



BY JOHNSON CONTROLS



DSH Model Air Cooled Self
Contained Indoor Packaged Units
2-5 Tons
Preliminary Application Data

July 28, 2008

PROJECT:	TAG:
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Gross Cooling Capacity [Btuh]:	25,240*
Design CFM:	800
Seasonal Energy Efficiency Ratio:	13.5 SEER**
Net Cooling Capacity [Btuh]:	24,745**
Net Cooling CFM:	800
Evaporator Fan No./Type:	1/CENTRIFUGAL
Diameter x Width [in]:	9x7
Drive:	Adjustable Belt
Motor HP :	0.25
Condenser Fan No./Type:	1/CENTRIFUGAL
Diameter x Width [in]:	10x10
Drive:	Adjustable Belt
Motor HP :	0.5

Evaporator Coil Face Area:	4.72 [sq ft]
Rows/FPI:	2 / 10
Refrigerant Control:	TX Valve
Condenser Coil Face Area:	5.83 [sq ft]
Rows/FPI:	4 / 16
Compressor No./Type:	1/Scroll
Refrigerant Circuits:	1/ Independent
Refrigerant:	R-410A
Filters - Qty./Size:	2/20x14x2
Operating Weight [lbs.]:	565
Shipping Weight [lbs.]:	600
Condensate Connection:	3 /4 NPT

*Cooling performance is rated at 95°F ambient, 80°F entering dry bulb, 67°F wet bulb and CFM listed. Gross capacity does not include the effect of fan motor heat.

**Rated in accordance with ARI Standard 210/240-2006

EVAPORATOR FAN PERFORMANCE

MODEL #	SUPPLY CFM	EXTERNAL STATIC PRESSURE - Inches W.C.											
		0.2		0.4		0.6		0.8		1.0		1.2	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
DSH024	700	593	0.06	755	0.10	915	0.13	1048	0.17	1175	0.23	-	-
	800	629	0.08	777	0.12	914	0.16	1169	0.20	1178	0.25	-	-
	900	668	0.11	804	0.15	930	0.19	1170	0.24	-	-	-	-

NOTE:

- At high evaporator air flows, and wet bulb conditions, condensate carry-over may occur. Adjust airflow downward as necessary.
- Values include pressure drop from wet coil and clean filters.


CONDENSER FAN PERFORMANCE

MODEL #	OUTDOOR CFM	EXTERNAL STATIC PRESSURE - Inches W.C.							
		0.2		0.4		0.6		0.8	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
DSH024	1600	750	0.29	852	0.35	948	0.42	996	0.46

ELECTRICAL DATA

MODEL #	VOLTAGE	COMPRESSOR			EVAPORATOR FAN		CONDENSER FAN		MIN. CCT. AMPACITY	"MOP" Max Overcurrent Prot.	
		QTY	RLA	LRA	HP	FLA	HP	FLA			
DSH024	208-230/1/60	1	@	13.5	58.3	0.25	2.6	0.50	4.5	23.98	35
	208-230/3/60	1	@	8.6	55.0	0.25	1.4	0.50	2.2	14.35	20

Johnson Controls maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

 BY JOHNSON CONTROLS	DESCRIPTION: HIGH EFFICIENCY DSH024 HORIZONTAL UNIT AIR-COOLED SELF-CONTAINED	Form YK145.11-PA1 (308)
		DATE: March 2008

“DSH” HI-EFFICIENCY SERIES HORIZONTAL INDOOR AIR-CONDITIONING SYSTEM

GENERAL

All models 2-5 tons ship as factory-charged unitized packages. These units include refrigerant line shut-off valves between the condenser and evaporator section, allowing the unit to be field split. All packages/modules are designed for suspended mounting via integral structural channels.

CABINET

All cabinets are completely constructed of heavy gauge corrosion-resistant steel. The entire unit interior (both evaporator and condensing section) is insulated with 1/2" thick, 2-lb. density insulation. Service panels are equipped with lifting handles for ease of removal and handling.

REFRIGERANT CIRCUIT

The 2-5 ton units have a single refrigeration circuit. All models utilize high-efficiency ‘Scroll’ compressors. Each refrigeration circuit is thoroughly evacuated, and fully charged with R-410A refrigerant before shipment. Internal motor overload protection is provided. Compressors are mounted on rubber isolators to minimize vibration transmission.

Each refrigeration circuit includes a thermal expansion valve (with external equalizer), liquid line filter drier, sight glass/moisture indicator, a high refrigerant pressure safety switch, a low refrigerant pressure switch (for compressor protection), and service gauge ports.

EVAPORATOR AND CONDENSER COILS

The evaporator and condenser coils are constructed of internally enhanced copper tubes mechanically bonded to enhanced-surface aluminum fins. Both coils are employed in a draw-thru configuration. The large evaporator coil face area minimizes potential for water blow-off.

INDOOR/OUTDOOR FANS


Forward curved, double inlet and double width centrifugal blowers are used for both evaporator and condenser air movement. Blower wheels are fabricated of galvanized steel. Blowers employ solid steel shafts, supported in permanently lubricated ball bearing. All blowers are belt-driven. Variable-pitch motor sheaves allow for field adjustment of blower rpm.

ELECTRICAL/CONTROLS

All units are completely factory wired with all necessary controls. Current overlaod protection is provided on both evaporator and condenser motors (Internal auto-reset overloads on single-phase units, external manual-reset overload on three-phase). A manual reset circuit is also provided on each compressor control circuit in the event of high/low pressure cutout. A 24-volt control circuit, with oversize transformer, is provided for field connection.

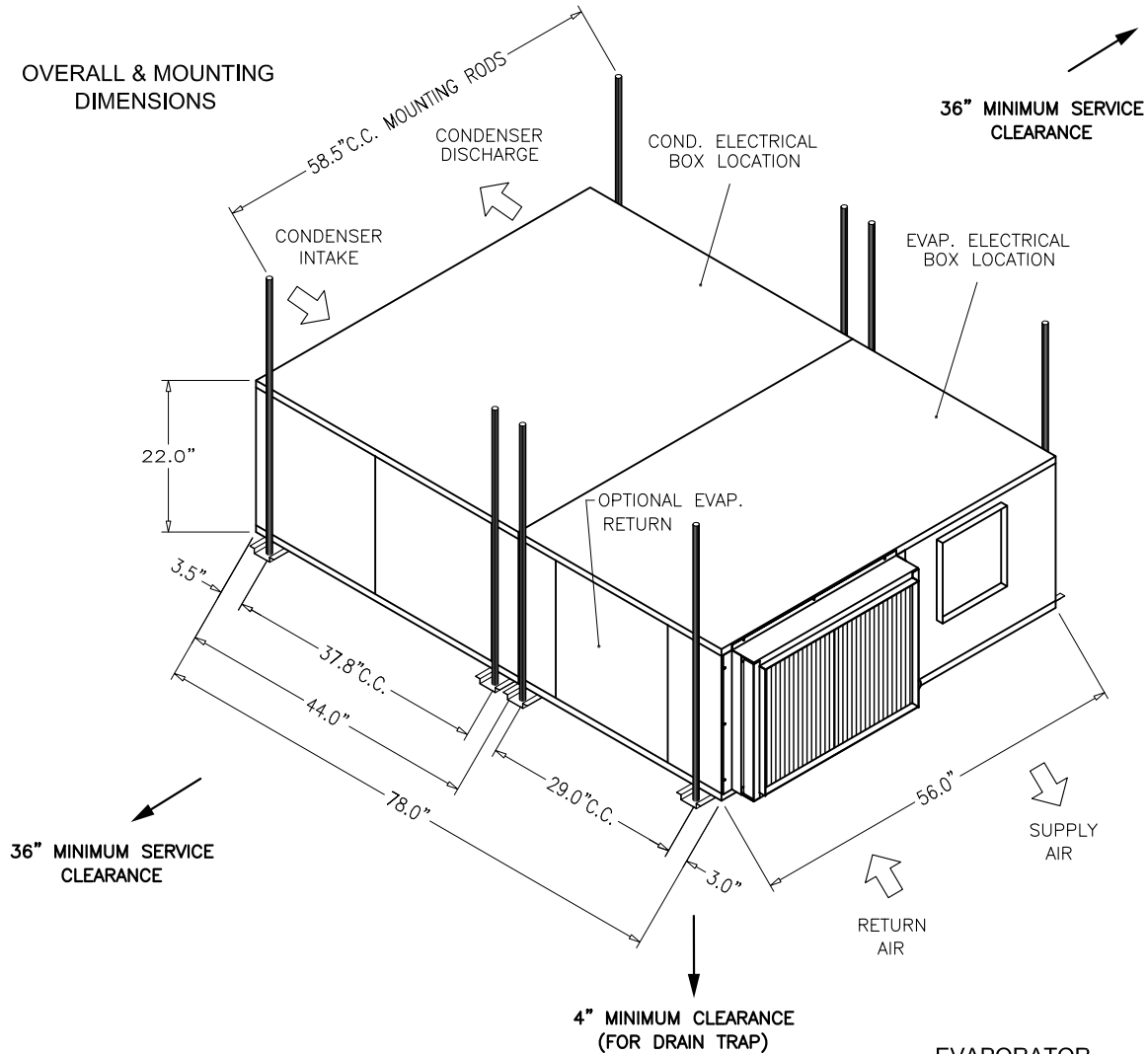
FILTERS

All models are shipped with 2 inch thick medium-efficiency throwaway filters factory installed.

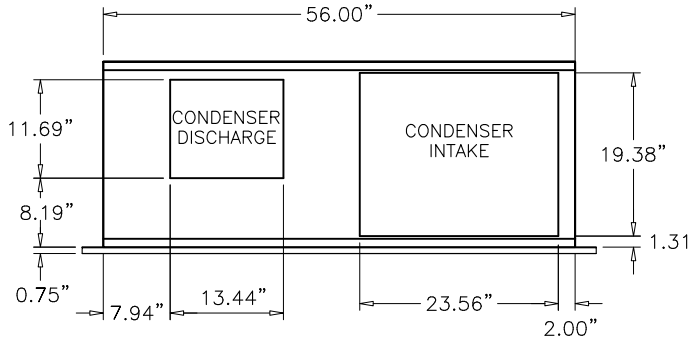
 BY JOHNSON CONTROLS	DESCRIPTION: MECHANICAL SPECIFICATIONS DSH024 HORIZONTAL UNIT AIR-COOLED SELF-CONTAINED HIGH EFFICIENCY	Form YK145.11-PA1 (308)
		DATE: March 2008

DSH024 AND DSH036 DIMENSIONAL DATA

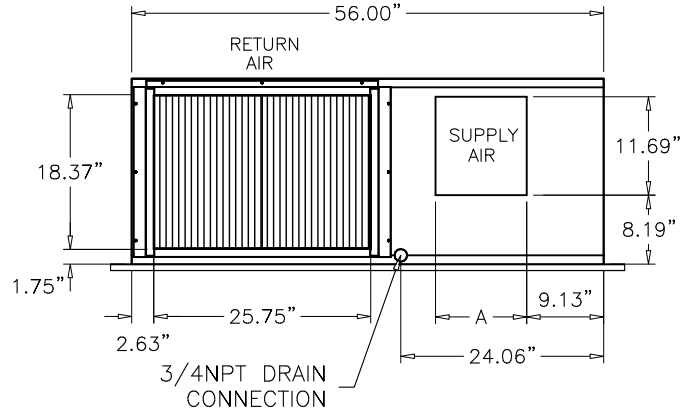
OVERALL & MOUNTING DIMENSIONS



CONDENSER OPENINGS



EVAPORATOR OPENINGS



Johnson Controls maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

	A
2 TON	9.57
3 TON	10.88



DESCRIPTION:

DIMENSIONAL DATA
DSH024 & DSH036 HORIZONTAL UNIT
AIR-COOLED SELF-CONTAINED
HIGH EFFICIENCY

Form YK145.11-PA1 (308)

DATE:

March 2008

PROJECT:	TAG:
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Gross Cooling Capacity [Btuh]:	36,656*
Design CFM:	1,200
Seasonal Energy Efficiency Ratio:	13.2 SEER**
Net Cooling Capacity [Btuh]:	35,643**
Net Cooling CFM:	1,200
Evaporator Fan No./Type:	1/CENTRIFUGAL
Diameter x Width [in]:	10x8
Drive:	Adjustable Belt
Motor HP :	0.33
Condenser Fan No./Type:	1/CENTRIFUGAL
Diameter x Width [in]:	10x10
Drive:	Adjustable Belt
Motor HP :	0.75

Evaporator Coil Face Area:	4.72 [sq ft]
Rows/FPI:	3 / 12
Refrigerant Control:	TX Valve
Condenser Coil Face Area:	5.83 [sq ft]
Rows/FPI:	4 / 16
Compressor No./Type:	1/Scroll
Refrigerant Circuits:	1/ Independent
Refrigerant:	R-410A
Filters - Qty./Size:	2/20x14x2
Operating Weight [lbs.]:	595
Shipping Weight [lbs.]:	630
Condensate Connection:	3 / 4 NPT

*Cooling performance is rated at 95°F ambient, 80°F entering dry bulb, 67°F wet bulb and CFM listed. Gross capacity does not include the effect of fan motor heat.

**Rated in accordance with ARI Standard 210/240-2006

EVAPORATOR FAN PERFORMANCE

MODEL #	SUPPLY CFM	EXTERNAL STATIC PRESSURE - Inches W.C.									
		0.2		0.4		0.6		0.8		1.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
DSH036	1000	598	0.11	722	0.16	835	0.19	930	0.25	1141	0.32
	1200	727	0.20	831	0.25	929	0.31	972	0.33	-	-
	1400	747	0.26	844	0.32	-	-	-	-	-	-

NOTE:

1. At high evaporator air flows, and wet bulb conditions, condensate carry-over may occur. Adjust airflow downward as necessary.
2. Values include pressure drop from wet coil and clean filters.

CONDENSER FAN PERFORMANCE

MODEL #	OUTDOOR CFM	EXTERNAL STATIC PRESSURE - Inches W.C.									
		0.2		0.4		0.6		0.8		1.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
DSH036	1950	864	0.47	949	0.55	1032	0.63	1112	0.72	-	-

ELECTRICAL DATA – STANDARD MOTOR

MODEL #	VOLTAGE	COMPRESSOR			EVAPORATOR FAN		CONDENSER FAN		MIN. CCT. AMPACITY	"MOP" Max Overcurrent Prot.	
		QTY	RLA	LRA	HP	FLA	HP	FLA			
DSH036	208-230/1/60	1	@	14.1	77.0	0.33	3.3	0.75	5.5	26.43	40
DSH036	208-230/3/60	1	@	9.0	71.0	0.33	1.6	0.75	2.6	15.45	20
DSH036	460/3/60	1	@	5.6	38.0	0.33	0.8	0.75	1.3	9.10	15
DSH036	575/3/60	1	@	3.8	36.5	0.50	0.9	0.75	1.0	6.63	15

* Units configured for 575 volt are supplied with 0.5 HP evaporator motor.

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<p>BY JOHNSON CONTROLS</p>	<p>DESCRIPTION:</p> <p style="text-align: center;">HIGH EFFICIENCY DSH036 HORIZONTAL UNIT AIR-COOLED SELF-CONTAINED</p>	<p>Form YK145.11-PA2 (308)</p>
	<p>DATE:</p> <p style="text-align: right; font-size: 1.2em;">March 2008</p>	

"DSH" HI-EFFICIENCY SERIES HORIZONTAL INDOOR AIR-CONDITIONING SYSTEM

GENERAL

All models 2-5 tons ship as factory-charged unitized packages. These units include refrigerant line shut-off valves between the condenser and evaporator section, allowing the unit to be field split. All packages/modules are designed for suspended mounting via integral structural channels.

CABINET

All cabinets are completely constructed of heavy gauge corrosion-resistant steel. The entire unit interior (both evaporator and condensing section) is insulated with 1/2" thick, 2-lb. density insulation. Service panels are equipped with lifting handles for ease of removal and handling.

REFRIGERANT CIRCUIT

The 2-5 ton units have a single refrigeration circuit. All models utilize high-efficiency 'Scroll' compressors. Each refrigeration circuit is thoroughly evacuated, and fully charged with R-410A refrigerant before shipment. Internal motor overload protection is provided. Compressors are mounted on rubber isolators to minimize vibration transmission.

Each refrigeration circuit includes a thermal expansion valve (with external equalizer), liquid line filter drier, sight glass/moisture indicator, a high refrigerant pressure safety switch, a low refrigerant pressure switch (for compressor protection), and service gauge ports.

EVAPORATOR AND CONDENSER COILS

The evaporator and condenser coils are constructed of internally enhanced copper tubes mechanically bonded to enhanced-surface aluminum fins. Both coils are employed in a draw-thru configuration. The large evaporator coil face area minimizes potential for water blow-off.

INDOOR/OUTDOOR FANS


Forward curved, double inlet and double width centrifugal blowers are used for both evaporator and condenser air movement. Blower wheels are fabricated of galvanized steel. Blowers employ solid steel shafts, supported in permanently lubricated ball bearing. All blowers are belt-driven. Variable-pitch motor sheaves allow for field adjustment of blower rpm.

ELECTRICAL/CONTROLS

All units are completely factory wired with all necessary controls. Current overload protection is provided on both evaporator and condenser motors (Internal auto-reset overloads on single-phase units, external manual-reset overload on three-phase). A manual reset circuit is also provided on each compressor control circuit in the event of high/low pressure cutout. A 24-volt control circuit, with oversize transformer, is provided for field connection.

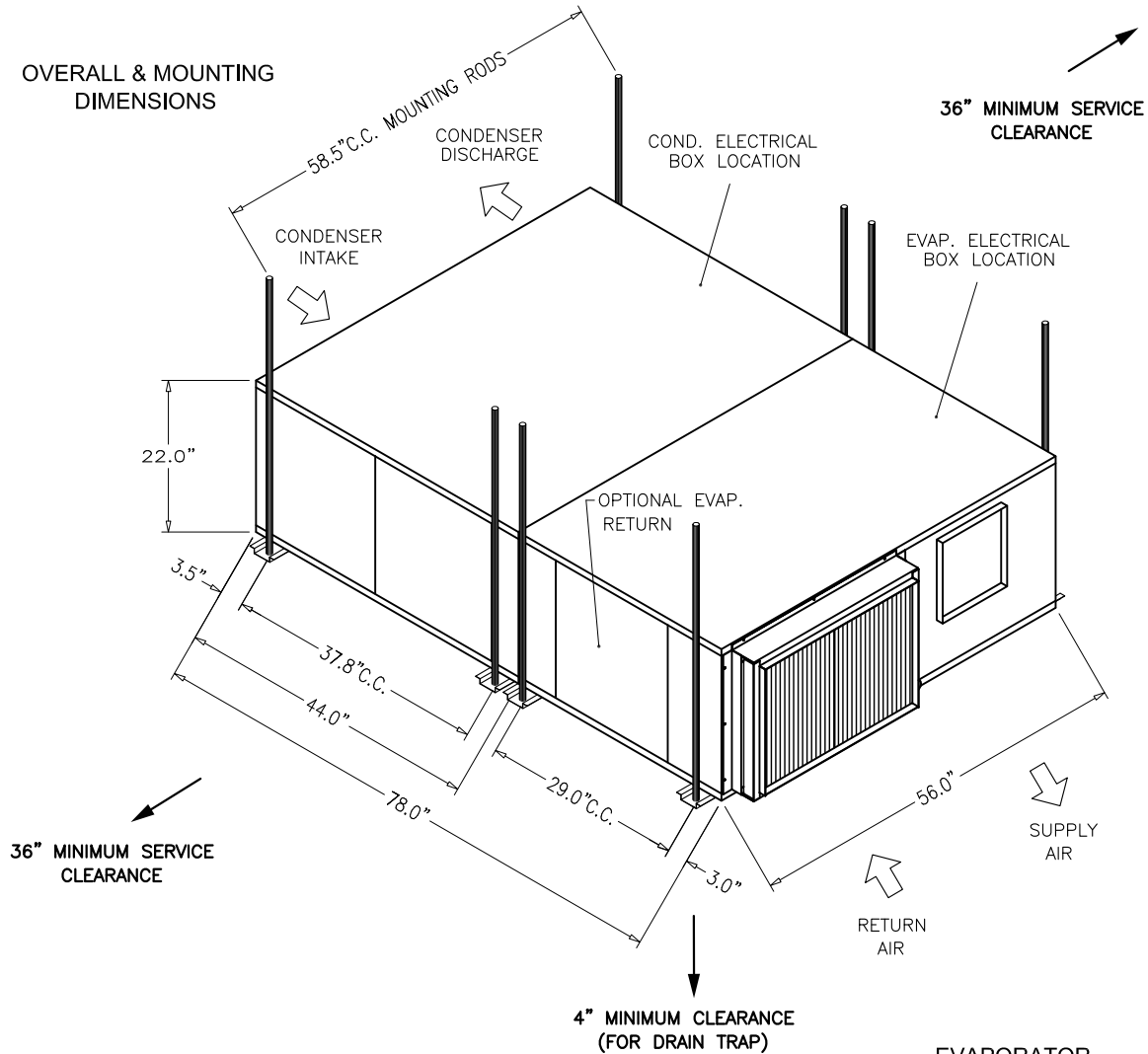
FILTERS

All models are shipped with 2 inch thick medium-efficiency throwaway filters factory installed.

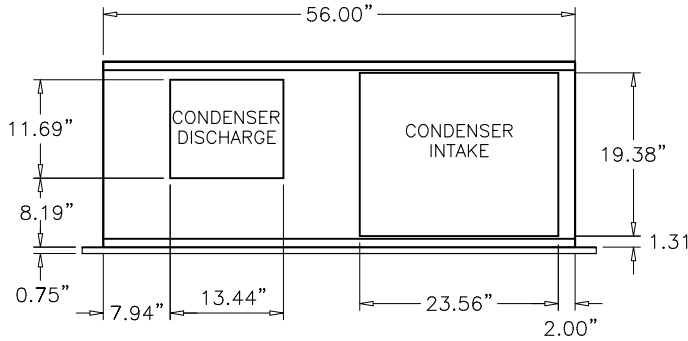
 BY JOHNSON CONTROLS	DESCRIPTION: MECHANICAL SPECIFICATIONS DSH036 HORIZONTAL UNIT AIR-COOLED SELF-CONTAINED HIGH EFFICIENCY	Form YK145.11-PA2 (308)
		DATE: March 2008

DSH024 AND DSH036 DIMENSIONAL DATA

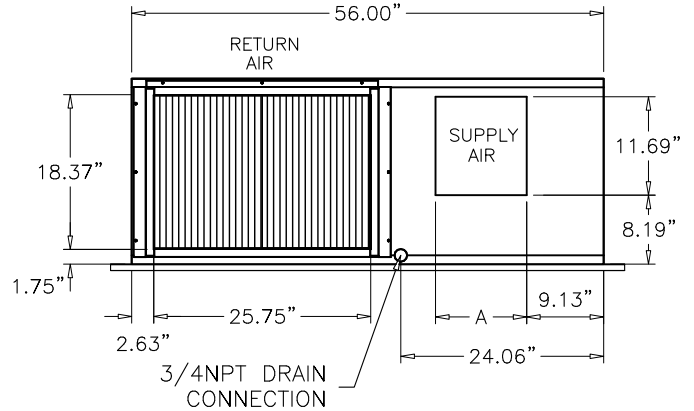
OVERALL & MOUNTING DIMENSIONS



CONDENSER OPENINGS



EVAPORATOR OPENINGS



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	A
2 TON	9.57
3 TON	10.88



DESCRIPTION:
DIMENSIONAL DATA
DSH024 & DSH036 HORIZONTAL UNIT
AIR-COOLED SELF-CONTAINED
HIGH EFFICIENCY

Form YK145.11-PA2 (308)

DATE:
March 2008

PROJECT:	TAG:
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Gross Cooling Capacity [Btuh]: 49,493* Design CFM: 1,600 Seasonal Energy Efficiency Ratio: 13.8 SEER** Net Cooling Capacity [Btuh]: 48,522** Net Cooling CFM: 1,600	Evaporator Fan No./Type: 1/CENTRIFUGAL Diameter x Width [in]: 12x9 Drive: Adjustable Belt Motor HP : 0.75
Condenser Fan No./Type: 1/CENTRIFUGAL Diameter x Width [in]: 12x11 Drive: Adjustable Belt Motor HP : 1.0	

Evaporator Coil Face Area: 6.07 [sq ft] Rows/FPI: 4 / 12 Refrigerant Control: TX Valve	Condenser Coil Face Area: 7.19 [sq ft] Rows/FPI: 4 / 16
Compressor No./Type: 1/Scroll Refrigerant Circuits: 1/ Independent	
Refrigerant: R-410A	
Filters - Qty./Size: 2/25x16x2	
Operating Weight [lbs.]: 740 Shipping Weight [lbs.]: 895	
Condensate Connection: 3 / 4 NPT	

*Cooling performance is rated at 95°F ambient, 80°F entering dry bulb, 67°F wet bulb and CFM listed. Gross capacity does not include the effect of fan motor heat.

**Rated in accordance with ARI Standard 210/240-2006

EVAPORATOR FAN PERFORMANCE

MODEL #	SUPPLY CFM	EXTERNAL STATIC PRESSURE - Inches W.C.													
		0.2		0.4		0.6		0.8		1.0		1.2		1.4	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
DSH048	1450	595	0.22	661	0.27	745	0.31	836	0.38	909	0.45	982	0.52	1046	0.61
	1600	601	0.26	691	0.33	773	0.39	847	0.44	921	0.51	987	0.61	1056	0.67
	1800	652	0.35	735	0.42	812	0.50	883	0.57	948	0.64	1018	0.72	-	-

NOTE:

1. At high evaporator air flows, and wet bulb conditions, condensate carry-over may occur. Adjust airflow downward as necessary.
2. Values include pressure drop from wet coil and clean filters.


CONDENSER FAN PERFORMANCE

MODEL #	OUTDOOR CFM	EXTERNAL STATIC PRESSURE - Inches W.C.									
		0.2		0.4		0.6		0.8		1.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
DSH048	2500	645	0.53	749	0.63	812	0.74	872	0.86	945	0.98

ELECTRICAL DATA

MODEL #	VOLTAGE	COMPRESSOR			EVAPORATOR FAN		CONDENSER FAN		MIN. CCT. AMPACITY	"MOP" Max Overcurrent Prot.	
		QTY	RLA	LRA	HP	FLA	HP	FLA			
DSH048	208-230/1/60	1	@	19.9	109.0	0.75	5.5	1.00	6.3	36.68	50
DSH048	208-230/3/60	1	@	13.1	83.1	0.75	2.6	1.00	3.3	22.28	35
DSH048	460/3/60	1	@	6.1	41.0	0.75	1.3	1.00	1.5	10.43	15
DSH048	575/3/60	1	@	5.0	34.0	0.75	1.0	1.00	1.1	8.35	15

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 BY JOHNSON CONTROLS	DESCRIPTION: HIGH EFFICIENCY DSH048 HORIZONTAL UNIT AIR-COOLED SELF-CONTAINED	Form YK145.11-PA3 (308)
		DATE: March 2008

“DSH” HI-EFFICIENCY SERIES HORIZONTAL INDOOR AIR-CONDITIONING SYSTEM

GENERAL

All models 2-5 tons ship as factory-charged unitized packages. These units include refrigerant line shut-off valves between the condenser and evaporator section, allowing the unit to be field split. All packages/modules are designed for suspended mounting via integral structural channels.

CABINET

All cabinets are completely constructed of heavy gauge corrosion-resistant steel. The entire unit interior (both evaporator and condensing section) is insulated with 1/2" thick, 2-lb. density insulation. Service panels are equipped with lifting handles for ease of removal and handling.

REFRIGERANT CIRCUIT

The 2-5 ton units have a single refrigeration circuit. All models utilize high-efficiency 'Scroll' compressors. Each refrigeration circuit is thoroughly evacuated, and fully charged with R-410A refrigerant before shipment. Internal motor overload protection is provided. Compressors are mounted on rubber isolators to minimize vibration transmission.

Each refrigeration circuit includes a thermal expansion valve (with external equalizer), liquid line filter drier, sight glass/moisture indicator, a high refrigerant pressure safety switch, a low refrigerant pressure switch (for compressor protection), and service gauge ports.

EVAPORATOR AND CONDENSER COILS

The evaporator and condenser coils are constructed of internally enhanced copper tubes mechanically bonded to enhanced-surface aluminum fins. Both coils are employed in a draw-thru configuration. The large evaporator coil face area minimizes potential for water blow-off.

INDOOR/OUTDOOR FANS


Forward curved, double inlet and double width centrifugal blowers are used for both evaporator and condenser air movement. Blower wheels are fabricated of galvanized steel. Blowers employ solid steel shafts, supported in permanently lubricated ball bearing. All blowers are belt-driven. Variable-pitch motor sheaves allow for field adjustment of blower rpm.

ELECTRICAL/CONTROLS

All units are completely factory wired with all necessary controls. Current overlaod protection is provided on both evaporator and condenser motors (Internal auto-reset overloads on single-phase units, external manual-reset overload on three-phase). A manual reset circuit is also provided on each compressor control circuit in the event of high/low pressure cutout. A 24-volt control circuit, with oversize transformer, is provided for field connection.

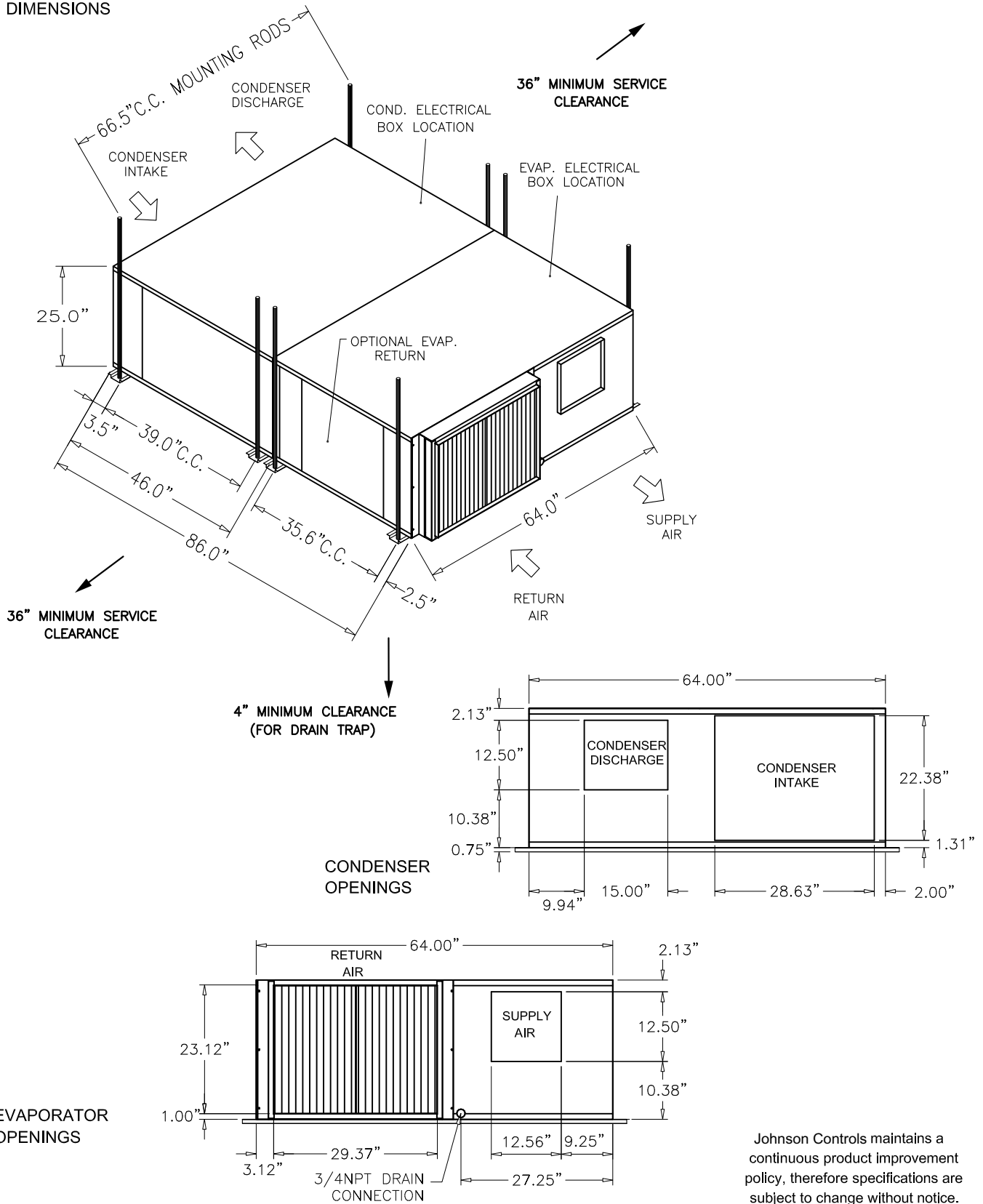
FILTERS

All models are shipped with 2 inch thick medium-efficiency throwaway filters factory installed.

 BY JOHNSON CONTROLS	DESCRIPTION: MECHANICAL SPECIFICATIONS DSH048 HORIZONTAL UNIT AIR-COOLED SELF-CONTAINED HIGH EFFICIENCY	Form YK145.11-PA3 (308)
		DATE: March 2008

DSH048 AND DSH060 DIMENSIONAL DATA

OVERALL & MOUNTING DIMENSIONS



Johnson Controls maintains a continuous product improvement policy, therefore specifications are subject to change without notice.



DESCRIPTION:
DIMENSIONAL DATA
DSH048 & DSH060 HORIZONTAL UNIT
AIR-COOLED SELF-CONTAINED
HIGH EFFICIENCY

Form YK145.11-PA3 (308)

DATE:
March 2008

PROJECT:	TAG:
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<i>Gross Cooling Capacity [Btuh]:</i>	62,211*
<i>Design CFM:</i>	2,000
<i>Seasonal Energy Efficiency Ratio:</i>	13.3 SEER**
<i>Net Cooling Capacity [Btuh]:</i>	60,873**
<i>Net Cooling CFM:</i>	2,000
<i>Evaporator Fan No./Type:</i>	1/CENTRIFUGAL
<i>Diameter x Width [in]:</i>	12x9
<i>Drive:</i>	Adjustable Belt
<i>Motor HP :</i>	1.00
<i>Condenser Fan No./Type:</i>	1/CENTRIFUGAL
<i>Diameter x Width [in]:</i>	12x11
<i>Drive:</i>	Adjustable Belt
<i>Motor HP :</i>	1.5

<i>Evaporator Coil Face Area:</i>	6.07 [sq ft]
<i>Rows/FPI:</i>	4 / 12
<i>Refrigerant Control:</i>	TX Valve
<i>Condenser Coil Face Area:</i>	7.19 [sq ft]
<i>Rows/FPI:</i>	4 / 16
<i>Compressor No./Type:</i>	1/Scroll
<i>Refrigerant Circuits:</i>	1/ Independent
<i>Refrigerant:</i>	R-410A
<i>Filters - Qty./Size:</i>	2/25x16x2
<i>Operating Weight [lbs.]:</i>	860
<i>Shipping Weight [lbs.]:</i>	920
<i>Condensate Connection:</i>	3 / 4 NPT

*Cooling performance is rated at 95°F ambient, 80°F entering dry bulb, 67°F wet bulb and CFM listed. Gross capacity does not include the effect of fan motor heat.

**Rated in accordance with ARI Standard 210/240-2006

EVAPORATOR FAN PERFORMANCE

MODEL #	SUPPLY CFM	EXTERNAL STATIC PRESSURE - Inches W.C.													
		0.2		0.4		0.6		0.8		1.0		1.2		1.4	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
DSH060	1800	583	0.30	674	0.37	755	0.44	830	0.52	900	0.59	966	0.69	1037	0.75
	2000	688	0.45	767	0.53	839	0.61	907	0.69	971	0.77	1029	0.85	1086	0.92
	2200	677	0.50	754	0.59	826	0.68	894	0.77	957	0.86	1018	0.95	-	-

NOTE:

1. At high evaporator air flows, and wet bulb conditions, condensate carry-over may occur. Adjust airflow downward as necessary.
2. Values include pressure drop from wet coil and clean filters.


CONDENSER FAN PERFORMANCE

MODEL #	OUTDOOR CFM	EXTERNAL STATIC PRESSURE - Inches W.C.													
		0.2		0.4		0.6		0.8		1.0		1.2		1.4	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
DSH060	2900	723	0.79	800	0.84	871	1.07	935	1.20	996	1.55	1057	1.42	-	-

ELECTRICAL DATA

MODEL #	VOLTAGE	COMPRESSOR			EVAPORATOR FAN		CONDENSER FAN		MIN. CCT.	"MOP"	
		QTY	RLA	LRA	HP	FLA	HP	FLA	AMPACITY	Max Overcurrent Prot.	
DSH060	208-230/3/60	1	@	16.0	110.0	1.00	3.3	1.50	4.6	27.90	40
DSH060	460/3/60	1	@	7.8	52.0	1.00	1.5	1.50	2.1	13.35	20
DSH060	575/3/60	1	@	5.7	38.9	1.00	1.1	1.50	1.7	9.93	15

Johnson Controls maintains a continuous product improvement policy, therefore specifications are subject to change without notice.

 BY JOHNSON CONTROLS	DESCRIPTION: HIGH EFFICIENCY DSH060 HORIZONTAL UNIT AIR-COOLED SELF-CONTAINED	Form YK145.11-PA4 (308)

“DSH” HI-EFFICIENCY SERIES HORIZONTAL INDOOR AIR-CONDITIONING SYSTEM

GENERAL

All models 2-5 tons ship as factory-charged unitized packages. These units include refrigerant line shut-off valves between the condenser and evaporator section, allowing the unit to be field split. All packages/modules are designed for suspended mounting via integral structural channels.

CABINET

All cabinets are completely constructed of heavy gauge corrosion-resistant steel. The entire unit interior (both evaporator and condensing section) is insulated with 1/2" thick, 2-lb. density insulation. Service panels are equipped with lifting handles for ease of removal and handling.

REFRIGERANT CIRCUIT

The 2-5 ton units have a single refrigeration circuit. All models utilize high-efficiency 'Scroll' compressors. Each refrigeration circuit is thoroughly evacuated, and fully charged with R-410A refrigerant before shipment. Internal motor overload protection is provided. Compressors are mounted on rubber isolators to minimize vibration transmission.

Each refrigeration circuit includes a thermal expansion valve (with external equalizer), liquid line filter drier, sight glass/moisture indicator, a high refrigerant pressure safety switch, a low refrigerant pressure switch (for compressor protection), and service gauge ports.

EVAPORATOR AND CONDENSER COILS

The evaporator and condenser coils are constructed of internally enhanced copper tubes mechanically bonded to enhanced-surface aluminum fins. Both coils are employed in a draw-thru configuration. The large evaporator coil face area minimizes potential for water blow-off.

INDOOR/OUTDOOR FANS


Forward curved, double inlet and double width centrifugal blowers are used for both evaporator and condenser air movement. Blower wheels are fabricated of galvanized steel. Blowers employ solid steel shafts, supported in permanently lubricated ball bearing. All blowers are belt-driven. Variable-pitch motor sheaves allow for field adjustment of blower rpm.

ELECTRICAL/CONTROLS

All units are completely factory wired with all necessary controls. Current overload protection is provided on both evaporator and condenser motors (Internal auto-reset overloads on single-phase units, external manual-reset overload on three-phase). A manual reset circuit is also provided on each compressor control circuit in the event of high/low pressure cutout. A 24-volt control circuit, with oversize transformer, is provided for field connection.

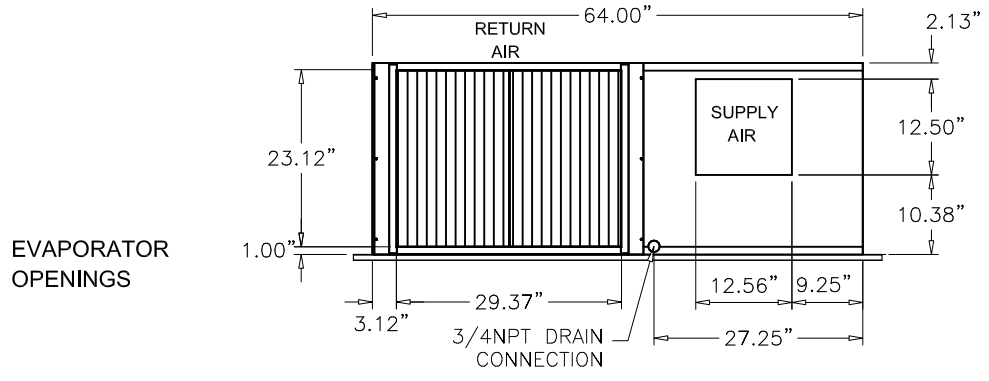
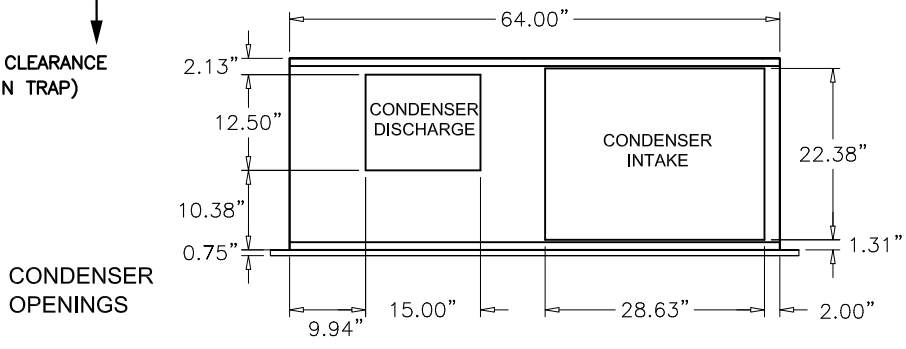
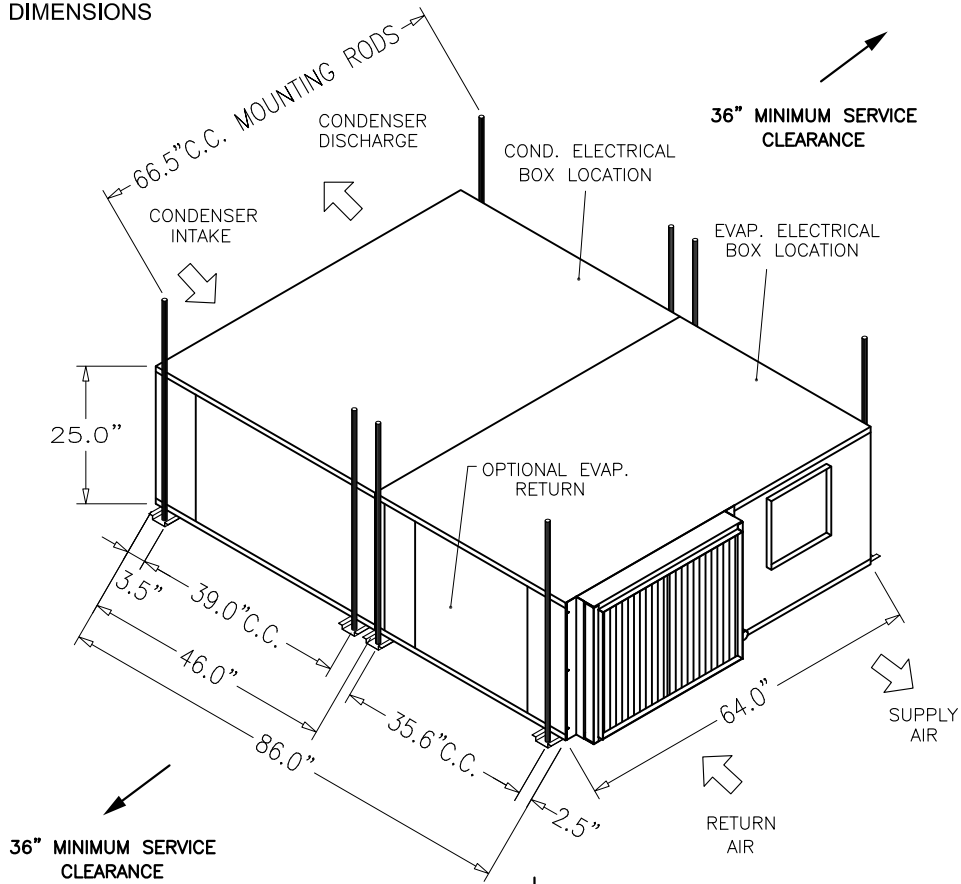
FILTERS

All models are shipped with 2 inch thick medium-efficiency throwaway filters factory installed.

 BY JOHNSON CONTROLS	<i>DESCRIPTION:</i> MECHANICAL SPECIFICATIONS DSH060 HORIZONTAL UNIT AIR-COOLED SELF-CONTAINED HIGH EFFICIENCY	Form YK145.11-PA4 (308)
		<i>DATE:</i> March 2008

DSH048 AND DSH060 DIMENSIONAL DATA

OVERALL & MOUNTING DIMENSIONS



Johnson Controls maintains a continuous product improvement policy, therefore specifications are subject to change without notice.



DESCRIPTION:
DIMENSIONAL DATA
DSH048 & DSH060 HORIZONTAL UNIT
AIR-COOLED SELF-CONTAINED
HIGH EFFICIENCY

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