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# Replacement Parts Manual

# QTEC Series Packaged Heat Pump

## Models:

QH241D    QH301D  
QH361D    QH421D

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## General Notes

- Revised and/or additional pages may be issued from time to time.
- A complete and current manual consists of pages shown in the following contents section.

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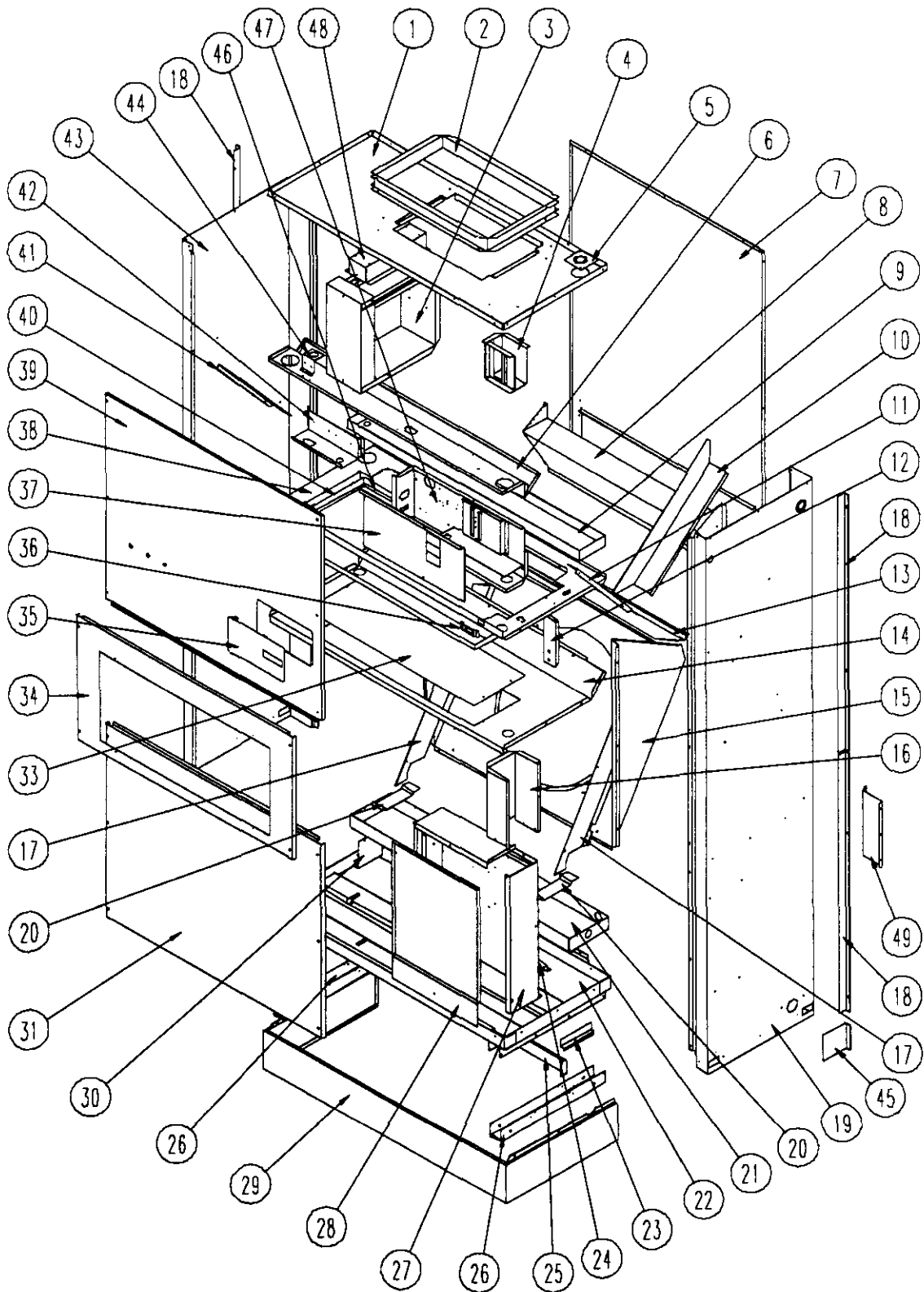
**BARD MANUFACTURING COMPANY**  
Bryan, Ohio 43506

*Since 1914...Moving ahead, just as planned.*

Manual: 2110-522  
Supersedes: Rev.  
File: Vol II Tab 14  
Date: 07-21-97

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# CABINET COMPONENTS



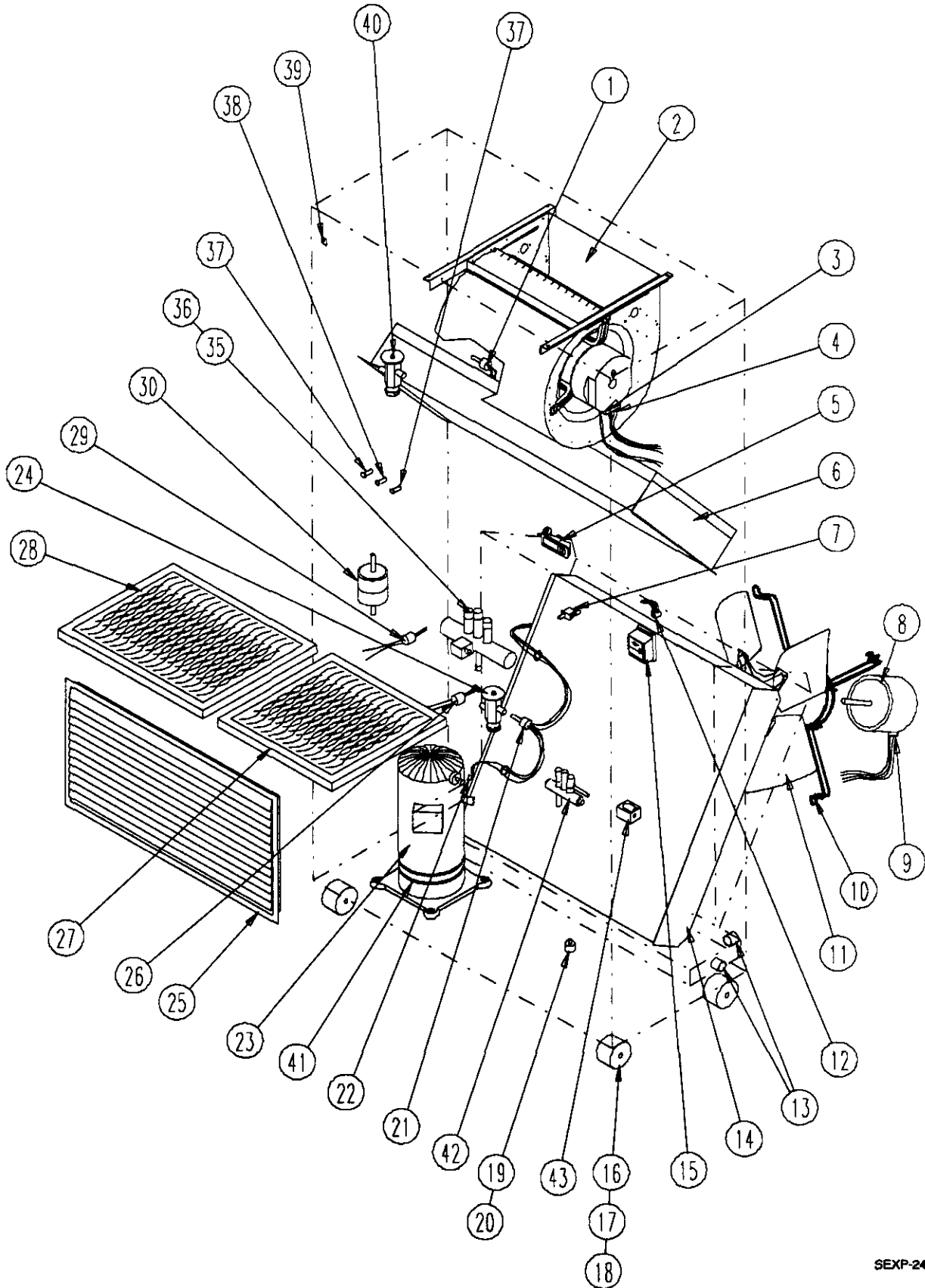
SEXP-239

# CABINET COMPONENTS

Drawing No.	Part No.	Description	QH241DA, D, B	QH241DC	QH301DA, DB	QH301DC	QH361DA, D, B	QH361DC	QH421DA, DB	QH421-D
1	S506-187	Top Assembly	X	X	X	X	X	X	X	X
2	110-044	Outlet Duct Flange	2	2	2	2	2	2	2	2
3	See Page 13	Heater Package Assembly (Optional)	X	X	X	X	X	X	X	X
4	117-187	Low Voltage Box Assembly (Optional)	X	X	X	X	X	X	X	X
5	136-359	T. K. O. Plate	X	X	X	X	X	X	X	X
6	534-153	Evaporator Coil Shield Assembly	X	X	X	X	X	X	X	X
7	508-133	Back Assembly	X	X	X	X	X	X	X	X
8	S538-106	Fresh Air Damper Assembly	X	X	X	X	X	X	X	X
9	523-093	Evaporator Drain Pan Assembly	X	X	X	X	X	X	X	X
10	134-154	Wire Channel	X	X	X	X	X	X	X	X
11	140X226	Right Evaporator Support	X	X	X	X	X	X	X	X
12	112-227	Filter Sensor Bracket	X	X	X	X	X	X	X	X
13	142-055	Condenser Coil Fill	X	X	X	X	X	X	X	X
14	520-304	Condenser Partition Assembly	X	X	X	X	X	X	X	X
15	124-031	Fan Shroud Left Side	X	X	X	X	X	X	X	X
15	124-032	Fan Shroud Back	X	X	X	X	X	X	X	X
15	124-033	Fan Shroud Right Side	X	X	X	X	X	X	X	X
16	140-228	Wire Channel	X	X	X	X	X	X	X	X
17	140-229	Condenser Coil Support	2	2	2	2	2	2	2	2
18	134-164-* (1)	Side Trim	4	4	4	4	4	4	4	4
19	500-329-* (1)	Right Side Assembly	X	X	X	X	X	X	X	X
20	140-227	Subcooling Loop Hold Down	3	3	3	3	3	3	3	3
21	123-094	Condenser Drain Pan Assembly	X	X	X	X	X	X	X	X
22	527-268	Lower Base Assembly	X	X	X	X	X	X	X	X
23	102-415	Pile Seal Offset	X	X	X	X	X	X	X	X
24	112-226	Water Sensor Bracket	X	X	X	X	X	X	X	X
25	134-152	Base Shield	X	X	X	X	X	X	X	X
26	140-225	Lower Roller Support	2	2	2	2	2	2	2	2
27	See Page 7	Control Panel Components	X	X	X	X	X	X	X	X
28	132-142	Control Panel Door	X		X		X		X	
28	132-149	Control Panel Door		X		X		X		X
29	534-155-* (1)	Base Trim Assembly	X	X	X	X	X	X	X	X
30	140-230	Drain Pan Support	X	X	X	X	X	X	X	X
31	552-271-* (1)	Condenser Door Assembly	X	X	X	X	X	X	X	X
33	536-351	Condenser Blank Off Plate	X	X	X	X	X	X	X	X
34	552-266-* (1)	Filter Door Assembly	X	X	X	X	X	X	X	X
35	152-265-* (1)	Circuit Breaker Door	X	X	X	X	X	X	X	X
36	112-228	Door Switch Bracket	X	X	X	X	X	X	X	X
37	132-144	Pull Disconnect Door Inner		X		X		X		X
37	132-143	Circuit Breaker Door Inner	X		X		X		X	
38	130-117	Filter Tray	X	X	X	X	X	X	X	X
39	See Page 11	Blower Door Assembly	X	X	X	X	X	X	X	X
40	130-118	Filter Frame	X	X	X	X	X	X	X	X
41	140Y226	Left Evaporator Support	X	X	X	X	X	X	X	X
42	117-203	Relay Control Panel	X	X	X	X	X	X	X	X
43	500-330-* (1)	Left Side Assembly	X	X	X	X	X	X	X	X
44	113-142	Expansion Valve Mounting Plate	X	X	X	X	X	X	X	X
45	134-165-* (1)	Base Trim Extension	2	2	2	2	2	2	2	2
46	104-981	Filter Frame Back	X	X	X	X	X	X	X	X
47	See Page 13	Pull Disconnect Assembly		X		X		X		X
47	See Page 13	Circuit Breaker Box Assembly	X		X		X		X	
48	112-229	Heatstrip Bracket	X	X	X	X	X	X	X	X
49	112-234	Mounting Bracket	2	2	2	2	2	2	2	2

(1) Exterior cabinet parts are manufactured with various color options. To insure that you receive the proper color, you must include the complete models and serial number of the unit for which parts are being ordered.

# FUNCTIONAL COMPONENTS



SEXP-240

# FUNCTIONAL COMPONENTS

Drawing No.	Part No.	Description	QH241DA	QH241DB	QH241DC	QH301DA	QH301DB	QH301DC	QH361DA	QH361DB	QH361DC	QH421DA	QH421DB	QH421DC
1	800-0247	Distributor Cooling	X	X	X	X	X	X						
1	800-0248	Distributor Cooling							X	X	X	X	X	X
2	900-225-001	Blower Assembly	X	X	X									
2	900-225-002	Blower Assembly				X	X	X						
2	900-225-004	Blower Assembly							X	X	X	X	X	X
3	3000-1045	Wire Harness High Voltage			X			X			X			X
3	3000-1046	Wire Harness High Voltage	X	X		X	X		X	X		X	X	
4	3000-1042	Wire Harness Low Voltage	X	X	X	X	X	X	X	X	X	X	X	X
5	1171-036	Keylatch/Circuit Breaker Door	X	X	X	X	X	X	X	X				
6	917-0039	Evaporator Coil	X	X	X	X	X	X						
6	917-0040	Evaporator Coil							X	X	X	X	X	X
7	8406-085	Door Switch	X	X	X	X	X	X	X	X	X	X	X	X
8	8103-021	Motor	X	X	X	X	X	X	X	X	X	X	X	X
9	3000-1049	Wire Harness	X	X	X	X	X	X	X	X	X	X	X	X
10	8200-001	Motor Mount	X	X	X	X	X	X	X	X	X	X	X	X
11	5151-050	Fan Blade	X	X	X	X	X	X	X	X	X	X	X	X
12	3000-1047	Wire Harness	X	X	X	X	X	X	X	X	X	X	X	X
13	6094-003	Drain Fitting	2	2	2	2	2	2	2	2	2	2	2	2
14	5051-095	Condenser Coil	X	X	X	X	X	X						
14	5051-096	Condenser Coil							X	X	X	X	X	X
15	8301-011	Dirty Filter Switch	X	X	X	X	X	X	X	X	X	X	X	X
16	1171-035	Wheel	4	4	4	4	4	4	4	4	4	4	4	4
17	1012-129	Bolt - Shoulder	4	4	4	4	4	4	4	4	4	4	4	4
18	1012-224	Nut - Locking	4	4	4	4	4	4	4	4	4	4	4	4
19	8406-083	Water Level Switch	X	X	X	X	X	X	X	X	X	X	X	X
20	1012-316	Nut - Water Level Switch	X	X	X	X	X	X	X	X	X	X	X	X
21	800-0249	Distributor - Heating	X	X	X	X	X	X						
21	800-0250	Distributor - Heating							X	X	X	X	X	X
22	910-1257	Defrost Sensor	X	X	X	X	X	X	X	X	X	X	X	X
23	8000-171	Compressor	X											
23	8000-201	Compressor		X										
23	8000-202	Compressor			X									
23	8000-172	Compressor				X								
23	8000-203	Compressor					X							
23	8000-204	Compressor						X						
23	8000-175	Compressor							X					
23	8000-163	Compressor								X				
23	8000-164	Compressor									X			
23	8000-177	Compressor										X		
23	8000-205	Compressor											X	
23	8000-206	Compressor												X
24	5651-137	TXV Heating	X	X	X									
24	5651-138	TXV Heating				X	X	X						
24	5651-102	TXV Heating							X	X	X	X	X	X
25	7051-034	Return Air Grille	X	X	X	X	X	X	X	X	X	X	X	X
26	8406-055	High Pressure Control	X	X	X	X	X	X	X	X	X	X	X	X
27	7004-009	Air Filter	X	X	X	X	X	X	X	X	X	X	X	X
27	7004-032	Filter 2" Fiberglass (Optional)	X	X	X	X	X	X	X	X	X	X	X	X
27	7004-034	Filter 2" Pleated (Optional)	X	X	X	X	X	X	X	X	X	X	X	X
28	7004-010	Air Filter	X	X	X	X	X	X	X	X	X	X	X	X
28	7004-033	Filter 2" Fiberglass (Optional)	X	X	X	X	X	X	X	X	X	X	X	X
28	7004-035	Filter 2" Pleated (Optional)	X	X	X	X	X	X	X	X	X	X	X	X
<i>Continued on Page 5</i>														

# FUNCTIONAL COMPONENTS

## Drawing

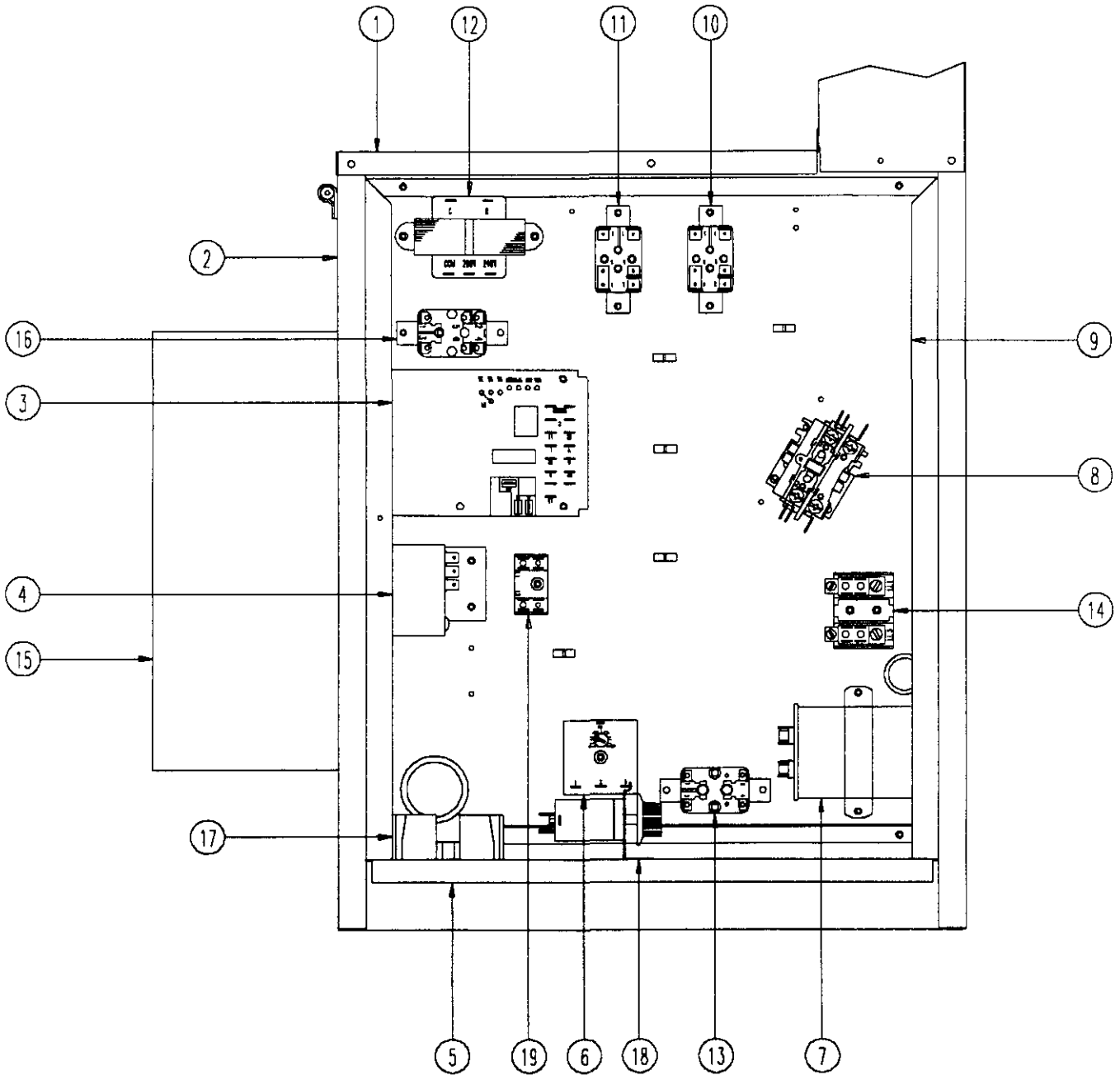
No.	Part No.	Description	QH241DA	QH241DB	QH241DC	QH301DA	QH301DB	QH301DC	QH361DA	QH361DB	QH361DC	QH421DA	QH421DB	QH421DC
<i>Continued from Page 4</i>														
29	8406-061	Low Pressure Control	X	X	X	X	X	X	X	X	X	X	X	X
30	5201-009	Filter/Drier	X	X	X	X	X	X	X	X	X	X	X	X
31	1171-038	Cupped Washer Black	4	4	4	4	4	4	4	4	4	4	4	4
35	5650-020	Reversing Valve	X	X	X									
35	5650-021	Reversing Valve				X	X	X						
35	5650-025	Reversing Valve							X	X	X	X	X	X
36	5650-022	Solenoid Coil	X	X	X	X	X	X	X	X	X	X	X	X
37	8611-094	Indicator Light - Red	2	2	2	2	2	2	2	2	2	2	2	2
38	8611-095	Indicator Light - Yellow	X	X	X	X	X	X	X	X	X	X	X	X
39	1012-315	"U" Clip Fastener	16	16	16	16	16	16	16	16	16	16	16	16
40	5651-137	TXV Cooling	X	X	X									
40	5651-138	TXV Cooling				X	X	X						
40	5651-102	TXV Cooling							X	X	X	X	X	X
41	8605-015	Crank Case Heater							X	X	X	X	X	X
42	5650-026	Three Way Valve	X	X	X	X	X	X	X	X	X	X	X	X
43	5650-027	Solenoid Coil	X	X	X	X	X	X	X	X	X	X	X	X
NS	1804-0108	Low Ambient Control (Optional)	X	X	X	X	X	X	X	X	X	X	X	X

## Drawing

No.	Part No.	Description	QH241DA	QH241DB	QH241DC	QH301DA	QH301DB	QH301DC	QH361DA	QH361DB	QH361DC	QH421DA	QH421DB	QH421DC
NS	4100-104	Wiring Diagram	X			X			X			X		
NS	4100-204	Wiring Diagram		X			X							
NS	4100-304	Wiring Diagram			X			X						
NS	4100-205	Wiring Diagram									X		X	
NS	4100-305	Wiring Diagram										X		X

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# CONTROL PANEL COMPONENTS



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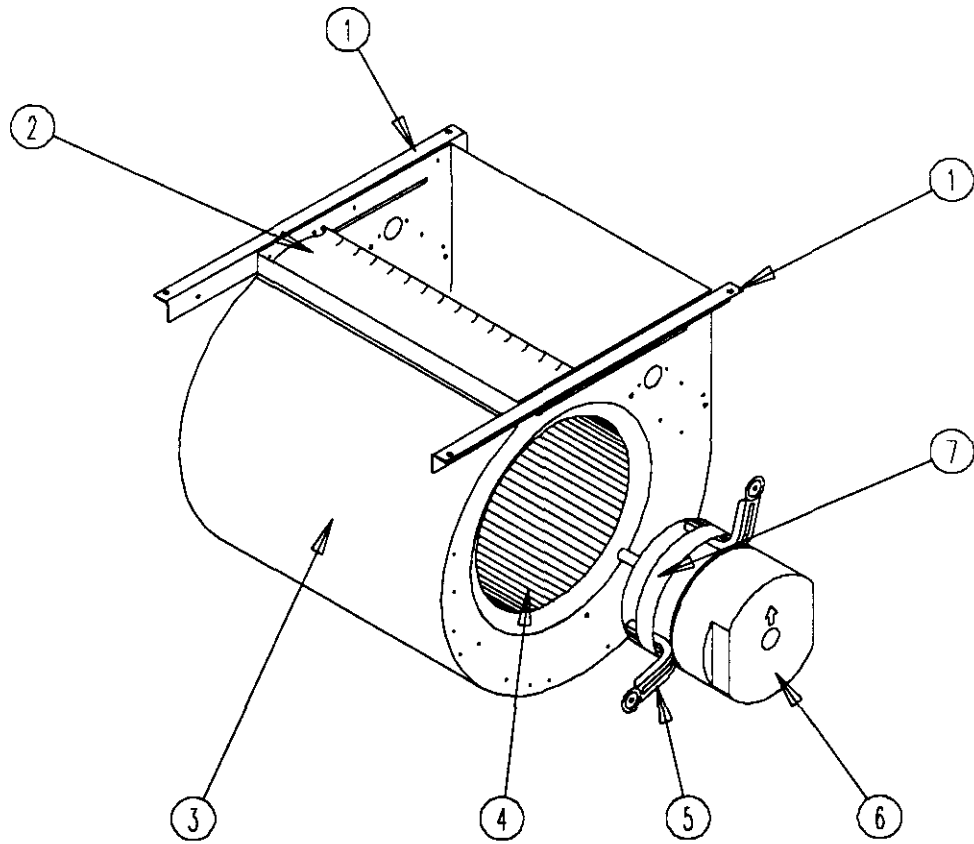


# CONTROL PANEL COMPONENTS

Drawing			QH241DA	QH241DB	QH241DC	QH301DA	QH301DB	QH301DC	QH361DA	QH361DB	QH361DC	QH421DA	QH421DB	QH421DC
No.	Part No.	Description												
1	116-186	Control Panel Top	X	X	X	X	X	X	X	X	X	X	X	X
2	116-184	Control Panel	X	X	X	X	X	X	X	X	X	X	X	X
3	8201-069	Heat Pump Control	X	X	X	X	X	X	X	X	X	X	X	X
4	8408-034	Condenser Motor Thermostat	X	X	X	X	X	X	X	X	X	X	X	X
5	126-266	Control Panel Base	X	X	X	X	X	X	X	X	X	X	X	X
6	8210-078	Low Pressure Bypass TDR	X	X	X	X	X	X	X	X	X	X	X	X
7	8552-002	Capacitor		X	X		X	X		X	X		X	X
7	8552-050	Capacitor	X											
7	8552-052	Capacitor				X								
7	8552-063	Capacitor							X					
7	8552-062	Capacitor										X		
8	8401-007	Contactora	X			X			X			X		
8	8401-002	Contactora		X	X		X	X			X			X
8	8401-027	Contactora								X			X	
9	116-186	Control Panel Mounting Plate	X	X	X	X	X	X	X	X	X	X	X	X
10	8201-062	Relay SPDT Pilot Duty	X	X	X	X	X	X	X	X	X	X	X	X
11	8201-009	Relay	X	X	X	X	X	X	X	X	X	X	X	X
12	8407-048	Transformer	X	X	X	X	X	X	X	X	X	X	X	X
13	8201-009	Relay			X			X			X			X
14	8607-013	Terminal Block Two Terminals			X			X			X			X
15	8407-003	Transformer Stepdown			X			X			X			X
17	8614-041	Fuse Holder			X			X			X			X
18	8408-028	Outdoor Thermostat (Optional)	X	X	X	X	X	X	X	X	X	X	X	X
19	8607-017	Terminal Block	X	X	X	X	X	X	X	X	X	X	X	X
NS	8614-006	Fuses Class CC 5A			X			X			X			X

# BLOWER ASSEMBLY COMPONENTS

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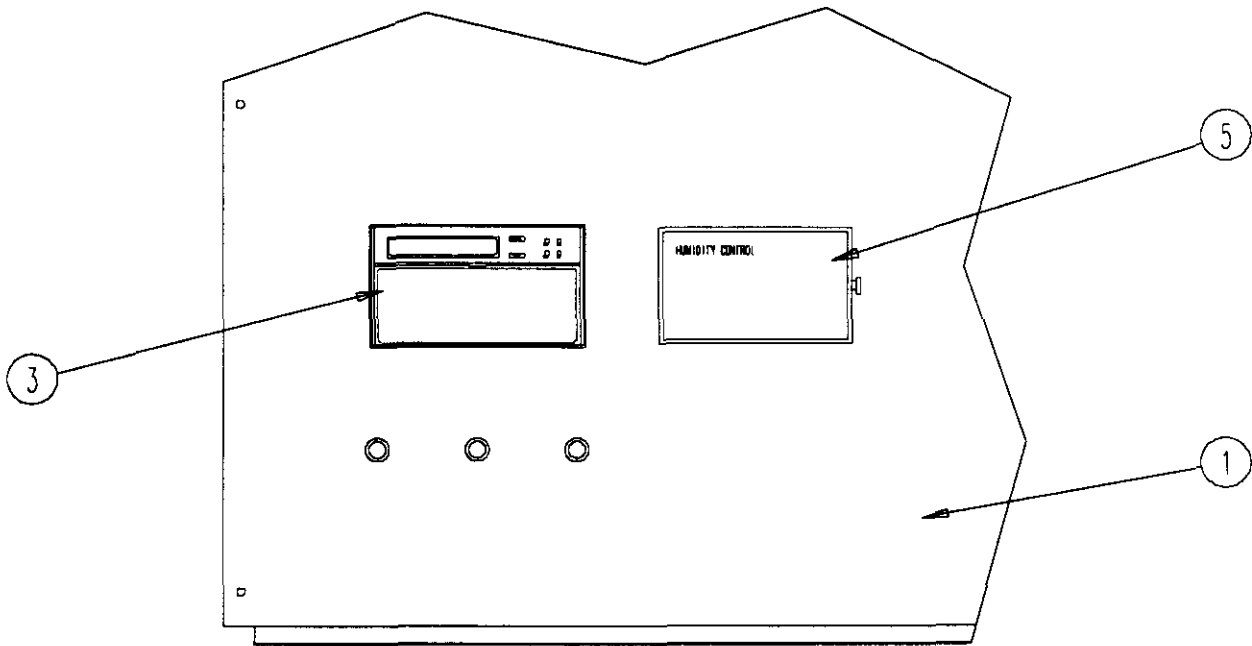


# BLOWER ASSEMBLY COMPONENTS

Drawing No.	Part No.	Description	900-225-001	900-225-002	900-225-004
1	104-980	Blower Angle	2	2	2
2	144-131	Diffuser	X	X	X
3	151-110	Blower Housing	X	X	X
4	5152-061	Blower Wheel	X	X	X
5	8200-034	Motor Mount Arm	3	3	3
6	8106-035-0003	Motor	X		
6	8106-035-0004	Motor		X	
6	8106-035-0005	Motor			X
7	8200-033	Motor Mount Band	X	X	X

# OPTIONAL CLIMATE CONTROLS

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SEXP-247

# OPTIONAL CLIMATE CONTROLS

## OPTIONAL CLIMATE CONTROL REPLACEMENT PARTS –

See table below to determine which Climate Control Option is installed:

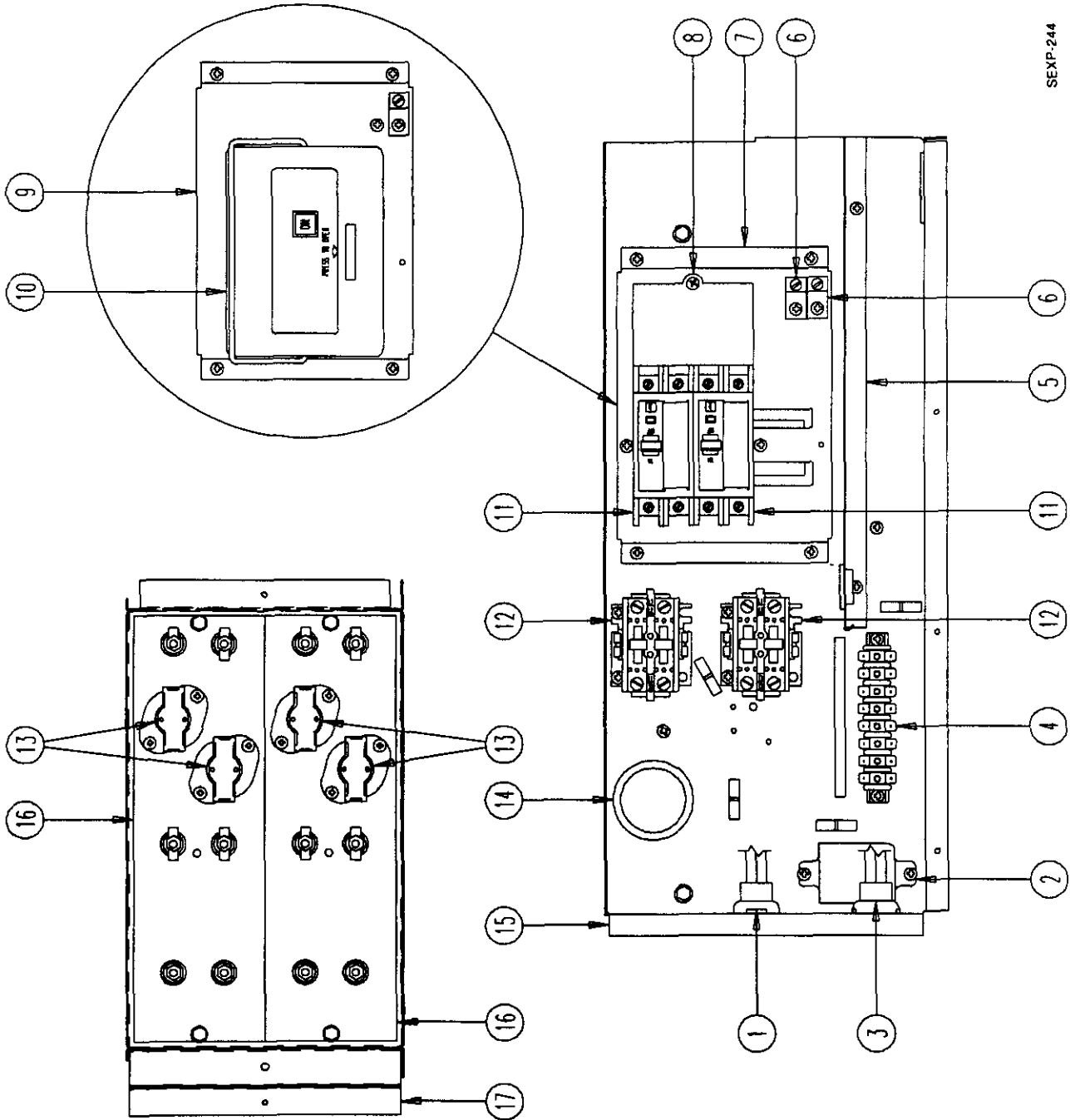
Drawing No.	Part No.	Description	Option <b>X</b>	Option <b>E</b>
1	552-270-6	Blower Door	X	
1	552-272-6	Blower Door		X
3	8403-034	Electronic/Programmable/Manual/Auto Change Over		X
5	8403-038	Humidistat		X

## CLIMATE CONTROL OPTION NOMENCLATURE AS SHOWN IN UNIT MODEL NUMBER

QH 361 - A 09 X X X X X



# OPTIONAL HEATER COMPONENTS



SEXP-244

Drawing

Drawing No.	Part No.	Description	QH241DA0Z QH301DA0Z	QH241DA05 QH301DA05	QH241DA10 QH301DA10	QH241DB0Z	QH301DB0Z	QH241DB06	QH301DB06	QH241DB09 QH301DB09	QH301DB12
1	3000-1044	Wire Set	X	X	X	X	X	X	X	X	X
2	8201-048	Relay		X	X			X	X	X	X
3	3000-1043	Wire Set	X	X	X	X	X	X	X	X	X
4	8607-022	Terminal Block	X	X	X	X	X	X	X	X	X
5	116-190	Box Partition	X	X	X	X	X	X	X	X	X
6	8611-006	Ground Lug	X	X	2	X	X	X	X	X	X
7	126-267	Circuit Breaker Base	X	X	X	X	X	X	X	X	X
8	8615-047	Jumper Bar Base			X					X	
11	8615-037	Circuit Breaker 30A 2-Pole	X		X						
11	8615-040	Circuit Breaker 50A 2-Pole		X	X						
11	8615-054	Circuit Breaker 20A 2-Pole				X					
11	8615-042	Circuit Breaker 35A 3-Pole						X			
11	8615-051	Circuit Breaker 25A 3-Pole					X				
11	8615-043	Circuit Breaker 40A 3-Pole							X		
11	8615-044	Circuit Breaker 45A 3-Pole								X	
11	8615-046	Circuit Breaker 60A 3-Pole									X
12	8401-006	Contacto 2-Pole 20A		X	X			X	X	X	
13	8402-100	Limits		1	2			2	2	2	2
14	8611-026	Snap Bushings 1-3/4	X	X	X	X	X	X	X	X	X
15	116-189	Heater Box	X	X	X	X	X	X	X	X	X
16	8604-103	Heat Strip 5 KW		X							
16	8604-104	Heat Strip 10 KW			X						
16	8604-107	Heat Strip 6 KW 3 PH						X	X		2
16	8604-108	Heat Strip 9 KW 3 PH			X					X	
17	116-191	Heat Strip Wrapper	X	X	X	X	X	X	X	X	X
NS	132-145	Heat Strip Cover	X	X	X	X	X	X	X	X	X
NS	4101-100	Wiring Diagram	X								
NS	4101-101	Wiring Diagram		X							
NS	4101-102	Wiring Diagram			X						
NS	4101-200	Wiring Diagram				X	X				
NS	4101-201	Wiring Diagram						X	X	X	
NS	4101-203	Wiring Diagram									X

NS = Not Shown

# OPTIONAL HEATER COMPONENTS

Drawing			QH241DC02	QH301DC02	QH241DC06	QH301DC06	QH241DC09	QH301DC09	QH301DC12	QH361DA0Z	QH421DA0Z	QH361DA05	QH421DA05	QH361DA10	QH421DA10	QH361DA15	QH421DA15
No.	Part No.	Description															
1	3000-1044	Wire Set	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2	8201-048	Relay		X	X	X	X					X	X	X	X	X	X
3	3000-1043	Wire Set	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4	8607-022	Terminal Block	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5	116-190	Box Partition	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6	8611-006	Ground Lug	X	X	X	X	X	X	X	X	X	X	X	2	2	2	2
7	126-267	Circuit Breaker Base	X							X	X	X	X	X	X	X	X
8	8615-047	Jumper Bar Base												X	X	X	X
9	126-269	Pull Disconnect Base	X	X	X	X	X										
10	8615-053	Pul Disconnect	X	X	X	X	X										
11	8615-039	Circuit Breaker 45A 2-Pole								X				X	X	X	X
11	8615-040	Circuit Breaker 50A 2-Pole									X						
11	8615-041	Circuit Breaker 60A 2-Pole										X					
11	8615-055	Circuit Breaker 40A 2-Pole											X				
12	8401-006	Contactor 2-Pole 20A		X	X	X	X					X	X	X	X	X	X
13	8402-100	Limits		2	2	2	4					1	2	3	3	3	3
14	8611-026	Snap Bushings 1-3/4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15	116-189	Heater Box	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16	8604-103	Heat Strip 5 KW										X					
16	8604-104	Heat Strip 10 KW												X	X	X	X
16	8604-107	Heat Strip 6 KW 480 V		X			2										
16	8604-108	Heat Strip 9 KW 480 V			X												
17	116-191	Heat Strip Wrapper	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
NS	132-145	Heat Strip Cover	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
NS	4101-100	Wiring Diagram								X	X						
NS	4101-101	Wiring Diagram										X					
NS	4101-102	Wiring Diagram												X			
NS	4101-103	Wiring Diagram														X	
NS	4101-300	Wiring Diagram	X														
NS	4101-301	Wiring Diagram		X	X												
NS	4101-303	Wiring Diagram						X									X

NS = Not Shown



# OPTIONAL HEATER COMPONENTS

Drawing No.	Part No.	Description	QH361DB0Z	QH421DB0Z	QH361DB06	QH421DB06	QH361DB09	QH421DB09	QH361DB15	QH421DB15	QH361DC0Z	QH421DC0Z	QH361DC06	QH421DC06	QH361DC09	QH421DC09	QH361DC15	QH421DC15
1	3000-1044	Wire Set	X		X		X		X		X		X		X		X	
2	8401-048	Relay			X		X		X				X		X		X	
3	3000-1043	Wire Set	X		X		X		X		X		X		X		X	
4	8607-022	Terminal Block	X		X		X		X		X		X		X		X	
5	116-190	Box Partition	X		X		X		X		X		X		X		X	
6	8611-006	Ground Lug	X		X		X		X		X		X		X		X	
7	126-267	Circuit Breaker Base	X		X		X		X									
9	126-269	Pull Disconnect Base									X		X		X		X	
10	8615-053	Pul Disconnect									X		X		X		X	
11	8615-052	Circuit Breaker 30A 3-Pole	X															
11	8615-045	Circuit Breaker 50A 3-Pole					X											
11	8615-046	Circuit Breaker 60A 3-Pole						X	X									
11	8615-044	Circuit Breaker 45A 3-Pole			X													
12	8401-006	Contactor 2-Pole 20A			X		2	X	X									
12	8401-002	Contactor 3-Pole 25A									X		X		X			
13	8402-100	Limits					2	2	2	3			2		2		4	
14	8611-026	Snap Bushings 1-3/4	X		X		X		X		X		X		X			
15	116-189	Heater Box	X		X		X		X		X		X		X			
16	8604-103	Heat Strip 6 KW 3 PH			X				X									
16	8604-106	Heat Strip 9 KW 3 PH					X	X	X									
16	8604-107	Heat Strip 6 KW 480 V											X				X	
16	8604-108	Heat Strip 9 KW 480 V													X		X	
17	116-191	Heat Strip Wrapper	X		X		X		X		X		X		X		X	
NS	132-145	Heat Strip Cover	X		X		X		X		X		X		X		X	
NS	4101-200	Wiring Diagram	X															
NS	4101-201	Wiring Diagram			X		X											
NS	4101-202	Wiring Diagram							X									
NS	4101-300	Wiring Diagram									X							
NS	4101-301	Wiring Diagram										X		X				
NS	4101-302	Wiring Diagram															X	

NS = Not Shown

