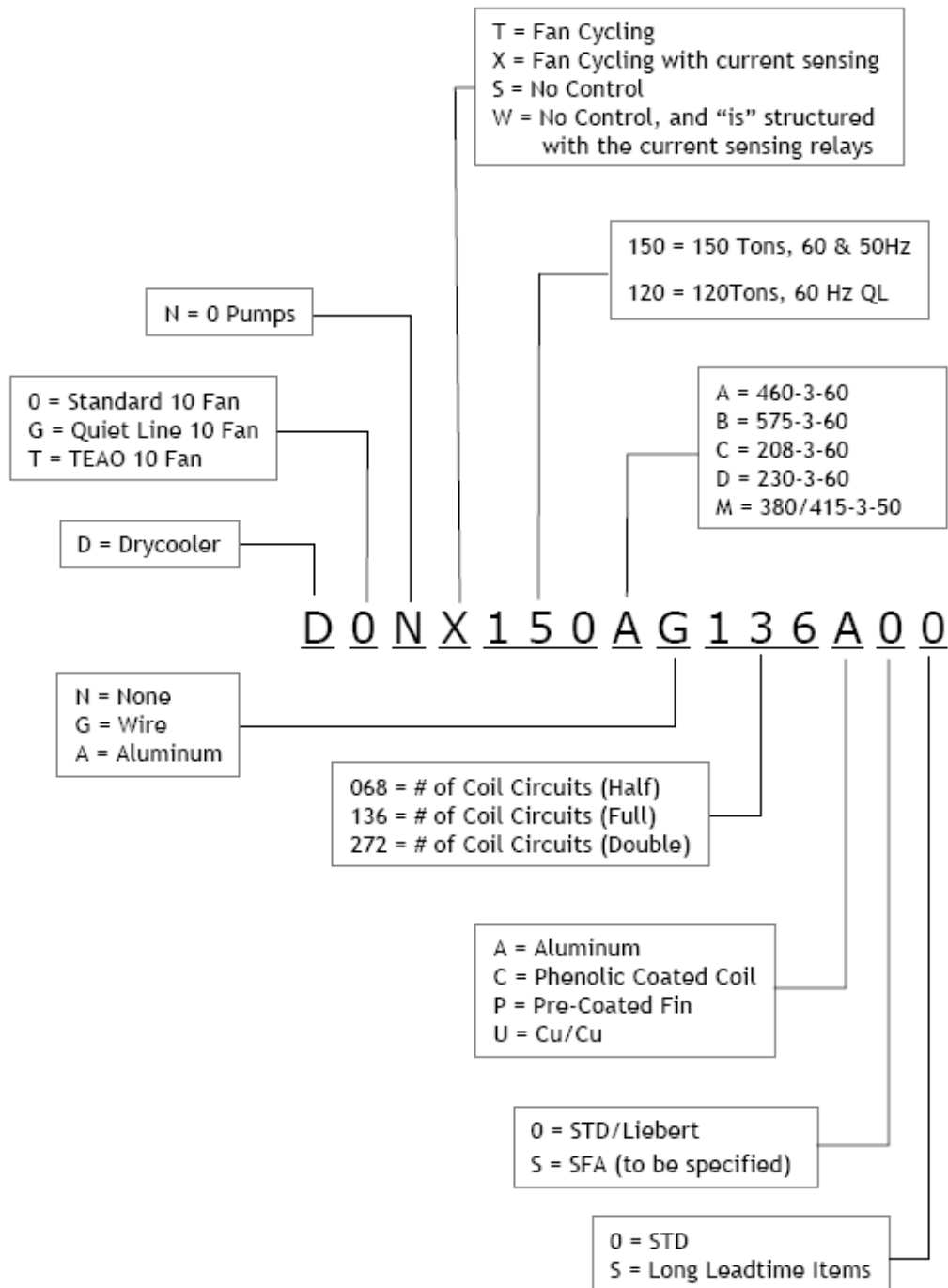


# 10 Fan Drycooler Parts Manual



**This manual is for units manufactured prior to December 2003, with serial numbers similar to 14126801F01C**

## Model Number Definition



**Note:** No field coil replacements are available for these systems.

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## 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**

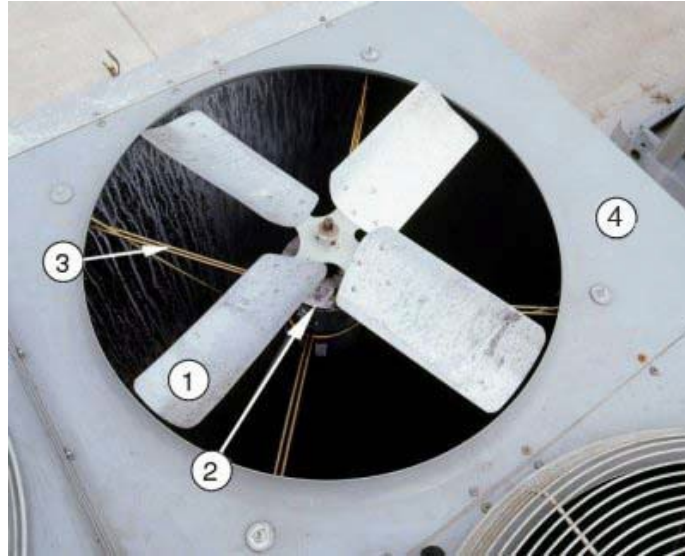
**Pump**

**Pump Control Panel**

**Flow Switch**

**Shut-off valves**

## 1. Fan Section



- 1. Prof Fan Blade
- 2. Fan Motor
- 3. Motor Mount
- 4. Plate Orifice

### 1.1. Prof Fan Blade



Part Number	Description	Volts	1820/150	1480/120
181210P1	FAN BLADE 10 FAN D&B	ALL	10	10

### 1.2. Fan Motor

Part Number	Description	Volts	1820/150	1480/120
167542P1	FAN MOTOR, 1 HP, 855 RPM	200-230-460/3/60		10
167543P1	FAN MOTOR, 1 HP, 855 RPM	575/3/60		10
167540P1	FAN MOTOR, 2 HP, 1140 RPM	575/3/60	10	
167541P1	FAN MOTOR, 2 HP, 1140 RPM	200-230-460/3/60	10	

### 1.3. Motor Mount

Part Number	Description	Volts	1820/150	1480/120
167536P1	MOTOR MOUNT	ALL	10	10

## 1.4. Plate Orifice

Part Number	Description	Volts	1820/150	1480/120
181209P1	PLATE ORIFICE 30" FAN	ALL	10	10

## 2. Guard Section

### 2.1. Fan Guard

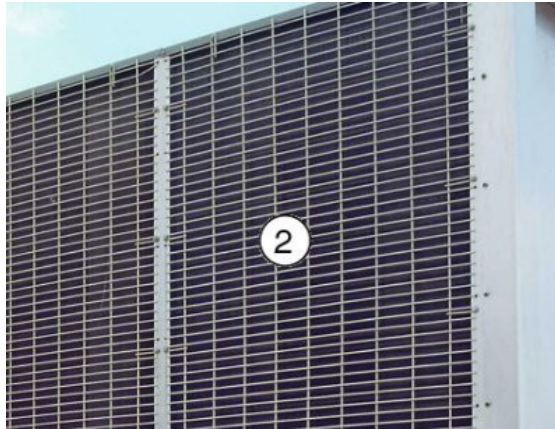


1. Fan Guard

#### 2.1.1. Fan Guard

Part Number	Description	Volts	1820/150	1480/120
167537P1	FAN GUARD	ALL	10	10

## 2.2. Coil Guard Section



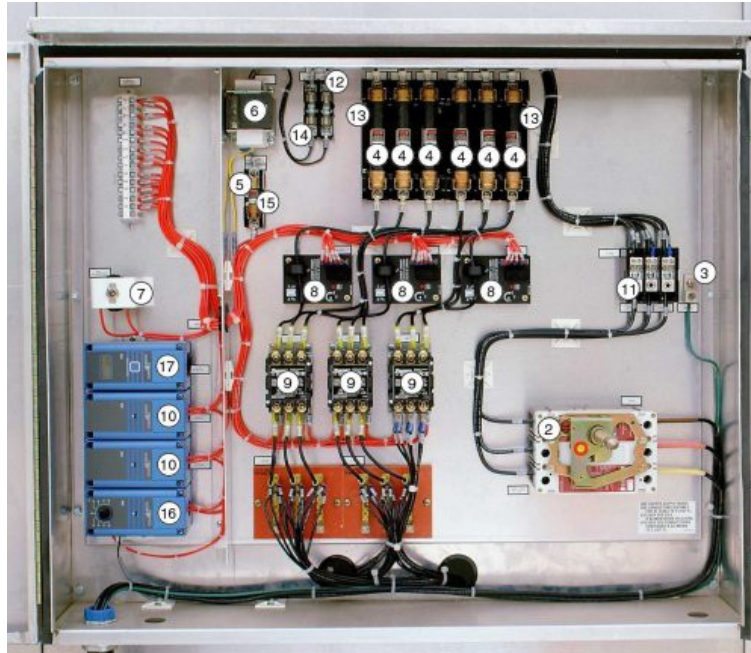
1. Coil Guard

### 2.2.1. Coil Guard

Part Number	Description	Volts	1820/150	1480/120
167569P1	GUARDS WIRE KIT	ALL	1	1
167570P1	GRILLE ALUMINUM KIT	ALL	1	1



### 3. Electrical Section



- |                  |                              |
|------------------|------------------------------|
| 1. Case Switch   | 9. Contactor                 |
| 2. Case Switch   | 10. Stage Control            |
| 3. Ground Lug    | 11. Main Terminal Block      |
| 4. Fuse          | 12. Fuse                     |
| 5. Fuse          | 13. Fuseblock                |
| 6. Transformer   | 14. Fuseblock                |
| 7. Toggle Switch | 15. Fuseblock                |
| 8. Sensing Relay | 16. First Stage Temp Control |
|                  | 17. Temperature Display      |

#### 3.1. Case Switch

Part Number	Description	Volts	1820/150	1480/120
167565P1	MOLDED CASE SWITCH HANDLE KIT	ALL	1	1

#### 3.2. Case Switch



Part Number	Description	Volts	1820/150	1480/120
167568P1	MOLDED CASE SWITCH	ALL	1	1

### 3.3. Ground Lug

Part Number	Description	Volts	1820/150	1480/120
167566P1	GROUND LUG	ALL	1	1

### 3.4. Fuse



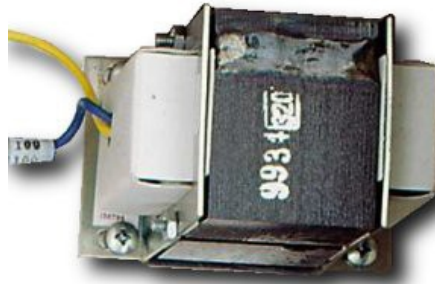
Part Number	Description	Volts	1820/150	1480/120
167559P1	FUSE, 15 AMP, 600V	460/575/3/60	3	3
167560P1	FUSE, 20 AMP, 600V	400/460/575/3/50/60	3	3
167555P1	FUSE, 25 AMP, 600V	400/460/3/50/60	3	
167563P1	FUSE, 30 AMP, 600V	208-230/3/60		3
167552P1	FUSE, 40 AMP, 250V	208/3/60	3	3
167535P1	FUSE, 50 AMP, 250V	230/3/60	3	
167553P1	FUSE, 60 AMP, 250V	208/3/60	3	

### 3.5. Fuse



Part Number	Description	Volts	1820/150	1480/120
167561P1	FUSE, 0.75 AMP, 500V	575/3/60	2	2
167557P1	FUSE, 0.8 AMP, 500V	400/460/3/50/60	2	2
167558P1	FUSE, 1 AMP, 500V	400/3/50	2	
167534P1	FUSE, 1.4 AMP, 250V	208-230/3/60	2	2
167554P1	FUSE, 5 AMP, 250V	208-230/400/460/3/50/60	1	1
167562P1	FUSE, 6.25 AMP, 250V	575/3/60	1	1

### 3.6. Transformer



Part Number	Description	Volts	1820/150	1480/120
167532P1	TRANSFORMER, 75 VA, 208/230/400 to 24 V	208-230/400/3/50/60	1	1
167533P1	TRANSFORMER, 100 VA, 600 to 24 V	575/3/60	1	1
167538P1	TRANSFORMER, 75 VA, 480 to 24 V	460/3/60	1	1

### 3.7. Toggle Switch

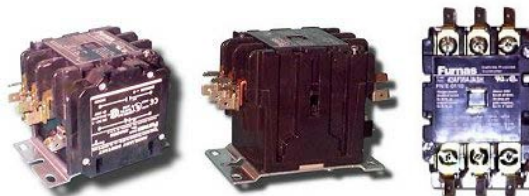
Part Number	Description	Volts	1820/150	1480/120
167567P1	TOGGLE SWITCH 6 AMP 250V	ALL	1	1

### 3.8. Sensing Relay



Part Number	Description	Volts	1820/150	1480/120
167551P1	CURRENT SENSING RELAY	ALL	3	3

### 3.9. Contactor



Part Number	Description	Volts	1820/150	1480/120
E-0110	CONTACTOR, 25 AMP 24VAC, HOLDING COIL	ALL	3	3
E-009F	CONTACTOR, 30 AMP 24VAC, HOLDING COIL	230/3/60	3	
E-0100	CONTACTOR, 40 AMP 24VAC, HOLDING COIL	208/3/60	3	

### 3.10. Stage Control



Part Number	Description	Volts	1820/150	1480/120
141810P3	ADDITIONAL STAGE CONTROL	ALL	2	2

### 3.11. Main Terminal Block



Part Number	Description	Volts	1820/150	1480/120
E13-0040	MAIN TERMINAL BLOCK	ALL	1	1

### 3.12. Fuse



Part Number	Description	Volts	1820/150	1480/120
167561P1	FUSE, 0.75 AMP, 500V	575/3/60	2	2
167557P1	FUSE, 0.8 AMP, 500V	400/460/3/50/60	2	2
167558P1	FUSE, 1 AMP, 500V	400/3/50	2	
167534P1	FUSE, 1.4 AMP, 250V	208-230/3/60	2	2
167554P1	FUSE, 5 AMP, 250V	208-230/400/460/3/50/60	1	1
167562P1	FUSE, 6.25 AMP, 250V	575/3/60	1	1

### 3.13. Fuseblock

Part Number	Description	Volts	1820/150	1480/120
167545P1	FUSEBLOCK 250V 3P 60 AMP	208-230/3/60	2	1
167548P1	FUSEBLOCK 600V 3P 30AMP	400/460/575/3/50/60	2	2
167549P1	FUSEBLOCK 250V 3P 30 AMP	208-230/3/60		1

### 3.14. Fuseblock

Part Number	Description	Volts	1820/150	1480/120
167556P1	FUSEBLOCK 600V 1P 30AMP	400/460/575/3/50/60	2	2
167547P1	FUSEBLOCK 250V 1P 30 AMP	ALL	1	1

### 3.15. First Stage Temp Control



Part Number	Description	Volts	1820/150	1480/120
141810P6	FIRST STAGE TEMP CONTROL	ALL	1	1

### 3.16. Temperature Display



Part Number	Description	Volts	1820/150	1480/120
141810P4	TEMPERATURE DISPLAY	ALL	1	1

## 4. Recommended Spare Parts – RPS

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.

### 4.1. RSP Kits B

Part Number	Part Description	Volts	Qty	Options Where Used
E-0110	CONTACTOR, 25 AMP, 24VAC, HOLDING	ALL	3	
E-009F	CONTACTOR, 30 AMP, 24VAC, HOLDING	230/3/60	3	
E-0100	CONTACTOR, 40 AMP, 24VAC, HOLDING	208/3/60	3	
167551P1	CURRENT SENSING RELAY	ALL	3	
167561P1	FUSE, 0.75 AMP, 500V	575/3/60	2	
167557P1	FUSE, 0.8 AMP, 500V	400/460/3/50/60	2	
167558P1	FUSE, 1 AMP, 500V	400/3/50	2	
167534P1	FUSE, 1.4 AMP, 250V	208-230/3/60	2	
167559P1	FUSE, 15 AMP, 600V	460/575/3/60	3	
167560P1	FUSE, 20 AMP, 600V	400/460/575/3/50/60	3	
167555P1	FUSE, 25 AMP, 600V	400/460/3/50/60	3	
167563P1	FUSE, 30 AMP, 250V	208-230/3/60	3	
167552P1	FUSE, 40 AMP, 250V	208/3/60	3	
167554P1	FUSE, 5 AMP, 250V	208-230/400/460/3/50	1	
167535P1	FUSE, 50 AMP, 250V	230/3/60	3	
167562P1	FUSE, 6.25 AMP, 250V	575/3/60	1	
167553P1	FUSE, 60 AMP, 250V	208/3/60	3	
148810P4	TEMPERATURE DISPLAY	ALL	1	
167533P1	TRANSFORMER, 100 VA, 600 TO 24 V	575/3/60	1	
167532P1	TRANSFORMER, 75 VA, 208/230/400 TO 24 V	208-230/400/3/50/60	1	
167538P1	TRANSFORMER, 75 VA, 480 TO 24 V	460/3/60	1	

## 4.2. RSP Kits C

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