

# Liebert DataMate Parts Manual

## Water/Glycol Condenser 1.5/ 2/3 Ton Systems



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## Product Description

The **DataMate** is a split system air or water/glycol cooled unit or self-contained chilled water unit.

The **evaporator section** includes the blower assembly, filter, microprocessor control, and electric reheat. All evaporator sections are 208/230 Volt 1-phase. A cooling-only model is also available

**Air cooled units** - include the evaporator section plus one of the following condensing units. (Design ambient 95°F (35°C).)

**MCD Centrifugal fan unit** includes scroll compressor, factory mounted disconnect switch, condenser coil, centrifugal blower assembly, high pressure switch, Lee-temp head pressure control system, hot gas bypass, and filter drier. Unit must be mounted indoors. Duct flanges are provided. (See pricing for voltages).

**Prop fan unit** which includes scroll compressor, condenser coil, prop fan, high pressure switch, Lee-Temp head pressure control, filter dryer, hot gas bypass, and sight glass. Unit is designed for outdoor location (see pricing for voltages). (Consult the Prop Fan Condensing Unit Price Book for optional selections).

**DMC Water/Glycol** cooled includes the evaporator section plus a water/glycol cooled condensing unit which includes compressor, condenser, two-way water regulating valve, filter dryer, and sight glass. Design pressure is 1034 kPa (50 psi). Condensing unit is designed to mate up to evaporator section to create a self-contained system. (See pricing for voltages.) Drycooler(s) and pump(s) selected separately.

**MCD Water/Glycol Condensing Unit** includes a scroll compressor, factory mounted disconnect switch, coaxial condenser, two-way or optional three-way water regulating valve, hot gas bypass, and filter drier. Design pressure is 150 psi (1034 kPa) or optional 350 psi (2413 kPa). (See pricing for voltages and complete model number). Drycooler(s) and pump(s) selected separately for applications using glycol loop. Drycooler and pump selected separately.

**Chilled water** fan/coil section includes chilled water coil and two-way slow close valve. Design pressure is 125 psi (862 kPa).

**Humidifier.** Steam-generating type with electronic control and automatic flushing circuit, humidification and dehumidification control, strainer, inlet drain, and solenoid valves and controls for humidification and dehumidification.

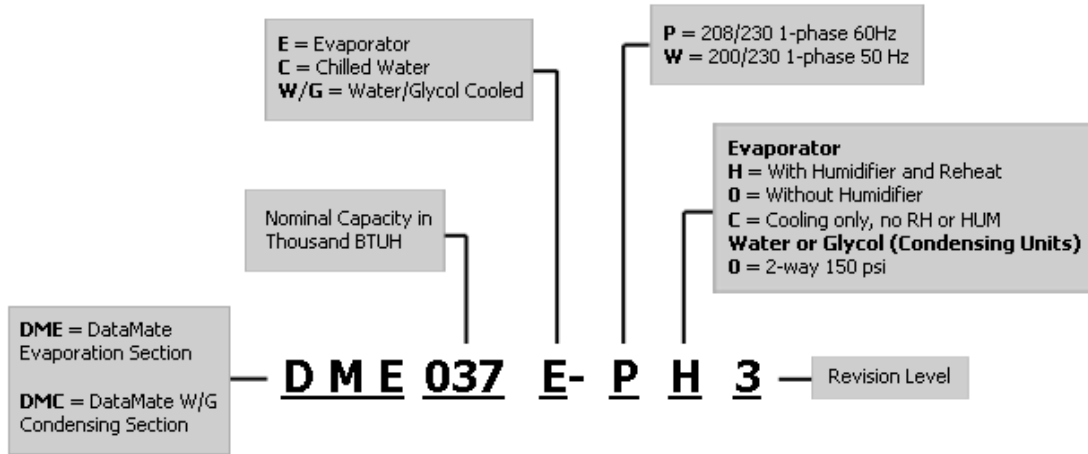
**Condensate Pump.** Can be field installed in the base of the unit. The pump is supplied with discharge check valve.

**Pre-charged refrigerant line set.** Contains an insulated copper suction line and a copper liquid line for interconnection of the indoor and outdoor sections. Available in 15 foot (4.5m) and 30 foot (9m) sections.

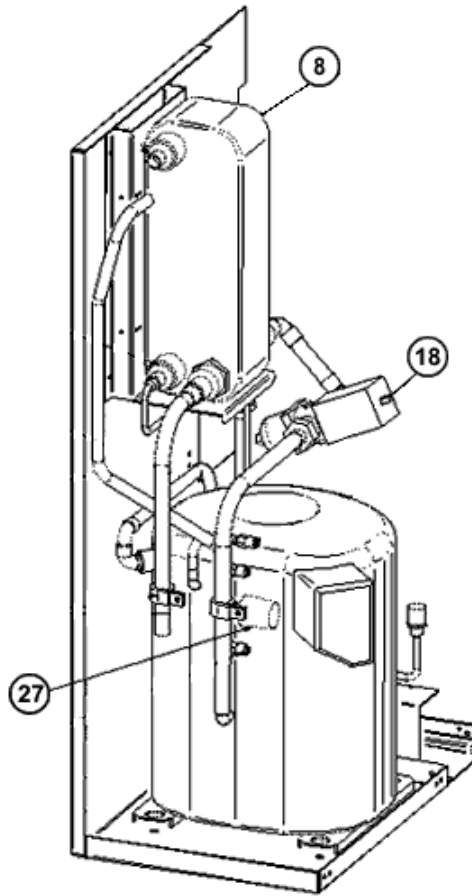
**Refrigerant-Line sweat adapter kit.** Contains two suction and two liquid line compatible fittings that allow field-supplied interconnecting refrigerant lines to be used. See Installation, Operation & Maintenance Manual for maximum recommended installed distances.

**277 Volt System** requires two field installed transformers (37.5 amps each). One for evaporator module and one for condensing module. For self-contained water/glycol system: consult factory for required transformer. The transformer is epoxy encapsulated and is suitable for indoor/outdoor installation.

## Model Number Definition

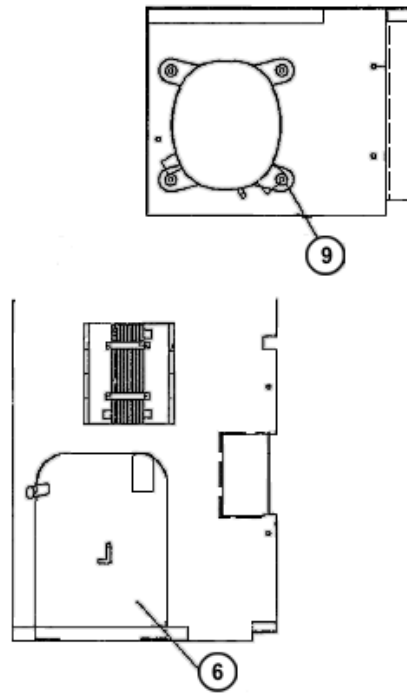


## 1. Piping Section



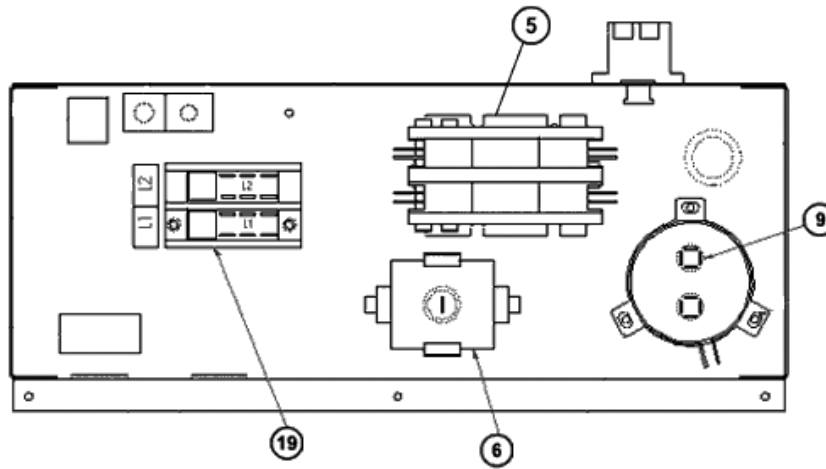
Item	Part #	Description	Voltage	22WG	29WG	40WG
8	121197P2	PLATE CONDENSER DM 1.5T	208/230/60/1	1		
	121197P3	PLATE CONDENSER DM 2T	208/230/60/1		1	
	121197P4	PLATE CONDENSER DM 3T	208/230/60/1	1	1	1
18	156400P1	VALVE H2O REG 2WAY 1/2" UB	208/230/60/1	1		
	136696P1	VALVE H2O REG 2WAY 3/4" UB	208/230/60/1		1	1
27	148372P1	Press SW HP SPDTAR C/Out 370PS	208/230/60/1	1	1	1

## 2. Compressor



Item	Part #	Description	Voltage	22WG	29WG	40WG
6	146303P1	COMP HERM 208/230-1-60 CR22K6	208/230-60-1	1	1	
	163166P1	COMP HERM 208-230/1/60	208/230-60-1			1
9	C03-0020	KIT SPRING COMP MTG	208/230/60/1	4	4	4

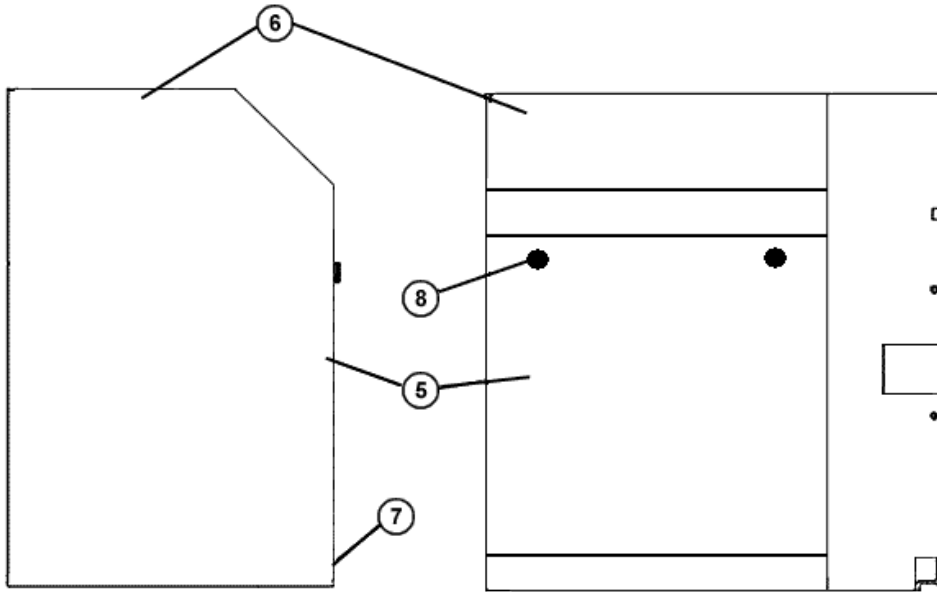
### 3. Electrical Section



Item	Part #	Description	Voltage	22WG	29WG	40WG
5	1C21105P1	CONTACTOR 2 PL 24V	208/230-60-1	1	1	1
6	1C19540P1	RES PTC 12.5 OHM 20%	208/230-60-1	1	1	1
9	C03-005A	CAP RUN 25MF 370VAC	208/230-60-1	1		
	1A19537P1	CAP RUN 30UF 370VAC	208/230-60-1		1	
	C15-0091	CAP RUN 40UF 440VAC	208/230-60-1			1
19	121187P1	PWRBLK 2PL 1)2:14X6)10:18 QC	208/230-60-1	1	1	1



### 4. Exterior Section



Item	Part #	Description	Voltage	22WG	29WG	40WG
5	121170G1	PANEL EXT FRONT W/INSUL DM PBK	208/230-60-1	1	1	1
6	121194G1	PANEL EXT TOP W/INSUL DMPGBK	208/230-60-1	1	1	1
	121172G1	PANEL EXT LEFT W/INSUL DM PGBK	208/230-60-1	1	1	1
7	121180G2	SPACER ASSY PIN BAR Z43	208/230-60-1	1	1	1
8	1D16378P63	LOCK PANEL DMATE	208/230-60-1	2	2	2

## 5. RSP Kits

### 5.1. A Kits

Part #	Description	Section Where Used
124156P2	FILTER MEDIA	EXTERIOR PANEL SECTION
127849P1	HUMIDIFIER BOTTLE	HUMIDIFIER DETAIL SECTION


### 5.2. B Kits

Part #	Description	Section Where Used
127853P1	HUMIDIFIER TORROID TRANSFORMER	HUMIDIFIER DETAIL SECTION
127992P1	HUMIDIFIER DRAIN VALVE	HUMIDIFIER DETAIL SECTION
136812P1	HUMIDIFIER FILL VALVE	HUMIDIFIER DETAIL SECTION
E03-0170	HUMIDIFIER RELAY	HUMIDIFIER DETAIL SECTION
127585P2	CHILLED WATER VALVE	PIPING SECTION
136782P1	FILTER DRIER	PIPING SECTION
148372P1	Press SW HP SPDTAR C/Out 370PS	PIPING SECTION
1C19507P1	VALVE EXP 3/8 X 1/2 X 1/4 ODF	PIPING SECTION
1C19507P2	VALVE EXP 3/8 X 1/2 X 1/4 ODF	PIPING SECTION
1C19507P3	EXPANSION VALVE	PIPING SECTION
131116P1	REHEAT RELAY	ELECTRICAL PANEL SECTION
1A19537P1	CAP RUN 30UF 370VAC	ELECTRICAL PANEL SECTION
1C19540P1	RES PTC 12.5 OHM 20%	ELECTRICAL PANEL SECTION
1C21105P1	CONTACTOR 2 PL 24V	ELECTRICAL PANEL SECTION
1D16378P20	REHEAT SAFETY(S)	ELECTRICAL PANEL SECTION
C03-005A	CAP RUN 25MF 370VAC	ELECTRICAL PANEL SECTION
C15-0091	CAP RUN 40UF 440VAC	ELECTRICAL PANEL SECTION
E03-0010	XMFR 075VA 5060 208/30/77-24	ELECTRICAL PANEL SECTION
E03-0170	MOTOR RELAYS	ELECTRICAL PANEL SECTION
E276C	CB 3.2A BRKT MNT ETA	ELECTRICAL PANEL SECTION

### 5.3. C Kits

Part #	Description	Section Where Used
124101P1	MOTOR .16HP 220-1-60 DBL SHFT	BLOWER MOTOR SECTION
124102P1	MOTOR .12HP 220-1-60 DBL SHFT	BLOWER MOTOR SECTION
124103P1	MOTOR .11HP 220-1-60 SGL SHFT	BLOWER MOTOR SECTION
124104P1	MOTOR .08HP 220-1-60 SGL SHFT	BLOWER MOTOR SECTION
153210G1	WALL CONTROLLER	ELECTRICAL PANEL SECTION
415771G1	CONTROL BOARD	ELECTRICAL PANEL SECTION
124067P1 124068P1	REHEAT ELEMENTS	REHEAT SECTION
136696P1 156400P1	WATER REGULATING VALVE	PIPING SECTION
146303P1 163166P1	COMPRESSOR	COMPRESSOR SECTION
134562P1	PWA CNTL ELEC RELAY HUM 2STG	HUMIDIFIER DETAIL SECTION

## 6. Parts Gallery

			
121197P2	121197P3	121197P4	156400P1
			
148372P1	C03-0020	163166P1	1C21105P1
			
121187P1	121172G1/121194G1	1A19537P1	C03-005A
			
C15-0091	1C19540P1	1D16378P63	121170G1
			
121180G2			

## 7. Revision History

Revision Date	Modification	Details
03/2010	Manual Conversion	