

**SUSSMAN 'ES, HU and MBA' SERIES PARTS LIST  
MBA PARTS - PAGES 4, 7 & 8  
EFFECTIVE MAY 19, 2025**

PART #	DESCRIPTION
<b>STEAM SAFETY VALVES</b>	
99136	100 PSIG 1/2" NPT (ES12 to ES72)
99137	100 PSIG 1" NPT (ES85 to ES180)
99132	15 PSIG 1/2" NPT (ES12 to ES48, HU40 to HU140)
99297V	15 PSIG 3/4" NPT (ES60 to ES72, HU175 to HU205)
99141	15 PSIG 1" NPT (ES85 to ES100, HU250 to HU310)
99142	15 PSIG 1-1/2" NPT (ES135 to ES180, HU410 to HU550)
99134	50 PSIG 1/2" NPT (ES12 to ES72, MBA)
99143	50 PSIG 3/4" NPT (ES85 to ES180)
103674	150 PSIG 1/2" NPT (ES12 to ES18072)
<b>PRESSURE CONTROLS</b>	
99113R	OPERATING PRESSURE CONTROL 3-15 PSIG
99969R	HIGH LIMIT PRESSURE CONTROL 3-15 PSIG W/MANUAL RESET
99128R	OPERATING PRESSURE CONTROL 20-90 PSIG
99130R	HIGH LIMIT PRESSURE CONTROL 20-90 PSIG W/ MANUAL RESET
99098	OPERATING PRESSURE CONTROL 8-35 PSIG: 50 PSIG TRIM
99997	HIGH LIMIT PRESSURE CONTROL 8-35 PSIG W/MANUAL RESET, 50 PSIG
99128	OPERATING PRESSURE CONTROL 150 PSIG TRIM
99130	HIGH LIMIT PRESSURE CONTROL 150 PSIG TRIM W/ MANUAL RESET
65026	EPC3008 TEMPERATURE/PRESSURE CONTROLLER USED FOR ES BOILERS OUTFITTED WITH BACNET/MODBUS OR 4-20MA REMOTE SETPOINT CONTROL OPTIONS, SHIPPED 2024 OR LATER
62005-100	PRESSURE TRANSMITTER USED WITH THE 65026 EPC3008 TEMPERATURE/PRESSURE CONTROLLER
99373	PRESSURE CONTROL PROPORTIONAL 20-150 PSIG - USED WITH SEQUENCER ES100442
99374	PRESSURE CONTROL PROPORTIONAL 3-15 PSIG - USED WITH SEQUENCER ES100442-15
FB023	PIGTAIL 1/4" NPT 180°
<b>PUMPS - THERE ARE TWO PUMP MANUFACTURERS, MTH AND BURKS, WHICH HAVE DIFFERENT PIPING CONNECTIONS. USE CARE WHEN SWITCHING BETWEEN THE TWO.</b>	
103535	NOT AVAILABLE; USE 99160 OR 99160M
103535C	NOT AVAILABLE; USE 99160 OR 99160M
99160M	MTH (BLACK) 1/3 HP MOTOR/PUMP 120/1 & 240/1 (ES12 to ES72) for ES38002A, ES38092EX, ES38083V & ES38050EX.
99160	BURKS (BLUE) 1/3 HP MOTOR/PUMP 120/1 & 240/1 (ES12 to ES72) for ES38002A, ES38092EX, ES38083V & ES38050EX.
99160-15	BURKS (BLUE) 1/3 HP MOTOR/PUMP 120/1 (ES12 to ES72) for 15 PSIG ES38083V-15
99157M	MTH (BLACK) 1/2 HP MOTOR/PUMP 120/1 & 240/1 (ES100 to ES180) for ES38020A, ES38051EX, ES38084V & ES38041EX.
99157	BURKS (BLUE) 1/2 HP MOTOR/PUMP 120/1 & 240/1 (ES100 to ES180) for ES38020A, ES38051EX, ES38084V & ES38041EX.
99157-15PSI	<u>OLD PN 99157-15</u> - 1/2 HP MOTOR/PUMP 120/1 (ES85 to ES180) for 15 PSIG ES38084V-15
99160-150	MTH (BLACK) 1/3 HP MOTOR/PUMP 120/1 & 240/1 (ES12 to ES72) for 150 PSIG TRIM SYSTEMS
38008-150	MTH (BLACK) 3/4HP, 3 PHASE MOTOR & PUMP FOR ES85 TO ES180, 150 PSIG TRIM SYSTEMS

## ES & HU PARTS LIST

PART #	DESCRIPTION
<b>PARTS FOR CONDENSATE RETURN</b>	
39011-FB	FLOAT FOR 17 GALLON & 33 GALLON TANKS (C.R.S.)
39010-F	FLOAT VALVE FOR 17 GALLON & 33 GALLON TANKS (C.R.S.)
38083V-TANK	CONDENSATE TANK ONLY - 17 GALLON
38084V-TANK	CONDENSATE TANK ONLY - 33 GALLON
<b>SOLENOIDS</b>	
99031	WATER SOLENOID COMPLETE 1/2" 120V 50/60 HZ
99032	WATER SOLENOID COMPLETE 1/2" 240V 50/60 HZ
<b>MISCELLANEOUS VALVES &amp; PRESSURE GAUGES</b>	
99123	1/2" STRAINER
99162	CHECK VALVE - SPRING 3/8"
99167	CHECK VALVE - SPRING 1/2"
22062-0.5	OLD PN 99178 - BALL VALVE 1/2" STEAM
99184-0.5	OLD PN 99178B - GATE DRAIN VALVE 1/2" STEAM
22063-0.25	OLD PN 99806 - BALL VALVE 1/4" STEAM
22062-1	OLD PN 99606SS - BALL VALVE 1" STEAM
99184-1	OLD PN 99184 - GATE DRAIN VALVE 1" STEAM
99197	PRESSURE GAUGE 0-160 PSIG for 100 PSIG Trim
99290	PRESSURE GAUGE 0-30 PSIG for 15 PSIG Trim
<b>TERMINAL BLOCK &amp; FUSES</b>	
99207	TERMINAL BLOCK, 3 POLE, 150 AMP: (ES12 - 208/1; ES18 - 208/1 & 240/1; ES24 - 208/1 & 208/3; ES30-ES36 - 208/3 & 240/3; ES48-ES72 - 380/3, 415/3, 480/3 & 600/3)
99264-6	FUSE - 10 AMP 250V
99209B	FUSE CUT OUT 1 POLE
99314	POWER CIRCUIT FUSE 250V 60 A (ES30-ES36 - 240/1; ES48 - 208/3; ES60-ES135 - 208/3 & 240/3; ES160-ES180 -240/3)
99315	FUSE BLOCK for 99314
99316	POWER CIRCUIT FUSE 600V 60 A (ES72 - 480/3 & 600/3; ES85-ES135 - 380/3 & 415/3 & 480/3 & 600/3; ES160-ES180 - 480/3 & 600/3)
99317	FUSE BLOCK for 99316
99539-60	OLD PN 99539 - POWER CIRCUIT FUSE 600V 60 A Class "J"
99580	OLD PN 99545 - TERMINAL BLOCK 4 POLE 30A 600V
99593	TERMINAL BLOCK (215A) for 5 CONTACTORS (ES30-ES36 - 240/1; ES48-ES72 - 208/3 & 240/3; ES85-ES180 - 380/3 & 415/3 & 480/3 & 600/3)
99594	TERMINAL BLOCK (325A) for 6 CONTACTORS (ES85-ES135 - 208/3; ES135-ES160 - 240/3)
99596	TERMINAL BLOCK (575A) for 10 CONTACTORS (ES180 - 208/3 & 240/3)
<b>MISCELLANEOUS</b>	
92827	TOGGLE SWITCH
92829	PILOT LIGHT
92830	BOILER ON/OFF SWITCH W/PILOT LIGHT
100442-6	MULTISTAGE STEP SEQUENCER
99348	AUX LWCO RESET SWITCH
99363-120	OLD PN 99363 - RELAY DPDT - 120V

## ES & HU PARTS LIST

PART #	DESCRIPTION
<b>BOILER GASKET, FLANGE &amp; BOLTS</b>	
99095	BLANK FLANGE 4-1/2 x 4-1/2 (ES SERIES)
99096B	GASKET (BLACK - NO SLIC-TITE USED)
10058-0.75-B	OLD PN 99547Z - 3/4 IN. ELEMENT BOLT (QTY of 1)
99547B	OLD PN 99547 - 3/4 IN. ELEMENT BOLT (QTY of 6)
99524-6T	18" #6 WIRE W/TERMINAL END
99524	#6 WIRE (per ft.)
97116	RING TERMINAL
103540	BOILER GASKET KIT (INCL 99096B GASKET, 99547B BOLTS, & NUTS)
<b>AUTOMATIC BLOWDOWN SYSTEM</b>	
103662	TIME CLOCK - 120V, 60 HZ
99353	DELAY TIMER RELAY 130 BOARD
103661	MOTOR DRIVEN BALL VALVE - 120V 1" NPT - STANDALONE ES UNITS
<b>PARTS FOR MM150 AUTOMATIC FEED CONTROL &amp; LOW WATER CUTOFF</b>	
103914	MICRO SWITCH ASSEMBLY
SA150-11	FLOAT & ROD
SA150-14	HEAD GASKET
SA150-106R	BELLOW ASSEMBLY WITH GASKET
99114	LOW WATER CUTOFF & AUTOMATIC WATER FEEDER, MM150 RANGE 0-100 PSIG (ES SERIES)
<b>SOLID STATE PROBE TYPE LOW WATER CUTOFF &amp; WATER FEED CONTROLS</b>	
90229	SPARK PLUG
90229-1	AUXILIARY LOW WATER CUT OFF PROBE
103163	PROBE BOOT
90241MRT	AUXILIARY LWCO BOARD - MANUAL RESET
99807-5	OLD PN 99807F - PROBE ROD 5-INCH for MBA, ES24A, ES30A & ES36A BOILERS ONLY - NOT USED ON FLOAT WATER LEVEL BOILERS.
100412A	LIQUID LEVEL CONTROL BOARD, 120V: MBA, ES24A, ES30A & ES36A BOILERS ONLY - NOT USED ON FLOAT WATER LEVEL BOILERS.
100412C	LIQUID LEVEL CONTROL BOARD, 240V: MBA, ES24A, ES30A & ES36A BOILERS ONLY - NOT USED ON FLOAT WATER LEVEL BOILERS.

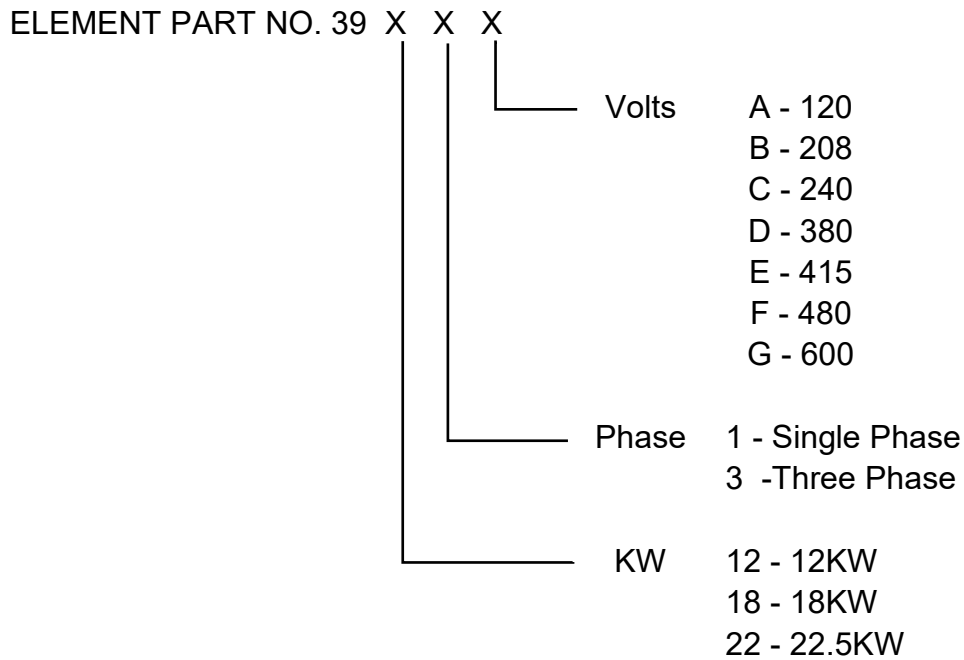
## ES, HU & MBA HEATING ELEMENTS

PART #	KW	VOLTAGE/PHASE
29031A	3	120/1
29031B	3	208/1
29031C	3	240/1
29033C	3	240/3
29063B	6	208/3
29063C	6	240/3
29063D	6	380/3
29063F	6	480/3
29093B	9	208/3
29093C	9	240/3
29093F	9	480/3
29093G	9	600/3
39121B	12	208/1
39121C	12	240/1
39123B	12	208/3
39123C	12	240/3
39123D	12	380/3
39123E	12	415/3
39123F	12	480/3
39123G	12	600/3
39181B	18	208/1
39181C	18	240/1
39183B	18	208/3
39183C	18	240/3
39183D	18	380/3
39183E	18	415/3
39183F	18	480/3
39183G	18	600/3
39201B	20	208/1
39201C	20	240/1
39203B	20	208/3
39203C	20	240/3
39203D	20	380/3
39203E	20	415/3
39203F	20	480/3
39203G	20	600/3
39223B	22.5	208/3
39223C	22.5	240/3
39223D	22.5	380/3
39223E	22.5	415/3
39223F	22.5	480/3
39223G	22.5	600/3
39243B	24	208/3
39243C	24	240/3
39243F	24	480/3

Elements shipped with gasket, bolts and wiring nuts.

## ES & HU HEATING ELEMENT SELECTION CHART

BOILER MODEL #	Total KW	ELEMENTS			
		QTY	KW	QTY	KW
ES-12	12	1	12		
ES-18	18			1	18
ES-24	24	2	12		
ES-30	30	1	12	1	18
ES-36	36			2	18
ES-48	48	1	12	2	18
ES-60	60	2	12	2	18
ES-72	72			4	18
ES-85	84	1	12	4	18
ES-100	108			6	18
ES-135	144			8	18
ES-160	157.5			7	22.5
ES-180	180			8	22.5



Example: 39183B - 18kW, 3 Phase, 208 Volts

## ES & HU CONTACTOR SELECTION CHARTS

QUANTITY AND AMPS								
	VOLTS/PHASE							
BOILER	208/1	240/1	208/3	240/3	380/3	415/3	480/3	600/3
ES12	1-75	1-60	1-50	1-50	1-50	1-50	1-50	1-50
ES18	*	*	1-60	1-50	1-50	1-50	1-50	1-50
ES24	2-75	2-60	2-50	2-50	1-50	1-50	1-50	1-50
ES30	--	--	2-60	2-50	1-50	1-50	1-50	1-50
ES36	--	--	2-60	2-50	1-60	1-60	1-50	1-50
ES48	--	--	3-60	3-50	2-50	2-50	2-50	2-50
ES60	--	--	4-60	4-50	2-50	2-50	2-50	2-50
ES72	--	--	4-60	4-50	2-60	2-60	2-50	2-50
ES85	--	--	1-50, 4-60	5-50	3-60	3-60	3-50	3-50
ES100	--	--	6-60	6-50	3-60	3-60	3-50	3-50
ES135	--	--	8-60	8-50	4-60	4-60	4-50	4-50
ES160	--	--	7-75	7-60	4-75	4-75	4-60	4-50
ES180	--	--	8-75	8-60	4-75	4-75	4-60	4-50

\* For ES18, single phase, 208V and 240V use P/N 99006B, 50 A-4 Pole Contactor

### CONTACTOR PART NUMBER SELECTION:

	VOLTS: 208/240/480/600	VOLTS: 346/380/415
AMPS	CONTROL CIRCUIT: 120V	CONTROL CIRCUIT: 240V
50	P/N 99003	P/N 99001
60	P/N 99075	P/N 99007
75	P/N 102206-1	P/N 102206

Example: For ES72 240V 3 phase, there are 4 contactors, 50 amps each (Part Number is 99003, 120V Coil).

CONTACTOR PART NUMBER	DESCRIPTION
103834	PUMP CONTACTOR 120V 1 POLE
103834C	PUMP CONTACTOR 240V 1 POLE
99001	CONTACTOR 50 AMP RATING 230V 50/60 HZ
99003	CONTACTOR 50 AMP RATING 120V 50/60 HZ (208V, 240V, 480V, 600V)
99006B	CONTACTOR 50 AMP RATING 4 POLE 120V 50/60 HZ
99007	CONTACTOR 60 AMP RATING 240V 50/60 HZ
102206-1	CONTACTOR 75 AMP RATING 120V 50/60 HZ
102206	CONTACTOR 75 AMP RATING 240V 50/60 HZ
99075	CONTACTOR 60 AMP RATING 120V 50/60 HZ

## ES, HU & MBA SIGHT GAUGE GLASS PARTS LIST

MODEL #	LENGTH	VALVE ASSEMBLY	GLASS TUBE	
			NEW PN	OLD PN
MBA3-MBA20	9-3/4" - 9-7/8"	99173C	24013-9.75-BR	99080-1
ES12-ES18	7-3/4" - 7-7/8"	99173C	24013-7.75-BR	99074-1
ES24-ES72	9-3/4" - 9-7/8"	99173C	24013-9.75-BR	99080-1
ES85-ES180	11-3/4" - 11-7/8"	99173C	24013-11.75-BR	99081-1
CRS	7-7/8"	99173C	24013-7.75-BR	99074-1
BDT	10-1/4"	99173C	24013-10.25-BR	99082-1

1. Gauge glass tube and valve assembly is sold separately
2. Glass tube includes 2 sleeve gaskets P/N 99174CV and 2 brass washers 99174B
3. Glass tube is 5/8 in. diameter Pyrex

NEW PART #	OLD PART #	DESCRIPTION
24013-7.75-BR	99074-1	7-3/4" GLASS W/ (2) SLEEVE GASKETS (ES12, ES18, & ES24A)
24013-9.75-BR	99080-1	9-3/4" GLASS WITH (2) SLEEVE GASKETS (ES24 to ES72, MBA)
24013-11.75-BR	99081-1	11-3/4" GLASS WITH (2) SLEEVE GASKETS (ES85 to ES180)
24013-10.25-BR	99082-1	10-1/4" Pyrex GLASS WITH (2) SLEEVE GASKETS (BDT)
99173C	99173C	GAUGE GLASS ASSEMBLY 1/2" x 1-3/4" (MBA, ES, HU Series, BDT)
99174CV	99174CV	GAUGE GLASS VITON SLEEVE GASKET
99174B	99174B	GAUGE GLASS BRASS WASHER

## MBA PARTS LIST

PART #	DESCRIPTION
90229	SPARK PLUG
92830	BOILER ON/OFF SWITCH W/PILOT LIGHT
99042	WATER SOLENOID 1/4" 120V
99042C	WATER SOLENOID 1/4" 240V
24013-9.75-BR	<u>OLD PN 99080-1</u> - 9-3/4" GAUGE GLASS WITH (2) SLEEVE GASKETS
99173C	GAUGE VALVE SET
99136	SAFETY VALVE 100 PSI, 1/2" NPT
99132	SAFETY VALVE 15 PSI, 1/2" NPT
99134	50 PSIG 1/2" NPT (ES12 to ES72, MBA)
99197	PRESSURE GAUGE 160 PSI
99290	PRESSURE GAUGE 0-30 PSIG for 15 PSIG Trim
99113R	OPERATING PRESSURE CONTROL 3-15 PSIG
99969R	HIGH LIMIT PRESSURE CONTROL 3-15 PSIG W/MANUAL RESET
99128R	OPERATING PRESSURE CONTROL 20-90 PSIG
99130R	HIGH LIMIT PRESSURE CONTROL 20-90 PSIG W/ MANUAL RESET
99098	OPERATING PRESSURE CONTROL 8-35 PSIG: 50 PSIG TRIM
99997	HIGH LIMIT PRESSURE CONTROL 8-35 PSIG W/MANUAL RESET, 50 PSIG
100706-1	FUSE 10 AMP
99807-5	<u>OLD PN 99807F</u> - PROBE ROD 5-INCH for MBA, ES24A, ES30A & ES36A BOILERS
99807-7	<u>OLD PN 99807A</u> - PROBE ROD 7-INCH AUX LWCO for MBA, ES24A, ES30A & ES36A
99075	CONTACTOR 60 AMP 3 POLE, 120V
99007	CONTACTOR 60 AMP 3 POLE, 240V
100412A	LIQUID LEVEL CONTROL BOARD, 120V
100412C	LIQUID LEVEL CONTROL BOARD, 240V
100378	PROBE ISOLATOR
99096B	GASKET (BLACK - NO SLIC-TITE USED)
10058-0.75-B	<u>OLD PN 99547Z</u> - 3/4 IN. ELEMENT BOLT (QTY of 1)
99547B	<u>OLD PN 99547</u> - 3/4 IN. ELEMENT BOLT (QTY of 6)
103540	BOILER GASKET KIT (INCL 99096B GASKET, 99547B BOLTS, & NUTS)