Low Noise Fan Coil Units
CR Series 50/60Hz

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

Dunham-Bush Air Conditioning

CR-CC

CR-DX/ CX/ BX/ AX
CRH-CB

CR-WM

CR-FB

CR-CE

MILESTONE

Dunham-Bush Profile

Dunham-Bush, one of the world's top commercial air conditioning manufacturers, has long been committed to offering creative solutions for the customer's requirements over its 120 years history in the HVAC/R. Dunham-Bush offers a complete range of HVAC/R products such as large chillers, unitary, airside system and thermal energy storages for residences, commercial buildings and industrial facilities. Dunham-Bush is striving to be the leader in the commercialization of green technologies. Today, by utilizing our global network of sales and service offices, Dunham-Bush is offering our value-added products and solutions to all corners of the world.

1894 Built in USA as a professional manufacturer of HVAC/R equipments.

1904 Developed the first air compressor system.

1924 Developed the first reciprocating compressor.

1930 Manufactured the air conditioner.

1935

Today, and Beyond — Innovations... never ends

2019 Dunham-Bush built factory in Miami, USA

2014 Dunham-Bush launched oil free magnetic bearing chiller.

2013 New compressor R&D center was founded in UK to engage in high tier compressor technology.

2008 Dunham-Bush launched its new logo to match its new global brand & business strategy.

2007 Dunham-Bush launched high efficiency dual stage centrifugal chiller.

1998 Dunham-Bush built factory in Kajang, Malaysia. Later built Global Headquarters there in 2000.

1996 Hartford Compressors Incorporated was built in USA.

1995 Dunham-Bush built factory in Yantai, China.

1967 Patented the technology to use a screw compressor for refrigeration / cooling.

1948 Dunham-Bush built factory in Connecticut, USA.

Dunham-Bush built factory in Havant, United Kingdom.

first air cooled

DUNHAM-BUSH MALAYSIA

Dunham-Bush Malaysia; founded in 1987, adhered to the innovation system of focusing on customers' demands to drive global research & design, and superior quality manufacturing. Nowadays Dunham-Bush Malaysia are creating innovative cooling solutions appropriate to the individual requirements of commercial building, schools, hospitals, airports, factories and residences. No matter where you are, what we deliver is the same: high performing, highly engineered cooling solutions developed to take on the challenges of the 21st century.



INTRODUCTION
CR-DX

Dunham-Bush's fan coil unit are high performance, low noise, large air volume and cooling capacity, and flexible left and right water connections. Currently there are more than 500 types of models with a wide cooling capacity selection. All fan coils have undergone rigorous testing before leaving the factory. Dunham Bush fan coil continue to lead the market in the air conditioning and refrigeration industry with cutting edge design, precise manufacturing and excellent performance.

Meticulously Made With High-Quality Materials

The unit are made using high-quality galvanized steel sheets and are carefully processed by precision CNC machine tools.The structure is compact and beautiful designed. PE insulation strips added to enhance the sealing and shock absorption, allow easy maintenance and detachability.

Coil

All coils are of seamless copper tubes, with corrugated hydrophilic coated fin for improved condensed draining and giving excellent heat transfer. The surface design of this "self-cleaning" corrugated fin create a vortex flow which make dust difficult to accumulate, and its heat exchange efficiency will not be affected even after used for a long time. All coil are leak tested at 2.4 MPa air pressure and are suitable for up to 1.6 MPa working pressure. The water inlet and outlet hexagonal connectors are of brass material. The water flow connection are easy to install on site.

Energy Efficiency

US patented computer selection technology to ensure an efficient operation. The fan coil fan is a forward multi-blade centrifugal fan, which is manufactured by a well-known fan manufacturer who expertly designed according to the aerodynamic principle to ensure the fan is light weight, high efficiency and low noise.

Options And Accessories

1) Thermostat- LCD or Mechanical
2) Filter - Nylon Mesh Filter or Carbon Filter
3) 2-way motorized valve (shipped loose)
4) Flexible pipe connector - For easy connection, eliminate vibration and reduce noise level
5) UV light - Produce germicidal effects to remove airborne bacteria and germs
6) Extended Drain Pan

Nomenclature

CR 03 1 P 3 DX T E H P L

- CR - Fan Coil Unit
- Unit Model
- 1 - Ceiling Concealed (12pa)
3 - Ceiling Concealed (30pa)
5 - Ceiling Concealed (50pa)
7 - Ceiling Concealed (70pa)
FB - Vertical Concealed Installation (0 Pa)
Note: FB standard with nylon mesh
- Blank - No Return Air Plenum
P - Back Return Air Plenum Without Filter
D - Bottom Return Air Plenum Without Filter
E - Back Return Air Plenum With Filter
G - Bottom Return Air Plenum With Filter
Note: Filter options (Nylon, Al. 10mm, Al. 22mm)
- L - Left Hand Piping
R - Right Hand Piping
- Product Generation
- Blank - Standard
H - Electric Heating
- 6 - 220V/1Ph/60Hz
E - 220V/1Ph/50Hz
- Blank - Standard Drain Pan
T - Extended 200mm Drain Pan
S - Stainless Steel Drain Pan
V - Extended 200mm Stainless Steel Drain Pan
- DX - AC Motor (3 Speed)
- 2 - 2 Rows Coil
3 - 3 Rows Coil
31 - 3+1 Rows Coil (4 Pipes)
Note: 31 not applicable for 70pa

CRH 08 CBP 3 DW K L

- CRH - High Static
- Unit Model
- CBP - Back Return Air Plenum Without Filter
CBPD - Bottom Return Air Plenum Without Filter
- L - Left Hand Piping
R - Right Hand Piping
- Product Generation
- DW - AC Motor (3 Speed)
- 2 - 2 Rows Coil
3 - 3 Rows Coil
4 - 4 Rows Coil

CR 03 CE 3 DX P L 1

- CR - Fan Coil Unit
- Unit Model
- CE - Ceiling Exposed
- 3 Rows Coil
- Blank - Floor Standing
1 - Ceiling Hung
- L - Left Hand Connection
R - Right Hand Connection
- Product Generation
- DX - AC Motor (3 Speed)

CR 03 WM

- CR - Fan Coil Unit
- Unit Model
- CCIIH2-Y - Ceiling Cassette
WM - Wall Mounted (50Hz Only)

Notes: 1. Left hand or Right hand piping connection is determined by facing the supply air.
2. Standard unit coil inlet and outlet are in the same direction as drain pipe. Concealed unit, the water inlet and outlet same direction as the junction box. For exposed unit, the water inlet outlet is opposite direction to the junction box.
3. The unit with return air plenum can be equipped with a filter, and the filter can be based on customer requirements.
4. Static pressure loss for return air plenum with filter is 10Pa.

INTRODUCTION
CR-CX/ BX/ AX

Dunham-Bush low noise fan coil unit not only have the advantages of standard fan coil units, it also processes large air volume, high cooling capacity , convenient left and right water pipes connection, ultra quiet operation and high efficiency.These units are widely use in luxury hotels, offices, business centres, hospital, high-end villas, apartments and condominium. With the technology advancement and excellent performance, Dunham-Bush Fan Coil Units has been continuously maintaining its leading position in the air-conditioning industry.

CR-AX Variable Speed DC Motor

40% less power consumption than conventional AC motors.

Using 0-10V signal control. The controller provides different voltage signals to the motor to adjust the air flow through the room temperature feedback to smoother the temperature transition and provide comfortable experience for the user.

Indoor temperature requirement can be meet by changing the high and low speeds.

The picture is for reference only. The thermostat design might be different for function.

Ultra Quiet Operation

Ultra-low noise. Specially studies and research to ensure the unit's operating noise is 1-3dB (A) lower than other conventional fan coil unit.

CR-BX Three Speed DC Motor

40% less power consumption than conventional AC motors.

With the analog voltage control method, users can manually select automatic mode or the three speeds high, medium and low speed. When automatic mode is selected, the controller automatically switches between high, middle and low speed through room temperature feedback.

Adjust the airflow by dialing the code to meet the indoor temperature requirements.

Indoor temperature requirement can be meet by changing the airflow using code.

The picture is for reference only. The thermostat design might be different for function.

Nomenclature

CR 03 1 P 3 CX T E P L

- CR - Fan Coil Unit
- Unit Model
- 1 - Ceiling Concealed (12pa)
  3 - Ceiling Concealed (30pa)
  5 - Ceiling Concealed (50pa)
  7 - Ceiling Concealed (70pa)
- Blank - No Return Air Plenum
  P - Back Return Air Plenum Without Filter
  D - Bottom Return Air Plenum Without Filter
  E - Back Return Air Plenum With Filter
  G - Bottom Return Air Plenum With Filter
- 2 - 2 Rows Coil
  3 - 3 Rows Coil
  31 - 3+1 Rows Coil (4 Pipes)
- CX - AC Motor (3 Speed)
  BX - DC Motor (3 Speed)
  AX - DC Motor (Variable Speed)
- Blank - Standard Drain Pan
  T - Extended Drain Pan
  S - Stainless Steel Drain Pan
  V - Extended Stainless Steel Drain Pan
- 6 - 220V/1Ph/60Hz
  E - 220V/1Ph/50Hz
- Product Generation
- L - Left Hand Piping
  R - Right Hand Piping

Notes:
1. Left hand or Right hand piping connection is determined by facing the supply air.
2. Standard unit coil inlet and outlet are in the same direction as drain pipe. Concealed unit, the water inlet and outlet same direction as the junction box. For exposed unit, the water inlet outlet is opposite direction to the junction box.
3. The unit with return air plenum can be equipped with a filter, and the filter can be based on customer requirements.
4. Static pressure loss for return air plenum with filter is 10Pa.



SPECIFICATIONS

CR-DX (2 Rows)

Model			02	03	04	05	06	07	08
Air Flow m^3/h		High Speed	340	510	680	850	1020	1190	1360
		Med. Speed	270	406	518	661	770	893	1016
		Low Speed	176	261	348	447	509	595	687
Total Cooling Capacity (W)			1890	2930	3610	4500	5400	6300	7200
Sensible Cooling Capacity (W)			1350	2070	2590	3220	3870	4520	5160
FCEER (W/W)	12Pa		51	55	54	54	51	49	49
	30Pa		45	47	47	49	47	46	43
	50Pa		38	42	41	43	44	43	40
	70Pa		36	38	37	39	39	37	35
Heating (W)	Entering Water 60°C		3243	4922	6159	7537	8635	10337	12017
	Entering Water 45°C		1988	3013	3774	4610	5286	6328	7358
FCCOP Entering Water 60°C (w/w)	12Pa		88	94	95	94	88	84	86
	30Pa		77	80	84	86	82	79	74
	50Pa		66	72	73	71	75	73	71
	70Pa		61	64	66	68	66	64	61
Noise Level dB(A)	12Pa	High Speed	32.6	36.2	38.3	40.0	44.2	44.7	44.5
		Med. Speed	26.5	29.7	30.5	34.9	37.5	32.8	37.4
		Low Speed	20.7	23.8	24.6	29.7	29.9	25.0	29.1
	30Pa	High Speed	36	39	41	42.6	46	47.5	46
		Med. Speed	32.4	35.8	35.9	37.6	39.7	37.3	38.8
		Low Speed	28.2	29.3	29.3	30.6	32.8	27.4	31.7
	50Pa	High Speed	38.7	43.0	44.0	46.0	48.0	49.0	49.0
		Med. Speed	34.0	36.9	38.5	40.6	42.6	43.5	38.6
		Low Speed	26.3	31.5	31.3	33.9	37.3	36.8	30.5
	70Pa	High Speed	41.4	44.8	45.0	49.6	53.0	54.1	49.5
		Med. Speed	37.2	39.5	40.9	47.9	51.5	51.3	47.2
		Low Speed	30.1	28.8	34.0	44.1	49.1	47.3	43.2
Water Flowrate (l/min)			5.4	9.0	10.8	12.6	14.4	18.0	21.6
Water Pressure Drop (kPa)			10.7	27.4	19.7	30.0	40.0	38.0	34.4
Blower Qty			1	2	2	2	2	2	4
Motor Qty			1	1	1	1	1	1	2
220V/1PH/50Hz Total Power Input (W)		12Pa	36	48	60	74	93	112	128
		30Pa	41	57	70	81	101	121	150
		50Pa	48	64	81	97	110	131	158
		70Pa	52	72	90	104	126	150	184
Unit Weight (kg)	Vertical Concealed		14.7	18	20	21.6	23	26.4	32.6
	Ceiling Concealed W/o R/A Plenum		10.2	12.7	14.2	15.3	16.2	18.5	23.5
	Ceiling Concealed With R/A Plenum		13.2	16.1	18.0	19.4	20.5	23.4	29.1

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 Total Capacity Correction Factor for other airflow.
5) Noise data is based on high speed under lab testing condition.
6) Motor power will be slightly different due to different motor manufacturers, please refer to the nameplate.

SPECIFICATIONS



CR-DX/ FB (3 Rows)

Model				02	03	04	05	06	07	08	10	12	14
Air Flow m^3/h			High Speed	340	510	680	850	1020	1190	1360	1700	2040	2380
			Med. Speed	260	383	501	623	765	893	1006	1260	1513	1739
			Low Speed	170	256	339	417	515	595	675	810	988	1190
Cooling (W)	Total Cooling Capacity (W)		High Speed	2300	3280	4170	5280	6100	7060	8330	9650	11510	13230
			Med. Speed	1850	2640	3320	4150	5005	5731	6694	7964	9461	10861
			Low Speed	1320	1540	2430	3058	3718	4334	4934	5720	6890	8203
	Sensible Cooling Capacity (W)		High Speed	1580	2290	2930	3710	4290	4990	5840	6850	8170	9400
			Med. Speed	1276	1815	2300	2880	3476	3990	4622	5566	6608	7584
			Low Speed	880	1298	1660	2079	2530	2948	3353	3916	4760	5631
FCEER (W/W)		12Pa		59	61	63	62	56	55	56	55	54	49
		30Pa		51	53	55	58	52	52	49	51	49	46
		50Pa		45	48	47	48	48	48	47	44	43	41
		70Pa		41	43	43	46	43	43	41	40	38	\
Water Flowrate (l/min)				7.2	9.2	12.6	14.9	17.3	19.8	23.7	27.6	31.7	37.5
Water Pressure Drop (kPa)				22	22	20	30	40	27	40	39	40	49
Heating (W)		Entering Water 60°C		3590	5100	6820	8300	9540	11340	13300	15610	18200	20860
		Entering Water 45°C		2200	3120	4170	5110	5840	6950	8160	9570	11270	12800
FCCOP Entering Water 60°C (W/W)		12Pa		93	99	104	101	91	90	93	94	90	82
		30Pa		82	84	89	93	84	84	81	84	80	75
		50Pa		72	76	78	79	78	78	77	72	70	67
		70Pa		65	68	70	73	69	69	65	66	61	\
Noise Level dB(A)		12Pa	High Speed	32.6	36.2	38.3	40.0	44.2	44.7	44.5	46.6	49.0	50.0
			Med. Speed	26.5	29.7	30.5	34.9	37.5	32.8	37.4	39.4	43.4	45.2
			Low Speed	20.7	23.8	24.6	29.7	29.9	25.0	29.1	30.6	33.6	35.0
		30Pa	High Speed	36	39	41	42.6	46	47.5	46	49	49.5	52.5
			Med. Speed	32.4	35.8	35.9	37.6	39.7	37.3	38.8	40.2	40.8	49.0
			Low Speed	28.2	29.3	29.3	30.6	32.8	27.4	31.7	31.4	30.5	43.1
		50Pa	High Speed	38.7	43.0	44.0	46.0	48.3	49.0	49.0	50.5	51.0	52.0
			Med. Speed	34.0	36.9	38.5	40.6	42.6	43.5	38.6	45.5	45.1	49.4
			Low Speed	26.3	31.5	31.3	33.9	37.3	36.8	30.5	36.2	36.8	44.5
		70Pa	High Speed	41.4	44.8	45.0	49.6	53.0	54.1	49.5	52.5	53.0	\
			Med. Speed	37.2	39.5	40.9	47.9	51.5	51.3	47.2	49.5	48.3	\
			Low Speed	30.1	28.8	34.0	44.1	49.1	47.3	43.2	45.1	40.9	\
Blower Qty				1	2	2	2	2	2	4	4	4	4
Motor Qty				1	1	1	1	1	1	2	2	2	2
Total Power Input (W)		12Pa		36	48	60	74	93	112	128	147	183	221
		30Pa		41	57	70	81	101	121	150	169	206	245
		50Pa		48	64	81	97	110	131	158	199	242	279
		70Pa		52	72	90	104	126	150	184	220	282	\
Unit Weight (kg)	Vertical Concealed			15.8	22.8	24.5	26	27.8	30	37.5	39	42.3	47
	Ceiling Concealed W/o R/A Plenum			11.3	13.2	14.8	16.1	17.1	19.4	24.6	26.8	29.5	32.3
	Ceiling Concealed With R/A Plenum			14.3	16.6	18.6	20.2	21.4	24.3	30.2	32.6	36.1	39.6

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 Total Capacity Correction Factor for other airflow.
5) Noise data is based on high speed under lab testing condition.
6) Motor power will be slightly different due to different motor manufacturers, please refer to the nameplate.



SPECIFICATIONS

CR-DX (3+1 Rows)

Model			02	03	04	05	06	07	08	10	12	14
Air Flow m³/h		High Speed	340	510	680	850	1020	1190	1360	1700	2040	2380
		Med. Speed	255	372	501	625	766	900	1011	1228	1525	1809
		Low Speed	173	240	329	412	501	595	674	823	1052	1242
Cooling (W)	Total Cooling Capacity (W)	High Speed	2300	3280	4170	5280	6090	7060	8330	9650	11510	13230
		Med. Speed	1850	2640	3320	4150	5005	5731	6694	7810	9461	10861
		Low Speed	1320	1540	2430	3058	3718	4334	4934	5720	6890	8203
	Sensible Cooling Capacity (W)	High Speed	1580	2290	2930	3710	4330	4990	5840	6850	8170	9400
		Med. Speed	1276	1815	2300	2880	3476	3990	4622	5450	6608	7584
		Low Speed	880	1298	1660	2079	2530	2948	3353	3916	4760	5631
FCEER (W/W)	12Pa		56	61	59	62	53	53	52	54	52	49
	30Pa		47	50	51	54	48	48	46	48	47	44
	50Pa		43	46	42	48	44	44	44	42	41	39
Water Flowrate (l/min)			7.2	9.2	12.6	14.9	17.3	19.8	23.7	27.6	31.7	37.5
Water Pressure Drop (kPa)			22	22	20	30	40	27	40	39	40	49
Heating (W)	Entering Water 60°C		2030	2710	3494	4277	5488	5785	6815	7989	9628	10962
	Entering Water 45°C		1290	1725	2233	2726	3488	3683	4335	5089	6119	6958
FCCOP Entering Water 60°C (W/W)	12Pa		52	53	55	53	51	48	47	48	46	44
	30Pa		43	43	46	45	46	43	41	42	42	39
	50Pa		39	40	38	40	42	39	38	36	35	34
Noise Level dB(A)	12Pa	High Speed	36.5	38.7	40.2	42	45	46	46	48	50	52
		Med. Speed	30	31.5	34.2	34.5	39.1	37	37.2	35	35.3	35.3
		Low Speed	23	24	27	27	27.2	27.8	27	25.5	25.3	28
	30Pa	High Speed	39.3	42	42.8	44.9	46.5	48	48	50	51	53.5
		Med. Speed	32	33	34.6	37	41	42.5	41.5	37.5	42.2	49.6
		Low Speed	26	26	26.8	29	33	32.4	32.8	28.5	33	45
	50Pa	High Speed	41.2	43.5	45.8	46.8	48	49.3	50	51.8	51.4	53
		Med. Speed	34	37.3	40.5	42	45	45.5	43.5	46	47.5	50.5
		Low Speed	27.8	30	33	35.6	40.8	39.5	35.5	40.5	43	47.4
Blower Qty			1	2	2	2	2	2	4	4	4	4
Motor Qty			1	1	1	1	1	1	2	2	2	2
Total Power Input (W)	12Pa		36	49	60	74	93	112	130	147	183	221
	30Pa		43	57	70	84	105	121	151	169	206	245
	50Pa		48	64	81	97	114	131	169	204	243	291
Unit Weight (kg)	Ceiling Concealed W/o R/A Plenum		12.1	14.7	16.6	17.1	18.2	20.5	25.9	28.2	31.1	34.1
	Ceiling Concealed With R/A Plenum		15.1	18.1	20.4	21.2	22.5	25.4	31.5	34.0	37.7	41.4

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 Total Capacity Correction Factor for other airflow.
5) Noise data is based on high speed under lab testing condition.
6) Motor power will be slightly different due to different motor manufacturers, please refer to the nameplate;

SPECIFICATIONS



CRH

Model		External Static Pressure (Pa)	Air Flow (m³/h)				Noise Level dB(A)	Capacity					Blower Qty	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)	Power Output (W)	
2Rows CBP CBPD	08	110	1500	1200	970	-	60	5220	3900	9870	15	6.7	2	1	303	150	38
		80	-	1500	1150	960									287	142	
	14	130	2400	2000	1700	-	62	8320	6150	15350	24	12.4	2	1	502	250	50
		100	-	2400	1900	1700									485	242	
	18	165	3300	2900	2200	-	64	12040	8670	21100	34.2	29	3	2	781	375	65
		125	-	3300	2600	2200									738	354	
3Rows CBP CBPD	08	100	1500	1200	970	-	60	7760	5300	13190	22.2	18.7	2	1	303	150	40
		70	-	1500	1200	960									287	142	
	14	115	2400	2000	1700	-	62	10810	7760	19870	31.2	9.9	2	1	502	250	52
		85	-	2400	1900	1700									485	242	
	18	150	3300	2900	2200	-	64	16030	11130	27450	46.2	24.2	3	2	781	375	69
		110	-	3300	2600	2200									738	354	
4Rows CBP CBPD	08	90	1500	1200	970	-	60	9430	6240	15320	27	34.5	2	1	303	150	43
		60	-	1500	1150	960									287	142	
	14	100	2400	2000	1700	-	62	12660	8910	22940	36.6	8.0	2	1	502	250	55
		70	-	2400	1900	1700									485	242	
	18	135	3300	2900	2200	-	64	17900	12390	31590	51.6	18.2	3	2	781	375	73
		95	-	3300	2600	2200									738	354	

Notes : 1) Motor is 220V/1Ph/50Hz four speed capacitor motor
2)The high speed air volume is the value when the residual pressure outside the machine is the corresponding pressure
3) 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
4) Heating capacity is based on water entering temperature of 60°C and air entering temperature of 21°C.
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.

CR-CCIIH2-Y

Model	Air Flow (m³/h)			Noise Level dB(A)	Cooling (W)	Heating (W)		FCEER (W/W)	FCCOP (W/W)		Water Flowrate (l/min)	Water Pressure Drop (kPa)	Blower Qty	Motor		Unit Weight (kg)
	High Speed	Med. Speed	Low Speed		High/ Med./ Low	Entering Water 60°C	Entering Water 45°C		Entering Water 60°C	Entering Water 45°C				Qty	Total Power Input (W)	
02	340	255	170	37	1800/1440/1080	2700	1800	46	68	46	5.33	30.0	1	1	36	19
03	510	383	255	39	2700/2160/1620	4050	2680	49	73	49	8.33	30.0	1	1	50	19
04	680	510	340	41	3600/2880/2160	5400	3600	54	81	54	10.17	30.0	1	1	60	19
05	850	638	425	43	4500/3600/2700	6750	4480	54	82	54	13.00	30.0	1	1	74	23.5
06	1020	765	510	45	5400/4320/3240	8100	5400	51	76	51	15.67	40.0	1	1	93	23.5
07	1190	893	595	46	6300/5040/3780	9450	6300	49	74	49	18.33	40.0	1	1	112	23.5
08	1360	1020	680	46	7200/5760/4320	10800	7200	49	73	49	20.00	40.0	1	1	130	28
10	1700	1275	850	48	9000/7200/5400	13500	9000	53	79	53	27.50	40.0	1	1	147	28
12	2040	1530	1020	50	10800/8640/6480	16200	10800	51	77	51	30.83	40.0	1	1	183	31.5
14	2380	1785	1190	52	12600/10080/7560	18900	12600	48	72	48	35.83	50.0	1	1	221	31.5

Notes: 1) 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.
2) Heating capacity is based on water entering temperature of 60°C and air entering temperature 21°C.



SPECIFICATIONS

CR-CE

Model	Air Flow (m³/h)			Noise Level dB(A)	Cooling (W)	Heating (W)		FCEER (W/W)	FCCOP (W/W)		Water Flowrate (l/min)	Water Pressure Drop (kPa)	Blower Qty	Motor		Unit Weight (kg)
	High Speed	Med. Speed	Low Speed		High/ Med./ Low	Entering Water 60°C	Entering Water 45°C		Entering Water 60°C	Entering Water 45°C				Qty	Total Power Input (W)	
02	340	255	170	37	1800/1440/1080	2700	1800	46	68	46	5.33	30.0	1	1	36	19.9
03	510	383	255	39	2700/2160/1620	4050	2680	49	73	49	8.33	30.0	2	1	50	19.9
04	680	510	340	41	3600/2880/2160	5400	3600	54	81	54	10.17	30.0	2	1	60	20.4
05	850	638	425	43	4500/3600/2700	6750	4480	54	82	54	13.00	30.0	2	1	74	20.4
06	1020	765	510	45	5400/4320/3240	8100	5400	51	76	51	15.67	40.0	2	1	93	27.5
07	1190	893	595	46	6300/5040/3780	9450	6300	49	74	49	18.33	40.0	2	1	112	27.5
08	1360	1020	680	46	7200/5760/4320	10800	7200	49	73	49	20.00	40.0	4	2	130	37.5
10	1700	1275	850	48	9000/7200/5400	13500	9000	53	79	53	27.50	40.0	4	2	147	37.5
12	2040	1530	1020	50	10800/8640/6480	16200	10800	51	77	51	30.83	40.0	4	2	183	44.5
14	2380	1785	1190	52	12600/10080/7560	18900	12600	48	72	48	35.83	50.0	4	2	221	44.5

Notes: 1) 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.
2) Heating capacity is based on water entering temperature of 60°C and air entering temperature 21°C.

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	m³/h	510	850	1020	1360
	Medium Speed	m³/h	383	638	765	1020
	Low Speed	m³/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/50Hz			
	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.

SPECIFICATIONS



CR-CX/ BX/ AX (2 Rows)

Model				02	03	04	05	06	07	08
Air Flow m³/h			High Speed	340	510	680	850	1020	1190	1360
			Med. Speed	270	406	518	661	770	893	1016
			Low Speed	176	261	348	447	509	595	687
Total Cooling Capacity (W)				1890	2930	3610	4500	5400	6300	7200
Sensible Cooling Capacity (W)				1350	2070	2590	3220	3870	4520	5160
FCEER (W/W)	AC Motor		12Pa	51	55	54	56	54	49	49
			30Pa	45	47	47	50	50	46	43
			50Pa	38	42	41	44	45	43	43
			70Pa	36	38	37	41	42	37	38
	DC Motor		12Pa	104	109	109	97	84	81	91
			30Pa	82	86	86	80	76	71	74
			50Pa	67	68	67	67	63	59	62
			70Pa	54	55	54	52	51	43	51
Heating (W)	Entering Water 60°C			3243	4922	6159	7604	9217	10337	12140
	Entering Water 45°C			1988	3013	3774	4655	5645	6328	7452
FCCOP (W/W)	AC Motor		12Pa	88	94	95	92	92	84	82
			30Pa	77	80	84	82	85	79	73
			50Pa	66	72	73	72	76	73	73
			70Pa	61	64	66	68	71	64	64
	DC Motor		12Pa	180	183	188	154	145	139	159
			30Pa	141	144	147	128	127	116	129
			50Pa	115	114	114	109	105	97	107
			70Pa	92	92	92	85	84	84	88
Noise Level dB(A)		12Pa	High Speed	32.2	36.0	38.0	39.5	43.1	44.2	43.8
			Med. Speed	26.5	29.5	30.2	31.1	33.5	32.5	32.0
			Low Speed	20.7	23.5	24.3	27.5	25.8	24.8	26.1
		30Pa	High Speed	36	38.0	40	41.1	43.8	47	43.8
			Med. Speed	32.4	35.5	35.7	35.2	36.5	37.0	35.4
			Low Speed	28.2	29.0	29.0	28.2	29.0	27.0	28.2
		50Pa	High Speed	38.5	42.6	43.0	44.4	45.4	48.5	46.0
			Med. Speed	34.2	36.6	38.2	39.4	39.6	43.1	40.7
			Low Speed	26.5	31.1	31.0	31.0	33.1	36.5	32.4
		70Pa	High Speed	41.0	44.2	44.5	48.0	50.9	53.5	47.8
			Med. Speed	37.0	39.3	40.5	46.2	48.1	51.0	45.1
			Low Speed	30.0	28.5	34.0	41.9	43.6	47.0	40.0
Water Flowrate (l/min)				5.4	9.0	10.8	12.6	16.2	18.0	21.6
Water Pressure Drop (kPa)				10.6	27.4	19.7	18.0	31.5	38.0	37.2
Blower Qty				1	2	2	2	2	2	4
Motor Qty				1	1	1	1	1	1	2
Total Power Input (W)	AC Motor		12Pa	36	48	60	74	93	112	130
			30Pa	41	57	70	84	99	121	151
			50Pa	48	64	81	97	114	131	153
			70Pa	52	72	90	103	122	150	177
	DC Motor		12Pa	17	22	29	41	56	64	66
			30Pa	22	29	38	51	65	73	82
			50Pa	27	38	49	61	80	90	101
			70Pa	34	48	63	81	102	113	126
Unit Weight (kg)	AC Motor		Vertical Concealed	14.7	18	20	23.4	25	26.4	35.6
			Ceiling Concealed W/o R/A Plenum	10.2	12.7	14.2	17.1	18.3	18.5	26.9
			Ceiling Concealed With R/A Plenum	13.2	16.1	18.0	21.4	23.2	23.4	32.7
	DC Motor		Vertical Concealed	15.7	19	21	24.4	26	27.9	37.1
			Ceiling Concealed W/o R/A Plenum	11.2	13.7	15.2	18.1	19.3	20	28.4
			Ceiling Concealed With R/A Plenum	14.2	17.1	19	22.4	24.2	24.9	34.2

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.

CR-CX/ BX/ AX (3 Rows)

Model				02	03	04	05	06	07	08	10	12	14
Air Flow m³/h			High Speed	340	510	680	850	1020	1190	1360	1700	2040	2380
			Med. Speed	260	383	501	630	757	893	1022	1260	1525	1809
			Low Speed	170	256	339	417	503	595	668	823	1052	1242
Cooling (W)	Total Cooling Capacity (W)		High Speed	2300	3280	4170	5300	6150	7060	8290	9650	11510	13230
			Med. Speed	1850	2640	3320	4290	5000	5731	6710	7964	9461	10861
			Low Speed	1320	1540	2430	3140	3620	4334	4920	5720	6890	8203
	Sensible Cooling Capacity (W)		High Speed	1580	2290	2930	3700	4310	4990	5830	6850	8170	9400
			Med. Speed	1276	1815	2300	2950	3460	3990	4650	5566	6608	7584
			Low Speed	880	1298	1660	2120	2460	2948	3350	3916	4760	5631
FCEER (W/W)	AC Motor		12Pa	59	61	63	63	61	55	55	55	54	49
			30Pa	51	53	55	56	57	52	49	51	49	46
			50Pa	45	48	47	49	50	49	49	44	43	41
			70Pa	41	43	43	47	47	43	43	40	38	\
	DC Motor		12Pa	112	125	110	110	84	87	106	86	77	73
			30Pa	90	98	88	89	71	74	86	73	66	64
			50Pa	75	77	70	72	60	63	70	63	56	55
			70Pa	61	62	57	59	53	55	59	53	49	48
Water Flowrate (l/min)				7.20	9.17	12.60	17.40	18.00	19.80	23.50	27.63	31.71	37.45
Water Pressure Drop (kPa)				22	22	20	30	22	27	30	39	40	49
Heating (W)	Entering Water 60°C			3590	5100	6820	8400	9570	11340	13530	15610	18200	20860
	Entering Water 45°C			2200	3120	4170	5150	5860	6950	8290	9570	11270	12800
FCCOP (W/W) Entering Water 60°C	AC Motor		12Pa	93	99	104	100	98	90	91	94	90	82
			30Pa	82	84	89	89	90	84	78	84	80	75
			50Pa	72	76	78	78	81	78	78	72	70	67
			70Pa	65	68	70	74	76	69	68	66	61	\
	DC Motor		12Pa	179	205	205	173	140	149	178	149	133	120
			30Pa	143	160	157	137	114	122	143	122	110	102
			50Pa	119	125	122	113	96	103	116	105	93	88
			70Pa	96	100	99	92	84	89	97	88	81	76
Noise Level dB(A)	12Pa		High Speed	32.2	36.0	38.0	39.5	43.1	44.2	43.8	46.2	48.8	49.5
			Med. Speed	26.5	29.5	30.2	31.1	33.5	32.5	32.0	39.0	43.0	45.0
			Low Speed	20.7	23.5	24.3	27.5	25.8	24.8	26.1	30.2	33.2	34.8
	30Pa		High Speed	36.0	38.5	40.0	41.1	43.8	47.0	43.8	48.5	49.0	51.8
			Med. Speed	32.4	35.5	35.7	35.2	36.5	37.0	35.4	40.0	40.6	49.0
			Low Speed	28.2	29.0	29.0	28.2	29.0	27.0	28.2	31.2	30.2	43.0
	50Pa		High Speed	38.5	42.6	43.0	44.4	45.4	48.5	46.0	50.0	50.0	51.5
			Med. Speed	34.2	36.6	38.2	39.4	39.6	43.1	40.7	45.1	45.0	49.0
			Low Speed	26.5	31.1	31.0	31.0	33.1	36.5	32.4	36.0	36.5	44.3
	70Pa		High Speed	41.0	44.2	44.5	48.0	50.9	53.5	47.8	52.0	52.5	\
			Med. Speed	37.0	39.3	40.5	46.2	48.1	51.0	45.1	49.1	48.0	\
			Low Speed	30.0	28.5	34.0	41.9	43.6	47.0	40.0	45.0	40.3	\
Blower Qty				1	2	2	2	2	2	4	4	4	4
Motor Qty				1	1	1	1	1	1	2	2	2	2
Total Power Input (W)	AC Motor		12Pa	36	48	60	74	93	112	130	147	183	221
			30Pa	41	57	70	84	99	121	151	169	206	245
			50Pa	48	64	81	97	114	131	153	199	242	279
			70Pa	52	72	90	103	122	150	177	220	282	\
	DC Motor		12Pa	17	22	29	41	56	64	66	88	114	139
			30Pa	22	29	38	51	65	73	82	101	140	166
			50Pa	27	38	49	61	80	90	101	125	173	206
			70Pa	34	48	63	81	102	113	126	159	206	247
Unit Weight (kg)	AC Motor		Vertical Concealed	15.8	22.8	24.5	27.8	29.8	30	39	39	42.3	47
			Ceiling Concealed W/o R/A Plenum	11.3	13.2	14.8	17.1	19.2	19.4	26.8	26.8	29.5	32.3
			Ceiling Concealed With R/A Plenum	14.3	16.6	18.6	21.4	24.1	24.3	32.6	32.6	36.1	39.6
	DC Motor		Vertical Concealed	16.8	23.8	25.5	28.8	30.8	31	40.5	40.5	43.8	48.5
			Ceiling Concealed W/o R/A Plenum	12.3	14.2	15.8	18.1	20.2	20.4	28.3	28.3	31	33.8
			Ceiling Concealed With R/A Plenum	15.3	17.6	19.6	22.4	25.1	25.3	34.1	34.1	37.6	41.1

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.

SPECIFICATIONS



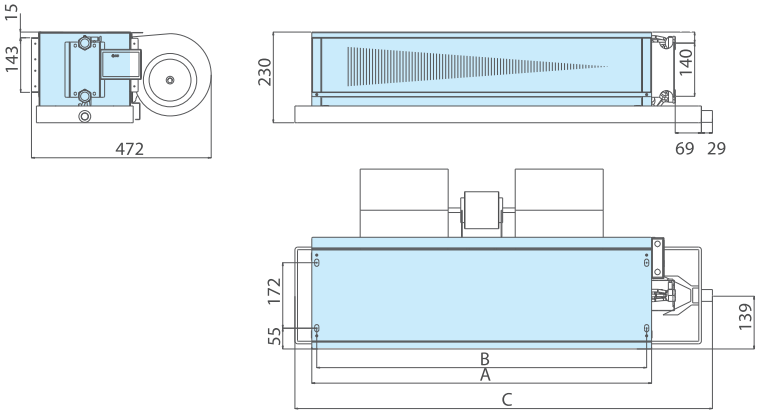
CR-CX/ BX/ AX (3+1 Rows)

Model				02	03	04	05	06	07	08	10	12	14
Air Flow m³/h			High Speed	340	510	680	850	1020	1190	1360	1700	2040	2380
			Med. Speed	255	372	501	630	757	900	1022	1228	1513	1739
			Low Speed	173	240	329	417	503	595	668	810	988	1190
Cooling (W)	Total Cooling Capacity (W)		High Speed	2300	3280	4170	5300	6150	7060	8290	9650	11510	13230
			Med. Speed	1850	2640	3320	4290	5000	5731	6710	7810	9461	10861
			Low Speed	1320	1540	2430	3140	3620	4334	4920	5720	6890	8203
	Sensible Cooling Capacity (W)		High Speed	1580	2290	2930	3700	4310	4990	5830	6850	8170	9400
			Med. Speed	1276	1815	2300	2950	3460	3990	4650	5450	6608	7584
			Low Speed	880	1298	1660	2120	2460	2948	3350	3916	4760	5631
FCEER (W/W)	AC Motor		12Pa	56	61	59	60	58	53	54	54	52	49
			30Pa	47	50	51	54	51	48	47	48	47	44
			50Pa	43	46	42	48	47	44	44	42	41	39
	DC Motor		12Pa	112	125	110	103	94	87	106	86	77	73
			30Pa	90	98	88	85	78	74	86	73	66	64
			50Pa	75	77	70	70	65	63	70	63	56	55
Water Flowrate (l/min)				7.20	9.17	12.60	17.40	18.00	19.80	23.50	27.63	31.71	37.45
Water Pressure Drop (kPa)				22	22	20	30	22	27	30	39	40	49
Heating (W)	Entering Water 60°C			2030	2710	3494	4423	5596	5785	6931	7989	9628	10962
	Entering Water 45°C			1290	1725	2233	2813	3565	3683	4408	5089	6119	6958
FCCOP (W/W) Entering Water 60°C	AC Motor		12Pa	52	53	55	54	54	48	48	48	46	44
			30Pa	43	43	46	48	48	43	41	42	42	39
			50Pa	39	40	38	42	44	39	38	36	35	34
	DC Motor		12Pa	111	111	114	97	86	84	95	83	73	68
			30Pa	87	87	87	77	70	69	76	68	61	58
			50Pa	71	67	67	62	58	57	61	57	51	50
Noise Level dB(A)	12Pa		High Speed	35.5	37.7	39.2	40.5	44.0	45.3	44.0	47.5	49.0	51.0
			Med. Speed	29.5	30.9	33.6	34.4	38.1	36.6	29.5	34.2	34.8	34.5
			Low Speed	22.7	23.6	26.5	26.0	28.8	27.3	23.0	25.1	24.9	27.2
	30Pa		High Speed	38.3	41.1	41.8	41.9	44.2	47.4	46.8	49.4	49.8	52.6
			Med. Speed	31.2	32.6	34.0	33.6	40.5	42.1	34.2	37.1	41.6	49.1
			Low Speed	26.0	25.5	26.2	26.9	31.2	31.9	26.2	28.1	32.6	44.6
	50Pa		High Speed	40.2	42.6	44.7	44.5	46.6	48.3	48.4	50.8	50.5	52.0
			Med. Speed	33.4	36.7	39.6	39.6	40.4	44.7	43.2	45.6	47.0	50.0
			Low Speed	27.1	29.4	32.4	33.3	31.5	39.3	36.2	39.7	42.3	47.0
Blower Qty				1	2	2	2	2	2	4	4	4	4
Motor Qty				1	1	1	1	1	1	2	2	2	2
Total Power Input (W)	AC Motor	12Pa		36	49	60	74	93	112	130	147	183	221
		30Pa		43	57	70	84	105	121	151	169	206	245
		50Pa		48	64	81	97	114	131	169	204	243	291
	DC Motor	12Pa		17	22	29	41	58	64	64	88	114	139
		30Pa		22	29	38	52	65	73	82	101	140	166
		50Pa		27	38	50	65	80	90	101	125	173	206
Unit Weight (kg)	AC Motor	Ceiling Concealed W/o R/A Plenum		12.1	14.7	16.6	18.1	20.3	20.5	28.2	28.2	31.1	34.1
		Ceiling Concealed With R/A Plenum		15.1	18.1	20.4	22.4	25.2	25.4	34.0	34.0	37.7	41.4
	DC Motor	Ceiling Concealed W/o R/A Plenum		13.1	15.7	17.6	19.1	21.3	21.5	29.7	29.7	32.6	35.6
		Ceiling Concealed With R/A Plenum		16.1	19.1	21.4	23.4	26.2	26.4	35.5	35.5	39.2	42.9

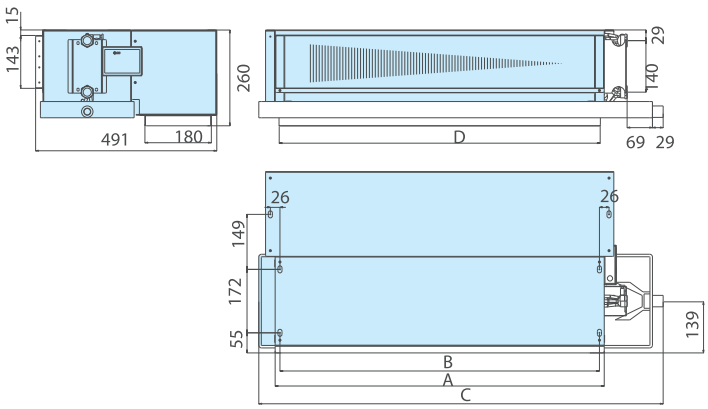
Notes: 1) High speed air flow corresponds to the respective external static pressure which is measured with unit without R/A plenum.
2) Cooling capacity is based on entering air temperature 27°C DB/ 19.5°C WB and water inlet/ outlet temperature 7°C/ 12°C, at high speed airflow.
3) Heating capacity is 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.



CR-DX (2 Rows, 3 Rows)



Model		A	B	C	C*	Air Outlet（mm×mm）
Without Return Air Plenum	CR02*2(3)DX	502	476	705	905	502×143
	CR03*2(3)DX	632	606	835	1035	632×143
	CR04*2(3)DX	732	706	935	1135	732×143
	CR05*2(3)DX	832	806	1035	1235	832×143
	CR06*2(3)DX	892	866	1190	1290	892×143
	CR07*2(3)DX	1068	1042	1270	1470	1068×143
	CR08*2(3)DX	1272	1256	1475	1675	1272×143
	CR10*3DX	1322	1296	1525	1725	1322×143
	CR12*3DX	1552	1526	1755	1955	1552×143
	CR14*3DX	1752	1726	1955	2155	1752×143



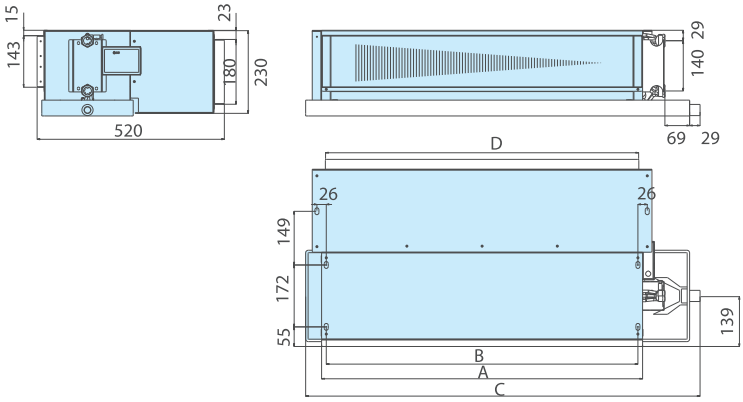
Model		A	B	C	C*	D	Air Outlet（mm×mm）	Air Inlet（mm×mm）
With Bottom Return Air Plenum	CR02*D2(3)DX	502	476	705	905	480	502×143	480×180
	CR03*D2(3)DX	632	606	835	1035	610	632×143	610×180
	CR04*D2(3)DX	732	706	935	1135	710	732×143	710×180
	CR05*D2(3)DX	832	806	1035	1235	810	832×143	810×180
	CR06*D2(3)DX	892	866	1190	1290	870	892×143	870×180
	CR07*D2(3)DX	1068	1042	1270	1470	1046	1068×143	1046×180
	CR08*D2(3)DX	1272	1256	1475	1675	1250	1272×143	1250×180
	CR10*D3DX	1322	1296	1525	1725	1300	1322×143	1300×180
	CR12*D3DX	1552	1526	1755	1955	1530	1552×143	1530×180
	CR14*D3DX	1752	1726	1955	2155	1730	1752×143	1730×180

Note: All dimensions are in mm.

DIMENSIONS

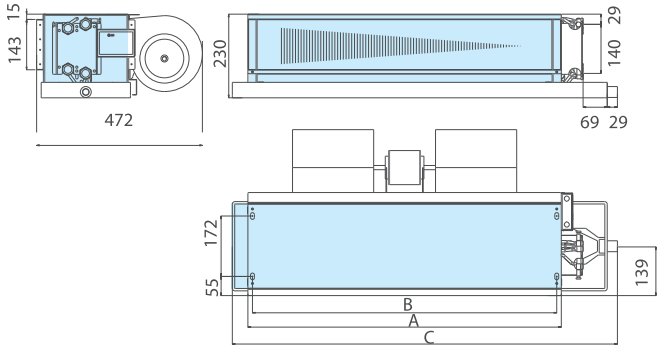


CR-DX (2 Rows, 3 Rows)



Model		A	B	C	C*	D	Air Outlet（mm×mm）	Air Inlet（mm×mm）
With Back Return Air Plenum	CR02*P2(3)DX	502	476	705	905	480	502×143	480×180
	CR03*P2(3)DX	632	606	835	1035	610	632×143	610×180
	CR04*P2(3)DX	732	706	935	1135	710	732×143	710×180
	CR05*P2(3)DX	832	806	1035	1235	810	832×143	810×180
	CR06*P2(3)DX	892	866	1190	1290	870	892×143	870×180
	CR07*P2(3)DX	1068	1042	1270	1470	1046	1068×143	1046×180
	CR08*P2(3)DX	1272	1256	1475	1675	1250	1272×143	1250×180
	CR10*P3DX	1322	1296	1525	1725	1300	1322×143	1300×180
	CR12*P3DX	1552	1526	1755	1955	1530	1552×143	1530×180
	CR14*P3DX	1752	1726	1955	2155	1730	1752×143	1730×180

CR-DX (3+1 Rows)

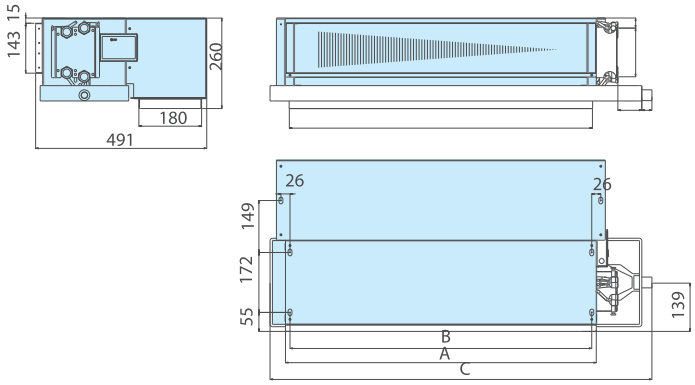


Model		A	B	C	C*	Air Outlet（mm×mm）
Without Return Air Plenum	CR02*31DX	502	476	705	905	502×143
	CR03*31DX	632	606	835	1035	632×143
	CR04*31DX	732	706	935	1135	732×143
	CR05*31DX	832	806	1035	1235	832×143
	CR06*31DX	892	866	1190	1290	892×143
	CR07*31DX	1068	1042	1270	1470	1068×143
	CR08*31DX	1272	1256	1475	1675	1272×143
	CR10*31DX	1322	1296	1525	1725	1322×143
	CR12*31DX	1552	1526	1755	1955	1552×143
	CR14*31DX	1752	1726	1955	2155	1752×143

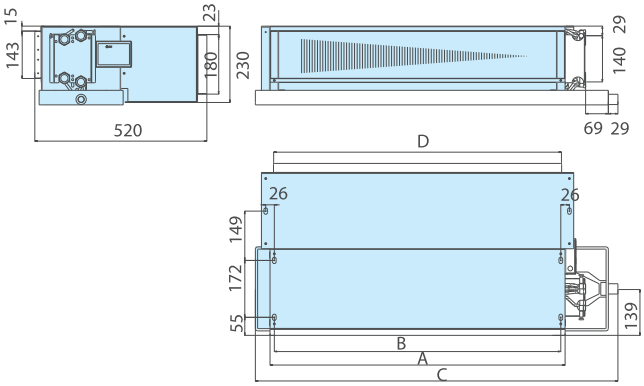
Note: All dimensions are in mm.



CR-DX (3+1 Rows)



Model		A	B	C	C*	D	Air Outlet（mm×mm）	Air Inlet（mm×mm）
With Bottom Return Air Plenum	CR02*D31DX	502	476	705	905	480	502×143	480×180
	CR03*D31DX	632	606	835	1035	610	632×143	610×180
	CR04*D31DX	732	706	935	1135	710	732×143	710×180
	CR05*D31DX	832	806	1035	1235	810	832×143	810×180
	CR06*D31DX	892	866	1190	1290	870	892×143	870×180
	CR07*D31DX	1068	1042	1270	1470	1046	1068×143	1046×180
	CR08*D31DX	1272	1256	1475	1675	1250	1272×143	1250×180
	CR10*D31DX	1322	1296	1525	1725	1300	1322×143	1300×180
	CR12*D31DX	1552	1526	1755	1955	1530	1552×143	1530×180
	CR14*D31DX	1752	1726	1955	2155	1730	1752×143	1730×180



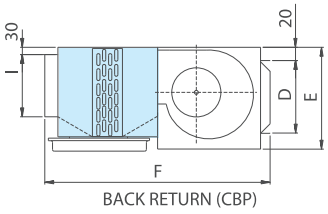
Model		A	B	C	C*	D	Air Outlet（mm×mm）	Air Inlet（mm×mm）
With Return Air Plenum	CR02*P31DX	502	476	705	905	480	502×143	480×180
	CR03*P31DX	632	606	835	1035	610	632×143	610×180
	CR04*P31DX	732	706	935	1135	710	732×143	710×180
	CR05*P31DX	832	806	1035	1235	810	832×143	810×180
	CR06*P31DX	892	866	1190	1290	870	892×143	870×180
	CR07*P31DX	1068	1042	1270	1470	1046	1068×143	1046×180
	CR08*P31DX	1272	1256	1475	1675	1250	1272×143	1250×180
	CR10*P31DX	1322	1296	1525	1725	1300	1322×143	1300×180
	CR12*P31DX	1552	1526	1755	1955	1530	1552×143	1530×180
	CR14*P31DX	1752	1726	1955	2155	1730	1752×143	1730×180

Note: All dimensions are in mm.

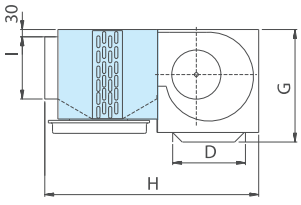
DIMENSIONS



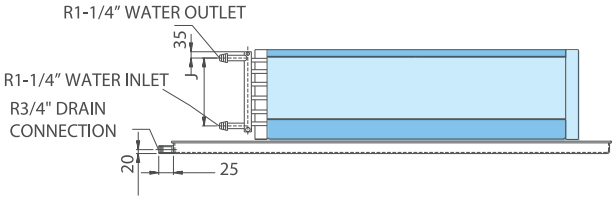
CRH

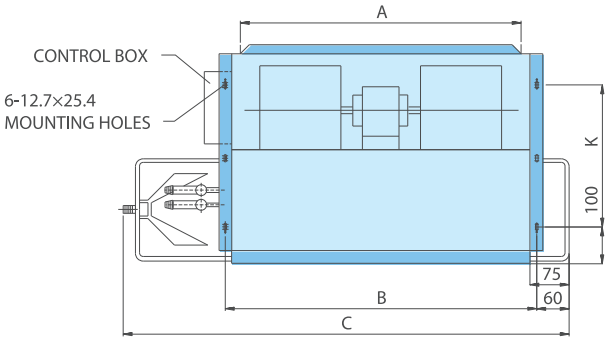


BACK RETURN (CBP)



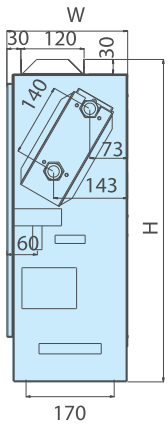
BOTTOM RETURN)CBPD)

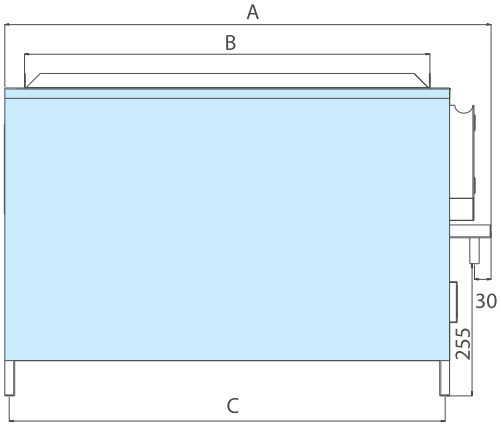




Model	A	B	C	D	E	F	G	H	I	J	K	Air Outlet (mm×mm)	Air Inlet (mm×mm)
08	930	990	1374	270	310	680	320	660	200	180	490	960×200	930×270
14	1120	1180	1544	320	360	730	370	710	250	230	540	1150×250	1120×320
18	1460	1520	1894	320	360	730	370	710	250	230	540	1490×250	1460×320

CR-FB





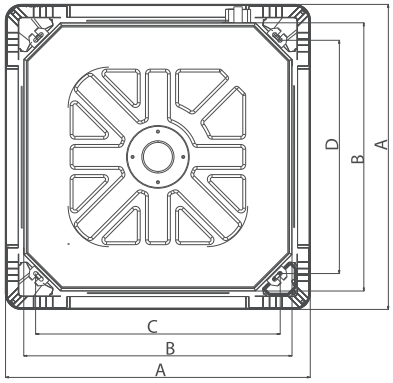
Model	A	B	C	H	W	Air Outlet (mm×mm)
CR02FB	608	450	508	621	234	450×120
CR03FB	738	580	638	621	234	580×120
CR04FB	838	680	738	621	234	680×120
CR05FB	938	780	838	621	234	780×120
CR06FB	998	840	898	621	234	840×120
CR07FB	1174	1016	1074	621	234	1016×120
CR08FB	1378	1220	1278	621	234	1220×120
CR10FB	1428	1270	1328	621	234	1270×120
CR12FB	1658	1500	1558	621	234	1500×120
CR14FB	1858	1700	1758	621	234	1700×120

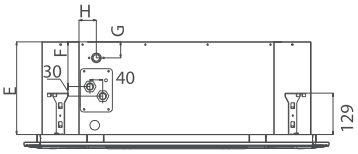
Note: All dimensions are in mm.



DIMENSIONS

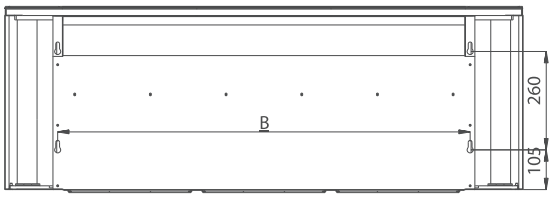
CR-CCIIH2-Y

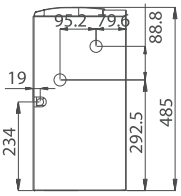




Model	A	B	C	D	E	F	G	H
CR02/03/04 CCIIH2-Y	750	660	578	542	200	85	34	62
CR05/06/07 CCIIH2-Y	750	660	578	542	290	140	50	50
CR08/10 CCIIH2-Y	850	760	678	642	290	140	50	50
CR12/14 CCIIH2-Y	950	836	763	727	290	140	50	54

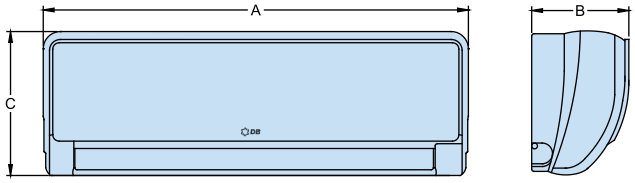
CR-CE





Model	A	B	C
CR02/03/04/05	1015	735	710
CR06/07	1370	1090	1065
CR08/10	1725	1445	1420
CR12/14	2080	1800	1775

CR-WM



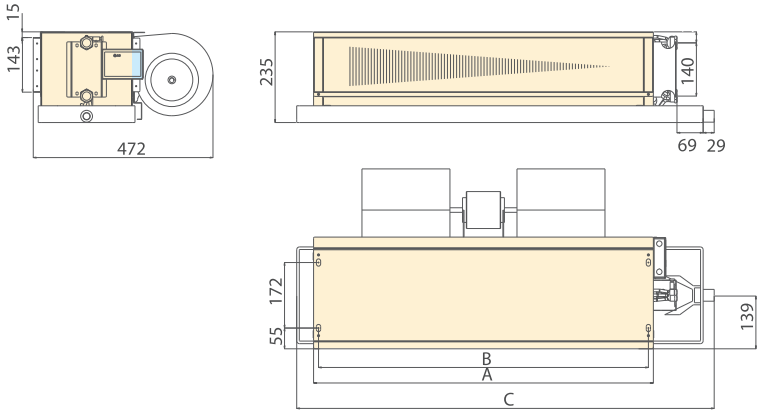
Model		A	B	C
WM	03	850	198	300
	05	970	235	315
	06	970	235	315
	08	1100	235	330

Note: All dimensions are in mm.

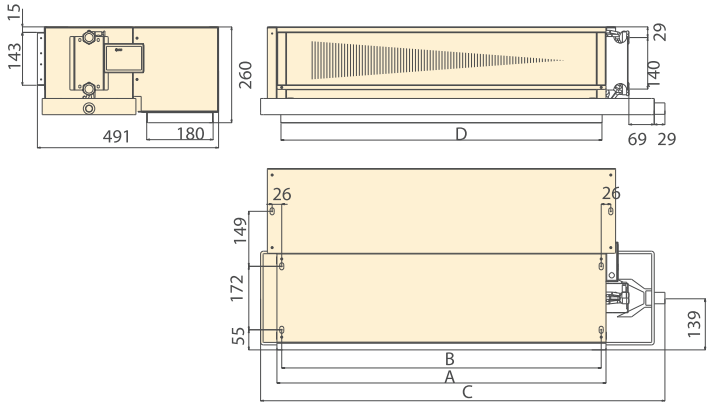
DIMENSIONS



CR-CX/ BX/ AX



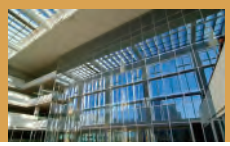
		A	B	C	C*	Air Outlet (mm×mm)
Without Return Air Plenum	CR02*2(3)	502	476	705	905	502×143
	CR03*2(3)	632	606	835	1035	632×143
	CR04*2(3)	732	706	935	1135	732×143
	CR05*2(3)	892	866	1190	1290	892×143
	CR06*2(3)	1068	1042	1270	1470	1068×143
	CR07*2(3)	1068	1042	1270	1470	1068×143
	CR08*2(3)	1322	1296	1525	1725	1322×143
	CR10*3	1322	1296	1525	1725	1322×143
	CR12*3	1552	1526	1755	1955	1552×143
	CR12*3	1752	1726	1955	2155	1752×143



Model		A	B	C	C*	D	Air Outlet (mm×mm)	Air Inlet (mm×mm)
With Bottom Return Air Plenum	CR02*D2(3)	502	476	705	905	480	502×143	480×180
	CR03*D2(3)	632	606	835	1035	610	632×143	610×180
	CR04*D2(3)	732	706	935	1135	710	732×143	710×180
	CR05*D2(3)	892	866	1190	1290	870	892×143	870×180
	CR06*D2(3)	1068	1042	1270	1470	1046	1068×143	1046×180
	CR07*D2(3)	1068	1042	1270	1470	1046	1068×143	1046×180
	CR08*D2(3)	1322	1296	1525	1725	1300	1322×143	1300×180
	CR10*D3	1322	1296	1525	1725	1300	1322×143	1300×180
	CR12*D3	1552	1526	1755	1955	1530	1552×143	1530×180
	CR12*D3	1752	1726	1955	2155	1730	1752×143	1730×180

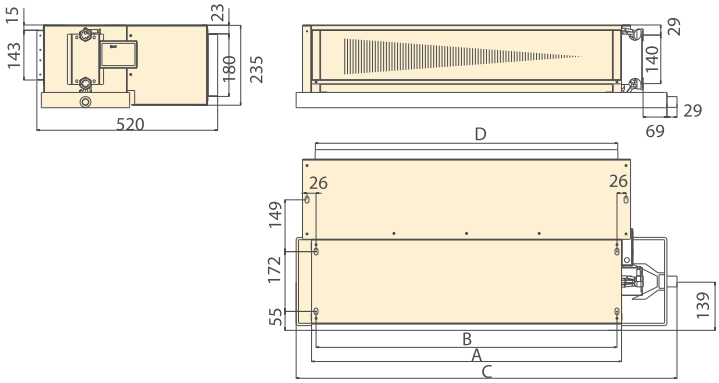
Note: All dimensions are in mm.





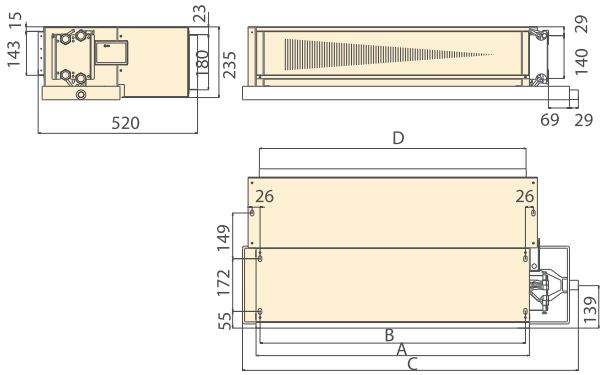
DIMENSIONS

CR-CX/ BX/ AX



Model		A	B	C	C*	D	Air Outlet（mm×mm）	Air Inlet（mm×mm）
With Back Return Air Plenum	CR02*P2(3)	502	476	705	905	480	502×143	480×180
	CR03*P2(3)	632	606	835	1035	610	632×143	610×180
	CR04*P2(3)	732	706	935	1135	710	732×143	710×180
	CR05*P2(3)	892	866	1190	1290	870	892×143	870×180
	CR06*P2(3)	1068	1042	1270	1470	1046	1068×143	1046×180
	CR07*P2(3)	1068	1042	1270	1470	1046	1068×143	1046×180
	CR08*P2(3)	1322	1296	1525	1725	1300	1322×143	1300×180
	CR10*P3	1322	1296	1525	1725	1300	1322×143	1300×180
	CR12*P3	1552	1526	1755	1955	1530	1552×143	1530×180
	CR14*P3	1752	1726	1955	2155	1730	1752×143	1730×180

CR-CX/ BX/ AX (3+1 Rows)

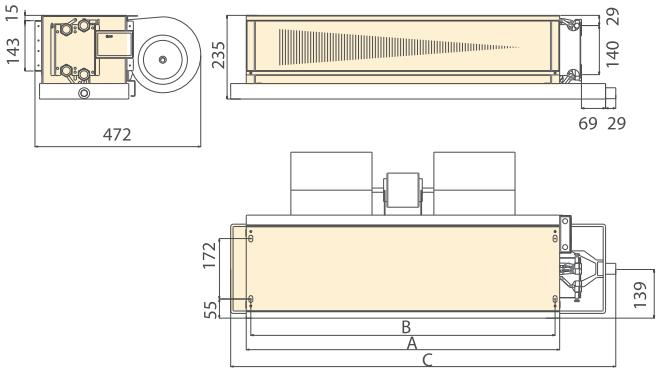


Model		A	B	C	C*	D	Air Outlet（mm×mm）	Air Inlet（mm×mm）
With Back Return Air Plenum	CR02*P31	502	476	705	905	480	502×143	480×180
	CR03*P31	632	606	835	1035	610	632×143	610×180
	CR04*P31	732	706	935	1135	710	732×143	710×180
	CR05*P31	892	866	1190	1290	870	892×143	870×180
	CR06*P31	1068	1042	1270	1470	1046	1068×143	1046×180
	CR07*P31	1068	1042	1270	1470	1046	1068×143	1046×180
	CR08*P31	1322	1296	1525	1725	1300	1322×143	1300×180
	CR10*P31	1322	1296	1525	1725	1300	1322×143	1300×180
	CR12*P31	1552	1526	1755	1955	1530	1552×143	1530×180
	CR14*P31	1752	1726	1955	2155	1730	1752×143	1730×180

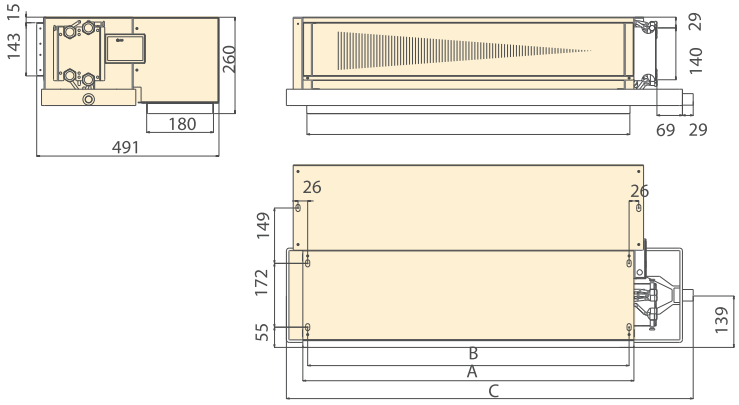
DIMENSIONS



CR-CX/ BX/ AX (3+1 Rows)



Model		A	B	C	C*	Air Outlet（mm×mm）
Without Return Air Plenum	CR02*31	502	476	705	905	502×143
	CR03*31	632	606	835	1035	632×143
	CR04*31	732	706	935	1135	732×143
	CR05*31	892	866	1190	1290	892×143
	CR06*31	1068	1042	1270	1470	1068×143
	CR07*31	1068	1042	1270	1470	1068×143
	CR08*31	1322	1296	1525	1725	1322×143
	CR10*31	1322	1296	1525	1725	1322×143
	CR12*31	1552	1526	1755	1955	1552×143
	CR14*31	1752	1726	1955	2155	1752×143



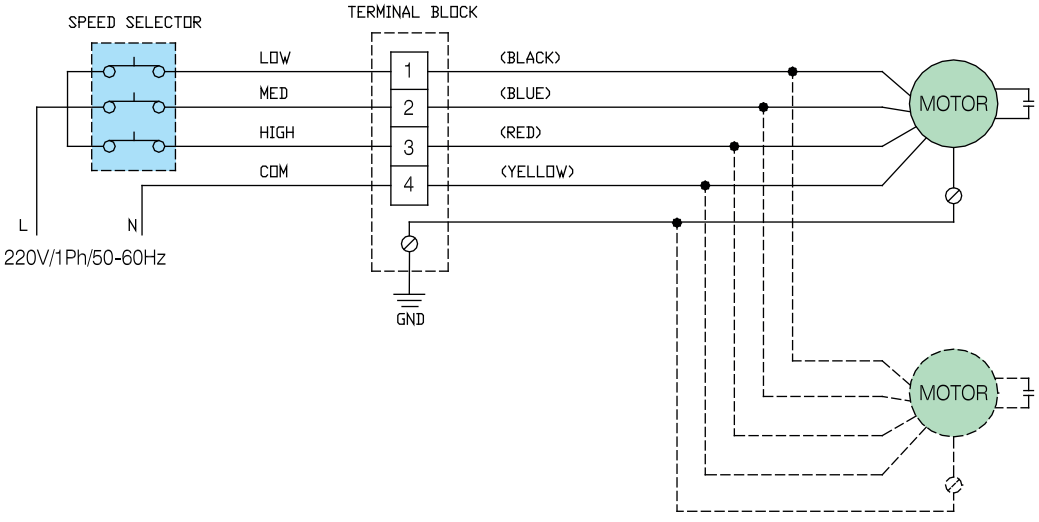
Model		A	B	C	C*	D	Air Outlet（mm×mm）	Air Inlet（mm×mm）
With Bottom Return Air Plenum	CR02*D31	502	476	705	905	480	502×143	480×180
	CR03*D31	632	606	835	1035	610	632×143	610×180
	CR04*D31	732	706	935	1135	710	732×143	710×180
	CR05*D31	892	866	1190	1290	870	892×143	870×180
	CR06*D31	1068	1042	1270	1470	1046	1068×143	1046×180
	CR07*D31	1068	1042	1270	1470	1046	1068×143	1046×180
	CR08*D31	1322	1296	1525	1725	1300	1322×143	1300×180
	CR10*D31	1322	1296	1525	1725	1300	1322×143	1300×180
	CR12*D31	1552	1526	1755	1955	1530	1552×143	1530×180
	CR14*D31	1752	1726	1955	2155	1730	1752×143	1730×180

Note: All dimensions are in mm.

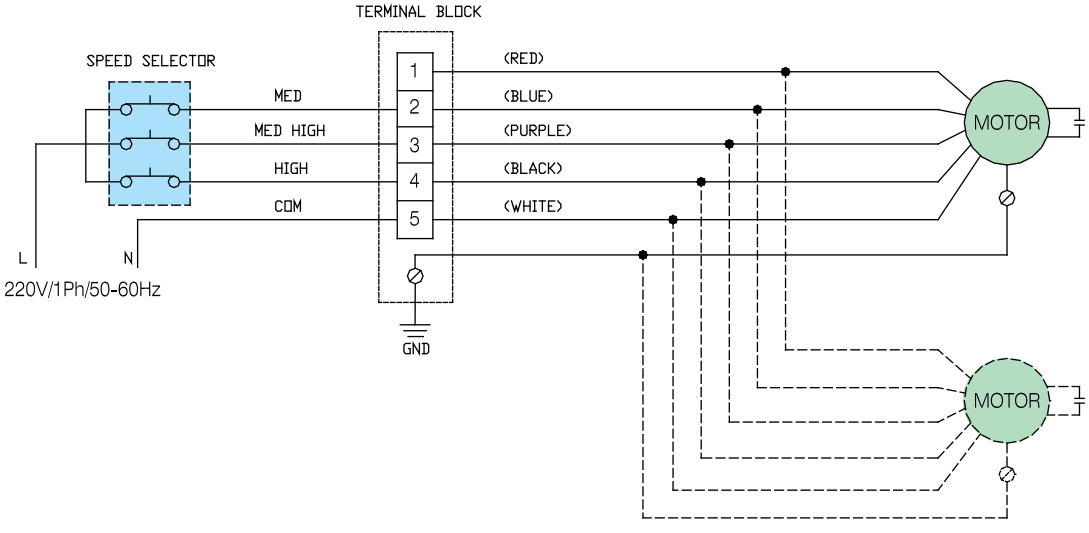


WIRING DIAGRAM

CR



CRH

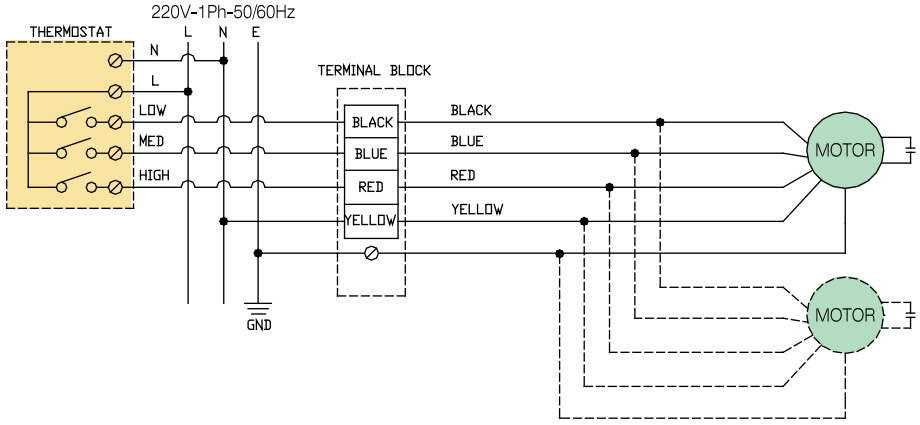


Note:
Terminal No. 1, 2, 3 for low static pressure of low, medium, high speed connection.
Terminal No. 2, 3. 4 for high static pressure of low, medium, high speed connection.
Terminal No. 2, 3, 4 are standard connection.
Caution: Wrong termination may cause motor damage.

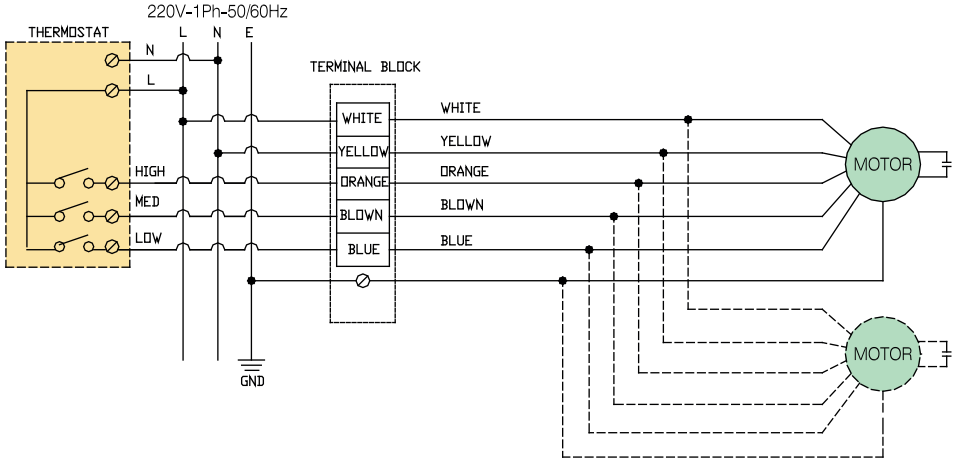
WIRING DIAGRAM



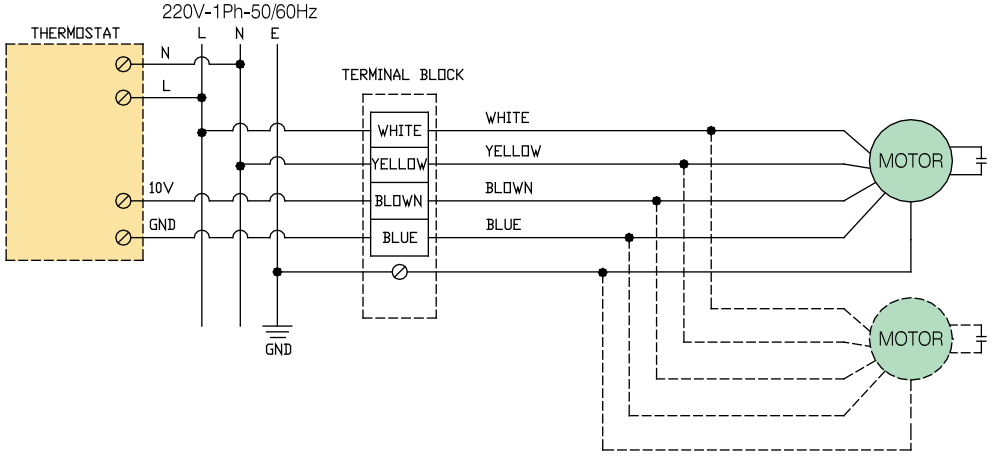
AC Motor (3 Speed)



DC Motor (3 Speed)



DC Motor (Variable Speed)



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