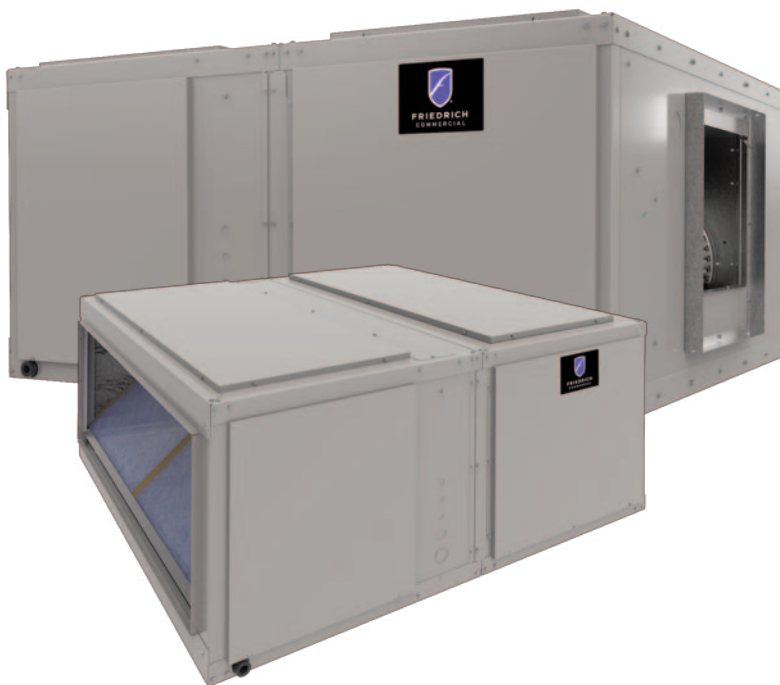




FRIEDRICH

1 8 8 3

Commercial Split F-Series™ A/C Air Handlers



RHCYA Series

Nominal Sizes: 7.5, 10 Small, 10 Large, 12.5, 15 & 20 Tons
[26.4, 35.2, 35.2, 44.0, 52.8 & 70.3 kW]

Cooling Capacities: 72.2k Btu/h to 240.0k Btu/h [21.2 kW to 70.3 kW]

Refrigerant Type: R-454B

Designed for use with matching RHCYA models



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RHCYA STANDARD FEATURES INCLUDE:

- Designed for R-454B refrigerant
- Wired and run tested
- Convertible airflow – vertical up flow or horizontal sideflow
- Cooling operation up to 125°F ambient
- TXV refrigerant metering system
- Field-adjustable TXVs
- Solid-core liquid line filter drier
- Insulation encapsulated throughout entire unit
- Galvanized steel drain pan
- Standard Variable Frequency Drives (VFDs)
- Unit cabinet design shall be separable to facilitate mobilization during installation
- MERV 8 & MERV 13 filters are available as an accessory



Designing for Sustainability with Low GWP: For 2025, the Environmental Protection Agency (EPA) has set a global warming potential (GWP) limit of 700 for refrigerant used in heating and cooling systems. This new requirement will result in a 78%¹ lower GWP than previous-generation refrigerants - with only minimal changes to system installation. For us, this is another step toward our continued sustainability goal of reducing greenhouse gas emissions, while still delivering an exceptional level of energy efficient, dependable comfort.

¹When comparing the GWP of R-454B to R-410A refrigerant.

ACCESSORIES

ACCESSORY DESCRIPTION	MODEL NUMBER	SIZE USED ON	DIMENSIONS D x L x W (INCHES)
MERV 13 Filter	RXMF-M13A11625	090, 120	1X16X25
	RXMF-M13A12025	121, 150, 180, 240	1X20X25
	RXMF-M13A21625	090, 120	2X16X25
	RXMF-M13A22520	121, 150, 180, 240	2X20X25
MERV 8 Filter	RXMF-M08A11625	090, 120	1X16X25
	RXMF-M08A12025	121, 150, 180, 240	1X20X25
	RXMF-M08A21625	090, 120	2X16X25
	RXMF-M08A22520	121, 150, 180, 240	2X20X25
Electric Heat (* = C, D, or Y Voltage)	RXHE-AG005CA	090, 120	N/A
	RXHE-AG005DA	090, 120	N/A
	RXHE-AG010*A	090, 120	N/A
	RXHE-AG015*A	090, 120	N/A
	RXHE-AG020*A	090, 120	N/A
	RXHE-AG025*A	090, 120	N/A
	RXHE-AG030*A	090, 120	N/A
	RXHE-AG035*A	090, 120	N/A
	RXHE-AG010*C	121, 150, 180, 240	N/A
	RXHE-AG020*C	121, 150, 180, 240	N/A
	RXHE-AG030*C	121, 150, 180, 240	N/A
	RXHE-AG040*C	121, 150, 180, 240	N/A
	RXHE-AG050DC	121, 150, 180, 240	N/A
	RXHE-AG050YC	121, 150, 180, 240	N/A
Economizers for Commercial Air Handler	RXHM-71SA	090, 120	N/A
	RXHM-71LA	121, 150, 180, 240	N/A

R
1

H
2

C
3

Y
4

A
5

2
6

090
789

C
10

A
11

R
12

1—Brand

R = Friedrich®

2—Unit Type

H = Air Handler

3—Cabinet Type

C = Commercial

4—Refrigerant

Y = R-454B

5—Heat Type

A = Air Conditioner

6—Airflow Configuration

2 = 2-Stage

7,8,9—Capacity

090 = 7.5 Ton

120 = 10 Ton (Small)

121 = 10 Ton (Large)

150 = 12.5 Ton

180 = 15 Ton

240 = 20 Ton

10—Electrical Designation

C = 208/230 V, 3 PH, 60 Hz

D = 460 V, 3 PH, 60 Hz

Y = 575 V, 3 PH, 60 Hz

11—Minor Series

A = 1st Design

12—Drive

R = Belt Drive—VFD Low Static

S = Belt Drive—VFD Medium Static

T = Belt Drive—VFD High Static

COMMERCIAL SPLIT AIR CONDITIONER MODEL MATCH-UPS

OUTDOOR UNIT MODEL NUMBER	INDOOR AIR HANDLER MODEL NUMBER
RACY2078	RHCYA2090
RACY2090	RHCYA2090
RACY2119	RHCYA2121
RACY2120	RHCYA2120
RACY2150	RHCYA2150
RACY2180	RHCYA2180
RACY2240	RHCYA2240

GENERAL DATA

Model RHCYA2 Series	090C	090D	090Y
			CONTINUED →
Indoor Coil—Fin Type	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled
Tube Size in. [mm]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	10.2 [0.9]	10.2 [0.9]	10.2 [0.9]
Rows / FPI [FPcm]	4 / 15 [10 / 38]	4 / 15 [10 / 38]	4 / 15 [10 / 38]
Refrigerant Control	TX Valves	TX Valves	TX Valves
Indoor Fan—Type	FC Centrifugal	FC Centrifugal	FC Centrifugal
Diameter in. [mm]	12x12 [305 x 305]	12x12 [305 x 305]	12x12 [305 x 305]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds (Standard / VFD)	Single / Multiple	Single / Multiple	Single / Multiple
No. Motors	1	1	1
Motor HP			
R - Low Static Drive	2	2	2
S - Medium Static Drive	2	2	2
T - High Static Drive	3	3	3
Motor RPM	1725	1725	1725
Weights			
Net Weight lbs. [kg]			
R - Low Static Drive	409 [186]	409 [186]	409 [186]
S - Medium Static Drive	409 [186]	409 [186]	409 [186]
T - High Static Drive	419 [190]	419 [190]	419 [190]
Shipping Weight lbs. [kg]			
R - Low Static Drive	429 [195]	429 [195]	429 [195]
S - Medium Static Drive	429 [195]	429 [195]	429 [195]
T - High Static Drive	439 [199]	439 [199]	439 [199]

[] Designates Metric Conversions

GENERAL DATA (CONTINUED)

Model RHCYA2 Series	120C	120D	120Y
			CONTINUED 
Indoor Coil—Fin Type	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled
Tube Size in. [mm]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	10.2 [0.9]	10.2 [0.9]	10.2 [0.9]
Rows / FPI [FPcm]	4 / 15 [10 / 38]	4 / 15 [10 / 38]	4 / 15 [10 / 38]
Refrigerant Control	TX Valves	TX Valves	TX Valves
Indoor Fan—Type	FC Centrifugal	FC Centrifugal	FC Centrifugal
Diameter in. [mm]	12x12 [305 x 305]	12x12 [305 x 305]	12x12 [305 x 305]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds (Standard / VFD)	Single / Multiple	Single / Multiple	Single / Multiple
No. Motors	1	1	1
Motor HP			
R - Low Static Drive	2	2	2
S - Medium Static Drive	2	2	2
T - High Static Drive	3	3	3
Motor RPM	1725	1725	1725
Weights			
Net Weight lbs. [kg]			
R - Low Static Drive	409 [186]	409 [186]	409 [186]
S - Medium Static Drive	409 [186]	409 [186]	409 [186]
T - High Static Drive	419 [190]	419 [190]	419 [190]
Shipping Weight lbs. [kg]			
R - Low Static Drive	429 [195]	429 [195]	429 [195]
S - Medium Static Drive	429 [195]	429 [195]	429 [195]
T - High Static Drive	439 [199]	439 [199]	439 [199]

[] Designates Metric Conversions

GENERAL DATA (CONTINUED)

Model RHCYA2 Series	121C	121D
CONTINUED →		
Indoor Coil—Fin Type	Louvered	Louvered
Tube Type	Rifled	Rifled
Tube Size in. [mm]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	16.5 [1.5]	16.5 [1.5]
Rows / FPI [FPcm]	3 / 15 [8 / 46]	3 / 15 [8 / 46]
Refrigerant Control	TX Valves	TX Valves
Indoor Fan—Type	FC Centrifugal	FC Centrifugal
Diameter in. [mm]	18x15 [457x381]	18x15 [457x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)
No. Speeds (Standard / VFD)	Single / Multiple	Single / Multiple
No. Motors	1	1
Motor HP		
R - Low Static Drive	2	2
S - Medium Static Drive	2	2
T - High Static Drive	3	3
Motor RPM	1725	1725
Weights		
Net Weight lbs. [kg]		
R - Low Static Drive	575 [261]	575 [261]
S - Medium Static Drive	585 [265]	585 [265]
T - High Static Drive	595 [270]	595 [270]
Shipping Weight lbs. [kg]		
R - Low Static Drive	595 [270]	595 [270]
S - Medium Static Drive	605 [274]	605 [274]
T - High Static Drive	615 [279]	615 [279]

[] Designates Metric Conversions

GENERAL DATA (CONTINUED)

Model RHCYA2 Series	150C	150D	150Y
			CONTINUED →
Indoor Coil—Fin Type	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled
Tube Size in. [mm]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	16.5 [1.5]	16.5 [1.5]	16.5 [1.5]
Rows / FPI [FPcm]	3 / 15 [8 / 38]	3 / 15 [8 / 38]	3 / 15 [8 / 38]
Refrigerant Control	TX Valves	TX Valves	TX Valves
Indoor Fan—Type	FC Centrifugal	FC Centrifugal	FC Centrifugal
Diameter in. [mm]	18x15 [457x381]	18x15 [457x381]	18x15 [457x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds (Standard / VFD)	Single / Multiple	Single / Multiple	Single / Multiple
No. Motors	1	1	1
Motor HP			
R - Low Static Drive	2	2	2
S - Medium Static Drive	3	3	3
T - High Static Drive	5	5	5
Motor RPM	1725	1725	1725
Weights			
Net Weight lbs. [kg]			
R - Low Static Drive	575 [261]	575 [261]	575 [261]
S - Medium Static Drive	585 [265]	585 [265]	585 [265]
T - High Static Drive	595 [270]	595 [270]	595 [270]
Shipping Weight lbs. [kg]			
R - Low Static Drive	595 [270]	595 [270]	595 [270]
S - Medium Static Drive	605 [274]	605 [274]	605 [274]
T - High Static Drive	615 [279]	615 [279]	615 [279]

[] Designates Metric Conversions

GENERAL DATA (CONTINUED)

Model RHCYA2 Series	180C	180D	180Y
			CONTINUED ➔
Indoor Coil—Fin Type	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled
Tube Size in. [mm]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	16.5 [1.5]	16.5 [1.5]	16.5 [1.5]
Rows / FPI [FPcm]	4 / 15 [10 / 38]	4 / 15 [10 / 38]	4 / 15 [10 / 38]
Refrigerant Control	TX Valves	TX Valves	TX Valves
Indoor Fan—Type	FC Centrifugal	FC Centrifugal	FC Centrifugal
Diameter in. [mm]	18x15 [457x381]	18x15 [457x381]	18x15 [457x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds (Standard / VFD)	Single / Multiple	Single / Multiple	Single / Multiple
No. Motors	1	1	1
Motor HP			
R - Low Static Drive	2	2	2
S - Medium Static Drive	3	3	3
T - High Static Drive	5	5	5
Motor RPM	1725	1725	1725
Weights			
Net Weight lbs. [kg]			
R - Low Static Drive	690 [313]	690 [313]	690 [313]
S - Medium Static Drive	700 [318]	700 [318]	700 [318]
T - High Static Drive	710 [322]	710 [322]	710 [322]
Shipping Weight lbs. [kg]			
R - Low Static Drive	710 [322]	710 [322]	710 [322]
S - Medium Static Drive	720 [327]	720 [327]	720 [327]
T - High Static Drive	730 [331]	730 [331]	730 [331]

[] Designates Metric Conversions

GENERAL DATA (CONTINUED)

Model RHCYA2 Series	240C	240D	240Y
Indoor Coil—Fin Type	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled
Tube Size in. [mm]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	16.5 [1.5]	16.5 [1.5]	16.5 [1.5]
Rows / FPI [FPcm]	4 / 15 [10 / 38]	4 / 15 [10 / 38]	4 / 15 [10 / 38]
Refrigerant Control	TX Valves	TX Valves	TX Valves
Indoor Fan—Type	FC Centrifugal	FC Centrifugal	FC Centrifugal
Diameter in. [mm]	18x18 [457x457]	18x18 [457x457]	18x18 [457x457]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds (Standard / VFD)	Single / Multiple	Single / Multiple	Single / Multiple
No. Motors	1	1	1
Motor HP			
R - Low Static Drive	5	5	5
S - Medium Static Drive	7.5	7.5	7.5
T - High Static Drive	7.5	7.5	7.5
Motor RPM	1725	1725	1725
Weights			
Net Weight lbs. [kg]			
R - Low Static Drive	700 [318]	700 [318]	700 [318]
S - Medium Static Drive	710 [322]	710 [322]	710 [322]
T - High Static Drive	710 [322]	710 [322]	710 [322]
Shipping Weight lbs. [kg]			
R - Low Static Drive	720 [327]	720 [327]	720 [327]
S - Medium Static Drive	730 [331]	730 [331]	730 [331]
T - High Static Drive	730 [331]	730 [331]	730 [331]

[] Designates Metric Conversions

UNIT DIMENSIONS

Model Number	CONNECTIONS				UNIT					
	Liquid		Vapor		W (Width)		H (Height)		L (Length)	
	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
RHCYA2090	1/2	12.70	1-1/8	28.58	54-1/2	1384.30	27-43/50	707.52	57-17/20	1469.39
RHCYA2120	5/8	15.88	1-3/8	34.93	54-1/2	1384.30	27-43/50	707.52	57-17/20	1469.39
RHCYA2121	5/8	15.88	1-3/8	34.93	61-47/50	1573.28	35-1/10	891.54	78-25/61	1991.59
RHCYA2150	5/8	15.88	1-3/8	34.93	61-47/50	1573.28	35-1/10	891.54	78-25/61	1991.59
RHCYA2180	7/8	22.23	1-5/8	41.28	61-47/50	1573.28	35-1/10	891.54	78-25/61	1991.59
RHCYA2240	7/8	22.23	1-5/8	41.28	61-47/50	1573.28	35-1/10	891.54	78-25/61	1991.59

ELECTRICAL DATA – RHCYA2 SERIES				
		090C	090D	090Y
Unit Information	Unit Operating Voltage Range	187-253	414-506	541-610
	Volts	208/230	460	575
	Minimum Circuit Ampacity			
	R - Low Static Drive	8	4	3
	S - Medium Static Drive	8	4	3
	T - High Static Drive	12	6	5
	Maximum Overcurrent Protection Device Size			
	R - Low Static Drive	15/15	15/15	15/15
	S - Medium Static Drive	15/15	15/15	15/15
	T - High Static Drive	15/20	15/15	15/15
Motor Information	No.	1	1	1
	Volts	208/230	460	575
	Phase	3	3	3
	Rating Plate Amps			
	R - Low Static Drive	6.2	3	2.4
	S - Medium Static Drive	6.2	3	2.4
	T - High Static Drive	9.2	4.6	3.5
	LRA (Amps)			
	R - Low Static Drive	47	24	22.72
	S - Medium Static Drive	47	24	22.72
	T - High Static Drive	74.5	38.1	30

ELECTRICAL DATA – RHCYA2 SERIES						
		120C	120D	120Y	121C	121D
Unit Information	Unit Operating Voltage Range	187-253	414-506	541-610	187-253	414-506
	Volts	208/230	460	575	208/230	460
	Minimum Circuit Ampacity					
	R - Low Static Drive	8	4	3	8	4
	S - Medium Static Drive	8	4	3	8	4
	T - High Static Drive	12	6	5	12	6
	Maximum Overcurrent Protection Device Size					
	R - Low Static Drive	15/15	15/15	15/15	15/15	15/15
	S - Medium Static Drive	15/15	15/15	15/15	15/15	15/15
	T - High Static Drive	15/20	15/15	15/15	15/15	15/15
Motor Information	No.	1	1	1	1	1
	Volts	208/230	460	575	208/230	460
	Phase	3	3	3	3	3
	Rating Plate Amps					
	R - Low Static Drive	6.2	3	2.4	6.2	3
	S - Medium Static Drive	6.2	3	2.4	6.2	3
	T - High Static Drive	9.2	4.6	3.5	9.2	4.6
	LRA (Amps)					
	R - Low Static Drive	47	24	22.72	47	24
	S - Medium Static Drive	47	24	22.72	47	24
	T - High Static Drive	74.5	38.1	30	74.5	38.1

ELECTRICAL DATA – RHCYA2 SERIES				
		150C	150D	150Y
Unit Information	Unit Operating Voltage Range	187-253	414-506	541-610
	Volts	208/230	460	575
	Minimum Circuit Ampacity			
	R - Low Static Drive	8	4	3
	S - Medium Static Drive	12	6	5
	T - High Static Drive	16	8	7
	Maximum Overcurrent Protection Device Size			
	R - Low Static Drive	15/15	15/15	15/15
	S - Medium Static Drive	15/15	15/15	15/15
	T - High Static Drive	20/25	15/15	15/15
Motor Information	No.	1	1	1
	Volts	208/230	460	575
	Phase	3	3	3
	Rating Plate Amps			
	R - Low Static Drive	6.2	3	2.4
	S - Medium Static Drive	9.2	4.6	3.5
	T - High Static Drive	12.6	6.3	5.1
	LRA (Amps)			
	R - Low Static Drive	47	24	22.72
	S - Medium Static Drive	74.5	38.1	30
	T - High Static Drive	95	47.5	38

ELECTRICAL DATA – RHCYA2 SERIES				
		180C	180D	180Y
Unit Information	Unit Operating Voltage Range	187-253	414-506	541-610
	Volts	208/230	460	575
	Minimum Circuit Ampacity			
	R - Low Static Drive	8	4	3
	S - Medium Static Drive	12	6	5
	T - High Static Drive	16	8	7
	Maximum Overcurrent Protection Device Size			
	R - Low Static Drive	15/15	15/15	15/15
	S - Medium Static Drive	15/15	15/15	15/15
	T - High Static Drive	20/25	15/15	15/15
Motor Information	No.	1	1	1
	Volts	208/230	460	575
	Phase	3	3	3
	Rating Plate Amps			
	R - Low Static Drive	6.2	3	2.4
	S - Medium Static Drive	9.2	4.6	3.5
	T - High Static Drive	12.6	6.3	5.1
	LRA (Amps)			
	R - Low Static Drive	47	24	22.72
	S - Medium Static Drive	74.5	38.1	30
	T - High Static Drive	95	47.5	38

ELECTRICAL DATA – RHCYA2 SERIES				
		240C	240D	240Y
Unit Information	Unit Operating Voltage Range	187-253	414-506	541-610
	Volts	208/230	460	575
	Minimum Circuit Ampacity			
	R - Low Static Drive	16	8	7
	S - Medium Static Drive	24	12	10
	T - High Static Drive	24	12	10
	Maximum Overcurrent Protection Device Size			
	R - Low Static Drive	20/25	15/15	15/15
	S - Medium Static Drive	30/40	15/20	15/15
	T - High Static Drive	30/40	15/20	15/15
Motor Information	No.	1	1	1
	Volts	208/230	460	575
	Phase	3	3	3
	Rating Plate Amps			
	R - Low Static Drive	12.6	6.3	5.1
	S - Medium Static Drive	19.2	9.6	7.7
	T - High Static Drive	19.2	9.6	7.7
	LRA (Amps)			
	R - Low Static Drive	95	47.5	38
	S - Medium Static Drive	127	63.5	58
	T - High Static Drive	127	63.5	58

208/230V THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KIT CHARACTERISTICS AND APPLICATION

Single Power Supply for Both Unit and Heater Kit						Separate Power Supply for Both Unit and Heater Kit			
Unit Model Number RHCYA2	Heater Kit			Air Conditioner		Heater Kit		Air Conditioner	
	Model No. RXHE-	Rated Heater kW @ 208/230V	FLA	Unit Min. Ckt. Ampacity	Max. Fuse or Ckt. Bkr. Size	Heater Kit Min. Ckt. Ampacity	Heater Kit Max. Fuse or Ckt. Bkr. Size	Air Cond. Min. Ckt. Ampacity	Air Cond. Max. Fuse or Ckt. Bkr. Size
090CAR 090CAS	AG005CA	3.76/5.00	10.44/12.03	21/23	25/25	14/16	15/20	8/8	15/15
	AG010CA	7.75/9.98	20.82/24.01	34/38	35/40	27/31	30/35	8/8	15/15
	AG015CA	11.27/15.0	31.28/36.08	47/53	50/60	92/106	100/110	8/8	15/15
	AG020CA	15.6/20.2	43.1/48.9	62/69	70/70	54/62	60/70	8/8	15/15
	AG025CA	18.78/25.0	52.13/60.14	73/83	80/90	66/76	70/80	8/8	15/15
	AG030CA	22.0/29.6	60.8/70.2	84/96	90/100	76/88	80/90	8/8	15/15
	AG035CA	26.29/35.0	72.97/84.20	99/113	100/125	92/106	100/110	8/8	15/15
090CAT	AG005CA	3.76/5.00	10.44/12.03	25/27	30/30	14/16	15/20	12/12	20/20
	AG010CA	7.75/9.98	20.82/24.01	38/42	40/45	27/31	30/35	12/12	20/20
	AG015CA	11.27/15.0	31.28/36.08	51/57	60/60	40/46	40/50	12/12	20/20
	AG020CA	15.6/20.2	43.1/48.9	66/73	70/80	54/62	60/70	12/12	20/20
	AG025CA	18.78/25.0	52.13/60.14	77/87	80/90	66/76	70/80	12/12	20/20
	AG030CA	22.0/29.6	60.8/70.2	88/100	90/100	76/88	80/90	12/12	20/20
	AG035CA	26.29/35.0	72.97/84.20	103/117	110/125	92/106	100/110	12/12	20/20
120CAR 120CAS	AG005CA	3.76/5.00	10.44/12.03	21/23	25/25	14/16	15/20	8/8	15/15
	AG010CA	7.75/9.98	20.82/24.01	34/38	35/40	27/31	30/35	8/8	15/15
	AG015CA	11.27/15.0	31.28/36.08	47/53	50/60	40/46	40/50	8/8	15/15
	AG020CA	15.6/20.2	43.1/48.9	62/69	70/70	54/62	60/70	8/8	15/15
	AG025CA	18.78/25.0	52.13/60.14	73/83	80/90	66/76	70/80	8/8	15/15
	AG030CA	22.0/29.6	60.8/70.2	84/96	90/100	76/88	80/90	8/8	15/15
	AG035CA	26.29/35.0	72.97/84.20	99/113	100/125	92/106	100/110	8/8	15/15
120CAT	AG005CA	3.76/5.00	10.44/12.03	25/27	30/30	14/16	15/20	12/12	20/20
	AG010CA	7.75/9.98	20.82/24.01	38/42	40/45	27/31	30/35	12/12	20/20
	AG015CA	11.27/15.0	31.28/36.08	51/57	60/60	40/46	40/50	12/12	20/20
	AG020CA	15.6/20.2	43.1/48.9	66/73	70/80	54/62	60/70	12/12	20/20
	AG025CA	18.78/25.0	52.13/60.14	77/87	80/90	66/76	70/80	12/12	20/20
	AG030CA	22.0/29.6	60.8/70.2	88/100	90/100	76/88	80/90	12/12	20/20
	AG035CA	26.29/35.0	72.97/84.20	103/117	110/125	92/106	100/110	12/12	20/20
121CAR 121CAS	AG010CC	7.50/9.98	20.82/24.01	34/38	35/40	27/31	30/35	8/8	15/15
	AG020CC	14.98/19.95	41.58/47.99	60/68	60/70	52/60	60/60	8/8	15/15
	AG030CC	21.6/28.8	60/70	83/96	90/100	75/88	80/90	8/8	15/15
	AG040CC	30/40	83/96	112/128	125/150	104/120	110/125	8/8	15/15
121CAT	AG010CC	7.50/9.98	20.82/24.01	38/42	40/45	27/31	30/35	12/12	20/20
	AG020CC	14.98/19.95	41.58/47.99	64/72	70/80	52/60	60/60	12/12	20/20
	AG030CC	21.6/28.8	60/70	87/99	90/100	75/88	80/90	12/12	20/20
	AG040CC	30/40	83/96	116/132	125/150	104/120	110/125	12/12	20/20
150CAR	AG010CC	7.50/9.98	20.82/24.01	34/38	35/40	27/31	30/35	8/8	15/15
	AG020CC	14.98/19.95	41.58/47.99	60/68	60/70	52/60	60/60	8/8	15/15
	AG030CC	21.6/28.8	60/70	83/96	90/100	75/88	80/90	8/8	15/15
	AG040CC	30/40	83/96	112/128	125/150	104/120	110/125	8/8	15/15
150CAS	AG010CC	7.50/9.98	20.82/24.01	38/42	40/45	27/31	30/35	12/12	20/20
	AG020CC	14.98/19.95	41.58/47.99	64/72	70/80	52/60	60/60	12/12	20/20
	AG030CC	21.6/28.8	60/70	87/99	90/100	75/88	80/90	12/12	20/20
	AG040CC	30/40	83/96	116/132	125/150	104/120	110/125	12/12	20/20
150CAT	AG010CC	7.50/9.98	20.82/24.01	42/46	45/50	27/31	30/35	16/16	25/25
	AG020CC	14.98/19.95	41.58/47.99	68/76	70/80	52/60	60/60	16/16	25/25
	AG030CC	21.6/28.8	60/70	91/104	100/110	75/88	80/90	16/16	25/25
	AG040CC	30/40	83/96	120/136	125/150	104/120	110/125	16/16	25/25
180CAR	AG010CC	7.50/9.98	20.82/24.01	34/38	35/40	27/31	30/35	8/8	15/15
	AG020CC	14.98/19.95	41.58/47.99	60/68	60/70	52/60	60/60	8/8	15/15
	AG030CC	21.6/28.8	60/70	83/96	90/100	75/88	80/90	8/8	15/15
	AG040CC	30/40	83/96	112/128	125/150	104/120	110/120	8/8	15/15
180CAS	AG010CC	7.50/9.98	20.82/24.01	38/42	40/45	27/31	30/35	12/12	20/20
	AG020CC	14.98/19.95	41.58/47.99	64/72	70/80	52/60	60/60	12/12	20/20
	AG030CC	21.6/28.8	60/70	87/99	90/100	75/88	80/90	12/12	20/20
	AG040CC	30/40	83/96	116/132	125/150	104/120	110/125	12/12	20/20
180CAT	AG010CC	7.50/9.98	20.82/24.01	42/46	45/50	27/31	30/35	16/16	25/25
	AG020CC	14.98/19.95	41.58/47.99	68/76	70/80	52/60	60/60	16/16	25/25
	AG030CC	21.6/28.8	60/70	91/104	100/110	75/88	80/90	16/16	25/25
	AG040CC	30/40	83/96	120/136	125/150	104/120	110/125	16/16	25/25
240CAR 240CAS	AG010CC	7.50/9.98	20.82/24.01	42/46	45/50	27/31	30/35	16/16	25/25
	AG020CC	14.98/19.95	41.58/47.99	68/76	70/80	52/60	60/60	16/16	25/25
	AG030CC	21.6/28.8	60/70	91/104	100/110	75/88	80/90	16/16	25/25
	AG040CC	30/40	83/96	120/136	125/150	104/120	110/125	16/16	25/25
240CAT	AG010CC	7.50/9.98	20.82/24.01	51/55	60/60	27/31	30/35	24/24	40/40
	AG020CC	14.98/19.95	41.58/47.99	76/84	80/90	52/60	60/60	24/24	40/40
	AG030CC	21.6/28.8	60/70	99/112	100/125	75/88	80/90	24/24	40/40
	AG040CC	30/40	83/96	128/144	150/150	104/120	110/125	24/24	40/40

460V THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KIT CHARACTERISTICS AND APPLICATION

Unit Model Number RHCYA2	Single Power Supply for Both Unit and Heater Kit					Separate Power Supply for Both Unit and Heater Kit			
	Heater Kit			Air Conditioner		Heater Kit		Air Conditioner	
	Model No. RXHE-	Rated Heater kW @ 460V	FLA	Unit Min. Ckt. Ampacity	Max. Fuse or Ckt. Bkr. Size	Heater Kit Min. Ckt. Ampacity	Heater Kit Max. Fuse or Ckt. Bkr. Size	Air Cond. Min. Ckt. Ampacity	Air Cond. Max. Fuse or Ckt. Bkr. Size
090DAR 090DAS	AG005DA	5	6.01	12	15	8	15	4	15
	AG010DA	9.98	12	19	20	15	15	4	15
	AG015DA	15	18.04	27	30	23	25	4	15
	AG020DA	20.2	24.7	35	35	31	35	4	15
	AG025DA	25	30.07	42	45	38	40	4	15
	AG030DA	29.7	35	48	50	44	45	4	15
	AG035DA	35	42.1	57	60	53	60	4	15
090DAT	AG005DA	5	6.01	14	15	8	15	6	15
	AG010DA	9.98	12	21	25	15	15	6	15
	AG015DA	15	18.04	29	30	23	25	6	15
	AG020DA	20.2	24.7	37	40	31	35	6	15
	AG025DA	25	30.07	44	45	38	40	6	15
	AG030DA	29.7	35	50	50	44	45	6	15
	AG035DA	35	42.1	59	60	53	60	6	15
120DAR 120DAS	AG005DA	5	6.01	12	15	8	15	4	15
	AG010DA	9.98	12	19	20	15	15	4	15
	AG015DA	15	18.04	27	30	23	25	4	15
	AG020DA	20.2	24.7	35	35	31	35	4	15
	AG025DA	25	30.07	42	45	38	40	4	15
	AG030DA	29.7	35	48	50	44	45	4	15
	AG035DA	35	42.1	57	60	53	60	4	15
120DAT	AG005DA	5	6.01	14	15	8	15	6	15
	AG010DA	9.98	12	21	25	15	15	6	15
	AG015DA	15	18.04	29	30	23	25	6	15
	AG020DA	20.2	24.7	37	40	31	35	6	15
	AG025DA	25	30.07	44	45	38	40	6	15
	AG030DA	29.7	35	50	50	44	45	6	15
	AG035DA	35	42.1	59	60	53	60	6	15
121DAR 121DAS	AG010DC	9.98	12	19	20	15	15	4	15
	AG020DC	20	24.06	34	35	31	35	4	15
	AG030DC	28.8	35	48	50	44	45	4	15
	AG040DC	40	48	64	70	60	60	4	15
	AG050DC	50	60.14	79	80	76	80	4	15
121DAT	AG010DC	9.98	12	21	25	15	15	6	15
	AG020DC	20	24.06	36	40	31	35	6	15
	AG030DC	28.8	35	50	50	44	45	6	15
	AG040DC	40	48	66	70	60	60	6	15
	AG050DC	50	60.14	81	90	76	80	6	15
150DAR	AG010DC	9.98	12	19	20	15	15	4	15
	AG020DC	20	24.06	34	35	31	35	4	15
	AG030DC	28.8	35	48	50	44	45	4	15
	AG040DC	40	48	64	70	60	60	4	15
	AG050DC	50	60.14	79	80	76	80	4	15
150DAS	AG010DC	9.98	12	21	25	15	15	6	15
	AG020DC	20	24.06	36	40	31	35	6	15
	AG030DC	28.8	35	50	50	44	45	6	15
	AG040DC	40	48	66	70	60	60	6	15
	AG050DC	50	60.14	81	90	76	80	6	15
150DAT	AG010DC	9.98	12	23	25	15	15	8	15
	AG020DC	20	24.06	38	40	31	35	8	15
	AG030DC	28.8	35	52	60	44	45	8	15
	AG040DC	40	48	68	70	60	60	8	15
	AG050DC	50	60.14	84	90	76	80	8	15

460V THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KIT CHARACTERISTICS AND APPLICATION (CONTINUED)

Unit Model Number RHCYA2	Single Power Supply for Both Unit and Heater Kit					Separate Power Supply for Both Unit and Heater Kit			
	Heater Kit			Air Conditioner		Heater Kit		Air Conditioner	
	Model No. RXHE-	Rated Heater kW @ 460V	FLA	Unit Min. Ckt. Ampacity	Max. Fuse or Ckt. Bkr. Size	Heater Kit Min. Ckt. Ampacity	Heater Kit Max. Fuse or Ckt. Bkr. Size	Air Cond. Min. Ckt. Ampacity	Air Cond. Max. Fuse or Ckt. Bkr. Size
180DAR	AG010DC	9.98	12	19	20	15	15	4	15
	AG020DC	20	24.06	34	35	31	35	4	15
	AG030DC	28.8	35	48	50	44	45	4	15
	AG040DC	40	48	64	70	60	60	4	15
	AG050DC	50	60.14	79	80	76	80	4	15
180DAS	AG010DC	9.98	12	21	25	15	15	6	15
	AG020DC	20	24.06	36	40	31	35	6	15
	AG030DC	28.8	35	50	50	44	45	6	15
	AG040DC	40	48	66	70	60	60	6	15
	AG050DC	50	60.14	81	90	76	80	6	15
180DAT	AG010DC	9.98	12	23	25	15	15	8	15
	AG020DC	20	24.06	38	40	31	35	8	15
	AG030DC	28.8	35	52	60	44	45	8	15
	AG040DC	40	48	68	70	60	60	8	15
	AG050DC	50	60.14	84	90	76	80	8	15
240DAR 240DAS	AG010DC	9.98	12	23	25	15	15	8	15
	AG020DC	20	24.06	38	40	31	35	8	15
	AG030DC	28.8	35	52	60	44	45	8	15
	AG040DC	40	48	68	70	60	60	8	15
	AG050DC	50	60.14	84	90	76	80	8	15
240DAT	AG010DC	9.98	12	27	30	15	15	12	20
	AG020DC	20	24.06	43	45	31	35	12	20
	AG030DC	28.8	35	56	60	44	45	12	20
	AG040DC	40	48	72	80	60	60	12	20
	AG050DC	50	60.14	88	90	76	80	12	20

575V THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KIT CHARACTERISTICS AND APPLICATION

Unit Model Number RHCYA2	Single Power Supply for Both Unit and Heater Kit					Separate Power Supply for Both Unit and Heater Kit			
	Heater Kit			Air Conditioner		Heater Kit		Air Conditioner	
	Model No. RXHE-	Rated Heater kW @ 575V	FLA	Unit Min. Ckt. Ampacity	Max. Fuse or Ckt. Bkr. Size	Heater Kit Min. Ckt. Ampacity	Heater Kit Max. Fuse or Ckt. Bkr. Size	Air Cond. Min. Ckt. Ampacity	Air Cond. Max. Fuse or Ckt. Bkr. Size
090YAR 090YAS	AG010YA	9.98	10.02	16	20	13	15	3	15
	AG015YA	15	15.06	22	25	19	20	3	15
	AG020YA	20	20.08	29	30	26	30	3	15
	AG025YA	25	25.1	35	35	32	35	3	15
	AG030YA	28.8	28.92	40	40	37	40	3	15
	AG035YA	35	35.14	47	50	44	45	3	15
090YAT	AG010YA	9.98	10.02	17	20	13	15	5	15
	AG015YA	15	15.06	24	25	19	20	5	15
	AG020YA	20	20.08	30	30	26	30	5	15
	AG025YA	25	25.1	36	40	32	35	5	15
	AG030YA	28.8	28.92	41	45	37	40	5	15
	AG035YA	35	35.14	49	50	44	45	5	15
120YAR 120YAS	AG010YA	9.98	10.02	16	20	13	15	3	15
	AG015YA	15	15.06	22	25	19	20	3	15
	AG020YA	20	20.08	29	30	26	30	3	15
	AG025YA	25	25.1	35	35	32	35	3	15
	AG030YA	28.8	28.92	40	40	37	40	3	15
	AG035YA	35	35.14	47	50	44	45	3	15
120YAT	AG010YA	9.98	10.02	17	20	13	15	5	15
	AG015YA	15	15.06	24	25	19	20	5	15
	AG020YA	20	20.08	30	30	26	30	5	15
	AG025YA	25	25.1	36	40	32	35	5	15
	AG030YA	28.8	28.92	41	45	37	40	5	15
	AG035YA	35	35.14	49	50	44	45	5	15
150YAR	AG010YC	9.98	10.02	16	20	13	15	3	15
	AG020YC	20	20.08	29	30	26	30	3	15
	AG030YC	28.8	28.92	40	40	37	40	3	15
	AG040YC	40	40.16	54	60	51	60	3	15
	AG050YC	49.99	50.19	66	70	63	70	3	15
150YAS	AG010YC	9.98	10.02	17	20	13	15	5	15
	AG020YC	20	20.08	30	30	26	30	5	15
	AG030YC	28.8	28.92	41	45	37	40	5	15
	AG040YC	40	40.16	55	60	51	60	5	15
	AG050YC	49.99	50.19	68	70	63	70	5	15
150YAT	AG010YC	9.98	10.02	19	20	13	15	7	15
	AG020YC	20	20.08	32	35	26	30	7	15
	AG030YC	28.8	28.92	43	45	37	40	7	15
	AG040YC	40	40.16	57	60	51	60	7	15
	AG050YC	49.99	50.19	70	70	63	70	7	15
180YAR	AG010YC	9.98	10.02	16	20	13	15	3	15
	AG020YC	20	20.08	29	30	26	30	3	15
	AG030YC	28.8	28.92	40	40	37	40	3	15
	AG040YC	40	40.16	54	60	51	60	3	15
	AG050YC	49.99	50.19	66	70	63	70	3	15
180YAS	AG010YC	9.98	10.02	17	20	13	15	5	15
	AG020YC	20	20.08	30	30	26	30	5	15
	AG030YC	28.8	28.92	41	45	37	40	5	15
	AG040YC	40	40.16	55	60	51	60	5	15
	AG050YC	49.99	50.19	68	70	63	70	5	15
180YAT	AG010YC	9.98	10.02	19	20	13	15	7	15
	AG020YC	20	20.08	32	35	26	30	7	15
	AG030YC	28.8	28.92	43	45	37	40	7	15
	AG040YC	40	40.16	57	60	51	60	7	15
	AG050YC	49.99	50.19	70	70	63	70	7	15
240YAR 240YAS	AG010YC	9.98	10.02	19	20	13	15	7	15
	AG020YC	20	20.08	32	35	26	30	7	15
	AG030YC	28.8	28.92	43	45	37	40	7	15
	AG040YC	40	40.16	57	60	51	60	7	15
	AG050YC	49.99	50.19	70	70	63	70	7	15
240YAT	AG010YC	9.98	10.02	19	20	13	15	10	15
	AG020YC	20	20.08	32	35	26	30	10	15
	AG030YC	28.8	28.92	43	45	37	40	10	15
	AG040YC	40	40.16	57	60	51	60	10	15
	AG050YC	49.99	50.19	70	70	63	70	10	15

A2L REFRIGERANT INSTALLATION SAFETY DATA

Qmin at Rating Plate Charge Weight [0'-200' 1/2" Line Set]						
RHCYA2		090 [0']	090 [50']	090 [100']	090 [150']	090 [200']
Refrigerant Charge weight (oz)		338.0	388.0	438.0	488.0	538.0
Minimum Total Room Area, TAmin (ft²)		623.0	715.0	807.0	900.0	992.0
Minimum circulation airflow, Qmin (CFM)		1124.0	1291.0	1457.0	1623.0	1789.0
Installed Altitude (ft above sea level)	Altitude Adjustment Factor	Minimum Total Conditioned Room Area, TAmin (sq ft)				
0	1.000	623	715	807	900	992
1000	1.025	638	733	827	922	1017
2000	1.051	655	751	848	946	1042
3000	1.078	672	771	870	970	1070
4000	1.107	690	792	893	996	1098
5000	1.138	709	813	918	1024	1129
6000	1.170	729	836	944	1053	1161
6500	1.187	739	848	958	1068	1177

Qmin at Rating Plate Charge Weight [0'-200' 5/8" Line Set]						
RHCYA2		120 [0']	120 [50']	120 [100']	120 [150']	120 [200']
Refrigerant Charge weight (oz)		373.5	448.5	523.5	598.5	673.5
Minimum Total Room Area, TAmin (ft²)		688.0	781.0	873.0	965.0	1057.0
Minimum circulation airflow, Qmin (CFM)		1242.0	1409.0	1575.0	1741.0	1908.0
Installed Altitude (ft above sea level)	Altitude Adjustment Factor	Minimum Total Conditioned Room Area, TAmin (sq ft)				
0	1.000	688	781	873	965	1057
1000	1.025	706	800	894	989	1083
2000	1.051	723	820	917	1014	1111
3000	1.078	742	842	941	1040	1140
4000	1.107	762	864	966	1068	1170
5000	1.138	783	888	993	1098	1203
6000	1.170	805	913	1021	1129	1237
6500	1.187	817	926	1036	1145	1254

A2L REFRIGERANT INSTALLATION SAFETY DATA (CONTINUED)

Qmin at Rating Plate Charge Weight [0'–200' 1/2" Line Set]						
RHCYA2		121 [0']	121 [50']	121 [100']	121 [150']	121 [200']
Refrigerant Charge weight (oz)		328.0	378.0	428.0	478.0	528.0
Minimum Total Room Area, TAmin (ft²)		605.0	697.0	789.0	881.0	973.0
Minimum circulation airflow, Qmin (CFM)		1091.0	1257.0	1424.0	1590.0	1756.0
Installed Altitude (ft above sea level)	Altitude Adjustment Factor	Minimum Total Conditioned Room Area, TAmin (sq ft)				
0	1.000	605	697	789	881	973
1000	1.025	620	714	808	903	997
2000	1.051	635	732	829	926	1023
3000	1.078	652	751	851	950	1049
4000	1.107	669	771	873	976	1078
5000	1.138	688	793	898	1002	1107
6000	1.170	707	815	923	1031	1139
6500	1.187	717	827	936	1046	1155

Qmin at Rating Plate Charge Weight [0'–200' 5/8" Line Set]						
RHCYA2		150 [0']	150 [50']	150 [100']	150 [150']	150 [200']
Refrigerant Charge weight (oz)		381.5	456.5	531.5	606.5	681.5
Minimum Total Room Area, TAmin (ft²)		703.2	795.4	887.5	979.7	1071.9
Minimum circulation airflow, Qmin (CFM)		1269.0	1435.0	1602.0	1768.0	1934.0
Installed Altitude (ft above sea level)	Altitude Adjustment Factor	Minimum Total Conditioned Room Area, TAmin (sq ft)				
0	1.000	703	795	888	980	1072
1000	1.025	721	733	827	922	1017
2000	1.051	739	751	848	946	1042
3000	1.078	758	771	870	970	1070
4000	1.107	779	792	893	996	1098
5000	1.138	800	813	918	1024	1129
6000	1.170	823	836	944	1053	1161
6500	1.187	834	848	958	1068	1177

A2L REFRIGERANT INSTALLATION SAFETY DATA (CONTINUED)

Qmin at Rating Plate Charge Weight [0'–200' 5/8" Line Set]						
RHCYA2		180 [0']	180 [50']	180 [100']	180 [150']	180 [200']
Refrigerant Charge weight (oz)		681.5	756.5	831.5	906.5	981.5
Minimum Total Room Area, TAmin (ft²)		1256.2	1348.3	1440.5	1532.7	1624.8
Minimum circulation airflow, Qmin (CFM)		2267.0	2433.0	2599.0	2766.0	2932.0
Installed Altitude (ft above sea level)	Altitude Adjustment Factor	Minimum Total Conditioned Room Area, TAmin (sq ft)				
0	1.000	1256	1348	1441	1533	1625
1000	1.025	1287	1382	1476	1571	1665
2000	1.051	1320	1417	1514	1611	1707
3000	1.078	1355	1454	1553	1653	1752
4000	1.107	1391	1493	1595	1697	1799
5000	1.138	1429	1534	1639	1744	1849
6000	1.170	1470	1577	1685	1793	1901
6500	1.187	1491	1600	1709	1819	1928

Qmin at Rating Plate Charge Weight [0'–200' 7/8" Line Set]						
RHCYA2		240 [0']	240 [50']	240 [100']	240 [150']	240 [200']
Refrigerant Charge weight (oz)		537.5	692.5	847.5	1002.5	1157.5
Minimum Total Room Area, TAmin (ft²)		990.8	1082.9	1175.1	1267.2	1359.4
Minimum circulation airflow, Qmin (CFM)		1788.0	1954.0	2120.0	2287.0	2453.0
Installed Altitude (ft above sea level)	Altitude Adjustment Factor	Minimum Total Conditioned Room Area, TAmin (sq ft)				
0	1.000	991	1083	1175	1267	1359
1000	1.025	1015	1110	1204	1299	1393
2000	1.051	1041	1138	1235	1332	1429
3000	1.078	1068	1168	1267	1366	1466
4000	1.107	1097	1199	1301	1403	1505
5000	1.138	1127	1232	1337	1442	1547
6000	1.170	1159	1267	1375	1483	1590
6500	1.187	1176	1285	1394	1504	1613

AIRFLOW PERFORMANCE RHCYA2090 — 7.5 TON [26.4 kW] — 60 Hz — SIDEFLOW

RHCYA2090		Voltage 208/230, 460, 575 — 3 phase 60 Hz																							
Air Flow CFM [L/s]	RPM	External Static Pressure—Inches of Water [kPa]																							
		0.1 [.02]												0.2 [.05]											
		W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM
2400 [1133]	526 487	581	537	631	581	678	619	720	650	803	788	844	849	884	909	922	967	960	1024	997	1080	1033	1135	1035	1157
2450 [1156]	533 505	587	555	637	599	683	637	724	668	809	810	850	871	889	932	927	991	965	1049	1001	1106	1036	1162	1040	1187
2500 [1180]	540 523	594	574	643	618	688	656	728	688	816	833	855	895	894	957	932	1017	969	1075	1005	1133	1040	1189	1044	1219
2550 [1203]	547 542	600	593	649	637	693	675	732	707	822	857	861	921	899	983	937	1043	973	1103	1009	1161	1018	1193	1049	1252
2600 [1227]	555 561	607	612	654	657	698	695	737	728	828	883	867	947	905	1010	942	1071	978	1131	1013	1190	1023	1226	1054	1286
2650 [1250]	562 581	613	632	660	677	703	716	741	748	834	910	873	975	910	1038	947	1100	983	1161	1017	1221	1028	1259	1059	1321
2700 [1274]	569 601	620	653	666	698	708	737	746	770	840	938	878	1003	916	1068	952	1131	987	1192	1022	1253	1038	1294	1063	1357
2750 [1298]	577 622	627	674	672	719	714	759	808	900	847	967	884	1034	921	1099	957	1162	992	1225	1026	1286	1038	1330	1068	1395
2800 [1321]	584 643	634	695	678	741	719	781	815	930	853	998	890	1065	927	1131	962	1195	997	1258	1030	1320	1043	1367	1073	1433
2850 [1345]	592 665	640	718	684	764	724	804	822	961	859	1030	896	1098	932	1164	967	1229	1001	1293	1034	1356	1048	1405	1078	1473
2900 [1368]	600 687	647	740	691	787	730	827	828	994	866	1063	902	1132	938	1199	973	1265	1006	1329	1039	1393	1053	1444	1083	1514
2950 [1392]	607 710	654	763	697	810	735	850	835	1027	872	1098	909	1167	944	1235	978	1301	1011	1367	1027	1415	1058	1485	1088	1556
3000 [1416]	615 734	661	787	703	834	741	875	842	1062	879	1133	915	1203	949	1272	983	1339	1016	1405	1032	1455	1063	1526	1093	1599
3050 [1439]	623 758	668	811	710	859	746	899	849	1098	886	1170	921	1241	955	1310	989	1378	1021	1445	1038	1496	1068	1569	1098	1644
3100 [1463]	631 782	675	836	716	884	820	1062	856	1136	892	1208	927	1280	961	1350	994	1419	1026	1486	1043	1539	1074	1613	1104	1689
3150 [1486]	638 807	683	861	722	909	827	1100	864	1174	899	1248	933	1320	967	1391	999	1460	1031	1528	1049	1582	1079	1658	1109	1736
3200 [1510]	646 833	690	887	729	935	835	1139	871	1214	906	1288	940	1361	973	1433	1005	1503	1036	1572	1054	1627	1084	1705	1114	1784
3250 [1534]	654 859	697	914	735	962	842	1179	878	1255	913	1330	946	1404	979	1476	1011	1547	1029	1595	1059	1673	1090	1752	1119	1833
3300 [1557]	662 886	704	941	742	989	850	1221	885	1298	919	1373	953	1448	985	1521	1016	1592	1035	1640	1065	1720	1095	1801	1125	1883
3350 [1581]	671 913	712	968	749	1017	858	1264	892	1341	926	1418	959	1493	991	1566	1022	1639	1040	1687	1071	1768	1100	1850	1130	1935
3400 [1604]	679 940	719	996	830	1229	866	1308	900	1386	933	1463	966	1539	997	1614	1027	1687	1046	1735	1076	1817	1106	1901	1135	1987

Drive Package	R						S						T					
	2 [3728.5]						2 [1491.4]						3 [2237.1]					
	AK104-3/4						AK71H						AK59					
	IVL44						IVL44						IVL44					
	A50						A44						A42					
Turns Open	0	1	2	3	4	5	0	1	2	3	4	5	1	2	3	4	5	6
RPM	696	661	627	593	558	646	998	939	906	874	840	806	1230	1160	1105	990	927	892

NOTES: 1. Factory sheave settings are shown in bold type.
2. Do not set motor sheave below minimum or maximum turns open shown.
3. Re-adjustment of sheave required to achieve rated airflow at AHRl minimum External Static Pressure
4. Drive data shown is for horizontal airflow with dry coil. Add component resistance (below) to duct resistance to determine total External Static Pressure.

[] Designates Metric Conversions

AIRFLOW PERFORMANCE RHCYA2090 — 7.5 TON [26.4 kW] — 60 Hz — SIDEFLOW (CONTINUED)

Airflow CFM [L/s]	AIRFLOW CORRECTION FACTORS *			COMPONENT AIRFLOW RESISTANCE		
	Total kBTU/h	Sensible kBTU/h	Power kW	Wet Coil Resistance Inches of Water [kPa]	MERV 8 Filter Resistance Inches of Water	MERV 13 Filter Resistance Inches of Water
2400 [1133]	0.93	0.73	0.96	0.04 [.01]	0.153	0.157
2500 [1180]	0.93	0.74	0.96	0.05 [.01]	0.164	0.168
2600 [1227]	0.94	0.76	0.97	0.05 [.01]	0.175	0.179
2700 [1274]	0.94	0.78	0.97	0.05 [.01]	0.186	0.189
2800 [1321]	0.95	0.80	0.97	0.05 [.01]	0.198	0.200
2900 [1368]	0.95	0.81	0.97	0.06 [.01]	0.209	0.211
3000 [1416]	0.95	0.83	0.98	0.06 [.01]	0.220	0.221
3100 [1463]	0.96	0.85	0.98	0.06 [.01]	0.231	0.232
3200 [1510]	0.96	0.87	0.98	0.06 [.01]	0.242	0.243
3300 [1557]	0.97	0.88	0.99	0.07 [.02]	0.253	0.254
3400 [1604]	0.97	0.90	0.99	0.07 [.02]	0.264	0.264
3500 [1652]	0.98	0.92	0.99	0.07 [.02]	0.276	0.275
3600 [1711]	0.98	0.93	0.99	0.08 [.02]	0.287	0.286
3700 [1746]	0.99	0.95	1.00	0.08 [.02]	0.298	0.296
3800 [1793]	0.99	0.97	1.00	0.08 [.02]	0.309	0.307
3900 [1840]	1.00	0.99	1.00	0.08 [.02]	0.320	0.318
4000 [1888]	1.00	1.00	1.01	0.09 [.02]	0.331	0.329

*Multiply correction factor times gross performance data — resulting sensible capacity cannot exceed total capacity.

[] Designates Metric Conversions

Air Flow CFM [L/s]		RHCA2120 Voltage 208/230, 460, 575 — 3 phase 60 Hz																			
		External Static Pressure—Inches of Water [kPa]																			
		0.1 [0.02]	0.2 [0.05]	0.3 [0.07]	0.4 [0.10]	0.5 [0.12]	0.6 [0.15]	0.7 [0.17]	0.8 [0.20]	0.9 [0.22]	1.0 [0.25]	1.1 [0.27]	1.2 [0.30]	1.3 [0.32]	1.4 [0.35]	1.5 [0.37]	1.6 [0.40]	1.7 [0.42]	1.8 [0.45]	1.9 [0.47]	2.0 [0.50]
RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W
3100 [1463]	—	—	—	—	756 915	793 984	830 1055	866 1129	901 1207	945 1317	980 1376	1012 1436	1042 1498	1070 1561	1096 1625	1119 1690	1140 1756	1183 1828	1213 1895	1238 1959	1259 2021
3200 [1510]	—	—	—	731 911	768 979	805 1050	841 1124	876 1202	911 1283	959 1382	993 1445	1024 1509	1053 1574	1080 1640	1104 1708	1126 1777	1146 1847	1193 1921	1220 1989	1243 2055	1262 2118
3300 [1557]	—	—	744 975	781 1046	817 1121	852 1198	887 1279	921 1362	973 1452	1005 1519	1035 1586	1063 1655	1089 1725	1112 1797	1133 1869	1172 1944	1202 2018	1227 2088	1248 2155	1255 2225	1260
3400 [1604]	—	—	757 1044	794 1118	829 1195	864 1276	898 1360	953 1459	986 1528	1017 1598	1046 1669	1073 1742	1097 1816	1119 1891	1139 1967	1182 2044	1210 2119	1233 2191	1253 2260	1268 2326	
3500 [1652]	—	734 1042	771 1116	807 1194	842 1274	876 1358	909 1442	967 1536	999 1609	1029 1683	1057 1758	1082 1834	1105 1911	1126 1994	1145 2069	1192 2148	1218 2234	1239 2298	1258 2368	1269 2436	
3600 [1699]	—	749 1116	785 1193	820 1274	854 1357	888 1444	921 1533	960 1619	1011 1695	1040 1773	1067 1851	1091 1931	1113 2012	1133 2094	1173 2175	1201 2256	1224 2334	1244 2409	1259 2481	1269 2436	
3700 [1746]	—	764 1193	799 1274	834 1357	867 1444	900 1534	961 1628	993 1707	1023 1787	1051 1868	1076 1950	1099 2034	1120 2118	1139 2204	1173 2286	1209 2369	1231 2448	1244 2525	1251 2598	1269 2436	
3800 [1793]	743 1195	779 1275	813 1359	847 1445	880 1535	913 1628	975 1718	1006 1800	1034 1884	1061 1968	1085 2054	1107 2141	1127 2229	1145 2319	1193 2402	1216 2486	1236 2567	1251 2645	1263 2720	1270 2792	
3900 [1840]	759 1278	794 1361	828 1448	861 1537	894 1630	956 1728	988 1813	1018 1898	1045 1986	1071 2074	1094 2164	1115 2254	1134 2346	1175 2433	1201 2521	1223 2607	1241 2689	1254 2769	1263 2846	1268 2919	
4000 [1888]	775 1365	809 1451	843 1541	876 1634	908 1729	970 1824	1013 1913	1029 2002	1056 2093	1080 2185	1102 2278	1122 2372	1145 2468	1186 2555	1210 2645	1239 2732	1245 2816	1256 2897	1264 2975	1266 3051	
4100 [1935]	791 1456	825 1545	858 1638	890 1734	921 1833	983 1926	1013 2021	1111 2066	2206	1089 2320	1110 2398	1129 2496	1145 2595	1195 2681	1217 2773	1235 2862	1249 2949	1258 3030	1263 3110	1264 3186	
4200 [1982]	808 1551	841 1643	873 1739	905 1838	966 1938	996 2033	1025 2128	1051 2225	1076 2323	1098 2423	1117 2523	1135 2625	1180 2716	1204 2812	1224 2905	1240 2996	1251 3083	1259 3167	1262 3248	1261 3326	
4300 [2029]	825 1650	857 1746	889 1844	920 1946	979 2047	1009 2145	1037 2244	1062 2345	1085 2447	1106 2549	1124 2653	1141 2759	1190 2850	1212 2947	1230 3042	1244 3134	1253 3222	1259 3308	1260 3391	1257 3471	
4400 [2076]	842 1753	873 1852	905 1954	962 2060	993 2161	1021 2262	1048 2365	1072 2470	1094 2575	1113 2681	1131 2789	1146 2898	1199 2987	1220 3087	1236 3183	1247 3276	1255 3366	1258 3454	1257 3538	1252 3619	
4500 [2123]	859 1860	890 1962	921 2067	976 2176	1005 2280	1033 2385	1058 2492	1081 2600	1102 2709	1120 2819	1137 2930	1186 3026	1208 3129	1226 3230	1240 3328	1250 3423	1256 3515	1257 3603	1254 3689	1247 3772	
4600 [2171]	876 1972	907 2077	959 2190	989 2296	1018 2404	1044 2513	1068 2623	1090 2735	1110 2847	1127 2961	1142 3076	1196 3170	1216 3276	1232 3378	1244 3477	1252 3574	1256 3667	1255 3757	1250 3845	1241 3929	
4700 [2218]	894 2087	924 2195	973 2312	1003 2422	1030 2534	1055 2646	1078 2760	1099 2875	1117 2992	1134 3109	1148 3228	1205 3319	1224 3426	1238 3530	1248 3631	1254 3729	1255 3824	1252 3916	1245 4004	1234 4090	
4800 [2265]	912 2207	956 2327	987 2440	1015 2554	1041 2669	1066 2785	1087 2903	1107 3021	1124 3141	1139 3262	1193 3351	1214 3473	1230 3581	1243 3686	1251 3789	1254 3888	1254 3985	1249 4078	1240 4168	1227 4256	
4900 [2312]	939 2341	971 2456	1000 2572	1027 2690	1053 2809	1075 2929	1096 3050	1115 3172	1131 3296	1145 3420	1203 3517	1222 3630	1236 3740	1247 3847	1253 3951	1254 4052	1252 4145	1245 4245	1234 4337	1219 4426	
5000 [2359]	954 2472	985 2591	1013 2711	1039 2832	1063 2954	1085 3078	1105 3203	1122 3329	1137 3456	1150 3584	1213 3678	1229 3792	1242 3903	1250 4012	1254 4117	1254 4220	1249 4319	1240 4416	1228 4509	1210 4600	
5100 [2407]	969 2608	998 2730	1026 2854	1051 2979	1074 3105	1094 3232	1113 3361	1129 3490	1143 3621	1203 3723	1222 3842	1236 3958	1247 4071	1253 4181	1255 4288	1252 4392	1246 4493	1235 4591	1220 4686	1149 5137	

Drive Package	R					S					T							
Motor H.P. [W]	2 [1491.4]					2 [1491.4]					3 [2237.1]							
Blower Sheave	AK104x3/4					AK84x3/4					AK94x3/4							
Motor Sheave	1VP56x7/8					1VP56x7/8					1VP75x7/8							
Belt	A52					A49					A52							
Turns Open	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
RPM	894	862	829	797	765	732	1159	1206	1163	1124	1082	998	1254	1267	1230	1194	1158	1120

NOTES: 1. Factory sheave settings are shown in bold type.
2. Do not set motor sheave below minimum or maximum turns open shown.
3. Re-adjustment of sheave required to achieve rated airflow at AHRI minimum External Static Pressure
4. Drive data shown is for horizontal airflow with dry coil. Add component resistance (below) to duct resistance to determine total External Static Pressure.

[] Designates Metric Conversions

AIRFLOW PERFORMANCE RHCYA2120 — 10 TON [26.4 kW] — 60 Hz — SIDEFLOW (CONTINUED)

Airflow CFM [L/s]	AIRFLOW CORRECTION FACTORS *			COMPONENT AIRFLOW RESISTANCE		
	Total kBtu/h	Sensible kBtu/h	Power kW	Wet Coil	MERV 8 Filter	MERV 13 Filter
				Resistance Inches of Water [kPa]	Resistance Inches of Water	Resistance Inches of Water
3500 [1652]	0.98	0.92	0.99	0.07 [.02]	0.091	0.098
3600 [1699]	0.98	0.93	0.99	0.08 [.02]	0.097	0.103
3700 [1746]	0.99	0.95	1.00	0.08 [.02]	0.103	0.109
3800 [1793]	0.99	0.97	1.00	0.08 [.02]	0.109	0.115
3900 [1840]	1.00	0.99	1.00	0.08 [.02]	0.115	0.121
4000 [1888]	1.00	1.00	1.01	0.09 [.02]	0.121	0.127
4100 [1935]	1.00	1.02	1.01	0.09 [.02]	0.127	0.132
4200 [1982]	1.01	1.04	1.01	0.09 [.02]	0.133	0.138
4300 [2029]	1.01	1.06	1.01	0.10 [.02]	0.139	0.144
4400 [2076]	1.02	1.07	1.02	0.10 [.02]	0.145	0.150
4500 [2123]	1.02	1.09	1.02	0.10 [.02]	0.151	0.156
4600 [2171]	1.03	1.11	1.02	0.10 [.02]	0.157	0.161
4700 [2218]	1.03	1.12	1.03	0.11 [.03]	0.163	0.167
4800 [2265]	1.04	1.14	1.03	0.11 [.03]	0.169	0.173
4900 [2312]	1.04	1.16	1.03	0.11 [.03]	0.175	0.179
5000 [2359]	1.05	1.18	1.03	0.12 [.03]	0.181	0.185
5100 [2407]	1.05	1.19	1.04	0.12 [.03]	0.188	0.190

*Multiply correction factor times gross performance data — resulting sensible capacity cannot exceed total capacity.

[] Designates Metric Conversions

AIRFLOW PERFORMANCE RHCYA2121 — 10 TON [26.4 kW] — 60 Hz — SIDEFLOW

Air Flow CFM [L/s]		RHCYA21210 Voltage 208/230, 460 — 3 phase 60 Hz																							
		External Static Pressure—Inches of Water [kPa]																							
		0.1 [1.02]	0.2 [0.05]	0.3 [0.07]	0.4 [1.10]	0.5 [1.12]	0.6 [1.15]	0.7 [1.17]	0.8 [1.20]	0.9 [1.22]	1.0 [1.25]	1.1 [1.27]	1.2 [1.30]	1.3 [1.32]	1.4 [1.35]	1.5 [1.37]	1.6 [1.40]	1.7 [1.42]	1.8 [1.45]	1.9 [1.47]	2.0 [1.50]				
RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W				
3200 [1510]	—	—	—	425 596	459 668	494 738	528 805	561 870	589 2285	618 2458	646 2700	673 3009	699 3386	724 3832	748 4345	766 4086	788 4450	810 4917	832 5487	853 6160	873 6936				
3300 [1557]	—	—	—	429 622	463 695	497 766	531 835	564 902	592 2317	621 2503	649 2757	676 3079	701 3469	726 3927	750 4453	768 4172	790 4554	812 5040	834 5628	854 6319	875 7114				
3400 [1604]	—	—	—	433 649	467 724	501 796	535 867	568 935	595 2355	624 2554	651 2820	678 3155	704 3557	728 4028	752 4566	770 4282	792 4662	814 5166	836 5772	856 6484	876 7295				
3500 [1652]	—	—	—	437 678	471 754	505 828	538 899	571 969	598 2397	627 2608	654 2887	680 3235	706 3650	730 4133	749 4039	772 4355	795 4773	816 5295	837 5920	858 6649	878 7480				
3600 [1699]	—	407 628	442 707	476 785	509 860	542 933	575 1004	601 2444	630 2668	657 2960	683 3319	708 3747	732 4242	752 4117	775 4451	797 4888	818 5429	839 6072	860 6819	880 7668					
3700 [1746]	—	412 657	446 738	480 817	513 893	546 968	578 1040	605 2496	633 2732	660 3036	686 3409	711 3849	735 4357	754 4199	777 4551	799 5007	821 5566	841 6227	862 6992	882 7860					
3800 [1793]	—	417 688	451 770	484 850	517 928	550 1004	582 1077	608 2553	636 2801	662 3118	688 3503	713 3955	737 4476	757 4285	779 4655	801 5129	823 5706	844 6386	864 7169	884 8056					
3900 [1840]	—	422 720	455 803	489 885	521 964	554 1041	583 2421	611 2614	639 2875	665 3204	691 3602	716 4067	739 4600	759 4374	782 4763	804 5255	825 5850	846 6548	866 7350	886 8255					
4000 [1888]	—	427 753	460 838	493 920	526 1001	558 1079	586 2474	615 2680	642 2954	668 3296	694 3705	718 4183	741 4729	762 4466	784 4873	806 5384	828 5998	848 6714	868 7534	888 8458					
4100 [1935]	—	432 787	465 873	498 957	530 1039	562 1119	590 2533	618 2751	645 3037	671 3391	697 3814	721 4304	744 4862	765 4562	787 4998	809 5517	830 6149	851 6884	870 7722	890 8664					
4200 [1982]	—	437 822	470 910	503 995	535 1079	566 1160	594 2596	622 2827	649 3125	675 3492	700 3927	724 4430	746 5000	768 4662	790 5106	812 5653	833 6304	853 7057	873 7914	—					
4300 [2029]	409 767	442 859	475 948	507 1034	539 1119	571 1201	598 2664	625 2907	652 3218	678 3597	703 4045	726 4560	749 5143	771 4765	793 5228	814 5793	835 6462	856 7234	875 8109	—					
4400 [2076]	415 804	448 896	480 987	512 1075	544 1161	575 1244	601 2736	629 2992	656 3316	681 3707	706 4167	729 4695	752 5291	774 4872	796 5353	817 5937	838 6624	858 7414	878 8308	—					
4500 [2123]	421 841	453 935	486 1027	517 1116	549 1204	580 1289	605 2813	633 3082	659 3418	685 3822	709 4295	732 4835	754 4587	777 4983	799 5482	820 6084	841 6790	861 7598	880 8510	—					

Drive Package	R				S				T			
Motor H.P. [W]	2 [3728.5]				2 [3728.5]				3 [3728.5]			
Blower Sheave	BK130H				BK120H				BK105H			
Motor Sheave	1VL40 7/8"				IVP50 7/8"				IVP50 7/8"			
Belt	B52				B52				B50			
Turns Open	0	1	2	3	4	5	0	1	2	3	4	5
RPM	563	541	517	490	463	646	746	939	906	874	840	806
								866	1032	997	963	927
												892

- NOTES: 1. Factory sheave settings are shown in bold type.
2. Do not set motor sheave below minimum or maximum turns open shown.
3. Re-adjustment of sheave required to achieve rated airflow at AHRI minimum External Static Pressure
4. Drive data shown is for horizontal airflow with dry coil. Add component resistance (below) to duct resistance to determine total External Static Pressure.

[] Designates Metric Conversions

AIRFLOW PERFORMANCE RHCYA2121 — 10 TON [26.4 kW] — 60 Hz — SIDEFLOW (CONTINUED)

Airflow CFM [L/s]	AIRFLOW CORRECTION FACTORS *			COMPONENT AIRFLOW RESISTANCE		
	Total kBtu/h	Sensible kBtu/h	Power kW	Wet Coil Resistance Inches of Water [kPa]	MERV 8 Filter Resistance Inches of Water	MERV 13 Filter Resistance Inches of Water
3500 [1652]	0.98	0.92	0.99	0.07 [.02]	0.091	0.098
3600 [1699]	0.98	0.93	0.99	0.08 [.02]	0.097	0.103
3700 [1746]	0.99	0.95	1.00	0.08 [.02]	0.103	0.109
3800 [1793]	0.99	0.97	1.00	0.08 [.02]	0.109	0.115
3900 [1840]	1.00	0.99	1.00	0.08 [.02]	0.115	0.121
4000 [1888]	1.00	1.00	1.01	0.09 [.02]	0.121	0.127
4100 [1935]	1.00	1.02	1.01	0.09 [.02]	0.127	0.132
4200 [1982]	1.01	1.04	1.01	0.09 [.02]	0.133	0.138
4300 [2029]	1.01	1.06	1.01	0.10 [.02]	0.139	0.144
4400 [2076]	1.02	1.07	1.02	0.10 [.02]	0.145	0.150
4500 [2123]	1.02	1.09	1.02	0.10 [.02]	0.151	0.156
4600 [2171]	1.03	1.11	1.02	0.10 [.02]	0.157	0.161
4700 [2218]	1.03	1.12	1.03	0.11 [.03]	0.163	0.167
4800 [2265]	1.04	1.14	1.03	0.11 [.03]	0.169	0.173
4900 [2312]	1.04	1.16	1.03	0.11 [.03]	0.175	0.179
5000 [2359]	1.05	1.18	1.03	0.12 [.03]	0.181	0.185
5100 [2407]	1.05	1.19	1.04	0.12 [.03]	0.188	0.190

*Multiply correction factor times gross performance data — resulting sensible capacity cannot exceed total capacity.

[] Designates Metric Conversions

AIRFLOW PERFORMANCE RHCYA2150 — 12.5 TON [44 kW] — 60 Hz — SIDEFLOW

Air Flow CFM [L/s]		RHCYA2150 Voltage 208/230, 460, 575 — 3 phase 60 Hz																																						
		External Static Pressure—Inches of Water [kPa]																																						
0.1 [0.02]	0.2 [0.05]	0.3 [0.07]	0.4 [0.10]	0.5 [0.12]	0.6 [0.15]	0.7 [0.17]	0.8 [0.20]	0.9 [0.22]	1.0 [0.25]	1.1 [0.27]	1.2 [0.30]	1.3 [0.32]	1.4 [0.35]	1.5 [0.37]	1.6 [0.40]	1.7 [0.42]	1.8 [0.45]	1.9 [0.47]	2.0 [0.50]																					
RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W																			
4200 [1982]	—	—	—	—	502	1033	529	1093	555	1162	582	1239	610	1325	639	1418	661	1538	686	1633	712	1732	738	1836	755	1770	778	1874	801	1986	826	2106	852	2236	878	2374	—			
4300 [2029]	—	—	—	—	482	1015	507	1070	533	1133	560	1205	586	1284	614	1372	642	1468	664	1582	689	1678	714	1778	741	1882	757	1814	779	1919	803	2033	828	2156	853	2287	880	2427	—	
4400 [2076]	—	—	—	—	487	1053	512	1110	538	1176	564	1250	591	1332	618	1422	645	1521	667	1629	691	1725	717	1826	743	1931	759	1861	781	1988	805	2083	829	2208	855	2341	881	2482	—	
4500 [2123]	—	—	—	—	493	1093	518	1153	543	1221	568	1297	595	1382	621	1475	649	1576	670	1678	694	1775	719	1876	745	1982	761	1910	783	2019	807	2136	831	2262	857	2397	883	2541	—	
4600 [2171]	—	—	—	—	499	1135	523	1197	548	1268	573	1347	599	1434	625	1530	652	1633	673	1729	697	1827	722	1929	747	2035	763	1962	786	2073	809	2192	833	2320	859	2456	885	2602	—	
4700 [2218]	—	—	—	481	1123	504	1180	528	1245	553	1318	578	1399	603	1489	629	1587	656	1693	676	1783	700	1881	725	1984	750	2091	765	2017	788	2129	811	2250	835	2380	861	2518	887	2665	—
4800 [2265]	—	—	—	487	1168	510	1227	534	1295	558	1370	583	1454	608	1546	634	1647	666	1744	679	1839	703	1938	727	2041	753	2149	768	2074	790	2188	813	2311	838	2443	863	2583	889	2732	—
4900 [2312]	—	—	—	493	1215	516	1277	539	1347	563	1425	588	1511	612	1606	638	1709	660	1802	683	1898	706	1997	731	2101	749	2026	771	2134	793	2250	816	2375	840	2508	865	2650	891	2801	—
5000 [2359]	—	—	500	1265	522	1329	545	1401	569	1482	593	1571	617	1668	642	1773	664	1863	687	1959	710	2059	734	2164	752	2087	773	2196	795	2314	819	2441	843	2576	868	2720	894	2872	—	
5100 [2407]	484	1259	506	1317	528	1384	551	1458	574	1542	598	1633	622	1733	646	1841	668	1925	690	2022	713	2123	737	2228	755	2151	776	2262	798	2381	821	2510	845	2647	870	2792	896	2947	—	
5200 [2454]	491	1311	513	1372	534	1441	557	1518	579	1604	603	1697	627	1800	651	1910	672	1990	694	2088	717	2189	740	2295	758	2217	779	2330	801	2451	824	2581	848	2720	873	2868	899	3024	—	
5300 [2501]	498	1365	519	1428	541	1500	563	1580	585	1668	608	1764	632	1869	656	1982	676	2058	698	2156	721	2258	744	2365	761	2286	782	2400	804	2524	827	2656	851	2796	876	2946	—	—		
5400 [2548]	505	1422	526	1488	547	1562	569	1644	591	1735	614	1834	637	1941	660	2033	681	2128	702	2226	724	2329	747	2437	765	2357	785	2474	807	2599	830	2733	854	2875	879	3026	—	—		
5500 [2595]	513	1481	533	1550	554	1626	575	1711	597	1804	619	1906	642	2015	665	2105	685	2200	706	2299	728	2403	751	2511	768	2431	789	2550	811	2677	833	2812	857	2957	882	3110	—	—		
5600 [2643]	520	1543	540	1614	560	1693	581	1780	603	1876	625	1980	647	2092	670	2179	690	2275	711	2375	732	2479	752	2397	772	2508	792	2628	814	2757	837	2895	860	3041	885	3196	—	—		
5700 [2690]	527	1607	547	1681	567	1762	588	1852	609	1950	630	2057	652	2171	674	2255	694	2352	715	2452	737	2557	756	2474	775	2588	796	2710	818	2840	840	2980	864	3128	888	3284	—	—		
5800 [2737]	535	1674	554	1750	574	1834	594	1926	615	2027	636	2136	658	2253	679	2334	699	2431	720	2532	741	2638	759	2555	779	2670	800	2794	821	2926	844	3067	867	3217	892	3375	—	—		

NOTES: 1. Factory sheave settings are shown in bold type.
2. Do not set motor sheave below minimum or maximum turns open shown.
3. Re-adjustment of sheave required to achieve rated airflow at AHRI minimum External Static Pressure
4. Drive data shown is for horizontal airflow with dry coil. Add component resistance (below) to duct resistance to determine total External Static Pressure.

[] Designates Metric Conversions

Drive Package	R				S				T			
Motor H.P. [W]	2 [1491.4]				3 [2237.1]				5 [2237.1]			
Blower Sheave	BK120SP 1.0"				BK120SP 1.0"				BK100SP			
Motor Sheave	1VL44 7/8				IVL50 7/8				1VP50 1 1/8			
Belt	B52				B52				B46			
Turns Open	0	1	2	3	4	5	0	1	2	3	4	5
RPM	650	630	606	579	551	522	746	723	699	644	597	597

AIRFLOW PERFORMANCE RHCYA2150 — 12.5 TON [44 kW] — 60 Hz — SIDEFLOW (CONTINUED)

Airflow CFM [L/s]	AIRFLOW CORRECTION FACTORS *			COMPONENT AIRFLOW RESISTANCE		
	Total kBtu/h	Sensible kBtu/h	Power kW	Wet Coil	MERV 8 Filter	MERV 13 Filter
				Resistance Inches of Water [kPa]	Resistance Inches of Water	Resistance Inches of Water
3500 [1652]	0.98	0.92	0.99	0.07 [.02]	0.091	0.098
3600 [1699]	0.98	0.93	0.99	0.08 [.02]	0.097	0.103
3700 [1746]	0.99	0.95	1.00	0.08 [.02]	0.103	0.109
3800 [1793]	0.99	0.97	1.00	0.08 [.02]	0.109	0.115
3900 [1840]	1.00	0.99	1.00	0.08 [.02]	0.115	0.121
4000 [1888]	1.00	1.00	1.01	0.09 [.02]	0.121	0.127
4100 [1935]	1.00	1.02	1.01	0.09 [.02]	0.127	0.132
4200 [1982]	1.01	1.04	1.01	0.09 [.02]	0.133	0.138
4300 [2029]	1.01	1.06	1.01	0.10 [.02]	0.139	0.144
4400 [2076]	1.02	1.07	1.02	0.10 [.02]	0.145	0.150
4500 [2123]	1.02	1.09	1.02	0.10 [.02]	0.151	0.156
4600 [2171]	1.03	1.11	1.02	0.10 [.02]	0.157	0.161
4700 [2218]	1.03	1.12	1.03	0.11 [.03]	0.163	0.167
4800 [2265]	1.04	1.14	1.03	0.11 [.03]	0.169	0.173
4900 [2312]	1.04	1.16	1.03	0.11 [.03]	0.175	0.179
5000 [2359]	1.05	1.18	1.03	0.12 [.03]	0.181	0.185
5100 [2407]	1.05	1.19	1.04	0.12 [.03]	0.188	0.190

*Multiply correction factor times gross performance data — resulting sensible capacity cannot exceed total capacity.

[] Designates Metric Conversions

AIRFLOW PERFORMANCE RHCYA2180 — 15 TON [52.7 kW] — 60 Hz — SIDEFLOW

Air Flow CFM [L/s]		RHCYA2180 Voltage 208/230, 460, 575 — 3 phase 60 Hz																																													
		External Static Pressure—Inches of Water [kPa]																																													
0.1 [.02]	0.2 [.05]	0.3 [.07]	0.4 [.10]	0.5 [.12]	0.6 [.15]	0.7 [.17]	0.8 [.20]	0.9 [.22]	1.0 [.25]	1.1 [.27]	1.2 [.30]	1.3 [.32]	1.4 [.35]	1.5 [.37]	1.6 [.40]	1.7 [.42]	1.8 [.45]	1.9 [.47]	2.0 [.50]																												
RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W										
4750 [2241]	—	—	—	—	—	—	—	—	—	537	1312	561	1382	585	1465	610	1559	636	1665	662	1782	681	1823	703	1910	724	2003	744	2101	770	2148	791	2231	812	2316	833	2402	853	2488	872	2576	892	2664				
4850 [2289]	—	—	—	—	—	—	—	—	—	542	1362	566	1436	590	1522	615	1620	640	1730	663	1797	685	1883	706	1973	727	2069	747	2169	774	2207	795	2292	815	2379	835	2466	855	2554	874	2643	894	2734				
4950 [2336]	—	—	—	—	—	—	—	—	—	525	1348	548	1414	572	1492	596	1582	620	1683	645	1797	667	1857	688	1945	710	2038	730	2136	751	2239	777	2268	798	2356	818	2444	838	2533	858	2623	877	2714	896	2806		
5050 [2383]	—	—	—	—	—	—	—	—	—	531	1399	554	1469	577	1551	601	1644	625	1749	650	1866	671	1919	692	2010	713	2105	734	2205	754	2311	781	2333	801	2422	821	2512	841	2603	860	2694	879	2787	898	2881		
5150 [2430]	—	—	—	—	—	—	—	—	—	537	1452	559	1526	583	1611	606	1708	631	1817	655	1938	675	1983	696	2076	717	2174	738	2277	764	2310	784	2399	804	2490	824	2582	844	2675	863	2768	882	2863	900	2958		
5250 [2477]	—	—	—	—	—	—	—	—	—	543	1508	565	1585	588	1674	612	1775	636	1887	661	2011	679	2049	700	2145	721	2245	741	2351	767	2377	788	2469	808	2561	827	2655	847	2749	866	2845	884	2941	902	3038		
5350 [2525]	—	—	—	—	—	—	—	—	—	527	1497	549	1566	571	1647	594	1740	618	1844	642	1960	662	2024	684	2117	705	2215	725	2318	745	2426	771	2447	791	2541	811	2635	831	2730	850	2827	868	2924	887	3022	905	3121
5450 [2572]	—	—	—	—	—	—	—	—	—	534	1553	555	1626	578	1711	600	1807	624	1915	647	2035	667	2091	688	2187	709	2288	729	2394	749	2504	775	2520	795	2615	815	2711	834	2809	853	2906	871	3005	889	3105	907	3206
5550 [2619]	—	—	—	—	—	—	—	—	—	540	1612	562	1689	584	1777	607	1877	630	1988	653	2112	672	2161	693	2260	713	2363	733	2471	753	2584	779	2595	799	2692	818	2790	837	2889	856	2989	874	3089	892	3191	—	—
5650 [2666]	526	1605	547	1673	569	1753	590	1845	613	1949	636	2064	659	2191	677	2233	697	2334	718	2440	737	2550	763	2576	783	2673	803	2772	822	2872	841	2972	859	3074	877	3176	895	3279	—	—	—	—	—	—			
5750 [2713]	533	1664	554	1736	575	1820	597	1916	619	2023	642	2142	661	2208	682	2307	702	2410	722	2519	742	2632	768	2654	787	2754	807	2854	825	2956	844	3058	862	3161	880	3266	898	3371	—	—	—	—	—	—			
5850 [2760]	541	1726	561	1802	582	1890	604	1989	626	2100	648	2222	666	2282	687	2383	707	2489	727	2600	746	2715	772	2736	791	2837	810	2939	829	3042	847	3147	865	3252	883	3357	901	3464	—	—	—	—	—	—			
5950 [2808]	548	1791	568	1870	589	1961	611	2064	633	2179	655	2305	671	2357	692	2461	712	2569	732	2683	751	2801	776	2819	796	2923	814	3027	833	3132	851	3237	869	3344	886	3452	903	3560	—	—	—	—	—	—			
6050 [2855]	556	1857	576	1940	596	2035	618	2142	639	2260	662	2390	677	2435	697	2541	717	2652	736	2768	755	2889	781	2906	800	3011	818	3117	837	3223	855	3331	872	3440	890	3549	906	3659	—	—	—	—	—	—			
6150 [2902]	563	1926	583	2013	604	2111	625	2221	646	2343	661	2411	682	2514	702	2623	722	2737	741	2855	766	2889	785	2995	804	3102	823	3209	841	3318	858	3427	876	3537	893	3649	—	—	—	—	—	—	—	—			
6250 [2949]	571	1997	591	2088	611	2190	632	2303	653	2429	667	2490	688	2596	708	2707	727	2823	746	2944	771	2979	790	3087	809	3195	827	3304	845	3415	862	3526	879	3638	896	3751	—	—	—	—	—	—	—	—			
6350 [2996]	579	2070	599	2165	619	2270	639	2388	661	2517	673	2571	693	2680	713	2794	732	2912	751	3036	776	3071	795	3181	813	3291	831	3402	849	3514	866	3627	883	3741	900	3856	—	—	—	—	—	—	—	—	—		

Drive Package	R				S				T			
Motor H.P. [W]	2 [1491.4]				3 [2237.1]				5 [2237.1]			
Blower Sheave	BK120SP 1.0"				BK120SP 1.0"				BK100SP			
Motor Sheave	1VL44 7/8"				1VL50 7/8"				1VP50 1-1/8"			
Belt	B52				B52				B45			
Turns Open	0	1	2	3	4	5	0	1	2	3	4	5
RPM	654	632	609	581	555	527	751	729	705	678	650	622

- NOTES:** 1. Factory sheave settings are shown in bold type.
2. Do not set motor sheave below minimum or maximum turns open shown.
3. Re-adjustment of sheave required to achieve rated airflow at AHRI minimum External Static Pressure
4. Drive data shown is for horizontal airflow with dry coil. Add component resistance (below) to duct resistance to determine total External Static Pressure.

[] Designates Metric Conversions

AIRFLOW PERFORMANCE RHCYA2180 — 15 TON [52.7 kW] — 60 Hz — SIDEFLOW (CONTINUED)

Airflow CFM [L/s]	AIRFLOW CORRECTION FACTORS *			COMPONENT AIRFLOW RESISTANCE		
	Total kBtu/h	Sensible kBtu/h	Power kW	Wet Coil Resistance Inches of Water [kPa]	MERV 8 Filter Resistance Inches of Water	MERV 13 Filter Resistance Inches of Water
4750 [2241]	1.03	1.13	1.03	0.11 [.03]	0.166	0.170
4850 [2289]	1.04	1.15	1.03	0.11 [.03]	0.172	0.176
4950 [2336]	1.04	1.17	1.03	0.11 [.03]	0.178	0.182
5050 [2383]	1.05	1.19	1.03	0.12 [.03]	0.185	0.188
5150 [2430]	1.05	1.20	1.04	0.12 [.03]	0.191	0.193
5250 [2477]	1.06	1.22	1.04	0.12 [.03]	0.197	0.199
5350 [2525]	1.06	1.24	1.04	0.13 [.03]	0.203	0.205
5450 [2572]	1.07	1.25	1.05	0.13 [.03]	0.209	0.211
5550 [2619]	1.07	1.27	1.05	0.13 [.03]	0.215	0.217
5650 [2666]	1.08	1.29	1.05	0.13 [.03]	0.221	0.222
5750 [2713]	1.08	1.31	1.05	0.14 [.03]	0.227	0.228
5850 [2760]	1.08	1.32	1.06	0.14 [.03]	0.233	0.234
5950 [2808]	1.09	1.34	1.06	0.14 [.03]	0.239	0.240
6050 [2855]	1.09	1.36	1.06	0.15 [.04]	0.245	0.246
6150 [2902]	1.10	1.38	1.07	0.15 [.04]	0.251	0.251
6250 [2949]	1.10	1.39	1.07	0.15 [.04]	0.257	0.257
6350 [2996]	1.11	1.41	1.07	0.15 [.04]	0.263	0.263

*Multiply correction factor times gross performance data — resulting sensible capacity cannot exceed total capacity.

[] Designates Metric Conversions

AIRFLOW PERFORMANCE RHCYA2240 — 20 TON [52.7 kW] — 60 Hz — SIDEFLOW

RHCYA2090		Voltage 208/230, 460, 575 — 3 phase 60 Hz																			
Air Flow CFM [L/s]		External Static Pressure—Inches of Water [kPa]																			
		0.1 [0.02]		0.2 [0.05]		0.3 [0.07]		0.4 [0.10]		0.5 [0.12]		0.6 [0.15]		0.7 [0.17]		0.8 [0.20]		0.9 [0.22]		1.0 [0.25]	
		RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W
6400 [3020]	575	1734	602	1845	628	1960	653	2078	677	2199	700	2325	722	2453	744	2585	764	2721	783	2860	783
6550 [3091]	585	1834	611	1950	637	2068	662	2190	686	2316	708	2445	730	2578	751	2714	770	2854	789	2997	790
6700 [3162]	595	1941	621	2060	646	2182	671	2309	694	2438	716	2571	737	2708	758	2848	777	2992	795	3139	797
6850 [3232]	605	2052	631	2175	656	2302	679	2432	702	2566	724	2703	745	2844	765	2988	784	3136	788	3284	804
7000 [3303]	615	2169	640	2296	665	2427	688	2561	711	2699	732	2840	752	2985	772	3133	790	3285	795	3437	811
7150 [3374]	625	2291	650	2422	674	2557	697	2695	719	2837	740	2982	760	3131	779	3283	797	3439	803	3593	819
7300 [3445]	635	2419	660	2554	683	2693	706	2835	727	2981	748	3130	767	3283	786	3439	795	3593	811	3751	827
7450 [3515]	645	2552	669	2691	692	2834	715	2980	736	3131	756	3284	775	3440	793	3601	803	3755	819	3917	835
7600 [3586]	655	2691	679	2834	702	2981	723	3131	744	3285	764	3442	783	3603	797	4038	812	4138	827	4250	844
7750 [3657]	665	2835	688	2982	711	3133	732	3287	752	3445	772	3606	790	3771	805	4201	820	4308	836	4428	853
7900 [3728]	675	2984	698	3135	720	3290	741	3449	761	3610	780	3776	798	3945	814	4371	829	4487	845	4614	862
8050 [3799]	685	3139	708	3294	729	3453	750	3615	769	3781	788	3951	809	4139	823	4550	838	4673	855	4809	872
8200 [3869]	695	3299	717	3458	739	3621	759	3788	778	3958	796	4131	818	4618	832	4737	848	4868	864	5011	882
8350 [3940]	705	3465	727	3628	748	3795	767	3965	786	4139	813	4691	827	4805	842	4932	868	5070	874	5221	892
8500 [4011]	716	3636	737	3803	757	3974	776	4149	794	4326	823	4878	837	5000	852	5135	868	5281	885	5440	903
8650 [4082]	726	3812	747	3984	766	4159	785	4337	819	4566	833	5074	847	5204	863	5346	879	5500	896	5666	913
8800 [4153]	736	3994	756	4169	776	4348	794	4531	830	5151	843	5277	858	5415	873	5564	890	5726	907	5900	925
8950 [4223]	746	4181	766	4361	785	4544	827	5234	840	5355	854	5488	869	5634	884	5791	901	5961	918	6143	936
9100 [4294]	756	4374	776	4558	794	4745	838	5438	851	5567	865	5708	880	5861	896	6026	912	6204	930	6393	948
9250 [4365]	766	4572	785	4760	836	5525	848	5650	862	5786	876	5935	891	6096	907	6269	924	6454	942	6652	960
9400 [4436]	776	4776	795	4967	847	5738	860	5870	873	6014	888	6171	903	6339	919	6520	936	6713	954	6918	978

Drive Package	R					S					T				
	5 [3728.5]	5 [3728.5]	5 [3728.5]	5 [3728.5]	5 [3728.5]	7.5 [2237.1]	7.5 [2237.1]	7.5 [2237.1]	7.5 [2237.1]	7.5 [2237.1]	7.5 [2237.1]	7.5 [2237.1]	7.5 [2237.1]	7.5 [2237.1]	7.5 [2237.1]
Motor H.P. [W]	5 [3728.5]	5 [3728.5]	5 [3728.5]	5 [3728.5]	5 [3728.5]	7.5 [2237.1]	7.5 [2237.1]	7.5 [2237.1]	7.5 [2237.1]	7.5 [2237.1]	7.5 [2237.1]	7.5 [2237.1]	7.5 [2237.1]	7.5 [2237.1]	7.5 [2237.1]
Blower Sheave	BK130H	BK130H	BK130H	BK130H	BK130H	2BK110 2SS 1.0"	2BK110 2SS 1.0"	2BK110 2SS 1.0"	2BK110 2SS 1.0"	2BK110 2SS 1.0"	2BK110 2SS 1.0"	2BK110 2SS 1.0"	2BK110 2SS 1.0"	2BK110 2SS 1.0"	2BK110 2SS 1.0"
Motor Sheave	1VP56-1 1/8	1VP56-1 1/8	1VP56-1 1/8	1VP56-1 1/8	1VP56-1 1/8	2VL60 1-3/8	2VL60 1-3/8	2VL60 1-3/8	2VL60 1-3/8	2VL60 1-3/8	2VL60 1-3/8	2VL60 1-3/8	2VL60 1-3/8	2VL60 1-3/8	2VL60 1-3/8
Belt	B51	B51	B51	B51	B51	B48	B48	B48	B48	B48	B46	B46	B46	B46	B46
Turns Open	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
RPM	563	541	517	699	673	646	646	646	646	646	806	806	806	806	806

NOTES: 1. Factory sheave settings are shown in bold type.
2. Do not set motor sheave below minimum or maximum turns open shown.
3. Re-adjustment of sheave required to achieve rated airflow at AHR minimum External Static Pressure
4. Drive data shown is for horizontal airflow with dry coil. Add component resistance (below) to duct resistance to determine total External Static Pressure.

[] Designates Metric Conversions

AIRFLOW PERFORMANCE RHCYA2240 — 20 TON [52.7 kW] — 60 Hz — SIDEFLOW (CONTINUED)

Airflow CFM [L/s]	AIRFLOW CORRECTION FACTORS *			COMPONENT AIRFLOW RESISTANCE		
	Total kBtu/h	Sensible kBtu/h	Power kW	Wet Coil Resistance Inches of Water [kPa]	MERV 8 Filter Resistance Inches of Water	MERV 13 Filter Resistance Inches of Water
6200 [2926]	1.10	1.38	1.07	0.15 [.04]	0.254	0.254
6300 [2973]	1.11	1.40	1.07	0.15 [.04]	0.260	0.260
6400 [3020]	1.11	1.42	1.07	0.16 [.04]	0.266	0.266
6500 [3067]	1.11	1.44	1.08	0.16 [.04]	0.272	0.272
6600 [3114]	1.12	1.45	1.08	0.16 [.04]	0.278	0.277
6700 [3162]	1.12	1.47	1.08	0.16 [.04]	0.284	0.283
6800 [3209]	1.13	1.49	1.08	0.17 [.04]	0.290	0.289
6900 [3256]	1.13	1.51	1.09	0.17 [.04]	0.296	0.295
7000 [3303]	1.14	1.52	1.09	0.17 [.04]	0.302	0.301
7100 [3350]	1.14	1.54	1.09	0.18 [.04]	0.308	0.306
7200 [3398]	1.15	1.56	1.10	0.18 [.04]	0.314	0.312
7300 [3445]	1.15	1.57	1.10	0.18 [.04]	0.320	0.318
7400 [3492]	1.16	1.59	1.10	0.18 [.04]	0.326	0.324
7500 [3539]	1.16	1.61	1.10	0.19 [.05]	0.332	0.330
7600 [3586]	1.16	1.63	1.11	0.19 [.05]	0.339	0.335
7700 [3633]	1.17	1.64	1.11	0.19 [.05]	0.345	0.341
7800 [3681]	1.17	1.66	1.11	0.19 [.05]	0.351	0.347

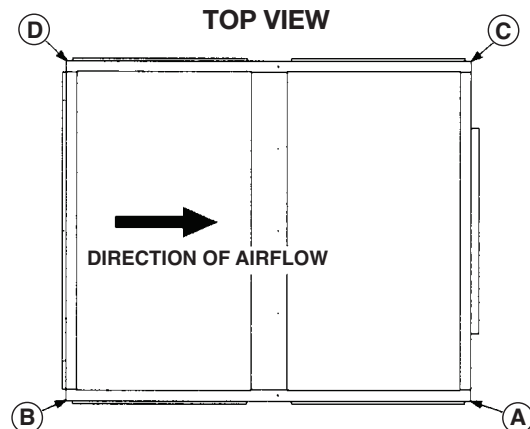
* Multiply correction factor times gross performance data — resulting sensible capacity cannot exceed total capacity.

[] Designates Metric Conversions

RHCYA2 DIMENSIONAL DATA 7.5 AND 10 NOMINAL TONS [26.4 AND 35.2 kW]

REFRIGERANT STUB SIZES, IN. [mm]				
MODEL	DUAL LIQ.	DUAL SUC.	SINGLE LIQ.	SINGLE SUC.
090	1/2, 1/2 [13, 13]	7/8, 7/8 [22, 22]	1/2 [13]	1 1/8 [29]
120	1/2, 1/2 [13, 13]	7/8, 7/8 [22, 22]	5/8 [16]	1 3/8 [35]

MODEL	CORNER WEIGHTS LBS. [kg]				OPERATING WEIGHT	SHIPPING WEIGHT
	A	B	C	D		
090	75.75 [34.36]	133.31 [60.49]	106.04 [48.10]	93.92 [42.60]	409 [185.52]	429 [194.60]
120	75.75 [34.36]	133.31 [60.49]	106.04 [48.10]	93.92 [42.60]	409 [185.52]	429 [194.60]

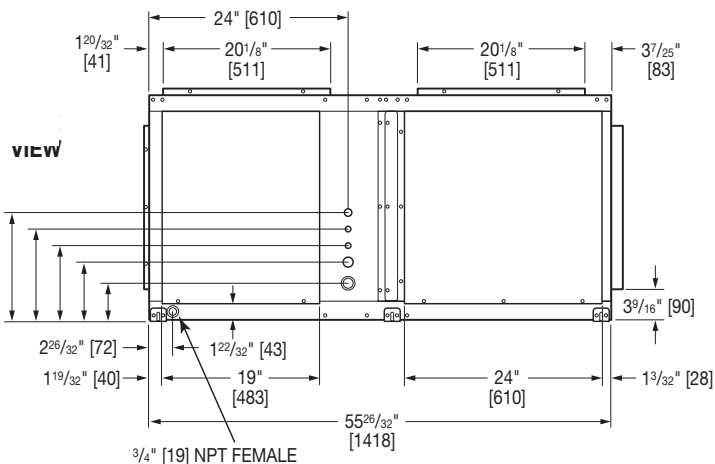


RETURN AIR OPENINGS = 47 3/8" [1203] x 19 7/8" [505] HEIGHT

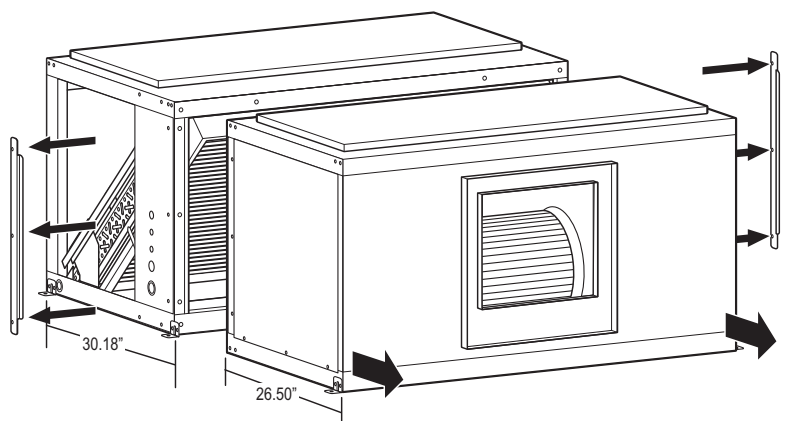
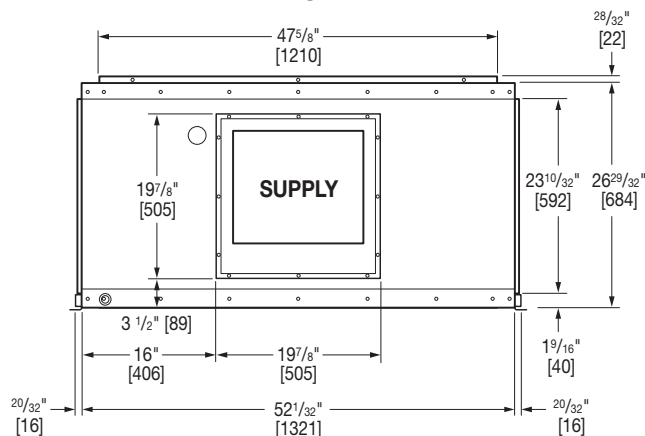
RETURN AIR OPENINGS = 47 5/8" [1203] WIDTH x 19 7/8" [505] HEIGHT

SIDE VIEW

KNOCK-OUTS BOTH SIDES	
7/8" [22]	12 13/16" [325]
5/8" [16]	10 13/16" [275]
5/8" [16]	8 13/16" [224]
1 1/4" [32]	6 13/16" [173]
1 1/4" x 1 3/4" [32 x 44]	4 9/16" [110]



FRONT VIEW



ST-A1372-29-01

ST-A1372-16-01

*Drain connections are provided on both sides of the drain pan. The drain can be connected to either side of the drain pan, but not both. The drain must be trapped.

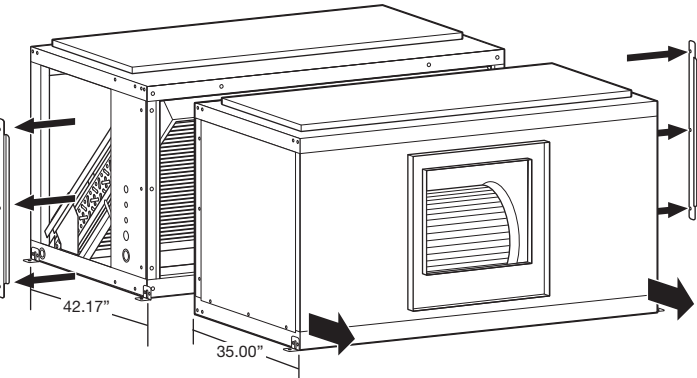
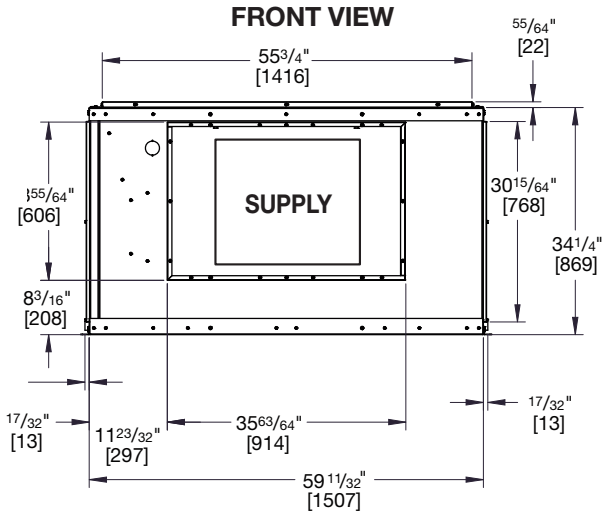
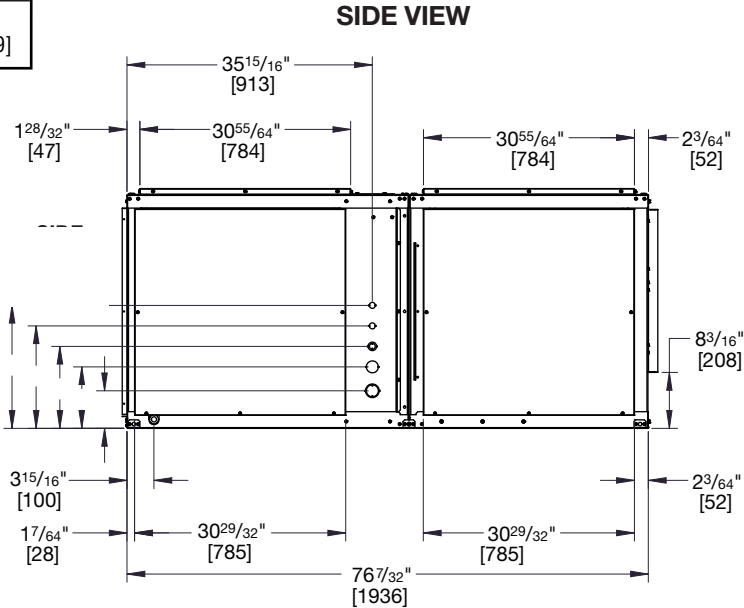
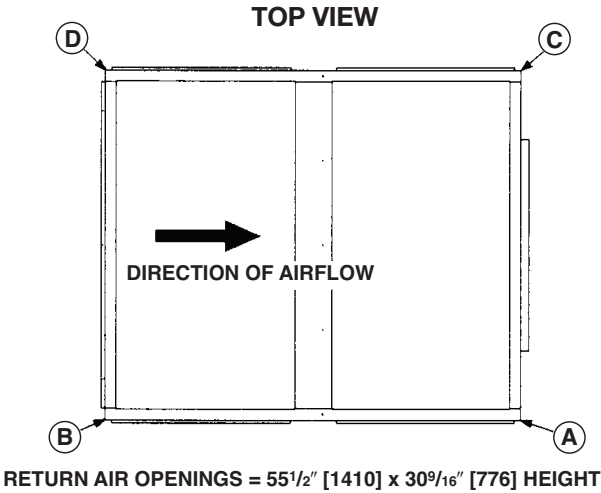
[] Designates Metric Conversions

RHCYA2 DIMENSIONAL DATA 10, 12.5, 15 & 20 NOMINAL TONS
[35.2, 44.0, 52.8 & 70.3 KW]

REFRIGERANT STUB SIZES, IN. [mm]				
MODEL	DUAL LIQ.	DUAL SUC.	SINGLE LIQ.	SINGLE SUC.
121	1/2, 1/2 [13, 13]	1 1/8, 1 1/8 [29, 29]	5/8 [16]	1 5/8 [41]
150	1/2, 1/2 [13, 13]	1 1/8, 1 1/8 [29, 29]	5/8 [16]	1 5/8 [41]
180	5/8, 5/8 [16, 16]	1 3/8, 1 3/8 [35, 35]	7/8 [22]	1 5/8 [41]
240	5/8, 5/8 [16, 16]	1 3/8, 1 3/8 [35, 35]	7/8 [22]	1 5/8 [41]

MODEL	CORNER WEIGHTS LBS. [kg]				OPERATING WEIGHT	SHIPPING WEIGHT
	A	B	C	D		
121	139.42 [63.24]	184.62 [83.74]	79.81 [36.20]	171.15 [77.63]	575 [260.82]	585 [265.35]
150	139.42 [63.24]	184.62 [83.74]	79.81 [36.20]	171.15 [77.63]	575 [260.82]	595 [269.89]
180	227.08 [103.0]	155.93 [70.73]	159.83 [72.50]	147.16 [66.75]	690 [312.98]	710 [322.05]
240	230.37 [104.49]	158.19 [71.75]	162.15 [73.55]	149.29 [67.72]	700 [317.52]	720 [326.59]

KNOCK-OUTS BOTH SIDES	
7/8" [22]	18" [457]
7/8" [22]	15" [381]
1 1/4" x 7/8" [32 x 22]	12" [305]
1 3/4" [44]	9" [229]
2" x 1 3/4" [51 x 44]	5 1/2" [140]



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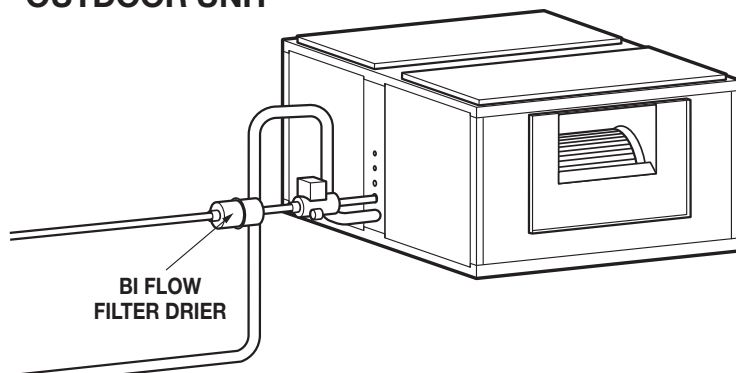
*Drain connections are provided on both sides of the drain pan. The drain can be connected to either side of the drain pan, but not both. The drain must be trapped.

[] Designates Metric Conversions

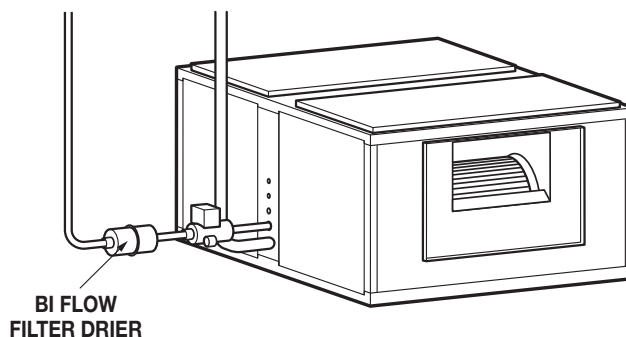
ST-A1372-41-01

TYPICAL PIPING RECOMMENDATIONS

INDOOR COIL ABOVE OUTDOOR UNIT



INDOOR COIL BELOW OUTDOOR UNIT



NOTE: PIPING ACCESSORIES SHOWN SHOULD BE MOUNTED AS CLOSE TO AIR HANDLER UNIT AS POSSIBLE

REFRIGERANT PIPING

1. Size liquid line for no more than 50 PSIG pressure drop.
2. Size suction lines for no more than 2°F loss, which corresponds to approximately 5 PSIG pressure drop.
3. When evaporator is installed below condensing unit, do not exceed the recommend-ed suction line O.D. This will insure adequate velocities for proper oil return.
4. Install strainer-drier and sight glass in liquid line.
5. Pitch all horizontal suction lines downward in the direction of flow.
6. When making up refrigerant piping, take every precaution to prevent dirt and moisture from entering the piping.
7. Locate the condensing unit and evaporator(s) as close together as possible to minimize piping runs.
8. A liquid line solenoid installed just ahead of the expansion valve is recommended.
9. See tables below for general refrigerant line sizing and equivalent length of valves and fittings.
10. Refer to the vapor and liquid line selection procedure and charts in the outdoor unit installation manual or literature for more specific refrigerant line sizing information. When dual outdoor units are matched with the air-handler using dual circuits, size the refrigerant lines for each system independently.

CONDENSATE DRAIN PIPING

- Consult local codes or ordinances for specific requirements regarding condensate drain.
- Condensate drain is open to atmosphere and must be trapped. Trap must be at least 3 inches [76 mm] deep and made of flexible material or fabricated to prevent freeze-up.
- Pitch the drain line at least 1/4 inch [6 mm] per foot away from the drain pan.
- Do not reduce the drain line size from the connection size provided on the unit.
- Do not connect the drain line to a closed sewer line.

RECOMMENDED VAPOR AND LIQUID LINE SIZES FOR VARIOUS LENGTHS OF RUN				
LINEAR LENGTH (FT.) [m]	LIQUID LINE O.D. SIZES (IN.) [mm]		VAPOR LINE O.D. SIZES (IN.) [mm]	
	090	120	090	120
0-40 [0-12.19]	1/2 [12.7]	5/8 [15.88]	1 1/8 [28.58]	1 3/8 [34.93]
41-90 [12.5-27.43]	1/2 [12.7]	5/8 [15.88]	1 3/8 [34.93]*	1 3/8 [34.93]*

***NOTE:** With the outdoor unit located below the indoor air handler, all vertical vapor lines must not exceed 1 1/8" [28.58 mm] O.D.

[] Designates Metric Conversions

TYPICAL PIPING RECOMMENDATIONS

All models are provided with dual circuit coil manifolds that can be configured for dual condensing unit applications. The coil is circuited to provide full face coil operation for each system. Knock-outs are provided on both sides of the unit to allow the refrigerant tubing to enter from either side. Remove the rubber grommets from the parts bag and install them in the appropriate

holes prior to running the line set tubing into the cabinet to seal around and protect the tubing. Copper fittings are provided in the parts bag to allow the two refrigerant circuits to be tied together for single condensing unit applications. The fittings may be installed to allow the tubing to enter the unit from either side.

REQUIRED OUNCES OF R-454B CHARGE PER FOOT OF TUBING									
Tube Size		Liquid Tube		Vapor Tube		Total		Internal Volume	
OD (in)	OD (mm)	oz/ft	kg/m	oz/ft	kg/m	oz/ft	kg/m	ft ³ /ft	m ³ /m
3/8	9.5	0.5	0.05	0.0	0.00	0.5	0.05	0.000555	0.000048
1/2	12.7	1.0	0.09	0.0	0.00	1.0	0.09	0.001080	0.000093
5/8	15.9	1.5	0.14	0.1	0.00	1.6	0.15	0.001730	0.000149
3/4	19.1	2.2	0.21	0.1	0.01	2.3	0.21	0.002480	0.000214
7/8	22.2	3.1	0.29	0.1	0.01	3.2	0.30	0.003430	0.000296
1	25.4	4.0	0.37	0.1	0.01	4.2	0.39	0.004500	0.000389
1 1/8	28.6	5.2	0.49	0.2	0.02	5.4	0.50	0.005850	0.000503
1 1/4	31.8	6.5	0.60	0.2	0.02	6.7	0.62	0.007210	0.000623
1 3/8	34.9	7.3	0.68	0.2	0.02	7.6	0.70	0.008165	0.000759
1 1/2	38.1	9.4	0.87	0.3	0.03	9.7	0.90	0.010500	0.000910
1 5/8	41.3	11.2	1.04	0.4	0.03	11.6	1.08	0.012500	0.001080
2 1/8	54.0	19.5	1.82	0.6	0.06	20.2	1.88	0.021800	0.001880

SEPARABLE CABINET

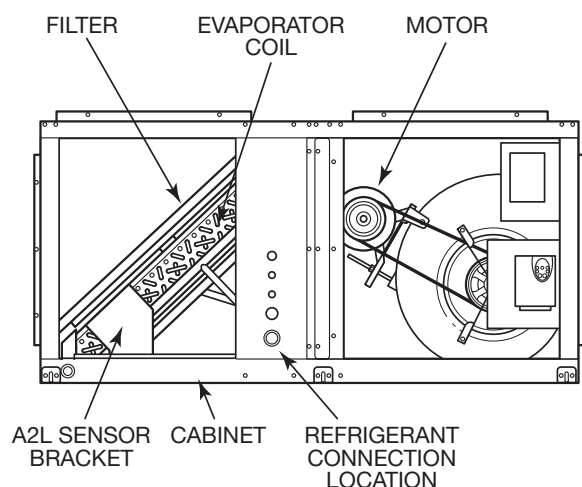
For ease of installation into the indoor space, the air handler unit is separable. If required to move into the space, follow the steps below to separate and reconnect the two halves of the air handler.

NOTE: Separation and reconnection should be completed on a flat, stable surface. Do not attempt while unit is suspended from the ceiling.

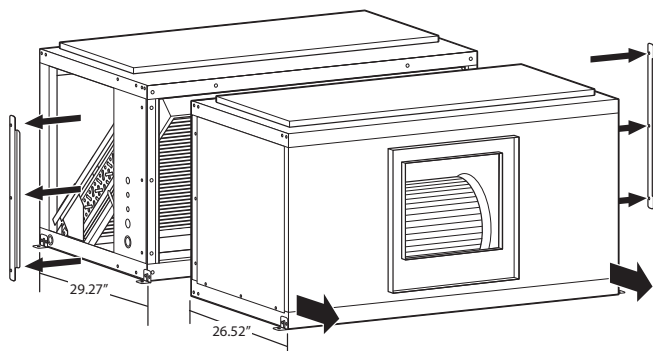
1. Unscrew and remove the two metal brackets on each side of the air handler.
2. Remove access panels.
3. Remove the 3/8 inch bolts from the frame. The unit can now be pulled apart.
4. Move the air handler into place.
5. If gasketing is damaged, use included replacement gasketing to repair the unit.
6. Align the two sides. Reattach the metal brackets and access panels—these brackets should help align the connecting holes—then insert and fasten the 3/8 inch bolts. The unit can now be reconnected and installation and set-up can commence.

REFRIGERANT LEAK DETECTION

In the event of a detected refrigerant leak, the refrigerant leak detection sensor will trigger a mitigation procedure that shuts off the compressor(s) and turns on the indoor blower motor.



UNIT SHOWN WITH SIDE PANELS REMOVED FOR COIL CONNECTIONS AND AIR FILTER ACCESS.



Guide Specifications RHCYA-090-240

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AC AIR HANDLER UNIT

HVAC Guide Specifications

Size Range: 7.5 to 20 Nominal Tons

1.01 Quality Assurance:

- A. Unit shall be rated in accordance with AHRI Standard 340/360.
- B. Unit construction shall comply with ANSI/ASHRAE 15 safety code latest revision and comply with NEC.
- C. Unit shall be constructed in accordance with UL 60335-2-40 standard and shall carry the UL label.
- D. Unit cabinet shall be capable of withstanding 500 hour salt spray exposure per ASTM B117 (scribed specimen).
- E. Unit shall be subjected to run test on the assembly line.
- F. Unit meets ASHRAE 90.1 2022 minimum efficiency requirements.
- G. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.
- H. Unit shall be subjected to a completely automated run test on the assembly line. The data for each unit will be stored at the factory and must be available upon request.

1.02 Manufacturer Qualifications:

- A. Unit shall be manufactured in a facility registered to ISO 9001:2015 manufacturing quality standard.

1.03 Installer Qualifications:

- A. The installer shall be trained to install and service equipment with A2L refrigerants.

1.04 Delivery, Storage, and Handling:

Unit shall be shipped as single package only, and shall be stored and handled according to unit manufacturer's recommendations.

- A. Unit shall be stored and handled per manufacturer's recommendations.
- B. Refer to the manufacturer's installation and operation manual for guidance on how to properly lift the unit.
- C. Unit shall only be stored or positioned in the upright position.

1.05 Unit Cabinet:

- A. Unit cabinet shall be constructed of galvanized steel and coated with a pre-painted baked enamel finish.
- B. Cabinets shall be insulated with 1/2" [13 mm] by 1-1/2 lbs. [.68 kg] density fiberglass insulation coated with neoprene and bonded to the cabinet surface with a U.L. approved adhesive. Insulation shall have fire retarding characteristics in accordance with smoke developed rating not to exceed 50 and flame spread rating of 25 per UL testing procedures.
- C. Unit cabinet exterior paint shall be: pre-painted steel.
- D. Insulation:
 - i. Interior cabinet surfaces shall be insulated with a minimum of 1/2-in. thick, minimum 1.6 lbs. density, flexible fiberglass insulation bonded with foil face on the air side.
 - ii. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.
 - iii. Insulation shall also be mechanically fastened with welded pin and retainer washer.
- E. Condensate Pan and Connections:
 - i. Shall be a sloped condensate drain pan made of a non-corrosive material and be removable for cleaning.
 - ii. Shall comply with ASHRAE Standard 62.
 - iii. Shall use a 3/4" NPT drain connection through either side of the drain pan. The connection shall be made per the manufacturer's recommendations.
 - iv. Shall have drain connections on each side of the unit in either horizontal or vertical type applications.
- F. Side Panel:
 - i. The separable unit shall have removable side panels on each side of the unit. Each side has two removable panels: four panels total.
- G. Electrical Connections:
 - i. All unit power wiring shall enter the unit cabinet through factory-prepared knockouts next to the unit access panels.
- H. Component Access Panels (Standard):
 - i. Cabinet panels shall be easily opened for servicing.
 - ii. Unit cabinet design shall be separable to facilitate mobilization during installation.

1.06 Refrigerant Components:

- A. The refrigerant circuit shall include the following control, safety, and maintenance features:
 - i. Refrigerant filter drier.
 - ii. Service gauge connections on suction and discharge lines.
 - iii. External pressure gauge ports allows pressures to be checked on the side, without removing access panel.

1.07 Evaporator Coils:

- A. The evaporator coil shall consist of copper tubes with aluminum fins bonded to the tubes by mechanical expansion. Suction and liquid line connections or supply and discharge connections shall be field-configurable to either side of the coil.
- B. Evaporator coil in 12.5 ton units shall be 3-row.
- C. Evaporator coil in 6.5, 7.5, 10, 15, and 20 ton units shall be 4-row.
- D. Direct expansion coils shall feature factory-installed thermostatic expansion valves (TXVs) for refrigerant control. The TXVs shall be R-454B compatible and capable of external adjustment.

1.08 Controls and Safeties:

- A. Components are not compatible between different refrigerants. Do not use R-410A service equipment or components on R-454B equipment. System or part failure could occur.

1.09 Operating Characteristics:

- A. When combined with matching RHCYA condensing unit, the system shall be capable of starting and running at ambient outdoor temperatures up to 125.6°F (52°C) in cooling mode.
- B. Unit shall be factory configured for horizontal supply & return configurations.
- C. Unit shall be field convertible from vertical to horizontal configuration.

1.10 Electrical Requirements:

- A. Unit shall operate at $\pm 10\%$ from rated voltage.
- B. Unit electrical power shall be single-point connection.
- C. Main power supply voltage, phase, and frequency must match those required by the manufacturer.

1.11 Thermostats:

- A. Thermostat shall:
 - i. Have the capability to energize 2 stages of cooling.
 - ii. The variable speed drive (VFD) must be powered continuously and controlled by the thermostat signals.
 - iii. Use a 3/4" NPT drain connection through either side of the drain pan.
- B. Thermostat Controls:
 - i. The appropriate thermostat control wires (C, G, Y2, W and R) must also be connected to the low voltage terminal block (TB2) located on the outside of the air-handler control box (No heat application).
 - ii. Electric Heat Application - The appropriate thermostat control wires must be connected to the thermostat pigtailed on the heater kit and to the C, G, Y2, and W1 terminals on the low voltage terminal block located on the outside of the air handler control box.
 - iii. Low voltage terminal block (TB3) to be used for A2L sensor. Red wire to "24V VAC/VDC. Brown wire to "24V COM.

1.12 Motor:

- A. Fan motor of the size and electrical characteristics specified on the equipment schedule shall be factory supplied and installed.
- B. Motors shall have inherent thermal overload protection.
- C. Alternate Motor and Drive:
 - i. An alternate motor and/or medium-static or high-static drive shall be available to meet the airflow and external static pressure requirements specified on the equipment schedule.
- D. Variable Frequency Drive (VFD) Standard:
 - i. Unit shall be supplied with an electronic variable frequency drive for the supply air fan.
 - ii. Drive shall be factory installed in an enclosed cabinet.
 - iii. Drive shall meet UL Standard 95-5V.
 - iv. The completed unit assembly shall be UL listed.
 - v. Drives are to be accessible through a tooled access hinged door assembly.
 - vi. The unit manufacturer shall install all power and control wiring.
 - vii. The supply air fan drive output shall be controlled by the factory installed main unit control system and drive status and operating speed shall be monitored and displayed at the main unit control panel.
 - viii. Drive shall be programmed and factory run tested in the unit.

1.13 Special Features:

- A. Electric Heaters:
 - i. Heaters for nominal 240V, 480V, or 575V, 3-Phase, 60Hz shall be field-installed as shown on the equipment drawings. Electric heat assembly shall be UL agency approved and shall have single-point power wiring.
- B. A2L Sensor:
 - i. Sensor shall provide the ability to signal the blower, compressor, and electric heat to comply with the UL 60335-2-40 mitigation when a refrigerant leak is detected.
 - ii. Sensor shall be operable when the unit is installed in either vertical or horizontal configurations.



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