

# COMMERCIAL AIR CONDITIONER

*Flow Master Series*

T1/50Hz

R410a

R407c

R22



# HIGH STATIC DUCTED

## | WIDE RANGE OF PRODUCT

KENDO High Static Ducted units are designed for air-conditioning system in commercial and industrial application comprises various model with complete range of equipment from 8hp to 60.0 hp for indoor units and 8hp to 20hp for outdoor units.



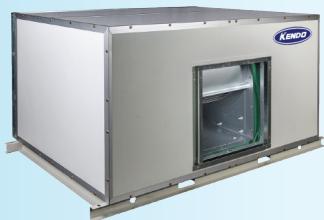
Single Skin Indoor Unit (8 ~ 15hp)



Outdoor Unit (8hp)



Outdoor Unit (10hp & 12.5hp)



Double Skin Indoor Unit (20 ~ 60hp)



Outdoor Unit (20hp)



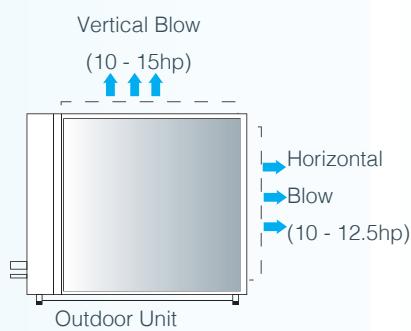
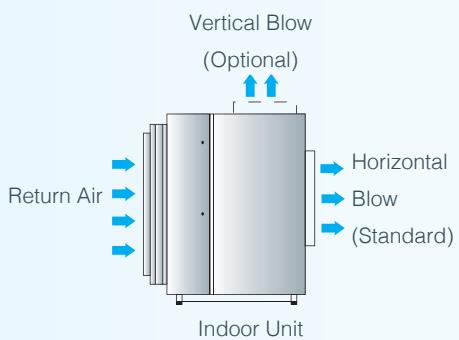
Outdoor Unit (15hp)

## | HIGH PERFORMANCE SCROLL COMPRESSOR

Adopting very famous brand with a special low noise, low vibration and high performance scroll compressor. Possesses a high Energy Efficiency Ratio (EER) delivering exceptional performance with a reduction in energy consumption. 100% gas cooler motor with internal line breaker or solid state motor protectors.



Scroll  
Compressor



## | FLEXIBLE APPLICATION & INSTALLATION

The indoor and outdoor unit allows you to choose the air discharge direction for either horizontal or vertical air discharge application (Optional). This package is optional and need to confirm before do the ordering.

## | HIGH QUALITY CASING

The indoor casing is constructed with powder coated electro galvanized mild steel sheet and insulated with 1/2" (13mm) thick 24kg/m<sup>3</sup> PE foam (8.0 ~ 15.0hp) or 1" (25mm) thick double skin panel injected with polyurethane foam (PU) insulation with "K" value of 0.02Watt/°C

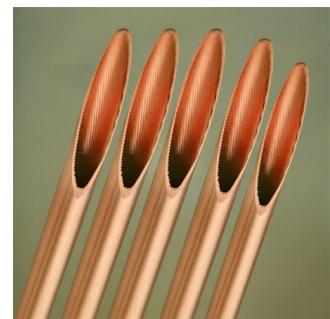
## HIGH EFFICIENCY HEAT EXCHANGER

Each coil consist of staggered row of 3/8" OD seamless copper tubes, mechanically expanded into die-formed aluminum fins.

The evaporator coil come standard with hydrophilic coated fin to ensure optimum system effectiveness and durability.

The condenser coil provided with integral sub-cooling circuit to maximize energy efficiency and promote superior match-system operating performance when connected to suitable sized DX Evaporator-Blower unit.

Coils are leak and pressure tested to 450psig while storage pressure is keep at 100 Psig.



## SAFETY FEATURES

Built in internal overload protection for compressor. All outdoor units are equipped with auto reset high pressure and low pressure cut-out to protect against compressor damage due to high head pressure and system leakage respectively.



Outdoor unit control circuit

\*Phase sequencer, overload and delay timer is optional.

## AIR FILTER

The Indoor unit come with washable synthetic fibre air filter. Designed with easy withdrawal and renewal of filter cells. HEPA, AAF and many type of air filter can be requested to meet the requirement and building application.



Washable Air Filter

## PART LOAD WITH MULTI CIRCUIT DESIGN

The unit has single (8.0 ~ 15.0 hp) and multiple hermetic scroll compressors (20.0 ~ 60.0 hp) with independent refrigerant circuit.

Each refrigerant circuit consists of a high efficiency compressor and condenser. With this modular system configuration combining with microprocessor controller allows the units to operate under partial load condition to meet the cooling capacity demand.

No total shut down when servicing or repairing a faulty compressor or outdoor units.



Single Condensing Unit



Indoor Unit (8 ~ 15hp)



Single Stage Controller



In a OUTDOOR MODULAR SYSTEM, any faulty unit can be shut down and the remaining units can keep on working.



Indoor Unit (20 ~ 60hp)



Sequential Controller

## INTELLIGENT CONTROLLER (STANDARD)

All the features can be easily set and change through microprocessor controller. It ensures comfortable cooling is delivered to the user with user friendly wired keypad controller.

Wide range of control features including mode, temperature setting, timer, self diagnosis error code and etc.

## Indoor Unit Specification (R22)

Indoor Unit		KHD-807C	KHD-1007C	KHD-1257C	KDH-1507C
Cooling Capacity	Btu/hr	80,000	100,000	125,000	150,000
	kW	23.45	29.31	36.64	43.96
Indoor Input Power	W	1,630	2,200	1,900	1,900
Indoor Running Current	A	3.70 x 2	5.00 x 2	3.30	3.30
Power Source	V/Ph/HZ	220 ~ 240/1/50	220 ~ 240/1/50	380 ~ 415/3/50	380 ~ 415/3/50
Refrigerant / Control Type		R22 Indoor TXV	R22 Indoor TXV	R22 Indoor TXV	R22 Indoor TXV
Air Flow	CFM / CMH	2,350 / 4,000	2,945 / 5,000	4,240 / 7,200	4,415 / 7,500
Air Filter Type / Material		Washable / Nylon	Washable / Nylon	Washable / Nylon	Washable / Nylon
External Static Pressure	pa / in.wg	100 / 0.4	100 / 0.4	150 / 0.6	150 / 0.6
Sound Pressure Level (Measured 1m away from indoor unit)	dBA	64	66	65	66
Unit Dimension (H x W x D)	mm	440 x 1,450 x 900	440 x 1,750 x 900	707 x 1,882 x 1,140	707 x 1,882 x 1,140
Unit Weight	kg	99	126	208	209
Connection	Liquid	mm (in)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)
Pipe Size	Gas	mm (in)	28.58 (1 <sup>1</sup> / <sub>8</sub> )	28.58 (1 <sup>1</sup> / <sub>8</sub> )	34.93 (1 <sup>3</sup> / <sub>8</sub> )
Recommended Outdoor Unit Model		KDO-807-E	KDO-1007-E	KDO-1257-E	KDO-1507-E

Indoor Unit		KHD-2007C2	KHD-2507C	KHD-3007C2	KDH-3507C3
Cooling Capacity	Btu/hr	200,000	250,000	300,000	350,000
	kW	58.62	73.27	87.92	102.58
Indoor Input Power	W	3,620	4,740	6,370	6,370
Indoor Running Current	A	6.10	8.00	10.70	10.70
Power Source	V/Ph/HZ	380 ~ 415 / 3/50	380 ~ 415/3/50	380 ~ 415/3/50	380 ~ 415/3/50
Refrigerant / Control Type		R22 Indoor TXV	R22 Indoor TXV	R22 Indoor TXV	R22 Indoor TXV
Air Flow	CFM / CMH	5,885 / 10,000	8,005 / 13,600	8,830 / 15,000	10,500 / 17,840
Air Filter Type / Material		Washable / Nylon	Washable / Nylon	Washable / Nylon	Washable / Nylon
External Static Pressure	pa / in.wg	250 / 1.00	250 / 1.00	300 / 1.20	300 / 1.20
Sound Pressure Level (Measured 1m away from indoor unit)	dBA	66	66	67	67
Unit Dimension (H x W x D)	mm	780 x 2,248 x 1,297	1,150 x 2,252 x 1,347	1,175 x 2,121 x 1,547	1,450 x 2,077 x 1,547
Unit Weight	kg	266	322	377	455
Connection	Liquid	mm (in)	15.88 (5/8)(x2)	15.88 (5/8)(x2)	15.88 (5/8)(x2) & 15.88 (5/8)
Pipe Size	Gas	mm (in)	28.58 (1 <sup>1</sup> / <sub>8</sub> )(x2)	28.58 (1 <sup>1</sup> / <sub>8</sub> )(x2)	34.93 (1 <sup>3</sup> / <sub>8</sub> )(x2) & 28.58 (1 <sup>1</sup> / <sub>8</sub> )
Recommended Outdoor Unit Model		KDO2-2007-E or KDO-1007-E(x2)	KDO-1257-E(x2)	KDO-1507-E(x2)	KDO-1257-E(x2) + KDO-1007-E

Indoor Unit		KHD-4007C4	KHD-4507C3	KHD-5007C4	KDH-6007C4
Cooling Capacity	Btu/hr	400,000	450,000	500,000	600,000
	kW	117.23	131.89	146.54	175.85
Indoor Input Power	W	8,490	8,490	12,360	12,570
Indoor Running Current	A	14.20	14.20	20.50	22.40
Power Source	V/Ph/HZ	380 ~ 415/3/50	380 ~ 415/3/50	380 ~ 415/3/50	380 ~ 415/3/50
Refrigerant / Control Type		R22 Indoor TXV	R22 Indoor TXV	R22 Indoor TXV	R22 Indoor TXV
Air Flow	CFM / CMH	11,770 / 20,000	12,950 / 22,000	14,125 / 24,000	18,245 / 31,000
Air Filter Type / Material		Washable / Nylon	Washable / Nylon	Washable / Nylon	Washable / Nylon
External Static Pressure	pa / in.wg	300 / 1.20	350 / 1.41	400 / 1.60	400 / 1.60
Sound Pressure Level (Measured 1m away from indoor unit)	dBA	69	69	70	71
Unit Dimension (H x W x D)	mm	1,450 x 2,434 x 1,547	1,450 x 2,777 x 1,637	1,450 x 2,777 x 1,637	1,650 x 2,777 x 1,737
Unit Weight	kg	584	600	640	755
Connection	Liquid	mm (in)	15.88 (5/8)(x4)	15.88 (5/8)(x4)	15.88 (5/8)(x4)
Pipe Size	Gas	mm (in)	28.58 (1 <sup>1</sup> / <sub>8</sub> )(x4)	34.93 (1 <sup>3</sup> / <sub>8</sub> )(x4)	34.93 (1 <sup>3</sup> / <sub>8</sub> )(x4)
Recommended Outdoor Unit Model		KDO-1007-E(x4)	KDO-1507-E(x3)	KDO-1257-E(x4)	KDO-1507-E(x4)

Conditions: 1) Nominal cooling capacities are based on the following conditions : Indoor 26.7°C DB, 19.4 °C WB, Outdoor 35°C DB.

2) All specifications are subjected to change by manufacturer without prior notice.

## Indoor Unit Specification (R407c)

Indoor Unit		KHD-807C-K	KHD-1007C-K	KHD-1257C-K	KHD-1507C-K
Cooling Capacity	Btu/hr kW	77,600 22.74	97,000 28.43	121,250 35.54	145,500 42.64
Indoor Input Power	W	1,630	2,200	1,900	1,900
Indoor Running Current	A	3.70 x 2	5.00 x 2	3.30	3.30
Power Source	V/Ph/HZ	220 ~ 240/1/50	220 ~ 240/1/50	380 ~ 415/3/50	380 ~ 415/3/50
Refrigerant / Control Type		R407C Indoor TXV	R407C Indoor TXV	R407C Indoor TXV	R407C Indoor TXV
Air Flow	CFM / CMH	2,350 / 4,000	2,945 / 5,000	4,240 / 7,200	4,415 / 7,500
Air Filter Type / Material		Washable / Nylon	Washable / Nylon	Washable / Nylon	Washable / Nylon
External Static Pressure	pa / in.wg	100 / 0.4	100 / 0.4	150 / 0.6	150 / 0.6
Sound Pressure Level (Measured 1m away from indoor unit)	dBA	64	66	65	66
Unit Dimension (H x W x D)	mm	440 x 1,450 x 900	440 x 1,750 x 900	707 x 1,882 x 1,140	707 x 1,882 x 1,140
Unit Weight	kg	99	126	208	209
Connection	Liquid	mm (in)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)
Pipe Size	Gas	mm (in)	28.58 (11/8)	28.58 (11/8)	34.93 (13/8)
Recommended Outdoor Unit Model		KDO-807-EK	KDO-1007-EK	KDO-1257-EK	KDO-1507-EK
Indoor Unit		KHD-2007C2-K	KHD-2507C-K	KHD-3007C2-K	KHD-3507C3-K
Cooling Capacity	Btu/hr kW	194,000 56.86	242,500 71.07	291,000 85.29	339,500 99.50
Indoor Input Power	W	3,620	4,740	6,370	6,370
Indoor Running Current	A	6.10	8.00	10.70	10.70
Power Source	V/Ph/HZ	380 ~ 415/3/50	380 ~ 415/3/50	380 ~ 415/3/50	380 ~ 415/3/50
Refrigerant / Control Type		R407C Indoor TXV	R407C Indoor TXV	R407C Indoor TXV	R407C Indoor TXV
Air Flow	CFM / CMH	5,885 / 10,000	8,005 / 13,600	8,830 / 15,000	10,500 / 17,840
Air Filter Type / Material		Washable / Nylon	Washable / Nylon	Washable / Nylon	Washable / Nylon
External Static Pressure	pa / in.wg	250 / 1.00	250 / 1.00	300 / 1.20	300 / 1.20
Sound Pressure Level (Measured 1m away from indoor unit)	dBA	66	66	67	67
Unit Dimension (H x W x D)	mm	780 x 2,248 x 1,297	1,150 x 2,252 x 1,347	1,175 x 2,121 x 1,547	1,450 x 2,077 x 1,547
Unit Weight	kg	266	322	377	455
Connection	Liquid	mm (in)	15.88 (5/8)(x2)	15.88 (5/8)(x2)	15.88 (5/8)(x2) & 15.88 (5/8)
Pipe Size	Gas	mm (in)	28.58 (11/8)(x2)	34.93 (13/8)(x2)	34.93 (13/8)
Recommended Outdoor Unit Model		KDO2-2007-EK or KDO-1007-EK (x2)	KDO-1257-EK (x2)	KDO-1507-EK (x2)	KDO-1257-EK (x2) + KDO-1007-EK
Indoor Unit		KHD-4007C4-K	KHD-4507C3-K	KHD-5007C4-K	KHD-6007C4-K
Cooling Capacity	Btu/hr kW	388,000 113.72	436,500 127.93	485,000 142.15	582,000 170.57
Indoor Input Power	W	8,490	8,490	12,360	12,570
Indoor Running Current	A	14.20	14.20	20.50	22.40
Power Source	V/Ph/HZ	380 ~ 415/3/50	380 ~ 415/3/50	380 ~ 415/3/50	380 ~ 415/3/50
Refrigerant / Control Type		R407C Indoor TXV	R407C Indoor TXV	R407C Indoor TXV	R407C Indoor TXV
Air Flow	CFM / CMH	11,770 / 20,000	12,950 / 22,000	14,125 / 24,000	18,245 / 31,000
Air Filter Type / Material		Washable / Nylon	Washable / Nylon	Washable / Nylon	Washable / Nylon
External Static Pressure	pa / in.wg	300 / 1.20	350 / 1.41	400 / 1.60	400 / 1.60
Sound Pressure Level (Measured 1m away from indoor unit)	dBA	69	69	70	71
Unit Dimension (H x W x D)	mm	1,450 x 2,434 x 1,547	1,450 x 2,777 x 1,637	1,450 x 2,777 x 1,637	1,650 x 2,777 x 1,737
Unit Weight	kg	584	600	640	755
Connection	Liquid	mm (in)	15.88 (5/8)(x4)	15.88 (5/8)(x2)	15.88 (5/8)(x4)
Pipe Size	Gas	mm (in)	28.58 (11/8)(x4)	34.93 (13/8)(x2)	34.93 (13/8)(x4)
Recommended Outdoor Unit Model		KDO-1007-EK (x4)	KDO-1507-EK (x3)	KDO-1257-EK (x4)	KDO-1507-EK (x4)

Conditions: 1) Nominal cooling capacities are based on the following conditions : Indoor 26.7°C DB, 19.4 °C WB, Outdoor 35°C DB.

2) All specifications are subjected to change by manufacturer without prior notice.

## Indoor Unit Specification (R410a)

Indoor Unit		KHD-807C-N	KHD-1007C-N	KHD-1257C-N	KHD-1507C-N
Cooling Capacity	Btu/hr	80,000	100,000	125,000	150,000
	kW	23.45	29.31	36.64	43.96
Indoor Input Power	W	1,630	2,200	1,900	1,900
Indoor Running Current	A	3.70 x 2	5.00 x 2	3.30	3.30
Power Source	V/Ph/HZ	220 ~ 240/1/50	220 ~ 240/1/50	380 ~ 415/3/50	380 ~ 415/3/50
Refrigerant / Control Type		R410a Indoor TXV	R410a Indoor TXV	R410a Indoor TXV	R410a Indoor TXV
Air Flow	CFM / CMH	2,350 / 4,000	2,945 / 5,000	3,679 / 6,250	4,415 / 7,500
Air Filter Type / Material		Washable / Nylon	Washable / Nylon	Washable / Nylon	Washable / Nylon
External Static Pressure	pa / in.wg	145 / 0.58	175 / 0.70	200 / 0.80	200 / 0.80
Sound Pressure Level (Measured 1m away from indoor unit)	dBA	64	65	65	65
Unit Dimension (H x W x D)	mm	440 x 1,450 x 900	440 x 1,750 x 900	700 x 1,860 x 1,140	700 x 1,860 x 1,140
Unit Weight	kg	99	126	208	209
Connection	Liquid	mm (in)	12.70 (1/2)	12.70 (1/2)	15.88 (5/8)
Pipe Size	Gas	mm (in)	22.23 (7/8)	25.40 (1)	28.58 (1 <sup>1</sup> /8)
Recommended Outdoor Unit Model		KDO-807-EN	KDO-1007-EN	KDO-1257-EN	KDO-1507-EN
Indoor Unit		KHD-2007C2-N	KHD-2507C2-N	KHD-3007C2-N	KHD-3507C3-N
Cooling Capacity	Btu/hr	200,000	250,000	300,000	350,000
	kW	58.62	73.27	87.92	102.58
Indoor Input Power	W	3,620	4,740	6,370	6,370
Indoor Running Current	A	6.10	8.00	10.70	10.70
Power Source	V/Ph/HZ	380 ~ 415/3/50	380 ~ 415/3/50	380 ~ 415/3/50	380 ~ 415/3/50
Refrigerant / Control Type		R410a Indoor TXV	R410a Indoor TXV	R410a Indoor TXV	R410a Indoor TXV
Air Flow	CFM / CMH	5,885 / 10,000	7,358 / 12,500	8,830 / 15,000	10,500 / 17,840
Air Filter Type / Material		Washable / Nylon	Washable / Nylon	Washable / Nylon	Washable / Nylon
External Static Pressure	pa / in.wg	250 / 1.00	300 / 1.20	300 / 1.20	300 / 1.20
Sound Pressure Level (Measured 1m away from indoor unit)	dBA	66	66	67	67
Unit Dimension (H x W x D)	mm	780 x 2,248 x 1,297	1,155 x 2,241 x 1,347	1,175 x 2,121 x 1,547	1,450 x 2,081 x 1,547
Unit Weight	kg	266	322	377	380
Connection	Liquid	mm (in)	12.70 (1/2)(x2)	12.70 (1/2)(x2)	15.88 (5/8)(x2)
Pipe Size	Gas	mm (in)	25.40 (1)(x2)	28.58 (1 <sup>1</sup> /8)(x2)	34.93 (1 <sup>3</sup> /8)(x2)
Recommended Outdoor Unit Model		KDO-1007-EN (x2)	KDO-1257-EN (x2)	KDO-1507-EN (x2)	KDO-1007-EN + KDO-1257-EN (x2)
Indoor Unit		KHD-4007C4-N	KHD-4507C3-N	KHD-5007C4-N	KHD-6007C4-N
Cooling Capacity	Btu/hr	400,000	450,000	485,000	582,000
	kW	117.23	131.89	142.15	170.57
Indoor Input Power	W	8,490	8,490	12,360	12,570
Indoor Running Current	A	14.20	14.20	20.50	22.40
Power Source	V/Ph/HZ	380 ~ 415/3/50	380 ~ 415/3/50	380 ~ 415/3/50	380 ~ 415/3/50
Refrigerant / Control Type		R410a Indoor TXV	R410a Indoor TXV	R410a Indoor TXV	R410a Indoor TXV
Air Flow	CFM / CMH	11,770 / 20,000	13,244 / 22,500	14,715 / 25,000	17,658 / 30,000
Air Filter Type / Material		Washable / Nylon	Washable / Nylon	Washable / Nylon	Washable / Nylon
External Static Pressure	pa / in.wg	300 / 1.20	350 / 1.41	400 / 1.60	400 / 1.60
Sound Pressure Level (Measured 1m away from indoor unit)	dBA	68	68	68	70
Unit Dimension (H x W x D)	mm	1,450 x 2,432 x 1,547	1,450 x 2,782 x 1,637	1,450 x 2,782 x 1,637	1,650 x 2,782 x 1,737
Unit Weight	kg	584	644	644	880
Connection	Liquid	mm (in)	12.70 (1/2)(x4)	15.88 (5/8)(x3)	12.70 (1/2)(x4)
Pipe Size	Gas	mm (in)	25.40 (1)(x4)	34.93 (1 <sup>3</sup> /8)(x3)	34.93 (1 <sup>3</sup> /8)(x4)
Recommended Outdoor Unit Model		KDO-1007-EN (x4)	KDO-1507-EN (x3)	KDO-1257-EN (x4)	KDO-1507-EN (x4)
Indoor Unit		KHD-7507C4-N			
Cooling Capacity	Btu/hr			750,000	
	kW			219.81	
Indoor Input Power	W			13,000	
Indoor Running Current	A			24.50	
Power Source	V/Ph/HZ			380 ~ 415/3/50	
Refrigerant / Control Type				R410a Indoor TXV	
Air Flow	CFM / CMH			22,073 / 37,500	
Air Filter Type / Material				Washable / Nylon	
External Static Pressure	pa / in.wg			450 / 1.81	
Sound Pressure Level (Measured 1m away from indoor unit)	dBA			70	
Unit Dimension (H x W x D)	mm			2,006 x 2,782 x 1,839	
Unit Weight	kg			900	
Connection	Liquid			15.88 (5/8)(x5)	
Pipe Size	Gas			34.93 (1 <sup>3</sup> /8)(x5)	
Recommended Outdoor Unit Model				KDO-1507-EN (x5)	

## Outdoor Unit Specification (R22)

Flow Master Series

Outdoor Unit		KDO-807-E	KDO-1007-E	KDO-1257-E	KDO-1507-E	KDO2-2007E
Cooling Capacity	Btu/hr	80,000	100,000	125,000	150,000	200,000 (100,000+100,000)
Outdoor Input Power	kW	23.45	29.31	36.64	43.96	58.62
Outdoor Running Current	W	7,570	9,820	11,180	15,475	19,640
Power Source	A	14.20	17.50	19.90	29.56	35.00
Refrigerant / Control Type	V/Ph/HZ	380 ~ 415/3/50	380 ~ 415/3/50	380 ~ 415/3/50	380 ~ 415/3/50	380 ~ 415/3/50
Air Flow	CFM / CMH	6,000 / 10,190	7,000 / 11,890	8,000 / 13,590	12,000 / 20,390	14,000 / 23,780
Unit Dimension (H x W x D)	mm	951 x 1,308 x 508	1,213 x 967 x 1,100	1,213 x 967 x 1,110	1,225 x 967 x 1,110	1,090 x 1,032 x 1,803
Unit Weight	kg	158	199	202	198	400
Connection	Liquid	mm (in)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)(x2)
Pipe Size	Gas	mm (in)	28.58 (1 <sup>1</sup> /8)	28.58 (1 <sup>1</sup> /8)	34.93 (1 <sup>3</sup> /8)	28.58 (1 <sup>1</sup> /8)(x2)

## Outdoor Unit Specification (R407c)

Outdoor Unit		KDO-807-EK	KDO-1007-EK	KDO-1257-EK	KDO-1507EK	KDO2-2007EK
Cooling Capacity	Btu/hr	77,600	97,000	121,250	145,500	194,000 (97,000+97,000)
Outdoor Input Power	kW	22.67	28.43	35.54	42.64	56.86
Outdoor Running Current	W	7,770	9,770	11,230	15,525	19,540
Power Source	A	14.60	17.70	20.00	30.46	35.40
Refrigerant / Control Type	V/Ph/HZ	380 ~ 415/3/50	380 ~ 415/3/50	380 ~ 415/3/50	380 ~ 415/3/50	380 ~ 415/3/50
Air Flow	CFM / CMH	6,000 / 10,190	7,000 / 11,890	8,000 / 13,590	12,000 / 20,390	14,000 / 23,780
Unit Dimension (H x W x D)	mm	951 x 1,308 x 508	1,213 x 967 x 1,100	1,213 x 967 x 1,100	1,225 x 967 x 1,110	1,090 x 1,032 x 1,803
Unit Weight	kg	158	199	202	198	400
Connection	Liquid	mm (in)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)(x2)
Pipe Size	Gas	mm (in)	28.58 (1 <sup>1</sup> /8)	28.58 (1 <sup>1</sup> /8)	34.93 (1 <sup>3</sup> /8)	28.58 (1 <sup>1</sup> /8)(x2)

## Outdoor Unit Specification (R410a)

Outdoor Unit		KDO-807-EN	KDO-1007-EN	KDO-1257-EN	KDO-1507EN
Cooling Capacity	Btu/hr	80,000	100,000	125,000	150,000
Outdoor Input Power	kW	23.45	29.31	36.64	43.96
Outdoor Running Current	W	7,140	9,430	11,230	15,525
Power Source	A	13.20	16.00	18.2	28.20
Refrigerant / Control Type	V/Ph/HZ	380 ~ 415/3/50	380 ~ 415/3/50	380 ~ 415/3/50	380 ~ 415/3/50
Air Flow	CFM / CMH	6,000 / 10,190	7,000 / 11,890	8,000 / 13,590	12,000 / 20,390
Unit Dimension (H x W x D)	mm	951 x 1,308 x 508	1,035 x 1,118 x 1,012	1,035 x 1,118 x 1,012	1,035 x 1,118 x 1,012
Unit Weight	kg	158	199	202	198
Connection	Liquid	mm (in)	12.70 (1/2)	12.70 (1/2)	12.70 (1/2)
Pipe Size	Gas	mm (in)	22.23 (7/8)	25.40 (1)	28.58 (1 <sup>1</sup> /8)
					34.93 (1 <sup>3</sup> /8)

Conditions: 1) Nominal cooling capacities are based on the following conditions : Indoor 26.7°C DB, 19.4 °C WB, Outdoor 35°C DB.

2) All specifications are subjected to change by manufacturer without prior notice.

# MULTI SPLIT 1 to 2 (Single Condenser)

## | WIDE RANGE OF PRODUCT

KENDO High Static Ducted multi split units are designed for air-conditioning system in commercial and industrial application. This unit has multiple hermetic compressors with independent refrigerant circuit in single foaming condenser coil.



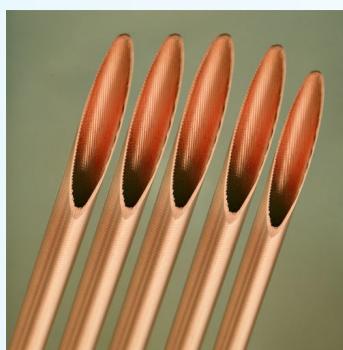
Outdoor Unit Multi Split (Single Coil)



Indoor Unit High Static Ducted

## | STRONG AIR FLOW

Each coil consist of staggered row of 3/8" OD seamless copper tubes, mechanically expanded into die-formed aluminum fins. The evaporator coil come standard with hydrophilic coated fin to ensure optimum system effectiveness and durability. The condenser coil provided with integral sub-cooling circuit to maximize energy efficiency and promote superior match-system operating performance when connected to suitable sized DX Evaporator-Blower unit. Coils are leak and pressure tested to 450psig while storage pressure is keep at 100 Psig.



Scroll Compressor

## | SLIM INDOOR DESIGN

The indoor casing is constructed with powder coated electro galvanized mild steel sheet and insulated with 1/2" (13mm) thick 24kg/m PE foam. Slim indoor design with body height 17.5" (440mm). The internal vents are easily accessible by removing the service panels.

## | HIGH QUALITY CASING

The indoor and outdoor casing is constructed with powder coated electro galvanized mild steel sheet and insulated with 1/2" (13mm) thick 24kg/m<sup>3</sup> PE foam

## | SAFETY FEATURES

Built in internal overload protection for compressor. All outdoor units are equipped with auto reset high pressure and low pressure cut-out to protect against compressor damage due to high head pressure and system leakage respectively



Outdoor unit control circuit

*\*Phase sequencer, overload and delay timer is optional.*

## | AIR FILTER

The Indoor unit come washable synthetic fibre air filter. Designed with easy withdrawal and renewal of filter cells. HEPA,AAF and many type of air filter can be requested to meet the requirement and building application.



Washable Air Filter

## | PART LOAD WITH MULTI CIRCUIT DESIGN

The unit has multiple hermetic scroll compressors with independent refrigerant circuit in single foaming condenser coil. Each refrigerant circuit consists of a high efficiency compressor and condenser. With this modular configuration combining with microprocessor controller allows the units to operate under partial load condition to meet the cooling capacity demand.



Outdoor Unit Multi Split(Single Coil)



Indoor Unit High Static Ducted



Sequential Controller

## | INTELLIGENT CONTROLLER (OPTIONAL)

All the features can be easily set and change through microprocessor controller. It ensures comfortable cooling is delivered to the user with user friendly wired keypad controller. Wide range of control features including mode, temperature setting, timer, self diagnosis error code and etc.

## Indoor Unit Specification

Indoor Unit		KHD2-1707 / KHD2-1707C	KHD2-2107 / KHD2-2107C	KHD2-1707C-K	KHD2-2107C-K
Cooling Capacity	Btu/hr kW	170,600 (85,300 x 2) 50.00 (25.0 x 2)	213,250 (106,625 x 2) 62.50 (31.25 x 2)	170,600 (85,300 x 2) 50.00 (25.0 x 2)	213,250 (106,625 x 2) 62.50 (31.25 x 2)
Indoor Input Power	W	650 x 2	1100 x 2	1,630	2,200
Indoor Running Current	A	3.70 x 2	5.00 x 2	3.70 x 2	5.00 x 2
Air Flow	V/Ph/HZ	220 ~ 240/1/50	220 ~ 240/1/50	220 ~ 240/1/50	220 ~ 240/1/50
Refrigerant / Control Type		R22 Indoor TXV	R22 Indoor TXV	R407c Indoor TXV	R407c Indoor TXV
Power Source	CFM	2,350 x 2	2,945 x 2	2,350 x 2	2,945 x 2
Air Filter Type / Material		Washable / Nylon	Washable / Nylon	Washable / Nylon	Washable / Nylon
External Static Pressure	pa / in.wg	100 / 0.4	100 / 0.4	100 / 0.4	100 / 0.4
Sound Pressure Level (Measured 1m away from indoor unit)	dBA/unit	64	66	64	66
Unit Dimension (HxWxD)	mm	(440 x 1, 450 x 900)x2	(440 x 1, 750 x 900)x2	(440 x 1, 750 x 900)x2	(440 x 1, 750 x 900)x2
Unit Weight	kg	99 x 2	126 x 2	99 x 2	126 x 2
Connection	Liquid	mm(in)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)
Pipe Size	Gas	mm(in)	28.58 (1 <sup>1</sup> /8)	28.58 (1 <sup>1</sup> /8)	28.58 (1 <sup>1</sup> /8)
Recommended Outdoor Unit Model		KDO2-1707 / KDO2-1707-E	KDO2-2107 / KDO2-2107-E	KDO-1707-EK	KDO2-2107-EK

## Outdoor Unit Specification

Outdoor Unit		KDO2-1707 / KDO2-1707-E	KDO2-2107 / KDO2-2107-E	KDO2-1707-EK	KDO2-2107-EK
Cooling Capacity	Btu/hr kW	170,600 50.00	213,250 62.50	170,600 50.00	213,250 62.50
Input Power	W	15,525	18,120	15,525	18,120
Running Current	A	30.46	34.34	30.46	34.34
Power Source	V/Ph/HZ	380~415/3/50	380~415/3/50	380~415/3/50	380~415/3/50
Refrigerant / Control Type		R22 Indoor TXV	R22 Indoor TXV	R407C Indoor TXV	R407C Indoor TXV
Condenser Type	Qty / Type		Single Coil / Crossed Finned CU Tube With AL. Fin		
Air Flow	CFM	12,000	14,000	12,000	14,000
Unit Dimension (H x W x D)	mm	1,090 x 1032 x 1803	1,090 x 1032 x 1803	1,090 x 1032 x 1803	1,090 x 1032 x 1803
Unit Weight	kg	380	400	380	400
Connection	Liquid	mm(in)	15.88 (5/8) (x2)	15.88 (5/8) (x2)	15.88 (5/8) (x2)
Pipe Size	Gas	mm(in)	34.93 (1 <sup>3</sup> /8) (x2)	28.58 (1 <sup>1</sup> /8) (x2)	28.58 (1 <sup>1</sup> /8) (x2)

Conditions: 1) Nominal cooling capacities are based on the following conditions : Indoor 26.7°C DB, 19.4 °C WB, Outdoor 35°C DB.

2) All specifications are subjected to change by manufacturer without prior notice.

3) For R410a Series, please contact manufacturer.

# ROOFTOP PACKAGED UNIT

## I PRODUCT INTRODUCTION

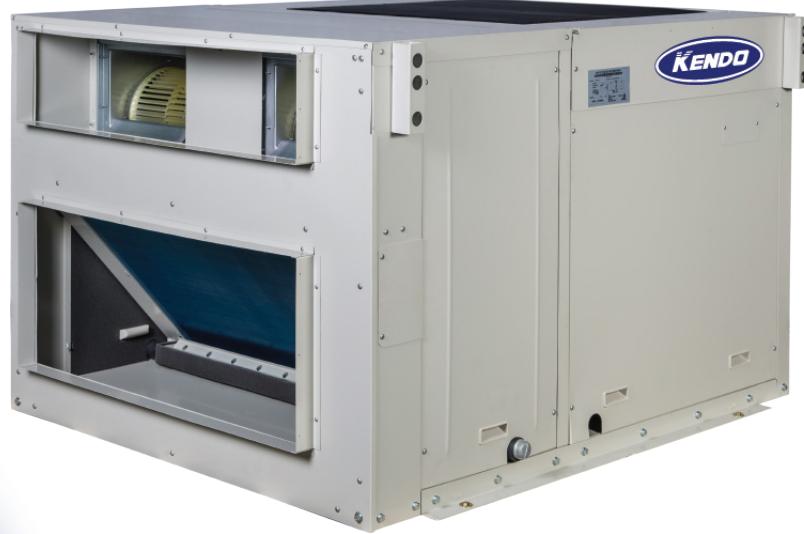
Flow Master Series

KENDO Rooftop Packaged Air Conditioners are designed and manufactured to meet the requirements of the severe climatic conditions and are built specifically for outdoor installations, either on ground or roof level.

The Rooftop Packaged Air Conditioners are ideal for warehouses, large halls, schools, residences, or wherever the requirement is for a heavy duty unit with a hermetic scroll compressor.

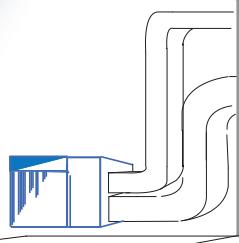
The units are available from 8Hp to 32Hp nominal (24kW to 100kW) in 50Hz. This Rooftop Packaged Air Conditioners are completely assembled, internally wired, charged with refrigerant at factory, tested before ship and ready for installation.

All that is required on site is connecting ducting and power supply. This greatly reduces installation work and costs.



### TYPICAL INSTALLATION

Roof Top Level Installation

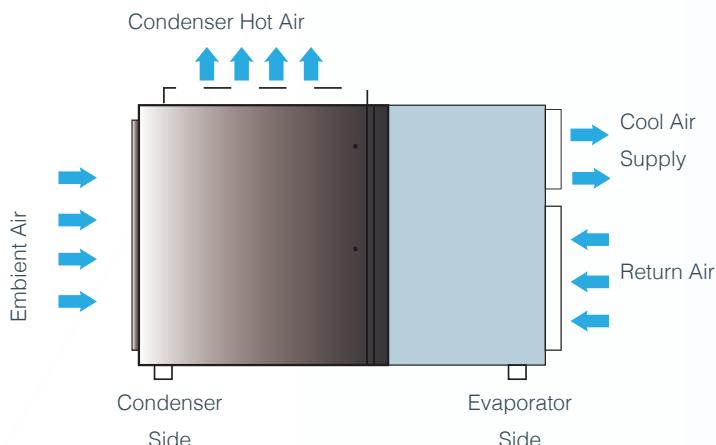


Ground Level Installation

## STRONG AIR FLOW

Design with high air flow and high external static pressure to make sure the air distribution is even to every corner with long ducting application.

Direct-driven forward curved centrifugal fan are used to deliver an accurate air flow at low noise level.



## HIGH PERFORMANCE SCROLL COMPRESSOR

Adopting very famous brand with a special low noise, low vibration and high performance scroll compressor. Possesses a high Energy Efficiency Ratio (EER) delivering exceptional performance with a reduction in energy consumption. 100% gas cooler motor with internal line breaker or solid state motor protectors.



Scroll Compressor

## SAFETY FEATURES

Built in internal overload protection for compressor. All outdoor units are equipped with auto reset high pressure and low pressure cut-out to protect against compressor damage due to high head pressure and system leakage respectively.



Outdoor unit control circuit

## AIR FILTER

The Indoor unit come with washable synthetic fibre air filter. Designed with easy withdrawal and renewal of filter cells. HEPA, AAF and many type of air filter can be requested to meet the requirement and building application.



Washable Air Filter

\*Phase sequencer, overload, wired controller and delay timer is optional.

## INTELLIGENT CONTROLLER (OPTIONAL)

All the features can be easily set and change through microprocessor controller. It ensures comfortable cooling is delivered to the user with user friendly wired keypad controller. Wide range of control features including mode, temperature setting, timer, self diagnosis error code and etc.

## Unit Specification (R22)

Model Number			KRP-807C	KRP-1007C	KRP-1207C	KRP-1507C2
POWER SOURCE		V/Ph/HZ	380 ~ 415 / 3 /50			
TOTAL COOLING CAPACITY	OUTDOOR 35°C DB	Btu/hr kW	81,900 24.0	109,200 32.0	119,500 35.0	163,800 48.0
	OUTDOOR 46°C DB	Btu/hr W	74,800 21.9	105,100 30.8	112,600 33.0	149,200 43.7
SENSIBLE COOLING CAPACITY	OUTDOOR 35°C DB	Btu/hr W	65,600 19.2	87,400 25.6	95,600 28.0	131,100 38.4
	TOTAL INPUT POWER	kW	8.1	10.5	12.5	15.6
TOTAL RUNNING CURRENT	A	13.40	16.90	20.20	25.30	
CAPACITY STEP	%		0-100			0-50-100
TYPE / DRIVE			CENTRIFUGAL / DIRECT			
EVAPORATOR FAN	AIR FLOW	CFM / CMH	2,826 / 4,800	3,532 / 6,000		5,651 / 9,600
	ESP	Pa / in.wg		100 / 0.4		200 / 0.8
REFRIGERANT / CONTROL TYPE						
SOUND PRESSURE LEVEL	dBA	66	66	69	70	
CONDENSER FAN	TYPE / DRIVE		PROPELLER / DIRECT			
	AIR FLOW	CFM / CMH	5,651 / 9,600	6,354 / 10,800		11,302 / 19,200
COMPRESSOR	TYPE		SCROLL			
UNIT DIMENSION (H*W*D)	mm		1,000*1,300*1,530	1,200*1,990*1,670		
UNIT WEIGHT	kg	360	390	395	655	

Model Number			KRP-2007C2	KRP-2407C2	KRP-3207C3	
POWER SOURCE	V/Ph/HZ		380 ~ 415 / 3 /50			
TOTAL COOLING CAPACITY	OUTDOOR 35°C DB	Btu/hr kW	218,400 64.0	238,900 70.0	341,200 100.0	
	OUTDOOR 46°C DB	Btu/hr W	209,900 61.5	225,200 66.0	320,800 94.0	
SENSIBLE COOLING CAPACITY	OUTDOOR 35°C DB	Btu/hr W	174,700 51.2	191,100 56.0	273,000 80.0	
	TOTAL INPUT POWER	kW	20.8	25.5	39.8	
TOTAL RUNNING CURRENT	A	34.8	42.7	66.7		
CAPACITY STEP	%		0-50-100		0-66-100	
TYPE / DRIVE			CENTRIFUGAL / DIRECT			
EVAPORATOR FAN	AIR FLOW	CFM / CMH	7,064 / 12,000		10,066 / 17,100	
	ESP	Pa / in.wg	200 / 0.8		250 / 1.0	
REFRIGERANT / CONTROL TYPE						
SOUND PRESSURE LEVEL	dBA	70	73	76		
CONDENSER FAN	TYPE / DRIVE		PROPELLER / DIRECT			
	AIR FLOW	CFM / CMH	11,302 / 19,200	12,708 / 21,600	16,954 / 28,800	
COMPRESSOR	TYPE		SCROLL			
UNIT DIMENSION (H*W*D)	mm	1,200*1,990*1,670	1,650*2,100*2,100			
UNIT WEIGHT	kg	755	765	1,100		

Conditions: 1) Nominal cooling capacities (1) are based on the following conditions : Indoor 26.7°C DB, 19.4 °C WB, Outdoor 35°C DB.

Nominal cooling capacities (2) are based on the following conditions : Indoor 26.7°C DB, 19.4 °C WB, Outdoor 46.1°C DB.

2) Refrigerant charge volumes are factory charged.

3) The range of working voltage is within +10% from rated voltage

4) All specifications are subjected to change by manufacturer without prior notice.

## Unit Specification (R407c)

Model Number		KRP-807C-K	KRP-1007C-K	KRP-1207C-K	KRP-1507C2-K
POWER SOURCE		V/Ph/HZ	380 ~ 415 / 3 /50		
TOTAL COOLING CAPACITY	OUTDOOR 35°C DB	Btu/hr kW	81,900 24.0	102,400 30.0	119,500 35.0
	OUTDOOR 46°C DB	Btu/hr W	74,800 21.9	98,300 28.8	112,600 33.0
SENSIBLE COOLING CAPACITY	OUTDOOR 35°C DB	Btu/hr W	65,600 19.2	81,900 24.0	95,600 28.0
					131,100 38.4
TOTAL INPUT POWER		kW	8.1	10.5	12.5 15.6
TOTAL RUNNING CURRENT		A	13.40	16.90	20.20
CAPACITY STEP		%	0-100		
EVAPORATOR FAN		TYPE / DRIVE AIR FLOW ESP	CFM / CMH Pa / in.wg	2,826 / 4,800 100 / 0.4	CENTRIFUGAL / DIRECT 3,532 / 6,000 200 / 0.8
REFRIGERANT / CONTROL TYPE					
SOUND PRESSURE LEVEL		dBA	66	66	69 70
CONDENSER FAN	TYPE / DRIVE AIR FLOW	CFM / CMH	5,651 / 9,600		
				6,354 / 10,800	11,302 / 19,200
COMPRESSOR		TYPE	SCROLL		
UNIT DIMENSION (H*W*D)		mm	1,000*1,300*1,530		
UNIT WEIGHT		kg	360	390	395 655

Model Number		KRP-2007C2-K	KRP-2407C2-K	KRP-3207C3-K	
POWER SOURCE		V/Ph/HZ	380 ~ 415 / 3 /50		
TOTAL COOLING CAPACITY	OUTDOOR 35°C DB	Btu/hr kW	218,400 64.0	238,900 70.0	
	OUTDOOR 46°C DB	Btu/hr W	209,900 61.5	225,200 66.0	
SENSIBLE COOLING CAPACITY	OUTDOOR 35°C DB	Btu/hr W	174,700 51.2	191,100 56.0	
				273,000 80.0	
TOTAL INPUT POWER		kW	20.8	25.5	
TOTAL RUNNING CURRENT		A	34.8	42.7	
CAPACITY STEP		%	0-50-100	0-66-100	
EVAPORATOR FAN		TYPE / DRIVE AIR FLOW ESP	CFM / CMH Pa / in.wg	CENTRIFUGAL / DIRECT 7,064 / 12,000 200 / 0.8	
REFRIGERANT / CONTROL TYPE					
SOUND PRESSURE LEVEL		dBA	70	73	76
CONDENSER FAN	TYPE / DRIVE AIR FLOW	CFM / CMH	PROPELLER / DIRECT 11,302 / 19,200		
				12,708 / 21,600	16,954 / 28,800
COMPRESSOR		TYPE	SCROLL		
UNIT DIMENSION (H*W*D)		mm	1,200*1,990*1,670		
UNIT WEIGHT		kg	755	765	1,100

Conditions: 1) Nominal cooling capacities (1) are based on the following conditions : Indoor 26.7°C DB, 19.4 °C WB, Outdoor 35°C DB.

Nominal cooling capacities (2) are based on the following conditions : Indoor 26.7°C DB, 19.4 °C WB, Outdoor 46.1°C DB.

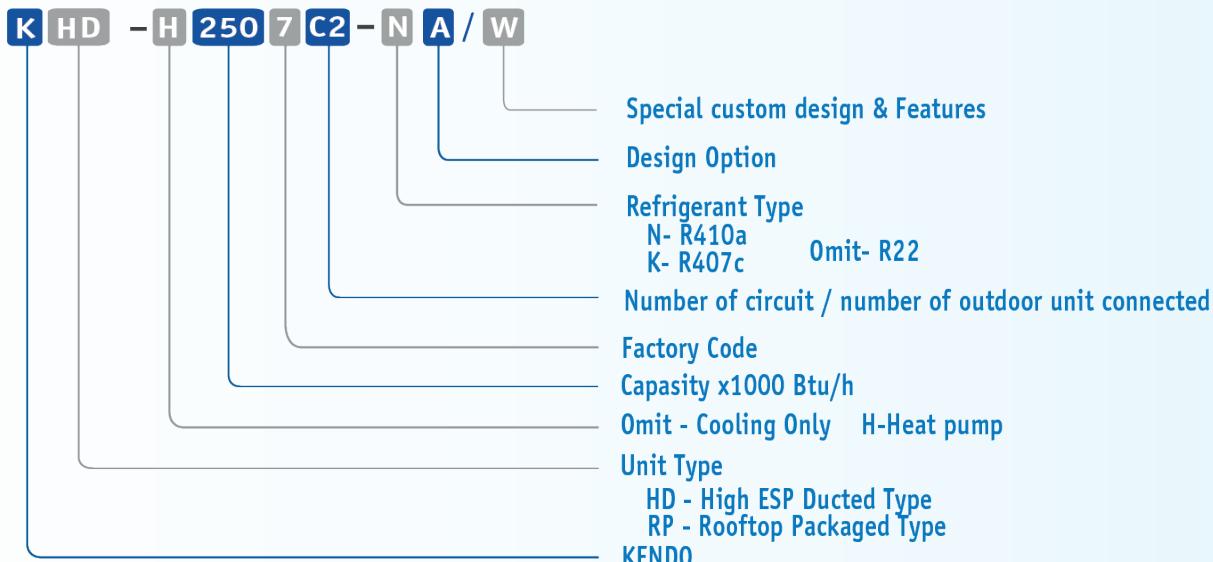
2) Refrigerant charge volumes are factory charged.

3) The range of working voltage is within +10% from rated voltage

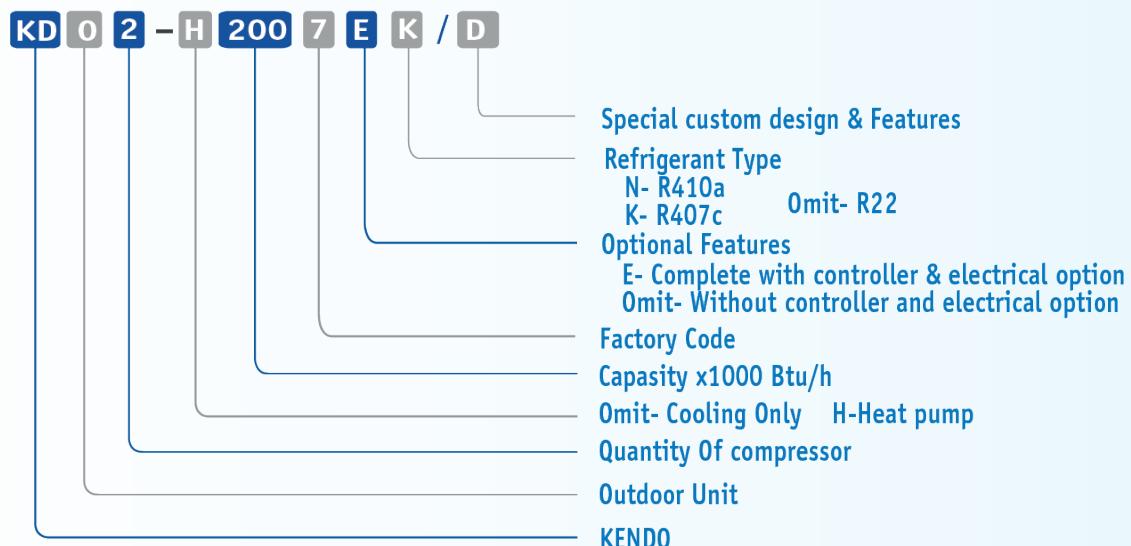
4) All specifications are subjected to change by manufacturer without prior notice.

## Nomenclature

### Indoor Unit Nomenclature



### Outdoor Unit Nomenclature





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