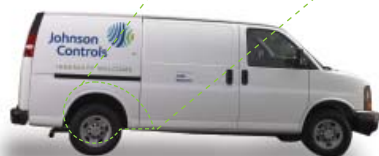


# MAL/YVL High Static Ducted Split Air Conditioners R407c Series



With more than 130 years experience in heating, ventilation, air-conditioning, and refrigeration (HVAC&R) product and services, YORK's array of air conditioners provides the ultimate comfort for your home and office by creating a cool, quiet and dry living environment. So with YORK air conditioners, you can sit back and enjoy a lazy afternoon. Everything else will just become more splendid.



**On the cover**

Integrated professional services designed for your unique business needs.

We care about your business and understand that every organization has its unique requirements. Our comprehensive maintenance package is tailor-made to fit all financial and technical needs. It covers everything from planned routine equipment inspections and predictive maintenance routines to system performance checks and annual shutdowns.

# Product Features

## Wide Range

- YORK MAL series offer a complete range of equipment (from 7.5 – 600 hp) to suit your needs.

## Flexibility

YORK MAL series provides flexibility at 3 levels

- **Fan Static Selection**  
With YORK MAL models, you are allowed the flexibility of changing the standard external static pressure to suit your design requirements (i.e. by adjusting the 3 fan speed of the MAL 75 - 100 and changing the pulley of MAL 125 - 600.)
- **Air Discharge**  
YORK MAL series also allows you to choose the direction of air discharge.
- **Air Distribution**  
YORK MAL series allows for long ducting to provide greater flexibility in installation and optimum comfort to the occupants.

High external static pressure allows air to be distributed evenly to every corner of the building without any loss of power to the airflow.

## Modular System

- The modular design of YORK MAL units provide you the flexibility of step-down unloading.
- The step-down unloading feature enables the particular individual compressor to cut off when there is a reduction of loading, thus saving you the unnecessary equipment running cost.

## Energy Savings

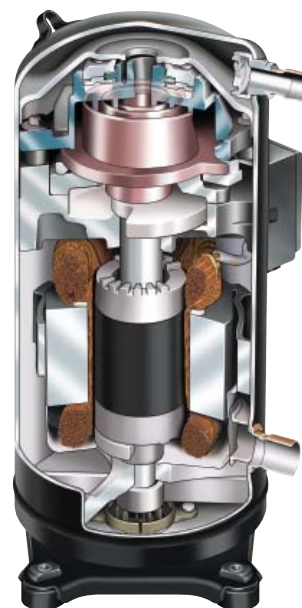
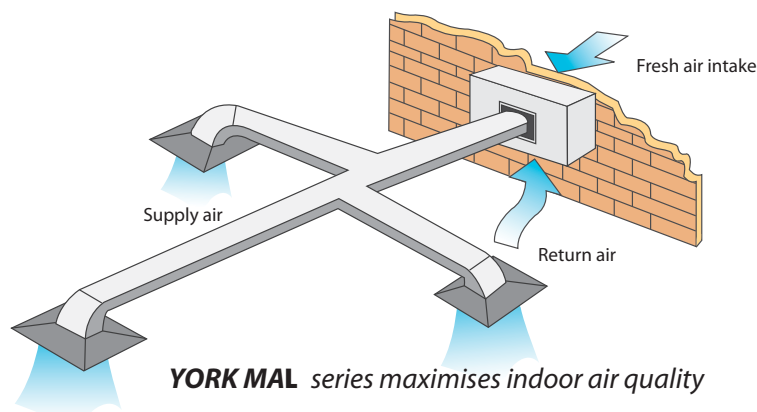
- YORK MAL series provide you greater energy savings with the application of scroll compressor.

## Easy Maintenance

- YORK series has been designed for quick and easy maintenance.
- The unit's internal components are easily accessible from either side just by loosening a few screws.

## High Efficiency Scroll Compressor

- **Quiet Operation**  
YORK MAL series scroll compressor is significantly more silent than other compressors and provides consumers with whisper quiet comfort.
- **High Durability**  
YORK MAL series scroll compressor uses 70% fewer moving parts than other comparably sized reciprocating compressors that means higher reliability and lower maintenance costs for the scroll compressor.
- **Greater Capability**  
The radial compliance of the scroll compressor allows the scroll members to separate in the presence of liquid refrigerants or debris thus eliminates high stress in members and substantially improves the durability of the compressor.
- **Higher Efficiency**  
YORK MAL series scroll compressor has a high Energy Efficiency Ratio, ensuring superior performance and greater energy savings for consumers.
- **Perfect Balance**  
The low pulse discharge and without-valve design of the scroll compressor ensures that vibration of the unit while in operation is minimized.



## Product

### Indoor Unit MAL 75 – 100

- Standard horizontal air discharge
- Adjustable 3 fan speed (direct drive)
- Designed ESP 100 Pa
- Build in filter rack



### MAL 125 – 150

- Standard horizontal air discharge
- Belt driven
- Designed ESP 150 Pa
- Build in filter rack
- Convertible to vertical discharge at site



### LMAL 125 – 150

- Standard horizontal air discharge
- Belt driven
- Designed ESP 150 Pa
- Build in filter rack
- Low ceiling height



### SML Controller (For MAL 75 to MAL 150 & LMAL 125-150)

- Mode: Cool, Dry, Fan
- Set temperature range 16°C~30°C
- Room temperature display
- Indoor fan speed: Auto, High, Medium, Low
- Sleep mode
- Delay on/off timer, 1~24 hours
- Key lock
- System error code read out
- Indoor coil temperature read out
- Compressor protections:-
  - Comp 3 minutes restart protection
  - Comp minimum runtime
  - Insufficient of refrigerant
  - Indoor coil anti freeze
  - Room sensor, indoor coil sensor fault monitoring
- Non volatile memory – keep system settings



## Indoor Unit MAL 200 – 600

- Standard vertical air discharge at site for MAL 200 – 600
- Vertical air discharge for MAL 600 (non-convertible)
- Single speed motor and belt drive blower
- Designed ESP
  - MAL 200 = 150 Pa
  - MAL 250 – 450 = 200 Pa
  - MAL 500 = 250 Pa
  - MAL 600 = 300 Pa
- Build in filter rack



## Sequential Remote Controller (For MAL 200 – MAL 600)

- Mode: Cool, Fan
- Set temperature range 16°C~30°C
- Room temperature display
- 7 days on/off timer
- Key lock
- Indoor coil temperature read out.
- System error code read out.
- Programmable system control parameters
- Remote on/off
- Compressor auto sequencing
- Compressor protections:-
  - Comp 3 minutes restart protection
  - Comp frequent cut in prevention



## Outdoor Unit YVL 75 – 150

- Direct Drive Outdoor Fan
- High efficiency scroll compressor
- High and low pressure protection
- Phase reversal protection
- Vertical air discharge



YVL 75-150



YHL 75-150

## YHL 75 – 150

- Direct Drive Outdoor Fan
- High efficiency scroll compressor
- High and low pressure protection
- Phase reversal protection
- Horizontal air discharge

## Specifications

Models		Indoor		MAL				
		Unit	75	100	125	150		
Nominal Capacities		Outdoor		YVL				
		Unit	75	100	125	150		
Power Supply	Cooling	Btu/h	75,000	100,000	125,000	150,000		
		kW	21.98	29.31	36.64	43.96		
		kcal/h	18,750	25,000	31,250	37,500		
Power Consumption		V/Ph/Hz	380-415/3/50					
Running Current		Ph	3	3	3	3		
Refrigerant Type		kW	8.89	11.80	12.64	16.78		
Power Supply		A	24.23	29.50	27.70	30.87		
Refrigerant Type		R407c						
Power Supply		V/Ph/Hz	220-240/1/50	220-240/1/50	380-415/3/50	380-415/3/50		
Blower Material		Ph	1	1	3	3		
Fan Type / Drive		Zinc Coated Steel						
Blower Size (Diameter x Length)- qty		Inch- Ea	9"x7"x2	10"x8"x2	15"x15"x1	15"x15"x1		
Speed (H/M/L)		rpm	1,350/1,150/980	1,250/1,150/1,050	1,390	1,380		
Running Current		A	6.33	4.4x2	2.8	3.7		
Motor Quantity		Ea	1	2	1	1		
Motor Model		-	YDK850-4A9	YDK550-4Q8-L/R	90-4S	90-4L		
Motor Size (Output)		W	850.0	550x2	1,100	1,500		
Input Power		W	1,300	982x2	1,442	1,908		
Output Power		W	850.0	550x2	1,100	1,500		
Air Flow		CFM	2,500	3,300	4,100	5,000		
ESP		Pa	100	100	150	150		
Motor Pulley		Type	-	V-Belt				
Blower Pulley		Type	-	V-Belt				
Coil		Tube	Material	Copper Tube				
			Diameter	mm	9.5			
		Fin	Material	Aluminum				
			Circuit	-	1	1	1	1
			Row	-	4	4	3	4
Face Area		ft2	4.74	6.14	10.23	10.23		
Casing		Material	Electro Galvanized Steel					
Finishing		Epoxy Polyester Powder Paint						
Insulation		PE						
Height		mm	485	550	870	870		
Width		mm	1,585	1,585	1,585	1,585		
Depth		mm	760	760	980	980		
Weight (included packing)		kg	129	150	215	217		
Air Filter		Not Supplied						
Piping		Pipe Size	Liquid	inch	5/8"	5/8"	5/8"	5/8"
			Suction	inch	1-1/8"	1-3/8"	1-3/8"	1-3/8"
			Drain	inch	1"	1"	1"	1"
Connection Type		Braze						
Power Supply		V/Ph/Hz	380-415/3/50					
Ph		3	3	3	3			
Qty		1	1	1	1			
Compressor Type		Scroll						
Oil Charge		cc	2,510	3,250	3,250	6,200		
Capacitor		µF	-	-	-	-		
Max. Starting Current		A	95	125	125	175		
Nominal Current		A	16.4	19.2	22.1	24.17		
Input Power		W	6,880	9,130	10,200	13,620		
Vibration Isolator		Rubber						
Protection Device		Internal Over Load Protector						
Qty		1	1	1	1			
Fan Type / Drive		Propeller / Direct Drive						
Fan Speed		rpm	930	930	920	920		
Blade Material		Aluminium						
Diameter		inch	24"	24"	26"	28"		
Rated Running Current		A	1.50	1.50	2.80	3.00		
Rated Output		W	450	450	750	950		
Rated Input		W	710	710	1,000	1,250		
Coil		Tube	Material	Copper Tube				
			Diameter	mm	9.5			
		Fin	Material	Aluminium				
			Row	-	2	2	2	2
			Fin per inch	-	14	14	14	14
Surface Area		ft <sup>2</sup>	18.95	18.95	18.95	27.00		
Casing		Material	Electro Galvanized Steel					
Finishing		Epoxy Polyester Powder Paint						
Height		mm	940	940	940	1,090		
Width		mm	965	965	965	1,130		
Depth		mm	975	975	975	1,105		
Weight (included packing)		kg	185	190	197	230		
No. of Circuit		1	1	1	1			
Piping		Pipe Size	Liquid	inch	5/8"	5/8"	5/8"	5/8"
			Suction	inch	1-1/8"	1-3/8"	1-3/8"	1-3/8"
Connection Type		Braze						

# Specifications

Models		MAL										
		Indoor Unit	MAL200B2	MAL250B2	MAL300B2	MAL350B3	MAL400B4	MAL450B3	MAL500B4	MAL600B4		
		Outdoor	YVL									
		Unit	YVL100x2	YVL125x2	YVL150x2	YVL100x1+YVL125x2	YVL100x4	YVL150x3	YVL125x4	YVL150x4		
Nominal Capacities	Cooling	Btu/h	200,000	250,000	300,000	350,000	400,000	450,000	500,000	600,000		
		kW	58.62	73.27	87.92	102.58	117.23	131.89	146.54	175.85		
		kcal/h	50,000	62,500	75,000	87,500	100,000	112,500	125,000	150,000		
Power Supply		V/Ph/Hz	380-415/3/50									
Power Consumption		kW	21.89	25.13	31.97	35.95	42.94	49.45	53.23	66.91		
Running Current		A	44.92	50.26	56.40	74.50	87.90	86.91	109.30	117.58		
Refrigerant Type			R407c									
Power Supply		V/Ph/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50		
		Ph	3	3	3	3	3	3	3	3		
Fan		Blower Material	Zinc Coated Steel									
		Fan Type/Drive	Centrifugal/Belt Driven									
		Blower Model	SYT15-15L	SYT18-18LK	SYT18-18LK	SYT18-18LK	SYD500R	SYD500R	SYD500R	SYD500R	SYD560R	
		Blower Pulley and Bush	mm	2SPZ132/1,610/25	2SPZ170/2,012/35	2SPZ170/2,012/35	2SPZ224/2,012/35	2SPA236/2,517/35	2SPA236/2,517/35	2SPA280/2,517/35	3SPA280/2,517/40	
		Blower Size (Diameter x Length) - qty	Inch-Ea	15"x15"x1	18"x18"x1	18"x18"x1	18"x18"x1	20"x16"x1	20"x16"x1	20"x16"x1	22"x19"x1	
		Speed(H/M/L)	rpm	880	770	810	810	650	690	780	680	
		Running Current	A	6.52	8.06	8.06	11.1	11.1	14.4	20.9	20.9	
		Motor Quantity	-	1	1	1	1	1	1	1	1	
		Motor Type	-	Squirrel Cage Induction								
		Motor Pulley and Bush	mm	2SPZ80/1,210/28	2SPZ90/1,610/28	2SPZ95/1,610/28	2SPZ125/1,610/38	2SPA106/1,610/38	2SPA112/1,610/38	2SPA150/2,012/42	3SPA132/2,012/42	
		Motor Size(Output)	W	3,000	4,000	4,000	5,500	5,500	7,500	11,000	11,000	
		Input Power	W	3,628	4,728	4,728	6,418	6,418	8,591	12,429	12,429	
		Output Power	W	3,000	4,000	4,000	5,500	5,500	7,500	11,000	11,000	
		Air Flow	CFM	6,400	8,000	9,000	10,500	12,000	13,500	15,000	18,000	
		ESP	Pa	150	200	200	200	200	250	250	300	
Belt		Vertical Air Discharge	-									
		Motor to Blower Center Point	mm	312	658	658	848	362	362	331	345	
		V-Belt Size	-	SPZ987	SPZ1737	SPZ1737	SPZ2240	SPA1207	SPA1207	SPA1357	SPA1357	
		Horizontal Air Discharge	-									
		Motor To Blower Center Point	mm	296	626	626	817	314	314	291	291	
Coil		V-belt Size	-	SPZ950	SPZ1687	SPZ1687	SPZ2187	SPA1120	SPA1120	SPA1250		
		Tube	-	Seamless Copper Tube								
		Diameter	mm(in)	9.52(3/8)								
		Material	-	Aluminum								
		Thickness	mm	0.115								
		Fin	-	-								
Circuit	-	2	2	2	3	4	3	4	4			
Row	-	4	4	5	4	4	4	5	6			
Fin per inch	-	12	14	12	12	14	14	12	12			
Face Area	ft²	12.06	16.04	17.76	24.65	27.88	27.88	27.88	36.49			
Face Velocity	ft/min	531	499	507	426	430	484	538	493			
Casing		Material	Electro Galvanized Steel									
		Finishing	Epoxy Polyester Power Coating									
		Insulation	PE									
Dimensions		Height	mm	835	1,230	1,230	1,435	1,490	1,490	1,490	1,895	
		Width	mm	1,965	1,935	1,935	2,190	2,345	2,345	2,345	2,355	
		Depth	mm	975	1,190	1,190	1,190	1,480	1,480	1,480	1,930	
		Wooden Casing	mm	1,055x2,050 x1,080	1,425x2,018 x1,355	1,425x2,018 x1,355	1,698x2,255 x1,420	1,770x2,404 x1,630	1,770x2,404 x1,630	1,770x2,404 x1,630	2,128x2,450 x2,030	
Type of Gas Precharged		-	Nitrogen Holding									
Control		-	Thermostat expansion valve									
Weight (Included Packing)		kg	235	368	378	503	556	570	850	920		
Noise Level		dBA	68.5	69	71	68	68.5	74	76.5	68		
Air Filter		-	Washable Viledon									
Air Filter Size		LxHxD	mm	542x738x25.4	533x532x25.4	533x532x25.4	617x661x25.4	668x661x25.4	668x661x25.4	668x661x25.4	668x579x25.4	
Piping		Pipe Size	Liquid	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"		
		Suction	inch	1-3/8"	1-3/8"	1-3/8"	1-3/8"	1-3/8"	1-3/8"	1-3/8"		
		Drain	inch	1-3/8"	1-3/8"	1-3/8"	1-3/8"	1-3/8"	1-3/8"	1-3/8"		
Connection Type		-	1-3/8" Brazed									
Power Supply		V/Ph/Hz	380-415/3/50									
Compressor		Qty	-	1	1	1	1	1	1	1		
		Compressor Type	-	Scroll								
		Capacitor	µF	-	-	-	-	-	-	-	-	
		Max. Starting Current	A	125 x 2	125 x 2	175 x 2	125 x 2 + 125	125 x 4	175 x 3	125 x 4	175 x 4	
		Nominal Current	A	19.2 x 2	22.1 x 2	24.17 x 2	22.1 x 2 + 19.2	19.2 x 4	24.17 x 3	22.1 x 4	24.17 x 4	
		Input Power	W	9,130 x 2	10,200 x 2	13,620 x 2	10,200 x 2 + 9130	9,130 x 4	13,620 x 3	10,200 x 4	13,620 x 4	
		Vibration Isolator	-	Rubber								
Protection Device		-	Internal Over Load Protector + Phase Protector									
Qty		-	1	1	1	1	1	1	1			
Fan Type / Drive		-	Propeller / Direct Drive									
Fan Speed		rpm	930	920	920	930 / 920	930	920	920	920		
Blade Material		-	Aluminium									
Diameter		inch	24"	26"	28"	26"	24"	28"	26"	28"		
Rated Running Current		A	1.5 x 2	2.8 x 2	3 x 2	2.8 x 2 + 1.5	1.5 x 4	3 x 3	2.8 x 4	3 x 4		
Rated Output		W	450 x 2	750 x 2	950 x 2	750 x 2 + 450	450 x 4	950 x 3	750 x 4	950 x 4		
Rated Input		W	710 x 2	1,000 x 2	1,250 x 2	1,000 x 2 + 710	710 x 4	1,250 x 3	1,000 x 4	1,250 x 4		
Coil		Tube	-	Copper Tube								
		Diameter	mm	9.5								
		Material	-	Aluminium								
		Fin	-	-								
Circuit	-	2	2	2	2	2	2	2	2			
Row	-	14	14	14	14	14	14	14	14			
Fin per inch	-	18.95	18.95	27.00	18.95	18.95	27.00	18.95	27.00			
Surface Area		ft²	18.95	18.95	27.00	18.95	18.95	27.00	18.95	27.00		
Casing		Material	Electro Galvanized Steel									
		Finishing	Epoxy Polyester Powder Paint									
		Height	mm	940	940	1,090	940	940	1,090	940	1,090	
Width		mm	965	965	1,130	965	965	1,130	965	1,130		
Depth		mm	975	975	1,105	975	975	1,105	975	1,105		
Weight (included packing)		kg	190	197	230	190 / 197	190	230	197	230		
No. of Circuit		-	1	1	1	1	1	1	1			
Piping		Pipe Size	Liquid	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"		
		Suction	inch	1-3/8"	1-3/8"	1-3/8"	1-3/8"	1-3/8"	1-3/8"	1-3/8"		
Connection Type		-	Brazed									



## Specifications

Models				Indoor	LMAL	
				Unit	125	150
Nominal Capacities				Outdoor	YHL	
				Unit	125	150
Cooling	Cooling	Btu/h	125,000	150,000		
		kW	36.64	43.96		
		kcal/h	31,250	37,500		
Power Supply		V/Ph/Hz	380-415/3/50			
Power Consumption		Ph	3	3		
Running Current		kW	13.16	16.78		
Refrigerant Type			R407c			
Power Supply		V/Ph/Hz	220-240/1/50	380-415/3/50		
		Ph	1	3		
Blower Material			Zinc coated steel			
Fan Type/ Drive			Forward Curve Centrifugal			
Fan	Blower Size (Diameter x Length)- qty	Inch-Ea	10"x10"x 2	12"x12"x 2		
	Speed (Hi/Me/Lo)	A	900/820/725	770		
	Running Current	A	3.4x2	3.7		
	Motor Quantity	Ea	2	1		
	Motor Model		PM3102206	90-4L		
	Input Power	W	700x2	1908		
	Output Power	W	312x2	1,500		
	Drive method		Direct	Belt		
	Air Flow	CFM	4,000	5,000		
	ESP	Pa	150	150		
	Motor Pulley	Type	-	Taper Bushed		
	Blower Pulley	Type	-	Taper Bushed		
	Coil	Tube	Material	Copper Tube		
Diameter			mm	9.5		
Fin		Material	Aluminum			
		Circuit		1		
		Row		4		
		Fin Per Inch		14		
Face Area	ft <sup>2</sup>	7.63	10.14			
Casing	Material	Electro Galvanized Steel				
	Finishing Insulation	Epoxy Polyester Powder Paint PE				
Dimensions	Height	mm	550	610		
	Width	mm	1,887	2,192		
	Depth	mm	517	737		
Weight (included packing)		kg	198	206		
Air Filter			Not Supplied			
Pipe Size	Liquid	inch	5/8"	5/8"		
	Suction	inch	1-3/8"	1-3/8"		
	Drain	inch	1"	1"		
Type			Braze			
Power Supply		V/Ph/Hz	380-415/3/50			
		Ph	3	3		
Compressor	Qty		1	1		
	Compressor Type		Scroll			
	Oil Charge	cc	3,250	6,200		
	Capacitor	µF	-	-		
	Max. Starting Current	A	125	175		
	Nominal Current	A	22.1	24.17		
	Input Power	W	10,200	13,620		
	Vibration Isolator		Rubber			
Protection Device		Internal Over Load Protector				
Fan	Qty		1	1		
	Fan Type / Drive		Propeller / Direct Drive			
	Fan Speed	rpm	920	920		
	Blade Material		Aluminium			
	Diameter	inch	26"	28"		
	Rated Running Current	A	2.80	3.00		
	Rated Output	W	750	950		
	Rated Input	W	1,000	1,250		
Coil	Tube	Material	Copper Tube			
		Diameter	mm	9.5		
	Fin	Material	Aluminium			
		Row		2		
Fin per inch		16				
Surface Area	ft <sup>2</sup>	17.5	26.00			
Casing	Material	Electro Galvanized Steel				
	Finishing	Epoxy Polyester Powder Paint				
Dimensions	Height	mm	794	945		
	Width	mm	962	1,227		
	Depth	mm	973	1,105		
Weight (Included Packing)		kg	197	230		
No. of Circuit			1	1		
Piping	Type		Braze			
	Pipe Size	Liquid	inch	5/8"	5/8"	
		Suction	inch	1-3/8"	1-3/8"	



## Specifications

Models		Indoor		LMAL		
		Unit		125	150	
Nominal Capacities		Outdoor		YVL		
		Unit		125	150	
Cooling	Btu/h		125,000		150,000	
	kW		36.64		43.96	
	kcal/h		31,250		37,500	
Power Supply		Btu/h	380-415/3/50			
Power Consumption		V/Ph/Hz	3			
Running Current		Ph	13.16			
Refrigerant Type		kW	25.97			
Power Supply		R407c				
Power Supply		V/Ph/Hz	220-240/1/50		380-415/3/50	
Power Supply		Ph	1		3	
Indoor Unit	Fan	Blower Material	-			
		Fan Type/ Drive	-			Forward Curve Centrifugal
		Blower Size (Diameter x Length)- qty	Inch-Ea	10 "x 10" x 2		12"x 12" x 2
		Speed (Hi/Me/Lo)	-	900/820/725		770
		Running Current	A	4.4x2		3.7
		Motor Quantity	Ea	2		1
		Motor Model		YDK550-4Q8-L/R		90-4L
		Input Power	W	700x2		1908
		Output Power	W	312x2		1,500
		Drive method		Direct		Belt
		Air Flow	CFM	4,000		5,000
		ESP	Pa	150		150
		Motor Pulley	Type	-		Taper Bushed
		Blower Pulley	Type	-		Taper Bushed
Coil	Tube	Material	Copper Tube			
		Diameter	mm	9.5		
	Fin	Material	Aluminum			
		Circuit		1	1	
		Row		4	4	
		Fin Per Inch		14	14	
Face Area	ft²	7.63		10.14		
Casing		Material	Electro Galvanized Steel			
Casing		Finishing	Epoxy Polyester Powder Paint			
Casing		Insulation	PE			
Dimensions	Height	mm	550		610	
	Width	mm	1,887		2,192	
	Depth	mm	517		737	
Weight (included packing)		kg	198		206	
Air Filter		Not Supplied				
Piping	Pipe Size	Liquid	inch	5/8"		
		Suction	inch	1-3/8"		
		Drain	inch	1"		
Connection Type		Soldering				
Power Supply		V/Ph/Hz	380-415/3/50			
Power Supply		Ph	3		3	
Outdoor Unit	Compressor	Qty	1		1	
		Compressor Type	Scroll			
		Oil Charge	cc	3,250		6,200
		Capacitor	µF	-		-
		Max. Starting Current	A	125		175
		Nominal Current	A	22.1		24.17
		Input Power	W	10,200		13,620
		Vibration Isolator	Rubber			
		Protection Device	Internal Over Load Protector			
		Qty	1		1	
Fan	Fan Type / Drive	Propeller / Direct Drive				
	Fan Speed	rpm	920		920	
	Blade Material	Aluminium				
	Diameter	inch	26"		28"	
	Rated Running Current	A	2.80		3.00	
	Rated Output	W	750		950	
	Rated Input	W	1,000		1,250	
Coil	Tube	Material	Copper Tube			
		Diameter	mm	9.5		
	Fin	Material	Aluminium			
		Row		2	2	
Fin per inch		14	14			
Surface Area	ft²	18.95		27.00		
Casing		Material	Electro Galvanized Steel			
Casing		Finishing	Epoxy Polyester Powder Paint			
Dimensions	Height	mm	940		1,090	
	Width	mm	965		1,130	
	Depth	mm	975		1,105	
Weight (Included Packing)		kg	197		230	
No. of Circuit		1				
Piping	Pipe Size	Liquid	inch	5/8"		
		Suction	inch	1-3/8"		
		Brazed				
Connection Type						

## Specifications

Models				Indoor	MAL			
				Unit	75	100	125	150
Nominal Capacities				Outdoor	YHL			
				Unit	75	100	125	150
Cooling	Cooling	Btu/h		75,000	100,000	125,000	150,000	
		kW		21.98	29.31	36.64	43.96	
		kcal/h		18,750	25,000	31,250	37,500	
Power Supply				V/Ph/Hz	380-415/3/50			
Power Consumption				Ph	3	3	3	3
Running Current				kW	8.89	11.80	12.64	16.78
Refrigerant Type				A	24.23	29.50	27.70	30.87
Refrigerant Type					R407c			
Indoor Unit	Power Supply			V/Ph/Hz	220-240/1/50	220-240/1/50	380-415/3/50	380-415/3/50
				Ph	1	1	3	3
Fan	Blower Material			Zinc coated steel				
	Fan Type/ Drive			Forward Curve Centrifugal Direct Drive		Forward Curve Centrifugal Belt Drive		
	Blower Size (Diameter x Length)- qty			Inch-Ea	9"x7" x2	10"x8" x2	15"x15" x1	15"x15" x1
	Speed (Hi/Me/Lo)			rpm	1,350/1,150/980	1,250/1,150/1,050	1,390	1,380
	Running Current			A	6.33	4.4x2	2.8	3.7
	Motor Quantity			Ea	1	2	1	1
	Motor Model				YDK850-4A9	YDK550-4Q8-L/R	90-4S	90-4L
	Motor Size (output)			W	850.0	550x2	1,100	1,500
	Input Power			W	1,300	982x2	1,442	1,908
	Output Power			W	850.0	550x2	1,100	1,500
	Air Flow			CFM	2,500	3,300	4,100	5,000
	ESP			Pa	100	100	150	150
	Motor Pulley			Type	V-Belt			
	Blower Pulley			Type	V-Belt			
	Coil	Tube	Material	Copper Tube				
Diameter			mm	9.5				
Fin		Material	Aluminum					
		Circuit		1	1	1	1	
		Row		4	4	3	4	
		Fin Per Inch		14	14	14	14	
Face Area			ft²	4.74	6.14	10.23	10.23	
Casing			Material	Electro Galvanized Steel				
			Finishing	Epoxy Polyester Powder Paint				
			Insulation	PE				
Dimensions	Height	mm	485	550	870	870		
	Width	mm	1,585	1,585	1,585	1,585		
	Depth	mm	760	760	980	980		
Weight (included packing)			kg	129	150	215	217	
Air Filter			Not Supplied					
Piping	Pipe Size	Liquid	inch	5/8"	5/8"	5/8"	5/8"	
		Suction	inch	1-1/8"	1-3/8"	1-3/8"	1-3/8"	
		Drain	inch	1"	1"	1"	1"	
Connection Type			Brazed					
Outdoor Unit	Power Supply			V/Ph/Hz	380-415/3/50			
				Ph	3	3	3	3
Compressor	Qty			1	1	1	1	
	Compressor Type			Scroll				
	Oil Charge			cc	2,510	3,250	3,250	6,200
	Capacitor			µF	-	-	-	-
	Max. Starting Current			A	95	125	125	175
	Nominal Current			A	16.4	19.2	22.1	24.17
	Input Power			W	6,880	9,130	10,200	13,620
	Vibration Isolator			Rubber				
	Protection Device			Internal Over Load Protector				
	Qty			1	1	1	1	
Fan	Fan Type / Drive			Propeller / Direct Drive				
	Fan Speed			rpm	930	930	920	920
	Blade Material			Aluminium				
	Diameter			inch	24"	24"	26"	28"
	Rated Running Current			A	1.50	1.50	2.80	3.00
	Rated Output			W	450	450	750	950
	Rated Input			W	710	710	1,000	1,250
	Coil	Tube	Material	Copper Tube				
Diameter			mm	9.5				
Fin		Material	Aluminium					
		Row		2	2	2	2	
Fin per inch				16	16	16	16	
Surface Area			ft²	17.5	17.5	17.5	26.00	
Casing			Material	Electro Galvanized Steel				
			Finishing	Epoxy Polyester Powder Paint				
Dimensions	Height	mm	794	794	794	945		
	Width	mm	962	962	962	1,227		
	Depth	mm	973	973	973	1,105		
Weight (Included Packing)			kg	192.0	196.0	197.0	230.0	
No. of Circuit				1	1	1	1	
Piping	Pipe Size	Liquid	inch	5/8"	5/8"	5/8"	5/8"	
		Suction	inch	1-1/8"	1-3/8"	1-3/8"	1-3/8"	
Connection Type			Brazed					

# Specifications

Models		Indoor	MAL							
		Unit	MAL200B2	MAL250B2	MAL300B2	MAL350B3	MAL400B4	MAL450B3	MAL500B4	MAL600B4
Nominal Capacities		Outdoor	YHL							
		Unit	YHL100×2	YHL125×2	YHL150×2	YHL100×1+ YHL125×2	YHL100×4	YHL150×3	YHL125×4	YHL150×4
Cooling	Btu/h		200,000	250,000	300,000	350,000	400,000	450,000	500,000	600,000
	kW		58.62	73.27	87.92	102.58	117.23	131.89	146.54	175.85
	kcal/h		50,000	62,500	75,000	87,500	100,000	112,500	125,000	150,000
Power Supply		V/Ph/Hz	380-415/3/50							
Power Consumption		Ph	3	3	3	3	3	3	3	3
Running Current		kW	21.89	25.13	31.97	35.95	42.94	49.45	53.23	66.91
Refrigerant Type		A	44.92	50.26	56.40	74.50	87.90	86.91	109.30	117.58
Power Supply		V/Ph/Hz	R407c							
Blower Material		Ph	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Fan Type/ Drive		Ph	3	3	3	3	3	3	3	3
Blower Model			Zinc Coated Steel							
Blower Size (Diameter x Length)- qty			Centrifugal/Belt Driven							
Blower Pulley and Bush			SYT15-15L	SYT18-18LK	SYT18-18LK	SYT18-18LK	SYD500R	SYD500R	SYD500R	SYD560R
Speed (Hi/Me/Lo)			15"x15" x1	18"x18" x1	18"x18" x1	18"x18" x1	20"x16" x1	20"x16" x1	20"x16" x1	22"x19" x1
Running Current		mm	2SPA/132/ 2,010/25	2SPA/170/ 2,012/35	2SPA/170/ 2,012/35	2SPA/224/ 2,517/35	2SPA/236/ 2,517/35	2SPA/236/ 2,517/35	2SPA/280/ 2,517/35	3SPA/280/ 2,517/40
Motor Quantity		rpm	880	770	810	810	650	690	780	680
Motor Type		A	6.52	8.06	8.06	11.1	11.1	14.4	20.9	20.9
Motor Pulley and Bush			1	1	1	1	1	1	1	1
Input Power			Squirrel Cage Induction							
Output Power		mm	2SPA/80/ 1,210/28	2SPA/90/ 1,610/28	2SPA/95/ 1,610/28	2SPA/125/ 1,610/38	2SPA/106/ 1,610/38	2SPA/112/ 1,610/38	2SPA/150/ 2,012/42	3SPA/132/ 2,012/42
Air Flow		W	3,628	4,728	4,728	6,418	6,418	8,591	12,429	12,429
ESP		W	3,000	4,000	4,000	5,500	5,500	7,500	11,000	11,000
Material		CFM	6,400	8,000	9,000	10,500	12,000	13,500	15,000	18,000
Diameter		Pa	150	200	200	200	200	250	250	300
Material			Seamless Copper Tube							
Thickness		mm(in)	9.52(3/8)							
Circuit			Aluminum							
Row		mm	0.115							
Fin Per Inch			2	2	2	3	4	3	4	4
Face Area		ft <sup>2</sup>	12.06	16.04	17.76	24.65	27.88	27.88	27.88	36.49
Face velocity		ft/min	531	499	507	426	430	484	538	493
Material			Electro Galvanized Steel							
Finishing			Epoxy Polyester Power Coating							
Insulation			PE							
Height		mm	835	1,230	1,230	1,435	1,490	1,490	1,490	1,895
Width		mm	1,965	1,935	1,935	2,190	2,345	2,345	2,345	2,355
Depth		mm	975	1,190	1,190	1,190	1,480	1,480	1,480	1,930
Wooden Casing		mm	1,055x2,050x 1,080	1,425x2,018x 1,355	1,425x2,018x 1,355	1,698x2,255x 1,420	1,770x2,404x 1,630	1,770x2,404x 1,630	1,770x2,404x 1,630	2,128x2,450x 2,030
Type of Gas Precharged			Nitrogen Holding							
Control			Thermostat Expansion Valve							
Weight (Included Packing)		kg	235	368	378	503	556	570	850	920
Noise Level		dB(A)	68.5	69	71	68	68.5	74	76.5	68
Air Filter			Washable viledon							
Air Filter size		L×H×D	542×738×25.4	533×532×25.4	533×532×25.4	617×661×25.4	668×661×25.4	668×661×25.4	668×661×25.4	668×579×25.4
Liquid		inch	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
Suction		inch	1-3/8"	1-3/8"	1-3/8"	1-3/8"	1-3/8"	1-3/8"	1-3/8"	1-3/8"
Drain		inch	1-3/8"							
Connection Type			Brazed							
Power Supply		V/Ph/Hz	380-415/3/50							
Compressor Type		Ph	3	3	3	3	3	3	3	3
Capacitor		µF	1	1	1	1	1	1	1	1
Max. Starting Current		A	Scroll							
Nominal Current		A	125 x 2	125 x 2	175 x 2	125 x 2 + 125	125 x 4	175 x 3	125 x 4	175 x 4
Input Power		W	19.2 x 2	22.1 x 2	24.17 x 2	22.1 x 2 + 19.2	19.2 x 4	24.17 x 3	22.1 x 4	24.17 x 4
Vibration Isolator			Rubber							
Protection Device			Internal Over Load Protector + Phase Protector							
Qty			1	1	1	1	1	1	1	1
Fan Type / Drive			Propeller / Direct Drive							
Fan Speed		rpm	930	920	920	930 / 920	930	920	920	920
Blade Material			Aluminium							
Diameter		inch	24"	26"	28"	26"	24"	28"	26"	28"
Rated Running Current		A	1.5 x 2	2.8 x 2	3 x 2	2.8 x 2 + 1.5	1.5 x 4	3 x 3	2.8 x 4	3 x 4
Rated Output		W	450 x 2	750 x 2	950 x 2	750 x 2 + 450	450 x 4	950 x 3	750 x 4	950 x 4
Rated Input		W	710 x 2	1,000 x 2	1,250 x 2	1,000 x 2 + 710	710 x 4	1,250 x 3	1,000 x 4	1,250 x 4
Material			Copper Tube							
Diameter		mm	9.5							
Material			Aluminium							
Row			2	2	2	2	2	2	2	2
Fin per inch			16	16	16	16	16	16	16	16
Surface Area		ft <sup>2</sup>	17.5	17.5	26.00	17.5	17.5	26.00	17.5	26.00
Material			Electro Galvanized Steel							
Finishing			Epoxy Polyester Powder Paint							
Height		mm	794	794	945	794	945	794	794	945
Width		mm	962	962	1,227	962	1,227	962	962	1,227
Depth		mm	973	973	1,105	973	973	1,105	973	1,105
Weight (Included Packing)		kg	196	197	230	196 / 197	197	230	197	230
No. of Circuit			1	1	1	1	1	1	1	1
Liquid		inch	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
Suction		inch	1-3/8"	1-3/8"	1-3/8"	1-3/8"	1-3/8"	1-3/8"	1-3/8"	1-3/8"
Connection Type			Brazed							

# Johnson Controls is the global leader that creates smart environments – bringing ingenuity to the places where people live, work and travel.

Johnson Controls' building efficiency business enables safe, comfortable, energy efficient and sustainable facilities.

We are a single source of integrated heating/cooling, controls, lighting, fire, security and wireless infrastructure products for buildings and industrial plants.

Our comprehensive life-cycle approach to in-building technology and operations includes planning and design, installation and integration optimization and maintenance as well as integrated real estate and facility management services.

Sustainability matters at every level. Our triple bottom line – Economic Prosperity, Environmental Stewardship and Social Responsibility – and every facet of our operations and community involvement are geared to the efficient use of resources to benefit the planet and people all over the world.

Johnson Controls inaugurated the Annual Energy Efficiency Forum in conjunction with the U.S. Energy Association. We are also a lead technology and energy-efficiency partner for the Clinton Climate Initiative and its ambitious C40 Large Buildings Retrofit Program. Johnson Controls helped the U.S. Green Building Council develop its Leadership in Energy Environmental Design (LEED) rating system and certification for green buildings.

Our network of more than 150 sales and support centers with more than 10,000 dedicated professionals located in 15 countries and regions has made us the partner of choice for some of the most recognisable structures in Asia and the Pacific, including the 2008 Olympics.

Johnson Controls is responsible for the region's LEED-certified buildings, including India's ITC Green Centre, China's Beijing Prosper Centre as well as the world's tallest buildings – Kuala Lumpur's Petronas Towers, Taipei 101 and the Shanghai World Finance Centre.

## Asia Headquarters

20/F, Tower 1, 2 & 3, Enterprise Square  
1, 9 Sheung Yuet Road, Kowloon Bay,  
Kowloon, Hong Kong

Tel : +852 2590 0012  
Fax: +852 2516 5648

## Australia

Tel : +61 (2) 9805 8300  
Fax: +61 (2) 9247 7750

## China (Shanghai)

Tel : +86 (21) 6276 6509  
Fax: +86 (21) 6277 3543

## Hong Kong

Tel : +852 2590 0012  
Fax: +852 2516 5648

## India

Tel : +91 (22) 3082 0391  
Fax: +91 (22) 3088 1592

## Indonesia

Tel : +62 (21) 626 3535  
Fax: +62 (21) 659 8875

## Japan

Tel : +81 (3) 5738 6100  
Fax: +81 (3) 5738 6298

## Korea

Tel : +82 (2) 554 5935  
Fax: +82 (2) 554 5739

## Macau

Tel : +853 2875 1820  
Fax: +853 2875 1821

## Malaysia

Tel : +60 (3) 7628 4300  
Fax: +60 (3) 7874 1180

## New Zealand

Tel : +64 (9) 444 6434  
Fax: +64 (9) 444 2092

## Philippines

Tel : +63 (2) 706 1420-22  
Fax: +63 (2) 706 1486

## Singapore

Tel : +65 6748 0202  
Fax: +65 6283 3015

## Taiwan

Tel : +886 (2) 2657 5568  
Fax: +886 (2) 2657 6388

## Thailand

Tel : +66 (2) 717 0751  
Fax: +66 (2) 717 0750

## Vietnam

Tel : +84 (8) 526 1205  
Fax: +84 (8) 526 1206

**Asia Factories:** Guangzhou & Wuxi, China · Pune, India

**Asia Engineering Centre:** Wuxi, China

**Asia Centre of Excellence in Engineering (CoEE):** Beijing, China · Mumbai & Pune, India

**Asia Centre of Engineering & Technology (CET):** Hong Kong

**Asia Parts & Product Hub:** Shanghai, China

