net Weight		kg	20	26	26	38	38	46	46

- Notes:
- 1) Air volume is defined as external pressure 0 Pa.
 - 2) Cooling capacity is based on water inlet/outlet temperature of 7°C/ 12°C, air entering temperature 27°C DB/ 19.5°C WB, and air volume during high speed (external pressure as 0Pa) standard.
 - 3) Heating capacity is based on water entering temperature of 60°C and air entering temperature 21°C.
 - 4) Total cooling load, sensible heating cooling load and total heating load under different air volume can be obtained according to correction factor chart.
 - 5) Noise data is based on high speed testing condition.

SPECIFICATIONS

CR-WM

Model			03	05	06	08
Cooling Capacity	High Speed	kW	2.7	4.5	5.4	7.2
	Medium Speed	kW	2.3	3.8	4.6	6.1
	Low Speed	kW	1.8	2.9	3.5	4.7
Heating Capacity	High Speed	kW	4.1	6.8	8.2	10.8
	Medium Speed	kW	3.5	5.8	7.0	9.2
	Low Speed	kW	2.6	4.4	5.3	7.0
Air Flow	High Speed	m ³ /h	510	850	1020	1360
	Medium Speed	m ³ /h	383	638	765	1020
	Low Speed	m ³ /h	255	425	510	680
Water Flowrate		l/min	10.2	15.8	18.0	23.2
Water Pressure Drop		kPa	30	30	40	40
Blower Fan Qty			1	1	1	1
Motor	Power Supply		220V/1Ph/50-60Hz			
	Input Power	W	52	76	96	134
	Qty		1	1	1	1
Noise Level		dB(A)	42	47	47	49
Control Mode			Remote control or wired wall pad			
Unit Dimension	W x D x H	mm	850x300x198	970x315x235	970x315x235	1100x330x235
Net Weight		kg	11	15	16	20
Water Connection	In	Inch	RC1/2"	RC1/2"	RC1/2"	RC1/2"
	Out	inch	RC1/2"	RC1/2"	RC1/2"	RC1/2"
	Drain Pipe	inch	R1/2"	R1/2"	R1/2"	R1/2"

- Notes: 1) Cooling capacity is based on water inlet/outlet temperature of 7°C/ 12°C, air entering temperature 27°C DB/ 19.5°C WB.
 2) Heating capacity is based on water entering temperature of 60°C and air entering temperature 21°C.
 3) External Static Pressure: 50Pa is optional.
 4) Noise level is tested in full-anechoic room.

CRH-CBP/ CBPD

Model	External Static Pressure (Pa)	Air Flow (m ³ /h)					Noise Level dB(A)	Capacity					Blower Qty	Power Supply	Motor		Unit Net Weight (kg)
		High Speed	Hi Med Speed	Medium Speed	Low Speed	Total Cooling (kW)		Sensible Heating (kW)	Heating (kW)	Water Flowrate (l/min)	Water Pressure Drop (kPa)	Qty			Power Input (W)		
2Rows CBP CBPD	08	110	1500	1200	970	-	60	5.22	3.90	9.87	15.00	6.72	2	220V/ 1P/ 50-60Hz	1	303	38
		80	-	1500	1150	960	60	5.22	3.90	9.87	15.00	6.72	2		1	287	38
	14	130	2400	2000	1700	-	62	8.32	6.15	15.35	24.00	12.38	2		1	502	50
		100	-	2400	1900	1700	62	8.32	6.15	15.35	24.00	12.38	2		1	485	50
	18	165	3300	2900	2200	-	64	12.04	8.67	21.10	34.20	29.00	3		2	781	65
		125	-	3300	2600	2200	64	12.04	8.67	21.10	34.20	29.00	3		2	738	65
3Rows CBP CBPD	08	100	1500	1200	970	-	60	7.76	5.30	13.19	22.20	18.71	2		1	303	40
		70	-	1500	1200	960	60	7.76	5.30	13.19	22.20	18.71	2		1	287	40
	14	115	2400	2000	1700	-	62	10.81	7.76	19.87	31.20	9.86	2		1	502	52
		85	-	2400	1900	1700	62	10.81	7.76	19.87	31.20	9.86	2		1	485	52
	18	150	3300	2900	2200	-	64	16.03	11.13	27.45	46.20	24.16	3		2	781	69
		110	-	3300	2600	2200	64	16.03	11.13	27.45	46.20	24.16	3		2	738	69
4Rows CBP CBPD	08	90	1500	1200	970	-	60	9.43	6.24	15.32	27.00	34.47	2	1	303	43	
		60	-	1500	1150	960	60	9.43	6.24	15.32	27.00	34.47	2	1	287	43	
	14	100	2400	2000	1700	-	62	12.66	8.91	22.94	36.60	8.02	2	1	502	55	
		70	-	2400	1900	1700	62	12.66	8.91	22.94	36.60	8.02	2	1	485	55	
	18	135	3300	2900	2200	-	64	17.90	12.39	31.59	51.60	18.16	3	2	781	73	
		95	-	3300	2600	2200	64	17.90	12.39	31.59	51.60	18.16	3	2	738	73	

- Notes: 1) Air volume is based on unit nominal external static pressure.
 2) Cooling capacity is based on water inlet/outlet temperature of 7°C/ 12°C and entering air temperature 27°C DB/ 19.5°C WB
 3) Heating capacity is based on water entering temperature of 60°C and air entering temperature of 21°C.
 4) Total cooling load, sensible heating cooling load and total heating load under different air volume can be obtained according to correction factor chart.
 5) Noise level data is based on nominal air pressure testing condition.
 6) Customer can opt for 2 rows hot water coil install at unit air outlet.

PERFORMANCE DATA

CR-CB/ HB/ HBS/ HBZ/ FB

Cooling Capacity (kW) – 2 Rows

Model	Entering Water Temperature - °C	Entering / Leaving Water Temperature Difference - °C	Entering Air Temperature																				
			DB24°C				DB25°C				DB26°C				DB27°C				DB28°C				
			WB17°C				WB18°C				WB19°C				WB19.5°C				WB21°C				
			Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	
kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa				
02	4	4	1.3	1.9	6.8	8.7	1.4	2.2	7.9	11.4	1.4	2.4	8.7	13.5	1.5	2.6	9.1	14.6	1.6	3.0	10.8	19.9	
		5	1.2	1.7	4.9	5.0	1.3	2.0	5.6	6.3	1.4	2.2	6.4	7.9	1.4	2.4	6.8	8.9	1.5	2.8	8.0	11.8	
		6	1.0	1.3	3.1	0.6	1.2	1.8	4.2	3.9	1.3	2.0	4.8	4.9	1.3	2.2	5.2	5.6	1.4	2.6	6.2	7.4	
		7	1.0	1.3	2.7	1.8	1.1	1.6	3.2	2.4	1.2	1.8	3.8	3.2	1.3	1.9	4.0	3.5	1.3	2.4	4.8	4.9	
	5	8	1.0	1.1	1.9	1.0	1.0	1.3	2.4	1.5	1.1	1.6	2.8	1.9	1.2	1.7	3.0	2.2	1.2	2.1	3.8	3.2	
		4	1.2	1.7	6.2	7.5	1.3	2.0	7.1	9.5	1.4	2.2	8.1	11.9	1.4	2.4	8.5	12.9	1.5	2.8	10.0	17.2	
		5	1.1	1.5	4.4	4.1	1.2	1.8	5.0	5.2	1.3	2.0	5.9	6.9	1.3	2.2	6.2	7.5	1.4	2.6	7.4	10.1	
		6	1.0	1.3	3.2	2.3	1.1	1.6	3.8	3.2	1.2	1.8	4.4	4.1	1.3	2.0	4.7	4.7	1.3	2.4	5.6	6.3	
	6	7	1.0	1.1	2.2	1.3	1.0	1.4	2.8	1.9	1.1	1.6	3.3	2.5	1.2	1.7	3.5	2.9	1.2	2.1	4.4	4.1	
		8	0.9	0.9	1.6	0.7	1.0	1.1	2.0	1.1	1.0	1.4	2.5	1.5	1.1	1.5	2.7	1.8	1.2	1.9	3.4	2.7	
		4	1.1	1.5	5.5	6.0	1.2	1.8	6.4	7.8	1.3	2.0	7.3	9.9	1.4	2.2	7.9	11.3	1.4	2.6	9.2	14.7	
		5	1.1	1.3	3.8	3.2	1.1	1.6	4.6	4.4	1.2	1.8	5.3	5.7	1.3	2.0	5.6	6.2	1.3	2.4	6.9	8.9	
	7	6	1.0	1.1	2.6	1.7	1.0	1.4	3.2	2.4	1.1	1.6	3.9	3.3	1.2	1.8	4.2	3.8	1.3	2.2	5.2	5.5	
		7	0.9	0.9	1.8	0.9	1.0	1.1	2.4	1.4	1.0	1.4	2.9	2.0	1.1	1.5	3.1	2.3	1.2	1.9	4.0	3.4	
		8	1.0	1.0	1.7	0.9	0.9	0.9	1.7	0.8	1.0	1.2	2.1	1.2	1.0	1.3	2.4	1.4	1.1	1.7	3.0	2.1	
		4	1.1	1.3	4.8	4.7	1.1	1.6	5.7	6.3	1.2	1.8	6.6	8.1	1.3	2.0	7.1	9.3	1.3	2.4	8.6	12.9	
	8	5	1.0	1.1	3.2	2.4	1.0	1.4	3.9	3.3	1.1	1.6	4.7	4.6	1.2	1.8	5.0	5.1	1.3	2.2	6.3	7.5	
		6	0.9	0.9	2.2	1.2	1.0	1.2	2.8	1.9	1.0	1.4	3.4	2.6	1.1	1.6	3.7	3.1	1.2	2.0	4.7	4.6	
		7	1.0	1.0	2.0	1.1	0.9	0.9	1.9	1.0	1.0	1.2	2.4	1.5	1.0	1.3	2.7	1.7	1.1	1.7	3.5	2.8	
		8	0.9	0.9	1.6	0.7	0.9	0.9	1.7	0.8	0.9	0.9	1.7	0.8	0.9	1.1	2.0	1.0	1.0	1.5	2.7	1.7	
	9	4	1.0	1.1	4.0	3.4	1.0	1.4	4.9	4.9	1.1	1.6	6.0	6.8	1.2	1.8	6.3	7.6	1.3	2.2	7.9	11.2	
		5	0.9	0.9	2.6	1.6	1.0	1.2	3.4	2.6	1.0	1.4	4.0	3.4	1.1	1.6	4.5	4.2	1.2	2.0	5.6	6.1	
		6	1.0	1.0	2.3	1.4	0.9	0.9	2.2	1.2	1.0	1.2	2.9	1.9	1.0	1.3	3.2	2.3	1.1	1.8	4.2	3.7	
		7	0.9	0.9	1.8	0.9	1.0	1.0	1.9	1.0	0.9	1.0	2.0	1.0	0.9	1.1	2.2	1.2	1.0	1.5	3.1	2.2	
	03	4	8	0.8	0.8	1.4	0.6	0.9	0.9	1.6	0.7	0.8	0.8	1.6	0.7	1.0	1.0	1.6	0.7	0.9	1.3	2.3	1.3
			4	0.9	0.9	3.2	2.4	1.0	1.2	4.2	3.7	1.0	1.4	5.1	5.1	1.1	1.6	5.6	6.0	1.2	2.0	7.1	9.2
			5	1.0	1.0	2.7	1.8	0.9	0.9	2.7	1.7	1.0	1.2	3.5	2.6	1.0	1.3	3.8	3.1	1.1	1.7	5.0	4.9
			6	0.9	0.9	2.1	1.1	1.0	1.0	2.3	1.3	0.9	1.0	2.3	1.4	1.0	1.1	2.6	1.6	1.0	1.5	3.7	2.9
	03	4	7	0.8	0.8	1.6	0.7	0.9	0.9	1.8	0.9	0.8	0.8	1.8	0.9	0.9	1.8	0.9	0.9	1.3	2.6	1.6	
			8	0.7	0.7	1.3	0.5	0.8	0.8	1.4	0.6	0.9	0.9	1.6	0.7	1.0	1.0	1.8	0.9	0.9	1.0	1.8	0.9
			4	1.8	2.7	9.6	18.3	1.9	3.1	10.9	22.9	2.0	3.4	12.3	28.4	2.1	3.6	12.9	30.7	2.2	4.2	15.0	40.4
			5	1.7	2.4	6.9	10.4	1.8	2.8	7.9	13.2	1.9	3.2	9.0	16.5	2.0	3.4	9.7	18.7	2.1	4.0	11.4	24.8
5		6	1.6	2.2	5.2	6.3	1.7	2.5	6.0	8.1	1.8	2.9	6.8	10.2	1.9	3.1	7.4	11.6	2.0	3.6	8.7	15.5	
		7	1.5	1.9	3.8	3.8	1.6	2.2	4.6	5.2	1.7	2.6	5.3	6.5	1.8	2.8	5.7	7.5	1.8	3.3	6.8	10.2	
		8	1.4	1.6	2.8	2.3	1.5	1.9	3.5	3.2	1.6	2.3	4.2	4.3	1.6	2.4	4.4	4.7	1.7	3.0	5.4	6.8	
		4	1.7	2.4	8.8	15.7	1.8	2.8	10.1	19.9	1.9	3.2	11.5	25.0	2.0	3.4	12.0	27.2	2.1	4.0	14.2	36.4	
6		5	1.6	2.2	6.2	8.4	1.7	2.5	7.1	10.8	1.8	2.9	8.4	14.4	1.9	3.1	8.8	15.7	2.0	3.7	10.5	21.2	
		6	1.5	1.9	4.6	5.0	1.6	2.2	5.3	6.5	1.7	2.6	6.1	8.4	1.8	2.8	6.7	9.6	1.9	3.4	8.1	13.5	
		7	1.4	1.6	3.2	2.8	1.5	1.9	4.0	4.0	1.6	2.3	4.7	5.3	1.7	2.5	5.1	6.2	1.7	3.0	6.2	8.5	
		8	1.2	1.3	2.3	1.6	1.3	1.6	2.9	2.3	1.4	2.0	3.6	3.4	1.5	2.2	3.9	3.8	1.6	2.7	4.9	5.6	
7		4	1.6	2.2	7.8	12.5	1.7	2.5	9.0	16.3	1.8	2.9	10.4	20.8	1.9	3.1	11.2	23.8	2.0	3.7	13.0	31.0	
		5	1.5	1.9	5.4	6.6	1.6	2.3	6.5	9.2	1.7	2.6	7.5	11.8	1.8	2.8	7.9	13.0	1.9	3.4	9.8	18.7	
		6	1.4	1.6	3.8	3.7	1.5	2.0	4.7	5.2	1.6	2.3	5.6	7.1	1.7	2.5	5.9	7.9	1.8	3.1	7.4	11.5	
		7	1.2	1.3	2.6	2.0	1.4	1.7	3.4	3.0	1.5	2.0	4.1	4.2	1.6	2.2	4.5	5.0	1.7	2.8	5.7	7.4	
8		8	1.4	1.4	2.5	1.7	1.2	1.3	2.4	1.7	1.3	1.7	3.1	2.5	1.4	1.9	3.4	3.0	1.5	2.4	4.4	4.6	
		4	1.5	1.9	6.8	9.8	1.6	2.2	8.0	13.0	1.7	2.6	9.3	17.0	1.8	2.8	10.1	19.6	1.9	3.4	12.2	27.3	
		5	1.4	1.6	4.6	5.1	1.5	2.0	5.7	7.2	1.6	2.3	6.7	9.5	1.7	2.5	7.3	11.1	1.8	3.1	8.8	15.6	
		6	1.2	1.3	3.1	2.6	1.4	1.7	4.0	4.0	1.5	2.0	4.8	5.4	1.6	2.2	5.2	6.3	1.7	2.8	6.7	9.5	
9		7	1.4	1.4	2.8	2.2	1.2	1.4	2.8	2.1	1.3	1.7	3.5	3.1	1.4	1.9	3.8	3.7	1.5	2.5	5.1	6.0	
		8	1.3	1.3	2.3	1.5	1.2	1.2	2.3	1.6	1.2	1.4	2.5	1.8	1.3	1.6	2.8	2.2	1.4	2.1	3.8	3.7	
		4	1.4	1.6	5.8	7.4	1.5	2.0	7.0	10.2	1.6	2.3	8.4	14.2	1.7	2.5	9.0	15.9	1.8	3.1	11.0	22.6	
		5	1.3	1.3	3.8	3.5	1.4	1.7	4.7	5.2	1.5	2.0	5.8	7.5	1.6	2.2	6.4	8.8	1.6	2.8	7.9	12.8	
03		8	6	1.4	1.4	3.3	2.8	1.2	1.4	3.3	2.8	1.3	1.7	4.1	4.1	1.5	1.9	4.6	4.9	1.5	2.5	5.9	7.7
			7	1.3	1.3	2.6	1.9	1.2	1.2	2.7	2.0	1.2	1.4	2.8	2.2	1.3	1.6	3.3	2.8	1.4	2.2	4.5	4.8
			8	1.2	1.2	2.1	1.3	1.3	1.3	2.3	1.5	1.2	1.2	2.2	1.4	1.2	1.3	2.3	1.5	1.3	1.8	3.3	2.8
			4	1.3	1.3	4.8	5.4	1.4	1.7	5.9	7.7	1.5	2.0	7.1	10.6	1.6	2.2	7.9	12.5	1.6	2.8	9.8	18.5
9		5	1.4	1.4	3.9	3.7	1.2	1.4	4.0	3.8	1.3	1.7	5.0	5.7	1.4	1.9	5.4	6.5	1.5	2.5	7.0	10.3	
		6	1.2	1.2	3.0	2.3	1.4	1.4	3.2	2.6	1.2	1.4	3.4	2.9	1.3	1.6	3.8	3.5	1.4	2.2	5.2	6.0	
		7	1.1	1.1	2.3	1.5																	

PERFORMANCE DATA

CR-CB/ HB/ HBS/ HBZ/ FB

Cooling Capacity (kW) – 2 Rows

Model	Entering Water Temperature -°C	Entering / Leaving Water Temperature Difference -°C	Entering Air Temperature																							
			DB24°C				DB25°C				DB26°C				DB27°C				DB28°C							
			WB17°C				WB18°C				WB19°C				WB19.5°C				WB21°C							
			Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop				
	kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa						
04	4	4	2.3	3.5	12.3	32.7	2.4	3.9	14.0	41.0	2.5	4.4	15.8	50.8	2.7	4.6	16.5	55.0	2.8	5.4	19.3	72.5				
		5	2.1	3.1	8.9	18.6	2.3	3.6	10.2	23.5	2.4	4.1	11.6	29.4	2.5	4.3	12.4	33.4	2.6	5.1	14.6	44.3				
		6	2.0	2.8	6.7	11.3	2.2	3.3	7.9	15.1	2.3	3.7	9.0	19.0	2.4	4.0	9.5	20.7	2.5	4.7	11.2	27.7				
		7	1.9	2.5	5.1	7.1	2.0	2.9	6.0	9.4	2.1	3.4	7.0	12.2	2.3	3.6	7.4	13.4	2.4	4.3	8.9	18.5				
	5	4	2.1	3.1	11.3	28.0	2.3	3.6	12.6	34.0	2.4	4.1	14.7	44.7	2.5	4.3	15.5	48.7	2.6	5.0	17.8	62.4				
		5	2.0	2.8	8.1	15.7	2.1	3.3	9.4	20.3	2.3	3.7	10.8	25.7	2.4	4.0	11.3	28.0	2.5	4.7	13.4	37.9				
		6	1.9	2.5	5.9	8.9	2.0	2.9	7.0	12.2	2.1	3.4	8.1	15.7	2.3	3.6	8.5	17.2	2.4	4.4	10.5	24.6				
		7	1.8	2.1	4.4	5.5	1.9	2.6	5.2	7.3	2.0	3.0	6.2	10.0	2.1	3.3	6.7	11.2	2.2	4.0	8.2	15.9				
	6	4	2.0	2.8	10.0	22.4	2.1	3.2	11.6	29.1	2.3	3.7	13.3	37.2	2.4	3.9	14.0	40.7	2.5	4.7	16.7	55.5				
		5	1.9	2.5	7.1	12.4	2.0	2.9	8.3	16.3	2.1	3.4	9.6	21.1	2.3	3.6	10.5	24.3	2.4	4.4	12.6	33.4				
		6	1.7	2.1	5.1	6.9	1.9	2.6	6.2	9.7	2.0	3.0	7.2	12.7	2.1	3.3	7.9	14.7	2.2	4.0	9.5	20.6				
		7	1.6	1.8	3.6	3.9	1.7	2.2	4.5	5.6	1.9	2.7	5.5	7.9	2.0	2.9	6.0	9.3	2.1	3.6	7.4	13.1				
	7	4	1.7	1.7	2.9	2.7	1.6	1.8	3.3	3.3	1.7	2.3	4.1	4.8	1.9	2.5	4.5	5.6	2.0	3.2	5.8	8.6				
		5	1.9	2.4	8.7	17.5	2.0	2.9	10.5	24.4	2.1	3.3	11.9	30.3	2.3	3.6	12.9	35.1	2.4	4.3	15.6	48.8				
		6	1.7	2.1	6.1	9.5	1.9	2.5	7.3	12.8	2.0	3.0	8.5	16.9	2.1	3.2	9.3	19.7	2.2	4.0	11.4	27.9				
		7	1.6	1.7	4.1	4.8	1.7	2.2	5.2	7.1	1.9	2.7	6.3	10.0	2.0	2.9	6.9	11.8	2.1	3.6	8.5	16.9				
	8	4	1.6	1.7	3.0	2.8	1.7	1.7	2.8	2.5	1.6	1.9	3.4	3.4	1.7	2.2	3.9	4.3	1.8	2.8	5.1	6.9				
		5	1.7	2.1	7.4	13.2	1.9	2.5	8.9	18.2	2.0	3.0	10.8	25.4	2.1	3.2	11.5	28.4	2.2	4.0	14.1	40.5				
		6	1.6	1.7	5.0	6.6	1.7	2.2	6.3	9.8	1.9	2.7	7.7	14.0	2.0	2.9	8.2	15.7	2.1	3.6	10.5	23.9				
		7	1.5	1.5	4.0	4.6	1.6	1.8	4.4	5.3	1.7	2.3	5.5	7.7	1.9	2.5	6.0	9.2	2.0	3.2	7.8	14.3				
	9	4	1.6	1.6	3.4	3.4	1.7	1.7	3.2	3.1	1.6	1.9	3.9	4.3	1.7	2.1	4.4	5.3	1.8	2.9	5.9	8.9				
		5	1.5	1.5	2.7	2.3	1.7	1.7	3.0	2.7	1.4	1.5	2.7	2.3	1.6	1.7	3.0	2.8	1.7	2.5	4.4	5.3				
		6	1.6	1.7	6.2	9.5	1.7	2.2	7.8	14.4	1.8	2.6	9.4	19.8	2.0	2.9	10.4	23.5	2.1	3.6	12.6	33.1				
		7	1.5	1.7	5.0	6.5	1.6	1.8	5.1	6.8	1.7	2.2	6.4	10.1	1.8	2.5	7.1	12.1	2.0	3.2	9.3	19.2				
	05	4	4	2.9	4.4	15.7	57.2	3.0	4.9	17.5	68.6	3.2	5.5	19.7	85.2	3.3	5.8	21.1	96.4	3.4	6.7	24.1	121.8			
			5	2.7	4.0	11.4	32.5	2.9	4.6	13.1	41.2	3.0	5.1	14.8	51.4	3.2	5.4	15.5	55.8	3.3	6.4	18.3	74.3			
			6	2.5	3.6	8.5	19.6	2.7	4.1	9.8	25.1	2.8	4.7	11.2	31.7	3.0	5.0	12.1	36.2	3.1	6.0	14.3	48.5			
			7	2.4	3.2	6.5	12.3	2.5	3.8	7.7	16.3	2.7	4.3	9.0	21.3	2.8	4.6	9.4	23.3	3.0	5.5	11.2	31.6			
		5	4	2.2	2.8	5.0	7.8	2.4	3.3	6.0	10.6	2.5	3.9	7.0	14.0	2.7	4.2	7.5	15.8	2.8	5.1	9.2	22.2			
			5	2.7	4.0	14.1	46.7	2.8	4.5	16.2	59.6	3.0	5.1	18.4	75.0	3.1	5.4	19.3	81.6	3.3	6.3	22.8	109.5			
			6	2.4	3.2	7.5	15.5	2.5	3.7	9.0	21.4	2.7	4.3	10.4	27.4	2.8	4.6	10.9	30.0	3.0	5.5	13.1	41.1			
			7	2.2	2.8	5.7	9.5	2.4	3.3	6.8	13.0	2.5	3.9	8.0	17.3	2.7	4.2	8.6	19.6	2.8	5.1	10.5	27.8			
		6	4	2.0	2.3	4.1	5.6	2.2	2.9	5.1	8.0	2.4	3.5	6.2	11.2	2.5	3.7	6.7	12.7	2.6	4.6	8.3	18.4			
			5	2.5	3.5	12.5	37.3	2.7	4.1	14.9	51.0	2.8	4.7	16.6	62.2	3.0	4.9	17.5	68.2	3.1	5.9	20.9	93.2			
			6	2.4	3.2	9.1	21.6	2.5	3.7	10.7	28.5	2.7	4.3	12.4	36.8	2.8	4.6	13.0	40.5	3.0	5.5	15.7	56.0			
			7	2.2	2.7	6.5	11.9	2.4	3.3	7.9	16.9	2.5	3.9	9.2	22.1	2.7	4.1	9.8	24.5	2.8	5.1	12.2	35.9			
		7	4	2.0	2.3	4.6	6.8	2.2	2.8	5.8	9.8	2.3	3.4	7.0	13.8	2.5	3.7	7.7	16.1	2.6	4.6	9.4	22.9			
			5	2.3	3.1	11.2	30.5	2.5	3.7	13.1	40.7	2.6	4.2	15.3	53.1	2.8	4.5	16.2	58.7	2.9	5.4	19.5	82.0			
			6	2.2	2.7	7.8	16.5	2.3	3.3	9.3	22.4	2.5	3.8	11.0	29.6	2.6	4.1	11.6	32.9	2.8	5.0	14.6	48.8			
			7	2.0	2.3	5.5	8.9	2.2	2.8	6.8	13.0	2.3	3.4	8.1	17.5	2.5	3.7	8.9	20.5	2.6	4.6	10.9	29.6			
		8	4	2.2	2.2	4.1	5.3	2.0	2.4	4.9	7.3	2.2	3.0	6.1	10.7	2.3	3.3	6.7	12.7	2.5	4.2	8.5	19.1			
			5	2.1	2.1	3.7	4.6	1.8	1.9	3.4	3.9	2.0	2.5	4.5	6.2	2.2	2.8	5.0	7.5	2.3	3.7	6.7	12.6			
			6	2.2	2.7	9.5	23.0	2.3	3.2	11.4	31.7	2.5	3.8	13.5	42.4	2.6	4.1	14.8	49.7	2.8	5.0	17.6	67.9			
			7	1.9	1.9	3.4	3.9	2.1	2.1	3.8	4.7	1.8	2.0	3.6	4.2	2.0	2.3	4.0	5.2	2.2	3.2	5.7	9.5			
		9	4	2.0	2.2	7.9	16.6	2.1	2.7	9.8	23.9	2.3	3.3	11.8	33.0	2.5	3.6	13.0	39.2	2.6	4.5	16.2	58.0			
			5	1.9	1.9	6.0	10.2	2.0	2.3	6.5	11.8	2.1	2.9	8.2	17.6	2.3	3.2	9.1	21.2	2.4	4.1	11.6	32.1			
			6	2.0	2.0	4.9	7.2	1.8	1.9	4.6	6.4	2.0	2.4	5.9	9.9	2.1	2.7	6.4	11.4	2.3	3.6	8.8	19.8			
			7	1.9	1.9	3.9	4.9	2.1	2.1	4.3	5.7	1.8	1.9	4.0	5.1	2.0	2.3	4.7	6.7	2.2	3.2	6.6	12.0			
8		1.7	1.7	3.1	3.3	1.9	1.9	3.4	3.9	2.1	2.1	3.7	4.4	2.2	2.2	3.6	4.2	2.0	2.7	4.8	7.0					

PERFORMANCE DATA

CR-CB/ HB/ HBS/ HBZ/ FB

Cooling Capacity (kW) – 2 Rows

Model	Entering Water Temperature - °C	Entering / Leaving Water Temperature Difference - °C	Entering Air Temperature																				
			DB24°C				DB25°C				DB26°C				DB27°C				DB28°C				
			WB17°C				WB18°C				WB19°C				WB19.5°C				WB21°C				
			Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	
kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa				
06	4	4	3.2	4.9	17.6	25.8	3.4	5.5	19.6	30.9	3.6	6.2	22.1	38.4	3.8	6.5	23.1	41.5	3.9	7.6	27.1	54.8	
		5	3.0	4.3	12.4	13.9	3.2	5.0	14.2	17.6	3.4	5.7	16.2	22.1	3.6	6.0	17.4	25.2	3.7	7.1	20.5	33.5	
		6	2.8	3.9	9.2	8.4	3.0	4.5	10.7	10.7	3.2	5.1	12.2	13.6	3.4	5.5	13.2	15.5	3.5	6.5	15.6	20.9	
		7	2.6	3.3	6.7	4.9	2.8	4.0	8.1	6.8	3.0	4.6	9.4	8.6	3.2	5.0	10.2	10.0	3.3	5.9	12.2	13.5	
	5	8	2.4	2.8	4.9	2.9	2.6	3.4	6.1	4.1	2.8	4.1	7.3	5.6	2.9	4.3	7.7	6.2	3.1	5.4	9.6	9.0	
		4	3.0	4.4	15.8	21.0	3.2	5.0	18.1	26.8	3.4	5.7	20.1	32.2	3.6	6.0	21.7	36.7	3.7	7.1	25.6	49.3	
		5	2.8	3.8	10.9	11.2	3.0	4.5	13.1	15.2	3.2	5.1	14.6	18.3	3.4	5.5	15.8	21.0	3.5	6.6	18.8	28.5	
		6	2.6	3.4	8.1	6.6	2.8	4.0	9.4	8.6	3.0	4.6	10.9	11.1	3.2	5.0	11.9	12.8	3.3	6.0	14.2	17.6	
	6	7	2.4	2.8	5.8	3.8	2.6	3.5	7.1	5.4	2.8	4.1	8.3	7.0	3.0	4.4	9.1	8.1	3.1	5.4	11.0	11.3	
		8	2.2	2.3	4.1	2.1	2.4	2.9	5.3	3.2	2.6	3.6	6.4	4.5	2.8	3.9	6.9	5.1	2.9	4.8	8.6	7.4	
		4	2.8	3.9	13.9	16.8	3.0	4.5	16.2	21.9	3.2	5.2	18.6	28.0	3.4	5.5	19.6	30.6	3.5	6.6	23.4	41.9	
		5	2.6	3.3	9.5	8.7	2.8	4.0	11.6	12.2	3.0	4.7	13.4	15.8	3.2	5.0	14.2	17.3	3.3	6.1	17.6	25.2	
	7	6	2.4	2.8	6.7	4.8	2.6	3.5	8.3	6.8	2.8	4.1	9.8	9.2	3.0	4.4	10.6	10.4	3.1	5.5	13.2	15.4	
		7	2.2	2.3	4.7	2.6	2.4	2.9	5.9	3.9	2.6	3.6	7.3	5.5	2.8	3.9	8.0	6.5	2.9	5.0	10.2	9.8	
		8	2.5	2.5	4.5	2.4	2.2	2.4	4.3	2.2	2.4	3.0	5.4	3.3	2.6	3.3	5.9	3.9	2.7	4.3	7.7	6.0	
		4	2.6	3.4	12.1	13.0	2.8	4.0	14.3	17.4	3.0	4.7	16.6	22.8	3.2	5.0	18.1	26.4	3.3	6.1	21.9	36.9	
	8	5	2.4	2.8	8.2	6.6	2.6	3.5	10.1	9.5	2.8	4.1	11.9	12.7	3.0	4.5	13.0	14.8	3.1	5.5	15.9	20.9	
		6	2.2	2.3	5.4	3.3	2.4	3.0	7.1	5.2	2.6	3.6	8.5	7.0	2.8	3.9	9.3	8.3	2.9	5.0	11.9	12.6	
		7	2.5	2.5	5.1	3.0	2.2	2.4	4.8	2.7	2.4	3.0	6.2	4.1	2.6	3.4	6.9	4.9	2.7	4.4	9.1	7.9	
		8	2.3	2.3	4.1	2.0	2.5	2.5	4.4	2.3	2.2	2.4	4.4	2.3	2.4	2.7	4.9	2.8	2.5	3.8	6.8	4.9	
	9	4	2.4	2.9	10.3	9.8	2.6	3.5	12.4	13.5	2.8	4.1	14.7	18.1	3.0	4.5	16.1	21.3	3.1	5.5	19.7	30.5	
		5	2.2	2.3	6.6	4.6	2.4	2.9	8.4	6.9	2.6	3.6	10.4	9.9	2.8	4.0	11.4	11.7	2.9	5.0	14.2	17.1	
		6	2.5	2.5	5.8	3.7	2.2	2.4	5.8	3.6	2.4	3.0	7.3	5.4	2.6	3.4	8.1	6.4	2.7	4.4	10.5	10.2	
		7	2.3	2.3	4.7	2.6	2.5	2.5	5.1	2.9	2.2	2.5	5.1	3.0	2.4	2.8	5.8	3.6	2.6	3.9	7.9	6.2	
	07	4	8	2.1	2.1	3.7	1.7	2.3	2.3	4.1	2.0	2.5	2.5	4.2	2.1	2.2	2.3	4.1	2.1	2.4	3.2	5.8	3.7
			4	2.2	2.3	8.3	6.7	2.4	3.0	10.6	10.2	2.6	3.6	13.1	14.8	2.8	3.9	14.1	16.8	2.9	5.0	18.1	26.1
			5	2.4	2.4	6.9	4.9	2.2	2.4	6.7	4.7	2.4	3.1	8.9	7.5	2.6	3.4	9.9	9.0	2.7	4.4	12.5	13.7
			6	2.2	2.2	5.3	3.1	2.5	2.5	6.0	3.8	2.2	2.5	5.9	3.7	2.4	2.8	6.6	4.6	2.6	3.8	9.2	8.0
	5	7	2.0	2.0	4.2	2.1	2.3	2.3	4.6	2.5	2.1	2.2	4.8	2.6	2.6	4.7	2.5	2.4	3.2	6.6	4.5	4.5	
		8	1.8	1.8	3.3	1.4	2.1	2.1	3.8	1.7	2.3	2.3	4.2	2.1	2.5	2.5	4.5	2.4	2.2	2.6	4.7	2.6	
		4	3.9	6.0	21.7	41.8	4.1	6.7	24.0	50.1	4.3	7.6	27.2	62.3	4.6	8.0	28.4	67.4	4.7	9.3	33.3	89.2	
		5	3.7	5.4	15.2	22.5	3.9	6.1	17.4	28.6	4.1	7.0	19.9	35.8	4.3	7.4	21.4	40.8	4.5	8.7	25.2	54.4	
	6	6	3.4	4.8	11.3	13.5	3.7	5.6	13.3	17.8	3.9	6.4	15.2	22.5	4.1	6.8	16.2	25.1	4.3	8.0	19.2	33.8	
		7	3.2	4.2	8.6	8.4	3.4	5.0	10.2	11.2	3.6	5.8	11.9	14.7	3.9	6.1	12.5	16.1	4.0	7.4	15.0	21.9	
		8	3.0	3.5	6.3	5.0	3.2	4.3	7.7	7.0	3.4	5.1	9.2	9.3	3.6	5.5	9.8	10.5	3.8	6.7	12.0	14.9	
		4	3.7	5.4	19.4	34.1	3.9	6.2	22.3	43.6	4.1	6.9	24.7	52.3	4.3	7.4	26.6	59.7	4.5	8.7	31.5	80.2	
	7	5	3.5	4.8	13.9	19.0	3.7	5.6	16.1	24.6	3.9	6.4	18.4	31.3	4.1	6.8	19.4	34.1	4.3	8.1	23.1	46.3	
		6	3.2	4.2	9.9	10.6	3.4	5.0	12.0	14.7	3.6	5.8	13.8	19.0	3.8	6.1	14.6	20.8	4.1	7.5	18.0	30.0	
		7	3.0	3.6	7.4	6.5	3.2	4.3	8.8	8.6	3.4	5.2	10.6	11.9	3.6	5.5	11.4	13.5	3.8	6.8	14.0	19.2	
		8	2.7	2.9	5.2	3.5	3.0	3.7	6.7	5.4	3.2	4.5	8.0	7.4	3.4	4.9	8.7	8.5	3.6	6.1	11.0	12.7	
8	4	3.4	4.8	17.1	27.2	3.7	5.5	19.9	35.5	3.9	6.4	22.9	45.4	4.1	6.7	24.1	49.8	4.3	8.0	28.8	68.1		
	5	3.2	4.2	12.1	14.9	3.4	5.0	14.2	19.7	3.6	5.7	16.5	25.6	3.8	6.1	17.4	28.1	4.0	7.5	21.6	40.9		
	6	3.0	3.6	8.5	8.2	3.2	4.4	10.5	11.6	3.4	5.1	12.3	15.3	3.6	5.5	13.2	17.3	3.8	6.8	16.3	25.0		
	7	2.7	2.9	6.1	4.5	3.0	3.7	7.6	6.7	3.2	4.5	9.3	9.4	3.4	4.9	10.0	10.8	3.6	6.1	12.5	15.8		
9	8	3.1	3.1	5.3	3.7	2.7	3.1	5.5	3.8	2.9	3.8	6.8	5.6	3.2	4.2	7.6	6.7	3.3	5.5	9.8	10.3		
	4	3.2	4.2	14.9	21.1	3.4	4.9	17.6	28.3	3.6	5.7	20.5	36.9	3.9	6.2	22.3	42.9	4.0	7.4	26.2	57.1		
	5	3.0	3.5	10.0	10.7	3.2	4.3	12.4	15.4	3.4	5.1	14.6	20.5	3.6	5.5	16.0	23.9	3.8	6.8	19.5	33.9		
	6	2.7	2.9	6.9	5.7	2.9	3.7	8.7	8.4	3.2	4.5	10.7	12.0	3.4	4.9	11.8	14.2	3.6	6.1	14.6	20.5		
08	7	3.1	3.1	6.2	4.7	2.7	3.0	6.2	4.7	2.9	3.8	7.7	6.9	3.2	4.2	8.6	8.2	3.3	5.5	11.1	12.8		
	8	2.8	2.8	5.1	3.4	2.6	2.7	5.1	3.3	2.7	3.1	5.6	3.9	2.9	3.6	6.4	4.9	3.1	4.8	8.6	8.1		
	4	3.0	3.5	12.7	15.9	3.2	4.3	15.7	23.1	3.4	5.1	18.0	29.4	3.6	5.5	19.8	34.5	3.8	6.8	24.3	49.5		
	5	2.7	2.9	8.4	7.8	2.9	3.7	10.6	11.7	3.2	4.5	12.7	16.0	3.4	4.9	14.0	19.0	3.6	6.1	17.4	27.7		
09	6	3.0	3.0	7.2	6.0	2.7	3.1	7.3	6.2	2.9	3.8	9.2	9.2	3.2	4.3	10.3	11.0	3.4	5.5	13.1	16.9		
	7	2.8	2.8	5.8	4.1	3.0	3.0	5.9	4.2	2.7	3.2	6.5	5.1	2.9	3.6	7.3	6.2	3.1	4.8	9.7	10.1		
	8	2.6	2.6	4.6	2.8	2.9	2.9	5.1	3.4	2.5	2.6	4.8	3.0	2.7	2.8	5.0	3.3	2.9	4.1	7.4	6.3		
	4	2.7	2.9	10.5	11.4	2.9	3.6	13.0	16.5	3.2	4.5	16.1	24.0	3.4	4.8	17.3	27.2	3.6	6.1	22.3	42.3		
10	5	3.0	3.0	8.5	7.9	2.7	3.0	8.6	8.1	2.9	3.8	10.9	12.1	3.2	4.2	12.1	14.6	3.4	5.5	15.9	23.3		
	6	2.8	2.8	6.6	5.1	2.6	2.7	6.9	5.6	2.7	3.1	7.5	6.4	2.9	3.5	8.4	7.8	3.1	4.8	11.6	13.6		
	7	2.5	2.5	5.2	3.4	2.8	2.8	5.8	4.1	2.5	2.6	5.5	3.8	2.7	2.9	5.9	4.2	2.9	4.1	8.4	7.7		
	8	2.3	2.3	4.1	2.3	2.6	2.6	4.6	2.8	2.9	2.9	5.1	3.3	2.6	2.7	5.4	3.7	2.7	3.4	6.0	4.4		



Product that perform...By people who care

PERFORMANCE DATA

CR-CB/ HB/ HBS/ HBZ/ FB Cooling Capacity (kW) – 2 Rows

Model	Entering Water Temperature °C	Entering / Leaving Water Temperature Difference °C	Entering Air Temperature																							
			DB24°C				DB25°C				DB26°C				DB27°C				DB28°C							
			WB17°C				WB18°C				WB19°C				WB19.5°C				WB21°C							
			Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop
kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa			
08	4	4	4.3	6.5	23.2	25.4	4.6	7.4	26.5	31.8	4.8	8.3	29.9	39.5	5.0	8.7	31.3	42.7	5.2	10.2	36.6	56.3				
		5	4.1	5.9	16.8	14.4	4.3	6.7	19.2	18.3	4.5	7.6	21.9	22.8	4.8	8.0	22.9	24.8	5.0	9.5	27.0	32.9				
		6	3.8	5.2	12.5	8.7	4.0	6.1	14.5	11.2	4.3	6.9	16.5	14.1	4.5	7.4	17.9	16.1	4.7	8.8	21.2	21.6				
		7	3.5	4.5	9.2	5.2	3.8	5.4	11.1	7.1	4.0	6.2	12.8	9.0	4.3	6.7	13.8	10.4	4.4	8.0	16.5	14.0				
	5	8	3.2	3.8	6.8	3.1	3.5	4.6	8.3	4.3	3.7	5.5	10.0	5.9	3.9	5.9	10.5	6.5	4.2	7.3	13.1	9.4				
		4	4.1	5.9	21.3	21.7	4.3	6.7	23.9	26.4	4.5	7.6	27.2	33.2	4.8	8.1	29.3	37.8	5.0	9.5	33.7	48.4				
		5	3.8	5.2	14.9	11.6	4.0	6.0	17.2	15.0	4.3	6.9	19.8	19.0	4.5	7.4	21.4	21.8	4.7	8.8	25.4	29.4				
		6	3.5	4.6	11.0	6.9	3.8	5.4	12.8	9.0	4.0	6.2	14.8	11.6	4.3	6.7	16.1	13.3	4.5	8.1	19.3	18.2				
	6	7	3.3	3.9	7.9	4.0	3.5	4.7	9.6	5.5	3.7	5.5	11.3	7.3	4.0	6.0	12.4	8.5	4.2	7.3	15.0	11.7				
		8	3.0	3.1	5.5	2.2	3.2	4.0	7.2	3.4	3.5	4.8	8.6	4.6	3.7	5.3	9.5	5.4	3.9	6.6	11.7	7.7				
		4	3.8	5.2	18.8	17.4	4.0	6.1	21.9	22.6	4.3	6.9	24.5	27.5	4.5	7.4	26.6	4.7	8.8	31.7	43.1	50.7				
		5	3.5	4.5	13.0	9.1	3.8	5.4	15.7	12.7	4.0	6.3	18.2	16.3	4.3	6.7	19.2	4.5	8.1	23.1	24.8	31.6				
	7	6	3.3	3.8	9.1	5.0	3.5	4.7	11.2	7.1	3.7	5.5	13.1	9.3	4.0	6.0	14.4	4.2	7.5	17.9	16.0	21.1				
		7	3.0	3.2	6.5	2.8	3.2	4.0	8.1	4.1	3.5	4.9	9.9	5.8	3.7	5.3	10.9	4.0	6.7	13.8	10.2	14.4				
		8	3.4	3.4	6.0	2.5	3.0	3.3	5.9	2.4	3.2	4.1	7.3	3.4	3.5	4.5	8.1	3.6	5.8	10.4	6.3	10.2				
		4	3.5	4.6	16.4	13.5	3.8	5.4	19.3	18.0	4.0	6.3	22.5	23.5	4.2	6.7	23.8	26.0	4.5	8.2	29.6	37.9				
	8	5	3.3	3.9	11.1	6.9	3.5	4.7	13.3	9.4	3.8	5.6	16.1	13.1	4.0	6.0	17.1	14.6	4.2	7.4	21.5	21.6				
		6	3.0	3.1	7.4	3.5	3.3	4.0	9.7	5.5	3.5	4.8	11.5	7.3	3.7	5.3	12.7	8.7	4.0	6.7	16.1	13.1				
		7	3.3	3.3	6.8	3.0	3.0	3.2	6.6	2.9	3.2	4.1	8.4	4.3	3.5	4.5	9.2	5.0	3.7	6.0	12.3	8.2				
		8	3.1	3.1	5.5	2.1	2.9	3.0	5.7	2.3	2.9	3.3	6.0	2.4	3.2	3.8	6.7	2.9	3.4	5.1	9.2	5.0				
	9	4	3.3	3.8	13.6	9.7	3.5	4.7	16.8	14.1	3.7	5.6	19.9	18.8	4.0	6.0	21.8	22.0	4.2	7.4	26.7	31.4				
		5	3.0	3.1	9.0	4.8	3.2	4.0	11.4	7.2	3.5	4.9	14.0	10.3	3.7	5.3	15.5	12.2	3.9	6.7	19.2	17.7				
		6	3.3	3.3	7.9	3.9	3.0	3.3	7.9	3.8	3.2	4.1	9.9	5.6	3.5	4.6	11.0	6.7	3.7	6.0	14.3	10.6				
		7	3.1	3.1	6.3	2.6	2.9	3.0	6.6	2.9	3.0	3.4	7.0	3.1	3.2	3.8	7.9	3.8	3.4	5.2	10.8	6.5				
	10	8	2.8	2.8	5.0	1.8	3.1	3.1	5.6	2.1	3.3	3.3	5.5	2.1	2.9	3.0	5.4	2.0	3.2	4.4	7.9	3.9				
		4	3.0	3.1	11.3	7.0	3.2	4.0	14.3	10.6	3.5	4.8	17.3	14.6	3.7	5.3	19.1	17.3	3.9	6.7	23.8	25.6				
		5	3.3	3.3	9.4	5.1	3.0	3.3	9.5	5.2	3.2	4.2	12.0	7.8	3.5	4.6	13.0	8.9	3.7	6.0	17.0	14.2				
		6	3.0	3.0	7.2	3.3	3.3	3.3	7.9	3.8	3.0	3.4	8.0	3.9	3.2	3.8	9.0	4.8	3.4	5.2	12.5	8.3				
	10	4	7	2.8	2.8	5.7	2.2	3.1	3.1	6.3	2.6	3.3	6.3	2.6	3.0	3.1	6.3	2.6	3.2	4.4	9.0	4.7				
			8	2.2	2.2	3.9	0.3	2.8	2.8	5.0	1.8	3.1	3.1	5.6	2.1	3.4	3.4	6.1	2.4	2.9	3.6	6.5	2.7			
			4	5.1	7.7	27.4	35.3	5.3	8.7	31.3	44.4	5.6	9.8	35.5	55.3	5.9	10.3	37.1	59.8	6.1	12.0	43.4	79.1			
			5	4.7	6.9	19.8	19.9	5.0	7.9	22.7	25.3	5.3	9.0	25.8	31.7	5.6	9.5	27.1	34.4	5.8	11.2	31.9	45.9			
		5	6	4.4	6.1	14.7	11.9	4.7	7.1	17.0	15.3	5.0	8.1	19.5	19.4	5.3	8.7	20.7	21.7	5.5	10.2	24.3	28.4			
			7	4.1	5.3	10.7	6.9	4.4	6.3	13.0	9.6	4.7	7.3	15.0	12.3	5.0	7.8	16.0	13.8	5.2	9.5	19.4	19.4			
			8	3.8	4.5	8.0	4.2	4.1	5.4	9.6	5.8	4.4	6.5	11.6	8.0	4.6	6.9	12.3	8.7	4.8	8.5	15.3	12.8			
			4	4.7	6.9	24.5	28.6	5.0	7.9	28.2	36.7	5.3	9.0	32.2	46.3	5.6	9.5	33.8	50.4	5.8	11.2	40.0	67.8			
		6	5	4.4	6.1	17.5	15.9	4.7	7.1	20.3	20.6	5.0	8.1	23.3	26.3	5.3	8.7	25.2	30.2	5.5	10.4	30.0	41.0			
			6	4.1	5.3	12.8	9.4	4.4	6.3	15.0	12.3	4.7	7.3	17.4	15.9	5.0	7.9	19.0	18.4	5.2	9.5	22.7	25.2			
			7	3.8	4.5	9.2	5.3	4.1	5.5	11.4	7.6	4.4	6.5	13.3	9.9	4.7	7.1	14.5	11.6	4.9	8.6	17.6	16.1			
			8	3.5	3.6	6.5	2.9	3.8	4.6	8.3	4.5	4.1	5.7	10.2	6.3	4.3	6.2	11.0	7.2	4.5	7.7	13.7	10.5			
7		4	4.4	6.1	21.6	22.8	4.7	7.2	25.9	31.4	5.0	8.1	29.0	38.3	5.3	8.7	31.4	44.1	5.5	10.4	37.6	60.3				
		5	4.1	5.3	15.2	12.4	4.4	6.3	17.9	16.5	4.7	7.3	20.8	21.4	5.0	7.9	22.7	24.9	5.2	9.5	27.3	34.5				
		6	3.8	4.5	10.6	6.7	4.1	5.5	13.1	9.7	4.4	6.5	15.4	12.7	4.7	7.1	16.9	14.9	4.9	8.7	20.5	20.9				
		7	3.5	3.7	7.5	3.7	3.8	4.6	9.4	5.5	4.1	5.7	11.6	7.8	4.4	6.2	12.8	9.2	4.6	7.8	16.0	13.6				
8		8	4.0	4.0	7.1	3.4	3.5	3.8	6.8	3.1	3.7	4.8	8.5	4.6	4.0	5.3	9.4	5.5	4.3	6.9	12.4	8.8				
		4	4.1	5.3	19.3	18.7	4.4	6.3	22.8	25.0	4.7	7.4	26.6	32.7	5.0	7.9	28.2	36.1	5.2	9.5	34.1	50.5				
		5	3.8	4.5	13.0	9.4	4.1	5.5	15.6	12.9	4.4	6.6	19.0	18.1	4.7	7.0	20.1	20.1	4.9	8.7	24.6	28.5				
		6	3.5	3.7	8.9	5.0	3.8	4.7	11.3	7.4	4.1	5.7	13.5	10.0	4.4	6.2	14.8	11.8	4.6	7.9	18.9	18.1				
9		7	3.9	3.9	8.0	4.1	3.5	3.8	7.6	3.8	3.8	4.9	10.0	6.0	4.1	5.3	10.9	7.0	4.3	7.0	14.4	11.3				
		8	3.6	3.6	6.5	2.9	3.4	3.5	6.9	3.2	3.4	3.9	6.9	3.2	3.8	4.5	8.1	4.2	4.0	6.1	10.9	6.9				
		4	3.8	4.5	15.9	13.3	4.1	5.5	19.8	19.4	4.4	6.5	23.4	26.0	4.7	7.1	25.7	30.6	4.9	8.7	31.6	43.9				
		5	3.5	3.7	10.5	6.5	3.8	4.7	13.3	9.8	4.1	5.7	16.5	14.1	4.4	6.2	17.7	15.9	4.6	7.9	22.7	24.5				
10		6	3.9	3.9	9.3	5.3	3.5	3.8	9.1	5.1	3.8	4.8	11.5	7.6	4.1	5.4	12.8	9.2	4.3	7.0	16.8	14.5				

PERFORMANCE DATA

CR-CB/ HB/ HBS/ HBZ/ FB

Cooling Capacity (kW) – 2 Rows

Model	Entering Water Temperature °C	Entering Air Temperature																					
		DB24°C				DB25°C				DB26°C				DB27°C				DB28°C					
		WB17°C				WB18°C				WB19°C				WB19.5°C				WB21°C					
		Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop		
kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa				
12	4	4	6.3	9.7	35.0	66.1	6.6	10.9	38.7	79.2	7.0	12.3	43.8	98.5	7.4	13.0	47.1	111.7	7.6	15.0	53.7	140.9	
		5	6.0	8.8	25.3	37.4	6.3	10.1	28.9	47.5	6.6	11.4	32.9	59.4	7.0	12.0	34.5	64.5	7.3	14.1	40.6	85.9	
		6	5.6	7.9	18.8	22.5	5.9	9.2	21.8	28.9	6.3	10.5	24.9	36.5	6.7	11.2	26.9	41.7	6.9	13.3	31.8	56.1	
		7	5.2	7.0	14.3	14.0	5.6	8.3	16.9	18.7	5.9	9.6	19.8	24.5	6.3	10.2	20.8	26.8	6.5	12.2	24.9	36.4	
	8	4.9	6.1	11.0	8.9	5.2	7.3	13.1	12.1	5.6	8.6	15.5	16.0	5.9	9.3	16.6	18.1	6.2	11.3	20.3	25.6		
	5	4	5.9	8.8	31.2	53.8	6.3	10.0	35.9	68.8	6.6	11.3	40.9	86.7	7.0	12.0	42.9	94.3	7.3	14.1	50.7	126.7	
		5	5.6	7.9	22.4	30.0	5.9	9.1	25.9	38.8	6.3	10.4	29.7	49.4	6.6	11.1	32.1	56.6	6.9	13.2	38.2	76.7	
		6	5.2	7.0	16.5	17.8	5.6	8.3	19.9	24.5	5.9	9.5	23.0	31.5	6.3	10.2	24.2	34.5	6.6	12.2	29.0	47.3	
		7	4.9	6.1	12.4	10.8	5.2	7.3	14.9	14.9	5.6	8.6	17.6	19.9	5.9	9.2	18.9	22.5	6.2	11.3	23.2	32.0	
	8	4.5	5.0	9.0	6.3	4.8	6.3	11.2	9.1	5.2	7.6	13.6	12.8	5.5	8.2	14.7	14.6	5.8	10.2	18.2	21.1		
	6	4	5.5	7.8	27.6	42.9	5.9	9.1	33.0	58.8	6.2	10.3	36.9	71.7	6.6	11.0	38.9	78.6	6.9	13.0	46.4	107.6	
		5	5.2	7.0	20.1	24.8	5.6	8.2	23.6	32.8	5.9	9.5	27.4	42.5	6.2	10.1	28.9	46.7	6.5	12.1	34.8	64.6	
		6	4.8	6.0	14.2	13.6	5.2	7.3	17.4	19.4	5.5	8.5	20.4	25.4	5.9	9.1	21.6	28.1	6.2	11.2	27.0	41.5	
		7	4.5	5.0	10.1	7.6	4.8	6.2	12.7	11.1	5.2	7.5	15.5	15.8	5.6	8.2	17.0	18.5	5.8	10.2	20.8	26.3	
	8	4.2	4.3	8.1	5.2	4.5	5.3	9.5	6.9	4.8	6.6	11.8	9.9	5.2	7.2	12.9	11.5	5.5	9.2	16.5	17.6		
	7	4	5.2	6.9	24.7	35.1	5.5	8.1	29.1	46.9	5.9	9.4	33.9	61.3	6.2	10.0	35.9	67.7	6.5	12.1	43.4	94.7	
		5	4.8	6.0	17.3	18.9	5.2	7.2	20.6	25.7	5.5	8.4	24.2	34.1	5.8	9.0	25.7	37.8	6.2	11.2	32.3	56.3	
		6	4.5	5.0	12.0	10.1	4.8	6.2	15.0	14.9	5.2	7.5	17.9	20.0	5.5	8.2	19.6	23.6	5.8	10.2	24.2	34.0	
		7	4.2	4.3	9.3	6.6	4.4	5.2	10.7	8.3	4.8	6.5	13.4	12.2	5.2	7.2	14.8	14.5	5.5	9.2	18.8	21.9	
	8	4.7	4.7	8.4	5.5	4.8	4.8	7.7	4.7	4.4	5.4	9.7	7.0	4.8	6.1	10.9	8.5	5.1	8.1	14.5	14.0		
	8	4	4.8	5.9	21.1	26.4	5.1	7.1	25.3	36.5	5.5	8.3	29.9	48.9	5.8	9.0	32.8	57.3	6.1	11.0	39.1	78.3	
		5	4.4	4.9	14.0	13.1	4.8	6.2	17.7	19.5	5.1	7.4	21.1	26.7	5.5	8.1	23.3	31.5	5.8	10.1	28.9	46.0	
		6	4.9	4.9	11.1	8.8	4.4	5.1	12.2	10.4	4.8	6.4	15.4	15.3	5.1	7.1	17.1	18.4	5.4	9.1	21.5	27.4	
		7	4.6	4.6	9.4	6.6	4.1	4.2	8.8	5.9	4.4	5.4	10.9	8.5	4.8	6.0	12.2	10.4	5.1	8.1	16.7	17.8	
	8	4.3	4.3	7.6	4.6	4.7	4.7	8.4	5.4	4.0	4.3	7.7	4.7	4.4	4.9	8.8	5.9	4.7	7.0	12.6	10.8		
	9	4	4.4	4.9	17.5	19.1	4.7	6.0	21.6	27.4	5.1	7.3	26.0	38.0	5.5	8.0	28.7	45.1	5.8	10.0	35.9	66.8	
		5	4.9	4.9	13.8	12.7	4.4	5.0	14.3	13.5	4.7	6.3	18.1	20.2	5.1	7.0	20.2	24.3	5.4	9.0	25.6	36.9	
		6	4.5	4.5	10.8	8.4	4.8	4.8	10.5	7.9	4.4	5.4	12.9	11.3	4.7	5.9	14.1	13.0	5.1	8.0	19.4	22.7	
		7	4.2	4.2	8.5	5.5	4.6	4.6	9.4	6.6	4.0	4.2	8.7	5.7	4.4	5.0	10.2	7.5	4.7	6.9	14.2	13.3	
	8	3.8	3.8	6.9	3.9	4.3	4.3	7.7	4.6	4.7	4.7	8.4	5.4	4.2	4.3	8.2	5.2	4.4	5.8	10.5	7.9		
	14	4	4	7.4	11.4	40.8	97.1	7.8	12.9	46.4	122.2	8.1	14.3	51.1	144.9	8.6	15.2	54.9	164.4	8.9	17.6	62.6	207.6
			5	7.0	10.5	30.3	57.8	7.4	11.9	33.8	69.7	7.7	13.4	38.4	87.3	8.1	14.1	40.2	94.8	8.5	16.6	47.3	126.4
			6	6.6	9.5	22.7	34.8	7.0	10.9	26.1	44.6	7.4	12.4	29.9	56.3	7.8	13.1	31.3	61.2	8.1	15.6	37.1	82.4
			7	6.2	8.4	17.3	21.7	6.6	9.8	20.1	28.2	6.9	11.3	23.1	35.9	7.4	12.2	25.0	41.3	7.7	14.5	29.8	56.2
		8	5.8	7.4	13.3	13.8	6.2	8.8	15.8	18.7	6.6	10.4	18.6	24.8	7.0	11.0	19.7	27.2	7.3	13.3	23.6	37.5	
		4	6.9	10.4	37.4	83.1	7.3	11.7	41.9	101.2	7.7	13.3	47.7	127.5	8.1	14.0	50.1	138.8	8.4	16.5	59.1	186.6	
5		5	6.5	9.4	26.9	46.4	6.9	10.8	31.1	60.0	7.3	12.3	35.6	76.2	7.7	13.0	37.5	83.2	8.1	15.5	44.5	112.9	
		6	6.1	8.3	19.9	27.5	6.5	9.8	23.2	36.0	6.9	11.2	26.8	46.2	7.3	12.1	29.1	53.3	7.7	14.5	34.8	73.1	
		7	5.7	7.3	14.9	16.8	6.1	8.7	17.6	22.4	6.5	10.2	20.9	29.9	6.9	11.0	22.4	33.8	7.3	13.4	27.4	48.2	
		8	5.3	6.1	10.9	9.8	5.7	7.6	13.5	14.2	6.1	9.1	16.4	19.8	6.5	9.9	17.7	22.5	6.9	12.2	21.9	32.6	
6		4	6.5	9.2	33.1	66.3	6.9	10.7	38.5	86.5	7.2	12.1	43.0	105.5	7.7	12.9	46.6	121.4	8.0	15.3	55.6	166.1	
		5	6.1	8.2	23.5	36.4	6.5	9.6	27.5	48.1	6.9	11.1	31.9	62.4	7.3	11.9	33.7	68.6	7.6	14.2	40.6	95.0	
		6	5.7	7.2	17.1	21.1	6.1	8.6	20.3	28.4	6.5	10.1	24.1	38.3	6.9	10.9	26.0	43.4	7.2	13.2	31.5	60.9	
		7	5.3	6.1	12.5	12.2	5.7	7.5	15.3	17.3	6.1	9.1	18.6	24.4	6.5	9.7	19.8	27.1	6.9	12.2	25.0	40.7	
8		4.8	5.0	9.0	7.0	5.3	6.4	11.5	10.7	5.7	7.9	14.3	15.4	6.1	8.6	15.5	17.8	6.4	11.0	19.5	26.5		
7		4	6.0	8.1	28.8	51.6	6.4	9.5	33.9	69.0	6.8	11.0	39.5	90.2	7.2	11.7	41.8	99.6	7.6	14.1	50.6	139.4	
		5	5.6	7.1	20.1	27.7	6.0	8.5	24.0	37.7	6.4	9.9	28.3	50.0	6.8	10.7	30.9	50.0	7.2	13.1	37.7	82.8	
		6	5.2	6.0	14.5	15.6	5.6	7.4	17.5	21.8	6.1	8.9	21.5	31.0	6.4	9.6	22.9	34.6	6.8	12.1	29.1	52.5	
		7	5.6	5.6	10.3	8.8	5.2	6.3	12.9	12.9	5.7	7.8	16.1	18.8	6.1	8.6	17.5	21.8	6.4	10.9	22.2	32.9	
8		5.5	5.5	9.9	8.2	4.8	5.1	9.2	7.3	5.2	6.6	11.7	10.9	5.6	7.3	13.1	13.2	6.0	9.8	17.5	21.7		
8		4	5.6	7.0	25.3	40.9	6.0	8.3	29.5	53.6	6.4	9.8	34.9	71.9	6.8	10.6	38.2	84.3	7.1	13.0	46.8	120.9	
		5	5.2	5.9	16.9	20.2	5.6	7.3	20.6	28.6	6.0	8.8	25.4	41.2	6.4	9.5	27.2	46.3	6.7	11.8	33.7	67.7	
		6	4.9	5.0	12.3	11.8	5.2	6.2	14.8	16.1	5.6	7.7	18.5	23.7	6.0	8.4	19.9	26.9	6.4	10.8	25.8	42.3	
		7	5.4	5.4	11.1	9.9	4.8	5.0	10.3	8.7	5.2	6.5	13.2	13.3	5.6	7.2	14.8	16.1	6.0	9.6	19.5	26.1	
8		5.1	5.1	9.1	7.0	5.5	5.5	9.8	8.0	4.8	5.2	9.4	7.4	5.2	6.1	11.0	9.7	5.6	8.5	15.2	16.8		
9		4	5.1	5.7	20.4	27.9	5.6	7.2	25.9	42.4	5.9	8.7	31.2	58.7	6.3	9.4	33.5	66.4	6.7	11.7	41.8	98.3	
		5	5.6	5.6	15.3	16.9	5.1	6.1	17.3	20.9	5.6	7.6	21.8	31.3	6.0	8.4	24.2	37.6	6.3	10.7	30.7	57.0	
		6	5.3	5.3	12.6	12.2	4.7	4.9	11.7	10.6	5.1	6.4	15.1	16.5	5.6	7.1	16.9	20.2	5.9	9.5	22.6	33.3	
		7	5.0	5.0	10.2	8.4	5.5	5.5	11.3	10.1	4.7	5.1	10.5	8.9	5.2	6.0	12.3	11.7	5.5	8.3	16.9	20.0	
8		4.5	4.5	8.1	5.7	5.1	5.1	9.2	7.0	5.4	5.4	9.3	7.2	4.8	4.9	9.1	6.9	5.1	7.1	12.7	12.2		

Notes: 1.) DB- Dry Bulb temperature, WB- Wet Bulb temperature
 2.) Capacity is based on high speed airflow with respective entering/ leaving temperature, refer to Page 23: Total Capacity Correction Factor for other airflow.

PERFORMANCE DATA

CR-CB/ HB/ HBS/ HBZ/ FB

Cooling Capacity (kW) – 3 Rows

Model	Entering Water Temperature °C	Entering Air Temperature																					
		DB24°C				DB25°C				DB26°C				DB27°C				DB28°C					
		WB17°C				WB18°C				WB19°C				WB19.5°C				WB21°C					
		Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop		
kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa				
02	4	4	1.5	2.3	8.5	19.4	1.6	2.6	9.4	23.2	1.7	2.9	10.3	27.4	1.8	3.0	10.8	29.7	1.9	3.5	12.8	40.1	
		5	1.5	2.2	6.2	11.3	1.5	2.5	7.1	14.1	1.6	2.8	8.0	17.4	1.7	2.9	8.3	18.9	1.8	3.4	9.5	23.9	
		6	1.4	2.0	4.7	7.0	1.5	2.3	5.4	8.9	1.6	2.6	6.1	11.0	1.6	2.7	6.4	12.0	1.7	3.2	7.7	16.4	
		7	1.3	1.8	3.7	4.6	1.4	2.1	4.3	6.0	1.5	2.4	4.9	7.5	1.6	2.5	5.2	8.2	1.6	3.0	6.1	11.0	
	8	1.2	1.6	2.9	3.0	1.3	1.9	3.4	4.0	1.4	2.2	3.9	5.1	1.5	2.3	4.2	5.8	1.6	2.8	5.0	7.9		
	5	4	1.4	2.1	7.6	16.0	1.5	2.4	8.7	20.1	1.6	2.7	9.6	24.2	1.7	2.8	10.1	26.3	1.8	3.3	11.9	34.8	
		5	1.4	2.0	5.7	9.6	1.5	2.2	6.4	11.7	1.5	2.5	7.2	14.7	1.6	2.7	7.8	16.6	1.7	3.1	9.0	21.4	
		6	1.3	1.8	4.3	5.9	1.4	2.1	4.9	7.6	1.5	2.4	5.7	9.5	1.5	2.5	6.0	10.4	1.6	3.0	7.1	14.1	
		7	1.2	1.6	3.2	3.6	1.3	1.9	3.8	4.9	1.4	2.2	4.4	6.2	1.5	2.3	4.8	7.1	1.6	2.8	5.7	9.7	
	6	4	1.1	1.3	2.4	2.2	1.2	1.6	2.9	3.1	1.3	1.9	3.5	4.2	1.4	2.1	3.8	4.8	1.5	2.6	4.7	6.9	
		5	1.3	1.7	5.0	7.6	1.4	2.0	5.8	9.9	1.5	2.3	6.7	12.6	1.5	2.5	7.0	13.9	1.6	2.9	8.4	18.9	
		6	1.2	1.5	3.6	4.4	1.3	1.8	4.4	6.1	1.4	2.1	5.1	7.8	1.5	2.3	5.5	9.0	1.5	2.8	6.6	12.3	
		7	1.1	1.3	2.7	2.8	1.1	1.5	3.0	3.3	1.3	1.9	3.9	5.0	1.4	2.1	4.3	5.8	1.5	2.6	5.3	8.4	
	7	4	1.0	1.1	2.0	1.6	1.1	1.4	2.5	2.4	1.2	1.7	3.1	3.3	1.3	1.9	3.3	3.8	1.4	2.3	4.2	5.7	
		5	1.3	1.7	6.1	10.6	1.3	2.0	7.1	14.0	1.4	2.3	8.2	17.9	1.5	2.4	8.7	19.8	1.6	2.9	10.2	26.3	
		6	1.2	1.5	4.3	5.9	1.3	1.8	5.2	8.2	1.4	2.1	6.0	10.3	1.4	2.2	6.5	11.8	1.5	2.7	7.8	16.5	
		7	1.1	1.3	3.1	3.3	1.2	1.6	3.8	4.7	1.3	1.9	4.5	6.3	1.4	2.0	4.9	7.3	1.4	2.5	6.0	10.3	
	8	4	1.0	1.1	2.2	1.9	1.1	1.4	2.8	2.8	1.2	1.7	3.4	4.0	1.3	1.8	3.7	4.6	1.4	2.3	4.7	6.9	
		5	1.1	1.3	2.4	2.2	1.0	1.1	2.0	1.6	1.1	1.5	2.6	2.5	1.2	1.6	2.9	3.0	1.3	2.1	3.7	4.6	
		6	1.2	1.5	5.3	8.4	1.3	1.7	6.2	11.0	1.3	2.1	7.4	15.0	1.4	2.2	7.9	16.8	1.5	2.7	9.5	22.9	
		7	1.1	1.3	3.6	4.2	1.2	1.6	4.4	6.1	1.3	1.9	5.4	8.5	1.4	2.0	5.7	9.5	1.4	2.5	7.2	14.2	
	9	4	1.1	1.3	2.0	1.6	1.1	1.4	2.5	2.4	1.2	1.7	3.1	3.3	1.3	1.9	3.3	3.8	1.4	2.3	4.2	5.7	
		5	1.0	1.0	2.5	2.3	1.0	1.1	2.6	2.5	1.1	1.4	3.3	3.7	1.2	1.6	3.8	4.6	1.3	2.0	4.9	7.2	
		6	1.0	1.0	2.1	1.7	1.1	1.1	1.9	1.5	1.0	1.1	2.3	2.0	1.1	1.3	2.7	2.6	1.2	1.8	3.7	4.5	
		8	0.9	0.9	1.6	1.1	1.0	1.0	1.9	1.4	0.9	0.9	1.6	1.0	1.0	1.1	1.9	1.4	1.1	1.6	2.8	2.8	
	03	4	4	2.2	3.3	12.1	41.3	2.3	3.7	13.4	49.6	2.4	4.1	14.8	58.7	2.5	4.3	15.4	63.5	2.6	5.0	18.0	83.2
			5	2.1	3.1	8.9	24.0	2.2	3.5	10.1	30.1	2.3	3.9	11.1	35.8	2.4	4.1	11.9	40.3	2.5	4.8	13.7	51.2
			6	2.0	2.8	6.7	14.8	2.1	3.2	7.7	18.8	2.2	3.7	8.7	23.4	2.3	3.9	9.4	26.4	2.4	4.5	10.8	33.8
			7	1.9	2.6	5.3	9.9	2.0	3.0	6.1	12.7	2.1	3.4	7.0	15.9	2.2	3.6	7.4	17.4	2.3	4.3	8.7	23.3
		5	4	1.7	2.3	4.1	6.3	1.9	2.7	4.9	8.4	2.0	3.1	5.6	10.7	2.1	3.4	6.0	12.2	2.2	4.0	7.2	16.6
			5	2.0	3.0	10.9	34.1	2.2	3.4	12.4	43.1	2.3	3.9	13.8	51.7	2.5	4.0	14.3	59.8	2.5	4.7	17.0	74.8
			6	1.9	2.8	8.1	20.3	2.1	3.2	9.1	24.9	2.2	3.6	10.4	31.3	2.4	3.8	10.9	37.8	2.4	4.5	12.9	45.8
			7	1.8	2.5	6.1	12.4	2.0	2.9	7.0	15.9	2.1	3.4	8.1	20.2	2.3	3.6	8.6	26.4	2.3	4.2	10.1	30.0
		6	4	1.7	2.3	4.7	7.8	1.8	2.7	5.4	10.2	2.0	3.1	6.3	13.1	2.2	3.3	6.8	18.2	2.2	4.0	8.1	20.5
			5	1.6	2.0	3.5	4.8	1.7	2.4	4.3	6.7	1.9	2.8	5.1	9.1	2.0	2.9	5.2	12.5	2.1	3.7	6.7	14.5
			6	1.9	2.7	9.7	27.5	2.0	3.1	11.4	36.8	2.2	3.6	12.8	44.9	2.3	3.8	13.5	49.2	2.4	4.4	15.6	64.2
			7	1.8	2.5	7.1	16.1	1.9	2.9	8.3	21.0	2.1	3.3	9.5	26.9	2.2	3.5	10.1	29.6	2.3	4.2	12.0	40.4
		7	4	1.7	2.2	5.3	9.6	1.8	2.6	6.2	12.8	1.9	3.0	7.2	16.5	2.1	3.3	7.8	19.0	2.2	3.9	9.4	26.2
			5	1.6	1.9	3.9	5.7	1.7	2.3	4.8	8.0	1.8	2.8	5.7	11.0	2.0	3.0	6.1	12.2	2.1	3.7	7.5	17.8
			6	1.5	1.6	2.8	3.3	1.6	2.0	3.7	5.1	1.7	2.5	4.5	7.2	1.8	2.7	4.8	8.0	2.0	3.4	6.0	11.9
7			1.4	1.5	2.4	8.7	22.5	1.9	2.8	10.1	29.7	2.0	3.2	11.7	38.4	2.1	3.5	12.4	42.4	2.2	4.1	14.6	56.5
8		4	1.7	2.2	6.2	12.5	1.8	2.6	7.5	17.4	1.9	3.0	8.5	21.8	2.0	3.2	9.0	24.3	2.2	3.9	11.2	35.2	
		5	1.6	1.9	4.5	7.3	1.7	2.3	5.5	10.3	1.8	2.7	6.5	13.7	1.9	2.9	6.9	15.3	2.0	3.6	8.5	21.8	
		6	1.4	1.5	3.2	4.0	1.6	2.0	4.1	6.1	1.7	2.4	5.0	8.6	1.8	2.6	5.5	10.1	1.9	3.3	6.8	14.6	
		7	1.4	1.3	2.5	2.6	1.4	1.6	2.9	3.5	1.6	2.1	3.7	5.3	1.7	2.3	4.1	6.2	1.8	3.0	5.4	10.0	
9		4	1.7	2.1	7.6	17.9	1.8	2.5	8.9	23.4	1.9	2.9	10.4	31.0	2.0	3.1	11.3	35.9	2.1	3.8	13.5	49.0	
		5	1.5	1.8	5.2	9.2	1.7	2.2	6.3	12.9	1.8	2.7	7.6	18.0	1.9	2.9	8.2	20.2	2.0	3.5	10.1	29.2	
		6	1.4	1.5	3.6	5.0	1.6	1.9	4.6	7.5	1.7	2.4	5.7	10.7	1.8	2.6	6.1	12.1	1.9	3.3	7.8	18.5	
		7	1.4	1.3	2.9	3.4	1.4	1.6	3.3	4.3	1.6	2.1	4.3	6.5	1.7	2.3	4.6	7.5	1.8	3.0	6.1	12.2	
9		4	1.5	1.5	2.6	2.9	1.5	1.5	2.3	2.4	1.4	1.7	3.1	3.7	1.6	1.9	3.5	4.7	1.7	2.6	4.8	7.9	
		5	1.4	1.5	6.2	12.6	1.7	2.2	7.8	18.5	1.8	2.6	9.1	24.4	1.9	2.8	10.0	28.6	2.0	3.5	12.4	41.8	
		6	1.4	1.5	4.3	6.5	1.5	1.9	5.5	9.9	1.7	2.3	6.6	13.9	1.8	2.5	7.3	16.4	1.9	3.2	9.2	24.6	
		7	1.4	1.3	3.5	4.7	1.3	1.4	3.2	1.0	1.6	2.0	4.8	8.0	1.7	2.2	5.4	9.6	1.8	2.9	7.0	15.3	
8		1.5	1.5	3.0	3.5	1.5	1.5	2.7	3.1	1.4	1.7	3.5	4.5	1.6	1.9	3.9	5.5	1.7	2.6	5.3	9.5		
9		1.3	1.3	2.4	2.5	1.5	1.5	2.7	2.9	1.3	1.3	2.3	2.2	1.4	1.5	2.7	3.1	1.6	2.3	4.1	6.0		



PERFORMANCE DATA

CR-CB/ HB/ HBS/ HBZ/ FB

Cooling Capacity (kW) – 3 Rows

Model	Entering Water Temperature °C	Entering / Leaving Water Temperature Difference °C	Entering Air Temperature																				
			DB24°C				DB25°C				DB26°C				DB27°C				DB28°C				
			WB17°C				WB18°C				WB19°C				WB19.5°C				WB21°C				
			Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	
kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa				
04	4	4	2.8	4.2	15.2	71.3	2.9	4.8	17.2	88.8	3.1	5.3	18.9	105.3	3.2	5.6	19.8	113.9	3.3	6.4	23.1	149.3	
		5	2.6	4.0	11.4	42.8	2.8	4.5	13.0	53.7	2.9	5.0	14.3	64.1	3.1	5.3	15.3	72.2	3.2	6.1	17.5	91.8	
		6	2.5	3.7	8.8	27.5	2.7	4.2	10.1	34.8	2.8	4.7	11.2	41.7	3.0	5.0	12.0	47.2	3.1	5.8	13.8	60.5	
		7	2.4	3.3	6.8	17.6	2.5	3.9	7.9	22.6	2.7	4.4	9.0	28.4	2.8	4.7	9.7	32.2	3.0	5.5	11.3	42.5	
		8	2.2	3.0	5.4	11.6	2.4	3.5	6.4	15.6	2.5	4.1	7.3	19.9	2.7	4.3	7.7	21.8	2.8	5.2	9.4	30.8	
		5	4	2.6	3.9	14.0	61.0	2.8	4.4	16.0	77.1	2.9	4.9	17.7	92.6	3.0	5.2	18.6	100.8	3.2	6.0	21.4	129.4
			5	2.5	3.6	10.4	36.2	2.6	4.1	11.7	44.5	2.8	4.6	13.3	55.9	2.9	4.9	14.0	61.1	3.1	5.7	16.5	82.0
			6	2.3	3.3	7.8	22.0	2.5	3.8	9.0	28.4	2.6	4.3	10.4	36.1	2.8	4.6	10.9	39.5	2.9	5.4	13.0	53.6
	7		2.2	2.9	6.0	13.9	2.4	3.5	7.2	18.9	2.5	4.0	8.3	24.3	2.7	4.3	8.7	26.7	2.8	5.1	10.5	36.6	
	8		2.1	2.6	4.6	8.9	2.2	3.1	5.6	12.4	2.4	3.6	6.5	16.1	2.5	3.9	7.1	18.5	2.7	4.8	8.5	25.8	
	6		4	2.4	3.5	12.4	49.2	2.6	4.0	14.3	63.5	2.7	4.5	16.4	80.4	2.9	4.8	17.3	88.2	3.0	5.6	20.1	115.1
			5	2.3	3.2	9.1	28.8	2.5	3.7	10.6	37.6	2.6	4.2	12.0	46.3	2.8	4.5	12.9	52.9	2.9	5.4	15.5	72.4
			6	2.2	2.9	6.9	17.9	2.3	3.4	8.0	22.7	2.5	3.9	9.5	30.6	2.6	4.2	10.0	33.9	2.8	5.0	12.1	46.9
		7	2.0	2.5	5.1	10.6	2.2	3.0	6.3	14.9	2.3	3.6	7.3	19.5	2.5	3.9	8.0	22.6	2.6	4.7	9.7	31.7	
		8	1.9	2.1	3.8	6.3	2.0	2.6	4.7	9.1	2.2	3.2	5.7	12.7	2.4	3.5	6.2	14.8	2.5	4.4	7.9	22.1	
		7	4	2.3	3.1	11.1	40.3	2.4	3.6	12.8	51.2	2.6	4.2	15.1	68.7	2.7	4.4	15.9	75.9	2.9	5.2	18.7	101.3
			5	2.1	2.8	7.9	22.2	2.3	3.3	9.6	31.0	2.4	3.8	10.9	39.0	2.6	4.1	11.6	43.4	2.7	5.0	14.4	63.1
			6	2.0	2.4	5.8	12.9	2.2	3.0	7.1	18.4	2.3	3.5	8.4	24.5	2.5	3.8	9.1	28.4	2.6	4.6	10.9	39.0
	7		1.9	2.0	4.2	7.4	2.0	2.6	5.4	11.3	2.2	3.1	6.4	15.3	2.3	3.4	7.0	17.9	2.5	4.3	8.9	27.1	
	8		1.7	1.7	3.0	4.2	1.9	2.2	3.9	6.4	2.0	2.7	4.9	9.7	2.2	3.0	5.4	11.6	2.3	3.9	7.0	17.8	
	8		4	2.1	2.7	9.8	31.9	2.3	3.2	11.4	41.8	2.4	3.7	13.4	55.4	2.6	4.0	14.6	64.2	2.7	4.8	17.4	87.9
			5	2.0	2.4	6.8	17.1	2.1	2.9	8.3	23.9	2.3	3.4	9.8	32.1	2.4	3.7	10.5	36.1	2.6	4.5	12.9	52.2
			6	1.8	2.0	4.7	8.9	2.0	2.5	6.0	13.8	2.1	3.1	7.3	19.0	2.3	3.3	8.0	22.4	2.4	4.2	10.0	33.0
		7	1.7	1.7	3.5	5.5	1.8	2.1	4.4	7.9	2.0	2.7	5.5	11.6	2.2	3.0	6.1	13.8	2.3	3.8	7.8	21.7	
		8	1.9	1.9	3.5	5.3	1.7	1.7	3.0	4.3	1.9	2.3	4.0	6.9	2.0	2.6	4.6	8.7	2.2	3.5	6.2	14.6	
		9	4	1.9	2.3	8.0	22.4	2.1	2.8	10.0	33.1	2.2	3.3	11.7	43.5	2.4	3.6	12.8	51.2	2.5	4.4	15.9	75.0
			5	1.8	1.9	5.5	11.6	2.0	2.4	7.0	17.7	2.1	3.0	8.7	25.7	2.3	3.3	9.4	29.3	2.4	4.1	11.8	43.9
			6	1.7	1.7	4.3	7.7	1.8	2.1	5.0	9.9	2.0	2.6	6.3	14.8	2.1	2.9	6.9	17.1	2.3	3.8	9.0	27.3
7	1.9		1.9	3.8	6.2	1.7	1.6	3.4	5.0	1.8	2.2	4.4	8.0	2.0	2.5	5.1	10.3	2.1	3.4	6.8	17.0		
8	1.7		1.7	3.1	4.3	1.9	1.9	3.3	5.0	1.7	1.7	3.1	4.3	1.8	2.0	3.6	5.7	2.0	2.9	5.2	10.7		
05	4		4	3.3	5.1	18.2	36.3	3.5	5.7	20.7	45.2	3.7	6.4	22.8	53.6	3.9	6.7	24.3	60.2	4.0	7.8	27.7	76.0
			5	3.2	4.7	13.3	21.0	3.4	5.3	15.2	26.3	3.5	6.0	17.2	32.7	3.7	6.3	18.0	35.4	3.9	7.4	21.1	46.8
			6	3.0	4.3	10.3	13.4	3.2	4.9	11.8	17.0	3.4	5.6	13.4	21.3	3.5	5.9	14.1	23.1	3.7	7.0	16.6	30.8
		7	2.8	3.9	7.9	8.6	3.0	4.5	9.2	11.0	3.2	5.1	10.5	13.9	3.4	5.5	11.3	15.8	3.5	6.5	13.4	21.2	
		8	2.6	3.4	6.0	5.4	2.8	4.0	7.2	7.3	3.0	4.7	8.3	9.3	3.2	5.0	9.0	10.6	3.3	6.0	10.8	14.5	
		5	4	3.2	4.6	16.8	31.1	3.3	5.3	18.7	37.8	3.5	5.9	21.3	47.2	3.7	6.2	22.3	51.3	3.9	7.3	26.2	68.3
			5	3.0	4.2	12.1	17.7	3.2	4.9	14.0	22.7	3.3	5.5	16.0	28.5	3.5	5.8	16.8	31.1	3.7	6.9	19.8	41.8
			6	2.8	3.8	9.1	10.7	3.0	4.4	10.6	13.9	3.2	5.1	12.1	17.7	3.4	5.4	13.1	20.2	3.5	6.5	15.6	27.3
	7		2.6	3.3	6.7	6.4	2.8	4.0	8.1	8.9	3.0	4.6	9.4	11.4	3.2	5.0	10.2	13.1	3.3	6.0	12.2	17.9	
	8		2.4	2.8	5.0	3.9	2.6	3.5	6.3	5.8	2.8	4.1	7.4	7.5	3.0	4.5	8.0	8.7	3.1	5.5	9.9	12.4	
	6		4	2.9	4.2	14.9	25.0	3.1	4.8	17.2	32.3	3.3	5.4	19.3	39.4	3.5	5.8	20.7	44.9	3.7	6.8	24.6	60.8
			5	2.8	3.7	10.7	14.1	3.0	4.4	12.5	18.4	3.1	5.0	14.4	23.5	3.3	5.4	15.5	27.0	3.5	6.4	18.1	35.5
			6	2.6	3.3	7.9	8.4	2.8	3.9	9.3	11.1	3.0	4.6	10.8	14.4	3.2	4.9	11.7	16.6	3.3	5.9	14.2	23.0
		7	2.4	2.8	5.8	4.9	2.6	3.4	7.1	6.9	2.8	4.1	8.3	9.1	3.0	4.4	9.1	10.6	3.1	5.5	11.3	15.6	
		8	2.2	2.3	4.1	2.7	2.4	2.9	5.3	4.2	2.6	3.6	6.4	5.9	2.8	3.9	7.1	6.9	3.0	5.0	8.9	10.4	
		7	4	2.7	3.7	13.0	19.7	2.9	4.3	15.6	27.1	3.1	4.9	17.7	33.7	3.3	5.3	18.7	37.2	3.5	6.3	23.0	53.5
			5	2.6	3.2	9.2	10.8	2.8	3.9	11.2	15.2	2.9	4.5	12.8	19.1	3.1	4.8	13.9	22.1	3.3	5.9	16.9	30.9
			6	2.4	2.7	6.5	6.0	2.6	3.4	8.1	8.6	2.8	4.1	9.8	12.0	2.9	4.4	10.4	13.4	3.1	5.4	13.1	19.9
	7		2.2	2.2	4.5	3.2	2.4	2.9	5.9	5.0	2.6	3.5	7.2	7.1	2.8	3.9	7.9	8.4	2.9	5.0	10.1	12.7	
	8		2.1	2.1	4.2	2.9	2.2	2.3	4.2	2.8	2.4	3.0	5.4	4.3	2.6	3.4	6.1	5.4	2.8	4.4	7.9	8.3	
	8		4	2.5	3.2	11.4	15.6	2.7	3.8	13.4	20.4	2.9	4.4	16.1	28.2	3.1	4.8	17.1	31.5	3.3	5.8	20.9	44.7
			5	2.4	2.7	7.8	8.0	2.5	3.3	9.4	11.2	2.7	4.0	11.5	15.7	2.9	4.3	12.3	17.7	3.1	5.4	15.5	26.6
			6	2.2	2.2	5.2	4.1	2.4	2.9	6.8	6.4	2.6	3.5	8.5	9.3	2.7	3.8	9.1	10.5	2.9	4.9	11.7	16.2
		7	2.4	2.4	4.9	3.7	2.2	2.3	4.7	3.5	2.4	3.0	6.2	5.4	2.6	3.3	6.9	6.5	2.7	4.4	8.9	10.2	
		8	2.3	2.3	4.0	2.6	2.4	2.4	4.0	2.6	2.2	2.4	4.4	3.0	2.4	2.8	5.0	3.8	2.6	3.9	6.9	6.6	
		9	4	2.3	2.6	9.3	10.9	2.5	3.3	11.7	16.2	2.7	3.9	14.0	22.1	2.9	4.3	15.4	26.1	3.1	5.3	18.7	36.7
			5	2.2	2.2	6.2	5.4	2.4	2.8	8.2	8.6	2.5	3.5	9.9	12.1	2.7	3.8	10.9	14.4	2.9	4.8	13.8	21.5
			6	2.4	2.4	5.7	4.7	2.2	2.3	5.5	4.4	2.4	2.9	7.0	6.6	2.5	3.3	7.8	8.0	2.7	4.3	10.3	12.8
7	2.2		2.2	4.5	3.2	2.4	2.4	4.7	3.4	2.2	2.4	4.8	3.5	2.4	2.7	5.6	4.5	2.5	3.8	7.8	7.9		
8	2.0		2.0	3.6	2.2	2.3	2.3	4.0	2.6	2.3	2.3	3.8	2.4	2.2	2.2	3.9	2.5	2.4	3.3	5.9	5.0		



Product that perform...By people who care

PERFORMANCE DATA

CR-CB/ HB/ HBS/ HBZ/ FB

Cooling Capacity (kW) – 3 Rows

Model	Entering Water Temperature °C	Entering / Leaving Water Temperature Difference °C	Entering Air Temperature																			
			DB24°C				DB25°C				DB26°C				DB27°C				DB28°C			
			WB17°C				WB18°C				WB19°C				WB19.5°C				WB21°C			
			Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop
	kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa		
06	4	4	4.0	6.1	21.6	55.0	4.2	6.8	24.5	68.6	4.4	7.6	27.5	84.5	4.6	8.0	28.8	91.4	4.8	9.2	32.8	115.4
		5	3.8	5.6	16.1	33.0	4.0	6.4	18.4	41.5	4.2	7.1	20.3	49.5	4.4	7.6	21.8	55.8	4.6	8.8	25.5	73.7
		6	3.6	5.2	12.5	21.2	3.8	5.9	14.0	25.8	4.0	6.7	15.9	32.2	4.2	7.1	17.1	36.5	4.4	8.3	20.1	48.5
		7	3.4	4.7	9.6	13.5	3.6	5.4	11.1	17.4	3.8	6.2	12.7	21.9	4.0	6.6	13.4	23.9	4.2	7.8	16.1	32.8
	5	8	3.1	4.1	7.3	8.5	3.4	4.9	8.8	11.5	3.6	5.7	10.1	14.7	3.8	6.1	10.9	16.8	4.0	7.3	13.0	22.8
		4	3.7	5.5	19.8	47.0	3.9	6.3	22.2	57.3	4.1	7.0	25.1	71.5	4.4	7.5	27.0	80.9	4.6	8.7	31.0	103.7
		5	3.5	5.1	14.4	26.8	3.7	5.8	16.5	34.3	4.0	6.6	18.9	43.2	4.2	7.0	19.8	47.1	4.4	8.2	23.5	63.3
		6	3.3	4.6	11.0	16.9	3.6	5.3	12.8	21.9	3.8	6.1	14.7	27.8	4.0	6.5	15.5	30.5	4.2	7.7	18.4	41.4
	6	7	3.1	4.1	8.4	10.6	3.3	4.8	9.9	14.0	3.6	5.6	11.4	17.9	3.8	6.0	12.3	20.6	4.0	7.2	14.8	28.3
		8	2.9	3.5	6.3	6.5	3.1	4.3	7.7	9.1	3.4	5.1	9.1	12.1	3.6	5.5	9.7	13.7	3.8	6.7	11.9	19.5
		4	3.5	5.0	18.0	39.5	3.7	5.7	20.4	49.0	3.9	6.5	23.3	62.1	4.1	6.9	24.5	68.1	4.3	8.1	29.1	92.3
		5	3.3	4.5	12.9	22.2	3.5	5.2	15.1	29.0	3.4	5.5	15.8	31.4	3.9	6.4	18.4	40.8	4.1	7.6	22.0	55.9
	7	6	3.1	4.0	9.6	13.2	3.3	4.7	11.3	17.5	3.5	5.5	13.1	22.7	3.8	5.9	14.2	26.1	4.0	7.2	17.1	36.2
		7	2.9	3.4	7.0	7.7	3.1	4.2	8.6	10.9	3.3	5.0	10.3	15.0	3.5	5.4	11.0	16.7	3.8	6.6	13.7	24.5
		8	2.7	2.9	5.1	4.6	2.9	3.6	6.4	6.6	3.1	4.4	7.8	9.3	3.3	4.8	8.6	10.9	3.5	6.1	10.8	16.3
		4	3.1	4.1	14.7	24.2	3.3	4.8	17.2	32.1	3.5	5.6	20.0	41.7	3.7	5.9	21.1	46.1	3.9	7.1	25.4	63.9
	8	5	2.9	3.6	10.4	13.2	3.1	4.3	12.3	17.9	3.3	5.0	14.4	23.5	3.5	5.4	15.7	27.2	3.7	6.6	19.0	38.3
		6	2.7	3.1	7.3	7.3	2.9	3.8	9.1	10.5	3.1	4.5	10.7	14.0	3.3	4.9	11.7	16.4	3.5	6.1	14.4	23.5
		7	2.4	2.5	5.0	3.9	2.7	3.2	6.6	6.1	2.9	4.0	8.1	8.7	3.1	4.3	8.9	10.2	3.3	5.5	11.4	15.6
		8	2.8	2.8	5.0	3.8	2.4	2.6	4.6	3.3	2.7	3.3	6.0	5.2	2.9	3.7	6.7	6.2	3.1	5.0	8.9	10.2
	9	4	3.0	3.8	13.5	23.6	3.2	4.6	16.5	33.6	3.4	5.3	19.0	42.8	3.7	5.7	20.2	47.7	3.9	6.9	24.7	67.8
		5	2.8	3.3	9.4	12.6	3.0	4.1	11.7	18.4	3.2	4.8	13.6	23.8	3.5	5.2	14.9	27.9	3.7	6.4	18.3	40.3
		6	2.6	2.7	6.4	6.5	2.8	3.5	8.3	10.2	3.1	4.3	10.3	14.6	3.3	4.6	11.0	16.6	3.5	5.9	14.1	25.5
		7	2.9	2.9	5.6	5.2	2.6	2.9	5.9	5.7	2.8	3.7	7.5	8.5	3.1	4.1	8.3	10.2	3.3	5.3	10.8	16.1
	07	8	2.7	2.7	4.8	4.1	2.8	2.8	4.5	3.6	2.6	3.0	5.5	5.0	2.8	3.4	6.1	6.0	3.1	4.8	8.6	10.8
		4	2.8	3.2	11.6	17.9	3.0	3.9	13.9	24.5	3.2	4.7	17.0	34.9	3.4	5.1	18.2	39.5	3.6	6.3	22.6	57.9
		5	2.6	2.6	7.5	8.5	2.8	3.4	9.6	13.0	3.0	4.2	12.0	19.0	3.2	4.5	12.9	21.7	3.4	5.8	16.7	33.9
		6	2.8	2.8	6.8	7.1	2.6	2.8	6.7	6.9	2.8	3.6	8.7	10.9	3.0	4.0	9.5	12.6	3.2	5.2	12.4	20.3
8	7	2.7	2.7	5.4	4.9	2.4	2.4	5.3	4.7	2.6	3.0	6.1	5.9	2.8	3.4	7.0	7.5	3.0	4.6	9.4	12.5	
	8	2.5	2.5	4.4	3.4	2.7	2.7	4.9	4.1	2.8	2.8	4.3	3.3	2.6	2.7	4.9	4.1	2.8	4.0	7.2	7.8	
	4	4.7	7.1	25.3	37.2	4.9	8.0	28.7	46.5	5.2	9.0	32.3	57.3	5.5	9.4	33.8	62.0	5.7	11.0	39.4	81.3	
	5	4.5	6.6	18.9	22.4	4.7	7.5	21.6	28.1	4.9	8.4	23.8	33.5	5.2	8.9	25.5	37.9	5.4	10.4	29.9	50.0	
9	6	4.2	6.0	14.3	13.7	4.4	6.9	16.4	17.4	4.7	7.8	18.6	21.8	5.0	8.2	19.5	23.7	5.2	9.7	23.0	31.6	
	7	3.9	5.3	11.0	8.8	4.2	6.2	12.7	11.2	4.4	7.1	14.5	14.2	4.7	7.6	15.7	16.2	4.9	9.1	18.6	21.8	
	8	3.7	4.6	8.3	5.4	3.9	5.5	9.9	7.4	4.2	6.5	11.6	9.7	4.4	6.9	12.4	10.9	4.6	8.3	14.9	14.8	
	4	4.4	6.5	23.2	31.9	4.7	7.4	26.6	40.4	4.9	8.3	30.2	50.5	5.2	8.8	31.7	54.9	5.4	10.2	36.5	70.3	
08	5	4.2	5.9	16.8	18.1	4.4	6.8	19.4	23.2	4.7	7.7	22.1	29.3	4.9	8.2	23.3	31.9	5.2	9.7	27.6	42.9	
	6	3.9	5.3	12.6	11.0	4.2	6.1	14.6	14.2	4.4	7.1	16.8	18.1	4.7	7.6	18.1	20.7	4.9	9.0	21.6	28.1	
	7	3.6	4.6	9.3	6.5	3.9	5.5	11.2	9.0	4.2	6.5	13.3	12.1	4.4	6.9	14.1	13.4	4.7	8.4	17.4	19.2	
	8	3.4	3.9	6.9	3.9	3.6	4.8	8.7	5.8	3.9	5.7	10.2	7.6	4.2	6.2	11.1	8.8	4.4	7.7	13.8	12.9	
09	4	4.1	5.8	21.1	26.8	4.4	6.7	23.9	33.2	4.6	7.6	27.4	42.1	4.9	8.1	28.8	46.1	5.1	9.6	34.3	62.6	
	5	3.9	5.2	14.8	14.4	4.1	6.1	17.2	18.8	4.4	7.0	19.9	24.1	4.7	7.5	21.5	27.7	4.9	9.0	25.8	37.9	
	6	3.6	4.5	10.9	8.5	3.9	5.4	12.9	11.3	4.1	6.4	15.3	15.4	4.4	6.8	16.3	17.0	4.6	8.3	20.1	24.6	
	7	3.4	3.9	7.9	4.9	3.6	4.8	9.7	7.0	3.9	5.7	11.8	9.7	4.1	6.1	12.5	10.8	4.4	7.6	15.7	15.9	
10	8	3.1	3.1	5.6	2.7	3.3	4.0	7.2	4.2	3.6	5.0	8.9	6.0	3.9	5.4	9.7	7.0	4.1	6.9	12.4	10.6	
	4	3.7	4.7	17.1	4.6	4.1	6.0	21.7	27.8	4.3	6.9	24.5	34.5	4.6	7.4	26.6	39.8	4.8	8.9	32.0	55.1	
	5	3.6	4.5	12.7	11.0	3.9	5.4	15.5	15.5	4.1	6.3	18.1	20.4	4.4	6.7	19.3	22.6	4.6	8.2	23.4	31.7	
	6	3.3	3.8	9.0	6.1	3.6	4.7	11.1	8.8	3.9	5.6	13.5	12.2	4.1	6.1	14.8	14.3	4.4	7.6	18.1	20.3	
11	7	3.0	3.0	6.2	3.2	3.3	4.0	8.1	5.1	3.6	4.9	10.0	7.2	3.9	5.4	11.0	8.5	4.1	6.9	14.0	13.0	
	8	3.5	3.5	6.2	3.2	3.0	3.2	5.7	2.8	3.3	4.1	7.4	4.3	3.6	4.7	8.4	5.4	3.8	6.1	10.9	8.5	
	4	3.6	4.4	15.8	16.0	3.8	5.3	18.9	21.8	4.1	6.2	22.3	29.0	4.3	6.7	23.7	32.3	4.6	8.1	29.0	45.9	
	5	3.3	3.7	10.7	8.2	3.6	4.6	13.4	11.9	3.8	5.5	15.9	16.1	4.1	6.0	17.0	18.1	4.3	7.5	21.5	27.3	
12	6	3.0	3.0	7.3	4.3	3.3	3.9	9.4	6.5	3.6	4.9	11.7	9.5	3.8	5.3	12.6	10.7	4.1	6.8	16.1	16.5	
	7	3.4	3.4	6.9	3.9	3.0	3.2	6.5	3.5	3.3	4.1	8.5	5.5	3.6	4.6	9.4	6.6	3.8	6.1	12.3	10.4	
	8	3.2	3.2	5.7	2.8	3.4	3.4	5.9	2.9	3.0	3.3	6.0	3.0	3.3	3.8	6.9	3.9	3.6	5.3	9.5	6.7	
	4	3.3	3.6	12.9	11.1	3.5	4.5	16.2	16.6	3.8	5.5	19.9	23.7	4.1	5.9	21.4	26.7	4.3	7.4	26.6	39.2	
13	5	3.1	3.1	9.0	6.0	3.3	3.9	11.3	8.8	3.5	4.8	13.7	12.3	3.8	5.3	15.2	14.7	4.0	6.7	19.1	22.0	
	6	3.3	3.3	8.0	4.9	3.0	3.1	7.5	4.4	3.3	4.0	9.6	6.7	3.5	4.5	10.8	8.1	3.8	6.1	14.6	13.7	
	7	3.1	3.1	6.3	3.3	3.0	3.0	6.9	3.8	3.0	3.2	6.6	3.6	3.3	3.8	7.7	4.6	3.5	5.3	10.7	8.1	
	8	2.8	2.8	5.1	2.3	3.2	3.2	5.6	2.7	2.9	2.9	5.6	2.7	3.0	3.0	5.4	2.5	3.3	4.5	8.1	5.0	



Product that perform...By people who care

PERFORMANCE DATA

CR-CB/ HB/ HBS/ HBZ/ FB

Cooling Capacity (kW) – 3 Rows

Model	Entering Water Temperature °C	Entering / Leaving Water Temperature Difference °C	Entering Air Temperature																				
			DB24°C				DB25°C				DB26°C				DB27°C				DB28°C				
			WB17°C				WB18°C				WB19°C				WB19.5°C				WB21°C				
			Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flow Rate	Water Pressure Drop	
kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa				
08	4	4	5.4	8.3	29.6	56.2	5.7	9.3	33.6	70.0	6.0	10.3	37.0	82.9	6.3	10.9	38.6	89.6	6.5	12.6	45.0	117.4	
		5	5.2	7.7	22.2	33.8	5.4	8.7	24.7	40.8	5.7	9.8	27.9	50.6	6.0	10.3	29.9	57.0	6.3	12.0	34.2	72.3	
		6	4.9	7.1	16.8	20.9	5.2	8.1	19.2	26.4	5.5	9.1	21.8	33.0	5.7	9.7	22.9	35.9	6.0	11.3	27.0	47.7	
		7	4.6	6.4	12.9	13.4	4.9	7.5	15.3	17.9	5.2	8.5	17.5	22.5	5.5	9.0	18.4	24.5	5.8	10.7	21.8	32.9	
	5	8	4.3	5.7	10.1	8.8	4.6	6.7	12.1	11.9	4.9	7.8	13.9	15.1	5.2	8.4	15.0	17.3	5.5	10.0	17.9	23.4	
		4	5.1	7.6	27.2	48.1	5.4	8.6	31.1	60.8	5.7	9.6	34.5	73.0	5.9	10.1	36.2	79.4	6.2	11.8	42.6	105.6	
		5	4.8	6.9	19.8	27.5	5.1	7.9	22.7	35.1	5.4	9.0	25.9	44.1	5.7	9.5	27.3	48.2	6.0	11.2	32.2	64.6	
		6	4.6	6.3	15.2	17.4	4.9	7.3	17.6	22.5	5.2	8.4	20.2	28.5	5.4	8.9	21.3	31.2	5.7	10.6	25.3	42.3	
	6	7	4.3	5.6	11.6	11.0	4.6	6.6	13.6	14.4	4.9	7.7	15.7	18.4	5.2	8.2	17.0	21.1	5.4	9.9	20.4	29.0	
		8	4.0	4.8	8.7	6.7	4.3	5.9	10.6	9.4	4.6	6.9	12.3	12.2	4.9	7.5	13.4	14.1	5.1	9.1	16.2	19.6	
		4	4.8	6.8	24.2	38.8	5.1	7.8	28.0	50.0	5.3	8.9	32.0	63.4	5.6	9.4	33.7	69.4	5.9	11.0	39.2	90.5	
		5	4.5	6.2	17.8	22.7	4.8	7.2	20.7	29.7	5.1	8.2	33.3	36.5	5.4	8.8	25.2	41.7	5.7	10.4	30.1	57.1	
	7	6	4.2	5.5	13.2	13.6	4.5	6.5	15.5	18.0	4.8	7.6	18.0	23.3	5.1	8.1	19.5	26.8	5.4	9.8	23.6	37.1	
		7	3.9	4.7	9.7	8.0	4.2	5.8	11.8	11.3	4.5	6.8	13.9	14.8	4.8	7.4	15.1	17.2	5.1	9.0	18.4	24.1	
		8	3.6	3.9	6.9	4.5	3.9	5.0	8.9	6.9	4.2	6.1	10.8	9.6	4.6	6.6	11.8	11.3	4.9	8.3	14.9	16.8	
		4	4.4	6.0	21.7	31.8	4.7	7.0	24.8	40.4	5.0	8.0	28.7	52.1	5.3	8.6	31.1	59.9	5.6	10.2	36.6	79.6	
	8	5	4.2	5.4	15.4	17.5	4.5	6.4	18.2	23.5	4.8	7.4	21.3	30.8	5.1	7.9	22.6	34.2	5.3	9.6	27.4	47.9	
		6	3.9	4.7	11.2	10.2	4.2	5.7	13.5	14.0	4.5	6.7	15.9	18.6	4.8	7.3	17.4	21.6	5.1	8.9	21.3	30.8	
		7	3.6	3.8	7.9	5.6	3.9	4.9	10.1	8.6	4.2	5.9	12.1	11.6	4.5	6.5	13.3	13.6	4.8	8.2	16.9	20.6	
		8	3.4	3.3	6.3	3.9	3.6	4.0	7.2	4.8	3.9	5.2	9.3	7.4	4.2	5.7	10.3	8.8	4.5	7.4	13.2	13.6	
	9	4	4.1	5.2	18.6	24.2	4.4	6.2	22.2	33.0	4.7	7.3	26.1	43.7	5.0	7.8	27.8	48.8	5.3	9.4	33.9	69.2	
		5	3.8	4.5	13.0	13.0	4.1	5.5	15.7	18.1	4.5	6.6	19.1	25.4	4.7	7.1	20.4	28.5	5.0	8.8	25.2	41.2	
		6	3.6	3.8	9.0	7.0	3.9	4.8	11.5	10.5	4.2	5.9	14.1	15.0	4.5	6.4	15.2	17.0	4.8	8.1	19.4	26.1	
		7	3.9	3.9	7.5	5.0	3.5	3.9	8.0	5.7	3.9	5.1	10.3	8.8	4.2	5.6	11.5	10.5	4.5	7.3	14.9	16.5	
	10	8	3.7	3.7	6.6	4.2	3.3	3.3	6.0	3.5	3.6	4.2	7.6	5.2	3.9	4.8	8.7	6.6	4.2	6.5	11.6	10.7	
		4	3.8	4.4	15.6	17.7	4.1	5.4	19.5	26.1	4.4	6.4	22.8	34.3	4.7	6.9	24.5	38.8	5.0	8.6	31.1	59.1	
		5	3.5	3.6	10.4	8.8	3.8	4.7	13.6	14.0	4.1	5.7	16.1	18.8	4.4	6.2	17.8	22.3	4.7	7.9	22.4	33.3	
		6	3.9	3.9	9.1	7.1	3.5	3.9	9.2	7.2	3.8	4.9	11.7	10.8	4.2	5.5	13.3	13.5	4.4	7.2	17.1	20.8	
	10	4	7	3.6	3.6	7.5	5.0	3.3	3.3	7.0	4.5	3.5	4.1	8.4	6.1	3.9	4.7	9.7	7.8	4.2	6.4	13.3	13.4
			8	3.4	3.4	6.0	3.5	3.7	3.7	6.7	4.2	3.2	3.2	5.8	3.2	3.5	3.8	6.8	4.3	3.9	5.5	9.9	8.1
			4	6.4	9.9	35.4	79.9	6.8	11.1	40.2	99.7	7.1	12.4	44.2	118.1	7.4	13.0	46.2	127.8	7.7	15.0	53.9	167.9
			5	6.1	9.2	26.5	47.9	6.4	10.3	29.5	57.8	6.8	11.6	33.4	71.8	7.1	12.2	34.9	77.9	7.4	14.3	40.9	103.1
5		6	5.8	8.4	20.0	29.4	6.1	9.6	22.9	37.3	6.5	10.9	26.1	46.7	6.8	11.5	27.4	50.8	7.1	13.5	32.3	67.8	
		7	5.4	7.6	15.4	18.7	5.8	8.9	18.3	25.1	6.1	10.1	20.6	31.0	6.5	10.7	22.0	34.6	6.8	12.7	26.1	46.6	
		8	5.1	6.7	12.0	12.2	5.5	8.0	14.4	16.6	5.8	9.2	16.5	21.2	6.2	9.9	17.9	24.2	6.5	11.9	21.4	33.0	
		4	6.0	9.0	31.8	65.6	6.4	10.2	36.4	83.2	6.7	11.5	41.3	104.0	7.1	12.1	43.3	113.2	7.3	14.1	49.8	145.0	
6		5	5.7	8.2	23.6	38.8	6.1	9.5	27.2	49.7	6.4	10.7	31.0	62.7	6.8	11.3	32.6	68.4	7.1	13.4	38.6	92.0	
		6	5.4	7.4	17.6	23.4	5.7	8.6	20.5	30.4	6.1	9.9	23.5	38.7	6.4	10.6	25.4	44.2	6.8	12.6	30.3	60.1	
		7	5.0	6.6	13.4	14.6	5.4	7.9	16.1	20.1	5.8	9.1	18.7	25.9	6.1	9.7	19.7	28.5	6.5	11.8	24.3	41.0	
		8	4.7	5.7	10.3	9.3	5.1	7.0	12.6	13.1	5.4	8.2	14.7	17.1	5.8	8.9	16.0	19.8	6.1	10.8	19.4	27.6	
7		4	5.7	8.1	28.9	55.0	6.0	9.3	33.4	71.1	6.3	10.6	38.3	90.3	6.7	11.2	40.3	99.0	7.0	13.1	46.9	129.1	
		5	5.3	7.3	20.7	30.7	5.7	8.6	24.8	42.0	6.0	9.8	27.9	51.7	6.4	10.4	29.4	56.9	6.7	12.4	35.3	78.1	
		6	5.0	6.4	15.3	18.2	5.4	7.7	18.5	25.3	5.7	9.0	21.5	32.9	6.1	9.6	22.8	36.3	6.4	11.6	27.5	50.5	
		7	4.7	5.6	11.5	11.1	5.0	6.9	14.1	15.8	5.4	8.1	16.5	20.8	5.7	8.8	18.0	24.1	6.1	10.8	22.0	34.1	
8		8	4.3	4.6	8.1	6.2	4.7	5.9	10.5	9.5	5.0	7.2	12.8	13.4	5.4	7.9	14.1	15.7	5.7	9.9	17.8	23.6	
		4	5.3	7.2	25.9	45.0	5.6	8.3	29.7	57.2	6.0	9.6	34.4	74.1	6.3	10.2	36.4	81.9	6.6	12.2	43.8	113.6	
		5	5.0	6.4	18.3	24.7	5.3	7.6	21.7	33.2	5.7	8.8	25.4	43.6	6.0	9.4	27.0	48.4	6.3	11.4	32.7	68.1	
		6	4.6	5.5	13.0	13.6	5.0	6.7	16.0	19.6	5.3	7.9	18.9	26.2	5.7	8.6	20.7	30.5	6.0	10.6	25.4	43.6	
9		7	4.2	4.5	9.3	7.7	4.6	5.7	11.7	11.4	5.0	7.0	14.4	16.2	5.4	7.7	15.8	19.1	5.7	9.8	20.1	29.0	
		8	4.1	4.0	7.8	5.7	4.3	4.8	8.5	6.6	4.6	6.1	11.0	10.2	5.0	6.8	12.2	12.2	5.4	8.8	15.8	19.0	
		4	4.9	6.2	22.2	34.2	5.2	7.4	26.5	46.8	5.6	8.6	30.5	59.6	5.9	9.2	33.2	69.3	6.2	11.2	40.5	98.6	
		5	4.5	5.3	15.1	17.4	4.9	6.5	18.8	25.5	5.3	7.8	22.3	34.5	5.6	8.5	24.4	40.4	5.9	10.4	30.1	58.5	
10		6	4.2	4.5	10.7	9.7	4.6	5.7	13.6	14.7	4.9	6.9	16.4	20.2	5.3	7.6	18.1	24.0	5.6	9.5	22.6	35.4	
		7	4.1	4.1	9.2	7.5	4.2	4.6	9.4	7.8	4.6	6.0	12.3	12.2	5.0	6.6	13.6	14.7	5.3	8.7	17.8	23.2	
		8	4.4	4.4	8.0	5.9	4.6	4.6	7.4	5.2	4.2	5.0	8.9	7.1	4.6	5.6	10.0	8.7	5.0	7.7	13.7	14.9	
		4	4.5	5.2	18.6	24.9	4.8	6.4	22.8	35.5	5.2	7.6	27.3	48.6	5.5	8.2	29.2	55.0	5.9	10.3	37.2	84.2	
10		5	4.2	4.3	12.3	12.2	4.5	5.5	15.8	18.8	4.9	6.7	19.2	26.4	5.2	7.4	21.2	31.5	5.6	9.4	26.8	47.2	
		6	4.6	4.6	11.1	10.3	4.2	4.6	10.9	9.9	4.5	5.8	13.9	15.1	4.9	6.5	15.5	18.2	5.3	8.5	20.4	29.3	
		7	4.3	4.3	8.8	6.9	4.6	4.6	8.7	6.7	4.2	4.8	9.9	8.4	4.6	5.5	11.2	10.3	4.9	7.6	15.4	18.1	
		8	4.0	4.0	7.2	5.0	4.5	4.5	8.0	5.9	3.9	3.9	7.0	4.7	4.2	4.4	8.0	5.9	4.6	6.6	11.8	11.3	



Product that perform...By people who care

PERFORMANCE DATA

CR-CB/ HB/ HBS/ HBZ/ FB Cooling Capacity (kW) – 3 Rows

Model	Entering Water Temperature -°C	Entering / Leaving Water Temperature Difference -°C	Entering Air Temperature																				
			DB24°C				DB25°C				DB26°C				DB27°C				DB28°C				
			WB17°C				WB18°C				WB19°C				WB19.5°C				WB21°C				
			Sensible Cooling	Total Cooling	Water Flowrate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flowrate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flowrate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flowrate	Water Pressure Drop	Sensible Cooling	Total Cooling	Water Flowrate	Water Pressure Drop	
kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa	kW	kW	l/min	kPa				
12	4	4	8.0	11.6	41.6	47.1	8.5	13.0	46.6	36.0	8.9	14.5	52.0	67.0	9.4	15.2	54.5	72.5	9.9	17.6	63.1	91.9	
		5	7.6	10.8	31.0	29.5	8.1	12.2	35.0	23.9	8.6	13.7	39.3	43.1	9.0	14.4	41.3	46.4	9.5	16.8	48.2	59.3	
		6	7.0	9.3	22.2	17.4	7.7	11.3	27.0	14.7	8.2	12.8	30.6	28.9	8.6	13.5	32.3	31.8	9.1	15.9	38.0	41.1	
		7	6.6	8.6	17.6	12.1	7.0	9.8	20.1	10.5	7.7	11.9	24.4	19.8	8.2	12.6	25.8	22.3	8.7	15.0	30.7	28.9	
	5	8	6.3	7.9	14.2	8.6	6.4	9.1	16.3	49.9	7.1	10.4	18.6	12.9	7.5	11.1	19.9	14.7	8.3	14.1	25.3	21.3	
		4	7.5	10.6	38.0	40.5	8.0	12.0	43.0	31.2	8.5	13.4	48.0	60.1	8.9	14.2	50.9	65.4	9.4	16.5	59.1	83.3	
		5	6.9	9.1	26.1	22.3	7.6	11.1	31.8	18.3	8.1	12.6	36.1	37.9	8.5	13.4	38.4	41.1	9.0	15.7	45.0	53.4	
		6	6.5	8.4	20.1	14.7	6.9	9.6	22.9	12.5	7.7	11.7	28.0	25.0	8.1	12.5	29.9	27.8	8.6	14.8	35.4	36.6	
	6	7	6.2	7.7	15.8	10.1	6.6	8.9	18.2	9.0	7.0	10.2	20.9	15.5	7.4	10.9	22.3	17.4	8.2	13.9	28.5	25.5	
		8	5.9	7.1	12.7	7.2	6.3	8.1	14.5	43.1	6.7	9.4	16.8	10.9	7.1	10.0	17.9	12.5	7.8	12.9	23.1	18.3	
		4	6.8	8.9	31.9	30.6	7.5	10.9	39.1	23.9	8.0	12.4	44.4	52.7	8.4	13.1	46.9	57.8	8.9	15.5	55.5	74.9	
		5	6.4	8.2	23.5	18.8	6.8	9.4	26.9	15.5	7.6	11.5	33.0	33.0	8.1	12.3	35.3	36.0	8.5	14.6	41.9	47.8	
	7	6	6.1	7.5	17.9	12.1	6.5	8.7	20.8	10.5	6.9	10.0	23.9	19.3	7.6	11.2	26.8	23.4	8.1	13.7	32.7	32.4	
		7	5.9	6.9	14.1	8.2	6.2	7.9	16.2	7.2	6.6	9.2	18.8	13.3	7.0	9.8	20.1	14.7	7.7	12.7	26.0	22.3	
		8	5.6	6.3	11.3	5.9	5.9	7.2	12.9	35.4	6.2	8.4	15.1	9.3	6.7	9.1	16.3	10.5	7.3	11.7	21.0	15.5	
		4	6.3	7.9	28.3	25.5	6.9	9.7	34.8	19.8	7.5	11.3	40.5	45.1	7.9	12.0	43.0	49.9	8.4	14.4	51.6	67.0	
	8	5	6.0	7.2	20.6	15.5	6.4	8.4	24.1	12.9	7.0	10.3	29.5	27.2	7.6	11.1	31.8	31.2	8.0	13.5	38.7	42.4	
		6	5.8	6.6	15.8	10.1	6.1	7.7	18.4	8.6	6.5	8.9	21.3	16.5	6.9	9.6	22.9	18.3	7.6	12.6	30.1	27.8	
		7	5.5	6.1	12.5	6.9	5.8	7.0	14.3	5.9	6.2	8.2	16.8	10.9	6.6	8.8	18.0	12.5	7.2	11.5	23.5	19.3	
		8	5.4	5.6	10.0	4.7	5.6	6.4	11.5	27.2	5.9	7.4	13.3	7.5	6.3	8.1	14.5	8.6	6.6	10.0	17.9	12.5	
	9	4	5.9	7.0	25.1	20.8	6.3	8.2	29.4	16.5	7.0	10.2	36.6	38.5	7.5	10.9	39.1	43.1	7.9	13.3	47.7	58.6	
		5	5.7	6.4	18.3	12.5	6.0	7.4	21.2	10.5	6.4	8.7	24.9	20.8	6.8	9.4	26.9	23.4	7.5	12.3	35.3	36.6	
		6	5.4	5.8	13.9	8.2	5.7	6.8	16.2	7.2	6.1	7.9	18.9	13.3	6.5	8.6	20.5	15.1	7.1	11.3	27.0	23.9	
		7	5.3	5.4	11.1	5.6	5.5	6.2	12.7	5.0	5.8	7.2	14.7	9.0	6.2	7.9	16.2	10.5	6.5	9.8	20.1	14.7	
	10	8	4.9	4.9	8.8	3.9	5.3	5.7	10.2	21.8	5.5	6.6	11.8	6.2	6.0	7.2	12.9	7.2	6.2	8.9	15.9	10.1	
		4	5.6	6.1	21.9	16.9	5.9	7.2	25.8	13.3	6.3	8.5	30.5	28.3	6.7	9.1	32.6	32.4	7.4	12.1	43.4	50.6	
		5	5.4	5.6	16.1	10.1	5.7	6.5	18.6	8.6	6.0	7.7	22.1	16.9	6.4	8.4	24.1	19.3	7.1	11.1	31.8	31.2	
		6	5.1	5.1	12.2	6.9	5.4	5.9	14.1	5.9	5.7	7.0	16.7	10.9	6.1	7.6	18.2	12.5	6.4	9.6	22.9	18.3	
	11	7	4.7	4.7	9.6	4.7	5.2	5.4	11.1	4.1	5.4	6.3	12.9	7.2	5.9	6.9	14.1	8.6	6.1	8.7	17.8	12.1	
		8	4.3	4.3	7.7	3.3	5.0	5.0	9.0	72.5	5.2	5.8	10.4	5.0	5.7	6.4	11.5	5.9	5.8	7.9	14.2	8.2	
		4	9.3	13.6	48.7	68.7	9.9	15.2	54.5	52.4	10.5	16.9	60.6	96.9	11.0	17.7	63.4	104.8	11.5	20.5	73.5	131.9	
		5	8.9	12.7	36.4	42.8	9.5	14.2	40.7	34.6	10.0	16.0	45.9	62.8	10.5	16.9	48.4	67.8	11.1	19.6	56.2	86.5	
	14	4	6	5.9	11.0	26.3	25.8	9.0	13.3	31.8	21.8	9.6	15.1	36.1	42.1	10.1	15.9	38.0	46.4	10.6	18.7	44.7	59.5
			7	7.8	10.2	20.9	17.6	8.3	11.7	24.0	15.6	9.1	14.0	28.7	29.4	9.6	14.9	30.5	32.6	10.2	17.7	36.2	42.8
			8	7.4	9.4	16.8	12.7	7.9	10.8	19.4	72.1	8.3	12.3	22.0	19.1	8.8	13.1	23.5	21.3	9.7	16.6	29.7	31.3
			4	8.8	12.4	44.4	59.5	9.3	14.0	50.2	44.9	9.9	15.7	56.3	86.5	10.4	16.6	59.5	94.0	11.0	19.3	69.2	120.1
		5	5	8.1	10.8	31.0	33.3	8.9	13.1	37.6	27.0	9.5	14.8	42.4	54.8	10.0	15.6	44.7	60.3	10.5	18.4	52.7	78.3
			6	7.6	9.6	22.9	21.8	8.1	11.4	27.2	18.6	9.0	13.8	33.0	36.6	9.6	14.7	35.1	40.7	10.1	17.4	41.6	53.2
			7	7.3	9.1	18.6	14.6	7.8	10.5	21.5	13.2	8.2	12.1	24.8	22.9	9.0	13.5	27.6	27.6	9.6	16.4	33.6	37.9
			8	7.0	8.4	15.1	10.5	7.4	9.7	17.4	62.8	7.8	11.1	19.9	16.5	8.4	11.9	21.3	18.6	9.1	15.3	27.4	27.0
		6	4	8.0	10.4	37.3	44.9	8.8	12.8	45.9	34.6	9.3	14.5	52.0	76.5	9.8	15.4	55.2	83.7	10.4	18.0	64.5	107.8
			5	7.5	9.6	27.5	27.6	8.0	11.1	31.8	22.9	8.9	13.5	38.7	47.9	9.4	14.4	41.3	52.4	10.0	17.1	49.0	69.5
			6	7.2	11.2	26.8	18.1	7.6	10.2	24.4	15.6	8.4	12.4	29.6	30.7	9.0	13.4	32.0	35.2	9.5	16.1	38.5	47.1
			7	6.9	8.1	16.6	12.3	7.3	9.4	19.2	11.0	7.7	10.8	22.1	19.6	8.2	11.7	24.0	21.8	9.1	15.0	30.7	33.3
		7	8	6.6	7.4	13.3	8.5	6.9	8.6	15.4	51.7	7.4	10.0	17.9	13.6	7.9	10.8	19.4	15.6	8.6	13.9	24.9	23.5
			4	7.4	9.3	33.3	37.2	8.1	11.4	40.9	28.8	8.7	13.2	47.3	66.1	9.3	14.1	50.5	73.0	9.8	16.8	60.2	96.9
			5	7.1	8.5	24.4	22.9	7.5	9.9	28.4	19.1	8.3	12.2	35.0	40.7	8.8	13.1	37.6	44.9	9.4	15.8	45.3	61.2
			6	6.8	7.8	18.6	15.1	7.1	9.1	21.7	12.7	7.6	10.6	25.3	24.1	8.1	11.4	27.2	27.0	8.9	14.8	35.4	41.4
8		7	6.5	7.2	14.7	10.1	6.8	8.3	17.0	8.9	7.2	9.7	19.9	16.0	7.7	10.5	21.5	18.6	8.5	13.7	28.1	28.2	
		8	6.3	6.6	11.8	7.0	6.6	7.6	13.6	39.3	6.7	8.4	15.1	10.5	7.1	9.2	16.5	12.3	7.5	11.4	20.4	17.0	
		4	6.9	8.2	29.4	30.7	7.4	9.6	34.4	24.1	8.2	11.9	42.6	55.5	8.7	12.8	45.9	62.0	9.3	15.5	55.5	84.6	
		5	6.6	7.5	21.5	18.6	7.0	8.8	25.2	15.6	7.5	10.3	29.5	30.7	8.0	11.1	31.8	34.6	8.8	14.5	41.6	53.2	
9		6	6.4	6.9	16.5	12.3	6.7	8.0	19.1	10.5	7.1	9.4	22.5	19.6	7.6	10.2	24.4	22.4	8.4	13.4	32.0	35.2	
		7	6.2	6.4	13.1	8.1	6.4	7.4	15.2	7.4	6.8	8.6	17.6	13.2	7.3	9.3	19.0	15.1	7.6	11.6	23.8	21.8	
		8	5.8	5.8	10.4	6.0	6.2	6.7	12.0	30.1	6.5	7.8	14.0	9.3	7.0	8.5	15.2	10.5	7.3	10.6	19.0	15.1	
		4	6.3	6.9	24.7	22.9	6.7	8.1	29.0	18.1	7.1	9.5</											

PERFORMANCE DATA

CR-CB/ HB/ HBS/ HBZ

Heating Capacity (kW) – 1 Row

Model	Water Flowrate (l/min)	Water Pressure Drop (kPa)	Entering Air Temperature DB 21°C				
			Entering Water Temperature				
			45°C	50°C	55°C	60°C	65°C
02	3.4	6.6	1.2	1.4	1.7	1.9	2.2
03	4.7	13.2	1.6	1.9	2.3	2.6	2.9
04	6.0	23.7	2.0	2.4	2.8	3.3	3.7
05	5.9	3.7	2.2	2.6	3.1	3.6	4.1
06	7.3	6.2	2.6	3.2	3.7	4.3	4.9
07	9.1	10.2	3.1	3.8	4.5	5.2	5.9
08	11.0	17.0	3.7	4.5	5.3	6.1	6.9
10	12.8	23.1	4.2	5.1	6.0	6.9	7.9
12	14.6	11.6	5.0	6.1	7.2	8.3	9.4
14	17.5	17.9	5.9	7.2	8.4	9.7	11.0

Notes: 1) DB= Dry Bulb temperature, WB= Wet Bulb temperature.

2) Capacity is based on high speed airflow, refer to Page 23: Total Capacity Correction Factor for other airflow.

3) For other entering air temperature, capacity is corrected as below:

eg. CR 14-1 Row fan coil, entering water temperature 60°C, water flowrate 14 l/min, capacity @ entering air temperature 21°C is 9.7kW (from table). Each 1°C entering air temperature difference the resulted capacity is 9.7/(60-21) = 0.249kW/°C. If entering air temperature is 18°C, the corrected capacity is 0.249 x (60-18) = 10.4kW.

Heating Capacity (kW) – 2 Rows

Model	Water Flowrate (l/min)	Water Pressure Drop (kPa)	Entering Air Temperature DB 21°C				
			Entering Water Temperature				
			45°C	50°C	55°C	60°C	65°C
02	5.0	3.8	1.9	2.3	2.6	3.0	3.5
	6.3	5.7	1.9	2.3	2.8	3.2	3.6
	6.9	6.7	2.0	2.4	2.8	3.2	3.6
	7.3	7.4	2.0	2.4	2.8	3.2	3.7
	7.9	8.5	2.0	2.4	2.8	3.3	3.7
03	8.3	9.3	2.0	2.4	2.9	3.3	3.7
	7.3	8.4	2.6	3.2	3.7	4.3	4.8
	8.9	12.0	2.7	3.3	3.8	4.4	5.0
	10.0	14.7	2.7	3.3	3.9	4.5	5.1
	11.0	17.5	2.8	3.4	4.0	4.5	5.1
	12.6	22.3	2.8	3.4	4.0	4.6	5.2
	13.7	25.9	2.8	3.4	4.1	4.7	5.3
04	9.3	14.9	3.3	4.0	4.7	5.4	6.1
	10.6	18.8	3.4	4.1	4.8	5.5	6.2
	11.7	22.4	3.4	4.1	4.9	5.6	6.3
	12.8	26.3	3.5	4.2	4.9	5.6	6.4
	14.0	31.0	3.5	4.2	5.0	5.7	6.5
	16.3	40.7	3.6	4.3	5.1	5.8	6.6
05	11.6	24.9	4.1	4.9	5.8	6.7	7.5
	13.6	33.2	4.2	5.1	6.0	6.9	7.7
	14.8	38.6	4.2	5.1	6.0	6.9	7.8
	16.3	45.9	4.3	5.2	6.1	7.0	7.9
	17.8	53.8	4.4	5.3	6.2	7.1	8.0
	20.4	68.9	4.4	5.3	6.3	7.2	8.2
06	13.0	11.1	4.7	5.7	6.7	7.7	8.7
	15.9	15.9	4.8	5.9	6.9	7.9	9.0
	17.8	19.5	4.9	6.0	7.0	8.1	9.1
	19.3	22.5	5.0	6.0	7.1	8.2	9.2
	22.7	30.1	5.1	6.2	7.2	8.3	9.4
	24.2	33.8	5.1	6.2	7.3	8.4	9.5
07	16.0	18.2	5.7	6.9	8.1	9.3	10.5
	19.7	26.3	5.9	7.1	8.4	9.6	10.9
	21.6	31.1	6.0	7.2	8.5	9.7	11.0
	23.8	37.0	6.0	7.3	8.6	9.9	11.2
	27.6	48.3	6.1	7.4	8.7	10.0	11.3
	29.5	54.4	6.2	7.5	8.8	10.1	11.4
08	17.1	24.2	6.3	7.7	9.0	10.4	11.7
	22.7	40.2	6.6	8.0	9.4	10.8	12.3
	25.0	47.8	6.7	8.1	9.6	11.0	12.4
	27.3	56.0	6.8	8.2	9.7	11.1	12.5
	29.5	64.3	6.9	8.3	9.7	11.2	12.7
	31.8	32.9	6.9	8.3	9.8	11.2	12.7
10	20.1	15.1	7.3	8.9	10.4	12.0	13.6
	26.5	24.7	7.7	9.3	11.0	12.6	14.2
	29.5	29.9	7.8	9.5	11.1	12.8	14.5
	32.1	34.7	7.9	9.6	11.3	12.9	14.6
	34.8	40.2	8.0	9.7	11.4	13.1	14.8
	37.1	45.1	8.1	9.8	11.5	13.2	14.9
12	25.7	28.6	9.1	11.0	13.0	14.9	16.9
	26.9	31.0	9.2	11.1	13.1	15.0	17.0
	29.5	36.5	9.3	11.3	13.3	15.3	17.3
	32.2	42.7	9.5	11.5	13.5	15.5	17.5
	34.5	48.3	9.6	11.6	13.6	15.6	17.7
	37.0	54.8	9.6	11.7	13.7	15.8	17.8
14	30.9	44.5	10.6	12.9	15.1	17.4	19.7
	32.2	9.2	10.7	12.4	14.6	16.8	19.0
	35.2	56.2	10.4	12.6	14.8	17.0	19.2
	38.2	65.1	10.5	13.3	15.6	18.0	20.3
	41.2	74.5	11.1	13.5	15.8	18.2	20.5
	43.9	83.6	11.2	13.6	15.9	18.3	20.7

Notes: 1) DB= Dry Bulb temperature, WB= Wet Bulb temperature.

2) Capacity is based on high speed airflow, refer to Page 23: Total Capacity Correction Factor for other airflow.

3) For other entering air temperature, capacity is corrected as below:

eg. CR 14-2 Rows fan coil, entering water temperature 60°C, water flowrate 30.9 l/min, capacity @ entering air temperature 21°C is 17.4kW (from table). Each 1°C entering air temperature difference the resulted capacity is 17.4/(60-21)=0.446 kW/°C. If entering air temperature is 18°C, the corrected capacity is 0.446 x (60-18) = 18.7kW.

PERFORMANCE DATA

CR-CB/ HB/ HBS/ HBZ

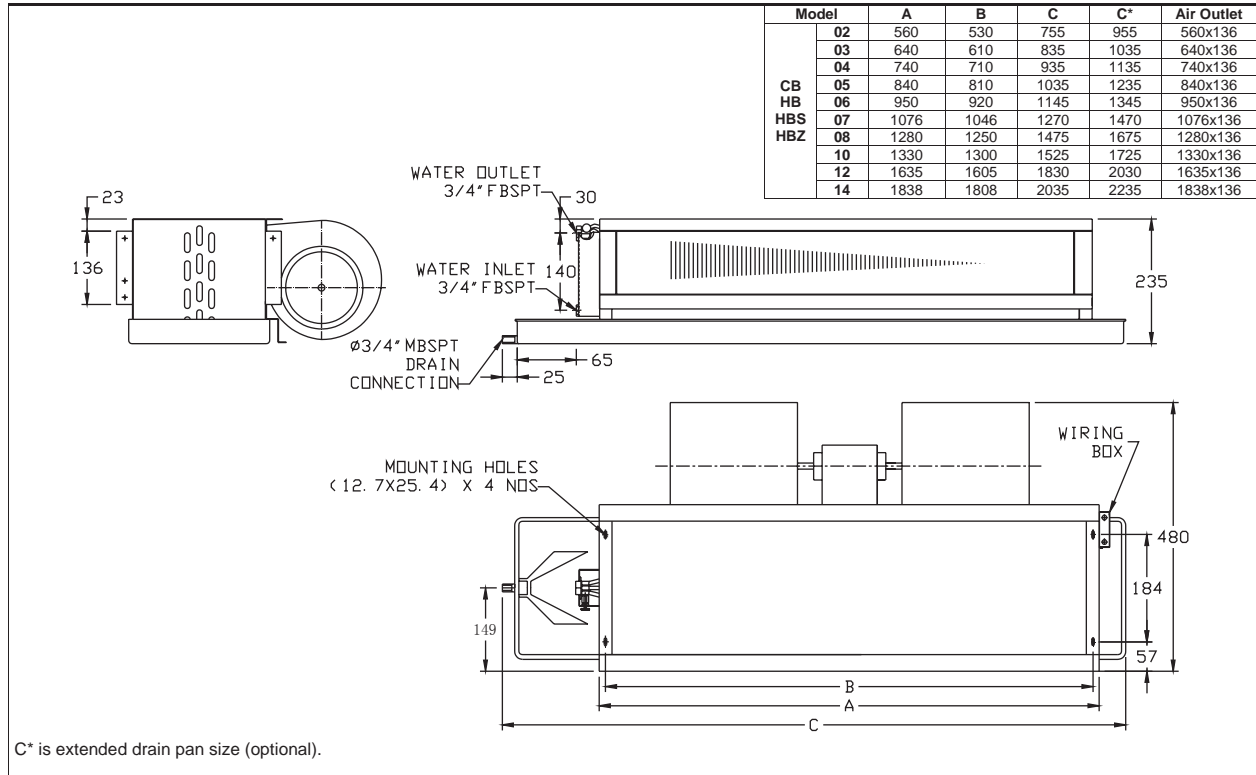
Heating Capacity (kW) – 3 Rows

Model	Water Flowrate (l/min)	Water Pressure Drop (kPa)	Entering Air temperature DB 21°C				
			Entering Water Temperature				
			45°C	50°C	55°C	60°C	65°C
02	6.5	9.0	2.2	2.7	3.1	3.6	4.1
	8.9	15.8	2.3	2.8	3.3	3.7	4.2
	9.6	18.1	2.3	2.8	3.3	3.8	4.3
	10.6	21.6	2.3	2.8	3.3	3.8	4.3
	11.9	26.6	2.4	2.8	3.3	3.8	4.3
	12.9	30.8	2.4	2.9	3.4	3.9	4.4
03	9.0	18.3	3.1	3.8	4.4	5.1	5.7
	9.6	20.5	3.1	3.8	4.5	5.1	5.8
	10.3	23.3	3.2	3.8	4.5	5.2	5.8
	11.1	26.6	3.2	3.9	4.5	5.2	5.9
	11.8	29.7	3.2	3.9	4.6	5.3	5.9
	12.9	34.9	3.3	3.9	4.6	5.3	6.0
04	11.6	33.1	3.9	4.8	5.6	6.4	7.3
	12.1	35.7	4.0	4.8	5.6	6.5	7.3
	12.8	39.5	4.0	4.8	5.7	6.5	7.4
	14.0	46.4	4.0	4.9	5.7	6.6	7.4
	14.7	50.7	4.1	4.9	5.8	6.6	7.5
	15.9	58.4	4.1	5.0	5.8	6.7	7.5
05	13.9	16.7	4.8	5.9	6.9	7.9	8.9
	15.5	20.3	4.9	5.9	7.0	8.0	9.1
	18.3	27.3	5.0	6.1	7.1	8.2	9.3
	20.8	34.3	5.1	6.2	7.2	8.3	9.4
	22.3	38.9	5.1	6.2	7.3	8.4	9.4
	24.2	45.1	5.2	6.2	7.3	8.4	9.5
06	15.7	23.4	5.7	6.9	8.0	9.3	10.5
	17.5	28.4	5.8	7.0	8.2	9.4	10.6
	19.3	33.8	5.8	7.1	8.3	9.5	10.8
	21.2	40.0	5.9	7.1	8.4	9.6	10.9
	22.7	45.2	5.9	7.2	8.4	9.7	11.0
	24.2	50.7	6.0	7.2	8.5	9.8	11.0
07	19.3	17.1	6.8	8.2	9.7	11.1	12.6
	20.5	19.0	6.9	8.3	9.8	11.2	12.7
	23.0	23.4	7.0	8.4	9.9	11.4	12.9
	25.7	28.5	7.1	8.6	10.1	11.6	13.1
	26.5	30.1	7.1	8.6	10.1	11.6	13.1
	28.4	34.1	7.2	8.7	10.2	11.7	13.2
08	22.6	26.8	7.6	9.3	10.9	12.5	14.1
	23.8	29.4	7.7	9.3	10.9	12.6	14.2
	25.3	32.8	7.8	9.4	11.0	12.7	14.3
	27.3	37.6	7.8	9.5	11.1	12.8	14.5
	29.5	43.2	7.9	9.6	11.2	12.9	14.6
	31.8	49.4	8.0	9.6	11.3	13.0	14.7
10	27.0	38.2	9.1	11.0	12.9	14.9	16.8
	28.4	41.9	9.2	11.1	13.0	15.0	16.9
	31.4	50.1	9.3	11.2	13.2	15.2	17.1
	34.0	57.8	9.4	11.4	13.3	15.3	17.3
	36.7	66.3	9.5	11.5	13.4	15.4	17.4
	39.0	74.0	9.5	11.5	13.5	15.5	17.6
12	31.7	20.2	10.9	13.3	15.6	17.9	20.2
	34.8	23.8	11.1	13.4	15.8	18.1	20.5
	38.2	28.1	11.2	13.6	16.0	18.4	20.8
	41.3	32.3	11.3	13.7	16.1	18.5	20.9
	44.3	36.6	11.4	13.8	16.3	18.7	21.1
	47.3	41.1	11.5	13.9	16.4	18.8	21.3
14	37.8	30.9	12.8	15.5	18.2	20.9	23.6
	41.6	36.7	12.9	15.7	18.4	21.1	23.9
	45.4	42.9	13.1	15.8	18.6	21.4	24.2
	49.2	49.5	13.2	16.0	18.8	21.6	24.4
	52.6	55.8	13.3	16.1	18.9	21.7	24.5
	56.0	62.4	13.4	16.2	19.0	21.9	24.7

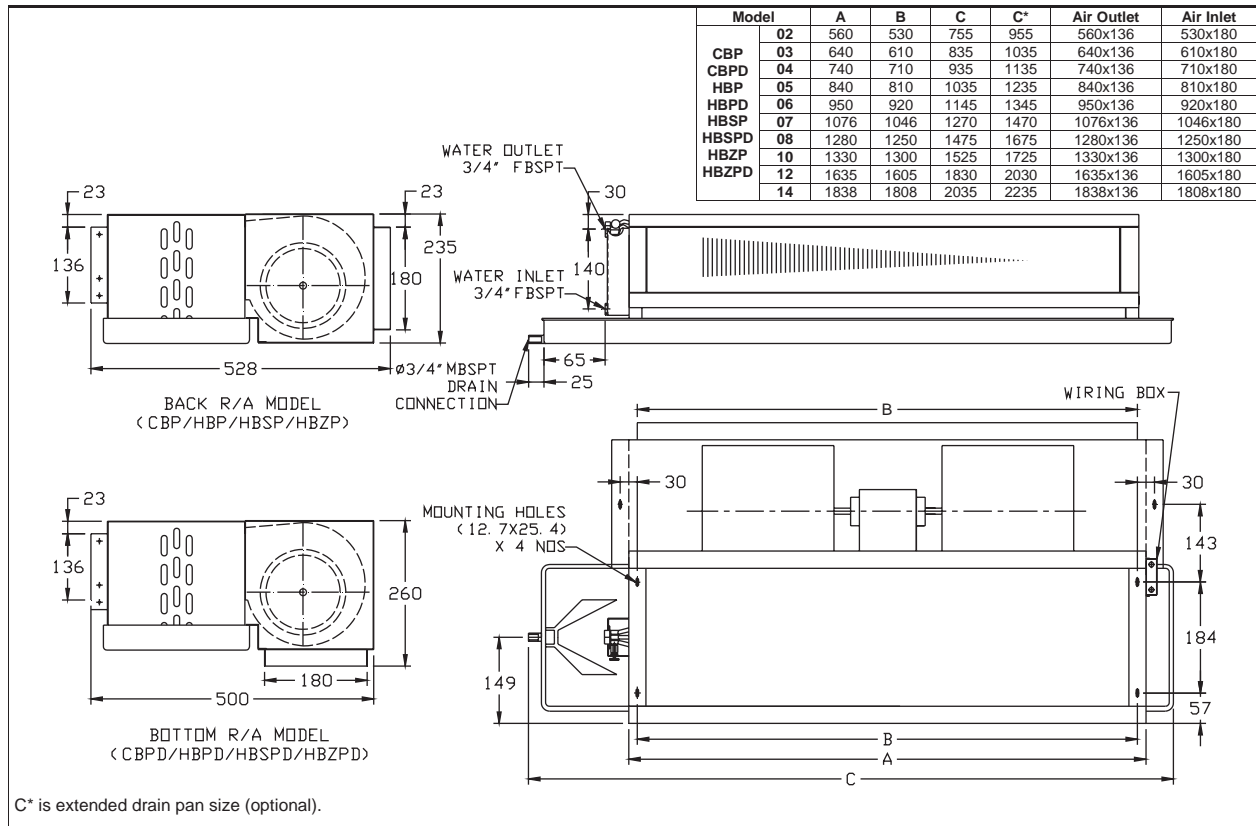
- Notes: 1.) DB= Dry Bulb temperature, WB= Wet Bulb temperature.
 2.) Capacity is based on high speed airflow, refer to Page 23: Total Capacity Correction Factor for other airflow.
 3.) For other entering air temperature, capacity is corrected as below:
 eg. CR 14-3 Rows fan coil, entering water temperature 60°C, water flowrate 37.8 l/min, capacity @ entering air temperature 21°C is 20.9kW (from table). Each 1°C entering air temperature difference the resulted capacity is $20.9/(60-21) = 0.536\text{kW}/^\circ\text{C}$. If entering air temperature is 18°C, the corrected capacity is $0.536 \times (60-18) = 22.5\text{kW}$.

DIMENSIONAL DATA

CR-CB/ HB/ HBS/ HBZ



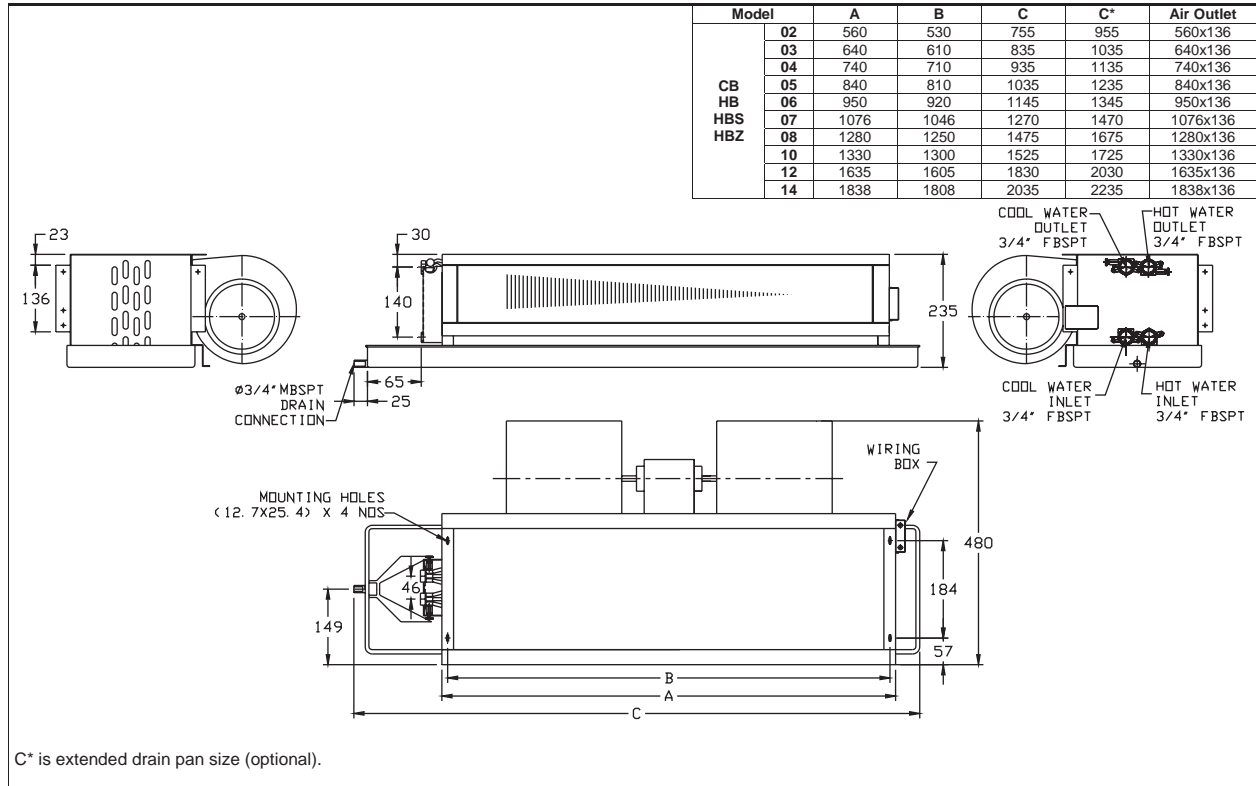
CR-CBP/ CBPD/ HBP/ HBPD/ HBSP/ HBSPD/ HBZP/ HBZPD



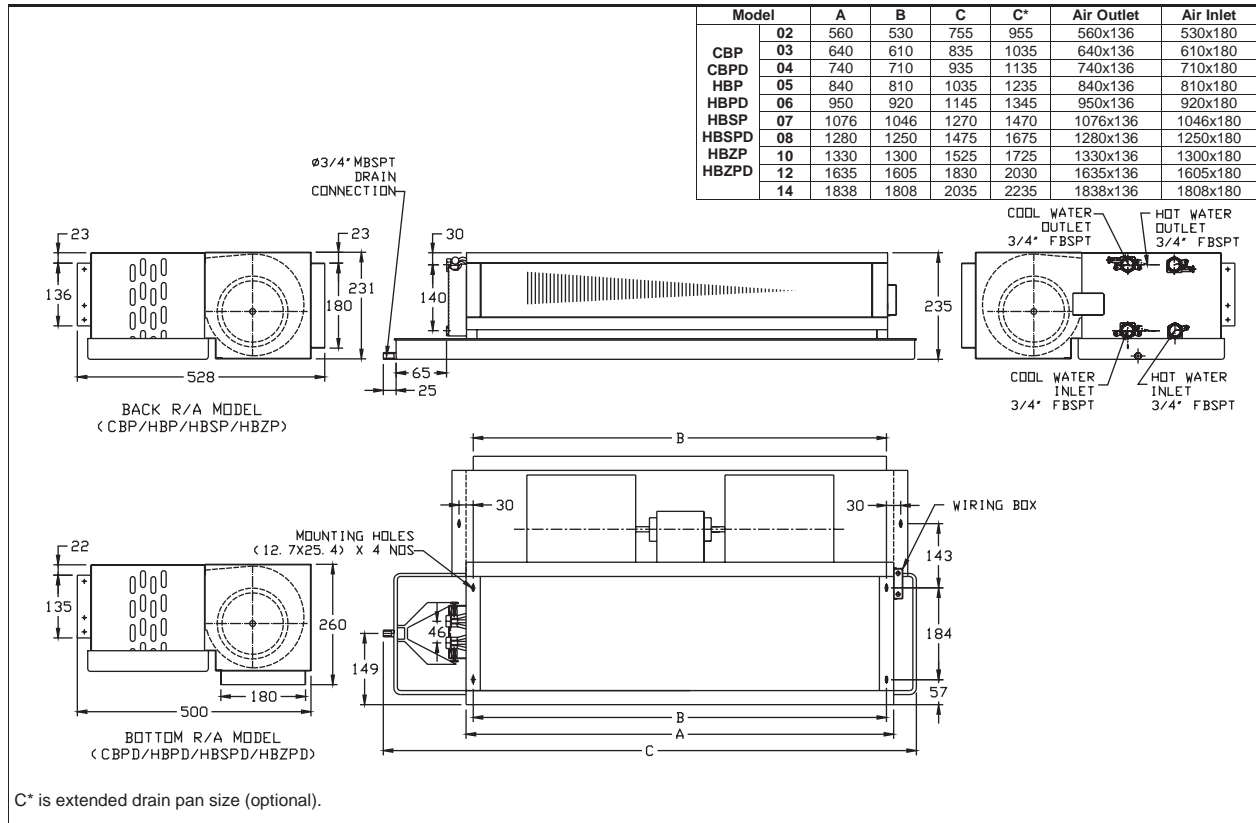
Note: All dimensions are in mm.

DIMENSIONAL DATA

CR-CB/ HB/ HBS/ HBZ – 4 Rows



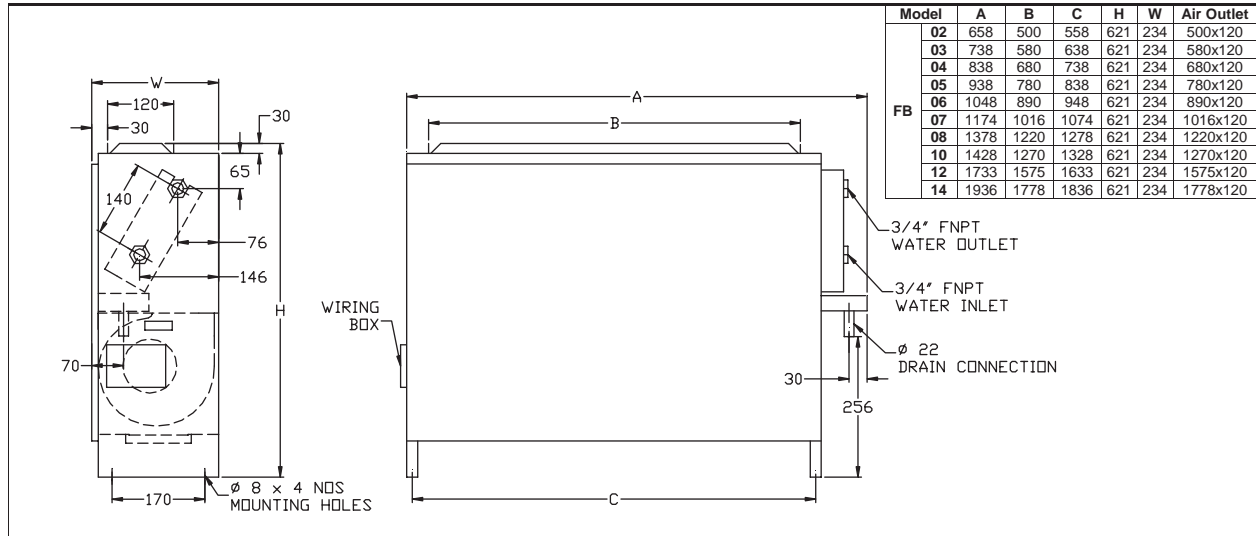
CR-CBP/ CBPD/ HBP/ HBPD/ HBSP/ HBSPD/ HBZP/ HBZPD – 4 Rows



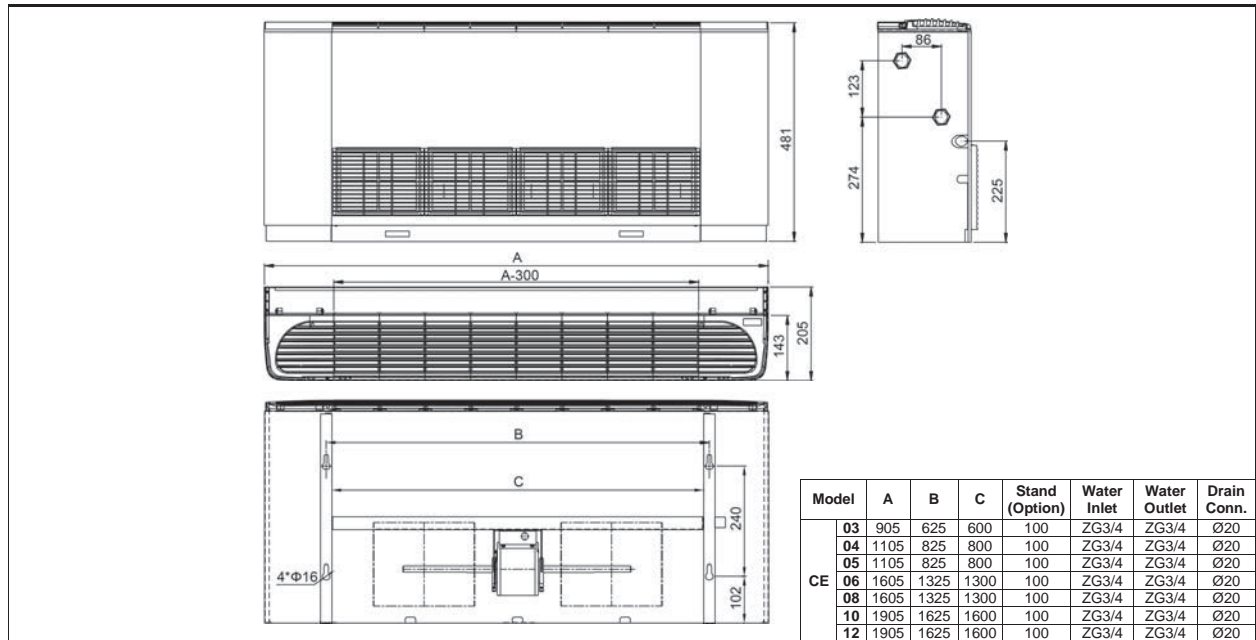
Note: All dimensions are in mm.

DIMENSIONAL DATA

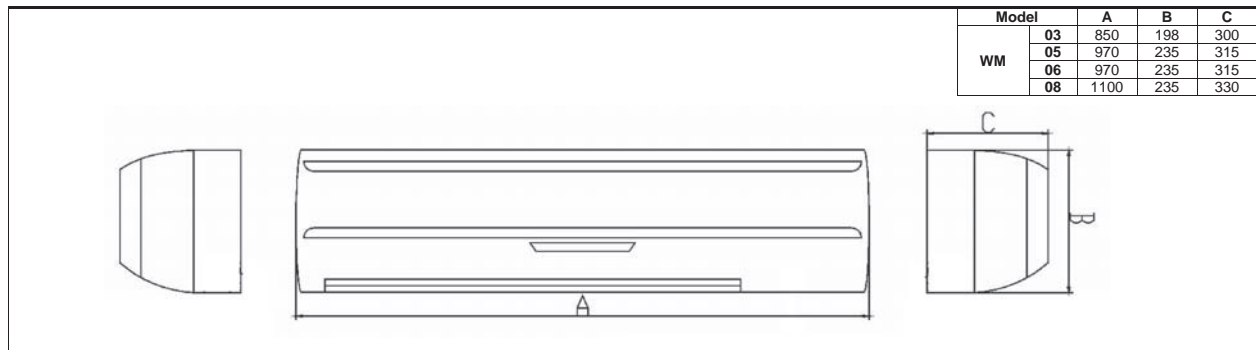
CR-FB



CR-CE



CR-WM

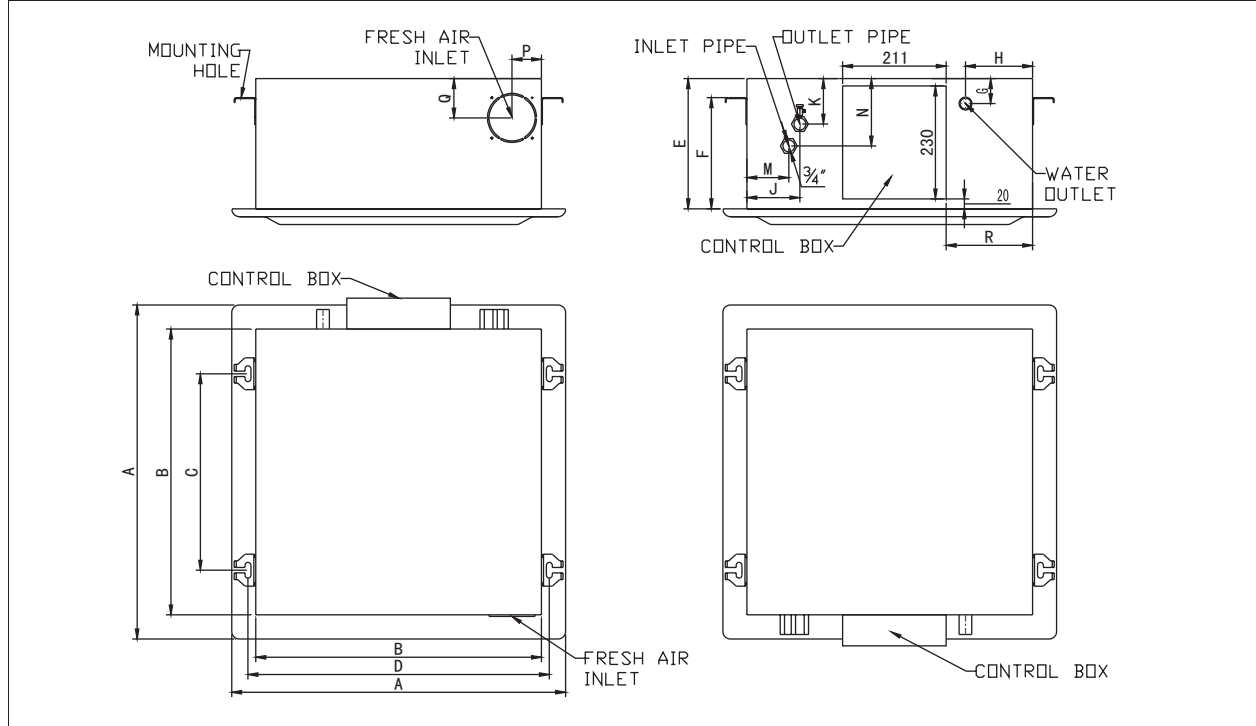


Note: All dimensions are in mm.

DIMENSIONAL DATA

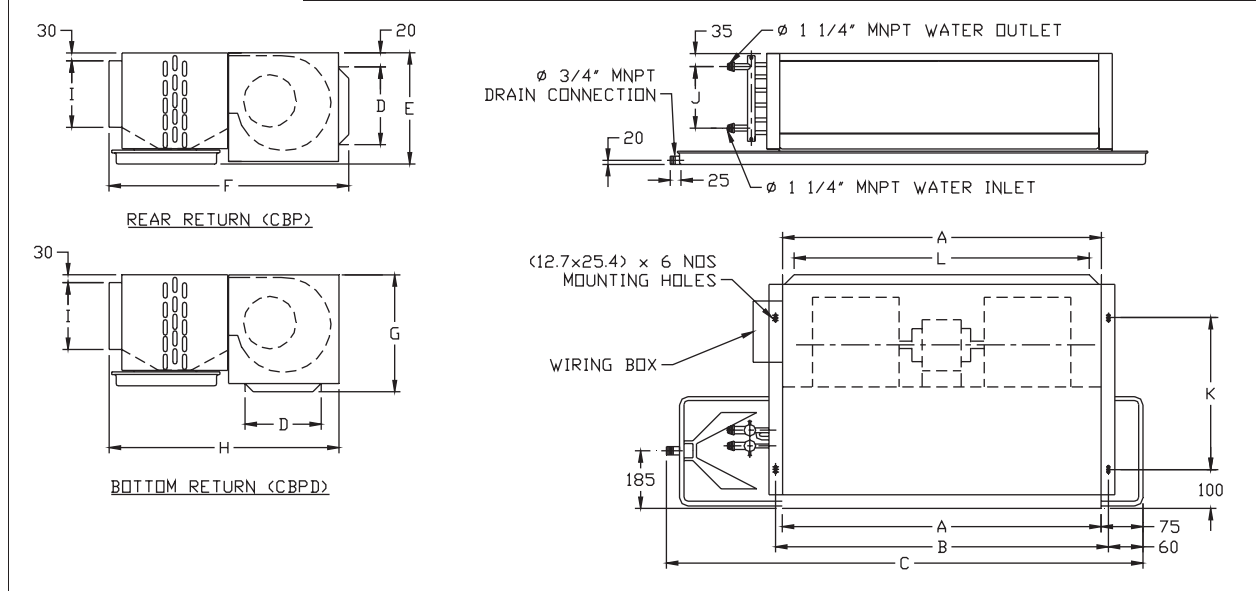
CR-CCIIH-Y

Model	A	B	C	D	E	F	G	H	J	K	M	N	P	Q	R	
CCIIH-Y	02	680	582	400	614	265	225	51	137	107.8	92.5	85.3	137.1	60	80	176
	03	680	582	400	614	265	225	51	137	107.8	92.5	85.3	137.1	60	80	176
	04	680	582	400	614	265	225	51	137	107.8	92.5	85.3	137.1	60	80	176
	05	830	712	544	744	290	220	89	142	107.8	106	86.2	150.6	60	100	223
	06	830	712	544	744	290	220	89	142	107.8	106	86.2	150.6	60	100	223
	08	830	712	544	744	290	220	89	142	107.8	106	86.2	150.6	60	100	223
	10	980	827	655	859	290	220	88	146	127.3	106	105.7	150.6	60	100	337
	12	980	827	655	859	290	220	88	146	127.3	106	105.7	150.6	60	100	337
14	980	827	655	859	290	220	88	146	127.3	106	105.7	150.6	60	100	337	



CRH-CBP/ CBPD

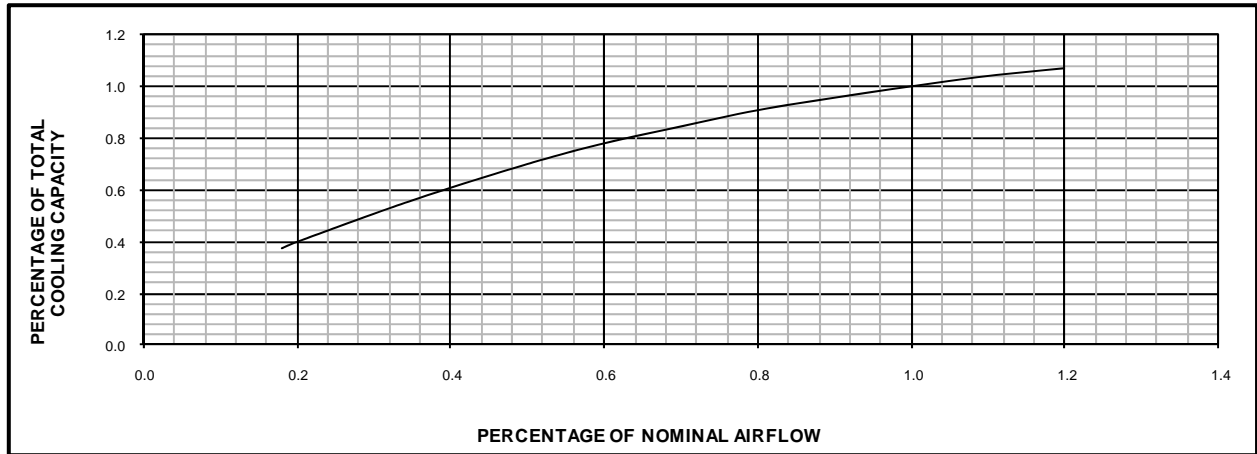
Model	A	B	C	D	E	F	G	H	I	J	K	Air Outlet	Air Inlet
CBP 08	930	990	1374	270	310	680	320	660	200	180	490	960x200	930x270
CBPD 14	1120	1180	1544	320	360	730	370	710	250	230	540	1150x250	1120x320
CBPD 18	1460	1520	1894	320	360	730	370	710	250	230	540	1490x250	1460x320



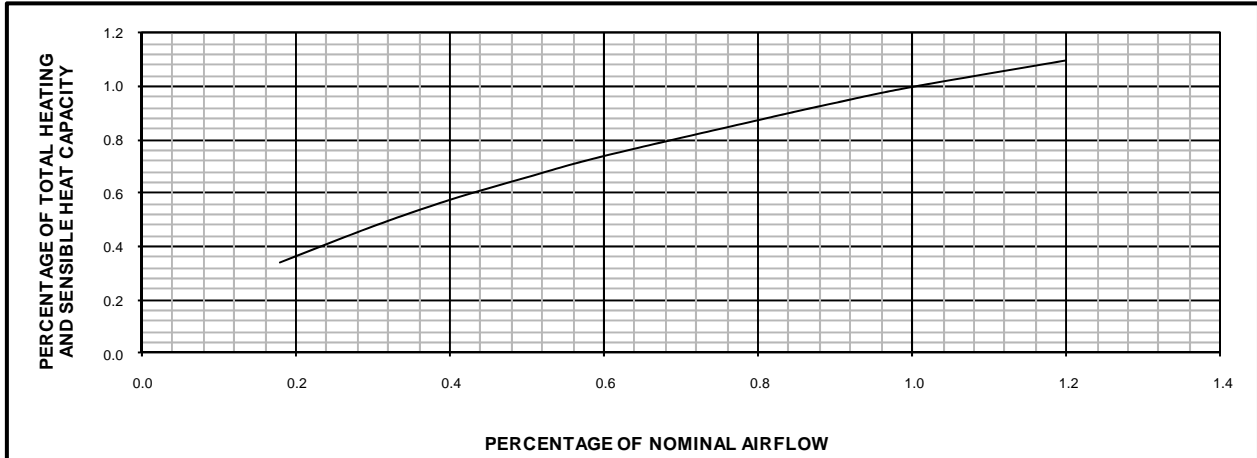
Note: All dimensions are in mm.

TOTAL CAPACITY CORRECTION FACTOR

1.) TOTAL COOLING CAPACITY

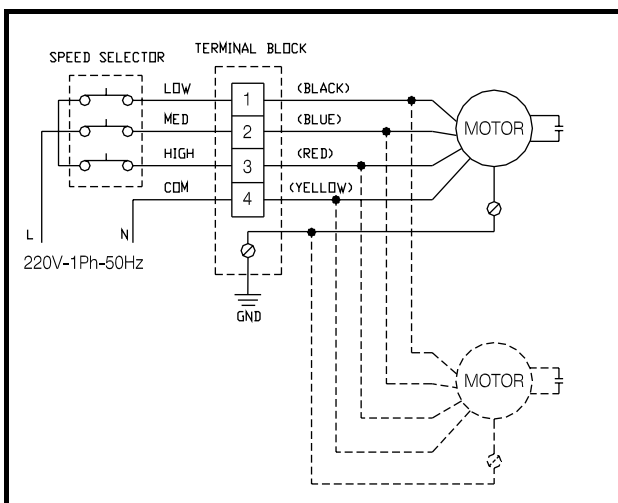


2.) TOTAL HEATING AND SENSIBLE HEAT

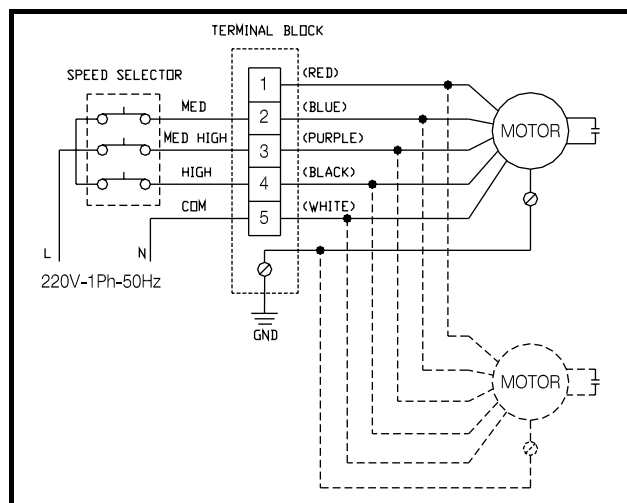


ELECTRICAL DIAGRAM

CR



CRH



Note: Terminal No. 1, 2, 3 for low, medium, high speed connection.
Caution: Wrong termination may cause motor damage.



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