



CUP SERIES

Duct Type Package Units

Model	Cooling Capacity Btu/h	Cooling Capacity Watt	Page Number
CUP 60	63,000	18,459	30
CUP 70	72,600	21,270	31
CUP 80	84,000	24,619	32
CUP 100	103,000	30,187	33
CUP 120	124,500	36,478	34
CUP 140	144,000	42,200	35
CUP 170	168,000	49,224	36
CUP 200	199,000	58,300	37
Recommended Heating Elements			38





CUP SERIES – DUCT TYPE PACKAGE UNITS 60,000-200,000 BTU/H

FEATURES AND ACCESSORIES

Haargaz-Unique CUP series is duct type Package Direct Expansion units. The operation of our CUP air conditioners is quite and durable with low maintenance requirements and provides efficient year-round cooling and heating. Haargaz-Unique CUP air conditioners are available in wide range of capacities and can be combined with electric heating elements.

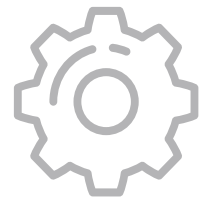
Standard Features:

- Designed to operate in all seasons and weather conditions.
- Factory assembled and tested.
- Hermetically sealed compressors, mounted on vibration isolators, equipped with internal thermal protection.
- Heat exchangers are made of high quality cooper tubing, expanded into aluminum fins.
- Outdoor units include direct driven axial fans, constructed of high efficiency, aerodynamic, statically and dynamically balanced low-noise blades.
- Indoor units include double-inlet low-noise centrifugal blowers, statically and dynamically balanced with direct driven 3-speed motor.
- Outdoor cabinets made of galvanized and oven baked pre-painted sheet metal.
- Indoor unit cabinets made of durable, galvanized sheet metal with thermal and acoustic insulation sheets.
- Large and easily accessible service doors.
- De-icing operation.



Standard Accessories:

- Electronic automatic defrosting.
- 4-way reversing valve.
- Over temperature protection on compressor.
- Advanced control system with I/R Remote Control with daily programmable capabilities.
- Suction accumulator for models CUP50 and larger.
- Expansion valve on large capacity units.

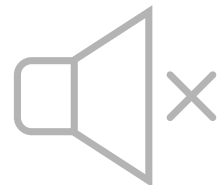


Optional Features:

- Designed for desert conditions (ambient temperature up to 45°C).
- Super-low noise versions.
- Electric resistance heaters.
- Coated heat exchangers for superior corrosion resistance.
- High and low pressure switches.

Optional Accessories:

- Sight glass with moisture indicator.
- Head pressure control.
- Compressor overload protection.
- Variable speed drive for outdoor unit fans.
- Expansion valve on small and medium capacity units.
- Indoor, wall-mounted thermostat, with weekly programmable capabilities.
- Compressor crankcase heater.
- Evaporating pressure regulator.
- Hot gas by-pass.
- Phase control relay.
- Main power breaker.
- Receiver.
- Filter-drier.





THERMOSTATS, SENSORS AND CLIMATE CONTROL SYSTEMS

Main Control Board:

Standard Features:

- 1-stage cooling and 1-stage heating.



Additional Available Features:

- 2-stage cooling and 2-stage heating.
- 1-stage cooling and 1-stage heating - Additional [2nd stage] heating by electrical heating element.
- 1-stage cooling only - Heating by electrical heating element or by hot water heating coil.
- 1-stage cooling and 2-stage heating - Additional [3rd stage] heating by electrical heating element.
- 1-stage cooling and 1-stage heating - Additional 2 heating stages [2nd and 3rd stage] by electrical heating element.
- 1-stage cooling only - 2 heating stages by electrical heating elements.
- 1-stage cooling only - 3 heating stages by electrical heating elements.

Receiver Panel:

- I/R (Infrared) wall-mounted receiver panel.
- Features I/R receiving and on/off buttons.

Remote Control Unit:

- I/R transmitter, daily program scheduling.



Room Receiver:

- I/R wall mounted room receiver.
- Enables remote control operation from another room.
- Room receivers can be daisy-chained.

Thermostat:

- Wall-mounted thermostat. Features local temperature read-out and adjustment, on/off buttons, mode adjustment, fan adjustment and I/R receiving.

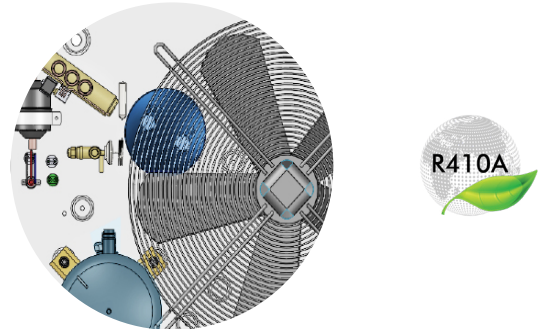
Programmable Thermostat:

- Wall-mounted thermostat. Features local temperature read-out and adjustment, on/off buttons, mode adjustment, fan adjustment, and I/R receiving.
- Seven-day program scheduling.

Model CUP60

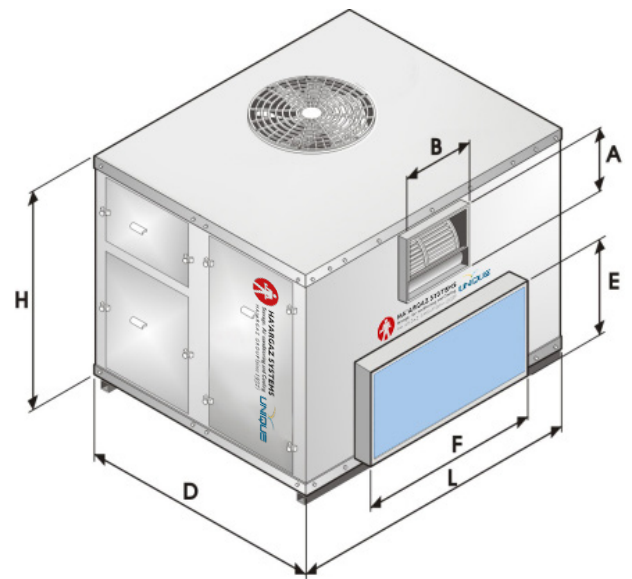
PERFORMANCE

Cooling Capacity ¹	Btu/h	63000
	Watt	18459
Heating Capacity ²	Btu/h	65500
	Watt	19200
Power Consumption - Cooling / Heating	Watt	5995/5758
Operating Current - Cooling / Heating ³	Amp	12.7/10.8
C.O.P - Cooling / Heating		3.08/3.33
Power Supply	V/Ph/Hz	400V, 3Ph, 50Hz
Time Delay Fuse	Amp	3x20-C



TECHNICAL DATA

GENERAL			
Dimensions	LxDxH	mm	1650x1250x1230
	A,B,E,F	mm	295, 335, 460, 885
Condensate Lines - Drain		Φ-mm (in)	22 (7/8")
Net Weight		kg	260



EVAPORATOR SIDE			
Air flow (at high speed)		cfm (m ³ /h)	2000 (3400)
High Fan Speed (No. Speeds)		R.P.M	900 (3)
Net Static Pressure ⁴		mm H ₂ O	6
Fan Type and Model			Centrifugal DD10-10 370W
Evaporator Coil	Face Area	ft ² /m ²	4.21/0.39
	Tube Diameter	mm	7
	Rows Deep ⁵		4
	Fins Spacing	Per Inch	12

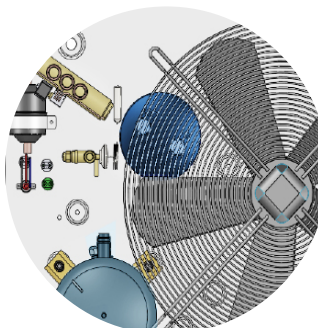
CONDENSER SIDE			
Air flow (at high speed)		cfm (m ³ /h)	5000 (8500)
No. / Axial Fan Diameter		mm	1/630
Speed		R.P.M	900
Condenser Coil	Face Area	ft ² /m ²	9.18/0.85
	Tube Diameter	mm	7
	Rows Deep		3
	Fins Spacing	Per Inch	12

- NOTES:
1. Nominal cooling capacity based on indoor air temp. 27°C DB/19°C WB and outdoor air temp. 35°C DB/24°C WB.
 2. Nominal heating capacity based on indoor air temp. 20°C DB and outdoor air temp. 7°C DB/6°C WB.
 3. Operating current measured at the most loaded phase.
 4. Net static pressure available at fan discharge at nominal capacity.
 5. 6 Rows deep is available on special order.

Model CUP70

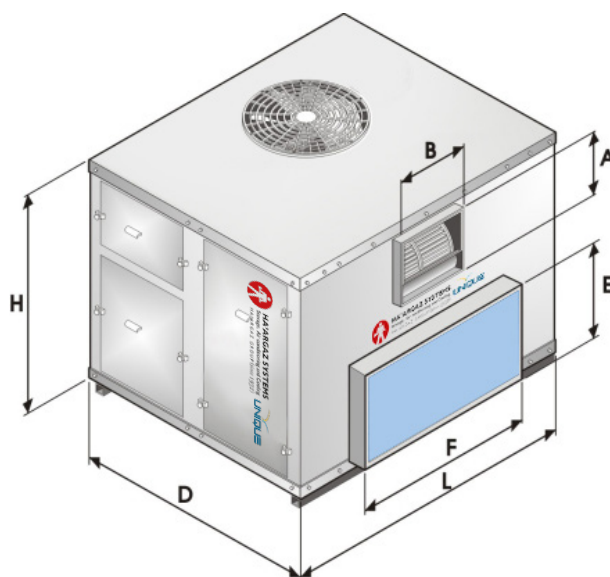
PERFORMANCE

Cooling Capacity ¹	Btu/h	72600
	Watt	21270
Heating Capacity ²	Btu/h	74000
	Watt	21670
Power Consumption - Cooling / Heating	Watt	7060/6210
Operating Current - Cooling / Heating ³	Amp	14.7/13.2
C.O.P - Cooling / Heating		3/3.5
Power Supply	V/Ph/Hz	400V, 3Ph, 50Hz
Time Delay Fuse	Amp	3x25-C



TECHNICAL DATA

GENERAL			
Dimensions	LxDxH	mm	1650x1350x1230
	A,B,E,F	mm	345, 400, 510, 915
Condensate Lines - Drain	Φ-mm (in)		22 (7/8")
Net Weight	kg		280



EVAPORATOR SIDE			
Air flow (at high speed)	cfm (m³/h)		2400 (4080)
High Fan Speed (No. Speeds)	R.P.M		900 (3)
Net Static Pressure ⁴	mm H ₂ O		8
Fan Type and Model			Centrifugal DD12-12 550W
Evaporator Coil	Face Area	ft²/m²	4.86/0.45
	Tube Diameter	mm	7
	Rows Deep ⁵		4
	Fins Spacing	Per Inch	

CONDENSER SIDE			
Air flow (at high speed)	cfm (m³/h)		5400 (9180)
No. / Axial Fan Diameter	mm		1/630
Speed	R.P.M		900
Condenser Coil	Face Area	ft²/m²	10.4/0.96
	Tube Diameter	mm	7
	Rows Deep		3
	Fins Spacing	Per Inch	

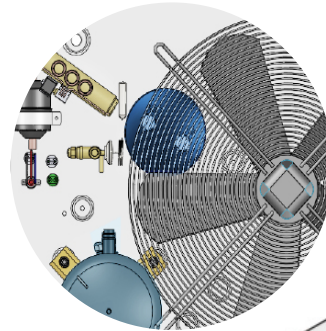
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 2. Nominal heating capacity based on indoor air temp. 20°C DB and outdoor air temp. 7°C DB/6°C WB.
 3. Operating current measured at the most loaded phase.
 4. Net static pressure available at fan discharge at nominal capacity.
 5. 6 Rows deep is available on special order.



Model CUP80

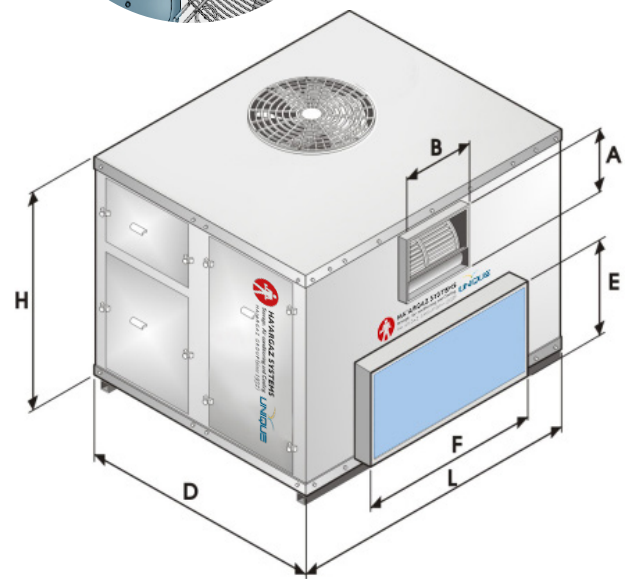
PERFORMANCE

Cooling Capacity ¹	Btu/h	84000
	Watt	24619
Heating Capacity ²	Btu/h	85500
	Watt	25000
Power Consumption - Cooling / Heating	Watt	7920/7820
Operating Current - Cooling / Heating ³	Amp	17.5/16.5
C.O.P - Cooling / Heating		3.1/3.2
Power Supply	V/Ph/Hz	400V, 3Ph, 50Hz
Time Delay Fuse	Amp	3x25-C



TECHNICAL DATA

GENERAL			
Dimensions	LxDxH	mm	1650x1350x1230
	A,B,E,F	mm	345, 400, 510, 1058
Condensate Lines - Drain		Φ-mm (in)	22 (7/8")
Net Weight		kg	305



EVAPORATOR SIDE			
Air flow (at high speed)		cfm (m ³ /h)	2800 (4760)
High Fan Speed (No. Speeds)		R.P.M	900 (3)
Net Static Pressure ⁴		mm H ₂ O	6
Fan Type and Model			Centrifugal DD12-12 550W
Evaporator Coil	Face Area	ft ² /m ²	5.47/0.51
	Tube Diameter	mm	7
	Rows Deep ⁵		4
	Fins Spacing	Per Inch	12

CONDENSER SIDE			
Air flow (at high speed)		cfm (m ³ /h)	6000 (10200)
No. / Axial Fan Diameter		mm	1/630
Speed		R.P.M	900
Condenser Coil	Face Area	ft ² /m ²	11.9/1.11
	Tube Diameter	mm	7
	Rows Deep		3
	Fins Spacing	Per Inch	12

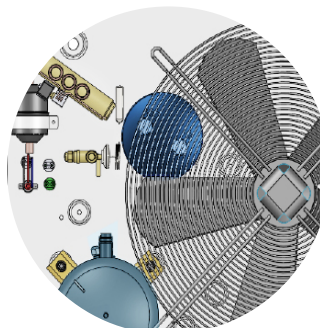
- NOTES:
1. Nominal cooling capacity based on indoor air temp. 27°C DB/19°C WB and outdoor air temp. 35°C DB/24°C WB.
 2. Nominal heating capacity based on indoor air temp. 20°C DB and outdoor air temp. 7°C DB/6°C WB.
 3. Operating current measured at the most loaded phase.
 4. Net static pressure available at fan discharge at nominal capacity.
 5. 6 Rows deep is available on special order.



Model CUP100

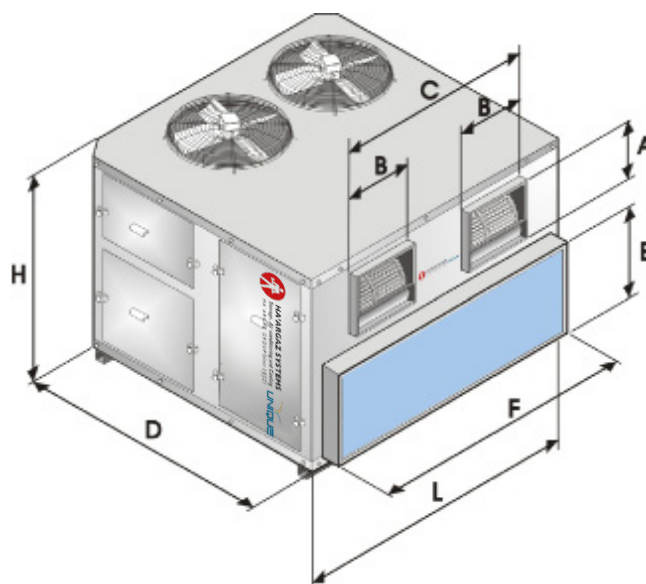
PERFORMANCE

Cooling Capacity ¹	Btu/h	103000
	Watt	30187
Heating Capacity ²	Btu/h	104350
	Watt	30583
Power Consumption - Cooling / Heating	Watt	9690/9440
Operating Current - Cooling / Heating ³	Amp	20/19.7
C.O.P - Cooling / Heating		3.1/3.2
Power Supply	V/Ph/Hz	400V, 3Ph, 50Hz
Time Delay Fuse	Amp	3xC-25



TECHNICAL DATA

GENERAL			
Dimensions	LxDxH	mm	1750x1500x1350
	A,B,C,E,F	mm	295,335,1010,460,1335
Condensate Lines - Drain		Φ-mm (in)	28 (1-1/8")
Net Weight		kg	410



EVAPORATOR SIDE			
Air flow (at high speed)		cfm (m ³ /h)	3200 (5440)
High Fan Speed (No. Speeds)		R.P.M	900 (3)
Net Static Pressure ⁴		mm H ₂ O	6
Fan Type and Model			Centrifugal DD10-10 370W
Evaporator Coil	Face Area	ft ² /m ²	6.42/0.59
	Tube Diameter	mm	7
	Rows Deep ⁵		4
	Fins Spacing	Per Inch	12

CONDENSER SIDE			
Air flow (at high speed)		cfm (m ³ /h)	6000 (10200)
No. / Axial Fan Diameter		mm	2/630
Speed		R.P.M	900
Condenser Coil	Face Area	ft ² /m ²	11.9/1.11
	Tube Diameter	mm	7
	Rows Deep		4
	Fins Spacing	Per Inch	12

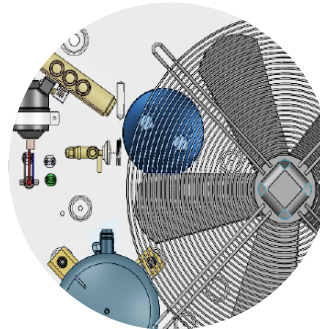
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 2. Nominal heating capacity based on indoor air temp. 20°C DB and outdoor air temp. 7°C DB/6°C WB.
 3. Operating current measured at the most loaded phase.
 4. Net static pressure available at fan discharge at nominal capacity.
 5. 6 Rows deep is available on special order.



Model CUP120

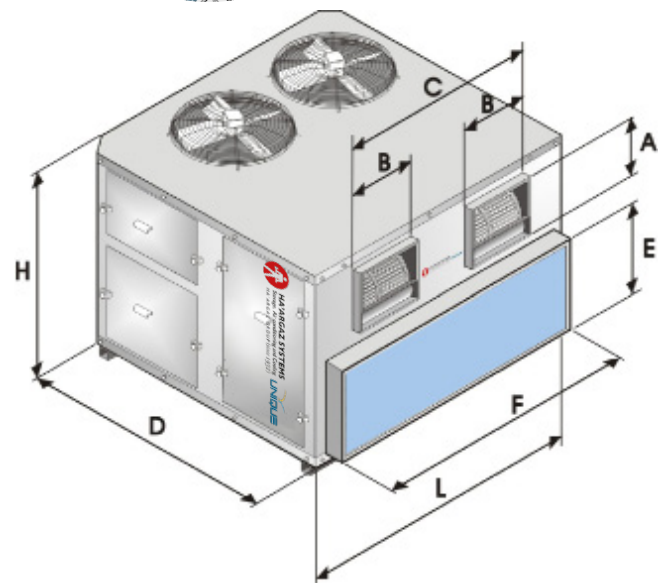
PERFORMANCE

Cooling Capacity ¹	Btu/h	124500
	Watt	36478
Heating Capacity ²	Btu/h	127800
	Watt	37451
Power Consumption - Cooling / Heating	Watt	12943/11523
Operating Current - Cooling / Heating ³	Amp	31/27.5
C.O.P - Cooling / Heating		2.82/3.24
Power Supply	V/Ph/Hz	400V, 3Ph, 50Hz
Time Delay Fuse	Amp	3x40-C



TECHNICAL DATA

GENERAL			
Dimensions	LxDxH	mm	1750x1500x1350
	A,B,C,E,F	mm	345,400,1114,533,1435
Condensate Lines - Drain		Φ-mm (in)	28 (1-1/8")
Net Weight		kg	460



EVAPORATOR SIDE			
Air flow (at high speed)		cfm (m ³ /h)	4000 (6800)
High Fan Speed (No. Speeds)		R.P.M	900 (3)
Net Static Pressure ⁴		mm H ₂ O	8
Fan Type and Model			Centrifugal DD12-12 550W
Evaporator Coil	Face Area	ft ² /m ²	8.07/0.75
	Tube Diameter	mm	7
	Rows Deep ⁵		4
	Fins Spacing	Per Inch	12

CONDENSER SIDE			
Air flow (at high speed)		cfm (m ³ /h)	10600 (18020)
No. / Axial Fan Diameter		mm	2/630
Speed		R.P.M	900
Condenser Coil	Face Area	ft ² /m ²	19.7/1.83
	Tube Diameter	mm	7
	Rows Deep		3
	Fins Spacing	Per Inch	12

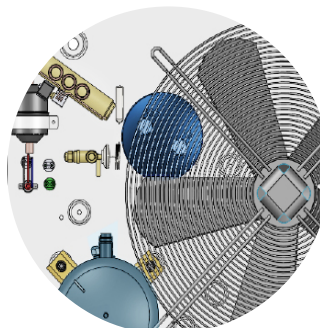
- NOTES:
1. Nominal cooling capacity based on indoor air temp. 27°C DB/19°C WB and outdoor air temp. 35°C DB/24°C WB.
 2. Nominal heating capacity based on indoor air temp. 20°C DB and outdoor air temp. 7°C DB/6°C WB.
 3. Operating current measured at the most loaded phase.
 4. Net static pressure available at fan discharge at nominal capacity.
 5. 6 Rows deep is available on special order.



Model CUP140

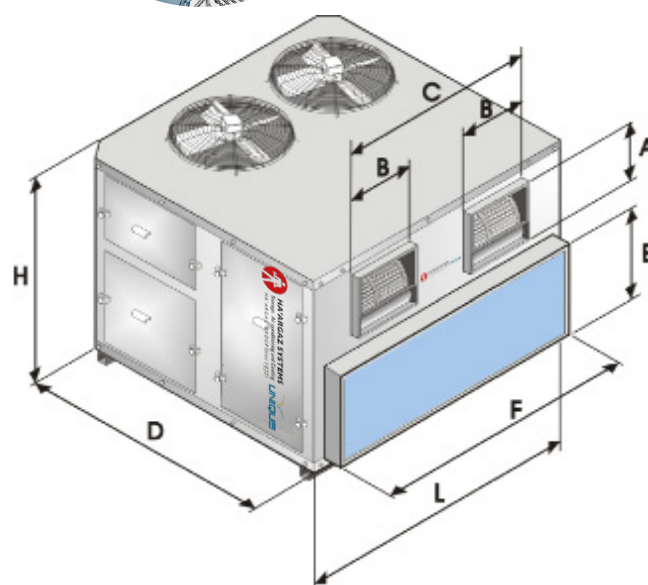
PERFORMANCE

Cooling Capacity ¹	Btu/h	144000
	Watt	42200
Heating Capacity ²	Btu/h	145400
	Watt	43997
Power Consumption - Cooling / Heating	Watt	14335/13053
Operating Current - Cooling / Heating ³	Amp	35.5/32
C.O.P - Cooling / Heating		2.95/3.35
Power Supply	V/Ph/Hz	400V, 3Ph, 50Hz
Time Delay Fuse	Amp	3x50-C



TECHNICAL DATA

GENERAL			
Dimensions	LxDxH	mm	1750x1500x1350
	A,B,C,E,F	mm	345,400,1114,635,1435
Condensate Lines - Drain		Φ-mm (in)	28 (1-1/8")
Net Weight		kg	505



EVAPORATOR SIDE			
Air flow (at high speed)		cfm (m ³ /h)	4800 (8160)
High Fan Speed (No. Speeds)		R.P.M	900 (3)
Net Static Pressure ⁴		mm H ₂ O	8
Fan Type and Model			Centrifugal DD12-12 550W
Evaporator Coil	Face Area	ft ² /m ²	9.51/0.88
	Tube Diameter	mm	7
	Rows Deep ⁵		4
	Fins Spacing	Per Inch	12

CONDENSER SIDE			
Air flow (at high speed)		cfm (m ³ /h)	10600 (18020)
No. / Axial Fan Diameter		mm	2/630
Speed		R.P.M	900
Condenser Coil	Face Area	ft ² /m ²	21.3/1.97
	Tube Diameter	mm	7
	Rows Deep		3
	Fins Spacing	Per Inch	12

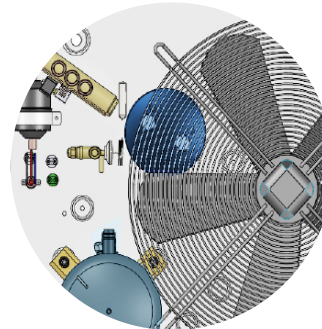
- NOTES:
1. Nominal cooling capacity based on indoor air temp. 27°C DB/19°C WB and outdoor air temp. 35°C DB/24°C WB.
 2. Nominal heating capacity based on indoor air temp. 20°C DB and outdoor air temp. 7°C DB/6°C WB.
 3. Operating current measured at the most loaded phase.
 4. Net static pressure available at fan discharge at nominal capacity.
 5. 6 Rows deep is available on special order.



Model CUP170

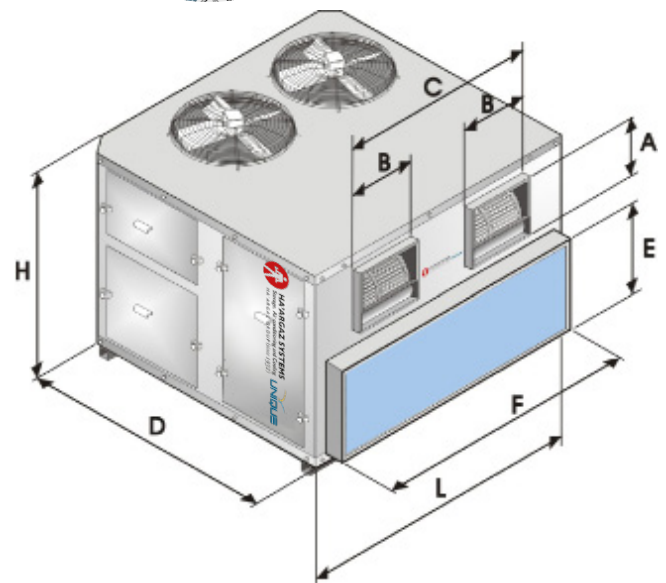
PERFORMANCE

Cooling Capacity ¹	Btu/h	168000
	Watt	49224
Heating Capacity ²	Btu/h	171780
	Watt	50350
Power Consumption - Cooling / Heating	Watt	16345/15285
Operating Current - Cooling / Heating ³	Amp	37.8/34.1
C.O.P - Cooling / Heating		3/3.32
Power Supply	V/Ph/Hz	400V, 3Ph, 50Hz
Time Delay Fuse	Amp	3x50-C



TECHNICAL DATA

GENERAL			
Dimensions	LxDxH	mm	2200x1700x1600
	A,B,C,E,F	mm	345,400,1114,635,1435
Condensate Lines - Drain		Φ-mm (in)	28 (1-1/8")
Net Weight		kg	505



EVAPORATOR SIDE			
Air flow (at high speed)		cfm (m ³ /h)	5600 (9520)
High Fan Speed (No. Speeds)		R.P.M	900 (1)
Net Static Pressure ⁴		mm H ₂ O	6
Fan Type and Model			Centrifugal DD12-12 736W
Evaporator Coil	Face Area	ft ² /m ²	11.06/1.02
	Tube Diameter	mm	7
	Rows Deep ⁵		4
	Fins Spacing	Per Inch	12

CONDENSER SIDE			
Air flow (at high speed)		cfm (m ³ /h)	12000 (20400)
No. / Axial Fan Diameter		mm	2/630
Speed		R.P.M	900
Condenser Coil	Face Area	ft ² /m ²	23.6/2.19
	Tube Diameter	mm	7
	Rows Deep		3
	Fins Spacing	Per Inch	12

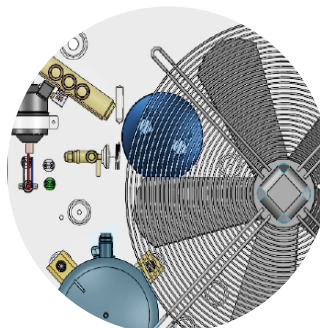
- NOTES:
1. Nominal cooling capacity based on indoor air temp. 27°C DB/19°C WB and outdoor air temp. 35°C DB/24°C WB.
 2. Nominal heating capacity based on indoor air temp. 20°C DB and outdoor air temp. 7°C DB/6°C WB.
 3. Operating current measured at the most loaded phase.
 4. Net static pressure available at fan discharge at nominal capacity.
 5. 6 Rows deep is available on special order.



Model CUP200

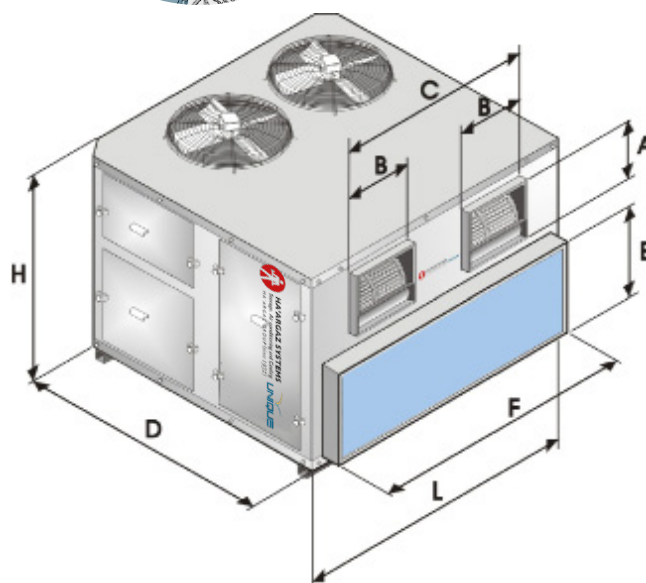
PERFORMANCE

Cooling Capacity ¹	Btu/h	199000
	Watt	58300
Heating Capacity ²	Btu/h	202000
	Watt	59183
Power Consumption - Cooling / Heating	Watt	19640/18100
Operating Current - Cooling / Heating ³	Amp	38.4/33
C.O.P - Cooling / Heating		2.96/3.3
Power Supply	V/Ph/Hz	400V, 3Ph, 50Hz
Time Delay Fuse	Amp	3x50-C



TECHNICAL DATA

GENERAL			
Dimensions	LxDxH	mm	2200x1900x1600
	A,B,C,E,F	mm	345,400,1114,635,1435
Condensate Lines - Drain		Φ-mm (in)	28 (1-1/8")
Net Weight		kg	565



EVAPORATOR SIDE			
Air flow (at high speed)		cfm (m ³ /h)	6000 (10200)
High Fan Speed (No. Speeds)		R.P.M	900 (1)
Net Static Pressure ⁴		mm H ₂ O	6
Fan Type and Model			Centrifugal DD 12-12 1000W
Evaporator Coil	Face Area	ft ² /m ²	16.2/1.5
	Tube Diameter	mm	7
	Rows Deep		6
	Fins Spacing	Per Inch	12

CONDENSER SIDE			
Air flow (at high speed)		cfm (m ³ /h)	14000 (23800)
No. / Axial Fan Diameter		mm	2/710
Speed		R.P.M	900
Condenser Coil	Face Area	ft ² /m ²	23.6/2.19
	Tube Diameter	mm	7
	Rows Deep		4
	Fins Spacing	Per Inch	12

- NOTES:
1. Nominal cooling capacity based on indoor air temp. 27°C DB/19°C WB and outdoor air temp. 35°C DB/24°C WB.
 2. Nominal heating capacity based on indoor air temp. 20°C DB and outdoor air temp. 7°C DB/6°C WB.
 3. Operating current measured at the most loaded phase.
 4. Net static pressure available at fan discharge at nominal capacity.



RECOMMENDED HEATING ELEMENTS FOR CUP UNITS:

Model	Cooling Capacity (Btu/hr)	Cooling/Heating CUC+CUE Without Heating Element		Recommended Heating Element (kW)	Heating With Heating Element	
		Working Current (A)*	Time Delay Fuse (A)		Working Current (A)	Time Delay Fuse (A)
CUP60	63000	12.7	3X20-C	9	15.2	3X16-C
CUP70	72000	14.7	3X25-C	9	17.6	3X20-C
CUP80	84000	17.5	3X25-C	10	19.1	3X20-C
CUP100	103000	20.0	3X32-C	12	23.9	3X25-C
CUP120	124500	31.0	3X40-C	15	31.2	3X40-C
CUP140	147000	35.5	3X50-C	15	31.2	3X40-C
CUP170	168000	37.8	3X50-C	20	32.0	3X40-C
CUP200	199000	38.4	3X50-C	24	38.0	3X40-C

* Nominal current presented is for Cooling or Heating, the highest.

