



10 Fan DryCooler

Parts Manual



10 Fan Drycooler (50Hz & 60Hz)

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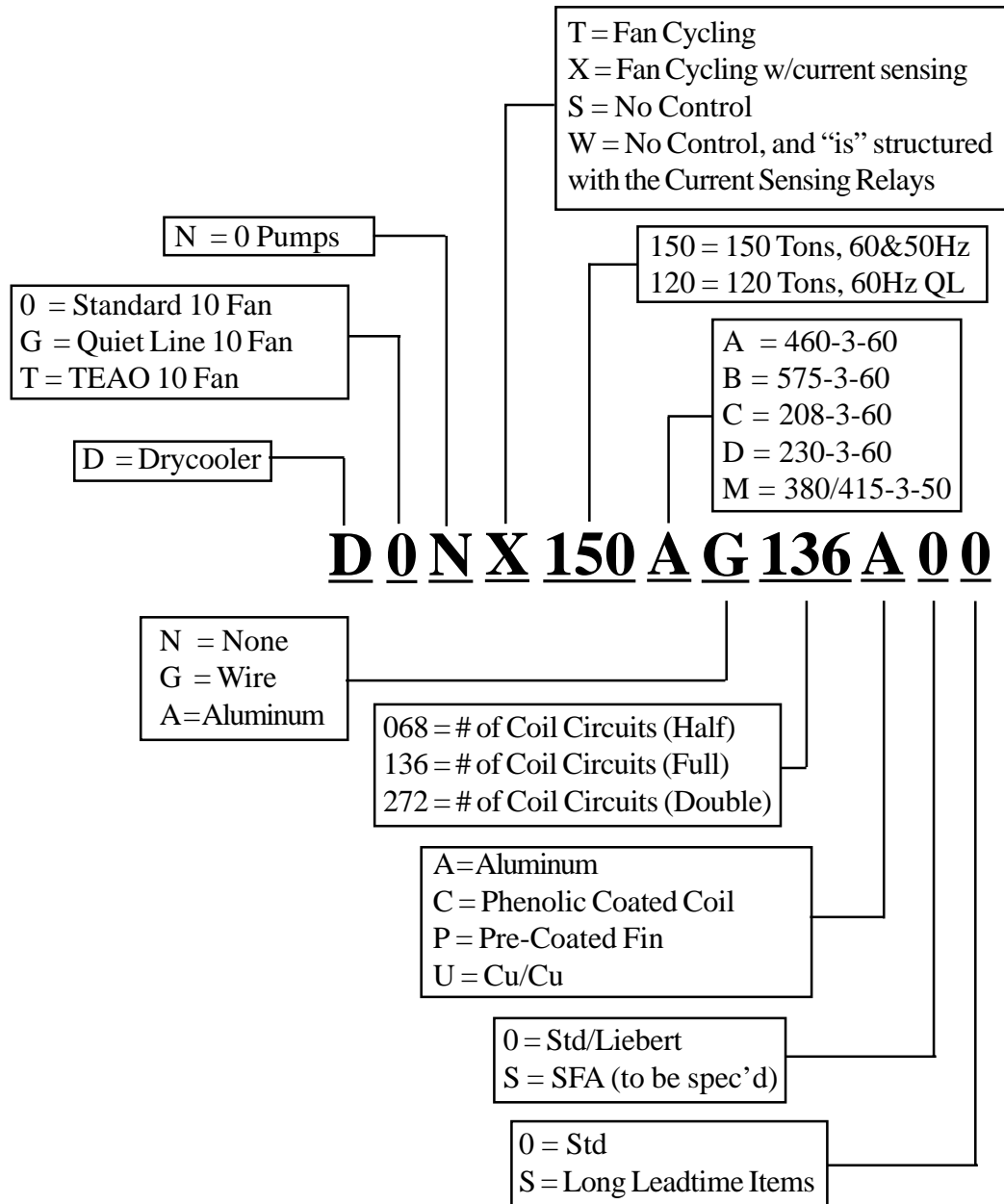
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10 Fan Drycooler 50Hz & 60Hz



**NO FIELD COIL REPLACEMENTS ARE
AVAILABLE FOR THESE SYSTEMS**

10 Fan Drycooler 50Hz and 60Hz

Product Description

The **10 Fan Drycooler** is an alternative drycooler for large site installations. By using one or more 10 fan drycoolers, the installation costs (electrical & piping) are much less than that of multiple standard drycoolers. The unit is available with three different coil circuits: 068(Half), 136(Full) and 272(Double). Each circuit is designed for a range of specific flow rates. Wire guards constructed of coated wire, in 1"x4" pattern, are mounted to protect the exposed vertical coil surface. Each unit is supplied with a locking disconnect switch and fan cycling control. Current sensing relays are provided with customer connection to monitor change in motor current to detect possible motor/fan failure. Units are available in 208, 230, 460 and 575 Volts 60Hz, and 380/415 Volts 50 Hz.

Options

Quiet-Line Drycooler includes the same features as the standard 10 fan drycooler, except that it has 8 pole motors in lieu of 6 pole motors for lower sound levels and reduced capacity. Not available for 50Hz models.

575 volts-3 phase-60Hz unit is designed for 575 volts 3 phase – 60Hz applications. Note: extended leadtime is required, consult factory for details.

Aluminum Grilles are used for unit aesthetic and general mechanical security purposes. The aluminum grilles extend from the base of the unit and protect the exposed coil sides.

Pre-coated fin stock provides pre-coated coil fins for added protection in corrosive environments. NOTE: extended leadtime is required, consult factory for details.

Phenolic coated coil provides a baked phenolic coated coil for added protection in corrosive environments. NOTE: extended leadtime is required, consult factory for details.

Copper Fin/Copper Tube Coil provides coil constructed of copper fins and copper tubes. NOTE: extended leadtime is required, consult factory for details.

TEAO motors includes totally enclosed motors in lieu of standard motors. For use in industrial applications. Not available for Quiet-Line, 575V models. NOTE: extended leadtime is required, consult factory for details.

Ancillary Items (any one of the following may be required for the site, please consult with applications engineering to determine availability of components that we can offer).

Tanks for expansion solutions

Pump

Pump Control Panel

Flow Switch

Shut-off valves

10 Fan DryCooler

1.0 FAN ASSEMBLY

STANDARD

Part Description	Part #	Volts	1820/150	1480/120	Figure #	RSP
FAN MOTOR, 1 HP, 855 RPM	167542P1	200-230-460/3/60		10	1-2	C
FAN MOTOR, 1 HP, 855 RPM	167543P1	575/3/60		10	1-2	C
FAN MOTOR, 2 HP, 1140 RPM	167540P1	575/3/60	10		1-2	C
FAN MOTOR, 2 HP, 1140 RPM	167541P1	200-230-460/3/60	10		1-2	C
MOTOR MOUNT	167536P1	ALL	10	10	1-3	
PROP FAN BLADE 30/30-4	167539P1	ALL	10	10	1-1	C

2.0 GUARDS

STANDARD

Part Description	Part #	Volts	1820/150	1480/120	Figure #	RSP
FAN GUARD	167537P1	ALL	10	10	2-4	

OPTIONAL

Part Description	Part #	Volts	1820/150	1480/120	Figure #	RSP
GRILLE ALUMINUM KIT	167570P1	ALL	1	1		
GUARDS WIRE KIT	167569P1	ALL	1	1	3-2	

THESE KITS ARE FOR THE COMPLETE UNIT

3.0 ELECTRICAL

STANDARD

Part Description	Part #	Volts	1820/150	1480/120	Figure #	RSP
ADDITIONAL STAGE CONTROL	141810P3	ALL	2	2	4-10	C
CONTACTOR, 25 AMP, 24VAC, HOLDING COIL	E-0110	ALL	3	3	4-9	B
CONTACTOR, 30 AMP, 24VAC, HOLDING COIL	E-009F	230/3/60	3		4-9	B
CONTACTOR, 40 AMP, 24VAC, HOLDING COIL	E-0100	208/3/60	3		4-9	B
FIRST STAGE TEMP CONTROL	141810P6	ALL	1	1	4-16	C
FUSE, 0.75 AMP, 500V	167561P1	575/3/60	2	2	4-12	B
FUSE, 0.8 AMP, 500V	167557P1	400/460/3/50/60	2	2	4-12	B
FUSE, 1 AMP, 500V	167558P1	400/3/50	2		4-12	B
FUSE, 1.4 AMP, 250V	167534P1	208-230/3/60	2	2	4-12	B
FUSE, 15 AMP, 600V	167559P1	460/575/3/60	3	3	4-4	B
FUSE, 20 AMP, 600V	167560P1	400/460/575/3/50/60	3	3	4-4	B
FUSE, 25 AMP, 600V	167555P1	400/460/3/50/60	3		4-4	B
FUSE, 30 AMP, 250V	167563P1	208-230/3/60		3	4-4	B
FUSE, 40 AMP, 250V	167552P1	208/3/60	3	3	4-4	B
FUSE, 5 AMP, 250V	167554P1	208-230/400/460/3/50/60	1	1	4-5	B
FUSE, 50 AMP, 250V	167535P1	230/3/60	3		4-4	B
FUSE, 6.25 AMP, 250V	167562P1	575/3/60	1	1	4-5	B
FUSE, 60 AMP, 250V	167553P1	208/3/60	3		4-4	B
FUSEBLOCK 250V 1P 30 AMP	167547P1	ALL	1	1	4-15	
FUSEBLOCK 250V 2P 30 AMP	167546P1	208-230/3/60	1	1	4-14	
FUSEBLOCK 250V 3P 30 AMP	167549P1	208-230/3/60		1	4-13	
FUSEBLOCK 250V 3P 60 AMP	167545P1	208-230/3/60	2	1	4-13	
FUSEBLOCK 600V 1P 30AMP	167556P1	400/460/575/3/50/60	2	2	4-15	
FUSEBLOCK 600V 3P 30AMP	167548P1	400/460/575/3/50/60	2	2	4-13	
GROUND LUG	167566P1	ALL	1	1	4-3	
MAIN TERMINAL BLOCK	E13-0040	ALL	1	1	4-11	
TEMPERATURE DISPLAY	141810P4	ALL	1	1	4-17	B
TOGGLE SWITCH 6 AMP 250V	167567P1	ALL	1	1	4-7	
TRANSFORMER, 100 VA, 600 TO 24 V	167533P1	575/3/60	1	1	4-6	B
TRANSFORMER, 75 VA, 208/230/400 TO 24 V	167532P1	208-230/400/3/50/60	1	1	4-6	B
TRANSFORMER, 75 VA, 480 TO 24 V	167538P1	460/3/60	1	1	4-6	B

W/ DISCONNECT

Part Description	Part #	Volts	1820/150	1480/120	Figure #	RSP
MOLDED CASE SWITCH	167568P1	ALL	1	1	4-2	
MOLDED CASE SWITCH HANDLE KIT	167565P1	ALL	1	1	5-1	

OPTIONAL

Part Description	Part #	Volts	1820/150	1480/120	Figure #	RSP
CURRENT SENSING RELAY	167551P1	ALL	3	3	4-8	B

Recommended Spare Parts - RSP

A kits - Consumable Items

B kits - Low Cost Functional Items

C kits - High Cost Functional Items

The RSP Kits are divided into 3 categories (A , B and C) .

The higher category kits contain all the parts of the lower category kits.

To make a C kit, all applicable parts from the A and B kits should be noted.

Determine which options are applicable to your unit and this will determine the parts needed for your kit.

RSP Kits B

Part	Volts	Qty	Part Description	Options Where Used
E-0110	ALL	3	CONTACTOR, 25 AMP, 24VAC, HOLDING	
E-009F	230/3/60	3	CONTACTOR, 30 AMP, 24VAC, HOLDING	
E-0100	208/3/60	3	CONTACTOR, 40 AMP, 24VAC, HOLDING	
167551P1	ALL	3	CURRENT SENSING RELAY	
167561P1	575/3/60	2	FUSE, 0.75 AMP, 500V	
167557P1	400/460/3/50/60	2	FUSE, 0.8 AMP, 500V	
167558P1	400/3/50	2	FUSE, 1 AMP, 500V	
167534P1	208-230/3/60	2	FUSE, 1.4 AMP, 250V	
167559P1	460/575/3/60	3	FUSE, 15 AMP, 600V	
167560P1	400/460/575/3/50/60	3	FUSE, 20 AMP, 600V	
167555P1	400/460/3/50/60	3	FUSE, 25 AMP, 600V	
167563P1	208-230/3/60	3	FUSE, 30 AMP, 250V	
167552P1	208/3/60	3	FUSE, 40 AMP, 250V	
167554P1	208-230/400/460/3/50/	1	FUSE, 5 AMP, 250V	
167535P1	230/3/60	3	FUSE, 50 AMP, 250V	
167562P1	575/3/60	1	FUSE, 6.25 AMP, 250V	
167553P1	208/3/60	3	FUSE, 60 AMP, 250V	
141810P4	ALL	1	TEMPERATURE DISPLAY	
167533P1	575/3/60	1	TRANSFORMER, 100 VA, 600 TO 24 V	
167532P1	208-230/400/3/50/60	1	TRANSFORMER, 75 VA, 208/230/400 TO 24 V	
167538P1	460/3/60	1	TRANSFORMER, 75 VA, 480 TO 24 V	

RSP Kits C

Part	Volts	Qty	Part Description	Options Where Used
141810P3	ALL	2	ADDITIONAL STAGE CONTROL	
167542P1	200-230-460/3/60	10	FAN MOTOR, 1 HP, 855 RPM	
167543P1	575/3/60	10	FAN MOTOR, 1 HP, 855 RPM	
167541P1	200-230-460/3/60	10	FAN MOTOR, 2 HP, 1140 RPM	
167540P1	575/3/60	10	FAN MOTOR, 2 HP, 1140 RPM	
141810P6	ALL	1	FIRST STAGE TEMP CONTROL	
167539P1	ALL	10	PROP FAN BLADE 30/30-4	

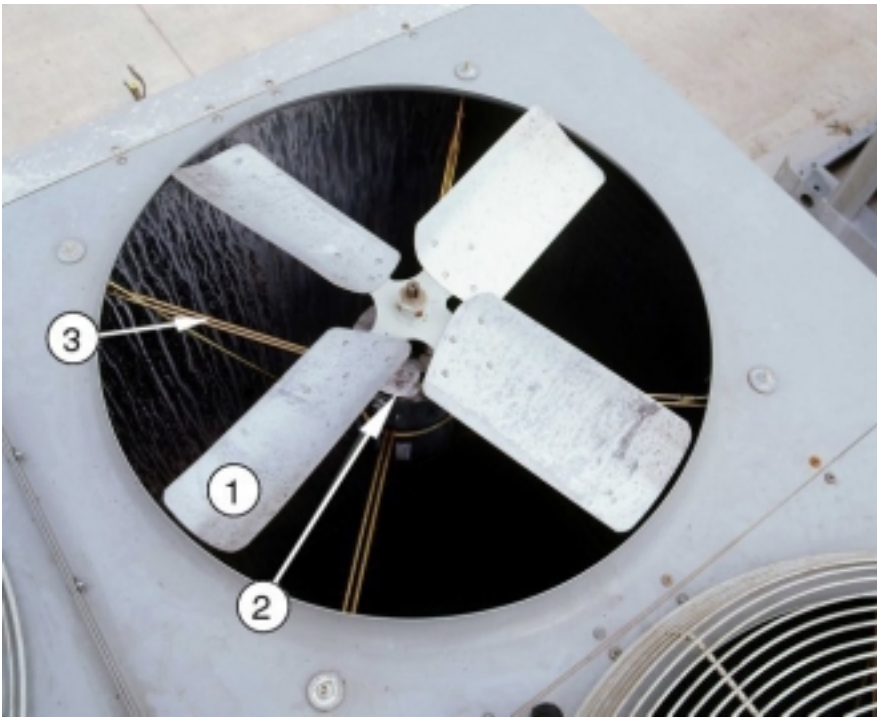


Figure 1



Figure 2

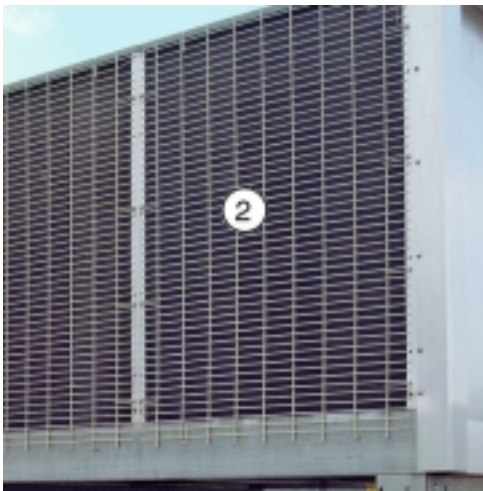


Figure 3

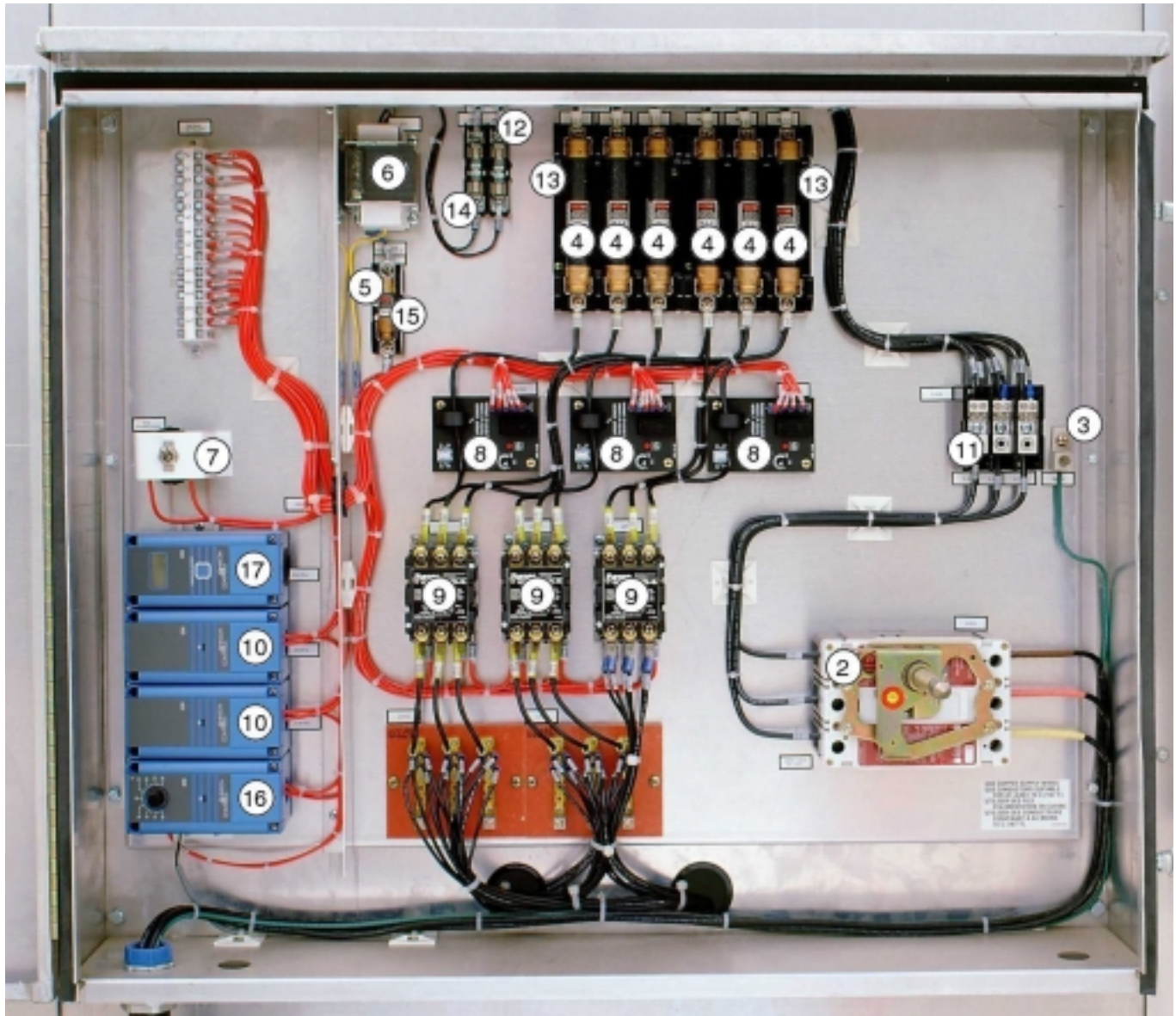


Figure 4



Figure 5