

ELECTRIC AIR HANDLERS FOR 7½ & 10-TON SPLIT SYSTEMS



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R32

■ Standard Features

- TXV Control; Units have two (2) thermal expansion valves
- DAQ units feature two 5-speed direct-drive motors
- Copper tube/aluminum fin coils
- AHRI Certified; ETL Listed
- R-32 leak mitigation system

■ Cabinet Features

- Heavy-gauge, reinforced, galvanized-steel cabinet
- Fully insulated with fiberglass blanket
- Horizontal and vertical condensate pans
- Built-in filter rack (2" filter included)
- Entry on top of panel for both low and high voltage
- Removable access panels make servicing of unit faster and easier



* Complete warranty details available from your local dealer or at www.daikincomfort.com.

	D	A	Q	120	3	4	A		
	1	2	3	4,5,6	7	8	9		
Brand	D - Daikin							Engineering*	
								Major/Minor Revisions	
	*Not used for inventory management								
Product Type	A - Single-Piece Air Handler							Electrical	
								3 - 208/230 V Three-Phase 60 Hz	
								4 - 460 V Three-Phase 60 Hz	
								Refrigerant	
								3 - R-32	
Unit Applicationon								Q - Multi-Position, 5-Speed Direct-Drive Motor	Nominal Capacity Range
									090 - 7½ tons
									120 - 10 tons

	DAQ09033**	DAQ09034**	DAQ12033**	DAQ12034**
TOTAL CAPACITIES				
Nominal Cooling (Tons) ¹	7.5	7.5	10	10
Heating (kW)	15, 20, 30	15, 20, 30	15, 20, 30	15, 20, 30
ELECTRICAL DATA				
Voltage-Hz-Phase	208/230-60-3	460-60-3	208/230-60-3	460-60-3
Voltage Range	197 - 253	414-506	197 - 253	414-506
FLA (Total)	13.8	4.6	13.8	4.6
Minimum Circuit Ampacity	15.5/15.5	5.2	15.5/15.5	5.2
BLOWER MOTOR				
Type	Direct-Drive	Direct-Drive	Direct-Drive	Direct-Drive
Horse Power	1	1	1	1
Voltage-Hz-Phase	208/230-60-3	460-60-3	208/230-60-3	460-60-3
FLA/ LRA	6.9/47.7	2.3/23.9	6.9/47.7	2.3/23.9
BLOWER & CONTROLS				
Wheel Dia. & Width (Qty.)	11 x 10 (2)	11 x 10 (2)	11 x 10 (2)	11 x 10 (2)
Nominal Airflow (Ft./Min.)	3,000	3,000	4,000	4,000
Transformer	Standard	Standard	Standard	Standard
Blower Relay	Standard	Standard	Standard	Standard
FILTER, COIL & REFRIGERANT				
Disposable Filter Size / Qty	16"x20"x2" / 2 20"x20"x2" / 2	16"x20"x2" / 2 20"x20"x2" / 2	16"x20"x2" / 2 20"x20"x2" / 2	16"x20"x2" / 2 20"x20"x2" / 2
Coil Area (sq. ft.)	10	10	10	10
FPI - Rows	14 - 4	14 - 4	14 - 4	14 - 4
Expansion Valve Qty.	2	2	2	2
Refrigerant	R-32	R-32	R-32	R-32
Liquid Connection (Qty.)	3/8" (2) *	3/8" (2) *	3/8" (2) *	3/8" (2) *
Suction Connection (Qty.)	1 1/8" (2)	1 1/8" (2)	1 1/8" (2)	1 1/8" (2)
Condensate Drain	3/4 FPT	3/4 FPT	3/4 FPT	3/4 FPT
SHIP WEIGHT (LBS)	430	430	430	430

* For two refrigerant lines

BLOWER PERFORMANCE TABLES • 7.5 Ton LC Indoor Split System • Models: DAQ09033, DAQ09034

*UP-FLOW					*HORIZONTAL FLOW				
SPEED TAP	ESP (IN H ₂ O)	SCFM	RPM	SINGLE FAN BHP	SPEED TAP	ESP (IN H ₂ O)	SCFM	RPM	SINGLE FAN BHP
T1	0.1	1,941	536	0.09	T1	0.1	2,105	507	0.09
	0.2	1,794	587	0.10		0.2	1,898	563	0.10
	0.3	1,627	638	0.11		0.3	1,692	616	0.11
	0.4	1,446	687	0.12		0.4	1,494	668	0.12
	0.5	1,256	734	0.13		0.5	1,314	720	0.13
	0.6	1,078	781	0.14		0.6	1,140	770	0.13
	0.7					0.7			
	0.8					0.8			
T2	0.1	3,079	727	0.28	T2	0.1	3,094	700	0.27
	0.2	2,985	764	0.29		0.2	3,034	746	0.28
	0.3	2,877	801	0.30		0.3	2,951	785	0.30
	0.4	2,761	838	0.32		0.4	2,854	820	0.31
	0.5	2,642	875	0.33		0.5	2,745	853	0.32
	0.6	2,525	912	0.35		0.6	2,621	885	0.34
	0.7	2,406	948	0.36		0.7	2,498	919	0.35
	0.8	2,287	983	0.37		0.8	2,357	953	0.36
T3	0.1	3,079	727	0.28	T3	0.1	3,094	700	0.27
	0.2	2,985	764	0.29		0.2	3,034	746	0.28
	0.3	2,877	801	0.30		0.3	2,951	785	0.30
	0.4	2,761	838	0.32		0.4	2,854	820	0.31
	0.5	2,642	875	0.33		0.5	2,745	853	0.32
	0.6	2,525	912	0.35		0.6	2,621	885	0.34
	0.7	2,406	948	0.36		0.7	2,498	919	0.35
	0.8	2,287	983	0.37		0.8	2,357	953	0.36
T4	0.1	3,565	819	0.39	T4	0.1	3,493	776	0.37
	0.2	3,500	845	0.40		0.2	3,410	814	0.39
	0.3	3,425	871	0.41		0.3	3,324	848	0.40
	0.4	3,348	899	0.43		0.4	3,224	878	0.42
	0.5	3,253	927	0.44		0.5	3,127	908	0.43
	0.6	3,153	958	0.46		0.6	3,015	937	0.45
	0.7	3,037	990	0.47		0.7	2,899	967	0.46
	0.8	2,917	1,025	0.49		0.8	2,773	998	0.47
T5	0.1	3,789	852	0.47	T5	0.1	3,815	832	0.46
	0.2	3,717	881	0.49		0.2	3,734	866	0.48
	0.3	3,634	909	0.50		0.3	3,649	896	0.49
	0.4	3,548	938	0.52		0.4	3,562	924	0.51
	0.5	3,452	967	0.53		0.5	3,471	951	0.52
	0.6	3,350	997	0.55		0.6	3,373	978	0.54
	0.7	3,242	1,028	0.57		0.7	3,272	1,006	0.55
	0.8	3,128	1,060	0.58		0.8	3,162	1,035	0.57

*Above table is for dry coil with filter in place. SCFM correction for wet coil results in 4% reduction.

NOTES:

- Any adjustment made to the blower should not cause the motor to draw more than the motors rated RLA.
- Applications that exceed the above could require a larger motor.

BLOWER PERFORMANCE TABLES • 10 Ton LC Indoor Split System • Models: DAQ12033, DAQ12034

UP FLOW					HORIZONTAL FLOW				
SPEED TAP	ESP (IN H ₂ O)	SCFM	RPM	BHP	SPEED TAP	ESP	SCFM	RPM	BHP
T1	0.1	2,525	622	0.17	T1	0.1	2,581	619	0.17
	0.2	2,400	666	0.18		0.2	2,468	660	0.18
	0.3	2,269	710	0.19		0.3	2,340	703	0.19
	0.4	2,132	753	0.20		0.4	2,204	747	0.20
	0.5	1,984	794	0.21		0.5	2,061	791	0.21
	0.6	1,843	835	0.22		0.6	1,904	834	0.22
	0.7	1,706	875	0.24		0.7	1,740	876	0.24
	0.8	1,565	913	0.25		0.8	1,603	919	0.25
T2	0.1	4,012	890	0.56	T2	0.1	4,134	881	0.55
	0.2	3,930	921	0.58		0.2	4,061	912	0.57
	0.3	3,841	950	0.59		0.3	3,989	940	0.59
	0.4	3,752	979	0.61		0.4	3,915	966	0.60
	0.5	3,658	1,007	0.63		0.5	3,835	991	0.62
	0.6	3,566	1,036	0.65		0.6	3,760	1,017	0.64
	0.7	3,463	1,064	0.66		0.7	3,671	1,043	0.65
	0.8	3,360	1,093	0.68		0.8	3,587	1,071	0.67
T3	0.1	4,012	890	0.56	T3	0.1	4,134	881	0.55
	0.2	3,930	921	0.58		0.2	4,061	912	0.57
	0.3	3,841	950	0.59		0.3	3,989	940	0.59
	0.4	3,752	979	0.61		0.4	3,915	966	0.60
	0.5	3,658	1,007	0.63		0.5	3,835	991	0.62
	0.6	3,566	1,036	0.65		0.6	3,760	1,017	0.64
	0.7	3,463	1,064	0.66		0.7	3,671	1,043	0.65
	0.8	3,360	1,093	0.68		0.8	3,587	1,071	0.67
T4	0.1	4,482	973	0.74	T4	0.1	4,530	955	0.73
	0.2	4,387	997	0.76		0.2	4,454	982	0.75
	0.3	4,299	1,021	0.78		0.3	4,377	1,008	0.77
	0.4	4,218	1,045	0.79		0.4	4,299	1,033	0.79
	0.5	4,141	1,069	0.81		0.5	4,219	1,057	0.80
	0.6	4,066	1,093	0.83		0.6	4,142	1,081	0.82
	0.7	3,992	1,117	0.85		0.7	4,062	1,104	0.84
	0.8	3,916	1,141	0.87		0.8	3,982	1,127	0.86
T5	0.1	4,588	1,003	0.81	T5	0.1	4,649	976	0.79
	0.2	4,510	1,033	0.83		0.2	4,574	1,004	0.81
	0.3	4,441	1,060	0.86		0.3	4,495	1,030	0.83
	0.4	4,372	1,084	0.88		0.4	4,417	1,055	0.85
	0.5	4,301	1,106	0.89		0.5	4,339	1,079	0.87
	0.6	4,244	1,129	0.91		0.6	4,267	1,103	0.89
	0.7	4,179	1,151	0.93		0.7	4,193	1,126	0.91
	0.8	4,108	1,173	0.95		0.8	4,123	1,149	0.93

*Above table is for dry coil with filter in place. SCFM correction for wet coil results in 4% reduction.

TEMPERATURE RISE RANGE

MODEL	HEAT KIT kW	CFM	SUPPLY VOLTAGE		
			208	240	480
DAQ0904**	15	2,800	12	16	16
		2,900	12	16	16
		3,000	11	15	15
		3,100	11	15	15
		3,200	10	14	14
	20	2,800	16	22	22
		2,900	16	21	21
		3,000	16	21	21
		3,100	16	20	20
		3,200	15	20	20
	30	2,800	24	32	32
		2,900	23	31	31
		3,000	23	30	30
		3,100	21	29	29
		3,200	21	29	29

MODEL	HEAT KIT kW	CFM	SUPPLY VOLTAGE		
			208	240	480
DAQ1204**	15	3,800	9	12	12
		3,900	9	12	12
		4,000	9	12	12
		4,100	9	12	12
		4,200	8	11	11
	20	3,800	12	17	17
		3,900	12	16	16
		4,000	12	16	16
		4,100	12	15	15
		4,200	11	15	15
	30	3,800	19	25	25
		3,900	18	24	24
		4,000	18	24	24
		4,100	17	23	23
		4,200	17	23	23

NOTES:

1. Above table are calculated with both stages of electric heat engaged (2-stage heat systems). Divide the temperature rise from the table by 2 for 1st stage operation for systems using staged electric heat.
2. Temperature rise data are in Degrees Fahrenheit.

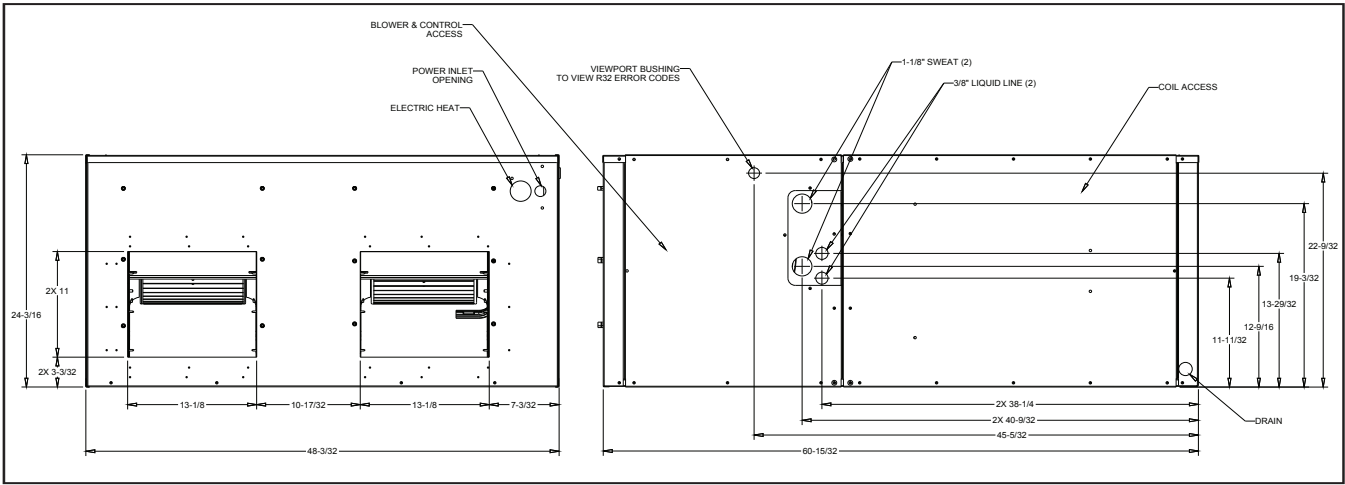
AIR HANDLER	AHKD MODEL	NOMINAL kW	ELECTRICAL DATA	STAGES	WEIGHT (LBS.)	MCA ¹	MOP ²
DAQ0903** and DAQ1203**	None	N/A	208-230/3/60	N/A	N/A	15.5 / 15.5	20 / 20
	AHKD15-3A	15	208-240/3/60	1	56	54.8-60.6	60 / 70
	AHKD20-3A	20	208-240/3/60	2	59	67.3-75.0	70 / 80
	AHKD30-3A	30	208-240/3/60	2	60	92.3-104	100 / 110
	None	N/A	460/3/60	N/A	N/A	5.2	15
	AHKD15-4A	15	480/3/60	1	55	27.4	30
	AHKD20-4A	20	480/3/60	2	57	34.6	35
	AHKD30-4A	30	480/3/60	2	58	49.1	50

¹ Minimum Circuit Ampacity

² Maximum Overcurrent Protection

NOTES:

- These air handlers do not have factory-installed electric heat. The above-listed kits are the ONLY heater kits that can be used with this commercial series. They are available for purchase as field-installed accessories.
- The electrical characteristics of the air handler, electric heater kits, and building power supply must be compatible.

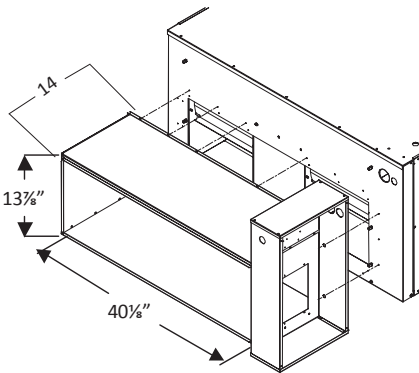


DUCT CONNECTION SIZING WITHOUT ELECTRIC HEATERS

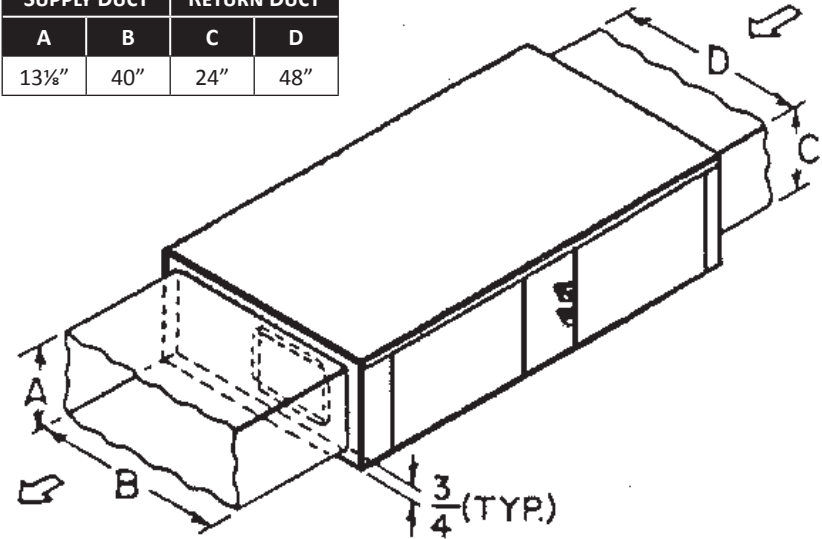
MINIMUM SUPPLY AND RETURN DUCT DIMENSIONS

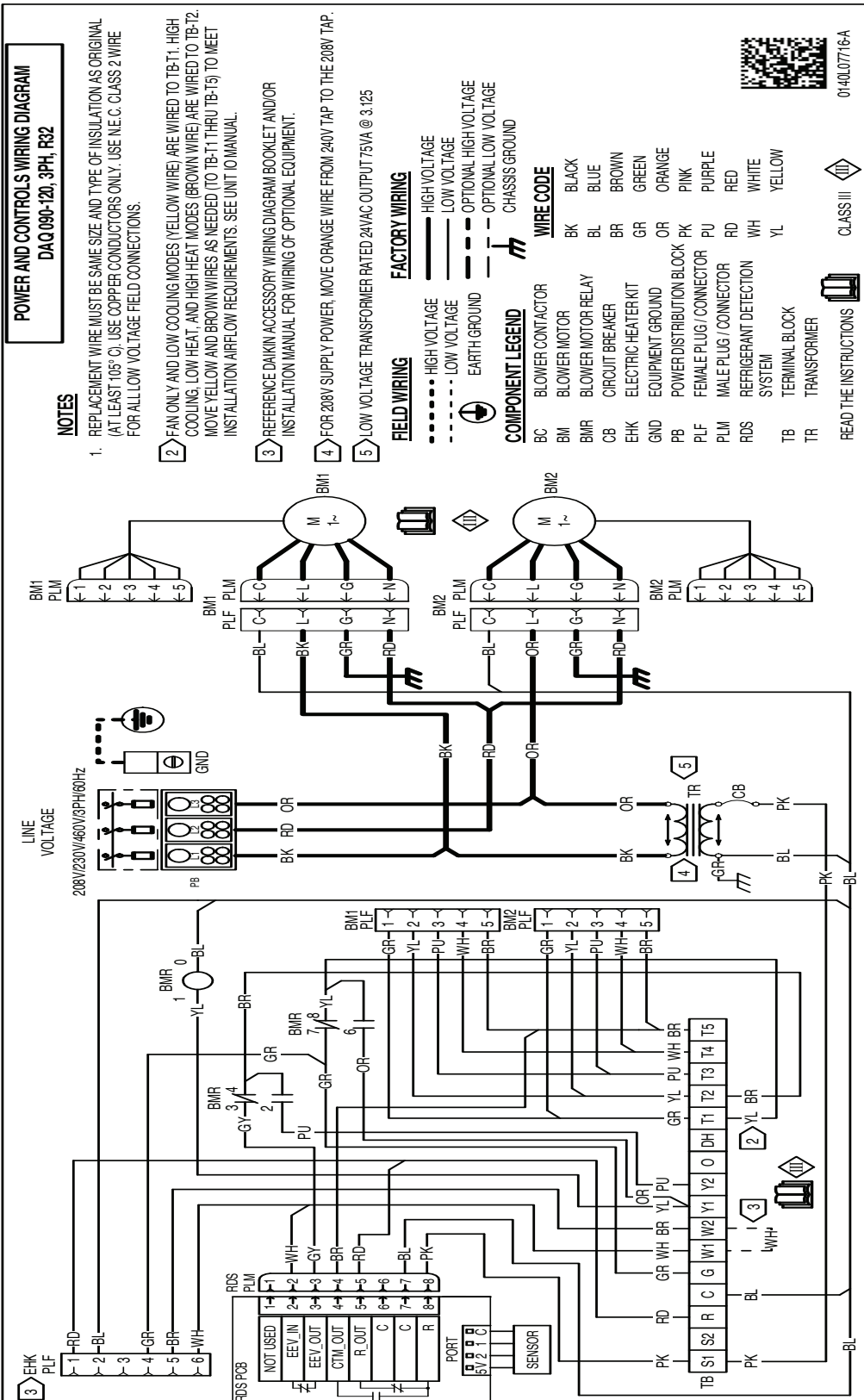
DIMENSIONAL DATA FOR ELECTRIC HEATER KITS

- 15, 20, & 30 kW Heater Kits
- Supply opening is 13 7/8" x 40 7/8"



SUPPLY DUCT		RETURN DUCT	
A	B	C	D
13 7/8"	40"	24"	48"





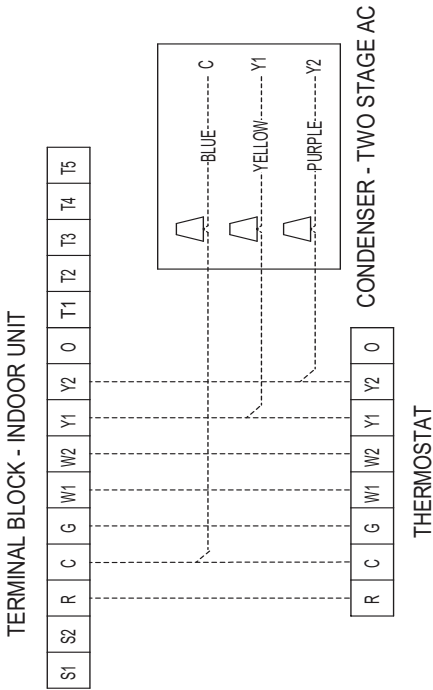
Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.



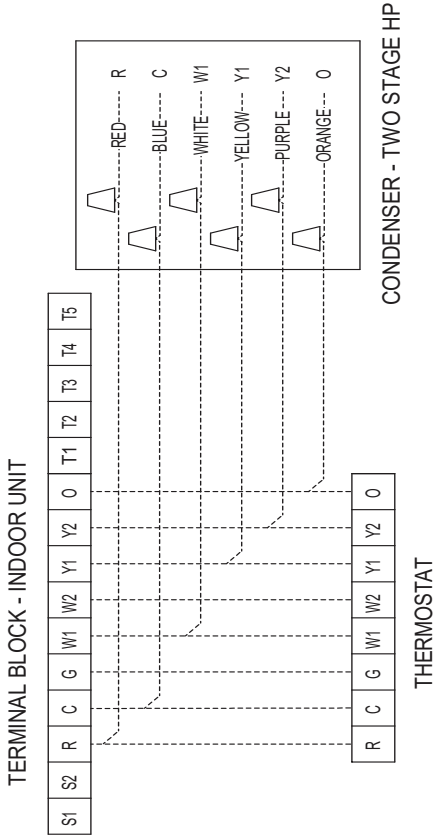
WARNING

High Voltage: Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury, or death.

1 TWO-STAGE CONDENSER UNIT



1 SINGLE-STAGE HEAT PUMP UNIT



LOW VOLTAGE FIELD WIRING
DAQ090-120, 3PH

NOTE:
THIS IS A SYSTEM WIRING DIAGRAM SHOWING DAQ MODEL SERIES WITH FIELD CONNECTIONS. THIS DIAGRAM IS TO BE INCLUDED IN INSTALLATION INSTRUCTIONS. A SEPARATE WIRING DIAGRAM IS CONTAINED INSIDE THE CONTROL BOX FOR UNIT FACTORY WIRING.

	AHKD MODEL	DAQ090*	DAQ120*
Electric Heat Kits	AHKD15-3A	X	X
	AHKD20-3A	X	X
	AHKD30-3A	X	X
	AHKD15-4A	X	X
	AHKD20-4A	X	X
	AHKD30-4A	X	X
Freeze Protection Kit	FSK05A	X	X
TXV Circuit 1	0151A00013	X	
TXV Circuit 2	0151A00014	X	
TXV Circuit 1	0151A00015		X
TXV Circuit 2	0151A00016		X

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