

SPARE PARTS LIST

6/8kW 340794 N ₂ , Ar			
6/8kW 204234 (1-949-0004) CO ₂ 350100 CO ₂			
Description	Item No Fig1	Stock No.	Old Part No.
Heater Element, 6/8KW (steel-CO ₂)	1A	204860	7-916-0017
Heater Element, 6/8KW (Stainless-N ₂ Ar)	1B	340835	--
Temperature Controller	2	204176	1-050-0125
Relief Valve, 1/2", 450 psi	3	204213	1-016-0753
Control Box	4	205266	8-910-0024
Overheat Sensor, 140°F Manual Reset	5	205171	7-950-0012
Wiring Diagram	6	205027	7-936-0093
Contactor, 30A	7	204497	5-017-0241
Transformer Control Circuit 240/480V-120 75VA	8	204505	5-020-0104
Timer OFF Delay (set 4 seconds)	9	204905	7-919-0023
Fuse, 8/10A (120) Buss FRN	10	350113	--
Fuse, 1/2A (480) Buss FRN-R (2x)	11	350116	--
Fuse 1.5A (240) Buss FRN-R (2x)	12	350114	--
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12/16/24 kW 344644 N ₂ , Ar			
12/16/24 kW 204235 S/N (1-949-0012) CO ₂			
Description	Item No Fig1	Stock No.	Part No.
Heater Element, 12/16/24kW (steel-CO ₂)	1A	N-204857	7-916-0014
Heater Element, 12/16/24kW (Stainless-N ₂ Ar)	1B	N-340836	--
Temperature Controller	2	N-204176	1-050-0125
Relief Valve, 1/2", 450 psi	3	N-204213	1-016-0753
Control Box	4	N-340892E	
Overheat Sensor, 140°F Manual Reset	5	N-205171	7-950-0012
Wiring Diagram	6	N-205028	7-936-0094
Contactor, 60A	7	N-204498	5-017-0300
Transformer Control Circuit 240/480V-120 75VA	8	N-204505	5-020-0104
Timer OFF Delay (set 4 seconds)	9	N-204905	7-919-0023
Fuse, 8/10A (120) Buss FRN	10	N-350113	--
Fuse, 1/2A (480) Buss FRN-R (2x)	11	N-350116	--
Fuse, 1.5A (240) Buss FRN-R (2x)	12	N-350114	--

VAPOR HEATER SPECIFICATIONS

	6/8KW	12/16/24KW		
Part Number	N-204234	N-204235		
Stock No.	1-949-0004	1-949-0012		
Height	37"	28"		
Width	15"	48"		
Depth	15"	11-1/2"		
Gas Inlet	1"FPT front	1-1/2"Mueller Flange Rear		
Gas Outlet	1"FPT top	1-1/2"Mueller Flange Rear		
MAWP	450 psig	450 psig		
Overheat Sensor	140°F manual reset	140°F manual reset		
Temperature Range	-100° to 600°F	-100° to 600°F		
Electrical Requirements	240/480V 3-phase	240/480V 3-phase		
240V Electrical Amps	14.4A	12KW 16KW 24KW	28.8A 38.5A 47.7A	
480V Electrical Amps	9.6A	12KW 16KW 24KW	14.4A 19.2A 28.8A	
Delay Relay	1/2 - 10 sec	1/2 - 10 sec		
Electrical Enclosure	Nema-4 outdoor	Nema-4 outdoor		

VAPOR HEATER TROUBLE SHOOTING

SYMPTOM	PROBABLE CAUSE	REMEDY
Heater not energizing	Electrical power failure.	Turn disconnect switch on. Replace blown line fuses or circuit breaker. Replace blown transformer fuse(s).
	Overheat sensor actuated.	Reset sensor and check temperature switch operation.
	Contactors coil burned out.	Replace defective contactor.
	Temperature switch broken.	Replace switch and adjust to 70° to 100°F.
	Heater elements burned.	Replace defective heaters.
Cool gas exiting heater	Temperature switch adjusted too low.	Readjust to 70° to 100°F; middle of scale. Replace defective switch.
	Excessive vapor withdrawal.	Replace with a larger heater.
	One or more heater elements malfunctioning.	Check heater wiring. Replace defective heater elements.
	Low or improper voltage.	Check voltage and heater wiring.
Contactors chattering	Time delay relay set too short.	Adjust relay to 2 - 4 second delay or replace. NOTE: Pre 1993 units may need to install time delay relays for best operation.
Contactors arcing excessively	Contacts pitted.	Replace contactor.