Magic Aire Fan Coil Unit
HVAC Guide Specifications

Size Range: **200 to 1200 Nominal CFM**
Magic Aire Model CH

Part 1 — General

1.01 SYSTEM DESCRIPTION

Horizontal, 2-pipe or 4-pipe (or electric heat), room fan coil unit with above-ceiling type concealed cabinet for free return or, with optional plenum, for ducted return.

1.02 QUALITY ASSURANCE

Unit shall be tested in accordance with ARI Standard 440 and base unit ETL listed to US and Canadian safety standards. Each coil shall be factory tested for leakage at 450 psig air pressure with coil submerged in water. Insulation and adhesive shall meet NFPA-90A requirements for flame spread and smoke generation. All equipment wiring shall comply with NEC requirements.

1.03 DELIVERY, STORAGE AND HANDLING

Each unit shall be individually packaged from point of manufacture. Unit shall be handled and stored in accordance with the manufacturer's instructions.

Part 2 — Product

2.01 EQUIPMENT

General:

Factory-assembled, horizontal, blow-thru type fan coil for furred-in or ducted installations. Unit shall be complete with water coil(s), fan(s), motor(s), drain pan, and all required wiring, piping, controls and special features.

A. Base Unit:

1. Unit shall include a collar on the unit discharge for supply duct connection. Units shall pass 500 hour salt spray test as described in ASTM B-117. NO filter installed in base unit.

2. The drain pan shall be constructed of galvanized steel extending the entire length and width of the coil(s) and shall be pitched for drainage. The drain connection shall be ¾" FPT.

B. Optional Return Air Plenum

Base unit with factory-installed plenum section and 1-in. fiberglass throwaway filter. The plenum shall be bottom or rear air return, shall enclose the fan/motor assemblies, and shall be lined with ½-in. fiberglass Tuf-Skin insulation. Unit shall have a removable panel to provide access to fan/motor assemblies and unit identification label.

C. Fans:

Direct-driven, double-width fan wheels with forward curved blades shall be statically and dynamically balanced. The housing shall be constructed of heavy gauge galvanized steel with die-formed inlet cones. Fan wheels shall be constructed of galvanized steel.

D. Coils:

1. Standard base unit shall be equipped with a 3-row or 4-row coil for installation in a 2 or 4-pipe system.

2. Cooling coil options include a 4 row DX coil with orifice (R-22 only) or TXV (R-22 or R-410A). Hydronic cooling coil options include 3, 4 or 5-row coils and split heating/cooling coils in combinations not exceeding 5 rows.

3. Heating Coils in a 4 pipe system may be 1 or 2 row water or 1.5 to 10 kW depending on unit size and voltage.

4. All coils shall have 3/8-in. copper tubes and aluminum fins spacing; Coil fins are mechanical bonded to tube joints. The copper tubes comply with the ASTM B-75. The fin thickness is 0.0045-in and tube thickness is 0.014-in. All coils are tested with air under water.

5. Unit with electric heat shall have electric resistance heaters mounted on the entering air side of the water coil. Heaters shall include high limit cutout with auto reset and contactor.

6. When fan motor and electric heater are selected at the same voltage and connected to a single power source, a junction box and fuse shall be factory furnished and installed to protect the motor and control circuit.

E. Controls and Safeties:

Unit shall be furnished with an optional 3-speed, 4-position fan switch on a wall plate for field mounting. The fan motor(s) shall be equipped with integral automatic temperature reset for motor protection.

F. Operating Characteristics:

1. A unit with single hydronic coil unit installed in a 2-pipe system shall be capable of providing heating or cooling as determined by the operating mode of the central water supply system.

2. A unit with two hydronic coils installed in a 4-pipe system shall be capable of providing heating and cooling, controlled as determined by field-provided and installed valves and controls.

G. Electrical Requirements:

The unit power supply shall be single phase, 60 Hz. The standard unit is 120V, but 208/240V and 277V options are available.

H. Motor(s):

Fan motors shall be 3-speed; permanent split capacitor type, with sleeve type bearings and factory-sealed oil reservoirs to ensure lubrication.

MODEL NOMENCLATURE

CHA Model Number Nomenclature

Position	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Example	C	H	A	0	6	B	A	R	A	1	A	A	A	M

Model Series
CHA-- Horizontal Direct Drive Unit, Uncased

	Unit Size	Nominal Tons
02 --	200 CFM	0.5
04 --	400 CFM	1.0
06 --	600 CFM	1.5
08 --	800 CFM	2.0
10 --	1000 CFM	2.5
12 --	1200 CFM	3.0

PRIMARY COIL TYPE AND CAPACITY

	Type	Rows	Metering
0 --	None	N/A	N/A
B --	Chilled Water/2-Pipe	3	N/A
C --		4	N/A
D --		5	N/A
J --	DX/R-22	4	Orifice
K --	DX/R-22	4	TXV
P --	DX/R-410A	4	TXV

HEATING COIL

	Type	Rows
A --	None	N/A
1 --	Hot Water	1
2 --		2

	Electric Heat Nominal kW	kW @ 208V
B--	1.5 kW	1.1 kW
C--	2.0 kW	1.5 kW
D--	2.5 kW	1.9 kW
E--	3.0 kW	2.3 kW
F--	4.0 kW	3.0 kW
G--	5.0 kW	3.8 kW
H--	6.0 kW	4.5 kW
J--	8.0 kW	6.0 kW
K--	10.0 kW	7.5 kW

HEATING COIL NOTES:
1. Refer to CH Option Schedule for available combinations.
2. Electric heat controls shall be wired at 240V by factory. Field must switch transformer tap for 208V operation.
3. Maximum of 5 total rows allowed (cooling coil rows plus heating coil rows).
4. Nominal kW is at 240V. 208V heaters are derated from 240V.

CH Electric Heat Schedule

Unit Size	Nominal kW (120V Only)			Nominal kW (208/240V Only)					
	1.5	2.0	2.5	3.0	4.0	5.0	6.0	8.0	10.0
02	X	X	X						
04	X	X	X						
06				X	X	X	X	X	
08				X	X	X	X	X	
10				X	X	X	X	X	
12							X	X	X

Electric heat not available for 277V.

M -- Not Used

DRAIN PAN OPTIONS
A -- Galvanized
B -- Stainless Steel

RETURN AIR OPTION
A -- None - No return air plenum
B -- Bottom Return Only
R -- Rear Return Only

CONTROLS
A -- Junction Box Only
B -- 24V Fan Control
C -- 24V Fan Control w/ Svc Disconnect Switch
D -- Svc Disconnect Switch Only
E -- 24V Control + Timer
F -- 24V Control + Timer + Svc Disconnect Switch

CONTROLS NOTES:
1. Svc disconnect switch is for non-electric heat units only.

MOTOR POWER SUPPLY

1 --	120/1/60	Std. Static
2 --	208/240/1/60	
3 --	277/1/60	
4 --	120/1/60	High Static
5 --	208/240/1/60	

MOTOR POWER SUPPLY NOTES:
1. Unit shall be wired for 240V at factory. Field must switch transformer tap (if provided) to 208V.

FUTURE USE
A -- Not Used

COIL CONFIGURATION

	Heat Position	Connection Hand
A --	Pre-Heat	Right Hand (Cooling & Heating Coil) or N/A
L --		Left Hand (Cooling & Heating Coil)
M --		Opp Cnx- Right Hand Cooling
N --		Opp Cnx- Left Hand Cooling
R --	Re-Heat	Right Hand (Cooling & Heating Coil)
S --		Left Hand (Cooling & Heating Coil)
T --		Opp Cnx- Right Hand Cooling
U --		Opp Cnx- Left Hand Cooling

COIL CONFIGURATION NOTES:
1. Water heating coil cannot be in reheat when cooling is DX.
2. Electric heat is available only in Pre-Heat.
3. "Left Hand" and "Right Hand" defined as looking at the filters in the direction of airflow.

CH Series
COIL OPTION SCHEDULE

CH Coil Option Schedule

Configuration	Unit Sizes	Cooling Coil/2-Pipe			HW Heating Coil (4-Pipe)			Electric Heat - Nominal kW								
								(120V Only)			(208/240V Only)					
		3-Row	4-Row	5-Row	None	1-Row	2-Row	1.5	2.0	2.5	3.0	4.0	5.0	6.0	8.0	10.0
CHW/HW	02-12	X				X										
		X					X									
			X			X										
		X			X											
			X		X											
				X	X											
DX/HW	02-12		X		X											
			X			X										
CHW/EH	02-04	X			X			X	X	X						
			X		X			X	X	X						
				X	X			X	X	X						
	06-10	X			X						X	X	X	X	X	
			X		X						X	X	X	X	X	
				X	X						X	X	X	X	X	
	12	X			X									X	X	X
			X		X									X	X	X
				X	X									X	X	X
DX/EH	02-04		X		X			X	X	X						
	06-10		X		X						X	X	X	X	X	
	12		X		X									X	X	X

Notes:

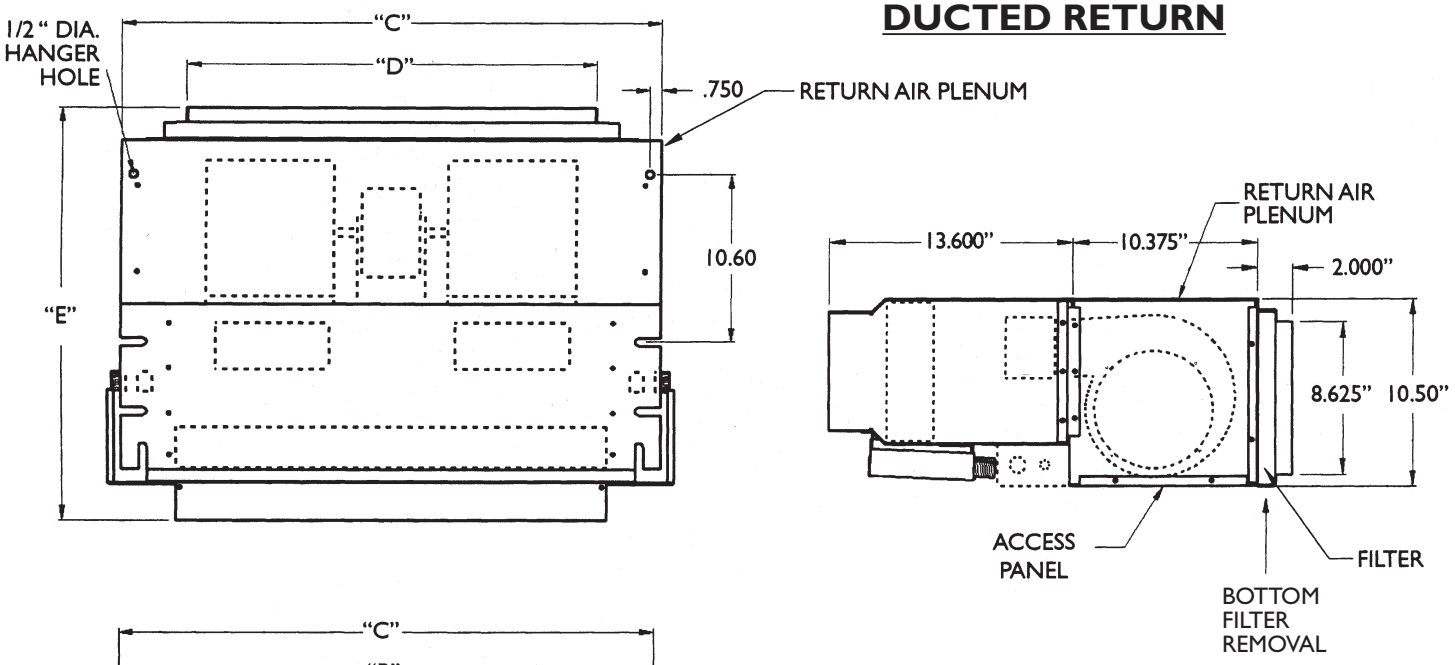
1. Legend: CHW Chilled Water
   DX Direct Expansion (Refrigerant)
   HW Hot Water
   EH Electric Heat
2. Option Schedule indicates available combinations. Refer to nomenclature to specify unit for order.
3. Electric heat not available for 277V.
4. Electric heat - select one option.
5. Coil options: 3 row minimum coil required; 5 rows total maximum; 4-pipe unit configurations are "split" style coils with both coils in same finblock and are available in 1/3, 1/4, and 2/3 arrangements, preheat or reheat. DX coil option is preheat only with separate HW coil module attached at blower discharge.

CH Series

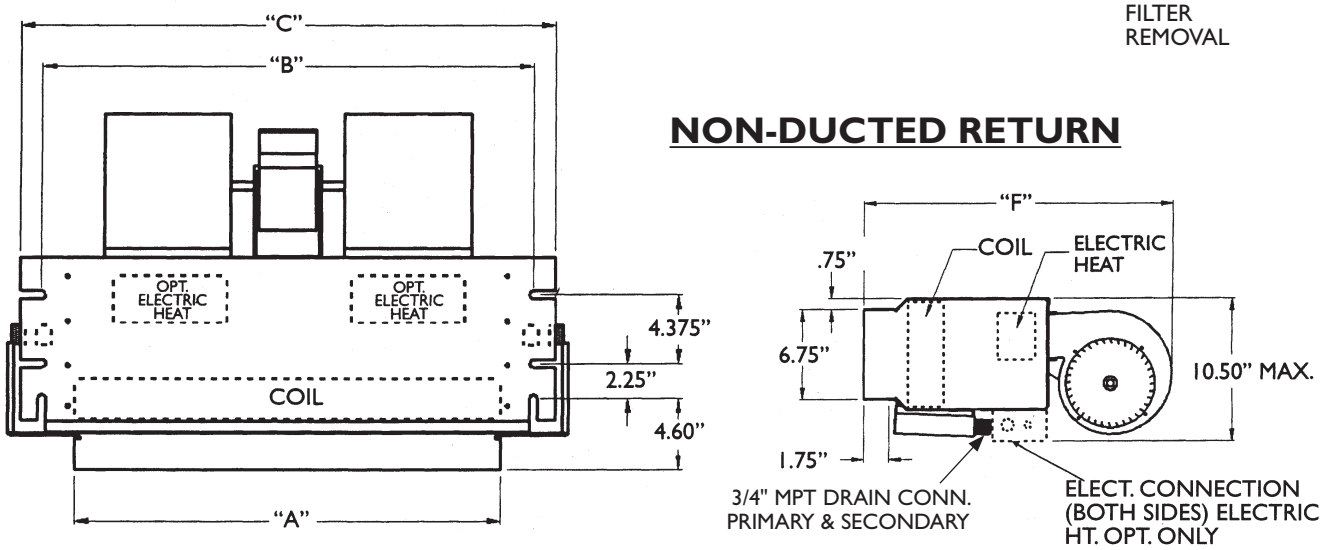
MAGIC AIRE Horizontal Fan Coil Units are engineered for permanent, ceiling mounted installations in the return airspace. An insulated return air plenum is available for ducted return applications and is easily field converted for bottom or rear entry.

- Units are available in various sizes from 200 to 1200 CFM, with or without factory installed electric heaters.
- All Magic Aire fan coil units are designed for easy access and service of heaters, controls and motors. Electrical requirements are 120V/1 Phase, 208/240V/1 Phase, 277V/1 Phase, 60 Hz.

DUCTED RETURN



NON-DUCTED RETURN



CHA Unit Size	Discharge Width "A"	Hanger Width "B"	Overall Width "C"	Return Plenum "D"	Overall Length "E" - Ducted Return (With Plenum) DX w/EH or CHW w/HW/EH	Overall Length "E" - Ducted Return (With Plenum) DX w/HW (Note 2)	Overall Length "F" - Non-Ducted Return (Without Plenum) DX w/EH or CHW w/HW/EH	Overall Length "F" - Non-Ducted Return (Without Plenum) DX w/HW (Note 2)	Filter Size	Cooling Coil Conn. (O.D)	Heating Coil Conn. (O.D.)	Unit Weight (lbs)	Plenum Weight (lbs)
02	15.1	22.3	26.5	13.8	26.0 (DX N/A)	N/A	22.6	26.1	10X15X1	5/8	5/8	42	13
04	18.1	22.3	26.5	16.8	26.0 (DX N/A)	N/A	22.6	26.1	10X18X1	5/8	5/8	45	15
06	27.1	31.3	35.5	25.8	26.0	29.5	22.6	26.1	10X27X1	5/8	5/8	59	20
08	36.1	40.3	44.5	34.8	26.0	29.5	22.6	26.1	10X36X1	5/8	5/8	67	25
10	45.1	49.3	53.5	43.8	26.0	29.5	22.6	26.1	10X45X1	5/8	5/8	81	30
12	54.1	58.3	62.5	52.8	26.0	29.5	22.6	26.1	10X54X1	5/8	5/8	115	35

Notes:
1. Dimensions are in inches.
2. For DX with HW: Heating coil module is added at blower discharge - note overall length difference.

CHA - CEA Electrical Data - 120V

UNIT SIZE	MOTOR HP	MOTOR FLA	TOTAL ELECTRIC HT (KW)	ELECTRIC HEAT AMPS	UNIT FLA	MINIMUM CIRCUIT AMPACITY	Maximum Overcurrent PD (A)	MIN WIRE SIZE AWG*1
Voltage		120	120	120	120	120	120	
02 04	1/15 std	0.75	NONE	NONE	0.8	0.9	15	14
			1.5	12.5	13.3	16.6	20	12
			2	16.7	17.4	21.8	25	10
			2.5	20.8	21.6	27.0	30	10
	1/10 hi-static	1.1	NONE	NONE	1.1	1.4	15	14
			1.5	12.5	13.6	17.0	20	12
			2	16.7	17.8	22.2	25	10
			2.5	20.8	21.9	27.4	30	10
06	1/10 std	1.4	NONE	NONE	1.4	1.8	15	14
	1/8 hi-static	1.6	NONE	NONE	1.6	2.0	15	14
08 10	1/8 std	1.8	NONE	NONE	1.8	2.3	15	14
	1/4 hi-static	3.1	NONE	NONE	3.1	3.9	15	14
12*2	1/10 x 2 std	1.4	NONE	NONE	2.8	3.5	15	14
	1/8 x 2 hi-static	1.6	NONE	NONE	3.8	4.8	15	14

Notes:

*1. Minimum Wire Gauge is based upon 75C wire at the unit. On 208/240V units the size is based upon the 240V Ratings.

2. Size 12 units have two fan motors.

CHA - CEA Electrical Data 208/240V

UNIT SIZE	MOTOR HP	MOTOR FLA	TOTAL ELECTRIC HT (KW)		ELECTRIC HEAT AMPS		UNIT FLA		MINIMUM CIRCUIT AMPACITY		Maximum Overcurrent PD (A)		MIN WIRE SIZE AWG*[1]
Voltage		240-208V	240	208	240	208	240	208	240	208	240	208	
02	1/10 hi-static	0.6	NONE		NONE		0.6	0.6	0.8	0.8	15	15	14
04	1/15 std	0.5	NONE		NONE		0.5	0.5	0.6	0.6	15	15	14
			3	2.25	12.5	10.8	13.0	11.3	16.3	14.2	20	15	12
			4	3.00	16.7	14.4	17.2	14.9	21.5	18.7	25	20	10
			5	3.76	20.8	18.1	21.3	18.6	26.7	23.2	30	25	10
	1/10 hi-static	0.6	NONE		NONE		0.6	0.6	0.8	0.8	15	15	14
			3	2.25	12.5	10.8	13.1	11.4	16.4	14.3	20	15	12
			4	3.00	16.7	14.4	17.3	15.0	21.6	18.8	25	20	10
			5	3.76	20.8	18.1	21.4	18.7	26.8	23.3	30	25	10
06	1/10 std	0.6	NONE		NONE		0.6	0.6	0.8	0.8	15	15	14
			3	2.25	12.5	10.8	13.1	11.4	16.4	14.3	20	15	12
			4	3.00	16.7	14.4	17.3	15.0	21.6	18.8	25	20	10
			5	3.76	20.8	18.1	21.4	18.7	26.8	23.3	30	25	10
			6	4.51	25.0	21.7	25.6	22.3	32.0	27.8	35	30	8
			8	6.01	33.3	28.9	33.9	29.5	42.4	36.9	45	40	8
	1/8 hi-static	0.77	NONE		NONE		0.8	0.8	1.0	1.0	15	15	14
			3	2.25	12.5	10.8	13.3	11.6	16.6	14.5	20	15	12
			4	3.00	16.7	14.4	17.4	15.2	21.8	19.0	25	20	10
			5	3.76	20.8	18.1	21.6	18.8	27.0	23.5	30	25	10
			6	4.51	25.0	21.7	25.8	22.4	32.2	28.0	35	30	8
			8	6.01	33.3	28.9	34.1	29.7	42.6	37.1	45	40	8
08 10	1/8 std	0.9	NONE		NONE		0.9	0.9	1.1	1.1	15	15	14
			3	2.25	12.5	10.8	13.4	11.7	16.8	14.7	20	15	12
			4	3.00	16.7	14.4	17.6	15.3	22.0	19.2	25	20	10
			5	3.76	20.8	18.1	21.7	19.0	27.2	23.7	30	25	10
			6	4.51	25.0	21.7	25.9	22.6	32.4	28.2	35	30	8
			8	6.01	33.3	28.9	34.2	29.8	42.8	37.2	45	40	8
			10	7.51	41.7	36.1	42.6	37.0	53.2	46.3	60	50	6
	1/4 hi-static	1.6	NONE		NONE		1.6	1.6	2.0	2.0	15	15	14
			3	2.25	12.5	10.8	14.1	12.4	17.6	15.5	20	20	12
			4	3.00	16.7	14.4	18.3	16.0	22.8	20.1	25	25	10
			5	3.76	20.8	18.1	22.4	19.7	28.0	24.6	30	25	10
			6	4.51	25.0	21.7	26.6	23.3	33.3	29.1	35	30	8
			8	6.01	33.3	28.9	34.9	30.5	43.7	38.1	45	40	8
			10	7.51	41.7	36.1	43.3	37.7	54.1	47.1	60	50	6
12[*2]	1/10 x 2 std	0.6	NONE		NONE		1.2	1.2	1.5	1.5	15	15	14
			6	4.51	25.0	21.7	26.2	22.9	32.8	28.6	35	30	8
			8	6.01	33.3	28.9	34.5	30.1	43.2	37.6	45	40	8
			10	7.51	41.7	36.1	42.9	37.3	53.6	46.6	60	50	6
	1/10 x 2 hi-static	0.77	NONE		NONE		1.5	1.5	1.9	1.9	15	15	14
			6	4.51	25.0	21.7	26.5	23.2	33.2	29.0	35	30	8
			8	6.01	33.3	28.9	34.9	30.4	43.6	38.0	45	40	8
			10	7.51	41.7	36.1	43.2	37.7	54.0	47.1	60	50	6

Notes:

*1. Minimum Wire Gauge is based upon 75C wire at the unit. On 208/240V units the size is based upon the 240V Ratings.

2. Size 12 units have two fan motors.

CHA - CEA Electrical Data 277V

UNIT SIZE	MOTOR HP	MOTOR FLA	TOTAL ELECTRIC HT (KW)	ELECTRIC HEAT AMPS	UNIT FLA	MINIMUM CIRCUIT AMPACITY	Maximum Overcurrent PD (A)	MIN WIRE SIZE AWG*1
Voltage		277	277	277	277	277	277	
02 04	1/15 std	0.4	NONE	NONE	0.4	0.5	15	14
06	1/10 std	0.6	NONE	NONE	0.6	0.8	15	14
08 10	1/8 std	0.83	NONE	NONE	0.8	1.0	15	14
12*2	1/10 x 2 std	0.6	NONE	NONE	1.2	1.5	15	14

Notes:

*1. Minimum Wire Gauge is based upon 75C wire at the unit. On 208/240V units the size is based upon the 240V Ratings.

2. Size 12 units have two fan motors.

CHA and CEA Blower Performance
Standard Static Unit - Dry Coil

Unit Size	ESP	High Speed Airflow (CFM)		
		3-ROW	4-ROW	5-ROW
02	0.10	265	255	240
	0.15	235	225	210
	0.20	210	190	180
	0.25	165	155	150
	0.30	125	120	110
04	0.10	410	385	370
	0.15	380	360	335
	0.20	350	325	300
	0.25	310	280	260
	0.30	260	235	220
06	0.10	595	565	530
	0.15	550	530	480
	0.20	500	460	425
	0.25	430	395	355
	0.30	350	320	300
08	0.10	840	800	750
	0.15	785	745	700
	0.20	730	680	630
	0.25	665	610	565
	0.30	575	535	500
10	0.10	905	850	800
	0.15	840	785	735
	0.20	750	705	660
	0.25	675	635	600
	0.30	580	550	510
12	0.10	1190	1130	1060
	0.15	1100	1060	960
	0.20	1000	920	850
	0.25	860	790	710
	0.30	700	640	600

BLOWER CORRECTION FACTOR
(Standard Static Units)

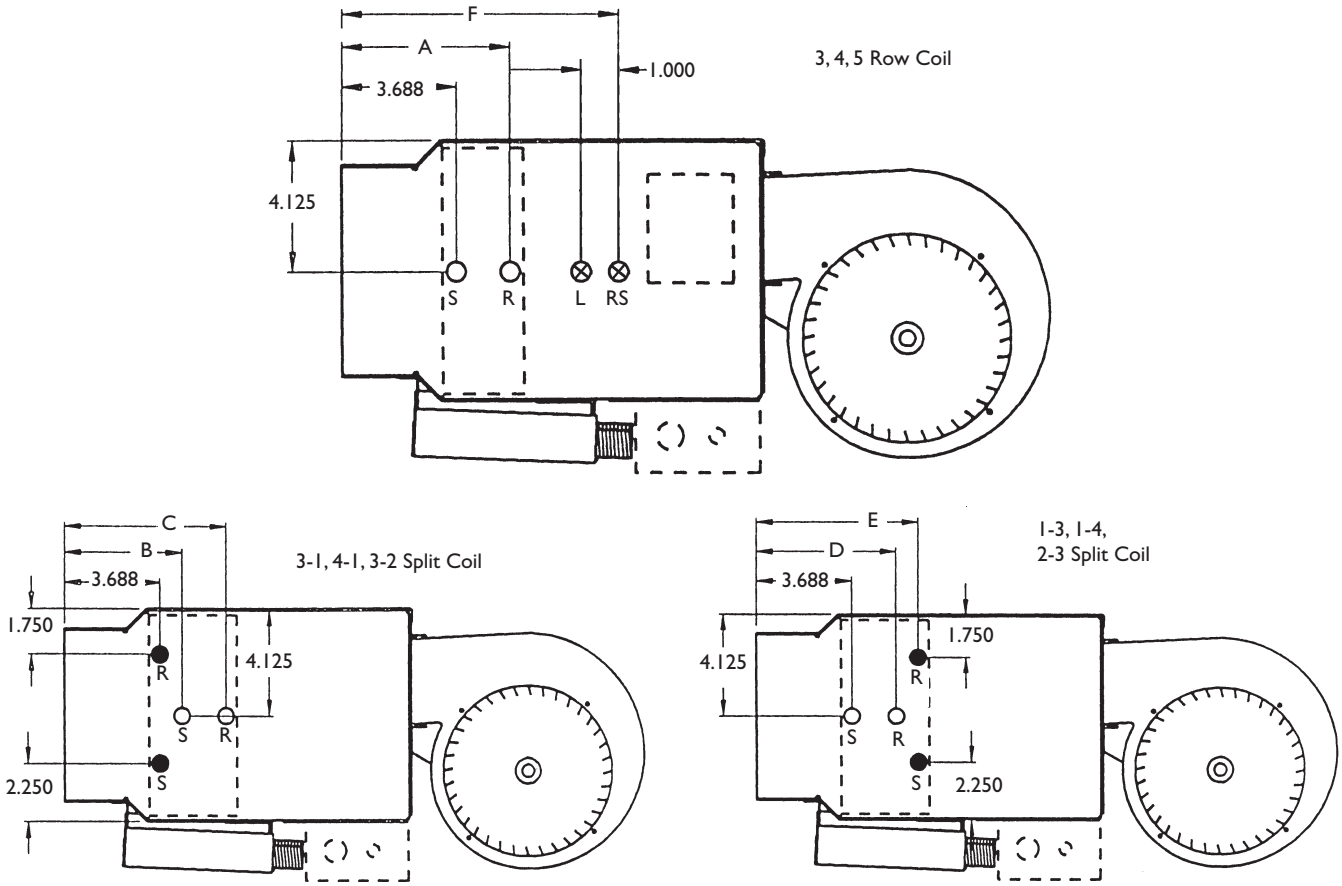
Unit Size	Fan Speed		
	High	Med	Low
02	1.00	0.90	0.80
04	1.00	0.90	0.80
06	1.00	0.95	0.91
08	1.00	0.95	0.91
10	1.00	0.90	0.80
12	1.00	0.95	0.91

For airflow data at medium and low speed, multiply standard static airflow by correction factor.

CHA and CEA Blower Performance High Static Unit - Dry Coil				
Unit Size	ESP	High Speed Airflow (CFM)		
		3-ROW	4-ROW	5-ROW
02	0.20	368	346	328
	0.25	352	331	314
	0.30	335	316	300
	0.35	319	300	285
	0.40	301	281	270
	0.45	283	267	254
	0.50	265	250	238
	0.55	245	232	222
	0.60	225	213	205
04	0.20	519	486	449
	0.25	500	468	432
	0.30	481	449	413
	0.35	460	429	394
	0.40	438	408	374
	0.45	415	386	353
	0.50	391	362	330
	0.55	364	337	306
	0.60	334	309	280
06	0.20	747	701	663
	0.25	719	675	638
	0.30	691	647	611
	0.35	661	619	584
	0.40	629	589	556
	0.45	596	557	526
	0.50	562	524	494
	0.55	525	489	461
	0.60	485	452	425
08	0.20	1032	974	914
	0.25	995	940	880
	0.30	957	904	846
	0.35	917	866	810
	0.40	875	827	772
	0.45	832	786	733
	0.50	786	743	692
	0.55	737	698	649
	0.60	686	649	603
10	0.20	1236	1162	1103
	0.25	1193	1121	1065
	0.30	1148	1080	1026
	0.35	1102	1037	985
	0.40	1054	993	943
	0.45	1005	947	900
	0.50	953	899	855
	0.55	900	849	808
	0.60	844	797	759
12	Double Size 06 Performance			

CH*-A COIL CONNECTION DIMENSIONS

Left Hand Shown
(Right Hand is Mirror Image)

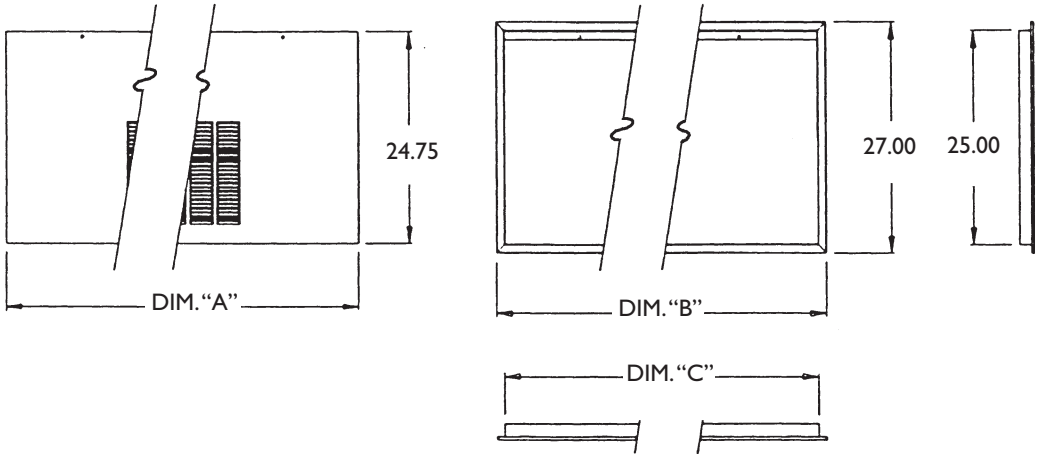


S – SUPPLY
R – RETURN
L – LIQUID (DX)
RS – REFRIGERANT SUCTION (DX)

○ – CHILLED WATER
● – HOT WATER
⊗ – DX

CHA UNIT SIZE	COIL	A	B	C	D	E	F
02 THROUGH 12	3 ROW	5.438					
	4 ROW	6.313					10.813
	5 ROW	7.188					
	3-1 ROW		4.500	6.250			
	4-1 ROW		4.500	7.125			
	3-2 ROW		5.375	7.125			
	1-3 ROW				5.438	6.313	
	1-4 ROW				6.313	7.188	
	2-3 ROW				5.438	7.188	

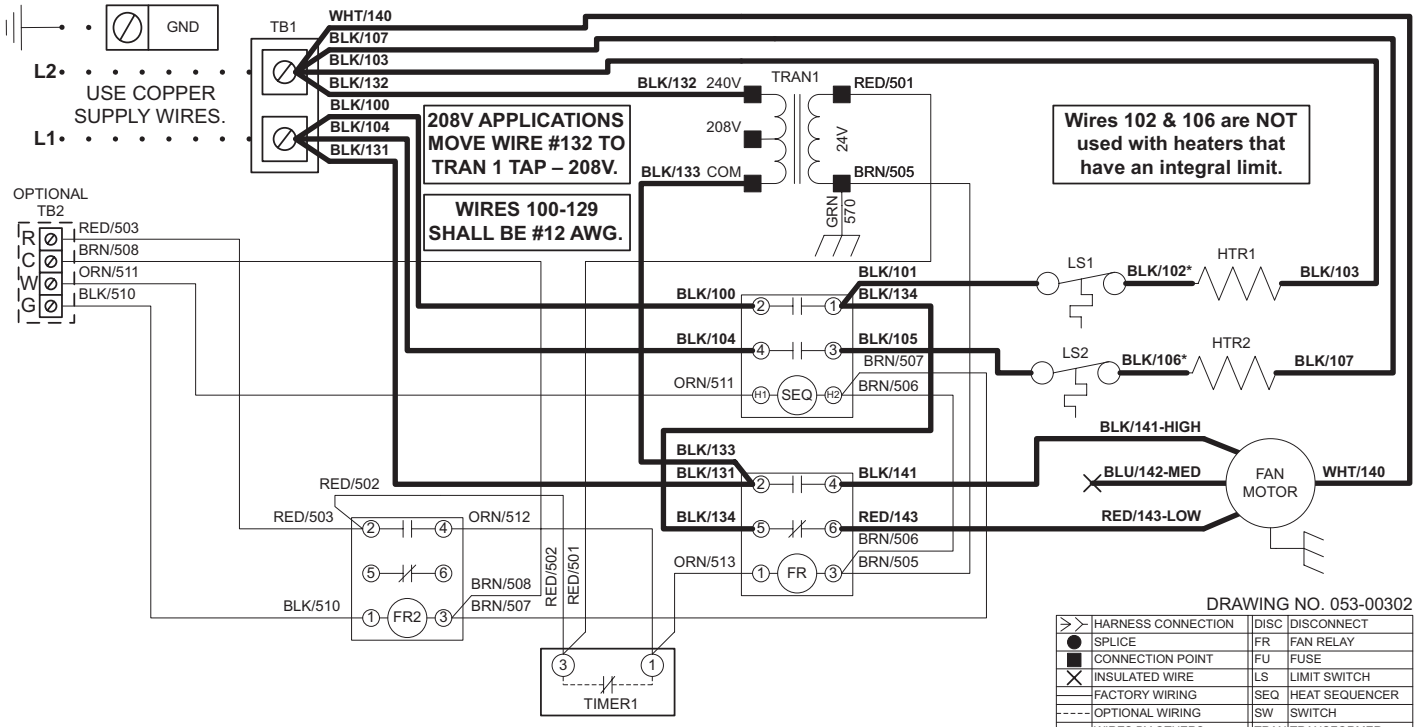
CH*-A
ACCESS PANELS



UNIT SIZE	DIM "A"	DIM "B"	DIM "C"	RECOMMENDED CEILING CUT OUT SIZE (± .125")	FILTER SIZE (LOUVERED PANELS ONLY)
CHA02,04	28.75	31.00	29.00	25.15 x 29.15	1-14 x 20
CHA06,08	45.75	48.00	46.00	25.15 x 46.15	1-14 x 20
CHA10	56.75	59.00	57.00	25.15 x 57.15	2-14 x 20
CHA12	65.75	68.00	66.00	25.15 x 66.15	2-14 x 20

Note: Access Panels ordered separately – refer to Price Sheets.

24V Fan Control with Timer and Electric Heat



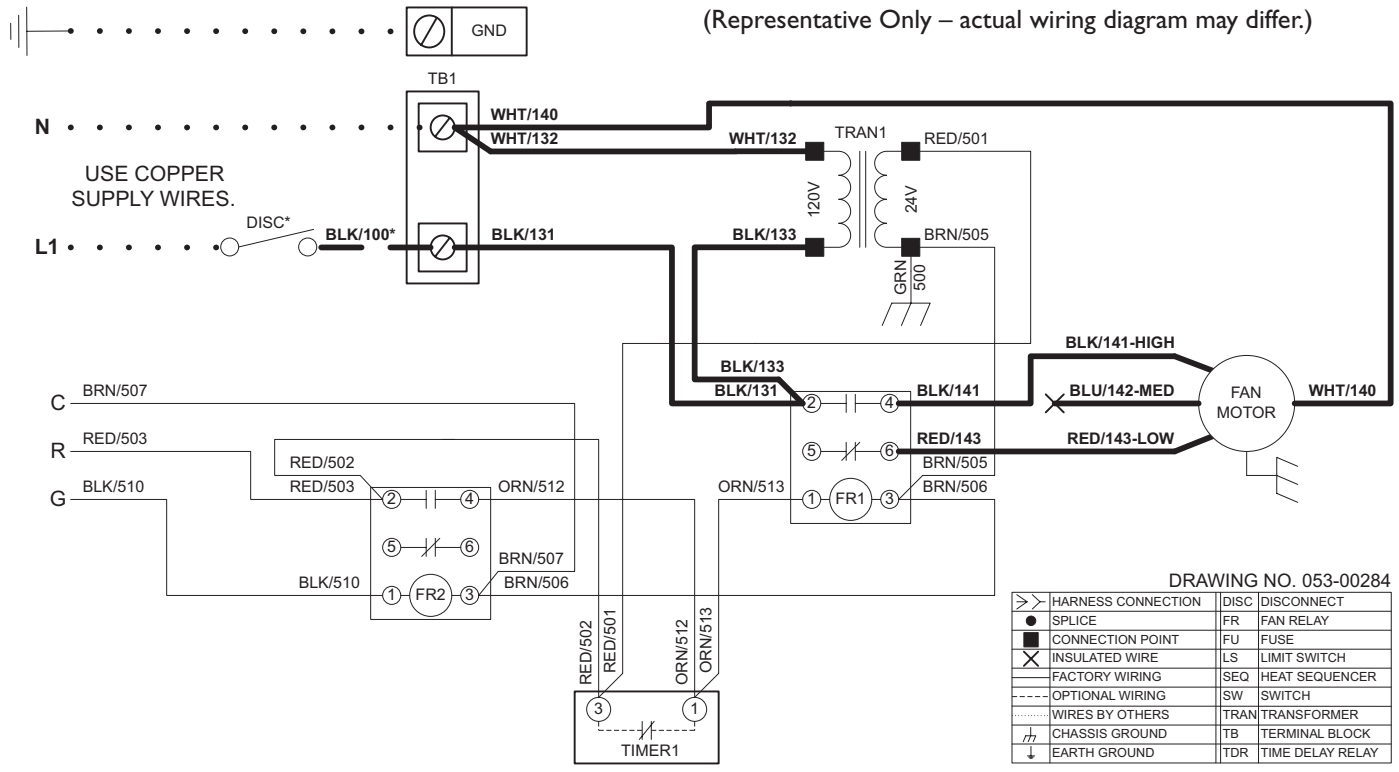
DRAWING NO. 053-00302

>>	HARNESS CONNECTION	DISC	DISCONNECT
●	SPLICE	FR	FAN RELAY
■	CONNECTION POINT	FU	FUSE
X	INSULATED WIRE	LS	LIMIT SWITCH
———	FACTORY WIRING	SEQ	HEAT SEQUENCER
- - - -	OPTIONAL WIRING	SW	SWITCH
.....	WIRES BY OTHERS	TRAN	TRANSFORMER
⏚	CHASSIS GROUND	TB	TERMINAL BLOCK
↓	EARTH GROUND	TDR	TIME DELAY RELAY

(Representative Only – actual wiring diagram may differ.)

24V Fan Control with Timer and Optional Service Disconnect Switch

(Representative Only – actual wiring diagram may differ.)

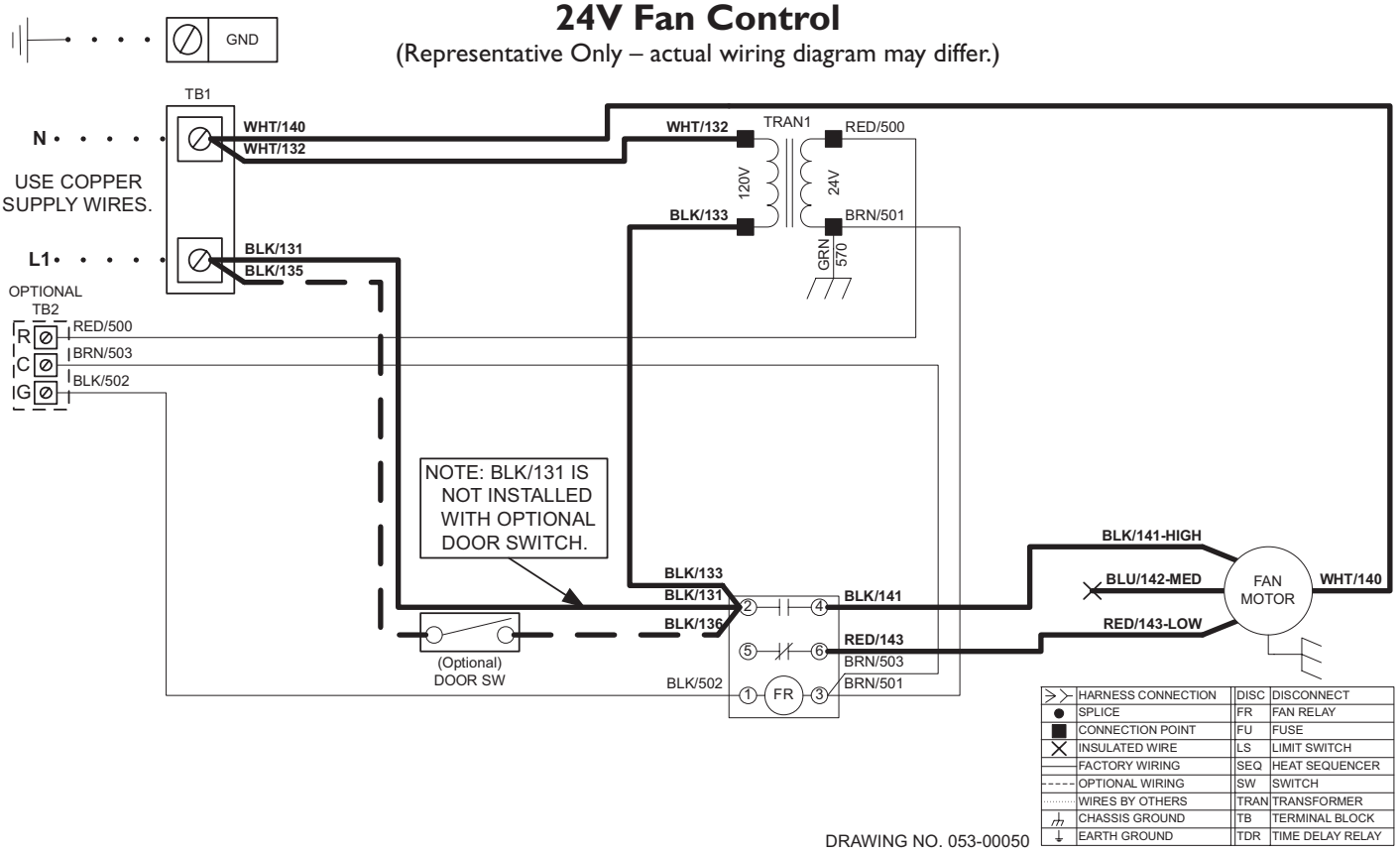


DRAWING NO. 053-00284

>>	HARNESS CONNECTION	DISC	DISCONNECT
●	SPLICE	FR	FAN RELAY
■	CONNECTION POINT	FU	FUSE
X	INSULATED WIRE	LS	LIMIT SWITCH
———	FACTORY WIRING	SEQ	HEAT SEQUENCER
- - - -	OPTIONAL WIRING	SW	SWITCH
.....	WIRES BY OTHERS	TRAN	TRANSFORMER
⏚	CHASSIS GROUND	TB	TERMINAL BLOCK
↓	EARTH GROUND	TDR	TIME DELAY RELAY

24V Fan Control

(Representative Only – actual wiring diagram may differ.)

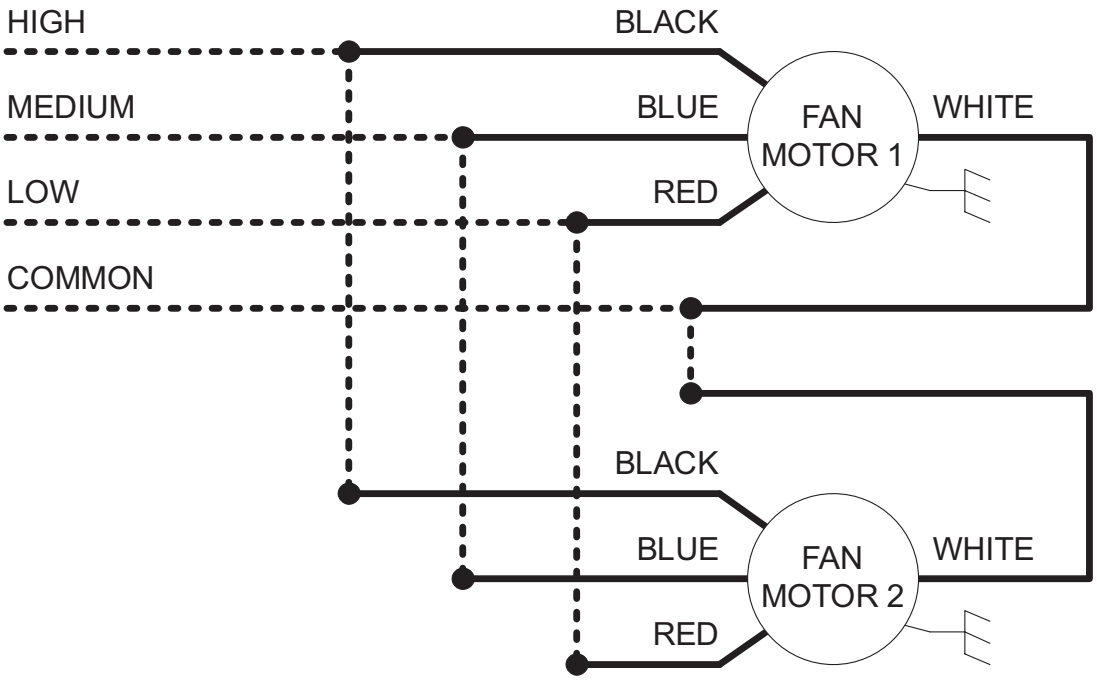


><	HARNESS CONNECTION	DISC	DISCONNECT
●	SPLICE	FR	FAN RELAY
■	CONNECTION POINT	FU	FUSE
X	INSULATED WIRE	LS	LIMIT SWITCH
	FACTORY WIRING	SEQ	HEAT SEQUENCER
- - - - -	OPTIONAL WIRING	SW	SWITCH
.....	WIRES BY OTHERS	TRAN	TRANSFORMER
⏚	CHASSIS GROUND	TB	TERMINAL BLOCK
↓	EARTH GROUND	TDR	TIME DELAY RELAY

DRAWING NO. 053-00050

Junction Box Only – Similar for Single Fan Motor

(Representative Only – actual wiring diagram may differ.)



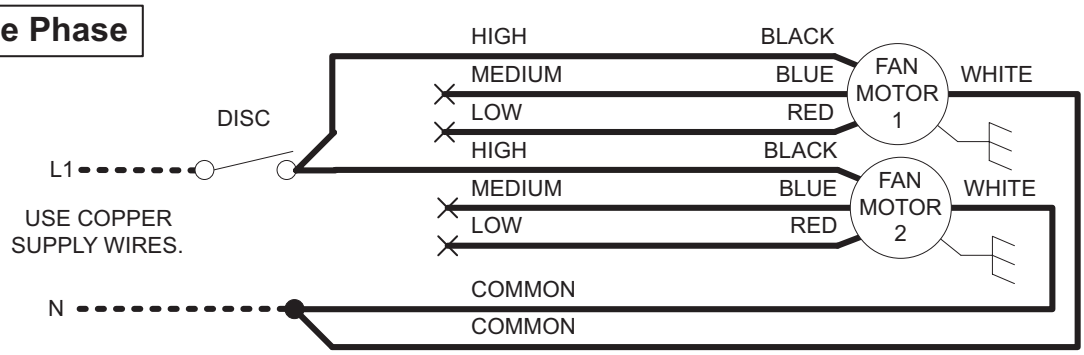
><	HARNESS CONNECTION
●	SPLICE
■	CONNECTION POINT
X	INSULATED WIRE
	FACTORY WIRING
.....	OPTIONAL WIRING
- - -	WIRES BY OTHERS
⏚	CHASSIS GROUND
↓	EARTH GROUND
DISC	DISCONNECT
FR	FAN RELAY
FU	FUSE
LS	LIMIT SWITCH
SEQ	HEAT SEQUENCER
SW	SWITCH
TRAN	TRANSFORMER
TB	TERMINAL BLOCK
TDR	TIME DELAY RELAY

DRAWING NO. 053-00162

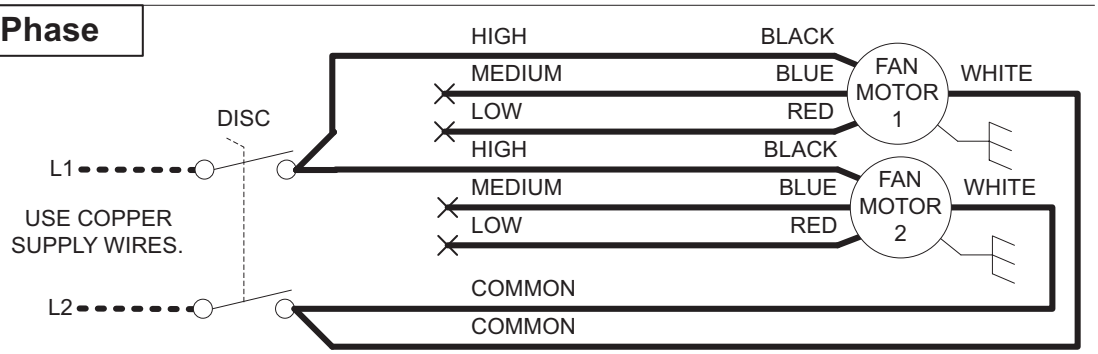
Service Disconnect Switch Only – Similar for Single Fan Motor

(Representative Only – actual wiring diagram may differ.)

115 or 265 V, Single Phase



208-230V, Single Phase



HARNESS CONNECTION		OPTIONAL WIRING		DISC	DISCONNECT	SW	SWITCH
SPLICE		WIRES BY OTHERS		FR	FAN RELAY	TRAN	TRANSFORMER
CONNECTION POINT		CHASSIS GROUND		FU	FUSE	TB	TERMINAL BLOCK
INSULATED WIRE		EARTH GROUND		LS	LIMIT SWITCH	TDR	TIME DELAY RELAY
FACTORY WIRING				SEQ	HEAT SEQUENCER		

DRAWING NO. 053-00294