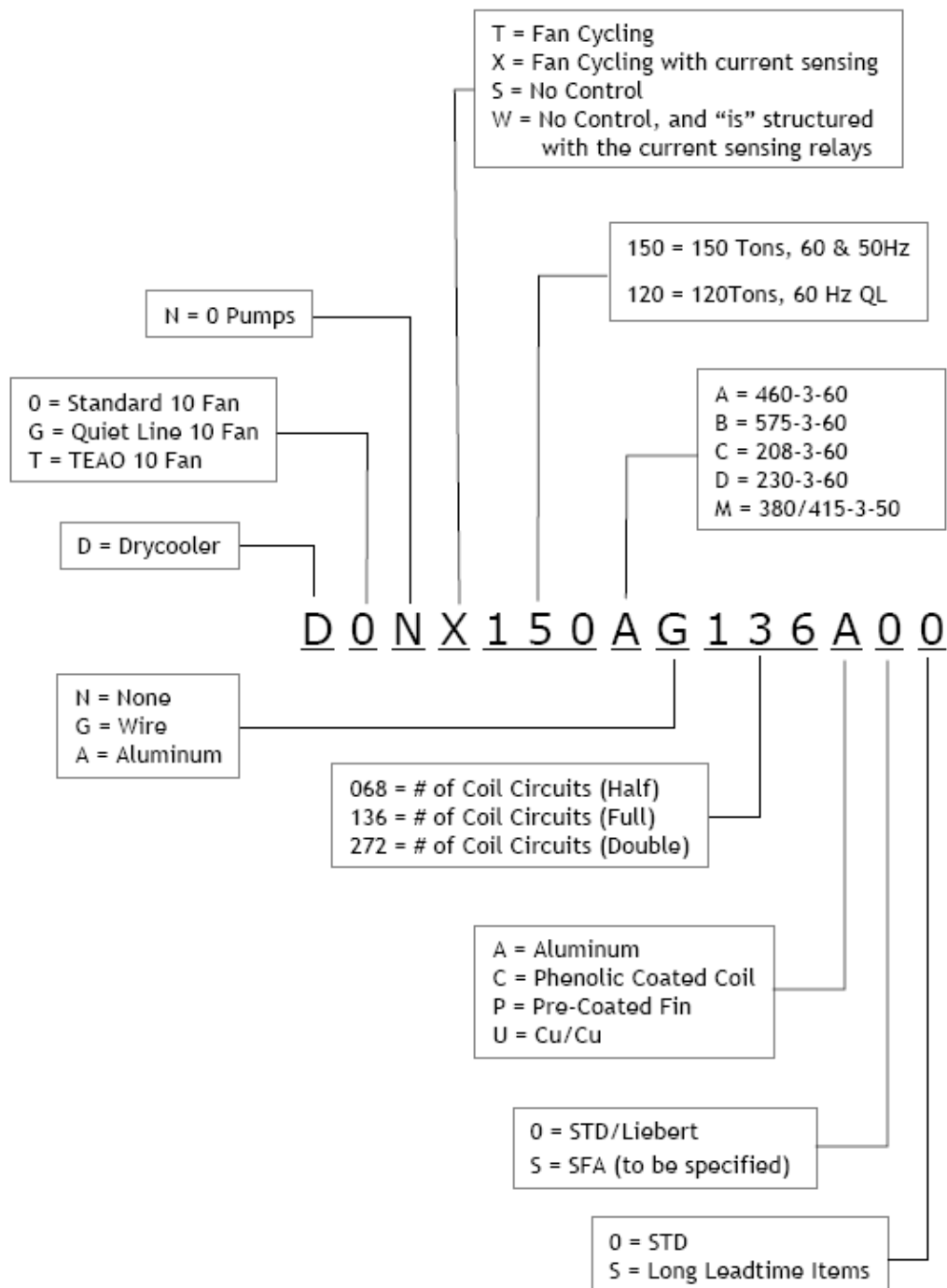


10 Fan Drycooler Parts Manual



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

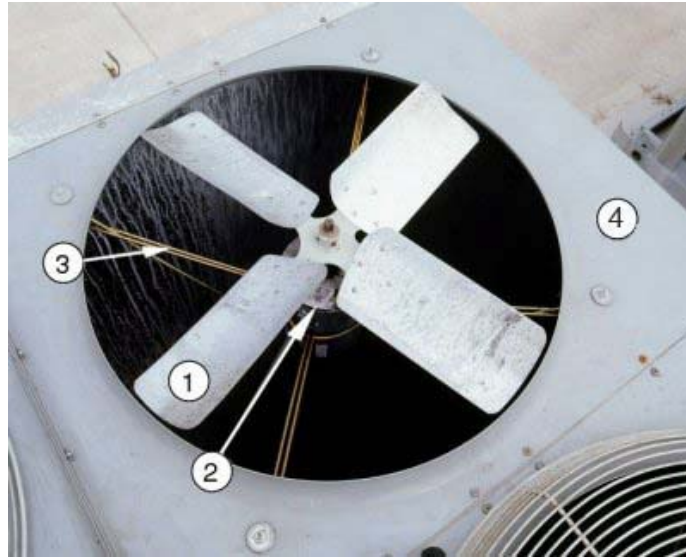
Pump

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

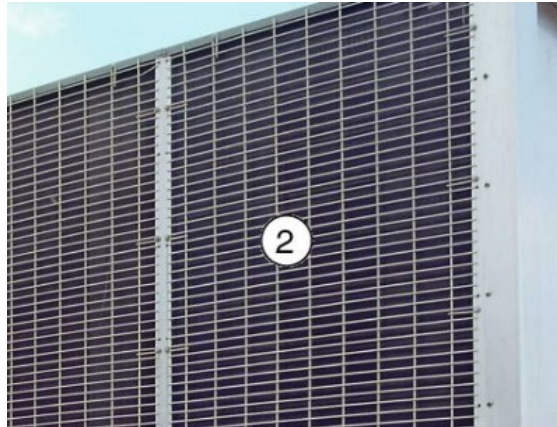


1. Fan Guard

2.1.1. Fan Guard

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

2.2. Coil Guard Section

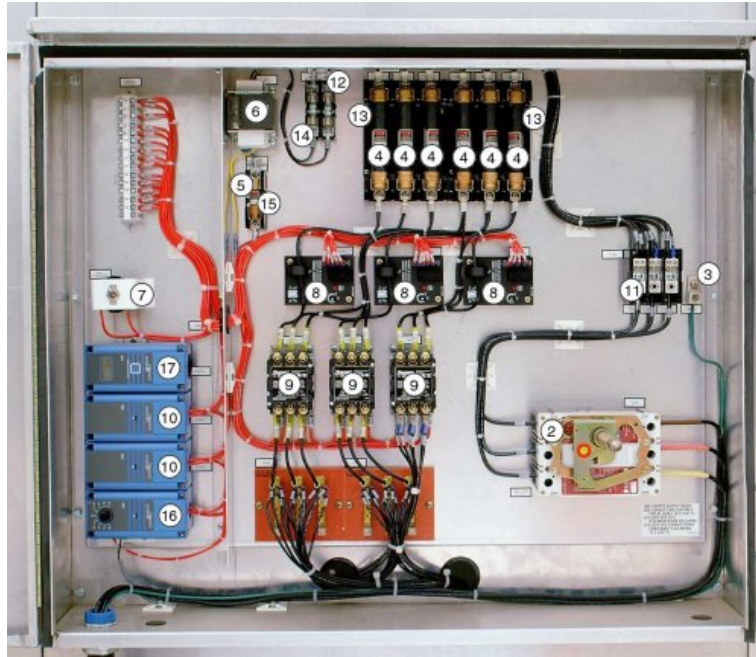


1. Coil Guard

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



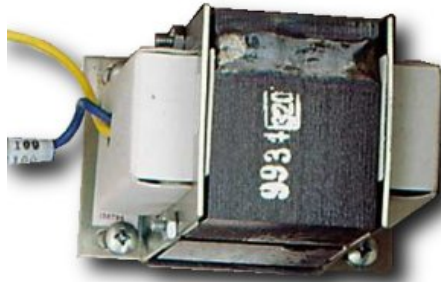
Part Number	Description	Volts	1820/150	1480/120
167559P1	FUSE, 15 AMP, 600V	460/575/3/60	3	3
167560P1	FUSE, 20 AMP, 600V	400/460/575/3/50/60	3	3
167555P1	FUSE, 25 AMP, 600V	400/460/3/50/60	3	
167563P1	FUSE, 30 AMP, 600V	208-230/3/60		3
167552P1	FUSE, 40 AMP, 250V	208/3/60	3	3
167535P1	FUSE, 50 AMP, 250V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

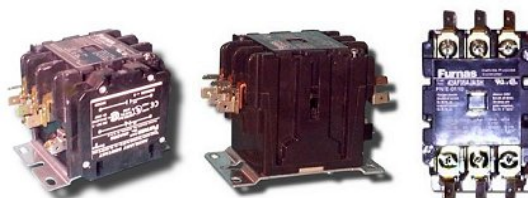
Part Number	Description	Volts	1820/150	1480/120
167567P1	TOGGLE SWITCH 6 AMP 250V	ALL	1	1

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	