7610.724.33 Rev. E 9/09 Catalog No.: 3227488

#### INSTRUCTION MANUAL

#### **Contents**

GENERAL SAFETY INFORMATION	1
1.0 INSTALLATION	2
2.0 OPERATION	3
3.0 MAINTENANCE	4
TROUBLESHOOTING GUIDE	6
SPECIFICATIONS	7-8
ELECTRICAL SCHEMATICS	S
DIMENSIONS AND WEIGHTS	10-12
PARTS LIST	13-14
WARRANTY	16

#### **GENERAL SAFETY INFORMATION**

### **▲** CAUTION

#### 1. Pressurized devices

This equipment is a pressure containing device.

- Do not exceed maximum operating pressure as shown on equipment serial number tag.
- Make certain equipment is depressurized before servicing.

#### 2. Electrical

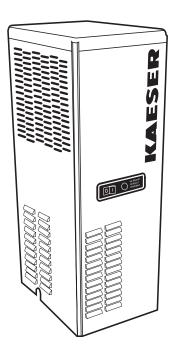
This equipment requires electricity to operate.

- Install equipment in compliance with national and local electrical codes.
- Standard equipment is supplied with NEMA 1 electrical enclosures and is not intended for installation in hazardous environments.
- Disconnect power supply to equipment when performing any electrical service work.

# 3. Breathing air

 Air treated by this equipment may not be suitable for breathing without further purification. Refer to OSHA standard 1910.134 for the requirements for breathing quality air.

# KAESER



HTRD SERIES

**HIGH INLET** 

**TEMPERATURE** 

REFRIGERATED

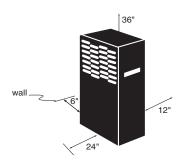
**COMPRESSED** 

**AIR DRYERS** 

#### 1.0 INSTALLATION

#### 1.1 Location

- A. Air compressor intake Locate air compressor so that contaminants potentially harmful to the dryer are not drawn into the air system.
- B. Free air flow Do not block either side of the cabinet. Observe minimum installation clearances as shown.



### 1.2 Mounting

Dryer is suitable for floor or shelf mounting.

# 1.3 Piping connections



- A. Air Inlet Connect compressed air line from air compressor to air inlet using strainer supplied.
  - Install strainer (included in shipping carton) prior to dryer inlet using pipe nipple supplied or other piping as required.

NOTE: Observe flow direction arrows on strainer.

NOTE: Install strainer where it is easily accessible for cleaning.

NOTE: Use vibration dampener, if vibration exists in air line at inlet to dryer.

- 2. Location in the compressed air system
- A. **A. WARNING** Maximum working pressure 250 psig, 17.6 kgf/cm². Do not exceed unit's Maximum Working Pressure.
  - For maximum capacity, install unit in air system at highest pressure possible (e.g. before pressure reducing valves)
  - 2) For maximum capacity, install unit at coolest compressed air temperature possible. Maximum inlet compressed air temperature: 180°F, 82°C. If inlet air exceeds this temperature, precool the air by extending the piping between the compressor and the dryer.
- B. Air Outlet Connect air outlet to downstream air lines.
- C. By-pass piping If servicing the unit without interrupting the air supply is desired, piping should include inlet and outlet isolation valves and an air by-pass valve.
- D. Condensate drain It is advisable to connect drain outlet to the condensate drainage system.

NOTE: Drain discharge is at system pressure. Drain line should be anchored to prevent whipping.

#### 1.4 Electrical connections

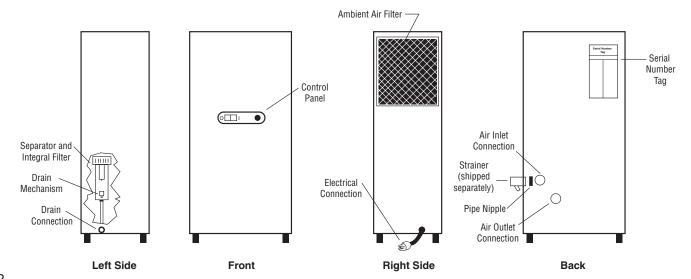
- A. Dryer is designed to operate on power supply (voltage) listed on serial number tag located on the back of the dryer.
- B. Dryer is supplied with an electrical cord. Install in receptacle of proper voltage.

NOTE: Models 50 and 75 (115v only) - Install plug in receptacle rated for 20 amps. Units are supplied with 20 amp plug.



Plug

NOTE: Refrigeration system is designed to run continuously and should NOT be wired to cycle on/off with the air compressor.



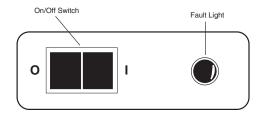
#### 2.0 OPERATION

NOTE: Installations above 6000 feet, 1825 meters Unit is adjusted to operate in altitudes up to 6000 feet, 1825 meters. If unit is installed in an altitude above this, and has not been preset at the factory for this altitude, contact Manufacturer's Service Department.

#### 2.1 Start-up

Start refrigeration system by pushing the on/off switch to the ON position (depress rocker switch on side marked "|").

NOTE: The fault light may illuminate when unit is energized. Light should go out approximately 5 minutes after start-up. If light remains lit after 30 minutes or illuminates after going out, refer to Troubleshooting Guide.



Control Panel

# 2.2 Operating check points

Check the following on a periodic basis:

- A. Rocker switch is in the ON position.
- B. Amber fault light is out.
- C. Condensate is being regularly discharged.

### 2.3 Minimum/maximum operating conditions

- A. Minimum/Maximum air pressure: 20/250 psig, 1.4/17.6 kgf/cm<sup>2</sup>
- B. Maximum inlet air temperature: 180°F, 82°C
- C. Minimum/Maximum ambient temperature: 35/110°F, 2/43°C

- D. Maximum flow capacity
- 1. For dryers without an aftercooler installed upstream Flow capacity in scfm (m³/min) @ 180°F, 82°C inlet temperature, 160°F, 71°C inlet pressure dew point, 95°F, 35°C ambient temperature, 50°F, 10°C outlet pressure dew point, and less than 5 psi, 0.35 kgf/cm² pressure drop.

60 HZ

Inlet Pressure psig (kgf/cm²)		175 (12.3)	150 (10.6)	125 (8.8)	100 (7.0)
	20	23 (0.65)	22 (0.62)	20 (0.57)	18 (0.51)
	25	29 (0.82)	27 (0.76)	25 (0.71)	23 (0.65)
	35	41 (1.16)	38 (1.08)	35 (0.99)	32 (0.91)
Model	Model 50	58 (1.64)	54 (1.53)	50 (1.42)	45 (1.27)
	75	87 (2.46)	81 (2.29)	75 (2.12)	68 (1.93)
	100	116 (3.29)	108 (3.06)	100 (2.83)	91 (2.58)
	125	145 (4.12)	135 (3.82)	125 (3.54)	114 (3.23)

#### 50 HZ

	Inlet Pressure psig (kgf/cm²)		150 (10.6)	125 (8.8)	100 (7.0)	
	20	20 (0.57)	18 (0.51)	17 (0.48)	15 (0.42)	
	25	24 (0.68)	23 (0.65)	21 (0.59)	19 (0.54)	
	35	35	31 (0.88)	29 (0.82)	27 (0.76)	24 (0.68)
Model	50	58 (1.64)	54 (1.53)	50 (1.42)	45 (1.27)	
	75	71 (2.01)	66 (1.87)	61 (1.73)	55 (1.56)	
	100	97 (2.75)	90 (2.55)	83 (2.35)	76 (2.15)	
	125	121 (3.43)	112 (3.17)	104 (2.95)	95 (2.69)	

2. For dryers with an aftercooler installed upstream Flow capacity in scfm (m³/min) @ 100°F, 38°C inlet temperature, 100°F, 38°C inlet pressure dew point, 100°F, 38°C ambient temperature, 50°F, 10°C outlet pressure dew point, and less than 10 psi, 0.7 kgf/cm² pressure drop.

**60 HZ** 

	Inlet Pressure psig (kgf/cm²)		150 (10.6)	125 (8.8)	100 (7.0)
	20		30 (0.85)	28 (0.79)	25 (0.71)
	25	40 (1.13)	37 (1.05)	34 (0.96)	31 (0.88)
	35	55 (1.56)	51 (1.44)	47 (1.33)	43 (1.22)
Model	50	78 (2.21)	73 (2.07)	67 (1.90)	61 (1.73)
	75	118 (3.34)	110 (3.12)	102 (2.89)	92 (2.61)
	100	157 (4.45)	146 (4.14)	136 (3.85)	123 (3.48)
	125	197 (5.58)	183 (5.18)	170 (4.82)	155 (4.39)

### **50 HZ**

Inlet Pressure psig (kgf/cm²)		175 (12.3)	150 (10.6)	125 (8.8)	100 (7.0)
	20	27 (0.76)	25 (0.71)	23 (0.65)	21 (0.59)
	25	33 (0.93)	31 (0.88)	29 (0.82)	26 (0.74)
	35	43 (1.22)	40 (1.13)	37 (1.05)	33 (0.93)
Model	50	78 (2.21)	73 (2.07)	67 (1.90)	61 (1.73)
	75	96 (2.72)	90 (2.55)	83 (2.35)	75 (2.12)
	100	131 (3.71)	122 (3.46)	113 (3.20)	102 (2.89)
	125	164 (4.65)	152 (4.31)	142 (4.02)	129 (3.65)

#### **3.0 MAINTENANCE**

**A CAUTION** DRYER IS A PRESSURE CONTAINING DEVICE. DEPRESSURIZE BEFORE SERVICING.

- 3.1 Ambient air filter Clean accumulated dust and dirt from ambient air filter monthly or more often if air flow across the condenser is impeded.
- A. Remove top panel.
- B. Remove ambient air filter by sliding upwards.





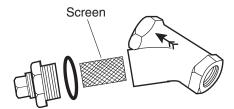
C. Wash with soap and water and allow to dry before reinstalling.

NOTE: Do not use solvents to clean ambient air filter.

D. Reinstall filter and top panel.

# **3.2** Inlet strainer - clean inlet strainer monthly or more often if rapid clogging occurs.

- Shut-off compressed air supply to the strainer and depressurize.
- B. Remove screen and clean or replace.
- C. Reinstall.



# 3.3 Replace separator/filter element yearly or more often if pressure drop across the dryer is excessive.

- A. Shut-off compressed air supply to the dryer and depressurize.
- B. Remove top panel.
- C. Remove two screws holding side panel and remove side panel by sliding upwards.
- D. Disconnect drain tube from bulkhead fitting in cabinet base. To remove, press the plastic collar in, toward the fitting, while pulling the tube out of the fitting.
- E. Remove bowl push bowl up, turn bowl 1/8th turn to your left, and pull straight down.
- F. Clean filter bowl.
- G. Replace element.





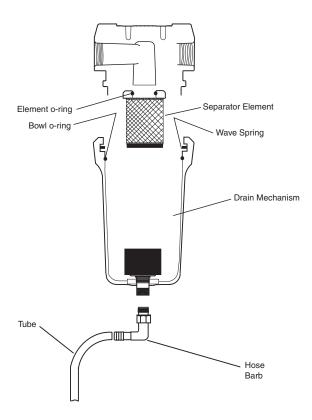
- 1. Replacing complete element
  - a) Pull off old element and discard.
  - b) Make certain 0-ring inside top of replacement element is in place and push element onto filter head.
- 2. Replacing sleeve only
  - a) Pull element straight down to remove.
  - b) Remove bolt and bottom cap and remove disposable filter sleeve.
  - Clean separator core with soap and water if necessary
  - d) Slide new filter sleeve over separator core and replace bottom cap and hand tighten bolt.
  - e) Make certain 0-ring inside top of element is in place and push element onto filter head.

H. After making sure that O-ring and wave spring inside top of bowl are in place, reassemble bowl to head.

NOTE: Make certain O-ring is generously lubricated

NOTE: Wave spring ends should be pointed down to prevent the wave spring from interfering with reassembly.

- I. Reconnect drain tube to bulkhead fitting by pushing tube into fitting until it locks in position.
- J. Reinstall side and top panels.
- K. Repressurize dryer and resume operation.



#### 3.4 Automatic condensate drain

- Check daily to be sure automatic drain is discharging.
- Replace drain mechanism yearly.
- A. Shut-off compressed air supply to the dryer and depressurize.
- B. Remove top panel.
- C. Remove two screws holding side panel then remove side panel by sliding upwards.
- D. Disconnect drain tube from bulkhead fitting in cabinet base. To remove, press the plastic collar in, toward the fitting, while pulling the tube out of the fitting.
- E. Remove bowl push bowl up, turn 1/8th turn to your left, and pull bowl straight down.
- F. Remove drain tube fitting from bottom of bowl.
- G. Remove old drain mechanism by turning knurled fitting to the right (clockwise) and remove.
- H. Install new drain mechanism. If necessary, use a wire or pencil to guide the new mechanism into place.
- I. Reassemble drain tube fitting to bowl.
- J. After making sure that large O-ring in filter head is in place, reassemble bowl to head.
- K. Reconnect drain tube to bulkhead fitting by pushing tube into fitting until it locks in position.
- L. Reinstall top and side panels.
- M. Repressurize dryer and resume operation.

# **TROUBLESHOOTING GUIDE**

SYMPTOM	POSSIBLE CAUSE(S)	CORRECTIVE ACTION		
A) Water downstream of dryer	<ol> <li>Residual free moisture remaining in downstream pipelines</li> <li>Air by-pass system is open</li> <li>Inlet and Outlet connections are reversed</li> <li>Temperatures surrounding air lines downstream of dryer have dropped below dryers dew point rating.</li> <li>Excessive free moisture (bulk liquid) at dryer inlet</li> <li>Condensate not being automatically drained Drain mechanism is clogged or inoperative. Drain line is restricted or frozen.</li> <li>Dryer overloaded resulting in elevated dew point.</li> <li>Refrigeration system not functioning properly resulting in elevated dew point.</li> </ol>	Blow out system with dry air  Check valve positions Check for correct connection  Insulate or heat trace air lines exposed to low ambients or dry air to lower dew point  Install separator ahead of dryer  Replace drain mechanism if inoperative Open drain line Check inlet air temperature and pressure, flow rate (compressor capacity) and ambient air temperature See D below		
B) High pressure drop across dryer	<ol> <li>Inlet air strainer clogged</li> <li>Excessive air flow</li> <li>Separator filter clogged.</li> <li>Freezing of moisture in evaporator because of refrigeration system improperly functioning.</li> </ol>	Clean inlet air strainer Check flow rate Replace filter sleeve See D below		
C) Fault Alarm	<ol> <li>Dryer overloaded resulting in high air outlet temperature.</li> <li>Refrigeration system not functioning properly resulting in high air outlet temperature.</li> <li>Unit functioning normally but thermostatic switch is malfunctioning or not securely mounted.</li> </ol>	See A 7 See D below  Contact qualified refrigeration repairman or manufacturer's service department		
D) Refrigeration system not functioning properly				
When dryer on/off switch in on or "I" position	a. Power failure b. Line disconnect switch open c. Blown fuses, open breaker d. Faulty wiring, loose terminals	Check power to unit Close disconnect switch Check for continuity Have electrician check electrical connections		
Refrigerant compressor cycles on and off	a. High or low ambient conditions  b. Ambient air filter clogged c. Condenser fins clogged d. Fan motor or fan control switch malfunction e. Refrigerant leak  f. Low voltage	Check minimum/maximum temperature ranges Clean ambient air filter Clean condenser Replace fan motor or fan control switch Contact qualified refrigeration repairman or manufacturer's service department Check wiring		

# **SPECIFICATIONS - Models 20 thru 75**

				Model				
Description			20 25 35 50					
Operating Conditions								
Rated Capacity	scfm	60 / 50 Hz	20 / 17	25 / 21	35 / 27	50 / 50	75 / 61	
@125 psig, 8.8 kgf/cm <sup>2*</sup>	m³/min	60 / 50 Hz	0.57 / 0.48	0.71 / 0.59	0.99 / 0.76	1.42 / 1.42	2.12 / 1.7	
Maximum Working Pressure					250 psig (17.6 kgf/cm	2)		
Maximum Inlet Temperature			180°F (82°C)					
Min/Max. Ambient Temperature					35-110°F (2-43°C)			
Pressure Drop @	psi	60 / 50 Hz	4.5 / 2.9	3.3 / 2.4	4.7 / 2.9	4.5 / 4.5	3.8 / 2.2	
rated capacity	(kgf/cm <sup>2</sup> )	60 / 50 Hz	(0.32 / 0.20)	(0.23 / 0.17)	(0.33 / 0.20)	(0.32 / 0.32)	(0.27 / 0.15)	
Refrigeration System Da	ata							
Compressor Type				Hermetic	, Rotary, Permanent Sp	olit Capacitor		
BTU/HR - Refrigeration Only		00 / 50 ! !-		0700 / 7047		40500		
@ ASRE-T Conditions		60 / 50 Hz		8720 / 7043		12500	/ 9970	
Outlet Air Temperature					45505 (6000)			
(nominal @ rated conditions)					155°F (68°C)			
Refrigerant Type	()	CO / FO ! !=			R-407C			
Refrigerant Charge	oz (grams)	60 / 50 Hz			See Dryer Serial Tag			
Suction Pressure Setting Factory Test (design) Pressure					67 psig (4.7 kgf/cm <sup>2</sup> )			
high side/low side				330/	178 psig (23.2/12.5 kg	F/cm <sup>2</sup> )		
Condenser Fan Switch Setting (	in out)				180 psig (16.9-12.7 kg)			
Air Flow Across Condenser	cfm	60 / 50 Hz		280 / 235	180 psig (16.9-12.7 kg)		/515	
All Flow Across Condensel	m³/min	60 / 50 Hz		(7.9 / 6.7)			/ 14.6)	
Electrical Data	111 / 11 1111	00 / 30 112		(7.37 0.77		(17.0	/ 14.0/	
Unit	115/1/60							
VAC/phase/Hz	113/1/00				115/1/60			
Minimum/maximum volts			98-127					
Full Load AmpS (FLA)				8.7	30 127	1'	2.6	
Branch Circuit Fuse Size (amp	ne)			15			20	
Compressor	<i>331</i>			13				
Volts/phase/Hz					115/1/60			
Rated Load amps (RLA)				7.5		1.	1.0	
Locked Rotor amps (LRA)				44.0		6	7.0	
Watts (input)				853		12	220	
Overload				Therr	mal and Current (Auto	Reset)		
Condenser fan motor								
Volts/phase/Watts (output)				115/1/25		115	′1/35	
Full Load Amps (FLA)				1.2		1	.6	
Other Loads								
Volts/amps/Watts					115/0.002/0.2			
Unit	220-240/1/	50						
VAC/phase/Hz					220-240/1/50			
Minimum/maximum volts					198-264			
Full Load Amps (FLA)				3.4		[ 6	.0	
Branch Circuit Fuse Size (amp	os)				15			
Compressor								
Volts/phase/Hz				2.2	220-240/1/50	T =	4	
Rated Load amps (RLA)			2.8				.1	
Locked Rotor amps (LRA)			18.6 28.0					
Watts (input)				690		1	90	
Overload				Therr	mal and Current (Auto	Reset)		
Condenser fan motor				220 240 /4 /40 3		220.04	2/4/25 6	
Volts/phase/Watts (output)				220-240/1/18.3			0/1/25.6	
Full Load Amps (FLA)				0.6		<u> </u>	.8	
Other Loads					220 240 /0 202 /0 4			
Volts/amps/Watts					220-240/0.002/0.4			

<sup>\*</sup> Capacity @  $180^{\circ}$ F,  $82^{\circ}$ C inlet temperature,  $160^{\circ}$ F,  $71^{\circ}$ C inlet pressure dew point,  $95^{\circ}$ F,  $35^{\circ}$ C ambient temperature,  $50^{\circ}$ F,  $10^{\circ}$ C outlet pressure dew point, and less than 5 psi, 0.35 kgf/cm² pressure drop.

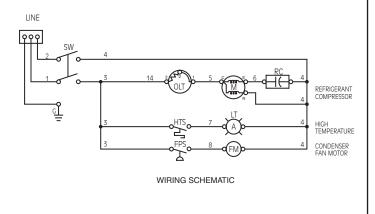
# **SPECIFICATIONS - Models 100 and 125**

			Mod	1el	
Description					
			100	125	
Operating Conditions Rated Capacity	20500	60 / 50 Hz	400 / 07	405 / 404	
@125 psig, 8.8 kgf/cm <sup>2</sup> *	scfm m³/min	60 / 50 Hz	100 / 83 2.83 / 2.35	125 / 104 3.54 / 2.95	
Maximum Working Pressure	1117111111	00 / 30 HZ	250 psig (17		
Maximum Inlet Temperature			230 psig (17		
Min/Max. Ambient Temperature			35-110°F		
Pressure Drop @	psi	60 / 50 Hz	3.5 / 2.6	4.6 / 3.1	
rated capacity	(kgf/cm²)	60 / 50 Hz	(0.25 / 0.18)	(0.32 / 0.22)	
Refrigeration System Da		007 00 1.12	(0.20 / 0.10/	(0.02 / 0.22/	
Compressor Type			Hermetic, Rotary, Pern	nanent Split Capacitor	
BTU/HR - Refrigeration Only			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
@ ASRE-T Conditions		60 / 50 Hz	24880 /	19543	
Outlet Air Temperature					
(nominal @ rated conditions)			155°F	(68°C)	
Refrigerant Type			R-2	22	
Refrigerant Charge	oz (grams)	60 / 50 Hz	See Dryer	Serial Tag	
Suction Pressure Setting			67 psig (4.7	kgf/cm²)	
Factory Test (design) Pressure					
high side/low side			278/144 psig (19.	6/10.1 kgf/cm <sup>2</sup> )	
Condenser Fan Switch Setting (	in-out)		240-180 psig (16.	9-12.7 kgf/cm <sup>2</sup> )	
Air Flow Across Condenser	cfm	60 / 50 Hz	830 /	690	
	m³/min	60 / 50 Hz	(23.5 /	19.5)	
Electrical Data					
Unit	208-230/1/6	60			
VAC/phase/Hz			230/	1/60	
Minimum/maximum volts			187-	253	
Full Load AmpS (FLA)			11	.7	
Branch Circuit Fuse Size (amp	os)		20		
Compressor					
Volts/phase/Hz			208-230	0/1/60	
Rated Load amps (RLA)			10	.6	
Locked Rotor amps (LRA)			58	.0	
Watts (input)			24′	15	
Overload			Thermal and Curr	ent (Auto Reset)	
Condenser fan motor					
Volts/phase/Watts (output)			230/	1/60	
Full Load Amps (FLA)			1.	1	
Other Loads			070 /0 0	00.40.4	
Volts/amps/Watts	000 010/4/5		230/0.0	02/0.4	
Unit	220-240/1/5	50	220.24	2/4/50	
VAC/phase/Hz			220-240		
Minimum/maximum volts			198-		
Full Load Amps (FLA)	20)		10		
Branch Circuit Fuse Size (amp	15/		15	)	
Compressor Volts/phase/Hz			220-240	0/1/50	
Rated Load amps (RLA)					
Locked Rotor amps (LRA)			9.		
Watts (input)			205		
Overload			Thermal and Curr		
Condenser fan motor			THEITHAI AHU CUIT	CITE VAULU KESEU	
Volts/phase/Watts (output)			230/	1/50	
Full Load Amps (FLA)			1.		
Other Loads			I.	1	
Volts/amps/Watts			220-240/0	0.002/0.4	
· Sico, arrips, vvacco			220 240/0		

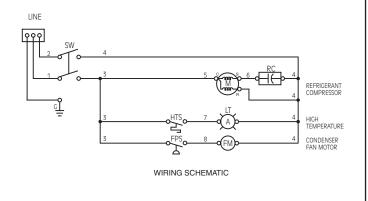
<sup>\*</sup> Capacity @ 180°F, 82°C inlet temperature, 160°F, 71°C inlet pressure dew point, 95°F, 35°C ambient temperature, 50°F, 10°C outlet pressure dew point, and less than 5 psi, 0.35 kgf/cm² pressure drop.

### **ELECTRICAL SCHEMATICS**

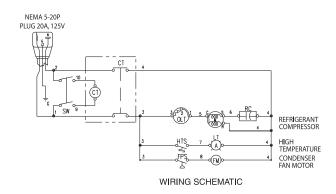
# Models 20 thru 75 - All Voltages Only Models 50 and 75 - 230-1-50/60



# Models 100 and 125 - All Voltages



# Only Models 50 and 75 - 115-1-50/60



### **LEGEND**

SW - On/Off Switch
OLT - Thermal Overload
M - Compressor Motor
RC - Run Capacitor

HTS - High Temperature Switch

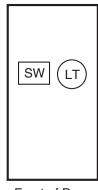
LT - Fault Light

FPS - Fan Pressure Switch

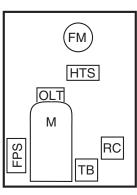
FM - Fan Motor TB - Terminal Block

CT - Contactor w/115V Coil

# Models 20 thru 125 - All Voltages



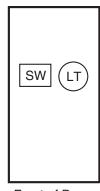
Front of Dryer (Outside)



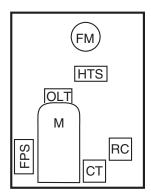
Right Side of Dryer (Inside)

#### **COMPONENT LOCATIONS**

# Only Models 50 and 75 - 115-1-50/60



Front of Dryer (Outside)



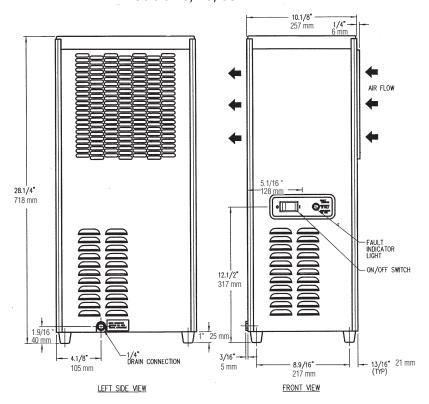
Right Side of Dryer (Inside)

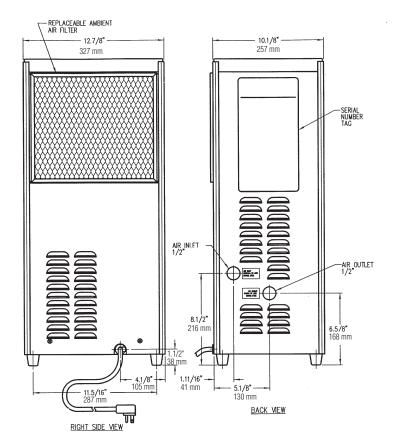
#### COMPONENT LOCATIONS

# **DIMENSIONS AND WEIGHTS**

Models 20, 25, 35

Model	Weight
20	79 lbs (36 kg)
25	80 lbs (36 kg)
35	81 lbs (37 kg)

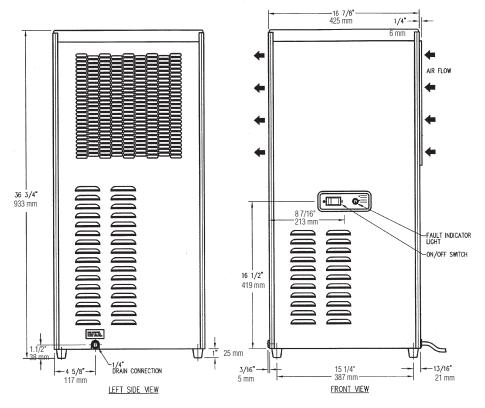


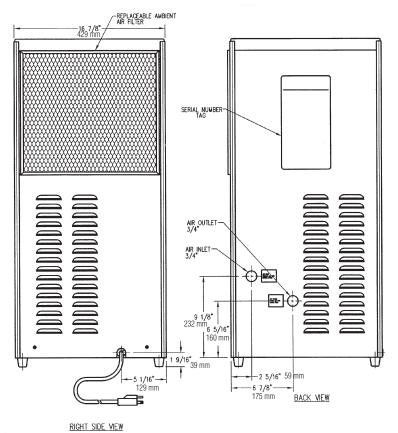


# **DIMENSIONS AND WEIGHTS**

# Models 50 and 75

Model	Weight
50	150 lbs (68 kg)
75	155 lbs (70 kg)

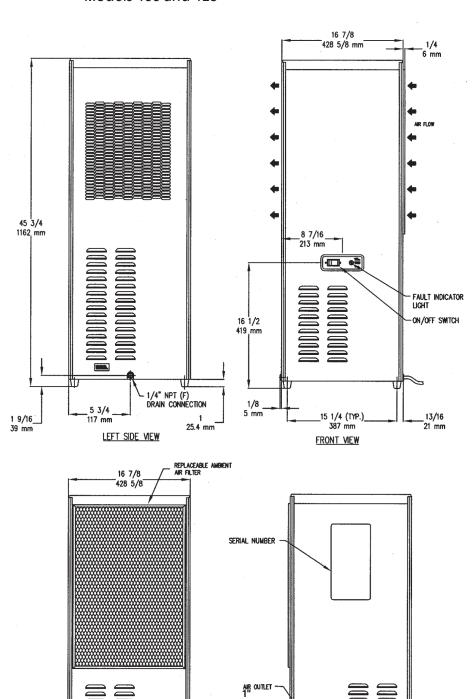




# **DIMENSIONS AND WEIGHTS**

# Models 100 and 125

Model	Weight
100	187 lbs (85 kg)
125	189 lbs (86 kg)



AIR INLET 1"

9 1/8 232 mm 6 5/16 160 mm

> 2 5/16 59 mm

6 7/8 175 mm

BACK VIEW

5 1/16 129 mm

RIGHT SIDE VIEW

1 1/2 \_ 38 mm

# **PARTS LIST**

PARTS DESCRIPTION		20	25	35	50	75
Separator						
*Separator/Filter Cartridge		FS-35	FS-35	FS-35	FS-60	FS-100
Filter Sleeve		FSS-35	FSS-35	FSS-35	FSS-60	FSS-100
*Drain Mechanism		3152270	3152270	3152270	3152270	3152270
Bowl		3240333	3240333	3240333	3223457	3241108
*O-ring Bowl		3154585	3154585	3154585	3162913	3162913
Inlet (Compressed Air) Straine	er					
Strainer, inlet		4009634	4009634	4009634	4009635	4009635
*Screen, strainer		3230672	3230672	3230672	3230673	3230673
Electrical						
Switch on/off		3230775	3230775	3230775	3230775	3230775
Light, Fault (amber) 11	15/1/60	3227423	3227423	3227423	3227423	3227423
Light, Fault (amber) 220-24	10/1/50	3227424	3227424	3227424	3227424	3227424
Cord Set 11	15/1/60	3221571	3221571	3221571	3221572	3221572
Cord Set 23	30/1/60	3234513	3234513	3234513	3234514	3234514
Cord Set 220-24	10/1/50	3221422	3221422	3221422	3221422	3221422
Capacitor, run 11	15/1/60	3220878	3220878	3220878	3220878	3220878
Capacitor, run 220-24	10/1/50	3220872	3220872	3220872	3220878	3220878
Capacitor, run 208-23	50/1/60	3220878	3220878	3220878	3220878	3220878
Switch, fault light w/conn.		3240331	3240331	3240331	3240597	3240597
Condenser Fan						
Fan Motor 11	15/1/60	3228001	3228001	3228001	3227992	3227992
Fan Motor 220-24	10/1/50	3228002	3228002	3228002	3227986	3227986
Fan Motor 208-23	30/1/60	3236665	3236665	3236665	3227986	3227986
Fan Blade 11	15/1/60	3219394	3219394	3219394	3219395	3219395
Fan Blade <b>208-240-</b> 1	1-50/60	3219394	3219394	3219394	3219399	3219399
Refrigeration System						
Compressor 11	15/1/60	3221265	3221265	3221265	3221267	3221267
Compressor 208-23	30/1/60	3234930	3234930	3234930	3234931	3234931
Compressor 220-24	10/1/50	3221266	3221266	3221266	3221268	3221268
Condenser		3221323	3221323	3221323	3221324	3221324
Hot gas by-pass valve		3232549	3232549	3232549	3232526	3232526
Filter/Dryer		3223809	3223809	3223809	3223809	3223809
Fan Pressure Switch		3230755	3230755	3230755	3230756	3230756
Cabinet						
*Filter, Ambient Air		3223805	3223805	3223805	3223806	3223806
Grommet (light & switch, front pane	el)	3224016	3224016	3224016	3224016	3224016
Foot, mounting		3223838	3223838	3223838	3223838	3223838

<sup>\*</sup> Maintenance kits for the above models are available "\*" indicates items included in the kits.

# **Maintenance Kits**

For Dryer Models	Kit Number
20, 25, 35	HTRDFMK1
50	HTRDFMK2
75	HTRDFMK3

# **PARTS LIST**

PARTS DESCRIPTION		100	125
Separator			
*Separator/Filter Cartridge		FS-100	FS-100
Filter Sleeve		FSS-100	FSS-100
*Drain Mechanism		3152270	3152270
Bowl		3241108	3241108
*O-ring Bowl		3162913	3162913
Strainer, inlet		4009636	4009636
*Screen, strainer		3230662	3230662
Electrical			
Switch on/off		3230775	3230775
Light, Fault 230v		3227424	3227424
Cord Set		3221573	3221573
Capacitor, run	230/1/60	3065778	3065778
Capacitor, run	220-240/1/50	3065778	3065778
Switch, fault light w/conn.		3240597	3240597
Condenser Fan			
Fan Motor		3227986	3227986
Fan Blade		3219404	3219404
Refrigeration System			
Compressor	230/1/60	3221269	3221269
Compressor	220-240/1/50	3248475	3221270
Condenser		3221325	3221325
Hot gas by-pass valve		3232526	3232526
Filter/Dryer		3223814	3223814
Fan Pressure Switch		3230756	3230756
Cabinet			
*Filter, Ambient Air		3223807	3223807
Grommet (light & switch, front panel)		3224016	3224016
Foot, mounting		3223838	3223838

 $<sup>^{\</sup>ast}$  Maintenance kits for the above models are available " $^{\ast}$ " indicates items included in the kits.

# **Maintenance Kits**

For Dryer Models	Kit Number
100	HTRDFMK4
125	HTRDFMK4

# **NOTES**

### WARRANTY

The manufacturer warrants the product manufactured by it, when properly installed, operated, applied, and maintained in accordance with procedures and recommendations outlined in manufacturer's instruction manuals, to be free from defects in material or workmanship for a period as specified below, provided such defect is discovered and brought to the manufacturer's attention within the aforesaid warranty period.

The manufacturer will repair or replace any product or part determined to be defective by the manufacturer within the warranty period, provided such defect occurred in normal service and not as a result of misuse, abuse, neglect or accident. Normal maintenance items requiring routine replacement are not warranted. The warranty covers parts and labor for the warranty period unless otherwise specified. Repair or replacement shall be made at the factory or the installation site, at the sole option of the manufacturer. Any service performed on the product by anyone other than the manufacturer must first be authorized by the manufacturer.

Unauthorized service voids the warranty and any resulting charge or subsequent claim will not be paid. Products repaired or replaced under warranty shall be warranted for the unexpired portion of the warranty applying to the original product.

The foregoing is the exclusive remedy of any buyer of the manufacturer's product. The maximum damages liability of the manufacturer is the original purchase price of the product or part.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER WRITTEN, ORAL, OR STATUTORY, AND IS EXPRESSLY IN LIEU OF THE IMPLIED WARRANTY OF MERCHANTABILITY AND THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. THE MANUFACTURER SHALL NOT BE LIABLE FOR LOSS OR DAMAGE BY REASON OF STRICT LIABILITY IN TORT OR ITS NEGLIGENCE IN WHATEVER MANNER INCLUDING DESIGN, MANUFACTURE OR INSPECTION OF THE EQUIPMENT OR ITS FAILURE TO DISCOVER, REPORT, REPAIR, OR MODIFY LATENT DEFECTS INHERENT THEREIN.

THE MANUFACTURER, HIS REPRESENTATIVE OR DISTRIBUTOR SHALL NOT BE LIABLE FOR LOSS OF USE OF THE PROD-UCT OR OTHER INCIDENTAL OR CONSEQUENTIAL COSTS, EXPENSES, OR DAMAGES INCURRED BY THE BUYER, WHETH-ER ARISING FROM BREACH OF WARRANTY, NEGLIGENCE OR STRICT LIABILITY IN TORT.

The manufacturer does not warrant any product, part, material, component, or accessory manufactured by others and sold or supplied in connection with the sale of manufacturer's products.

# **Warranty Period**

Parts and labor for two (2) years from the date of shipment from the factory; heat exchangers are covered (parts only) for an additional three (3) years (total of five [5]). On units that manufacturer requests be returned to the factory, a one time removal/reinstallation labor allowance as noted in the Service Warranty Policies and Procedures Handbook will apply. Freight to the factory from the installation site and to the installation site from the factory will be paid by the manufacturer; means of transportation to be specified by manufacturer.

AUTHORIZATION FROM THE SERVICE DEPARTMENT IS NECESSARY BEFORE MATERIAL IS RETURNED TO THE FACTORY OR IN-WARRANTY REPAIRS ARE MADE.

SERVICE DEPARTMENT: (724) 745-3038



www.kaeser.com