

COMPRESSED
AIR ADVISORS
Inc.

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KRAD

REFRIGERATED TYPE COMPRESSED AIR DRYERS

KRAD 10 - KRAD 1200

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I. IMPORTANT SAFETY NOTES – Please READ

- A)** When operating the air dryer the operator must apply safe working methods and observe all local safety instructions and relevant regulations.
- B)** Prior to installation, the dryer and the compressed air system are to be depressurized and disconnected from the electrical main supply.
- C)** The user is responsible for safe operating conditions. Parts and accessories must be replaced if inspection shows that safe operation cannot be assured.
- D)** Installation, operation, maintenance and repair are only to be authorized, trained and skilled engineers.
- E)** The minimum and maximum values stated must be observed, as well as all of the safety precautions described in this manual.
- F)** If any statement in this manual does not comply with the local legislation, the strongest standard is to be applied.

1.1. Transportation

- A)** Use care and caution when transporting the dryer. Avoid dropping and other physical abuse.
- B)** A forklift can be used to transport the dryers provided the forks are long enough to support its full width or length and caution is used throughout the move.

1.2. Positioning

- A)** The dryer must be installed horizontally. A minimum of 20" clearance around the dryer is necessary to allow a good ventilation and easy access for servicing.
- B)** The ambient temperature in the room should not exceed 122°F and should not be below 39°F, taking the heat radiated by the dryer into account.
- C)** (40 watt for each liter/sec under ISO 7183-A condition or 18 watts for each SCFM under ISO 7183-B condition).

1.3. Installation

- A)** In addition to the general mechanical construction procedures and local regulations, the following instructions need to be emphasized:
 - 1) Only authorized, trained and skilled engineers should install the compressed air dryer.
 - 2) Safety devices, protecting covers or insulation in the dryers never to be dismantled or modified. Each pressure vessel or accessory installed outside the dryer with air above atmospheric pressure must be fitted with the required pressure relief safety valves.

1.4. Before Operating

- A)** Review all safety precautions.
- B)** The piping must have the correct diameter and be adapted to the operating pressure (see technical specification).
- C)** Never operate the dryer at pressure above the maximum specified on the dryer label (check the technical specs too).

1.5. Maintenance by an Engineer

- A)** Maintenance and repairs should only be performed when the air dryer is shut down and depressurized and when the main power switch is turned off.
- B)** Use only the appropriate tools for maintenance and repair.
- C)** Before dismantling a part under pressure, disconnect the pressure sources and depressurize the system.
- D)** Proceed carefully during maintenance and repair. Prevent dirt from entering by covering parts and orifices with a clean cloth, paper or tape. A receiver should never be welded or modified in any way.
- E)** Never leave tools, loose parts or cleaning rags in or on the air dryer.
- F)** Before returning the dryer into service, check the setting of the control and safety devices as well as the pressure and the temperature of the compressed air circuit.

1.6. Maintenance by the user

- A)** Keep the dryer clean.
- B)** Regularly check the correct operation of the condensate drain trap.
- C)** Every six months, check and clean the drain strainer by undoing the access screw and rinsing the filter with tap water to remove the trapped dirt from the inside.

- D) For aircooled dryers, clean the air condenser as soon as it's dirty or clogged.
- E) For optional water-cooled condensers, use only clean water and install a water filter if needed. Use water counter flow to clean condenser if need.
- F) Check the trouble-shooting list in case of maintenance troubles.
- G) Check operating pressures, temperatures and time settings after maintenance. If operating and safety devices function properly, the air dryer may be used.

2. INTRODUCTION TO THE DRYER

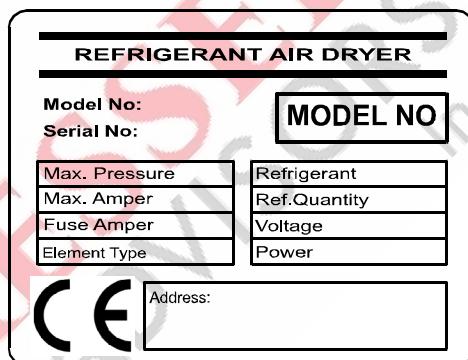
A) Manufacturer: KELTEC

B) Purpose of this dryer

- 1) This refrigerated compressed air dryer has been designed to remove water vapor from industrial compressed air.
- 2) This dryer has been designed for indoor operation.
- 3) The minimum and maximum values stated must be observed, as well as the safety precautions described in this manual.

C) Dryer label

The following label is affixed on the cabinet of the refrigerant compressed air dryer.



D) Working details

1) Refrigerant circuit:

The refrigerant circuit can be divided in 3 parts:

- a) Low pressure section with an evaporator (heat exchanger)
- b) High-pressure section including: Condenser, liquid receiver, (if installed) and the filter dryer.
- c) Control circuit including: Compressor, Expansion valve, by-pass valve (if installed), Fan pressure switch (if installed)

2) For Water - Cooled Dryers: (Between models KRAD350 to KRAD1200)

- a) Water valve
- b) Safety high pressure switch (if installed)

3) The Refrigerant circuit operates as follows:

- a) The compressor compresses gaseous refrigerant to a high temperature.
- b) The hot refrigerant condenses in the condenser. Being liquefied it is stored in the liquid receiver (if installed).
- c) The liquid is taken out the storage vessel and injected in the evaporator (heat exchanger) by an expansion valve. This expansion valve is protected by a filter, which removes particles and humidity that could be in the circuit.
- d) The injected liquid fills in the refrigerant section of the air / refrigerant heat exchanger and evaporates by taking out the calories from the compressed air. The gaseous refrigerant is sucked in the compressor and the cycle carries on.
- e) In order to keep the evaporation pressure steady, and thus the refrigerant temperature in the heat exchanger, a by-pass valve is injecting hot gaseous refrigerant in the circuit. On certain dryers, an automatic expansion valve regulates this.

4) Compressed air circuit

- a) The saturated hot compressed air flows into the Economiser where it is pre-cooled by the out flowing dry chilled air. In the cold zone of the air refrigerant section it continues to cool

down to dew point and enters the separator where condensates are collected. The outgoing chilled air is then warmed up in the economizer by the hot incoming air.

- b) The condensates are collected after centrifugal separation and drained out through the automatic trap.
- c) As long as the compressed air temperature does not drop below dew point, there will be no condensation in the air circuit.

5) Refrigerant compressor

Being of the hermetic type, it requires no servicing.

6) Condenser

- a) The air condensers are equipped with a helical coil at the condenser refrigerant level.
On certain types of dryers, a water-cooled condenser can be fitted.
- b) In this case, a water valve being driven by the refrigerant circuit is taking care of its regulation.

7) Refrigerant circuit protection

- a) **Klixon:** The single phase compressors are equipped with a klixon which is a thermal sensitive switch controlling the temperature of the compressor and possible overintensity.
In case of malfunction, the klixon trips but switches on again automatically as soon as the compressor has cooled down.
- b) **High Pressure Security Switch:** Refrigerant line is considered as a pressure vessel. That is why it is protected against bursts by the help of manually reset switch. It is set to 362.5 psi for dryers working with R134a
- c) **Filter dryer:** A refrigerant circuit is a closed circuit and total water removal in the refrigerant circuit is paramount in order to obtain a correct functioning.
- d) To avoid problems, the refrigerant circuit must be vacuumed before loading the refrigerant.
It is equipped with a filter dryer, which also traps any solid particles, which may have migrated into the circuit during assembly.
- e) Water-cooled dryers have a safety high-pressure switch.
In case of cooling water failure, the safety switch stops the dryer. When the safety switch has tripped out, it has to be manually resettled before switching on the dryer.

8) Refrigerant circuit controls

- a) Liquid refrigerant injection: The liquid refrigerant is injected into the evaporator by a control valve. This valve is a thermostatic or pressostatic one maintaining a constant overheat of the refrigerant in the evaporator(s).
- b) Constant evaporating pressure: In the dryers equipped with a bypass valve, the evaporating pressure is kept constant by a controlled injection of hot gas from the high-pressure side into the low-pressure section of the circuit.

9) Condensate drain - trap assembly

Dismantling the drain is easy because it can be isolated from the air circuit under pressure with a ball valve.
The drain has to be depressurized before being dismantled.

10) Heat Exchanger Modular design

- a) The dryers are equipped with a compact Mono Bloc Heat Exchanger module.
This assembly has been specially designed to dry compressed air and is made of:
 - 1) An Economiser which pre-cools the entering hot air with the outgoing cold air.
 - 2) An air/refrigerant exchanger cooling down the compressed air.
 - 3) A centrifugal separator concentrating all condensates and requiring no maintenance.

11) Accessories

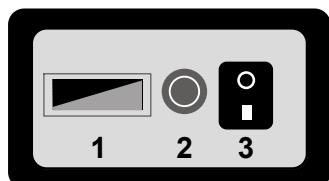
- a) Dew point indicator: Located on the control panel, it displays the value of the pressure dew point.
- b) Temperature switch: Located inside the dryer, this temperature switch is adjustable from 32°F up to 95 °F.
- c) Energy Saving Device: (ESD) This device helps the dryer save energy when there is no compressed air flow in the dryer. (Please see the models have standard and optional in next page)
- d) Filter change alarm on the front panel

3. OPERATION

3.1. Operation

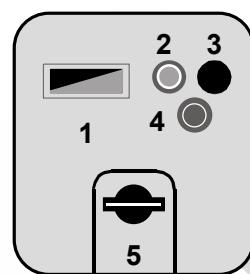
A) Control panels: The control panel of the dryer includes the following elements:

Monophase	Dew point indicator
KRAD10 - KRAD250	●



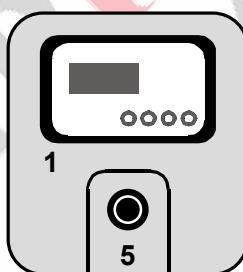
- 1) Dewpoint indicator (Standard)
- 2) Filter change Alarm**
- 3) Start / Stop Button

Monophase	Dew point indicator
KRAD350 - KRAD500	●



- 1) Dewpoint indicator (Standard)
- 2) Start Light
- 3) N/A
- 4) Filter change Alarm**
- 5) Main Switch

Triphase	ESD3
KRAD600 - KRAD1200	●



- 1) ESD3 (Standard)
- 5) EMERGENCY STOP

**** IMPORTANT NOTE:** The Dryer has two Compressed Air Filter inside.
It is better to change filter element for the best efficiency when the alarm light is active.
It is recommended to keep replacement filter elements in your stock
in order to replace them when needed.

ATTENTION : KRAD range dryers have low pressure drop according its competitors.
Do not use KRAD range dryers together with other dryers which have higher
pressure drop without getting the confirmation from our technical team.

3.2. During Operation

Regularly check the digital temperature controller ESD3 or dewpoint indicator on dryer.

B) Start up and shut-down

Warning: Avoid leaving the dryer off when compressed air is still flowing through it.

C) Starting for the first time or after a long stop

- 1) Set the rotary switch to "I" This preheats the dryer and turns the drain system on.
It is recommended to leave the dryer power on permanently so the crankcase heater runs continuously.

2) IMPORTANT NOTE!

After a long stop of the dryer it is MANDATORY to allow a preheating period of minimum **4 hours** before starting again, to avoid any compressed air flow during preheating.

- 3) Follow the daily starting and shut down procedure.

D) Daily starting and shut-down

- 1) Push on the green button to start the dryer.
- 2) The start light will indicate that the dryer is running.
- 3) To stop the dryer, first stop the airflow (either shut-down the air compressor or close the inlet/outlet or by-pass valve) When the air flow is stopped set the rotary switch on " 0 " Set it again on " I " in order to keep the preheating on.
- 4) **IMPORTANT NOTE!**
Avoid leaving the dryer stopped when compressed air is still flowing through it.
- 5) To switch the already preheated dryer on again, simply push the green start button.

E) Digital Temperature Control technical features (ESD3)

ESD3: PLC clear text multilingual indication of alarms, maintenance and running hours
+ Energy Saving Device automatic switching OFF at no load and ON when warm compressed air is entering.
(Please see the ESD3 manual which is given with Dryer)

KRAD

REFRIGERATED TYPE COMPRESSED AIR DRYERS

Technical Specifications & Diagrams

COMPRESSED
AIR ADVISOR[®]
Inc.

4. TECHNICAL SPECIFICATIONS

Model	Capacity (scfm)	Connection Size (NPT)	Voltage (V)	Installed Power (kw)	Min. Circuit Ampacity (Amp)	Refrigerant gas	Pressure drop (psi)	Maximum working pressure (psi)	Maximum ambient temperature (°F)	Maximum inlet temperature (°F)
KRAD 10	10	1/2"	115/1/60	0,35	6,1	R134a	< 3	230	122	140
KRAD 15	15	1/2"	115/1/60	0,35	6,1	R134a	< 3	230	122	140
KRAD 25	25	1/2"	115/1/60	0,42	8,3	R134a	< 3	230	122	140
KRAD 40	40	3/4"	115/1/60	0,42	8,3	R134a	< 3	230	122	140
KRAD 60	60	3/4"	115/1/60	0,68	13,1	R134a	< 3	230	122	140
KRAD 80	80	3/4"	115/1/60	0,80	13,4	R134a	< 3	230	122	140
KRAD 100	100	1 1/2"	115/1/60	0,93	19	R134a	< 3	230	122	140
KRAD 125	125	1 1/2"	115/1/60	1,28	24,2	R134a	< 3	230	122	140
KRAD 150	150	1 1/2"	230/1/60	1,49	14	R134a	< 3	230	122	140
KRAD 200	200	2"	230/1/60	1,49	14	R134a	< 3	230	122	140
KRAD 250	250	2"	230/1/60	1,94	21,8	R134a	< 3	230	122	140
KRAD 350	350	2"	230/1/60	2,01	22	R134a	< 3	230	122	140
KRAD 500	500	2"	230/1/60	2,63	26,7	R134a	< 3	230	122	140
KRAD 600	600	3"	460/3/60	3,01	15,9	R134a	< 3	230	122	140
KRAD 750	750	3"	460/3/60	3,77	17,1	R134a	< 3	230	122	140
KRAD 1000	1000	3"	460/3/60	4,31	21,6	R134a	< 3	230	122	140
KRAD 1200	1200	3"	460/3/60	5,68	22,8	R134a	< 3	230	122	140

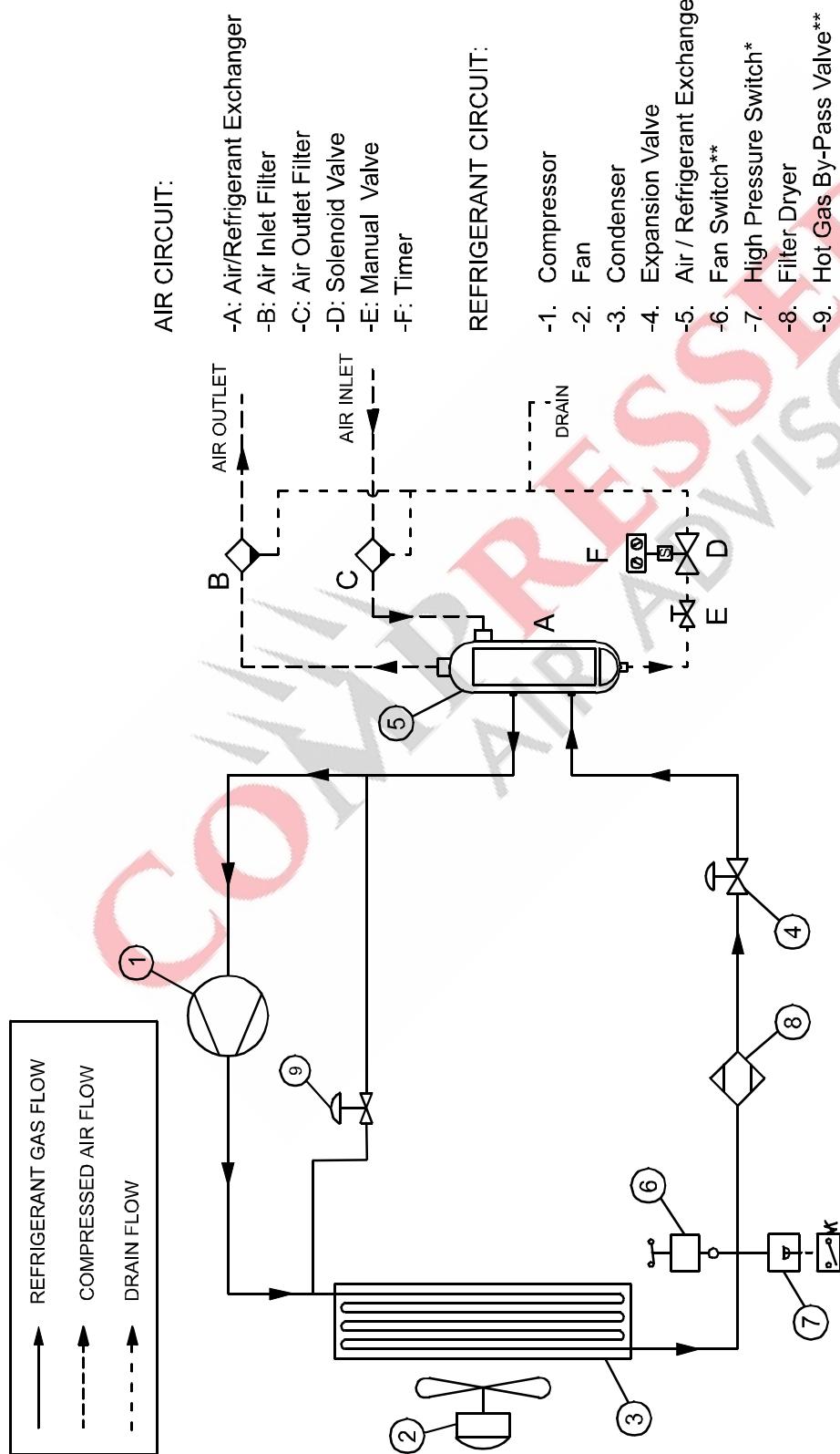
FOR ALL MODELS

Nominal Pressure	100 psi
Maximum pressure	230 psi
Maximum ambient temperature	122°F
Minimum ambient temperature	39°F
Maximum inlet temperature	140°F

5. DIAGRAMS

5.1 AIR FLOW DIAGRAMS

KRAD 10 - KRAD 150

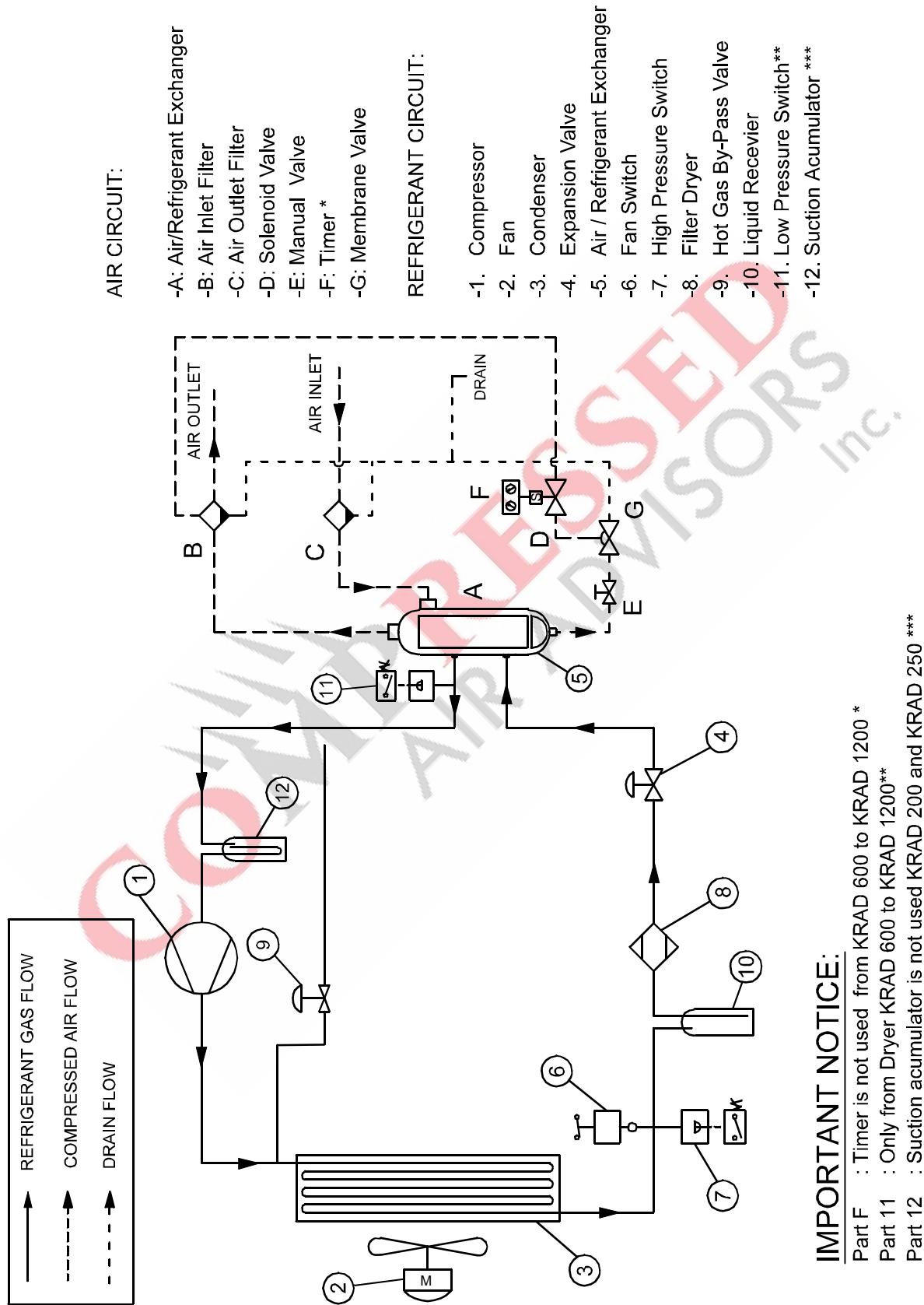


IMPORTANT NOTICE:

- Part 7 : Only from Dryer KRAD 40 to KRAD 150 *

 Part 9 : Only from Dryer KRAD 100 to KRAD 150 **

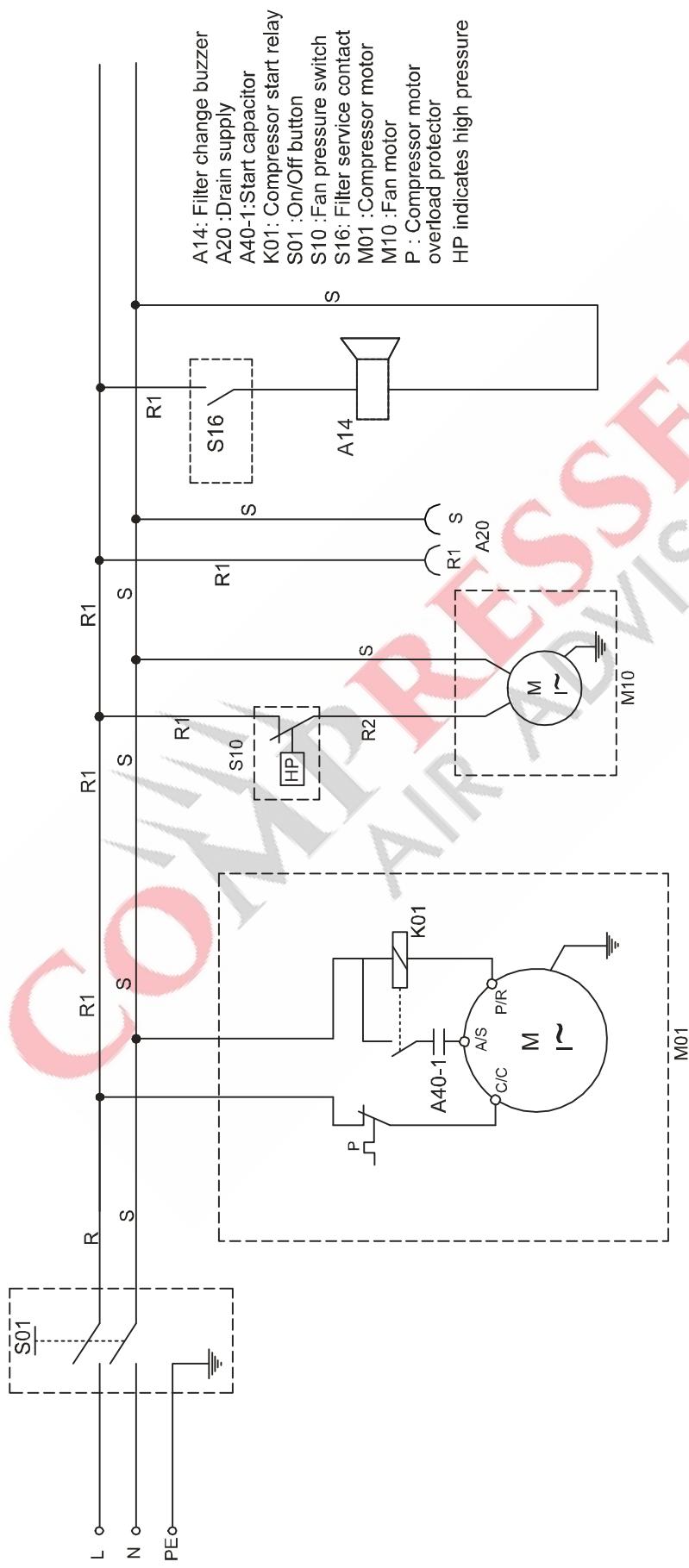
KRAD 200 - KRAD 1200



5.2 ELECTRICAL DIAGRAMS

KRAD 10 - KRAD 25

Electrical Circuit

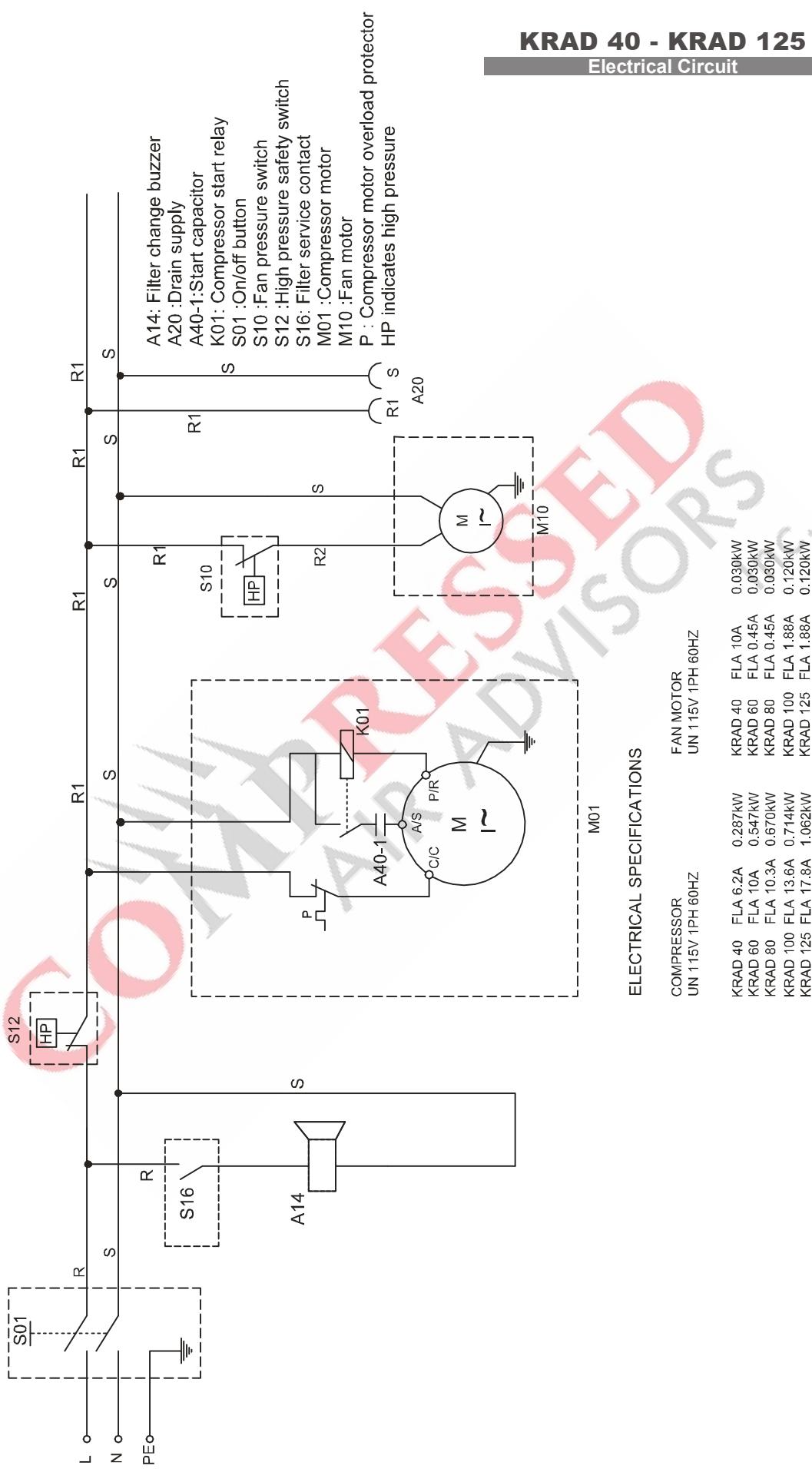


ELECTRICAL SPECIFICATIONS

COMPRESSOR	FAN MOTOR
UN 115V 1PH 60Hz	UN 115V 1PH 60Hz
KRAD 10 FLA 4.4A	0.221kW
KRAD 15 FLA 4.4A	0.221kW
KRAD 25 FLA 6.2A	0.287kW
	KRAD 10 FLA 0.45A 0.030kW
	KRAD 15 FLA 0.45A 0.030kW
	KRAD 25 FLA 0.45A 0.030kW

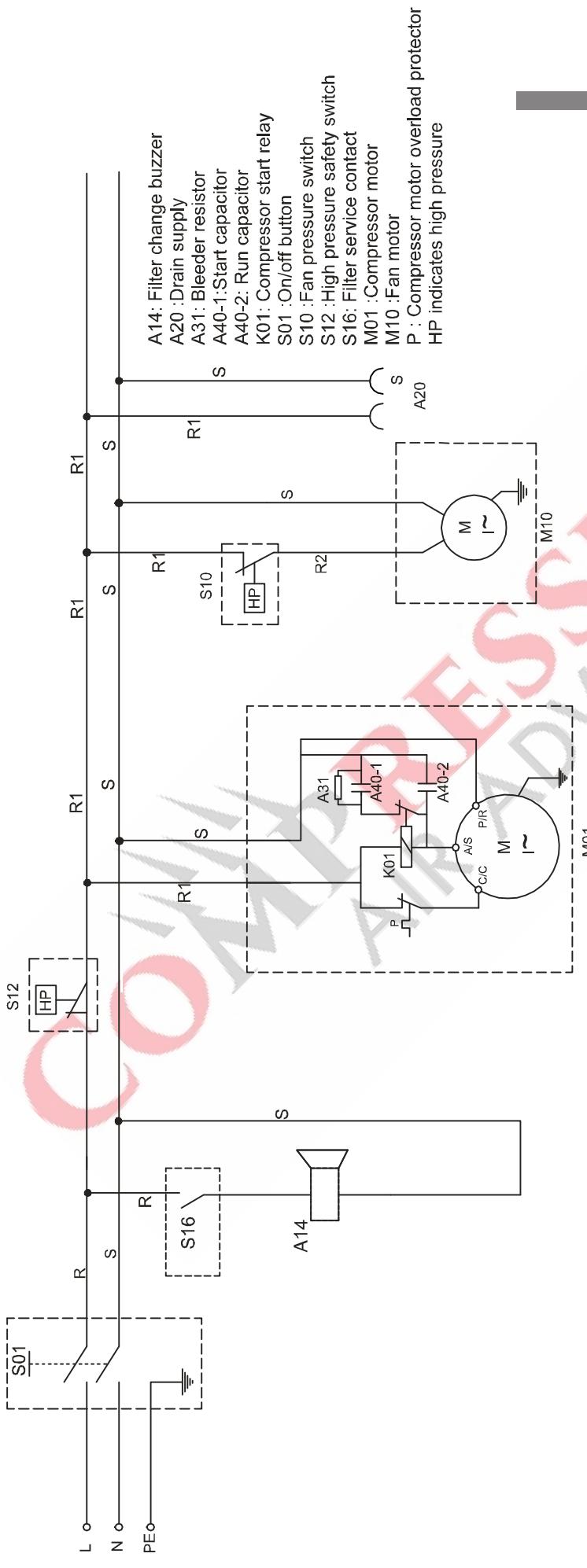
KRAD 40 - KRAD 125

Electrical Circuit



KRAD 150

Electrical Circuit



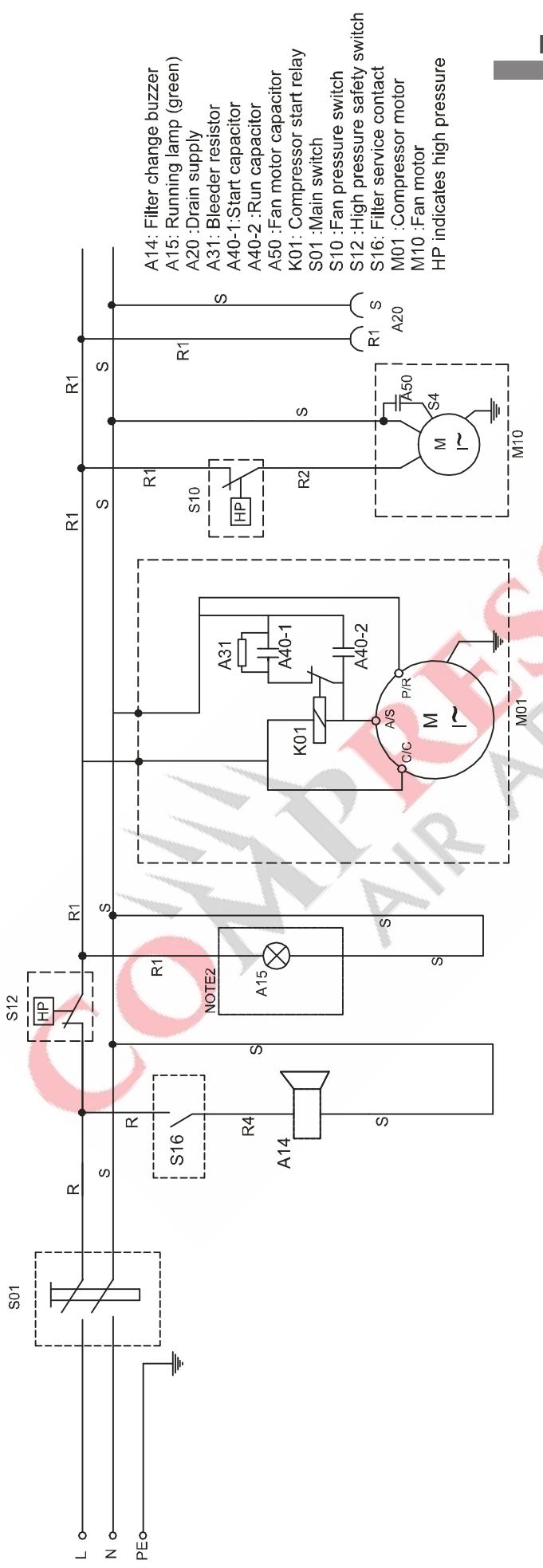
ELECTRICAL SPECIFICATIONS

COMPRESSOR
UN 115V 1PH 60HZ
KRAD 150 FLA 10.3A 1.292kW

FAN MOTOR
UN 115V 1PH 60HZ
KRAD 150 FLA 0.94A 0.95kW

KRAD 200 - KRAD 250

Electrical Circuit

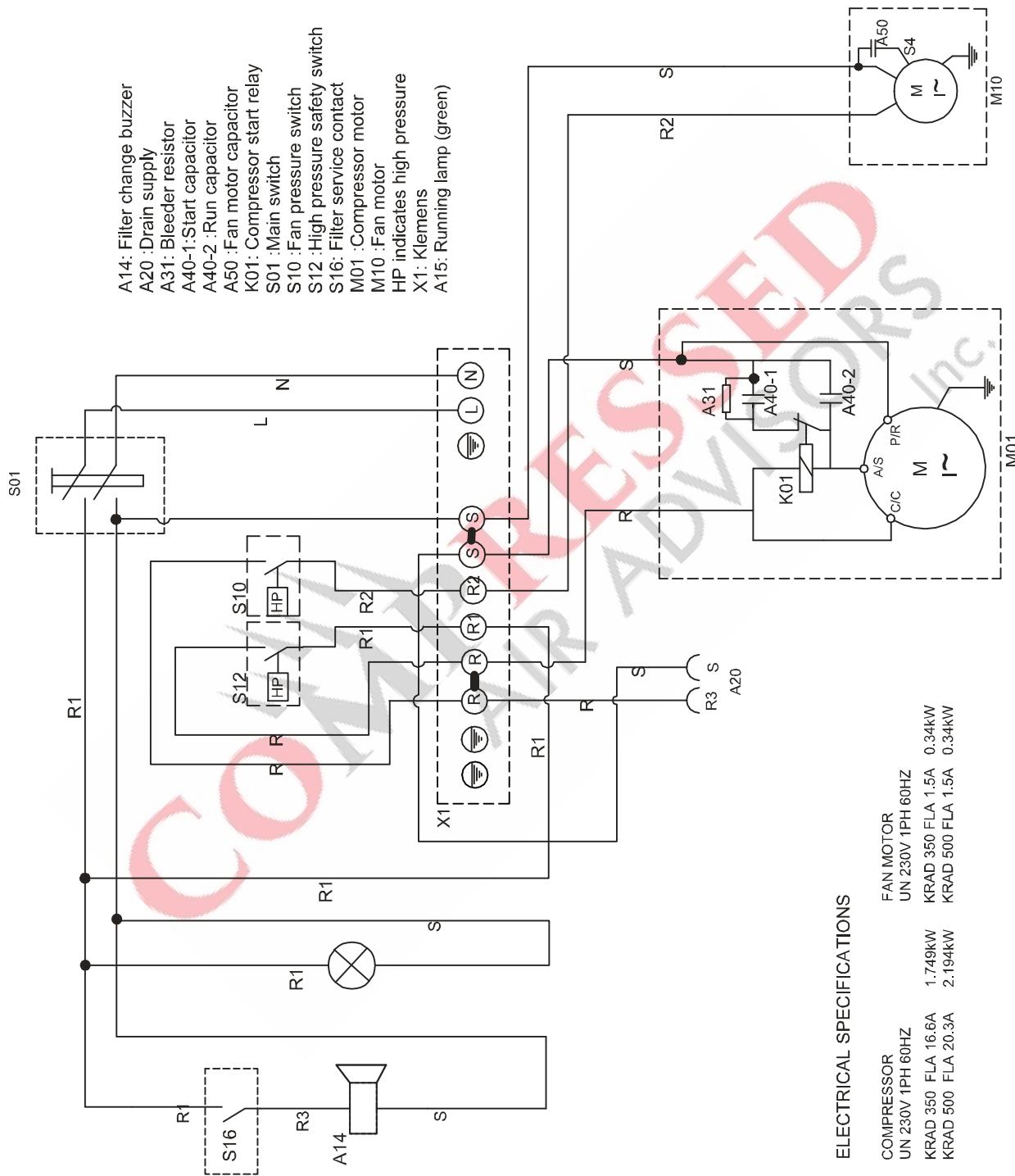


ELECTRICAL SPECIFICATIONS

COMPRESSOR	FAN MOTOR
UN 230V 1PH 60HZ	UN 230V 1PH 60HZ
KRAD 200 FLA 10.3A	KRAD 200 FLA 0.94A
KRAD 250 FLA 16.6A	KRAD 250 FLA 0.94A
	0.095kW
	0.095kW

KRAD 350 - KRAD 500

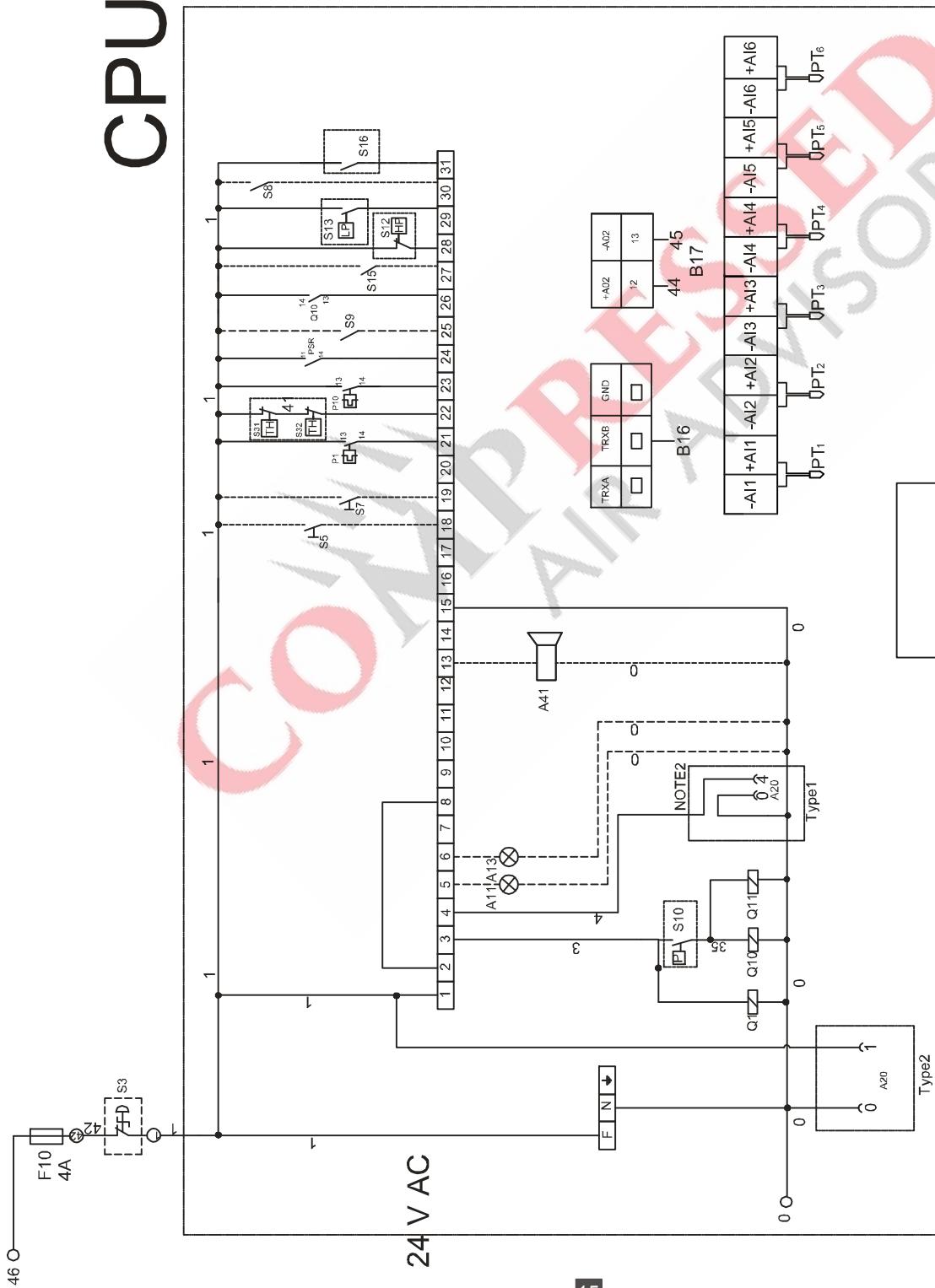
Electrical Circuit



KRAD 600 - KRAD 1200

Electrical Control Circuit

CPU

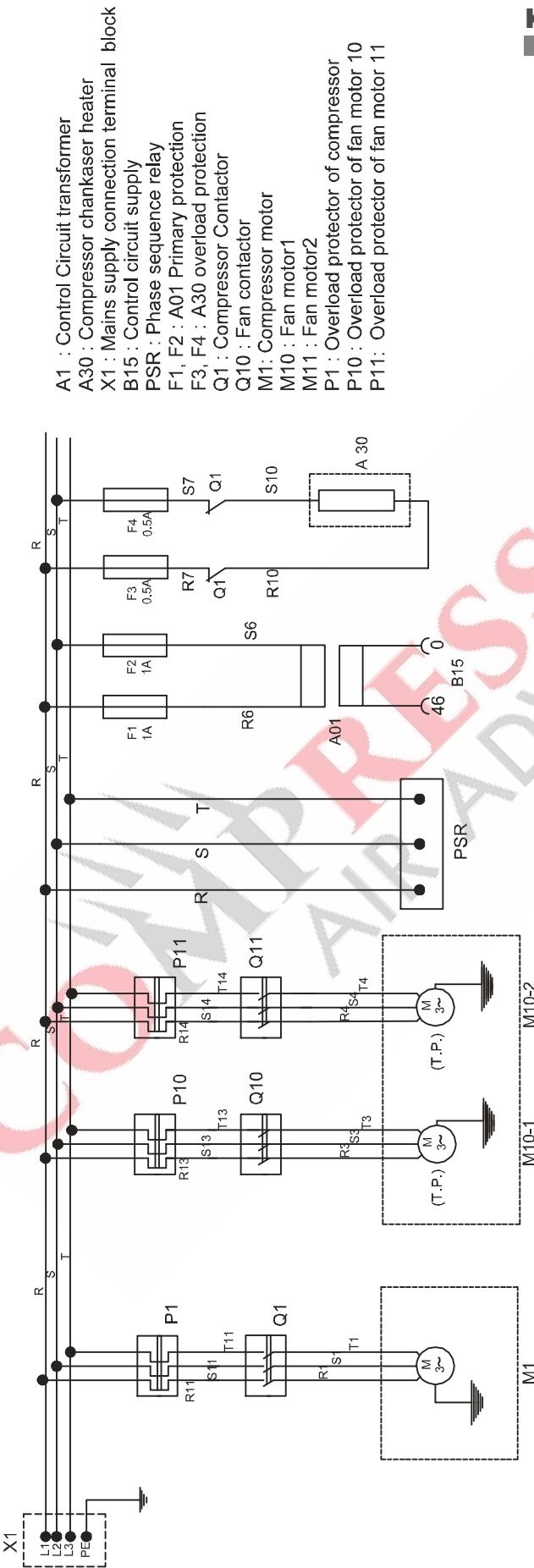


NOTE1: DRAIN SYSTEM CAN BE TYPE1 OR TYPE2

HMI

KRAD 600 - KRAD 1200

Electrical Power Circuit



ELECTRICAL SPECIFICATIONS

COMPRESSOR
 UN 460V/3/60

FAN MOTOR
 UN 460V/3/60
 KRAD 750 FLA 1.1A 2.580kW
 KRAD 1000 FLA 1.5A 2.900kW
 KRAD 1200 FLA 1.9A 4.210kW

KRAD 750 FLA 1.19A 0.3kW(x2)
 KRAD 1000 FLA 1.95A 0.41kW(x2)
 KRAD 1200 FLA 1.95A 0.44kW(x2)

KRAD

REFRIGERATED TYPE COMPRESSED AIR DRYERS

**General Arrangements
Main Settings
Drawings**

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AIR ADVISORY
Inc.

6. GENERAL ARRANGEMENTS

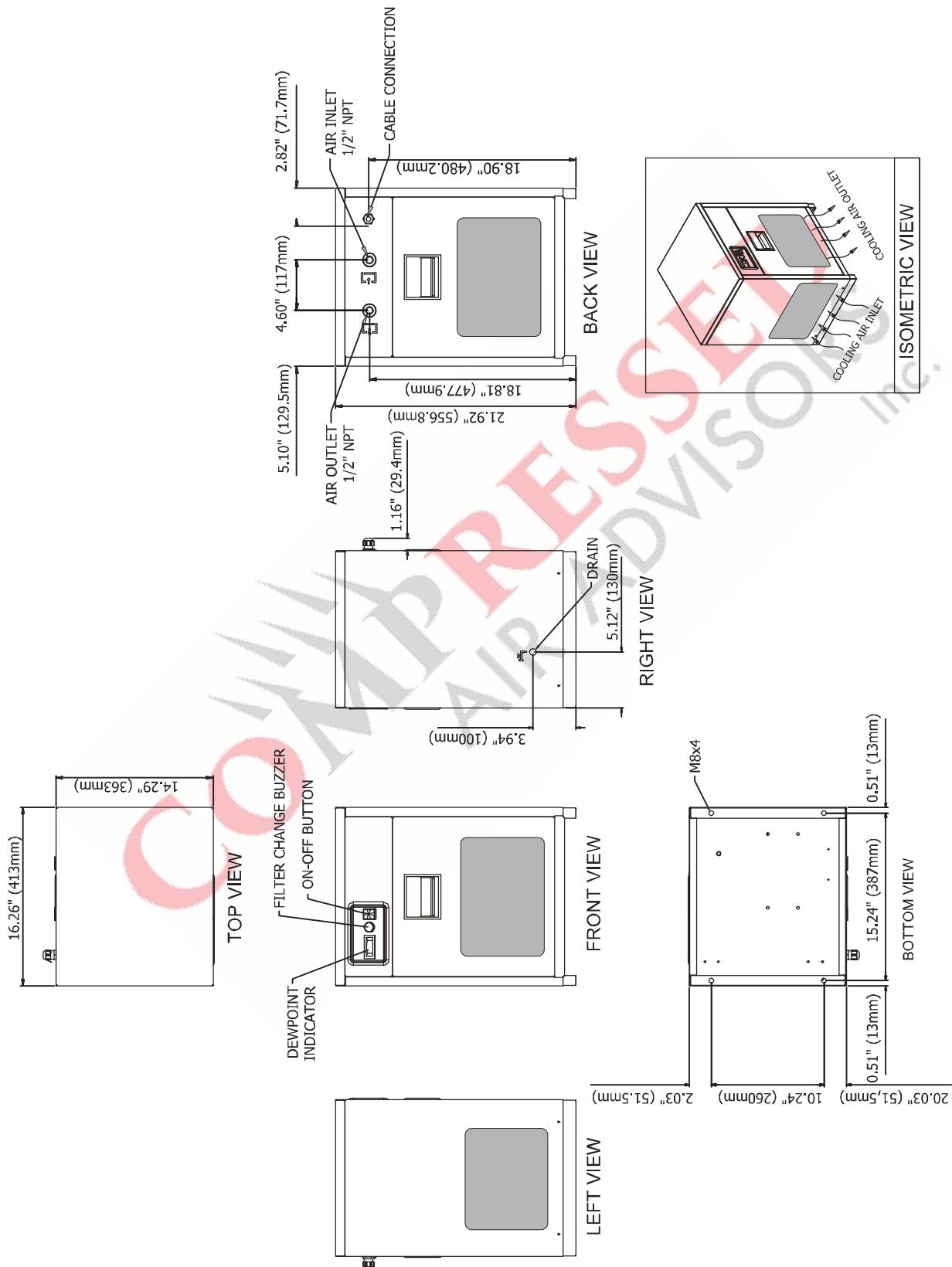
Model	Pre-filter (1 micron)	After-filter (0.01 micron)	Pre-filter element	After-filter element	Length (inch)	Width (inch)	Height (inch)	Weight (lbs)
KRAD 10	CAH-ADFK1X	CAH-ADFK1Y	KRADFK1X	KRADFK1Y	16.26	14.29	21.92	70.55
KRAD 15	CAH-ADFK1X	CAH-ADFK1Y	KRADFK1X	KRADFK1Y	16.26	14.29	21.92	70.55
KRAD 25	CAH-ADFK1X	CAH-ADFK1Y	KRADFK1X	KRADFK1Y	16.26	14.29	21.92	70.55
KRAD 40	CAH-ADFK2X	CAH-ADFK2Y	KRADFK2X	KRADFK2Y	18.62	17.83	32.75	112.43
KRAD 60	CAH-ADFK2X	CAH-ADFK2Y	KRADFK2X	KRADFK2Y	18.62	17.83	32.75	116.85
KRAD 80	CAH-ADFK2X	CAH-ADFK2Y	KRADFK2X	KRADFK2Y	18.62	17.83	32.75	121.25
KRAD 100	CAH-ADFK3X	CAH-ADFK3Y	KRADFK3X	KRADFK3Y	21.77	19.80	34.40	172
KRAD 125	CAH-ADFK3X	CAH-ADFK3Y	KRADFK3X	KRADFK3Y	21.77	19.80	34.40	183
KRAD 150	CAH-ADFK3X	CAH-ADFK3Y	KRADFK3X	KRADFK3Y	21.77	19.80	34.40	189.60
KRAD 200	CAH-ADFK4X	CAH-ADFK4Y	KRADFK4X	KRADFK4Y	26.69	25.51	45.56	352.75
KRAD 250	CAH-ADFK5X	CAH-ADFK5Y	KRADFK5X	KRADFK5Y	26.69	25.51	45.56	363.77
KRAD 350	CAH-ADFK5X	CAH-ADFK5Y	KRADFK5X	KRADFK5Y	37.32	28.66	53.91	485
KRAD 500	CAH-ADFK5X	CAH-ADFK5Y	KRADFK5X	KRADFK5Y	37.32	28.66	53.91	507
KRAD 600	CAH-ADFK6X	CAH-ADFK6Y	KRADFK6X	KRADFK6Y	37.32	31.42	57.44	595.25
KRAD 750	CAH-ADFK6X	CAH-ADFK6Y	KRADFK6X	KRADFK6Y	37.32	31.42	57.44	628.30
KRAD 1000	CAH-ADFK7X	CAH-ADFK7Y	KRADFK7X	KRADFK7Y	45.79	30.63	67.81	864.20
KRAD 1200	CAH-ADFK7X	CAH-ADFK7Y	KRADFK7X	KRADFK7Y	45.79	30.63	67.81	904

7. MAIN SETTINGS

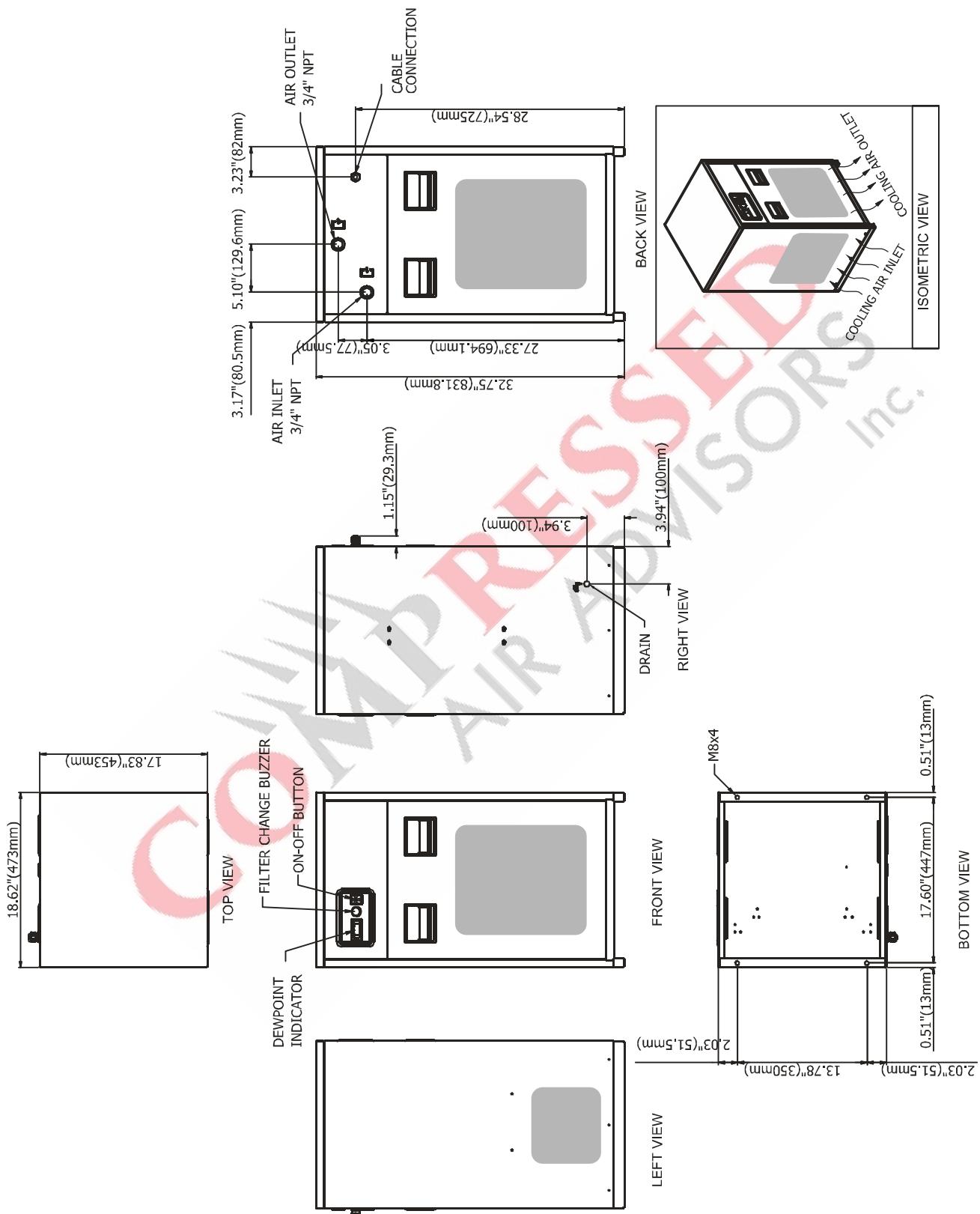
	Superheat of thermostatic expansion valve	Evaporating pressure	Fan pressure switch	Security high pressure switch	Security low pressure switch	Drain timer	Refrigerant temperature switch	Water flow valve (if water condenser)
ALL MODELS	41°F - 50°F	29.7 psi	130 - 174 psi	362.5 psi	23.2 psi	5 min. - 5 sec.	113°F	159.5 psi

8. ED and ID DRAWINGS

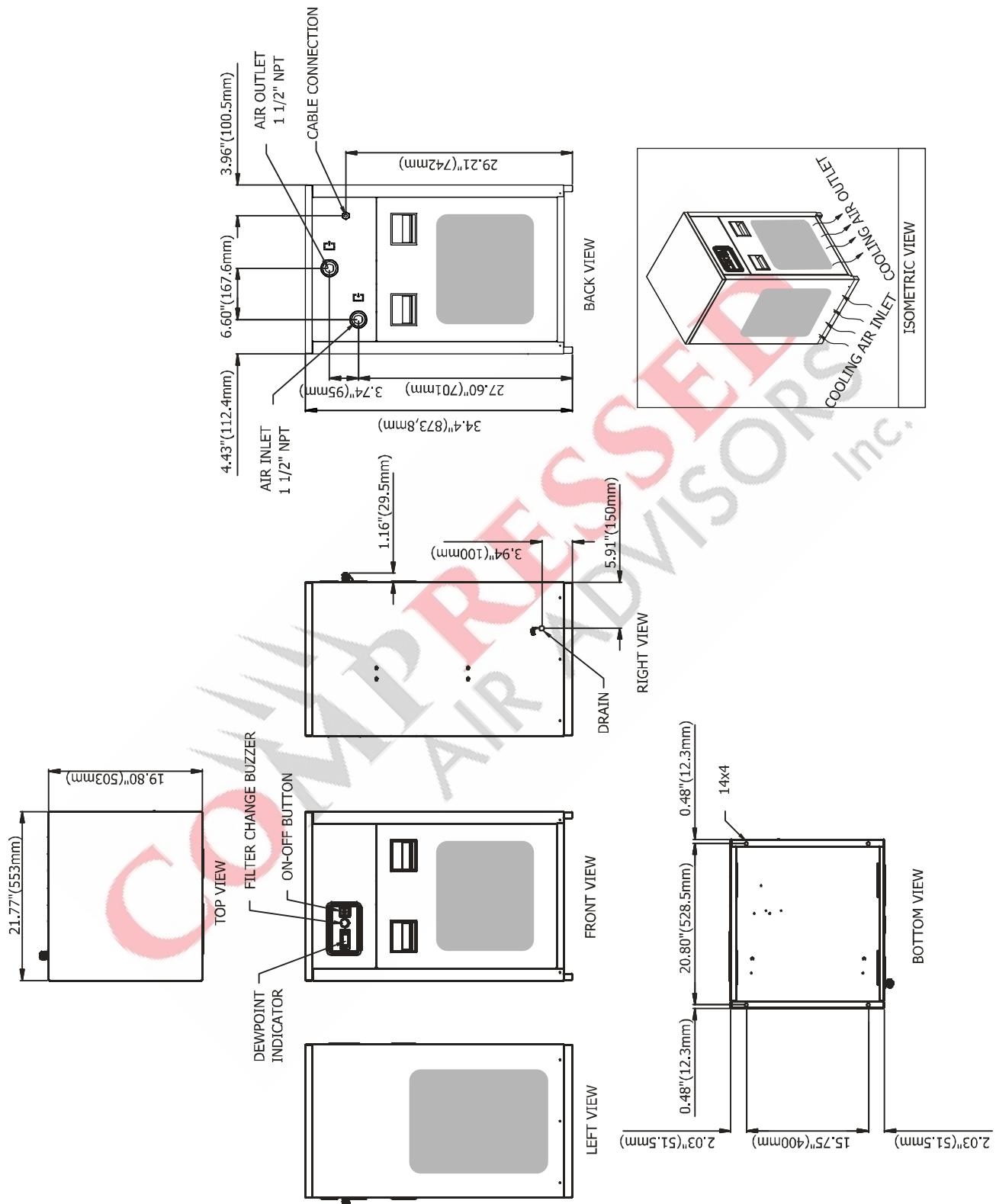
KRAD 10 - KRAD 25



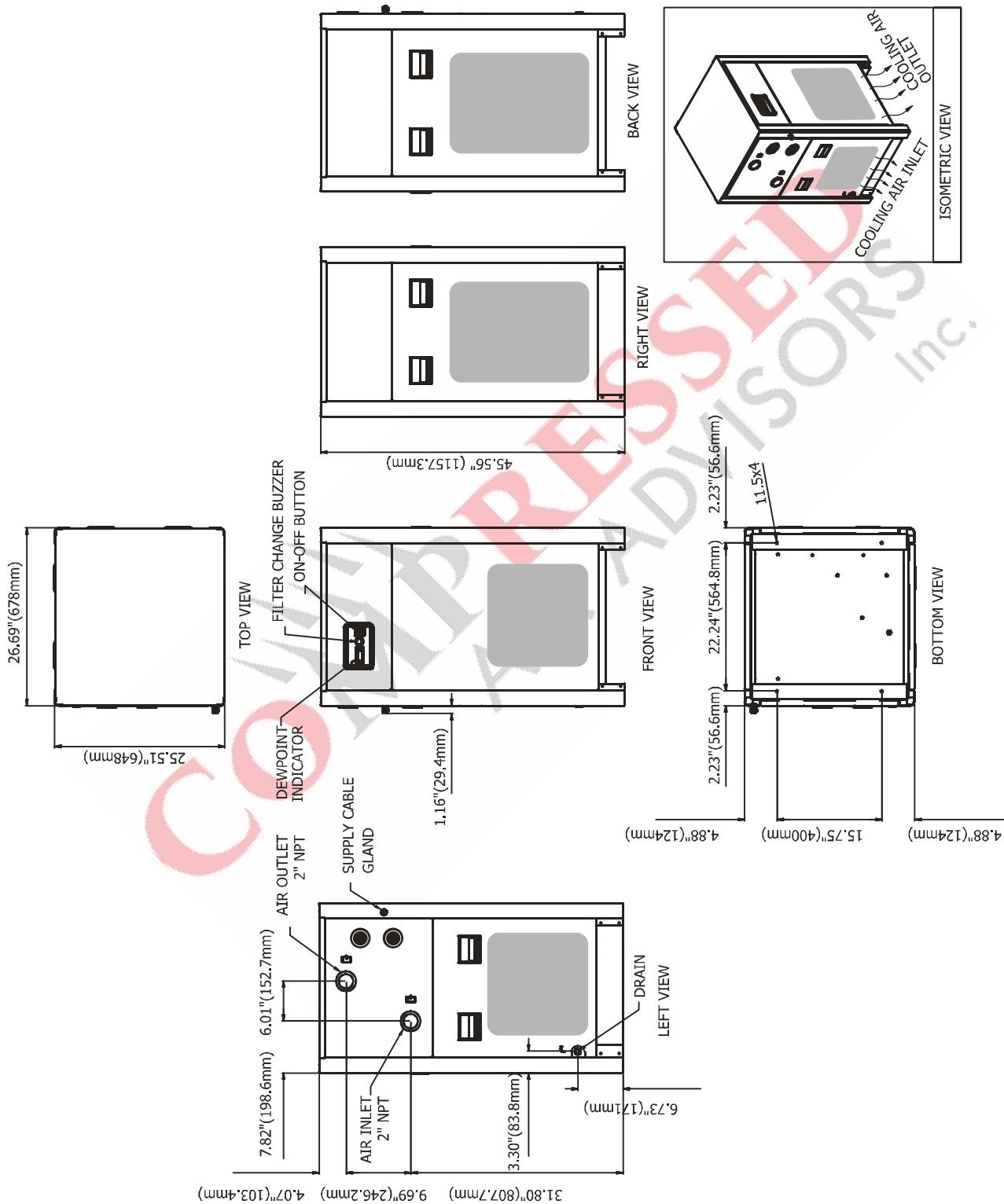
KRAD 40 - KRAD 80



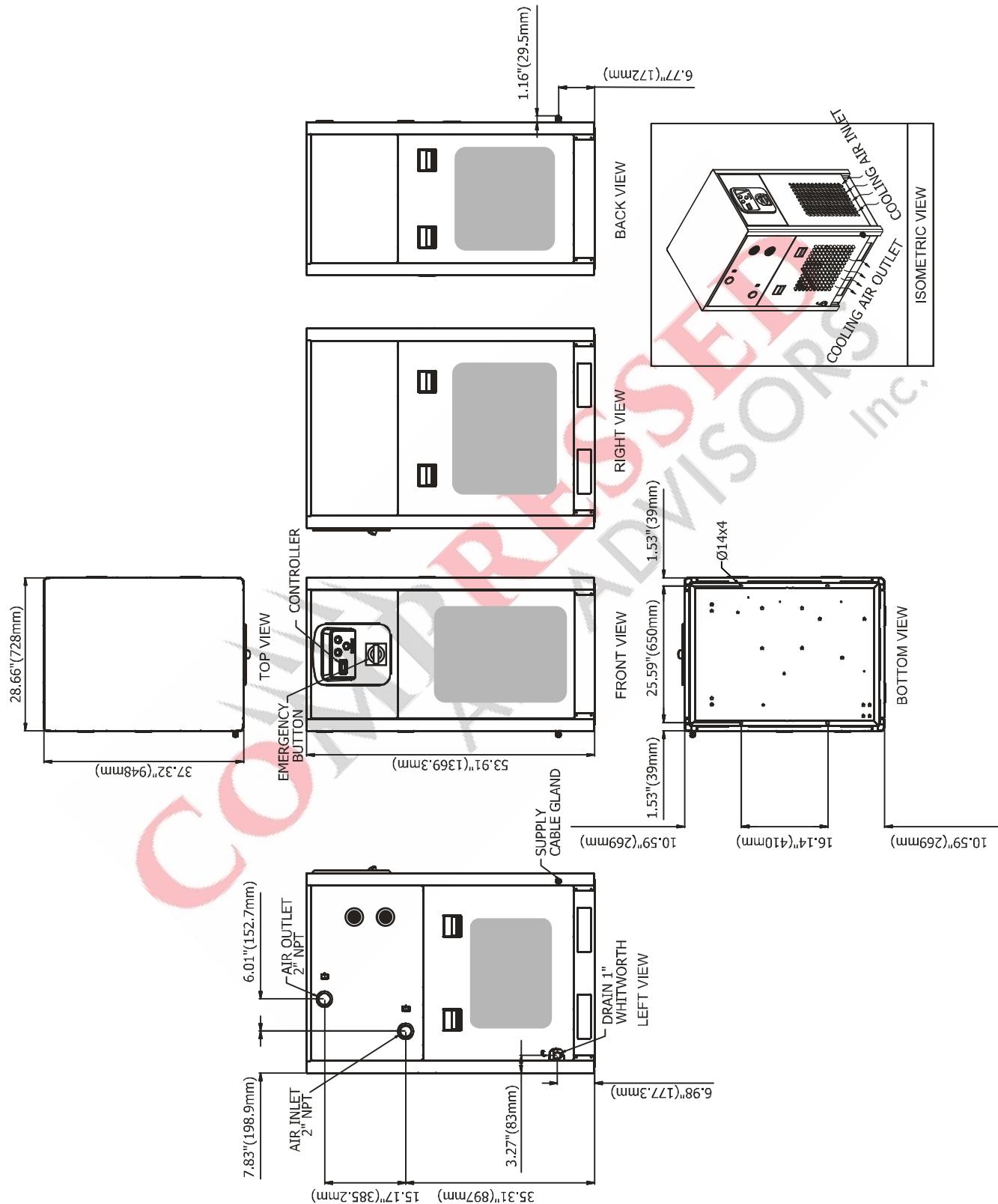
KRAD 100 - KRAD 150



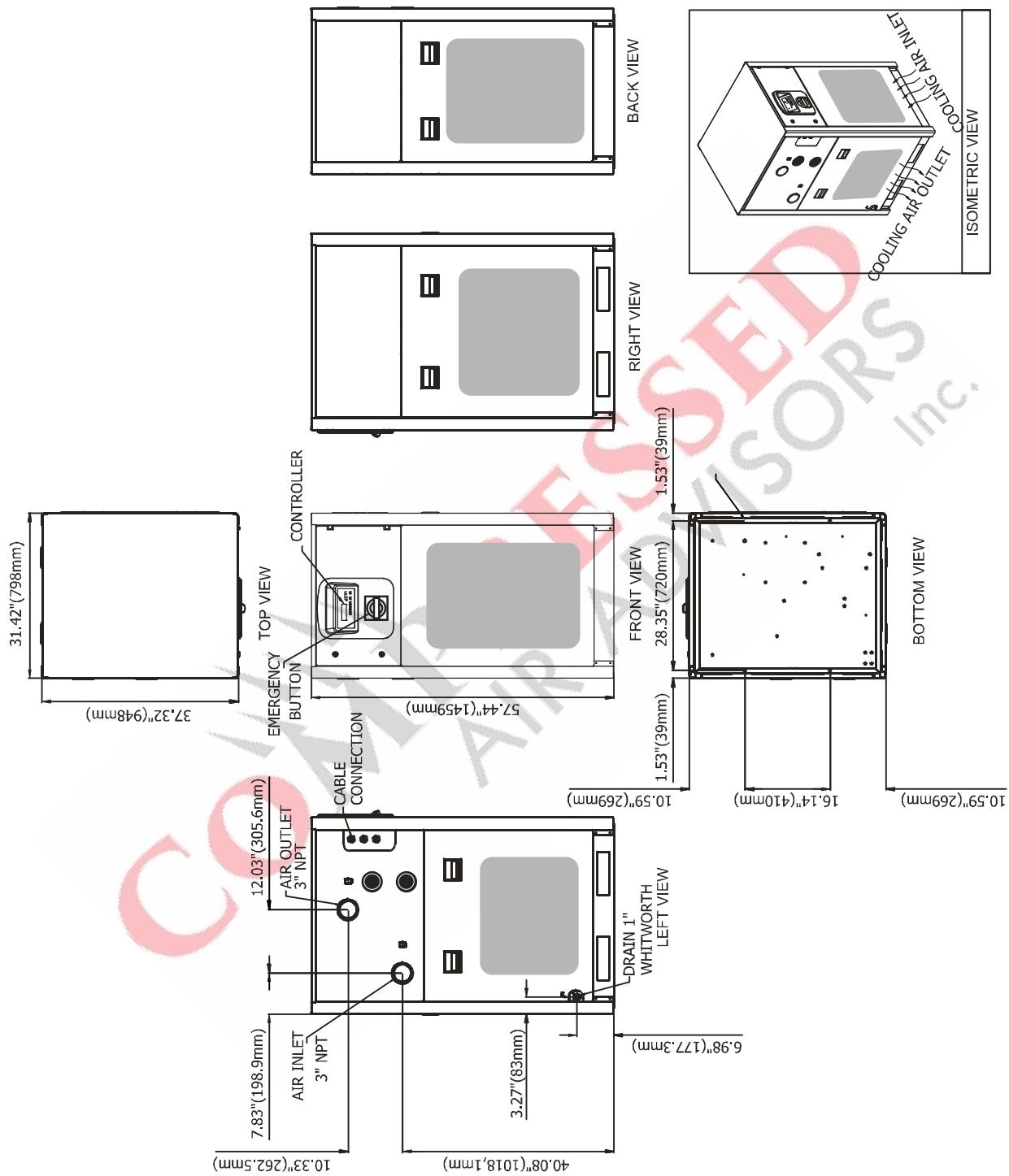
KRAD 200 - KRAD 250



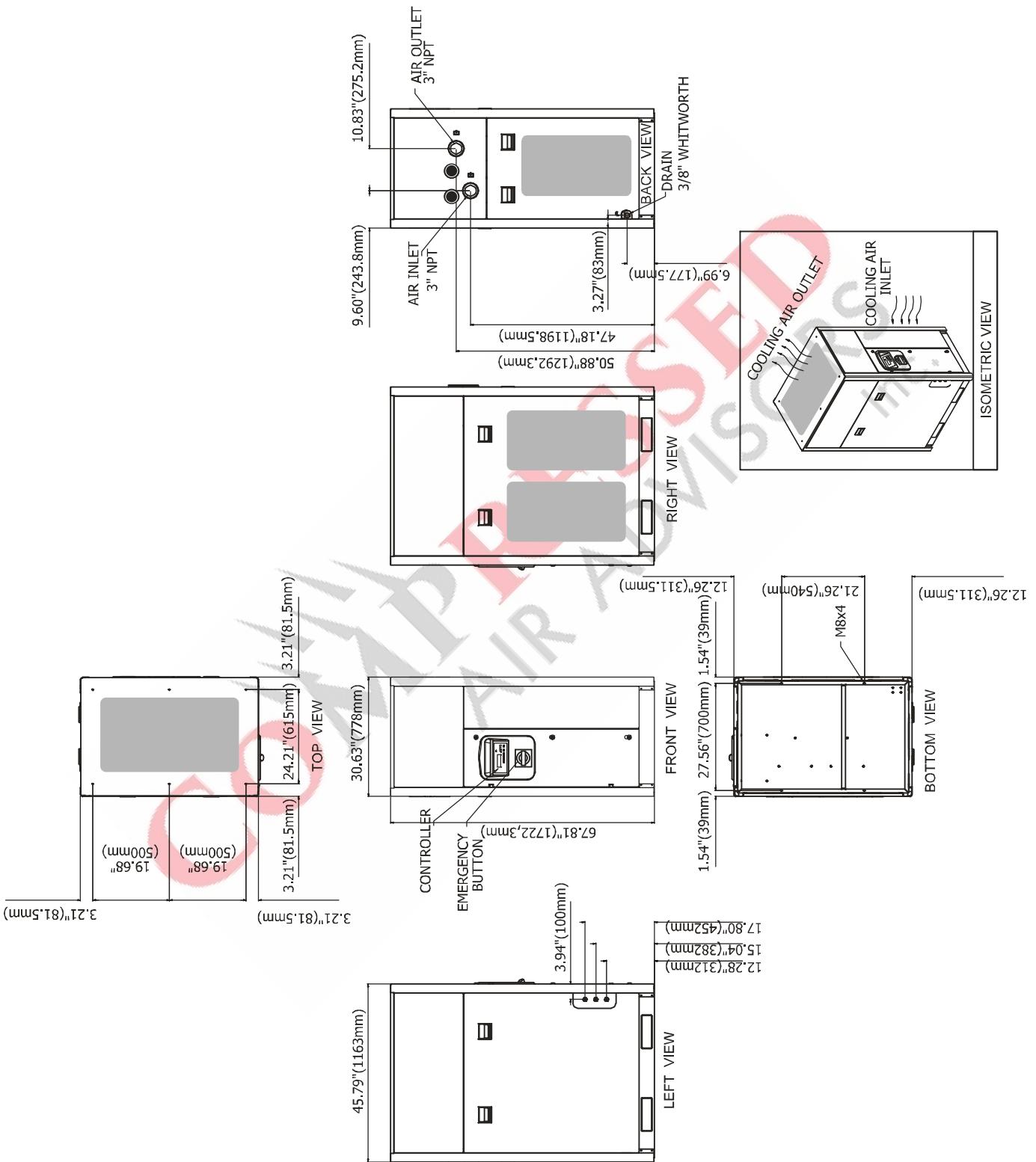
KRAD 350 - KRAD 500



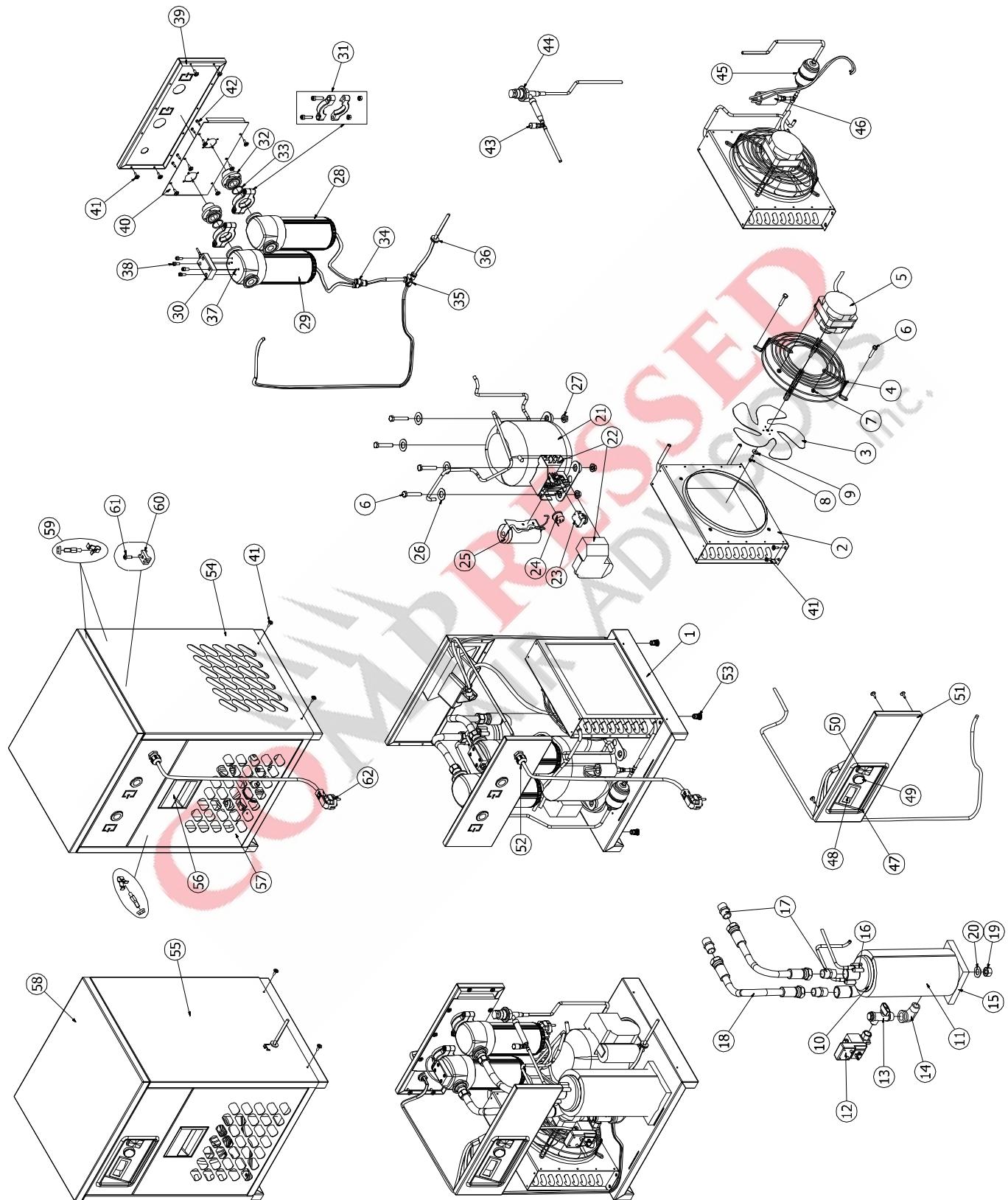
KRAD 600 - KRAD 750



KRAD 1000 - KRAD 1200

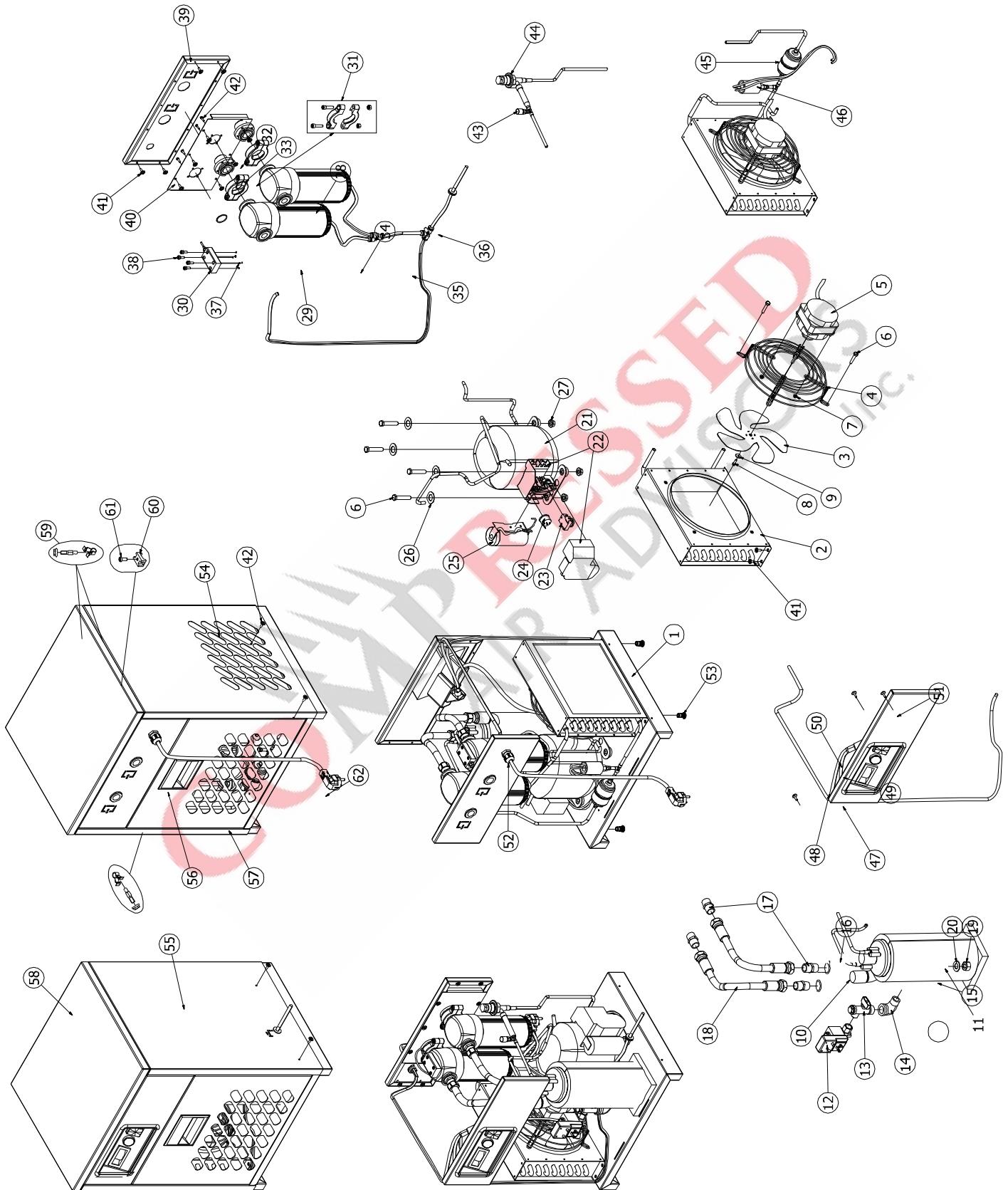


KRAD 10



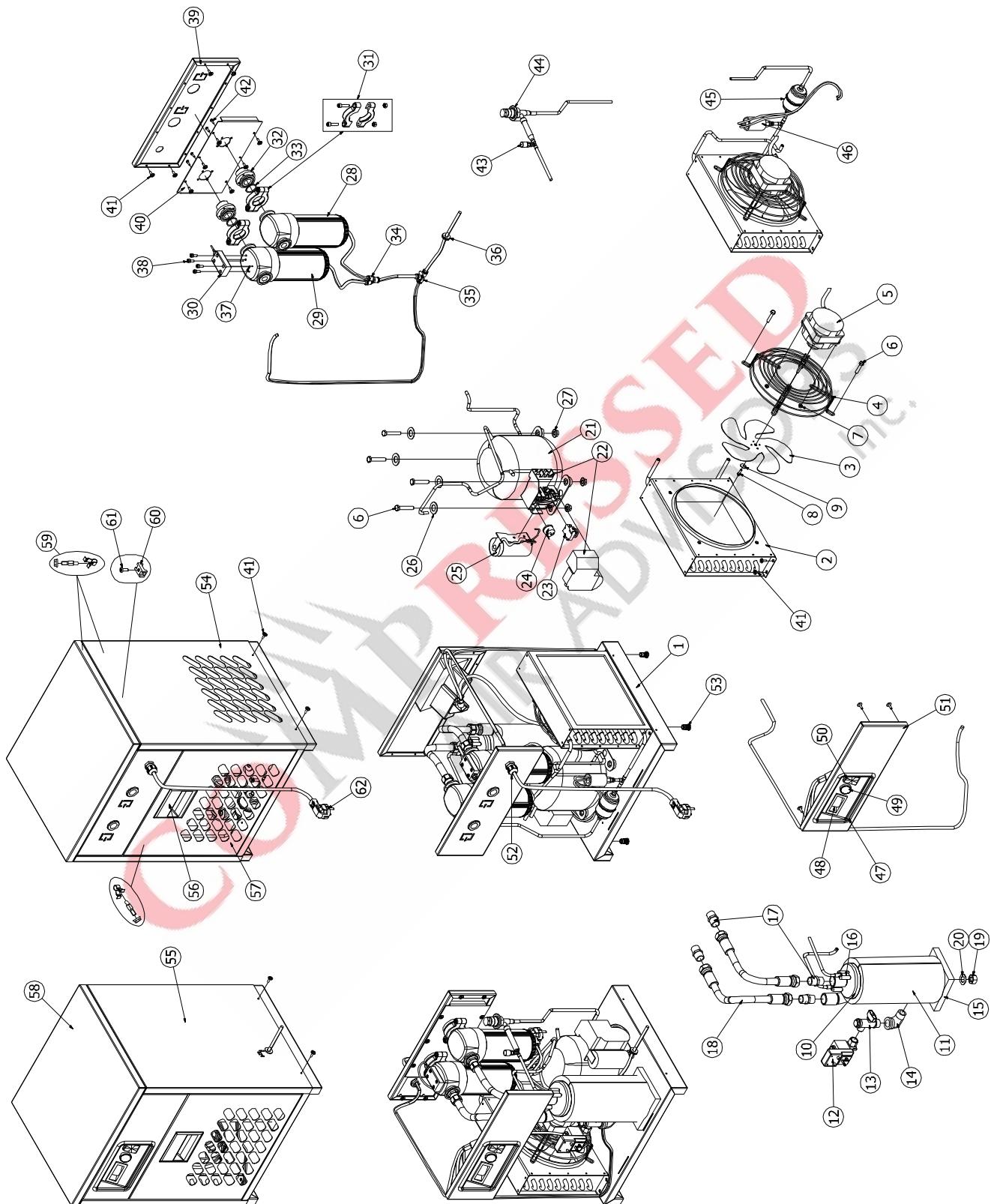
ITEM NO.	MATERIAL NAME	QTY	SPARE PART CODE
PART LIST			
62	POWER CABLE	1	KRAD500-US-PWC
61	RIVET Ø3,5	3	KRAD150-US-RVT3,5
60	CABLE STRAP	3	KRAD150-US-CSP
59	CABINET FASTENER	8	KRAD5500-US-CFS
58	CABINET TOP	1	KRAD25-US-CAT
57	CABINET STRIPPING	2	KRAD25-US-CSG
56	CABINET HANDLE	2	KRAD5500-US-CAH
55	CABINET RIGHT	1	KRAD25-US-CBR
54	CABINET LEFT	1	KRAD25-US-CLT
53	RIVET NUT M8	4	KRAD5500-US-RNT8
52	CABLE GLAND PG11	1	KRAD5500-US-CG11
51	CABINET ELECTRICAL BOX	1	KRAD25-US-CEB
50	ON/OFF SWITCH	1	KRAD500-US-ONB
49	POWER LIGHT	1	KRAD500-US-PLT
48	DEWPOINT INDICATOR	1	KRAD500-US-DPI
47	PLASTIC CONTROL PANEL	1	KRAD250-US-PCP
46	FAN SWITCH	1	KRAD5500-US-FSW
45	DEHYDRATOR / FILTER DRIER	1	KRAD150-US-DRI
44	EXPANSION VALVE	1	KRAD25-US-EXP
43	SETTING THE CONNECTION	1	KRAD25-US-STC
42	BOLT M4x8	8	KRAD80-US-BLT48
41	BOLT M4x12	22	KRAD150-US-BLT412
40	CABINET INSIDE	1	KRAD25-US-CAI
39	CABINET REAR TOP	1	KRAD25-US-CRT
38	BOLT M5x12	4	KRAD1200-US-BLT512
37	INDICATOR GASKET 1	2	KRAD1200-US-ING1
36	GASKET FOR DRAIN	1	KRAD150-US-GFD
35	FITTING 2	1	KRAD150-US-FTT2
34	FITTING 1	1	KRAD150-US-FTT1
33	ORING	2	KRAD25-US-ORG
32	CONNECTION CIT	2	KRAD25-US-CNK
31	COUPLING CLAMP	2	KRAD25-US-CPG
30	FILTER GAUGE	1	KRAD1200-US-FTG
29	COMPRESSED AIR FILTER ELEMENT KIT (X)	1	KRAD25-US-ELK-X
28	COMPRESSED AIR FILTER ELEMENT KIT (Y)	1	KRAD25-US-ELK-Y
27	NUT M6	4	KRAD25-US-NT6
26	WASHER 18x7x1mm	4	KRAD40-US-WSR18
25	START CAPACITOR	1	KRAD15-US-SCR
24	OVERLOAD PROTECTOR	1	KRAD15-US-OVP
23	START RELAY	1	KRAD15-US-STR
22	COMPRESSOR ELECTRICAL BOX	1	KRAD15-US-CEP
21	COMPRESSOR	1	KRAD15-US-CMP
20	WASHER 26x10,5x2,5mm	1	KRAD25-US-WHR26
19	NUT M8	1	KRAD25-US-NT8
18	DRAIN HOSE	2	KRAD25-US-DRH
17	DRAIN 1	4	KRAD25-US-DRN1
16	REDUCTIONS	2	KRAD25-US-RDS
15	MDF	1	KRAD25-US-MDF
14	ELBOW 1	1	KRAD25-US-ELW1
13	DRAIN VALVE 1	1	KRAD500-US-DRA1
12	TIMER RELAY	1	KRAD250-US-TMR
11	INSULATION OF HEAT EXCHANGER	1	KRAD25-US-IHE
10	HEAT EXCHANGER	1	KRAD25-US-EXC
09	WASHER 20x4,5x1,5	1	KRAD25-US-WHR20
08	BOLT M4x14mm	1	KRAD25-US-BLT414
07	NUT M4	4	KRAD25-US-NT4
06	BOLT M6x30mm	8	KRAD5500-US-BLT630
05	FAN	1	KRAD40-US-FAN
04	FAN GRILL	1	KRAD40-US-FGR
03	FAN GLADE	1	KRAD40-US-FBL
02	CONDANSER	1	KRAD25-US-CON
01	CABINET BASE	1	KRAD25-US-CAB

KRAD 15



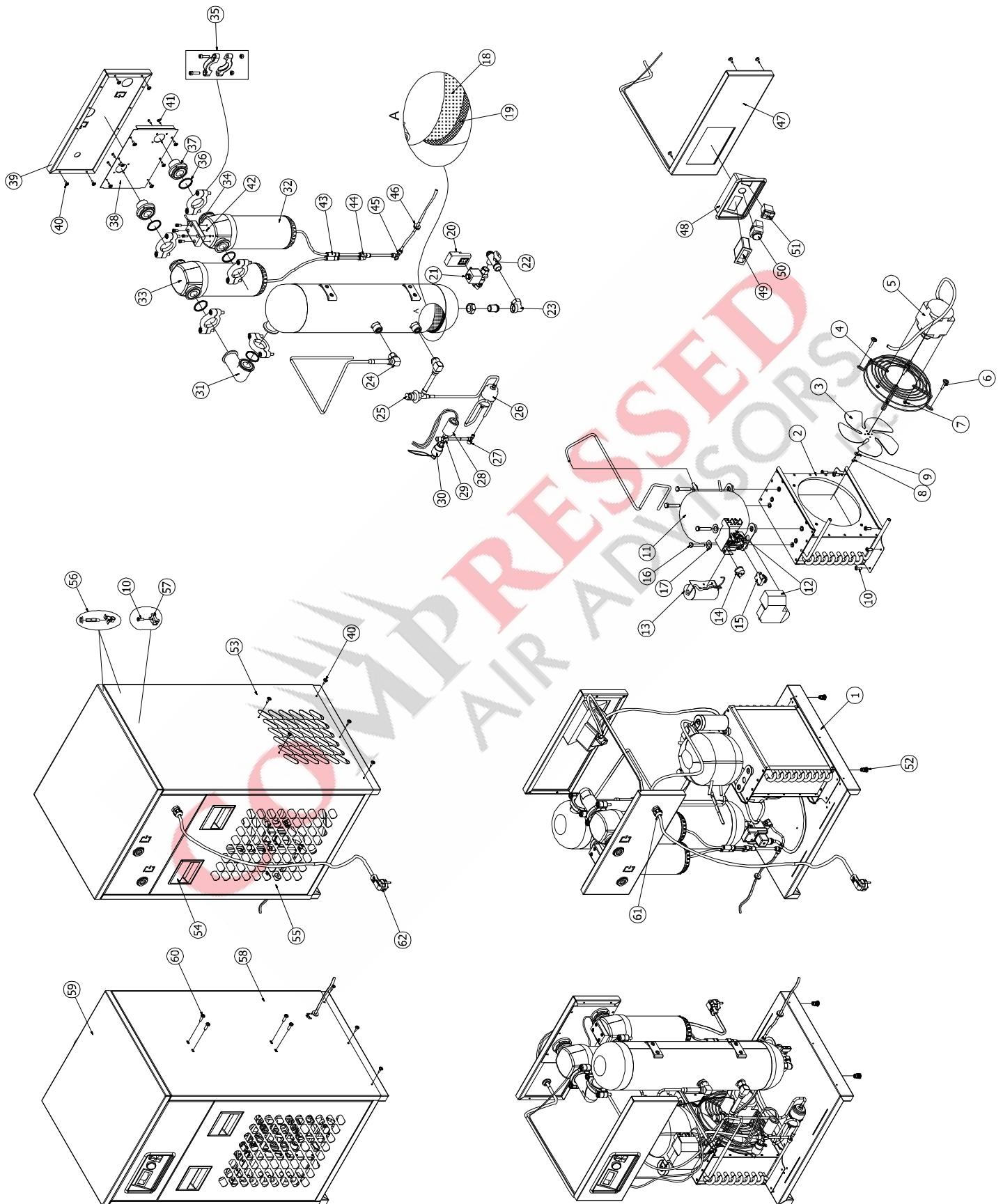
ITEM NO.	MATERIAL NAME	QTY	SPARE PART CODE
PART LIST			
62	POWER CABLE	1	KRAD500-US-PWC
61	RIVET Ø3,5	3	KRAD150-US-RVT3,5
60	CABLE STRAP	3	KRAD150-US-CSP
59	CABINET FASTENER	8	KRAD5500-US-CFS
58	CABINET TOP	1	KRAD25-US-CAT
57	CABINET STRIPPING	2	KRAD25-US-CSG
56	CABINET HANDLE	2	KRAD5500-US-CAH
55	CABINET RIGHT	1	KRAD25-US-CBR
54	CABINET LEFT	1	KRAD25-US-CLT
53	RIVET NUT M8	4	KRAD5500-US-RNT8
52	CABLE GLAND PG11	1	KRAD5500-US-CG11
51	CABINET ELECTRICAL BOX	1	KRAD25-US-CEB
50	ON/OFF SWITCH	1	KRAD500-US-ONB
49	POWER LIGHT	1	KRAD500-US-PLT
48	DEWPOINT INDICATOR	1	KRAD500-US-DPI
47	PLASTIC CONTROL PANEL	1	KRAD250-US-PCP
46	FAN SWITCH	1	KRAD5500-US-FSW
45	DEHYDRATOR / FILTER DRIER	1	KRAD150-US-DRI
44	EXPANSION VALVE	1	KRAD25-US-EXP
43	SETTING THE CONNECTION	1	KRAD25-US-STC
42	BOLT M4x8	8	KRAD80-US-BLT48
41	BOLT M4x12	22	KRAD150-US-BLT412
40	CABINET INSIDE	1	KRAD25-US-CAI
39	CABINET REAR TOP	1	KRAD25-US-CRT
38	BOLT M5x12	4	KRAD1200-US-BLT512
37	INDICATOR GASKET 1	2	KRAD1200-US-ING1
36	GASKET FOR DRAIN	1	KRAD150-US-GFD
35	FITTING 2	1	KRAD150-US-FTT2
34	FITTING 1	1	KRAD150-US-FTT1
33	ORING	2	KRAD25-US-ORG
32	CONNECTION CIT	2	KRAD25-US-CNK
31	COUPLING CLAMP	2	KRAD25-US-CPG
30	FILTER GAUGE	1	KRAD1200-US-FTG
29	COMPRESSED AIR FILTER ELEMENT KIT (X)	1	KRAD25-US-ELK-X
28	COMPRESSED AIR FILTER ELEMENT KIT (Y)	1	KRAD25-US-ELK-Y
27	NUT M6	4	KRAD25-US-NT6
26	WASHER 18x7x1mm	4	KRAD40-US-WSR18
25	START CAPACITOR	1	KRAD15-US-SCR
24	OVERLOAD PROTECTOR	1	KRAD15-US-OVP
23	START RELAY	1	KRAD15-US-STR
22	COMPRESSOR ELECTRICAL BOX	1	KRAD15-US-CEP
21	COMPRESSOR	1	KRAD25-US-CMP
20	WASHER 26x10,5x2,5mm	1	KRAD25-US-WHR26
19	NUT M8	1	KRAD25-US-NT8
18	DRAIN HOSE	2	KRAD25-US-DRH
17	DRAIN 1	4	KRAD25-US-DRN1
16	REDUCTIONS	2	KRAD25-US-RDS
15	MDF	1	KRAD25-US-MDF
14	ELBOW 1	1	KRAD25-US-ELW1
13	DRAIN VALVE 1	1	KRAD500-US-DRA1
12	TIMER RELAY	1	KRAD250-US-TMR
11	INSULATION OF HEAT EXCHANGER	1	KRAD25-US-IHE
10	HEAT EXCHANGER	1	KRAD25-US-EXC
09	WASHER 20x4,5x1,5	1	KRAD25-US-WHR20
08	BOLT M4x14mm	1	KRAD25-US-BLT414
07	NUT M4	4	KRAD25-US-NT4
06	BOLT M6x30mm	8	KRAD5500-US-BLT630
05	FAN	1	KRAD40-US-FAN
04	FAN GRILL	1	KRAD40-US-FGR
03	FAN GLADE	1	KRAD40-US-FBL
02	CONDANSER	1	KRAD25-US-CON
01	CABINET BASE	1	KRAD25-US-CAB

KRAD 25



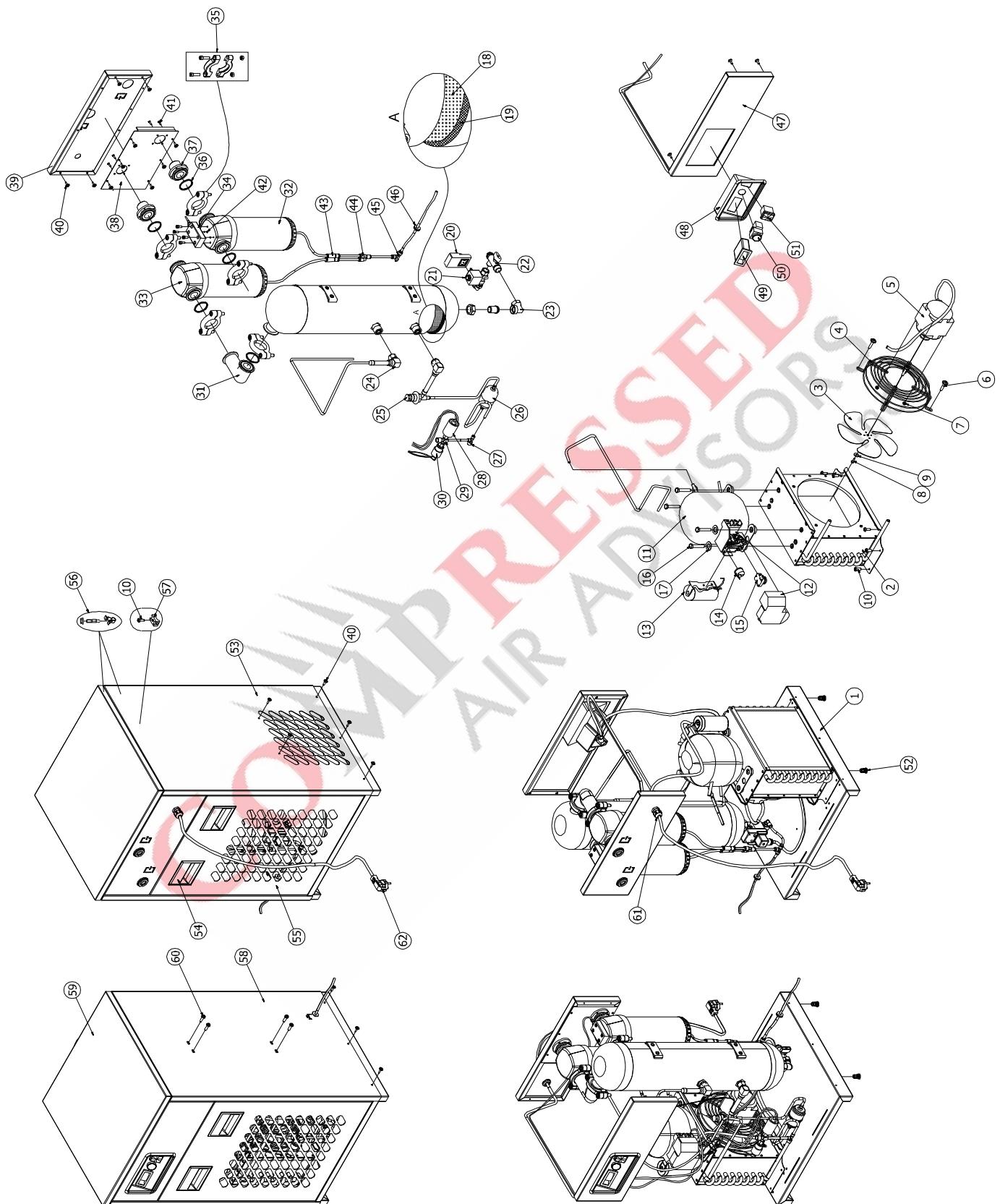
62	POWER CABLE	1	KRAD500-US-PWC
61	RIVET Ø3,5	3	KRAD150-US-RVT3,5
60	CABLE STRAP	3	KRAD150-US-CSP
59	CABINET FASTENER	8	KRAD5500-US-CFS
58	CABINET TOP	1	KRAD25-US-CAT
57	CABINET STRIPPING	2	KRAD25-US-CSG
56	CABINET HANDLE	2	KRAD5500-US-CAH
55	CABINET RIGHT	1	KRAD25-US-CBR
54	CABINET LEFT	1	KRAD25-US-CLT
53	RIVET NUT M8	4	KRAD5500-US-RNT8
52	CABLE GLAND PG11	1	KRAD5500-US-CG11
51	CABINET ELECTRICAL BOX	1	KRAD25-US-CEB
50	ON/OFF SWITCH	1	KRAD500-US-ONB
49	POWER LIGHT	1	KRAD500-US-PLT
48	DEWPOINT INDICATOR	1	KRAD500-US-DPI
47	PLASTIC CONTROL PANEL	1	KRAD250-US-PCP
46	FAN SWITCH	1	KRAD5500-US-FSW
45	DEHYDRATOR / FILTER DRIER	1	KRAD150-US-DRI
44	EXPANSION VALVE	1	KRAD25-US-BYP
43	SETTING THE CONNECTION	1	KRAD25-US-STC
42	BOLT M4x8	8	KRAD80-US-BLT48
41	BOLT M4x12	22	KRAD150-US-BLT412
40	CABINET INSIDE	1	KRAD25-US-CAI
39	CABINET REAR TOP	1	KRAD25-US-CRT
38	BOLT M5x12	4	KRAD1200-US-BLT512
37	INDICATOR GASKET 1	1	KRAD1200-US-ING1
36	GASKET FOR DRAIN	1	KRAD150-US-GFD
35	FITTING 2	1	KRAD150-US-FTT2
34	FITTING 1	1	KRAD150-US-FTT1
33	ORING	2	KRAD25-US-ORG
32	CONNECTION CIT	2	KRAD25-US-CNK
31	COUPLING CLAMP	2	KRAD25-US-CPG
30	FILTER GAUGE	1	KRAD1200-US-FTG
29	COMPRESSED AIR FILTER ELEMENT KIT (X)	1	KRAD25-US-ELK-X
28	COMPRESSED AIR FILTER ELEMENT KIT (Y)	1	KRAD25-US-ELK-Y
27	NUT M6	4	KRAD25-US-NT6
26	WASHER 18x7x1mm	4	KRAD40-US-WSR18
25	START CAPACITOR	1	KRAD25-US-SCR
24	OVERLOAD PROTECTOR	1	KRAD25-US-OVP
23	START RELAY	1	KRAD25-US-STR
22	COMPRESSOR ELECTRICAL BOX	1	KRAD25-US-CEP
21	COMPRESSOR	1	KRAD25-US-CMP
20	WASHER 26x10,5x2,5mm	1	KRAD25-US-WHR26
19	NUT M8	1	KRAD25-US-NT8
18	DRAIN HOSE	2	KRAD25-US-DRH
17	DRAIN 1	4	KRAD25-US-DRN1
16	REDUCTIONS	2	KRAD25-US-RDS
15	MDF	1	KRAD25-US-MDF
14	ELBOW 1	1	KRAD25-US-ELW1
13	DRAIN VALVE 1	1	KRAD500-US-DRA1
12	TIMER RELAY	1	KRAD250-US-TMR
11	INSULATION OF HEAT EXCHANGER	1	KRAD25-US-IHE
10	HEAT EXCHANGER	1	KRAD25-US-EXC
09	WASHER 20x4,5x1,5	1	KRAD25-US-WHR20
08	BOLT M4x14mm	1	KRAD25-US-BLT414
07	NUT M4	4	KRAD25-US-NT4
06	BOLT M6x30mm	8	KRAD5500-US-BLT630
05	FAN	1	KRAD40-US-FAN
04	FAN GRILL	1	KRAD40-US-FGR
03	FAN GLADE	1	KRAD40-US-FBL
02	CONDANSER	1	KRAD25-US-CON
01	CABINET BASE	1	KRAD25-US-CAB
ITEM NO.	MATERIAL NAME	QTY	SPARE PART CODE
PART LIST			

KRAD 40



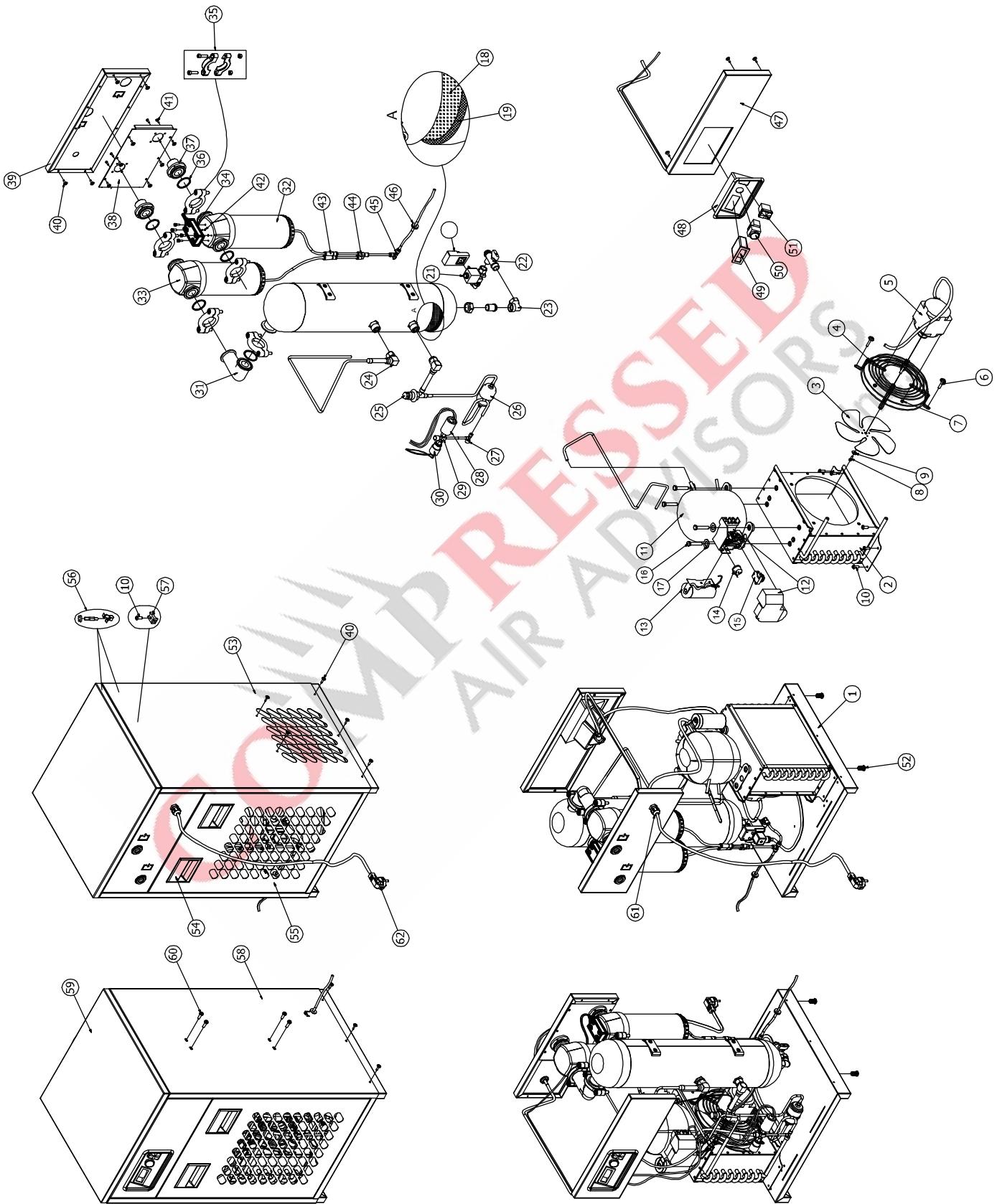
ITEM NO.	MATERIAL NAME	QTY	SPARE PART CODE
PART LIST			
62	POWER CABLE	1	KRAD500-US-PWC
61	CABLE GLAND PG11	1	KRAD5500-US-CG11
60	BOLT M6x15	4	KRAD150-US-BLT615
59	CABINET TOP	1	KRAD80-US-CAT
58	CABINET RIGHT	1	KRAD80-US-CBR
57	CABLE STRAP	3	KRAD150-US-CSP
56	CABINET FASTENER	8	KRAD5500-US-CFS
55	CABINET STRIPPING	2	KRAD80-US-CSG
54	CABINET HANDLE	4	KRAD5500-US-CAH
53	CABINET LEFT	1	KRAD80-US-CLT
52	RIVET NUT M8	4	KRAD5500-US-RNT8
51	ON/OFF SWITCH	1	KRAD500-US-ONB
50	POWER LIGHT	1	KRAD500-US-PLT
49	DEWPOINT INDICATOR	1	KRAD500-US-DPI
48	PLASTIC CONTROL PANEL	1	KRAD250-US-PCP
47	CABINET ELECTRICAL BOX	1	KRAD80-US-CEB
46	GASKET FOR DRAIN	1	KRAD150-US-GFD
45	FITTING 3	1	KRAD80-US-FTT3
44	FITTING 2	1	KRAD80-US-FTT2
43	FITTING 1	2	KRAD80-US-FTT1
42	INDICATOR GASKET 1	2	KRAD1200-US-ING1
41	BOLT M4x8	8	KRAD80-US-BLT48
40	BOLT M4x12	22	KRAD150-US-BLT412
39	CABINET REAR TOP	1	KRAD80-US-CRT
38	CABINET INSIDE	1	KRAD80-US-CAI
37	CONNECTION CIT2	2	KRAD80-US-CNK2
36	ORING	5	KRAD80-US-ORG
35	COUPLING CLAMP	5	KRAD80-US-CPG
34	FILTER GAUGE	1	KRAD1200-US-FTG
33	COMPRESSED AIR FILTER ELEMENT KIT (Y)	1	KRAD80-US-ELK-Y
32	COMPRESSED AIR FILTER ELEMENT KIT (X)	1	KRAD80-US-ELK-X
31	CONNECTION CIT1	1	KRAD80-US-CNK1
30	HIGH PRESSURE SWITCH	1	KRAD250-US-HPS
29	ADAPTOR T	1	KRAD80-US-TDP
28	FAN SWITCH	1	KRAD5500-US-FSW
27	CUPPER T1	1	KRAD80-US-CPT1
26	DEHYDRATOR / FILTER DRIER	1	KRAD150-US-DRI
25	EXPANSION VALVE	1	KRAD80-US-BYP
24	ROTOLOCK ADAPTOR1	1	KRAD5500-US-RTA1
23	ELBOW 1	1	KRAD5500-US-ELW1
22	DRAIN VALVE 1	1	KRAD500-US-DRA1
21	SELONOID VALVE	1	KRAD500-US-SVA
20	TIMER RELAY	1	KRAD500-US-TMR
19	INSULATION OF HEAT EXCHANGER	1	KRAD80-US-IHE
18	HEAT EXCHANGER	1	KRAD80-US-EXC
17	WASHER Ø18xØ7x1,2	4	KRAD80-US-WHR18
16	BOLT M6x30	4	KRAD80-US-BLT630
15	START RELAY	1	KRAD40-US-STR
14	OVERLOAD PROTECTOR	1	KRAD40-US-OVP
13	START CAPACITOR	1	KRAD40-US-SCR
12	COMPRESSOR ELECTRICAL BOX	1	KRAD40-US-CEB
11	COMPRESSOR	1	KRAD40-US-CMP
10	RIVET Ø3,5	9	KRAD40-US-RVT3,5
09	WASHER Ø20xØ4,3x1,5	1	KRAD40-US-WHR20
08	BOLT M4x14mm	1	KRAD40-US-BLT414
07	NUT M4	4	KRAD40-US-NT4
06	BOLT M6x20	4	KRAD40-USBLT620
05	FAN	1	KRAD40-US-FAN
04	FAN GRILL	1	KRAD40-US-FGR
03	FAN BLADE	1	KRAD40-US-FBL
02	CONDANSER	1	KRAD40-US-CON
01	CABINET BASE	1	KRAD80-US-CAB

KRAD 60



ITEM NO.	MATERIAL NAME	QTY	SPARE PART CODE
PART LIST			
62	POWER CABLE	1	KRAD500-US-PWC
61	CABLE GLAND PG11	1	KRAD5500-US-CG11
60	BOLT M6x15	4	KRAD150-US-BLT615
59	CABINET TOP	1	KRAD80-US-CAT
58	CABINET RIGHT	1	KRAD80-US-CBR
57	CABLE STRAP	3	KRAD150-US-CSP
56	CABINET FASTENER	8	KRAD5500-US-CFS
55	CABINET STRIPPING	2	KRAD80-US-CSG
54	CABINET HANDLE	4	KRAD5500-US-CAH
53	CABINET LEFT	1	KRAD80-US-CLT
52	RIVET NUT M8	4	KRAD5500-US-RNT8
51	ON/OFF SWITCH	1	KRAD500-US-ONB
50	POWER LIGHT	1	KRAD500-US-PLT
49	DEWPOINT INDICATOR	1	KRAD500-US-DPI
48	PLASTIC CONTROL PANEL	1	KRAD250-US-PCP
47	CABINET ELECTRICAL BOX	1	KRAD80-US-CEB
46	GASKET FOR DRAIN	1	KRAD150-US-GFD
45	FITTING 3	1	KRAD80-US-FTT3
44	FITTING 2	1	KRAD80-US-FTT2
43	FITTING 1	2	KRAD80-US-FTT1
42	INDICATOR GASKET 1	2	KRAD1200-US-ING1
41	BOLT M4x8	8	KRAD80-US-BLT48
40	BOLT M4x12	22	KRAD150-US-BLT412
39	CABINET REAR TOP	1	KRAD80-US-CRT
38	CABINET INSIDE	1	KRAD80-US-CAI
37	CONNECTION CIT2	2	KRAD80-US-CNK2
36	ORING	5	KRAD80-US-ORG
35	COUPLING CLAMP	5	KRAD80-US-CPG
34	FILTER GAUGE	1	KRAD1200-US-FTG
33	COMPRESSED AIR FILTER ELEMENT KIT (Y)	1	KRAD80-US-ELK-Y
32	COMPRESSED AIR FILTER ELEMENT KIT (X)	1	KRAD80-US-ELK-X
31	CONNECTION CIT1	1	KRAD80-US-CNK1
30	HIGH PRESSURE SWITCH	1	KRAD250-US-HPS
29	ADAPTOR T	1	KRAD80-US-TDP
28	FAN SWITCH	1	KRAD5500-US-FSW
27	CUPPER T1	1	KRAD80-US-CPT1
26	DEHYDRATOR / FILTER DRIER	1	KRAD150-US-DRI
25	EXPANSION VALVE	1	KRAD80-US-BYP
24	ROTOLOCK ADAPTOR1	1	KRAD5500-US-RTA1
23	ELBOW 1	1	KRAD5500-US-ELW1
22	DRAIN VALVE 1	1	KRAD500-US-DRA1
21	SELONOID VALVE	1	KRAD500-US-SVA
20	TIMER RELAY	1	KRAD500-US-TMR
19	INSULATION OF HEAT EXCHANGER	1	KRAD80-US-IHE
18	HEAT EXCHANGER	1	KRAD80-US-EXC
17	WASHER Ø22xØ8,5x2,5	4	KRAD150-US-WHR18
16	BOLT M8x40	4	KRAD150-US-BLT630
15	START RELAY	1	KRAD60-US-STR
14	OVERLOAD PROTECTOR	1	KRAD60-US-OVP
13	START CAPACITOR	1	KRAD60-US-SCR
12	COMPRESSOR ELECTRICAL BOX	1	KRAD60-US-CEB
11	COMPRESSOR	1	KRAD60-US-CMP
10	RIVET Ø3,5	9	KRAD60-US-RVT3,5
09	WASHER Ø20xØ4,3x1,5	1	KRAD60-US-WHR20
08	BOLT M4x14mm	1	KRAD60-US-BLT414
07	NUT M4	4	KRAD60-US-NT4
06	BOLT M6x20	4	KRAD60-US-BLT620
05	FAN	1	KRAD60-US-FAN
04	FAN GRILL	1	KRAD60-US-FGR
03	FAN BLADE	1	KRAD60-US-FBL
02	CONDANSER	1	KRAD60-US-CON
01	CABINET BASE	1	KRAD80-US-CAB

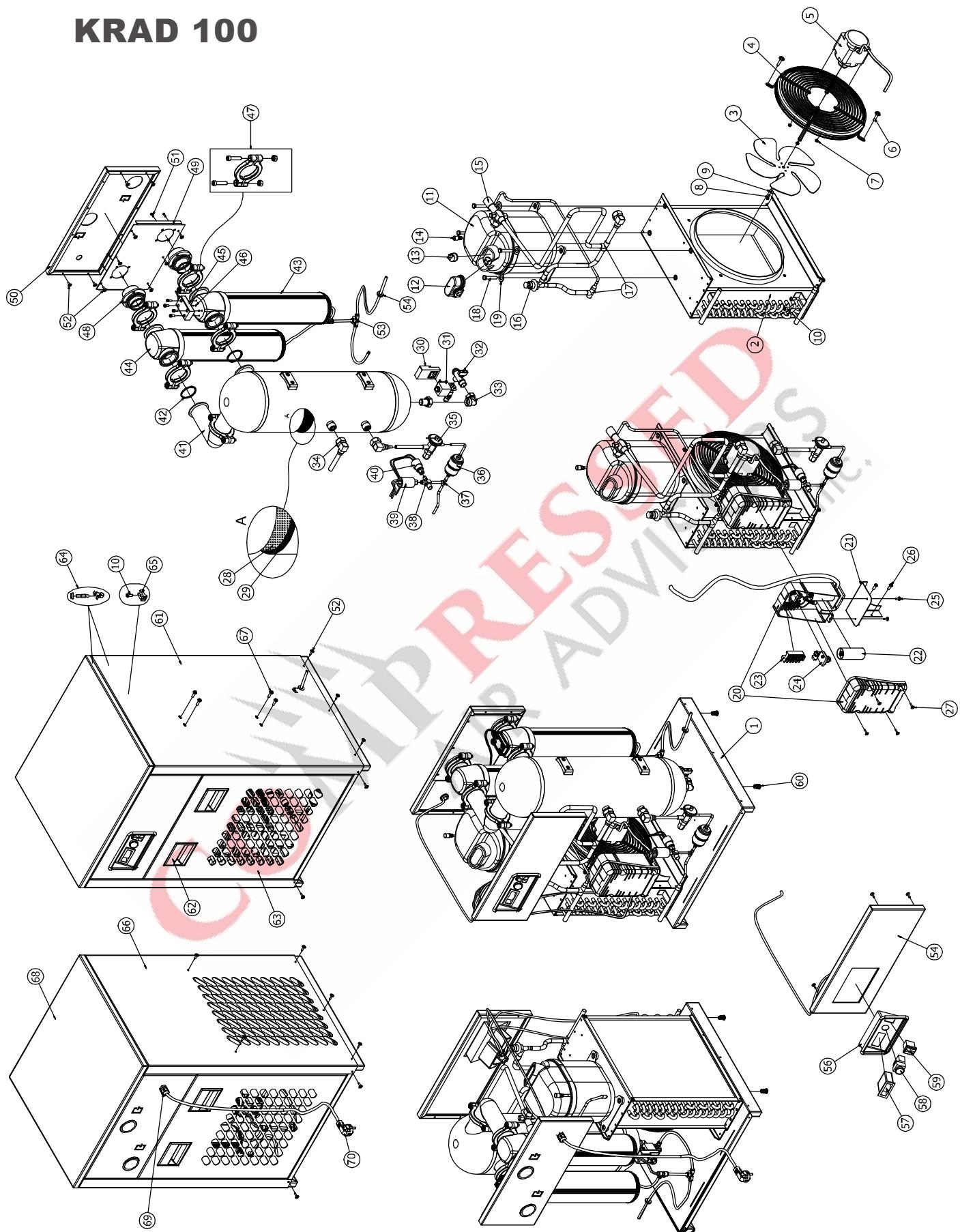
KRAD 80



62	POWER CABLE	1	KRAD500-US-PWC
61	CABLE GLAND PG11	1	KRAD5500-US-CG11
60	BOLT M6x15	4	KRAD150-US-BLT615
59	CABINET TOP	1	KRAD80-US-CAT
58	CABINET RIGHT	1	KRAD80-US-CBR
57	CABLE STRAP	3	KRAD150-US-CSP
56	CABINET FASTENER	8	KRAD5500-US-CFS
55	CABINET STRIPPING	2	KRAD80-US-CSG
54	CABINET HANDLE	4	KRAD5500-US-CAH
53	CABINET LEFT	1	KRAD80-US-CLT
52	RIVET NUT M8	4	KRAD5500-US-RNT8
51	ON/OFF SWITCH	1	KRAD500-US-ONB
50	POWER LIGHT	1	KRAD500-US-PLT
49	DEWPOINT INDICATOR	1	KRAD500-US-DPI
48	PLASTIC CONTROL PANEL	1	KRAD250-US-PCP
47	CABINET ELECTRICAL BOX	1	KRAD80-US-CEB
46	GASKET FOR DRAIN	1	KRAD150-US-GFD
45	FITTING 3	1	KRAD80-US-FTT3
44	FITTING 2	1	KRAD80-US-FTT2
43	FITTING 1	2	KRAD80-US-FTT1
42	INDICATOR GASKET 1	2	KRAD1200-US-ING1
41	BOLT M4x8	8	KRAD80-US-BLT48
40	BOLT M4x12	22	KRAD150-US-BLT412
39	CABINET REAR TOP	1	KRAD80-US-CRT
38	CABINET INSIDE	1	KRAD80-US-CAI
37	CONNECTION CIT2	2	KRAD80-US-CNK2
36	ORING	5	KRAD80-US-ORG
35	COUPLING CLAMP	5	KRAD80-US-CPG
34	FILTER GAUGE	1	KRAD1200-US-FTG
33	COMPRESSED AIR FILTER ELEMENT KIT (Y)	1	KRAD80-US-ELK-Y
32	COMPRESSED AIR FILTER ELEMENT KIT (X)	1	KRAD80-US-ELK-X
31	CONNECTION CIT1	1	KRAD80-US-CNK1
30	HIGH PRESSURE SWITCH	1	KRAD250-US-HPS
29	ADAPTOR T	1	KRAD80-US-TDP
28	FAN SWITCH	1	KRAD5500-US-FSW
27	CUPPER T1	1	KRAD80-US-CPT1
26	DEHYDRATOR / FILTER DRIER	1	KRAD150-US-DRI
25	EXPANSION VALVE	1	KRAD80-US-BYP
24	ROTOLOCK ADAPTOR1	1	KRAD5500-US-RTA1
23	ELBOW 1	1	KRAD5500-US-ELW1
22	DRAIN VALVE 1	1	KRAD500-US-DRA1
21	SELONOID VALVE	1	KRAD500-US-SVA
20	TIMER RELAY	1	KRAD500-US-TMR
19	INSULATION OF HEAT EXCHANGER	1	KRAD80-US-IHE
18	HEAT EXCHANGER	1	KRAD80-US-EXC
17	WASHER Ø22xØ8,5x2,5	4	KRAD150-US-WHR18
16	BOLT M8x40	4	KRAD150-US-BLT630
15	START RELAY	1	KRAD80-US-STR
14	OVERLOAD PROTECTOR	1	KRAD80-US-OVP
13	START CAPACITOR	1	KRAD80-US-SCR
12	COMPRESSOR ELECTRICAL BOX	1	KRAD80-US-CEB
11	COMPRESSOR	1	KRAD80-US-CMP
10	RIVET Ø3,5	9	KRAD80-US-RVT3,5
09	WASHER Ø20xØ4,3x1,5	1	KRAD80-US-WHR20
08	BOLT M4x14mm	1	KRAD80-US-BLT414
07	NUT M4	4	KRAD80-US-NT4
06	BOLT M6x20	4	KRAD80-US-BLT620
05	FAN	1	KRAD80-US-FAN
04	FAN GRILL	1	KRAD80-US-FGR
03	FAN BLADE	1	KRAD80-US-FBL
02	CONDANSER	1	KRAD80-US-CON
01	CABINET BASE	1	KRAD80-US-CAB
ITEM NO.	MATERIAL NAME	QTY	SPARE PART CODE

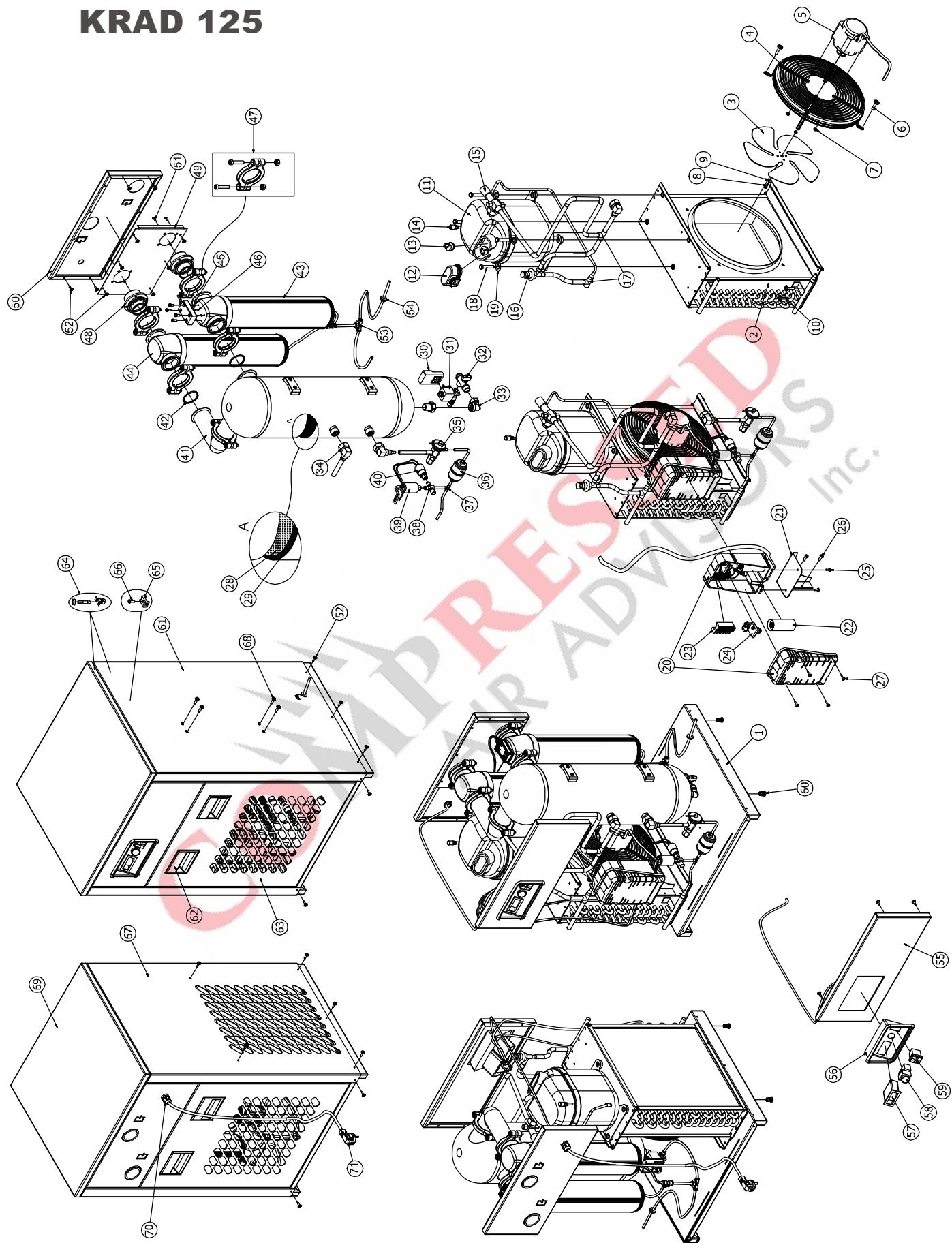
PART LIST

KRAD 100



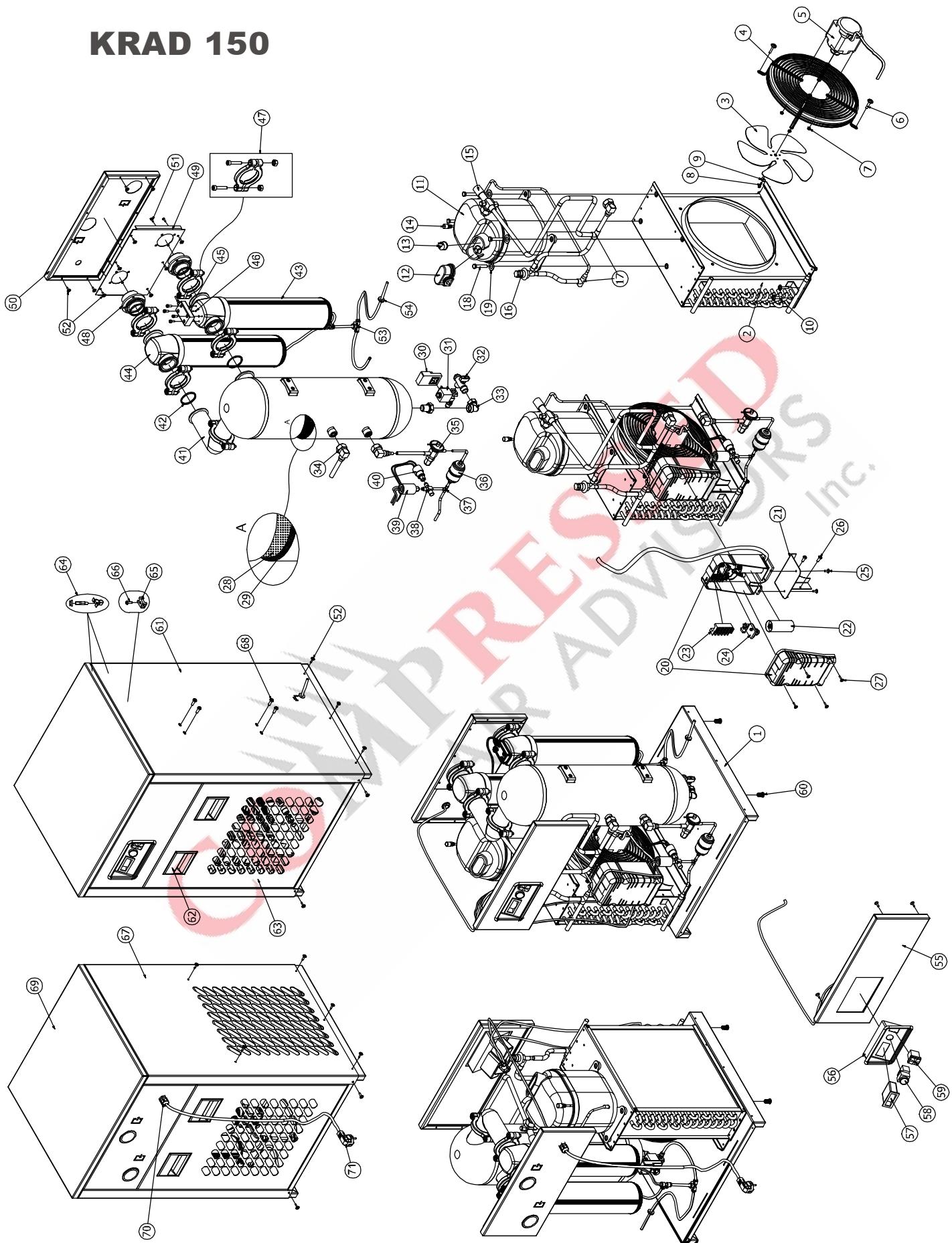
ITEM NO.	MATERIAL NAME	QTY	SPARE PART CODE
PART LIST			
70	POWER CABLE	1	KRAD500-US-PWC
69	CABLE GLAND PG11	1	KRAD5500-US-CG11
68	CABINET TOP	1	KRAD150-US-CAT
67	BOLT M6x15	4	KRAD150-US-BLT615
66	CABINET LEFT	1	KRAD150-US-CLT
65	CABLE STRAP	6	KRAD150-US-CSP
64	CABINET FASTENER	8	KRAD5500-US-CFS
63	CABINET STRIPPING	2	KRAD150-US-CSG
62	CABINET HANDLE	4	KRAD5500-US-CAH
61	CABINET RIGHT	1	KRAD150-US-CBR
60	RIVET NUT M8	4	KRAD5500-US-RNT8
59	ON/OFF SWITCH	1	KRAD500-US-ONB
58	POWER LIGHT	1	KRAD500-US-PLT
57	DEWPOINT INDICATOR	1	KRAD500-US-DPI
56	PLASTIC CONTROL PANEL	1	KRAD250-US-PCP
55	CABINET ELECTRICAL BOX	1	KRAD150-US-CEB
54	GASKET FOR DRAIN	1	KRAD150-US-GFD
53	FITTING	2	KRAD150-US-FTT
52	BOLT M4x10	24	KRAD150-US-BLT4
51	BOLT M6x10	8	KRAD150-US-BLT610
50	CABINET REAR TOP	1	KRAD150-US-CRT
49	CABINET INSIDE	1	KRAD150-US-CAI
48	CONNECTION CIT2	2	KRAD150-US-CN2
47	COUPLING CLAMP	5	KRAD150-US-CPG
46	INDICATOR GASKET 1	2	KRAD1200-US-ING1
45	FILTER GAUGE	1	KRAD1200-US-FTG
44	COMPRESSED AIR FILTER ELEMENT KIT (Y)	1	KRAD150-US-ELK-Y
43	COMPRESSED AIR FILTER ELEMENT KIT (X)	1	KRAD150-US-ELK-X
42	ORING	5	KRAD150-US-ORG
41	CONNECTION CIT1	1	KRAD150-US-CN1
40	HIGH PRESSURE SWITCH	1	KRAD250-US-HPS
39	FAN SWITCH	1	KRAD5500-US-FSW
38	ADAPTOR T	1	KRAD150-US-TDP
37	CUPPER T2	1	KRAD150-US-CPT2
36	DEHYDRATOR / FILTER DRIER	1	KRAD150-US-DRI
35	EXPANSION VALVE	1	KRAD200-US-EXP
34	ROTOLOCK ADAPTOR2	2	KRAD5500-US-RTA2
33	ELBOW 1	1	KRAD5500-US-ELW1
32	DRAIN VALVE 1	1	KRAD500-US-DRA1
31	SELONOID VALVE	1	KRAD500-US-SVA
30	TIMER RELAY	1	KRAD500-US-TMR
29	INSULATION OF HEAT EXCHANGER	1	KRAD150-US-IHE
28	HEAT EXCHANGER	1	KRAD150-US-EXC
27	BOLT M4x15	4	KRAD150-US-BLT415
26	RIVET Ø4,5	2	KRAD150-US-BLT410
25	BOLT M4x10	2	KRAD150-US-BLT410
24	START RELAY	1	KRAD150-US-STR
23	TERMINAL BLOCK	1	KRAD150-US-TRM
22	START CAPACITOR	1	KRAD150-US-SCR
21	ELECTRICAL BOX LOWER SUPPORT PLATE	1	KRAD150-US-ELBS
20	ELECTRICAL BOX	1	KRAD150-US-ELB
19	WASHER Ø22xØ8,5x2,5	4	KRAD150-US-WHR22
18	BOLT M8x40	4	KRAD150-US-BLT840
17	CUPPER T1	2	KRAD150-US-CPT1
16	BY-PASS VALVE	1	KRAD100-US-BYP
15	ROTOLOCK ADAPTOR1	1	KRAD5500-US-RTA1
14	SETTING THE CONNECTION	1	KRAD750-US-STC
13	OVERLOAD PROTECTOR	1	KRAD100-US-OVP
12	COMPRESSOR ELECTRICAL BOX	1	KRAD100-US-CEB
11	COMPRESSOR	1	KRAD100-US-CMP
10	RIVET Ø3,5	10	KRAD150-US-RVT3,5
09	WASHER Ø20xØ4,3x1,5	1	KRAD100-US-WHR
08	BOLT M4x14mm	1	KRAD100-US-BLT414
07	NUT M4	4	KRAD100-US-NT4
06	BOLT M6x30	4	KRAD5500-US-BLT630
05	FAN	1	KRAD100-US-FAN
04	FAN GRILL	1	KRAD100-US-FGR
03	FAN BLADE	1	KRAD100-US-FBL
02	CONDANSER	1	KRAD100-US-CON
01	CABINET BASE	1	KRAD150-US-CAB

KRAD 125



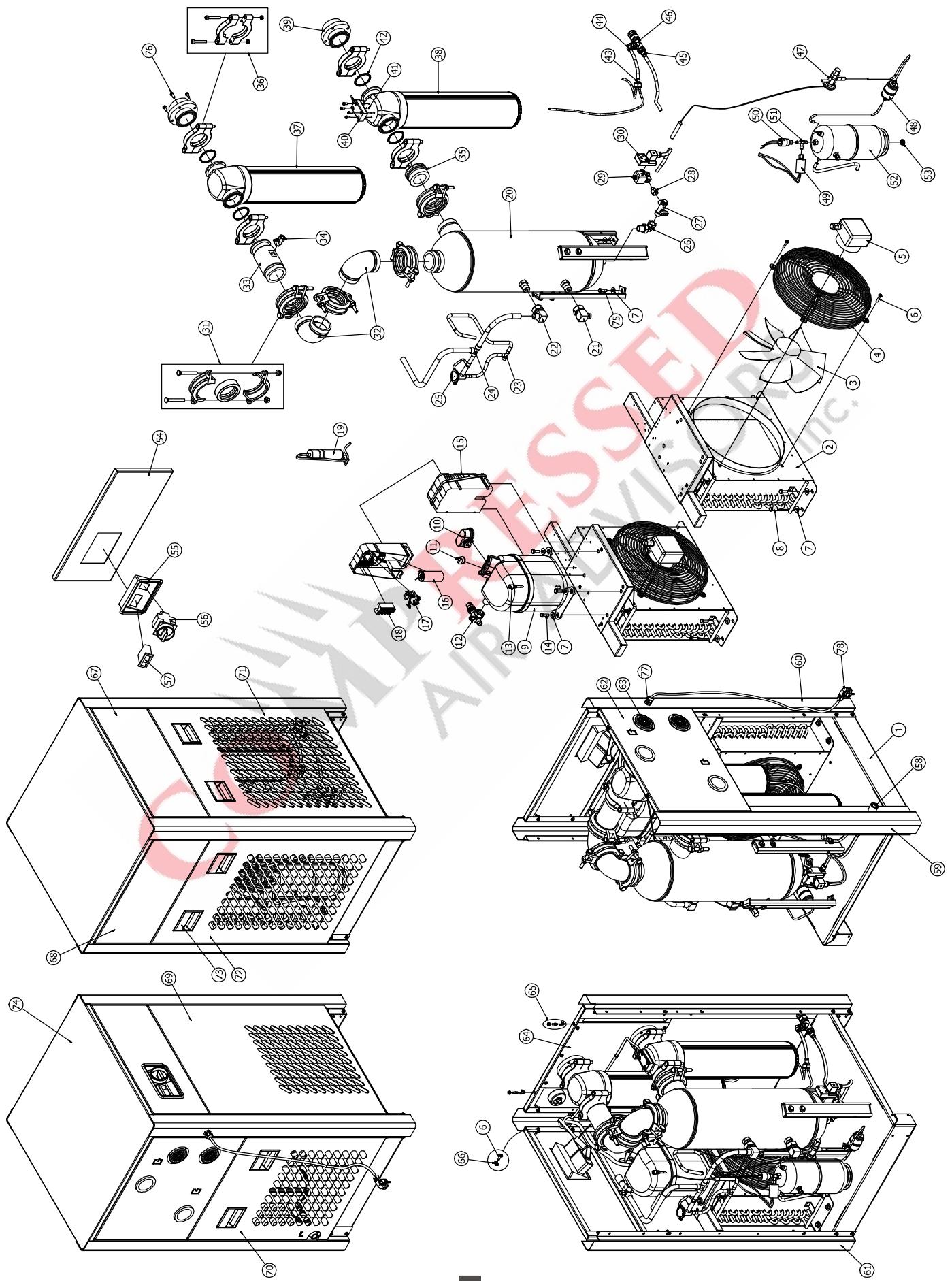
ITEM NO.	MATERIAL NAME	QTY	SPARE PARTCODE
71	POWER CABLE	1	KRAD500-US-PWC
70	CABLE GLAND PG11	1	KRAD5500-US-CG11
69	CABINET TOP	1	KRAD150-US-CAT
68	BOLT M6x15	4	KRAD150-US-BLT615
67	CABINET LEFT	1	KRAD150-US-CLT
66	RIVET Ø3,5	6	KRAD150-US-RVT3,5
65	CABLE STRAP	6	KRAD150-US-CSP
64	CABINET FASTENER	8	KRAD5500-US-CFS
63	CABINET STRIPPING	2	KRAD150-US-CSG
62	CABINET HANDLE	4	KRAD5500-US-CAH
61	CABINET RIGHT	1	KRAD150-US-CBR
60	RIVET NUT M8	4	KRAD5500-US-RNT8
59	ON/OFF SWITCH	1	KRAD500-US-ONB
58	POWER LIGHT	1	KRAD500-US-PLT
57	DEWPOINT INDICATOR	1	KRAD500-US-DPI
56	PLASTIC CONTROL PANEL	1	KRAD250-US-PCP
55	CABINET ELECTRICAL BOX	1	KRAD150-US-CEB
54	GASKET FOR DRAIN	1	KRAD150-US-GFD
53	FITTING	2	KRAD150-US-FTT
52	BOLT M4x10	24	KRAD150-US-BLT410
51	BOLT M6x10	8	KRAD150-US-BLT610
50	CABINET REAR TOP	1	KRAD150-US-CRT
49	CABINET INSIDE	1	KRAD150-US-CAI
48	CONNECTION CIT2	2	KRAD150-US-CNK2
47	COUPLING CLAMP	5	KRAD150-US-CPG
46	INDICATOR GASKET 1	2	KRAD1200-US-ING1
45	FILTER GAUGE	1	KRAD1200-US-FTG
44	COMPRESSED AIR FILTER ELEMENT KIT (Y)	1	KRAD150-US-ELK-Y
43	COMPRESSED AIR FILTER ELEMENT KIT (X)	1	KRAD150-US-ELK-X
42	ORING	5	KRAD150-US-ORG
41	CONNECTION CIT1	1	KRAD150-US-CNK1
40	FAN SWITCH	1	KRAD5500-US-FSW
39	HIGH PRESSURE SWITCH	1	KRAD250-US-HPS
38	ADAPTOR T	1	KRAD150-US-TDP
37	CUPPER T2	1	KRAD150-US-CPT2
36	DEHYDRATOR / FILTER DRIER	1	KRAD150-US-DRI
35	EXPANSION VALVE	1	KRAD200-US-EXP
34	ROTOLOCK ADAPTOR2	2	KRAD5500-US-RTA2
33	ELBOW 1	1	KRAD5500-US-ELW1
32	DRAIN VALVE 1	1	KRAD500-US-DRA1
31	SELONOID VALVE	1	KRAD500-US-SVA
30	TIMER RELAY	1	KRAD500-US-TMR
29	INSULATION OF HEAT EXCHANGER	1	KRAD150-US-IHE
28	HEAT EXCHANGER	1	KRAD150-US-EXC
27	BOLT M4x15	4	KRAD150-US-BLT415
26	RIVET Ø4,5	2	KRAD150-US-RVT4
25	BOLT M4x10	2	KRAD150-US-BLT410
24	START RELAY	1	KRAD150-US-STR
23	TERMINAL BLOCK	1	KRAD150-US-TRM
22	START CAPACITOR	1	KRAD150-US-SCR
21	ELECTRICAL BOX LOWER SUPPORT PLATE	1	KRAD150-US-ELBS
20	ELECTRICAL BOX	1	KRAD150-US-ELB
19	WASHER Ø22xØ8,5x2,5	4	KRAD150-US-WHR22
18	BOLT M8x40	4	KRAD150-US-BLT840
17	CUPPER T1	2	KRAD150-US-CPT1
16	BY-PASS VALVE	1	KRAD500-US-BYP
15	ROTOLOCK ADAPTOR1	1	KRAD5500-US-RTA1
14	SETTING THE CONNECTION	1	KRAD750-US-STC
13	OVERLOAD PROTECTOR	1	KRAD125-US-OVP
12	COMPRESSOR ELECTRICAL BOX	1	KRAD125-US-CEB
11	COMPRESSOR	1	KRAD125-US-CMP
10	BOLT M4x10	4	KRAD150-US-BLT410
09	WASHER Ø20xØ4,3x1,5	1	KRAD150-US-WHR
08	BOLT M4x14mm	1	KRAD150-US-BLT414
07	NUT M4	4	KRAD150-US-NT4
06	BOLT M6x30	4	KRAD5500-US-BLT630
05	FAN	1	KRAD150-US-FAN
04	FAN GRILL	1	KRAD150-US-FGR
03	FAN BLADE	1	KRAD150-US-FBL
02	CONDANSER	1	KRAD150-US-CON
01	CABINET BASE	1	KRAD150-US-CAB
PART LIST			

KRAD 150



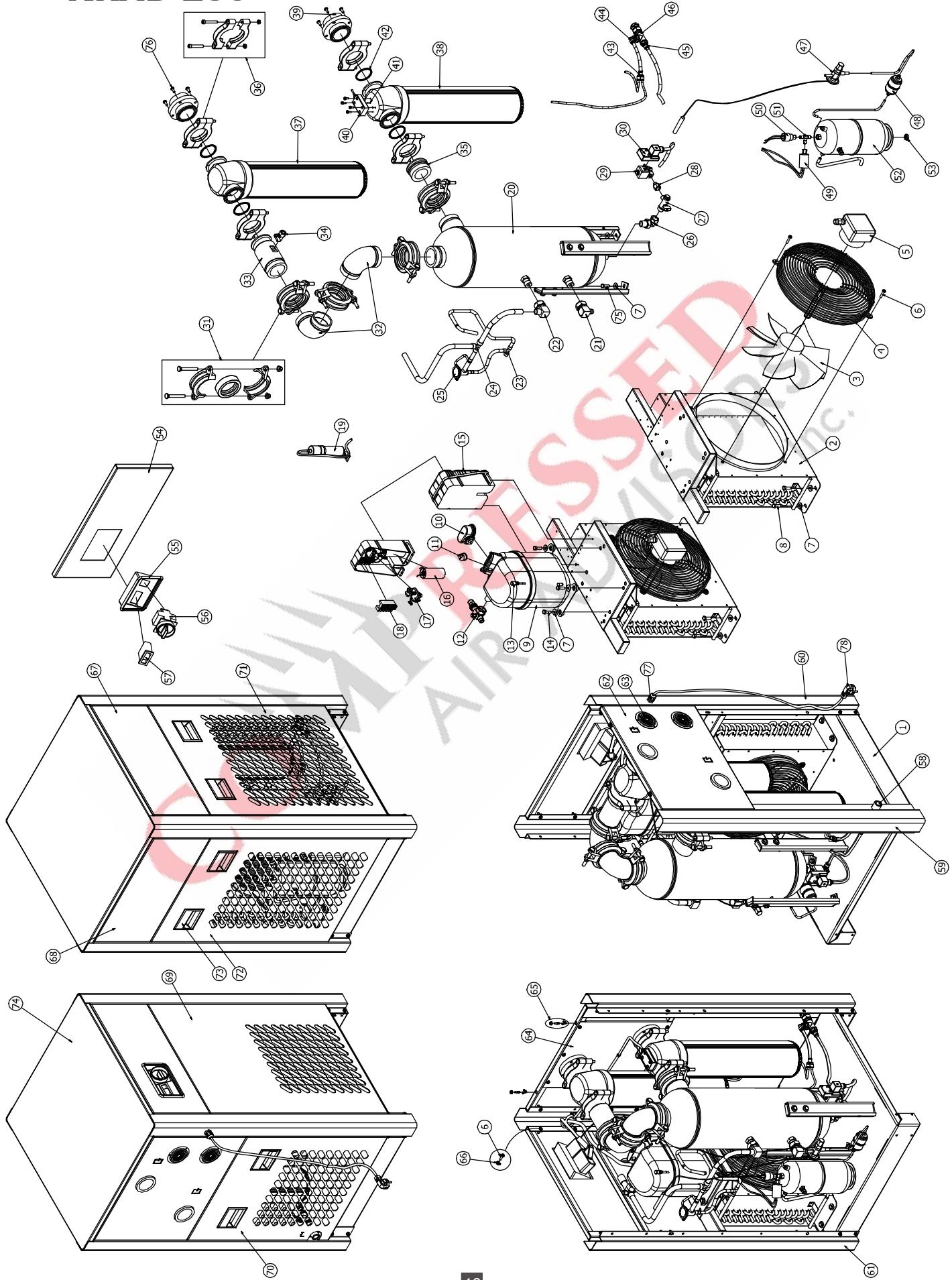
ITEM NO.	MATERIAL NAME	QTY	SPARE PART CODE
PART LIST			
71	POWER CABLE	1	KRAD500-US-PWC
70	CABLE GLAND PG11	1	KRAD5500-US-CG11
69	CABINET TOP	1	KRAD150-US-CAT
68	BOLT M6x15	4	KRAD150-US-BLT615
67	CABINET LEFT	1	KRAD150-US-CLT
66	RIVET Ø3,5	6	KRAD150-US-RVT3,5
65	CABLE STRAP	6	KRAD150-US-CSP
64	CABINET FASTENER	8	KRAD5500-US-CFS
63	CABINET STRIPPING	2	KRAD150-US-CSG
62	CABINET HANDLE	4	KRAD5500-US-CAH
61	CABINET RIGHT	1	KRAD150-US-CBR
60	RIVET NUT M8	4	KRAD5500-US-RNT8
59	ON/OFF SWITCH	1	KRAD500-US-ONB
58	POWER LIGHT	1	KRAD500-US-PLT
57	DEWPOINT INDICATOR	1	KRAD500-US-DPI
56	PLASTIC CONTROL PANEL	1	KRAD250-US-PCP
55	CABINET ELECTRICAL BOX	1	KRAD150-US-CEB
54	GASKET FOR DRAIN	1	KRAD150-US-GFD
53	FITTING	2	KRAD150-US-FTT
52	BOLT M4x10	24	KRAD150-US-BLT410
51	BOLT M6x10	8	KRAD150-US-BLT610
50	CABINET REAR TOP	1	KRAD150-US-CRT
49	CABINET INSIDE	1	KRAD150-US-CAI
48	CONNECTION CIT2	2	KRAD150-US-CNK2
47	COUPLING CLAMP	5	KRAD150-US-CPG
46	INDICATOR GASKET 1	2	KRAD1200-US-ING1
45	FILTER GAUGE	1	KRAD1200-US-FTG
44	COMPRESSED AIR FILTER ELEMENT KIT (Y)	1	KRAD150-US-ELK-Y
43	COMPRESSED AIR FILTER ELEMENT KIT (X)	1	KRAD150-US-ELK-X
42	ORING	5	KRAD150-US-ORG
41	CONNECTION CIT1	1	KRAD150-US-CN1
40	FAN SWITCH	1	KRAD5500-US-FSW
39	HIGH PRESSURE SWITCH	1	KRAD250-US-HPS
38	ADAPTOR T	1	KRAD150-US-TDP
37	CUPPER T2	1	KRAD150-US-CPT2
36	DEHYDRATOR / FILTER DRIER	1	KRAD150-US-DRI
35	EXPANSION VALVE	1	KRAD200-US-EXP
34	ROTOLOCK ADAPTOR2	2	KRAD5500-US-RTA2
33	ELBOW 1	1	KRAD5500-US-ELW1
32	DRAIN VALVE 1	1	KRAD500-US-DRA1
31	SELONOID VALVE	1	KRAD500-US-SVA
30	TIMER RELAY	1	KRAD500-US-TMR
29	INSULATION OF HEAT EXCHANGER	1	KRAD150-US-IHE
28	HEAT EXCHANGER	1	KRAD150-US-EXC
27	BOLT M4x15	4	KRAD150-US-BLT415
26	RIVET Ø4,5	2	KRAD150-US-RVT4
25	BOLT M4x10	2	KRAD150-US-BLT410
24	START RELAY	1	KRAD150-US-STR
23	TERMINAL BLOCK	1	KRAD150-US-TRM
22	START CAPACITOR	1	KRAD150-US-SCR
21	ELECTRICAL BOX LOWER SUPPORT PLATE	1	KRAD150-US-ELBS
20	ELECTRICAL BOX	1	KRAD150-US-ELB
19	WASHER Ø22xØ8,5x2,5	4	KRAD150-US-WHR22
18	BOLT M8x40	4	KRAD150-US-BLT840
17	CUPPER T1	2	KRAD150-US-CPT1
16	BY-PASS VALVE	1	KRAD500-US-BYP
15	ROTOLOCK ADAPTOR1	1	KRAD5500-US-RTA1
14	SETTING THE CONNECTION	1	KRAD750-US-STC
13	OVERLOAD PROTECTOR	1	KRAD200-US-OVP
12	COMPRESSOR ELECTRICAL BOX	1	KRAD200-US-CEB
11	COMPRESSOR	1	KRAD200-US-CMP
10	BOLT M4x10	4	KRAD150-US-BLT410
09	WASHER Ø20xØ4,3x1,5	1	KRAD150-US-WHR
08	BOLT M4x14mm	1	KRAD150-US-BLT414
07	NUT M4	4	KRAD150-US-NT4
06	BOLT M6x30	4	KRAD5500-US-BLT630
05	FAN	1	KRAD150-US-FAN
04	FAN GRILL	1	KRAD150-US-FGR
03	FAN BLADE	1	KRAD150-US-FBL
02	CONDENSER	1	KRAD150-US-CON
01	CABINET BASE	1	KRAD150-US-CAB

KRAD 200



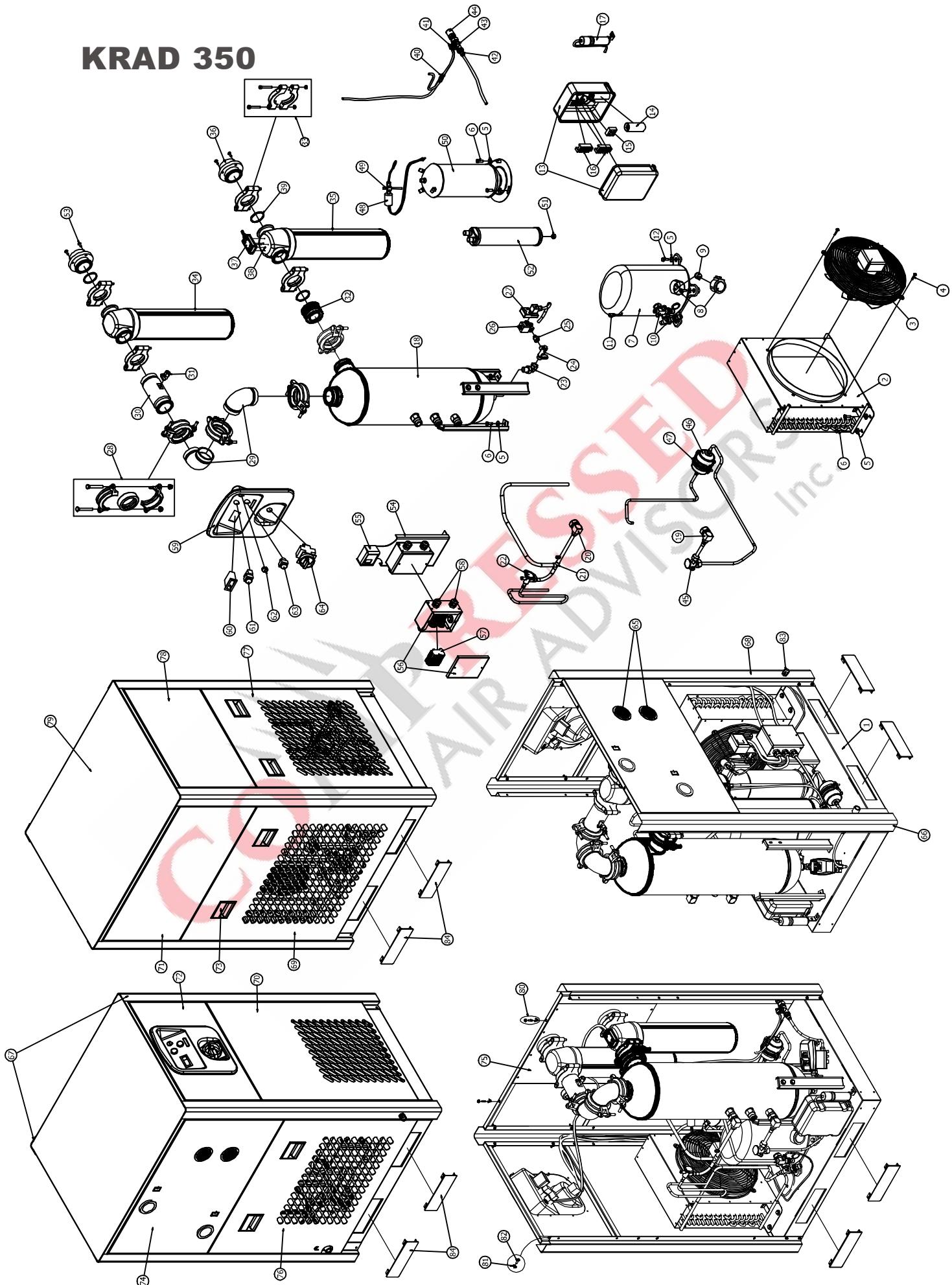
ITEM NO.	MATERIAL NAME	QTY	SPARE PART CODE
PART LIST			
78	POWER CABLE	1	KRAD500-US-PWC
77	CABLE GLAND PG11	1	KRAD5500-US-CG11
76	BOLT M8x15	8	KRAD1200-US-BLT815
75	BOLT M8x30	3	KRAD5500-US-BLT830
74	CABINET TOP	1	KRAD250-US-CAT
73	CABINET HANDLE	6	KRAD5500-US-CAH
72	CABINET LOWER RIGHT	1	KRAD250-US-CLR
71	CABINET REAR BOTTOM	1	KRAD250-US-CRB
70	CABINET BOTTOM LEFT	1	KRAD250-US-CBL
69	CABINET FRONT BOTTOM	1	KRAD250-US-CFB
68	CABINET UPPER RIGHT	1	KRAD250-US-CUR
67	CABINET REAR TOP	1	KRAD250-US-CRT
66	CAGE NUTS M6	16	KRAD5500-US-CGN6
65	CABINET FASTENER	14	KRAD5500-US-CFS
64	CABINET INSIDE	1	KRAD250-US-CAI
63	HIGH - LOW PRESSURE GAUGE	2	KRAD5500-US-HLPG
62	CABINET UPPER LEFT	1	KRAD250-US-CUL
61	CABINET LEG3	2	KRAD250-US-CAL3
60	CABINET LEG2	1	KRAD250-US-CAL2
59	CABINET LEG1	1	KRAD250-US-CAL1
58	DRAIN SLEEVE	1	KRAD750-US-DRS
57	DEWPOINT INDICATOR	1	KRAD500-US-DPI
56	MAIN SWITCH	1	KRAD500-US-MSW
55	PLASTIC CONTROL PANEL	1	KRAD250-US-PCP
54	CABINET ELECTRICAL BOX	1	KRAD250-US-CEB
53	NUT M10	1	KRAD750-US-NT10
52	LIQUID RECEVIER	1	KRAD250-US-LIQ
51	ADAPTOR T	1	KRAD5500-US-TDP
50	HIGH PRESSURE SWITCH	1	KRAD250-US-HPS
49	FAN SWITCH	1	KRAD5500-US-FSW
48	DEHYDRATOR / FILTER DRIER	1	KRAD200-US-DRI
47	EXPANSION VALVE	1	KRAD200-US-EXP
46	DRAIN VALVE2	1	KRAD5500-US-DRA2
45	FITTING 2	1	KRAD5500-US-FTT2
44	ELBOW FITTING	1	KRAD5500-US-ELW
43	FITTING 1	1	KRAD1200-US-FTT1
42	ORING	4	KRAD1200-US-ORG
41	INDICATOR GASKET1	2	KRAD1200-US-ING1
40	FILTER GAUGE	1	KRAD1200-US-FTG
39	CONNECTION CIT3	2	KRAD250-US-CNK3
38	COMPRESSED AIR FILTER ELEMENT KIT (X)	1	KRAD250-US-ELK-X
37	COMPRESSED AIR FILTER ELEMENT KIT (Y)	1	KRAD250-US-ELK-Y
36	COUPLING CLAMP2	4	KRAD1200-US-CPG2
35	CONNECTION CIT2	1	KRAD250-US-CN2
34	BALL VALVE	1	KRAD5500-US-BVL
33	CONNECTION CIT1	1	KRAD250-US-CN1
32	ELBOW 2	2	KRAD1200-US-ELW2
31	COUPLING CLAMP1	4	KRAD5500-US-CPG1
30	TIMER RELAY	1	KRAD500-US-TMR
29	SELONOID VALVE	1	KRAD500-US-SVA
28	DRAIN NUT	1	KRAD5500-US-DRN
27	DRAIN VALVE 1	1	KRAD5500-US-DRA1
26	ELBOW 1	1	KRAD5500-US-ELW1
25	BY-PASS VALVE	1	KRAD500-US-BYP
24	CUPPER T2	1	KRAD5500-US-CPT2
23	CUPPER T1	1	KRAD5500-US-CPT1
22	ROTOLOCK ADAPTOR3	1	KRAD5500-US-RTA3
21	ROTOLOCK ADAPTOR2	1	KRAD5500-US-RTA2
20	HEAT EXCHANGER	1	KRAD250-US-EXC
19	THERMOSTAT	1	KRAD500-US-TMT
18	THERMINAL BLOCK	1	KRAD250-US-TRM
17	START RELAY	1	KRAD250-US-STR
16	START CAPACITOR	1	KRAD250-US-SCR
15	ELECTRICAL BOX	1	KRAD250-US-ELB
14	BOLT M8x40	4	KRAD750-US-BLT840
13	SETTING THE CONNECTION	1	KRAD750-US-STC
12	ROTOLOCK ADAPTOR1	1	KRAD5500-US-RTA1
11	OVERLOAD PROTECTOR	1	KRAD200-US-OVP
10	COMPRESSOR ELECTRICAL BOX	1	KRAD200-US-CEP
09	COMPRESSOR	1	KRAD200-US-CMP
08	BOLT M8x25	4	KRAD750-US-BLT825
07	WASHER Ø22x8,2x2,4	11	KRAD5500-US-WHR
06	BOLT M6x30	20	KRAD5500-US-BLT630
05	FAN	1	KRAD250-US-FAN
04	FAN GRILL	1	KRAD250-US-FGR
03	FAN BLADE	1	KRAD250-US-FBL
02	CONDANSER	1	KRAD250-US-CON
01	CABINET BASE	1	KRAD250-US-CAB

KRAD 250



ITEM NO.	MATERIAL NAME	QTY	SPARE PART CODE
PART LIST			
78	POWER CABLE	1	KRAD500-US-PWC
77	CABLE GLAND PG11	1	KRAD5500-US-CG11
76	BOLT M8x15	8	KRAD1200-US-BLT815
75	BOLT M8x30	3	KRAD5500-US-BLT830
74	CABINET TOP	1	KRAD250-US-CAT
73	CABINET HANDLE	6	KRAD5500-US-CAH
72	CABINET LOWER RIGHT	1	KRAD250-US-CLR
71	CABINET REAR BOTTOM	1	KRAD250-US-CRB
70	CABINET BOTTOM LEFT	1	KRAD250-US-CBL
69	CABINET FRONT BOTTOM	1	KRAD250-US-CFB
68	CABINET UPPER RIGHT	1	KRAD250-US-CUR
67	CABINET REAR TOP	1	KRAD250-US-CRT
66	CAGE NUTS M6	16	KRAD5500-US-CGN6
65	CABINET FASTENER	14	KRAD5500-US-CSFS
64	CABINET INSIDE	1	KRAD250-US-CAI
63	HIGH - LOW PRESSURE GAUGE	2	KRAD5500-US-HLPG
62	CABINET UPPER LEFT	1	KRAD250-US-CUL
61	CABINET LEG3	2	KRAD250-US-CAL3
60	CABINET LEG2	1	KRAD250-US-CAL2
59	CABINET LEG1	1	KRAD250-US-CAL1
58	DRAIN SLEEVE	1	KRAD750-US-DRS
57	DEWPOINT INDICATOR	1	KRAD500-US-DPI
56	MAIN SWITCH	1	KRAD500-US-MSW
55	PLASTIC CONTROL PANEL	1	KRAD250-US-PCP
54	CABINET ELECTRICAL BOX	1	KRAD250-US-CEB
53	NUT M10	1	KRAD750-US-NT10
52	LIQUID RECEVIER	1	KRAD250-US-LIQ
51	ADAPTOR T	1	KRAD5500-US-TDP
50	HIGH PRESSURE SWITCH	1	KRAD5500-US-HPS
49	FAN SWITCH	1	KRAD5500-US-FSW
48	DEHYDRATOR / FILTER DRIER	1	KRAD750-US-DR1
47	EXPANSION VALVE	1	KRAD250-US-EXP
46	DRAIN VALVE2	1	KRAD5500-US-DRA2
45	FITTING 2	1	KRAD5500-US-FTT2
44	ELBOW FITTING	1	KRAD5500-US-ELW
43	FITTING 1	1	KRAD1200-US-FTT1
42	ORING	4	KRAD1200-US-ORG
41	INDICATOR GASKET1	2	KRAD1200-US-ING1
40	FILTER GAUGE	1	KRAD1200-US-FTG
39	CONNECTION CIT3	2	KRAD250-US-CNK3
38	COMPRESSED AIR FILTER ELEMENT KIT (X)	1	KRAD500-US-ELK-X
37	COMPRESSED AIR FILTER ELEMENT KIT (Y)	1	KRAD500-US-ELK-Y
36	COUPLING CLAMP2	4	KRAD1200-US-CPG2
35	CONNECTION CIT2	1	KRAD250-US-CNK2
34	BALL VALVE	1	KRAD5500-US-BVL
33	CONNECTION CIT1	1	KRAD250-US-CNK1
32	ELBOW 2	2	KRAD1200-US-ELW2
31	COUPLING CLAMP1	4	KRAD5500-US-CPG1
30	TIMER RELAY	1	KRAD500-US-TMR
29	SELONOID VALVE	1	KRAD500-US-SVA
28	DRAIN NUT	1	KRAD5500-US-DRN
27	DRAIN VALVE 1	1	KRAD5500-US-DRA1
26	ELBOW 1	1	KRAD5500-US-ELW1
25	BY-PASS VALVE	1	KRAD500-US-BYP
24	CUPPER T2	1	KRAD5500-US-CPT2
23	CUPPER T1	1	KRAD5500-US-CPT1
22	ROTOLOCK ADAPTOR3	1	KRAD5500-US-RTA3
21	ROTOLOCK ADAPTOR2	1	KRAD5500-US-RTA2
20	HEAT EXCHANGER	1	KRAD250-US-EXC
19	THERMOSTAT	1	KRAD250-US-TMT
18	THERMINAL BLOCK	1	KRAD250-US-TRM
17	START RELAY	1	KRAD250-US-STR
16	START CAPACITOR	1	KRAD250-US-SCR
15	ELECTRICAL BOX	1	KRAD250-US-ELB
14	BOLT M8x40	4	KRAD750-US-BLT840
13	SETTING THE CONNECTION	1	KRAD750-US-STC
12	ROTOLOCK ADAPTOR1	1	KRAD5500-US-RTA1
11	OVERLOAD PROTECTOR	1	KRAD250-US-OVP
10	COMPRESSOR ELECTRICAL BOX	1	KRAD250-US-CEP
09	COMPRESSOR	1	KRAD250-US-CMP
08	BOLT M8x25	4	KRAD750-US-BLT825
07	WASHER Ø22x8,2x2,4	11	KRAD5500-US-WHR
06	BOLT M6x30	20	KRAD5500-US-BLT630
05	FAN	1	KRAD250-US-FAN
04	FAN GRILL	1	KRAD250-US-FGR
03	FAN BLADE	1	KRAD250-US-FBL
02	CONDANSER	1	KRAD250-US-CON
01	CABINET BASE	1	KRAD250-US-CAB

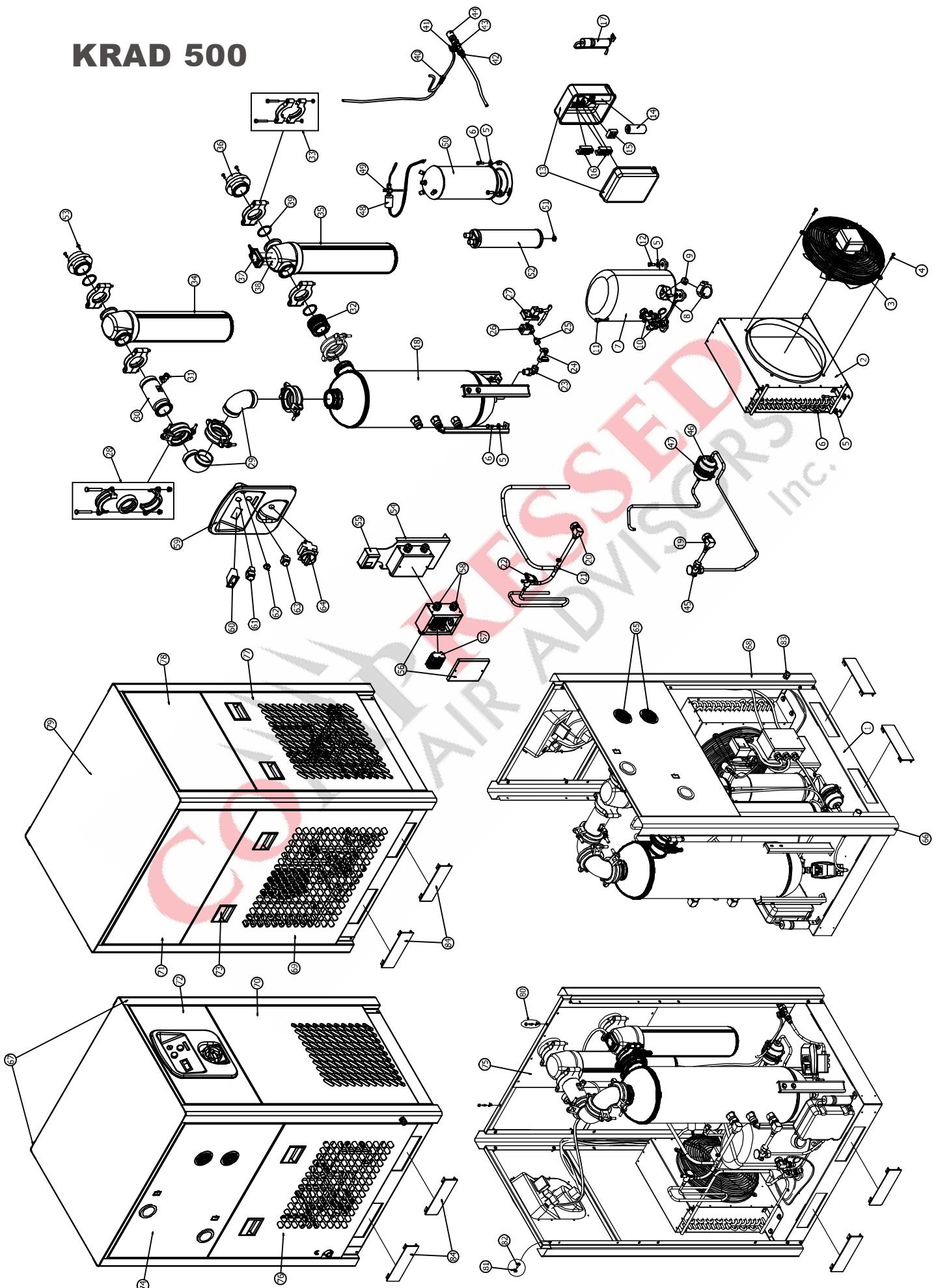
KRAD 350



84	REMOVABLE SHIELD	4	KRAD1750-US-CFS
83	CABLE GLAND PG11	1	KRAD5500-US-CG11
82	BOLT M8x25	24	KRAD5500-US-BLT826
81	CAGE NUTS M6	24	KRAD5500-US-CGN6
80	CABINET FASTENER	14	KRAD5500-US-CFS
79	CABINET TOP	1	KRAD500-US-CAT
78	CABINET REAR TOP	1	KRAD500-US-CRT
77	CABINET REAR BOTTOM	1	KRAD500-US-CRB
76	CABINET BOTTOM LEFT	1	KRAD500-US-CBL
75	CABINET INSIDE	1	KRAD500-US-CAI
74	CABINET UPPER LEFT	1	KRAD500-US-CUL
73	CABINET HANDLE	6	KRAD5500-US-CAH
72	CABINET ELECTRICAL BOX	1	KRAD500-US-CEB
71	CABINET UPPER RIGHT	1	KRAD500-US-CUR
70	CABINET FRONT BOTTOM	1	KRAD500-US-CFB
69	CABINET LOWER RIGHT	1	KRAD500-US-CLR
68	CABINET LEG3	1	KRAD500-US-CAL3
67	CABINET LEG2	2	KRAD500-US-CAL2
66	CABINET LEG1	1	KRAD500-US-CAL1
65	HIGH - LOW PRESSURE GAUGE	2	KRAD5500-US-HLPG
64	MAIN SWITCH	1	KRAD500-US-MSW
63	FILTER ALARM LIGHT	1	KRAD500-US-FAL
62	STOPER	1	KRAD5500-US-STP
61	START BUTTON	1	KRAD500-US-STB
60	DEWPOINT INDICATOR	1	KRAD500-US-DPI
59	PLASTIC CONTROL PANEL	1	KRAD5500-US-PCP
58	CABLE GLAND PG16	3	KRAD5500-US-CG16
57	THERMINAL BLOCK	1	KRAD500-US-TRM
56	ELECTRICAL BOX	1	KRAD500-US-ELB
55	HIGH PRESSURE SWICH	1	KRAD500-US-HPS
54	SUPPORT PLATE JUNCTION	1	KRAD500-US-SPJ
53	BOLT M8x15	8	KRAD1200-US-BLT815
52	SUCTION ACCUMULATOR	1	KRAD500-US-SUC
51	NUT M10	1	KRAD750-US-NT10
50	LIQUID RECEIVER	1	KRAD500-US-LIQ
49	T ADAPTOR	1	KRAD5500-US-TDP
48	FAN SWITCH	1	KRAD5500-US-FSW
47	FILTER DRIER CLAMP	1	KRAD750-US-FDC
46	DEHYDRATOR / FILTER DRIER	1	KRAD750-US-DRI
45	EXPANSION VALVE	1	KRAD750-US-EXP
44	DRAIN SLEEVE	1	KRAD750-US-DRS
43	DRAIN VALVE2	1	KRAD5500-US-DRA2
42	FITTING2	1	KRAD5500-US-FTT2
41	ELBOW FITTING	1	KRAD5500-US-EWF
40	FITTING1	1	KRAD1200-US-FTT1
39	ORING	4	KRAD1200-US-ORG
38	INDICATOR GASKET1	2	KRAD1200-US-ING1
37	FILTER GAUGE	1	KRAD1200-US-FTG
36	CONNECTION CIT3	2	KRAD500-US-CNK3
35	COMPRESSED AIR FILTER ELEMENT KIT (X)	1	KRAD500-US-ELK-X
34	COMPRESSED AIR FILTER ELEMENT KIT (Y)	1	KRAD500-US-ELK-Y
33	COUPLING CLAMP2	4	KRAD1200-US-CPG2
32	CONNECTION CIT2	1	KRAD500-US-CNK2
31	BALL VALVE	1	KRAD5500-US-BVL
30	CONNECTION CIT1	1	KRAD500-US-CNK1
29	ELBOW2	2	KRAD1200-US-ELW2
28	COUPLING CLAMP1	4	KRAD5500-US-CPG1
27	TIMER RELAY	1	KRAD500-US-TMR
26	SELENOID VALVE	1	KRAD500-US-SVA
25	DRAIN NUT	1	KRAD5500-US-DRN
24	DRAIN VALVE1	1	KRAD5500-US-DRA1
23	ELBOW1	1	KRAD5500-US-ELW1
22	BY-PASS VALVE	1	KRAD500-US-BYP
21	CUPPER T1	1	KRAD5500-US-CPT1
20	ROTOLOCK ADAPTOR3	1	KRAD5500-US-RTA3
19	ROTOLOCK ADAPTOR2	1	KRAD5500-US-RTA2
18	HEAT EXCHANGER	1	KRAD500-US-EXC
17	THERMOSTAT	1	KRAD500-US-TMT
16	THERMINAL_BLOCK	1	KRAD500-US-TRM
15	START RELAY	1	KRAD500-US-STR
14	START CAPACITOR	1	KRAD500-US-SCR
13	ELECTRICAL BOX	1	KRAD500-US-ELB
12	BOLT M8x50	4	KRAD5500-US-BLT850
11	SETTING THE CONNECTION	1	KRAD750-US-STC
10	ROTOLOCK ADAPTOR1	2	KRAD5500-US-RTA1
09	OVERLOAD PROTECTOR	1	KRAD350-US-OVP
08	COMPRESSOR ELECTRICAL BOX	1	KRAD350-US-CEB
07	COMPRESSOR	1	KRAD350-US-CMP
06	BOLT M8x25	10	KRAD750-US-BLT825
05	WASHER Ø22x8,2x2,4	14	KRAD5500-US-WHR22
04	BOLT M6x30	4	KRAD5500-US-BLT630
03	FAN	1	KRAD350-US-FAN
02	CONDANSER	1	KRAD350-US-CON
01	CABINET BASE	1	KRAD500-US-CAB
ITEM NO.	MATERIAL NAME	QTY	SPARE PART CODE

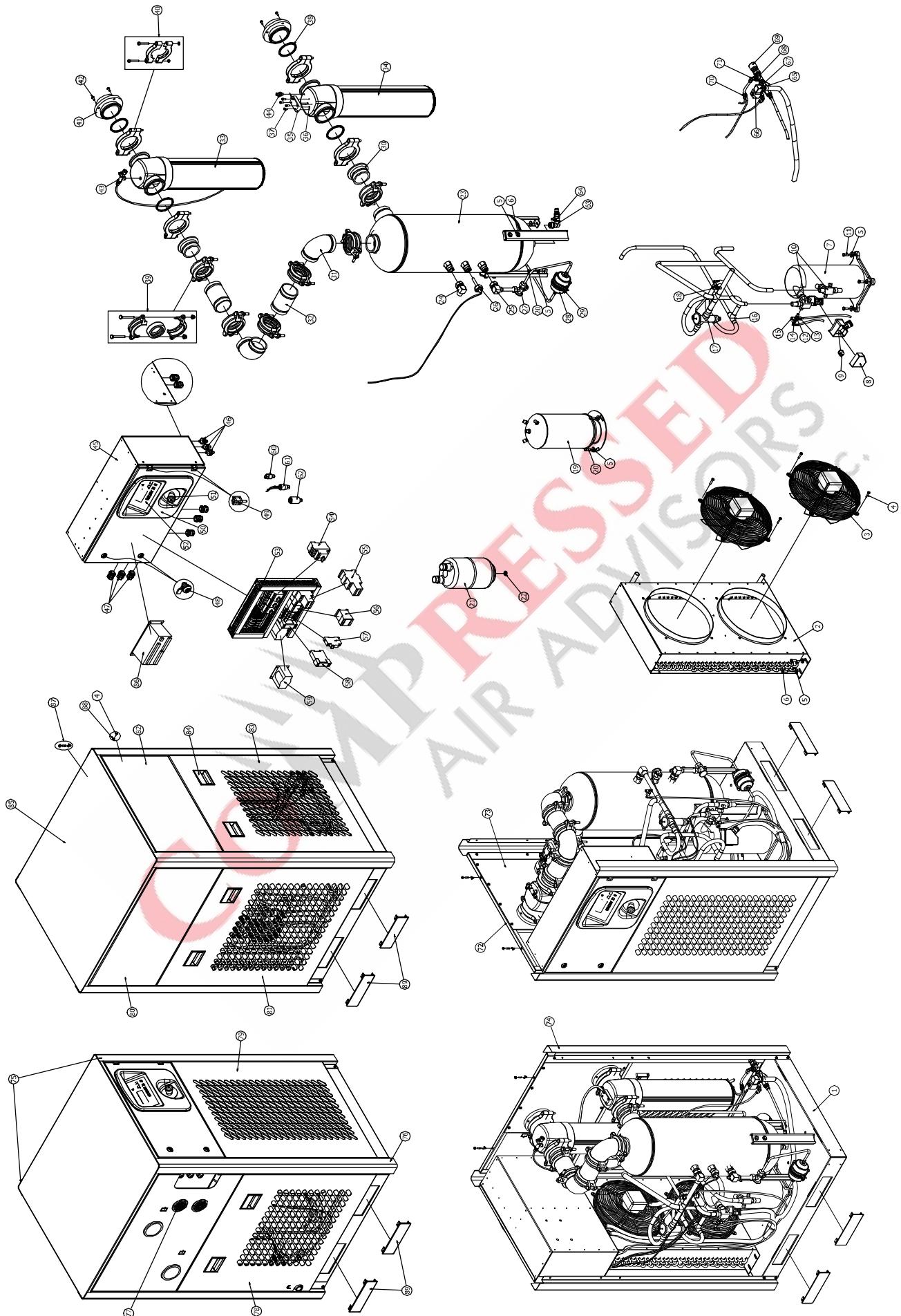
PART LIST

KRAD 500



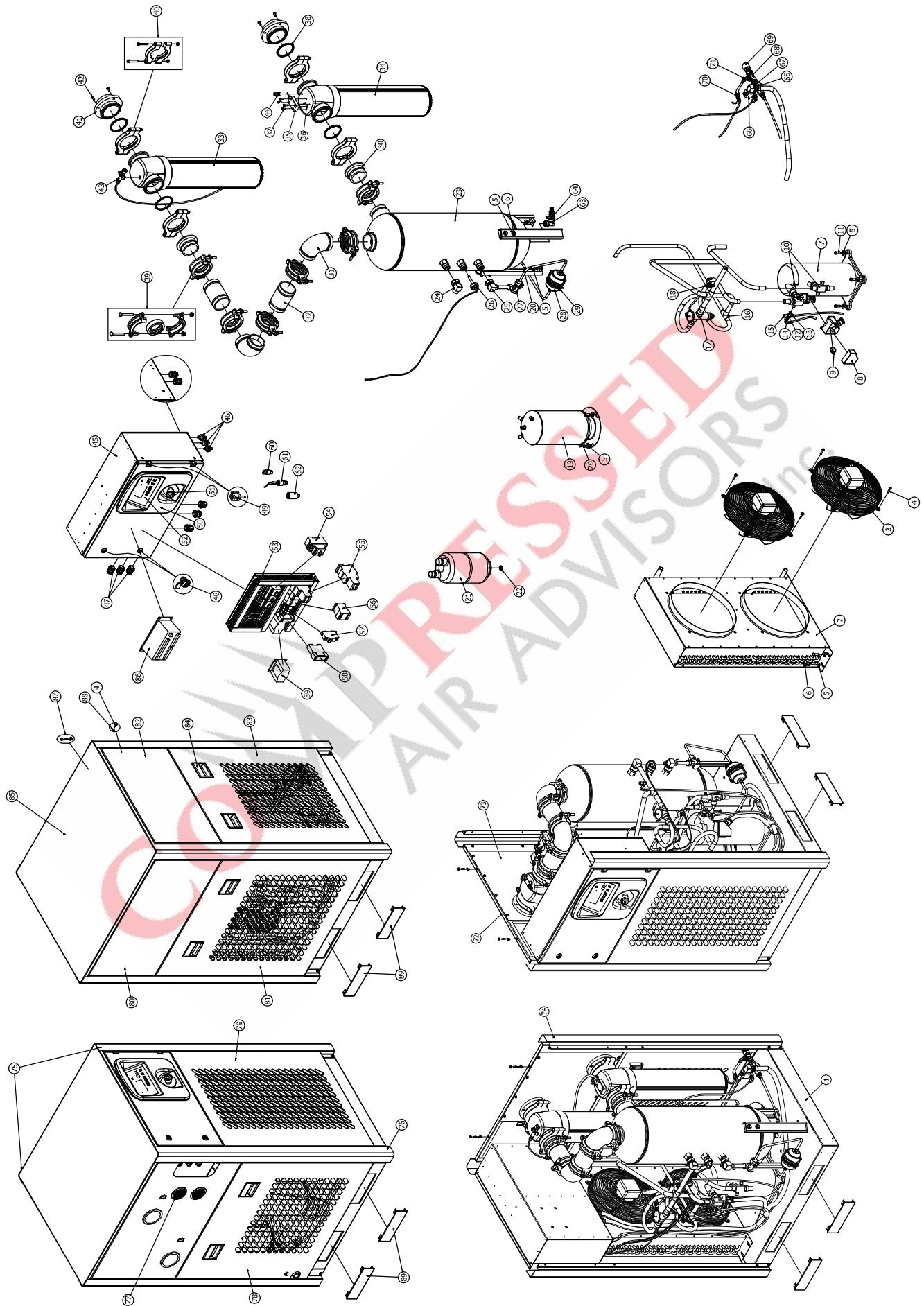
ITEM NO.	MATERIAL NAME	QTY	SPARE PART CODE
PART LIST			
84	REMOVABLE SHIELD	4	KRAD1750-US-CFS
83	CABLE GLAND PG11	1	KRAD5500-US-CG11
82	BOLT M8x25	24	KRAD5500-US-BLT826
81	CAGE NUTS M6	24	KRAD5500-US-CGN6
80	CABINET FASTENER	14	KRAD5500-US-CFS
79	CABINET TOP	1	KRAD500-US-CAT
78	CABINET REAR TOP	1	KRAD500-US-CRT
77	CABINET REAR BOTTOM	1	KRAD500-US-CRB
76	CABINET BOTTOM LEFT	1	KRAD500-US-CBL
75	CABINET INSIDE	1	KRAD500-US-CAI
74	CABINET UPPER LEFT	1	KRAD500-US-CUL
73	CABINET HANDLE	6	KRAD5500-US-CAH
72	CABINET ELECTRICAL BOX	1	KRAD500-US-CEB
71	CABINET UPPER RIGHT	1	KRAD500-US-CUR
70	CABINET FRONT BOTTOM	1	KRAD500-US-CFB
69	CABINET LOWER RIGHT	1	KRAD500-US-CLR
68	CABINET LEG3	1	KRAD500-US-CAL3
67	CABINET LEG2	2	KRAD500-US-CAL2
66	CABINET LEG1	1	KRAD500-US-CAL1
65	HIGH - LOW PRESSURE GAUGE	2	KRAD5500-US-HLPG
64	MAIN SWITCH	1	KRAD500-US-MSW
63	FILTER ALARM LIGHT	1	KRAD500-US-FAL
62	STOPER	1	KRAD5500-US-STP
61	START BUTTON	1	KRAD500-US-STB
60	DEWPOINT INDICATOR	1	KRAD500-US-DPI
59	PLASTIC CONTROL PANEL	1	KRAD5500-US-PCP
58	CABLE GLAND PG16	3	KRAD5500-US-CG16
57	THERMINAL BLOCK	1	KRAD500-US-TRM
56	ELECTRICAL BOX	1	KRAD500-US-ELB
55	HIGH PRESSURE SWICH	1	KRAD500-US-HPS
54	SUPPORT PLATE JUNCTION	1	KRAD500-US-SPJ
53	BOLT M8x15	8	KRAD1200-US-BLT815
52	SUCTION ACCUMULATOR	1	KRAD500-US-SUC
51	NUT M10	1	KRAD750-US-NT10
50	LIQUID RECEIVER	1	KRAD500-US-LIQ
49	T ADAPTOR	1	KRAD5500-US-TDP
48	FAN SWITCH	1	KRAD5500-US-FSW
47	FILTER DRIER CLAMP	1	KRAD750-US-FDC
46	DEHYDRATOR / FILTER DRIER	1	KRAD750-US-DRI
45	EXPANSION VALVE	1	KRAD750-US-EXP
44	DRAIN SLEEVE	1	KRAD750-US-DRS
43	DRAIN VALVE2	1	KRAD5500-US-DRA2
42	FITTING2	1	KRAD5500-US-FTT2
41	ELBOW FITTING	1	KRAD5500-US-EWF
40	FITTING1	1	KRAD1200-US-FTT1
39	ORING	4	KRAD1200-US-ORG
38	INDICATOR GASKET1	2	KRAD1200-US-ING1
37	FILTER GAUGE	1	KRAD1200-US-FTG
36	CONNECTION CIT3	2	KRAD500-US-CNK3
35	COMPRESSED AIR FILTER ELEMENT KIT (X)	1	KRAD500-US-ELK-X
34	COMPRESSED AIR FILTER ELEMENT KIT (Y)	1	KRAD500-US-ELK-Y
33	COUPLING CLAMP2	4	KRAD1200-US-CPG2
32	CONNECTION CIT2	1	KRAD500-US-CNK2
31	BALL VALVE	1	KRAD5500-US-BVL
30	CONNECTION CIT1	1	KRAD500-US-CNK1
29	ELBOW2	2	KRAD1200-US-ELW2
28	COUPLING CLAMP1	4	KRAD5500-US-CPG1
27	TIMER RELAY	1	KRAD500-US-TMR
26	SELENOID VALVE	1	KRAD500-US-SVA
25	DRAIN NUT	1	KRAD5500-US-DRN
24	DRAIN VALVE1	1	KRAD5500-US-DRA1
23	ELBOW1	1	KRAD5500-US-ELW1
22	BY-PASS VALVE	1	KRAD500-US-BYP
21	CUPPER T1	1	KRAD500-US-CPT1
20	ROTOLOCK ADAPTOR3	1	KRAD5500-US-RTA3
19	ROTOLOCK ADAPTOR2	1	KRAD5500-US-RTA2
18	HEAT EXCHANGER	1	KRAD500-US-EXC
17	THERMOSTAT	1	KRAD500-US-TMT
16	THERMINAL BLOCK	1	KRAD500-US-TRM
15	START RELAY	1	KRAD500-US-STR
14	START CAPACITOR	1	KRAD500-US-SCR
13	ELECTRICAL BOX	1	KRAD500-US-ELB
12	BOLT M8x50	4	KRAD5500-US-BLT850
11	SETTING THE CONNECTION	1	KRAD750-US-STC
10	ROTOLOCK ADAPTOR1	2	KRAD5500-US-RTA1
09	OVERLOAD PROTECTOR	1	KRAD500-US-OVP
08	COMPRESSOR ELECTRICAL BOX	1	KRAD500-US-CEB
07	COMPRESSOR	1	KRAD500-US-CMP
06	BOLT M8x25	34	KRAD750-US-BLT825
05	WASHER Ø22x8,2x2,4	14	KRAD5500-US-WHR22
04	BOLT M6x30	4	KRAD5500-US-BLT630
03	FAN	1	KRAD500-US-FAN
02	CONDANSER	1	KRAD500-US-CON
01	CABINET BASE	1	KRAD500-US-CAB

KRAD 600



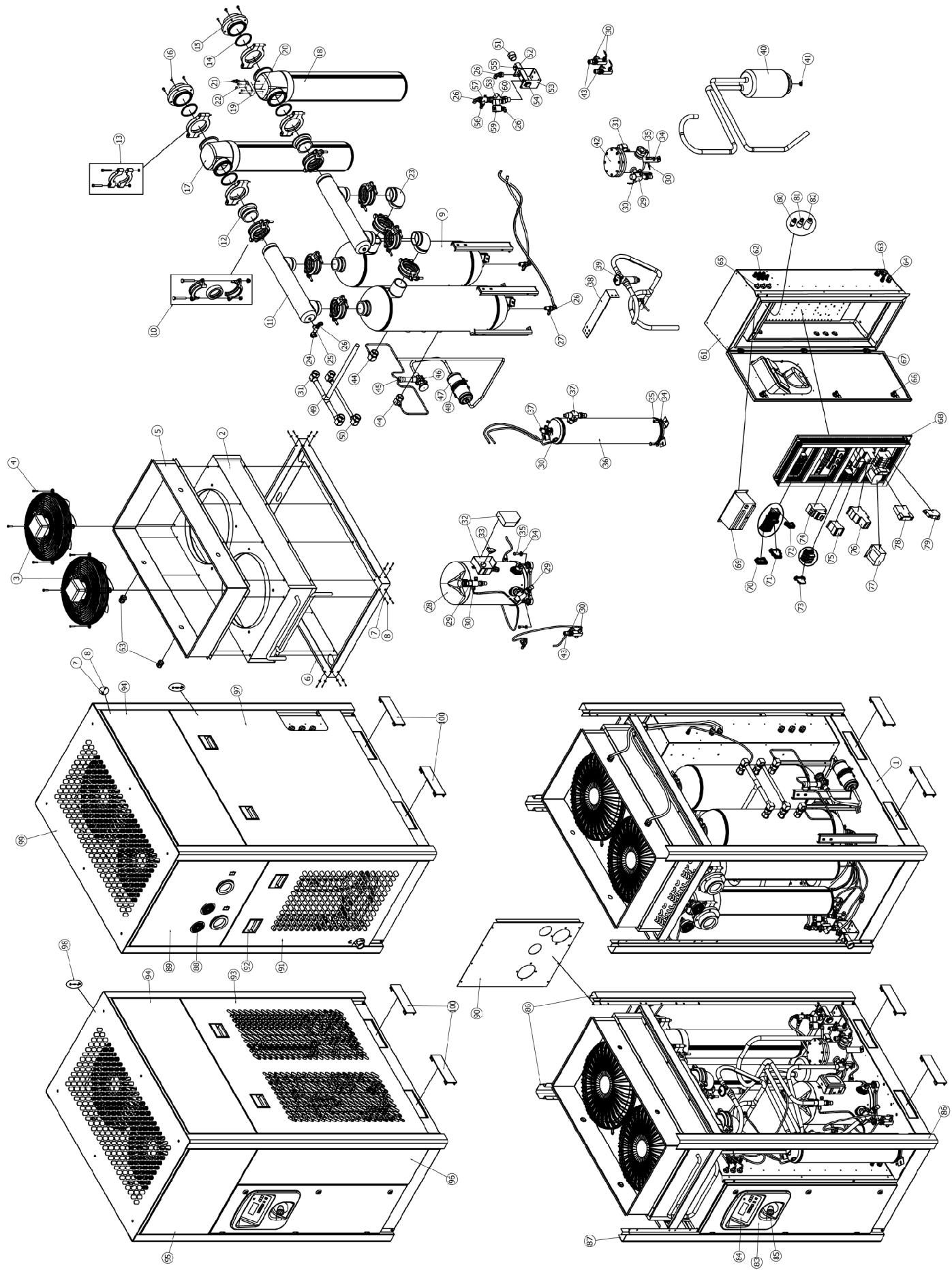
ITEM NO.	MATERIAL NAME	QTY	SPARE PART CODE
PART LIST			
89	REMOVABLE SHIELD	4	KRAD1750-US-CFS
88	CAGE NUT M6	26	KRAD5500-US-CGN6
87	CABINET FASTENER	14	KRAD5500-US-CFS
86	CONTROLLER	1	KRAD5500-US-CTR
85	CABINET TOP	1	KRAD750-US-CAT
84	CABINET HANDLE	1	KRAD5500-US-CAH
83	CABINET REAR BOTTOM	1	KRAD750-US-CRB
82	CABINET REAR TOP	1	KRAD750-US-CRT
81	CABINET LOWER RIGHT	1	KRAD750-US-CLR
80	CABINET UPPER RIGHT	1	KRAD750-US-CUR
79	CABINET FRONT BOTTOM	1	KRAD750-US-CFB
78	CABINET BOTTOM LEFT	1	KRAD750-US-CBL
77	HIGH - LOW PRESSURE GAUGE	2	KRAD5500-US-HLPG
76	CABINET LEG3	1	KRAD750-US-CAL3
75	CABINET LEG2	2	KRAD750-US-CAL2
74	CABINET LEG1	1	KRAD750-US-CAL1
73	CABINET INSIDE	1	KRAD750-US-CAI
72	CABINET UPPER LEFT	1	KRAD750-US-CUL
71	ELBOW FITTINGS	2	KRAD1200-US-EWF
70	FITTING	1	KRAD1200-US-FTT
69	DRAIN SLEEVE	1	KRAD750-US-DRS
68	DRAIN VALVE2	1	KRAD5500-US-DRA2
67	MEMBRAN VALVE	1	KRAD1750-US-MEV
66	SELENOID VALVE	1	KRAD5500-US-SVA
65	SOLENOID VALVE COIL	1	KRAD5500-US-SVC
64	DRAIN VALVE1	1	KRAD5500-US-DRA1
63	ELBOW2	1	KRAD5500-US-ELW2
62	FAN SWICH	1	KRAD5500-US-FSW
61	HIGH PRESSURE SWICH	1	KRAD5500-US-HPS
60	LOW PRESSURE SWICH	1	KRAD5500-US-LPS
59	MOTOR THERMAL	1	KRAD5500-US-MTRL
58	PHASE PROTECTION RELAY	1	KRAD5500-US-PHR
57	FUSE	4	KRAD5500-US-FUS
56	FAN CONTACTOR	2	KRAD5500-US-FCT
55	HEAT EXCHANGER CONTACTOR	1	KRAD5500-US-EXCN
54	THERMINAL BLOCK PROTECTION	3	KRAD5500-US-TBP
53	ELECTRICAL PANEL	1	KRAD750-US-ELP
52	ESD3 CONTROLLER	1	KRAD5500-US-ES2
51	MAIN SWITCH	1	KRAD5500-US-MSW
50	PLASTIC CONTROL PANEL	1	KRAD5500-US-PCP
49	HINGE	2	KRAD5500-US-HNG
48	DOOR LOCK	2	KRAD5500-US-DLK
47	CABLE GLAND PG16	8	KRAD5500-US-CG16
46	SWITCH CONNECTION FITTING	3	KRAD5500-US-SCF
45	ELECTRICAL BOX	1	KRAD750-US-ELB
44	TEMPERATURE SENSOR	1	KRAD1200-US-TMPS
43	BALL VALVE	1	KRAD5500-US-BVL
42	BOLT M8x15	8	KRAD1200-US-BLT815
41	CONNECTION CIT2	2	KRAD1200-US-CN2
40	COUPLING CLAMP 2	4	KRAD1200-US-CPG2
39	COUPLING CLAMP 1	6	KRAD5500-US-CPG1
38	ORING	1	KRAD1200-US-ORG
37	BOLT M5x12	4	KRAD1200-US-BLT512
36	INDICATOR GASKET1	2	KRAD1200-US-ING1
35	FILTER GAUGE	1	KRAD1200-US-FTG
34	COMPRESSED AIR FILTER ELEMENT KIT (X)	1	KRAD750-US-ELK-X
33	COMPRESSED AIR FILTER ELEMENT KIT (Y)	1	KRAD750-US-ELK-Y
32	COUPLING PIPE	2	KRAD750-US-CPP
31	ELBOW1	2	KRAD1200-US-ELW1
30	CONNECTION CIT1	2	KRAD750-US-CN1
29	FILTER DRIER CLAMP	1	KRAD750-US-FDC
28	DEHYDRATOR / FILTER DRIER	1	KRAD750-US-DRI
27	EXPANSION VALVE	1	KRAD750-US-EXP
26	SENSOR ADAPTOR	1	KRAD750-US-SSD
25	ROTOLOCK ADAPTOR3	1	KRAD5500-US-RTA3
24	ROTOLOCK ADAPTOR2	1	KRAD5500-US-RTA2
23	HEAT EXCHANGER	1	KRAD750-US-EXC
22	NUT M10	1	KRAD1750-US-NT10
21	SUCTION ACCUMULATOR	1	KRAD1200-US-SUC
20	BOLT M8x30	6	KRAD5500-US-BLT830
19	LIQUID RECEIVER	1	KRAD750-US-LIQ
18	CUPPER T2	1	KRAD5500-US-CPT2
17	BY-PASS VALVE	1	KRAD1500-US-BYP
16	CUPPER T1	2	KRAD5500-US-CPT1
15	SETTING THE CONNECTION	1	KRAD750-US-STC
14	CAPILLARY TUBE CONNECTION2	2	KRAD5500-US-CTC2
13	CAPILLARY TUBE CONNECTION1	1	KRAD5500-US-CTC1
12	T ADAPTOR	1	KRAD5500-US-TDP
11	BOLT M8x50	4	KRAD5500-US-BLT850
10	ROTOLOCK ADAPTOR1	1	KRAD5500-US-RTA1
09	OVERLOAD PROTECTOR	1	KRAD600-US-OVP
08	COMPRESSOR ELECTRICAL BOX	1	KRAD600-US-CEB
07	COMPRESSOR	1	KRAD600-US-CMP
06	BOLT M8x25	13	KRAD750-US-BLT825
05	WASHER 22x8,2x2,4	23	KRAD5500-US-WHR22
04	BOLT M6x30	30	KRAD5500-US-BLT630
03	FAN	2	KRAD600-US-FAN
02	CONDANSER	1	KRAD600-US-CON
01	CABINET BASE	1	KRAD750-US-CAB

KRAD 750



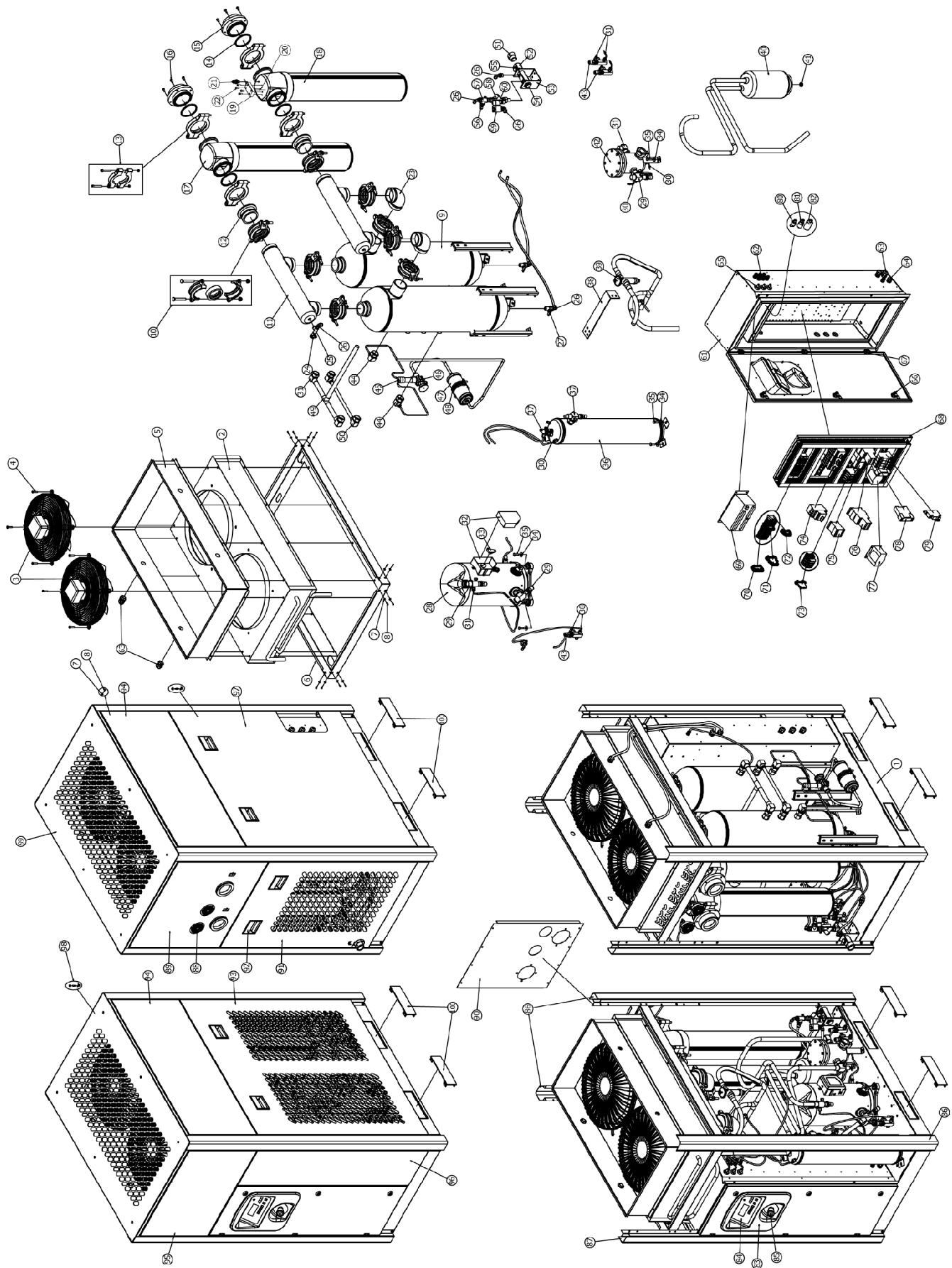
89	REMOVABLE SHIELD	4	KRAD1750-US-CFS
88	CAGE NUT M6	26	KRAD5500-US-CGN6
87	CABINET FASTENER	14	KRAD5500-US-CFS
86	CONTROLLER	1	KRAD5500-US-CTR
85	CABINET TOP	1	KRAD750-US-CAT
84	CABINET HANDLE	1	KRAD5500-US-CAH
83	CABINET REAR BOTTOM	1	KRAD750-US-CRB
82	CABINET REAR TOP	1	KRAD750-US-CRT
81	CABINET LOWER RIGHT	1	KRAD750-US-CLR
80	CABINET UPPER RIGHT	1	KRAD750-US-CUR
79	CABINET FRONT BOTTOM	1	KRAD750-US-CFB
78	CABINET BOTTOM LEFT	1	KRAD750-US-CBL
77	HIGH - LOW PRESSURE GAUGE	2	KRAD5500-US-HLPG
76	CABINET LEG3	1	KRAD750-US-CAL3
75	CABINET LEG2	2	KRAD750-US-CAL2
74	CABINET LEG1	1	KRAD750-US-CAL1
73	CABINET INSIDE	1	KRAD750-US-CAI
72	CABINET UPPER LEFT	1	KRAD750-US-CUL
71	ELBOW FITTINGS	2	KRAD1200-US-EWF
70	FITTING	1	KRAD1200-US-FTT
69	DRAIN SLEEVE	1	KRAD750-US-DRS
68	DRAIN VALVE2	1	KRAD5500-US-DRA2
67	MEMBRAN VALVE	1	KRAD1750-US-MEV
66	SELENOID VALVE	1	KRAD5500-US-SVA
65	SOLENOID VALVE COIL	1	KRAD5500-US-SVC
64	DRAIN VALVE1	1	KRAD5500-US-DRA1
63	ELBOW2	1	KRAD5500-US-ELW2
62	FAN SWICH	1	KRAD5500-US-FSW
61	HIGH PRESSURE SWICH	1	KRAD5500-US-HPS
60	LOW PRESSURE SWICH	1	KRAD5500-US-LPS
59	MOTOR THERMAL	1	KRAD5500-US-MTRL
58	PHASE PROTECTION RELAY	1	KRAD5500-US-PHR
57	FUSE	4	KRAD5500-US-FUS
56	FAN CONTACTOR	2	KRAD5500-US-FCT
55	HEAT EXCHANGER CONTACTOR	1	KRAD5500-US-EXCN
54	THERMINAL BLOCK PROTECTION	3	KRAD5500-US-TBP
53	ELECTRICAL PANEL	1	KRAD750-US-ELP
52	ESD3 CONTROLLER	1	KRAD5500-US-ES2
51	MAIN SWITCH	1	KRAD5500-US-MSW
50	PLASTIC CONTROL PANEL	1	KRAD5500-US-PCP
49	HINGE	2	KRAD5500-US-HNG
48	DOOR LOCK	2	KRAD5500-US-DLK
47	CABLE GLAND PG16	8	KRAD5500-US-CG16
46	SWITCH CONNECTION FITTING	3	KRAD5500-US-SCF
45	ELECTRICAL BOX	1	KRAD750-US-ELB
44	TEMPERATURE SENSOR	1	KRAD1200-US-TMPS
43	BALL VALVE	1	KRAD5500-US-BVL
42	BOLT M8x15	8	KRAD1200-US-BLT815
41	CONNECTION CIT2	2	KRAD1200-US-CN2
40	COUPLING CLAMP 2	4	KRAD1200-US-CPG2
39	COUPLING CLAMP 1	6	KRAD5500-US-CPG1
38	ORING	1	KRAD1200-US-ORG
37	BOLT M5x12	4	KRAD1200-US-BLT512
36	INDICATOR GASKET1	2	KRAD1200-US-ING1
35	FILTER GAUGE	1	KRAD1200-US-FTG
34	COMPRESSED AIR FILTER ELEMENT KIT (X)	1	KRAD750-US-ELK-X
33	COMPRESSED AIR FILTER ELEMENT KIT (Y)	1	KRAD750-US-ELK-Y
32	COUPLING PIPE	2	KRAD750-US-CPP
31	ELBOW1	2	KRAD1200-US-ELW1
30	CONNECTION CIT1	2	KRAD750-US-CN1
29	FILTER DRIER CLAMP	1	KRAD750-US-FDC
28	DEHYDRATOR / FILTER DRIER	1	KRAD750-US-DRI
27	EXPANSION VALVE	1	KRAD750-US-EXP
26	SENSOR ADAPTOR	1	KRAD750-US-SSD
25	ROTOLOCK ADAPTOR3	1	KRAD5500-US-RTA3
24	ROTOLOCK ADAPTOR2	1	KRAD5500-US-RTA2
23	HEAT EXCHANGER	1	KRAD750-US-EXC
22	NUT M10	1	KRAD1750-US-NT10
21	SUCTION ACCUMULATOR	1	KRAD1200-US-SUC
20	BOLT M8x30	6	KRAD5500-US-BLT830
19	LIQUID RECEIVER	1	KRAD750-US-LIQ
18	CUPPER T2	1	KRAD5500-US-CPT2
17	BY-PASS VALVE	1	KRAD1500-US-BYP
16	CUPPER T1	2	KRAD5500-US-CPT1
15	SETTING THE CONNECTION	1	KRAD750-US-STC
14	CAPILLARY TUBE CONNECTION2	2	KRAD5500-US-CTC2
13	CAPILLARY TUBE CONNECTION1	1	KRAD5500-US-CTC1
12	T ADAPTOR	1	KRAD5500-US-TDP
11	BOLT M8x50	4	KRAD5500-US-BLT850
10	ROTOLOCK ADAPTOR1	1	KRAD5500-US-RTA1
09	OVERLOAD PROTECTOR	1	KRAD750-US-OVP
08	COMPRESSOR ELECTRICAL BOX	1	KRAD750-US-CEB
07	COMPRESSOR	1	KRAD750-US-CMP
06	BOLT M8x25	13	KRAD750-US-BLT825
05	WASHER 22x8,2x2,4	23	KRAD5500-US-WHR22
04	BOLT M6x30	30	KRAD5500-US-BLT630
03	FAN	2	KRAD750-US-FAN
02	CONDANSER	1	KRAD750-US-CON
01	CABINET BASE	1	KRAD750-US-CAB
ITEM	MATERIAL NAME	QTY	SPARE PART CODE
	PART		

KRAD 1000



ITEM	MATERIAL NAME	QTY	SPARE PART CODE
PART			
100	REMOVABLE SHIELD	4	KRAD1750-US-RMS
99	CABINET TOP	1	KRAD1200-US-CAT
98	CABINET FASTENER	14	KRAD5500-US-CFS
97	CABINET SIDE BOTTOM2	1	KRAD1200-US-CSB2
96	CABINET FRONT BOTTOM	1	KRAD1200-US-CFB
95	CABINET FRONT TOP	1	KRAD1200-US-CFT
94	CABINET SIDE TOP	2	KRAD1200-US-CST
93	CABINET SIDE BOTTOM1	1	KRAD1200-US-CSB1
92	CABINET HANDLE	6	KRAD5500-US-CAH
91	CABINET REAR BOTTOM	1	KRAD1200-US-CRB
90	CABINET INSIDE	1	KRAD1200-US-CAI
89	CABINET REAR TOP	1	KRAD1200-US-CRT
88	HIGH - LOW PRESSURE GAUGE	2	KRAD5500-US-HLPG
87	CABINET LEG2	1	KRAD1200-US-CAL2
86	CABINET LEG1	3	KRAD1200-US-CAL1
85	MAIN SWITCH	1	KRAD5500-US-MSW
84	ESD3 CONTROLLER	1	KRAD5500-US-ES2
83	PLASTIC CONTROL PANEL	1	KRAD5500-US-PCP
82	FAN SWITCH	1	KRAD5500-US-FSW
81	HIGH PRESSURE SWITCH	1	KRAD5500-US-HPS
80	LOW PRESSURE SWITCH	1	KRAD5500-US-LPS
79	FUSE	4	KRAD5500-US-FUS
78	PHASE PROTECTION RELAY	1	KRAD5500-US-PHR
77	MOTOR TERMINAL	1	KRAD5500-US-MTRL
76	HEAT EXCHANGER CONTACTOR	1	KRAD5500-US-EXCN
75	FAN CONTACTOR	2	KRAD5500-US-FCT
74	THERMINAL BLOCK PROTECTION	3	KRAD5500-US-TBP
73	THERMINAL BLOCK4	4	KRAD5500-US-TRM4
72	THERMINAL BLOCK3	9	KRAD5500-US-TRM3
71	THERMINAL BLOCK2	1	KRAD5500-US-TRM2
70	THERMINAL BLOCK1	24	KRAD5500-US-TRM1
69	CONTROLLER	1	KRAD5500-US-CTR
68	ELECTRICAL PANEL	1	KRAD1200-US-ELP
67	HINGE	3	KRAD5500-US-HNG
66	DOOR LOCK	3	KRAD5500-US-DLK
65	SWITCH CONNECTION FITTING	3	KRAD5500-US-SCF
64	CABLE GLAND PG11	2	KRAD5500-US-CG11
63	CABLE GLAND PG16	8	KRAD5500-US-CG16
62	CABLE GLAND PG7	8	KRAD5500-US-CG7
61	ELECTRICAL BOX	1	KRAD1200-US-ELB
60	SOLENOID VALVE COIL	1	KRAD5500-US-SVC
59	SOLENOID VALVE	1	KRAD5500-US-SVA
58	MEMBRAN VALVE	1	KRAD1750-US-MEV
57	DRAIN VALVE2	1	KRAD5500-US-DRA2
56	FITTINGS	2	KRAD5500-US-FTT
55	MANIFOLD BLIND CAP2	1	KRAD5500-US-MBC2
54	MANIFOLD BLIND CAP1	1	KRAD5500-US-MBC1
53	MANIFOLD REINFORCEMENT SHEET METAL	1	KRAD5500-US-MRS
52	DRAIN MANIFOLD	1	KRAD5500-US-DRM
51	DRAIN SLEEVE	1	KRAD1200-US-DRS
50	ROTOLOCK ADAPTOR5	2	KRAD5500-US-RTA5
49	CUPPER T	2	KRAD5500-US-CPT
48	FILTER DRYER CLAMP	1	KRAD1200-US-FDC
47	DEHYDRATOR / FILTER DRIER	1	KRAD1200-US-DRI
46	EXPANSION VALVE	1	KRAD1000-US-EXP
45	DISTRIBUTOR	1	KRAD5500-US-DST
44	ROTOLOCK ADAPTOR4	2	KRAD5500-US-RTA4
43	ROTOLOCK SERVICE VALVE	3	KRAD5500-US-RSV
42	OIL SEPARATOR	1	KRAD1750-US-OSE
41	NUT M10	1	KRAD1200-US-NUT10
40	SUCTION ACCUMULATOR	1	KRAD1200-US-SUC
39	BY-PASS VALVE	1	KRAD1500-US-BYP
38	REINFORCEMENT SHEET METAL	1	KRAD1200-US-RSM
37	ROTOLOCK ADAPTOR3	2	KRAD5500-US-RTA3
36	LIQUID RECEIVER	1	KRAD1200-US-LIQ
35	BOLT M8x50	10	KRAD5500-US-BLT850
34	WASHER 22x8,2x2,4	10	KRAD5500-US-WHR22
33	OVERLOAD PROTECTOR	1	KRAD1000-US-OVP
32	COMPRESSOR ELECTRICAL BOX	1	KRAD1000-US-CEB
31	ROTOLOCK ADAPTOR2	3	KRAD5500-US-RTA2
30	CAPILLARY TUBE CONNECTION	15	KRAD5500-US-CTC
29	ROTOLOCK ADAPTOR1	3	KRAD5500-US-RTA1
28	COMPRESSOR	1	KRAD1000-US-CMP
27	DRAIN VALVE1	2	KRAD5500-US-DRA1
26	ELBOW FITTINGS	6	KRAD5500-US-EWF
25	T CONNECTION	1	KRAD5500-US-TCN
24	BALL VALVE	1	KRAD5500-US-BVL
23	ELBOW	2	KRAD1200-US-ELW
22	BOLT M5x12	4	KRAD1200-US-BLT512
21	TEMPERATURE SENSOR	5	KRAD5500-US-TMPS
20	INDICATOR GASKET 1	2	KRAD1200-US-ING1
19	FILTER GAUGE	1	KRAD1200-US-FTG
18	COMPRESSED AIR FILTER ELEMENT KIT (X)	1	KRAD1200-US-ELK-X
17	COMPRESSED AIR FILTER ELEMENT KIT (Y)	1	KRAD1200-US-ELK-Y
16	BOLT M8x15	8	KRAD1200-US-BLT815
15	CONNECTION KIT 2	2	KRAD1200-US-CNPK2
14	ORING	4	KRAD1200-US-ORG
13	COUPLING CLAMP 2	4	KRAD1200-US-CPG2
12	CONNECTION KIT 1	2	KRAD1200-US-CNPK1
11	COLLECTOR	2	KRAD1200-US-CLL
10	COUPLING CLAMP 1	8	KRAD5500-US-CPG1
09	HEAT EXCHANGER	2	KRAD1200-US-EXC
08	BOLT M6x30	48	KRAD5500-US-BLT630
07	CAGE NUT M6	48	KRAD5500-US-CGN6
06	CONDENSER REINFORCEMENT PLATE	1	KRAD5500-US-CRP
05	FAN PROTECTOR	1	KRAD5500-US-FPRT
04	BOLT M6x30	8	KRAD5500-US-BLT630
03	FAN	2	KRAD1200-US-FAN
02	CONDENSER	1	KRAD1200-US-CON
01	CABINET BASE	1	KRAD1200-US-CAB

KRAD 1200



ITEM	MATERIAL NAME	QTY	SPARE PART CODE
PART			
100	REMOVABLE SHIELD	4	KRAD1750-US-RMS
99	CABINET TOP	1	KRAD1200-US-CAT
98	CABINET FASTENER	4	KRAD5500-US-CFS
97	CABINET SIDE BOTTOM2	1	KRAD1200-US-CSB2
96	CABINET FRONT BOTTOM	1	KRAD1200-US-CFB
95	CABINET FRONT TOP	1	KRAD1200-US-CFT
94	CABINET SIDE TOP	2	KRAD1200-US-CST
93	CABINET SIDE BOTTOM1	1	KRAD1200-US-CSB1
92	CABINET HANDLE	6	KRAD5500-US-CAH
91	CABINET REAR BOTTOM	1	KRAD1200-US-CRB
90	CABINET INSIDE	1	KRAD1200-US-CAI
89	CABINET REAR TOP	1	KRAD1200-US-CRT
88	HIGH - LOW PRESSURE GAUGE	2	KRAD5500-US-HLPG
87	CABINET LEG2	1	KRAD1200-US-CAL2
86	CABINET LEG1	3	KRAD1200-US-CAL1
85	MAIN SWITCH	1	KRAD5500-US-MSW
84	ESD3 CONTROLLER	1	KRAD5500-US-ES2
83	PLASTIC CONTROL PANEL	1	KRAD5500-US-PCP
82	FAN SWICH	1	KRAD5500-US-FSW
81	HIGH PRESSURE SWICH	1	KRAD5500-US-HPS
80	LOW PRESSURE SWICH	1	KRAD5500-US-LPS
79	FUSE	4	KRAD5500-US-FUS
78	PHASE PROTECTION RELAY	1	KRAD5500-US-PHR
77	MOTOR THERMAL	1	KRAD5500-US-MTRL
76	HEAT EXCHANGER CONTACTOR	1	KRAD5500-US-EXCN
75	FAN CONTACTOR	2	KRAD5500-US-FCT
74	THERMINAL BLOCK PROTECTION	3	KRAD5500-US-TBP
73	THERM NAL BLOCK4	4	KRAD5500-US-TRM4
72	THERM NAL BLOCK3	9	KRAD5500-US-TRM3
71	THERM NAL BLOCK2	1	KRAD5500-US-TRM2
70	THERM NAL BLOCK1	24	KRAD5500-US-TRM1
69	CONTROLLER	1	KRAD5500-US-CTR
68	ELECTRICAL PANEL	1	KRAD1200-US-ELP
67	HINGE	3	KRAD5500-US-HNG
66	DOOR LOCK	3	KRAD5500-US-DLK
65	SWITCH CONNECTION FITTING	3	KRAD5500-US-SCF
64	CABLE GLAND PG11	2	KRAD5500-US-CG11
63	CABLE GLAND PG16	8	KRAD5500-US-CG16
62	CABLE GLAND PG7	8	KRAD5500-US-CG7
61	ELECTRICAL BOX	1	KRAD1200-US-ELB
60	SOLENOID VALVE COIL	1	KRAD5500-US-SVC
59	SOLENOID VALVE	1	KRAD5500-US-SVA
58	MEMBRAN VALVE	1	KRAD1750-US-MEV
57	DRAIN VALVE2	1	KRAD5500-US-DRA2
56	FITTINGS	2	KRAD5500-US-FTT
55	MANIFOLD BLIND CAP2	1	KRAD5500-US-MBC2
54	MANIFOLD BLIND CAP1	1	KRAD5500-US-MBC1
53	MANIFOLD REINFORCEMENT SHEET METAL	1	KRAD5500-US-MRS
52	DRAIN MANIFOLD	1	KRAD5500-US-DRM
51	DRAIN SLEEVE	1	KRAD1200-US-DRS
50	ROTOLOC ADAPTOR5	2	KRAD5500-US-RTA5
49	CUPPER T	2	KRAD5500-US-CPT
48	FILTER DRYER CLAMP	1	KRAD1200-US-FDC
47	DEHYDRATOR / FILTER DRIER	1	KRAD1200-US-DRI
46	EXPANSION VALVE	1	KRAD1750-US-EXP
45	DISTRIBUTOR	1	KRAD5500-US-DST
44	ROTOLOCK ADAPTOR4	2	KRAD5500-US-RTA4
43	ROTOLOCK SERVICE VALVE	3	KRAD5500-US-RSV
42	OIL SEPARATOR	1	KRAD1750-US-OSE
41	NUT M10	1	KRAD1200-US-NUT10
40	SUCTION ACCUMULATOR	1	KRAD1200-US-SUC
39	BY-PASS VALVE	1	KRAD1500-US-BYP
38	REINFORCEMENT SHEET METAL	1	KRAD1200-US-RSM
37	ROTOLOCK ADAPTOR3	2	KRAD5500-US-RTA3
36	LIQUID RECEIVER	1	KRAD1200-US-LIQ
35	BOLT M8x50	10	KRAD5500-US-BLT850
34	WASHER 22x8,2x2,4	10	KRAD5500-US-WHR22
33	OVERLOAD PROTECTOR	1	KRAD1200-US-OVP
32	COMPRESSOR ELECTRICAL BOX	1	KRAD1200-US-CEB
31	ROTOLOCK ADAPTOR2	3	KRAD5500-US-RTA2
30	CAPILLARY TUBE CONNECTION	15	KRAD5500-US-CTC
29	ROTOLOCK ADAPTOR1	3	KRAD5500-US-RTA1
28	COMPRESSOR	1	KRAD1200-US-CMP
27	DRAIN VALVE1	2	KRAD5500-US-DRA1
26	ELBOW FITTINGS	6	KRAD5500-US-EWF
25	T CONNECTION	1	KRAD5500-US-TCN
24	BALL VALVE	1	KRAD5500-US-BVL
23	ELBOW	2	KRAD1200-US-ELW
22	BOLT M5x12	4	KRAD1200-US-BLT512
21	TEMPERATURE SENSOR	5	KRAD5500-US-TMPS
20	INDICATOR GASKET 1	2	KRAD1200-US-ING1
19	FILTER GAUGE	1	KRAD1200-US-FTG
18	COMPRESSED AIR FILTER ELEMENT KIT (X)	1	KRAD1200-US-ELK-X
17	COMPRESSED AIR FILTER ELEMENT KIT (Y)	1	KRAD1200-US-ELK-Y
16	BOLT M8x15	8	KRAD1200-US-BLT815
15	CONNECTION KIT 2	2	KRAD1200-US-CN2
14	ORING	4	KRAD1200-US-ORG
13	COUPLING CLAMP 2	4	KRAD1200-US-CPG2
12	CONNECTION KIT 1	2	KRAD1200-US-CN1
11	COLLECTOR	2	KRAD1200-US-CLL
10	COUPLING CLAMP 1	8	KRAD5500-US-CPG1
09	HEAT EXCHANGER	2	KRAD1200-US-EXC
08	BOLT M6x30	48	KRAD5500-US-BLT630
07	CAGE NUT M6	48	KRAD5500-US-CGN6
06	CONDENSER REINFORCEMENT PLATE	1	KRAD5500-US-CRP
05	FAN PROTECTOR	1	KRAD5500-US-FPRT
04	BOLT M6x30	8	KRAD5500-US-BLT630
03	FAN	2	KRAD1200-US-FAN
02	CONDANSER	1	KRAD1200-US-CON
01	CABINET BASE	1	KRAD1200-US-CAB

9. COMPONENTS LOCATION

All main components located into dryer identified with labels as listed here under.

CAUTION: Due to manufacture design, some components out of the list are not installed into the dryer.

Electrical components:

Accessories :

A01:	Control circuit transformer
A02:	Power circuit transformer
A10:	ON warning light
A11:	OFF warning light
A20:	Drain solenoid valve
A30:	Crankcase heater
A31:	Electrical resistor
A40:	Electrical capacity
A50-3:	Energy Saving Device 3 (ESD3)

Relays :

K01:	Compressor motor relay
K10:	Fan motor relay
K20:	Drain timer or Bekomat (optional)
K30:	Temperature Controller

Switches :

S01 :	Main switch
S02 :	Start push button
S03 :	Stop push button
S10:	Fan pressure control
S11:	High-low pressure security control
S12:	High pressure security control
S13:	Low pressure security control
S20:	Refrigerant temperature control
S21:	Air temperature control

Motors:

M01:	Refrigerant compressor motor
M10:	Fan motor

Thermal protections :

P01:	Refrigerant compressor thermal overload
P10:	Fan motor thermal overload

Fuses protections :

See complete identification into electrical sketch included in dryer

F- -:	Transformer protection
F- -:	Fan protection
F- -:	Compressor relay protection
F- -:	Transformer protection
F- -:	Drain protection
F- -:	Fan relay protection

Refrigerant components:

G01:	Liquid receiver
G02:	Refrigerant drier
G03:	Expansion valve
G04:	Liquid separator
G05:	Hot gas bypass valve
G06:	Refrigerant solenoid valve
G10:	Water cooled condenser
G11:	Water control valve
G20:	Refrigerant evaporating pressure gauge
G21:	Refrigerant evaporating temperature gauge

Compressed air components:

H01:	Air inlet prefilter
H11:	Drain filter
H12:	Pneumatic drain valve

Terminal boxes:

B01:	Main terminal box
B11:	Refrigerant unit terminal box
B12:	Free of potential terminal box

10. TROUBLESHOOTING

Problem	Possible Cause	Repair	Comments
Dryer is switched on, indicator light is lit but the refrigerant compressor does not turn on.	The connection has inverted phases	Invert two phases	3-phase dryers are equipped with a phase controller to avoid the fans from turning in the opposite direction.
	Refrigeration unit is not functioning	Check refrigeration compressor	Several factors can cause compressor failure. A qualified refrigeration technician needs to check all the electrical and refrigerant circuit and controls.
	The refrigerant high pressure protection has tripped	The refrigerant safety high pressure switch has tripped.	The dryer is protected against excessively high refrigerant pressure. If the condenser efficiency has reduced, the switch will trip. Manually reset the switch.
		In case of water cooled condensers, check the water control valve	
Dryer is switched on, but the refrigerant compressor does not turn on.	Excessive ambient temperature	Be sure that dryer is working in temperatures lower than the design conditions. Designed conditions and correction factors are described in this manual.	A high ambient temperature may cause the refrigerant system to operate at higher than normal pressures. Results will be higher than normal evaporator temperature. Important: adequate air circulation around the dryer, and proper ventilation in the equipment room should guarantee a low enough ambient temperature.
	Excessive temperature on crankcase of compressor.	Allow time to compressor to cool down. Reason may be a possible incorrect adjustment of hot gas bypass valve or shortage of refrigerant	Compressor is protected against overly high temperatures of the crankcase by a thermal switch.
	Excessive compressed air inlet temperature.	Be sure that dryer is working in temperatures lower than design conditions.	The dryer is designed for working in calculated conditions (see description in this manual). If conditions are exceeded, the dryer will be overflowed, dew point will go up and protecting devices can switch off.
	Clogged condenser fins or clogged water condenser. Possible high crankcase temperature Possible loss of phase Possible low voltage causing overload trip Possible failed compressor	Clear fins or water condenser of all obstructions.	The clogged fins in the condenser will restrict the air passage and reduce the refrigeration capacity, causing high temperature in the evaporator. Same will occur if water condenser is clogged with mud or dirt. Air condenser and water condenser should be periodically checked and cleaned. Protect water circuit by an adapted filter.
	Too much compressed air flow.	Check actual flow through the dryer.	This dryer is designed for a maximum air flow at design conditions. If too much air is pumped into the dryer, water removal capacity may not be sufficient, resulting in liquid carryover down stream. Check the rated output the air compressor.
	Faulty electrical wiring	Inspect the circuit	The compressor-on light should be wired into the refrigerant compressor circuit. See wiring diagrams in this manual.
	One electrical protection has tripped.	Reset the protection or replace the blown fuse.	The dryer is protected against high amp draw by fuse and/or overload relay that can trip in case of need. Reset or replace fuse once, but do not persist if it trips again, request assistance from a qualified refrigeration contractor.
Dryer is switched on but fan is not running.	Fan has to run if refrigerant high pressure reaches upper set point.	Check that compressed air flows through the dryer. Check that fan blades are free to move. Check the fan pressure switch.	Fan operates automatically to keep refrigerant pressure below the maximum value. The fan can stop if pressure is under the recommended setting.
When compressor starts, it vibrates a lot and makes mechanical noise.	Compressor is slugging liquid refrigerant at start up.	Be sure the pre-heating period of at least 2 hours is respected	Refrigerant may move between receivers when refrigerant compressor is stopped and not heated, especially if stopped for a long time. This migration may cause liquid shock (slugging) in valves specially on large dryers containing more refrigerant

Problem	Possible Cause	Repair	Comments
Water in system	Compressed Air Inlet and outlet connections are reversed.	Check inlet and outlet connections.	This dryer is designed for air flow in one direction only. Inlet and outlet directions are identified on the dryer.
	Drain system is clogged or inoperative.	Restore a free flow of water condensate. Check water evacuation.	Drain system is timed solenoid valve, pneumatically assisted which has to be adjusted in accordance with values listed in this manual. The Solenoid valve includes a strainer that has to be periodically checked and cleaned. Membranes of pneumatically assisted drain have to be checked or replaced every 6 months.
	Bypass system is open	Check the valves	Important: Bypass piping should be installed around the dryer so the dryer can be isolated for service without shutting down the air supply. During dryer operation, valves must be set so all air goes into the system. Check tightness of the bypass system.
	Free moisture remains in pipe lines.	Blow out the system	Before the dryer is first started all free moisture should be blown out of the system.
	Excessive air flow	Check actual flow through the dryer.	This dryer is designed for a maximum air flow. If too much air is pumped into the dryer, water removal capacity may not be sufficient, resulting in liquid carry over downstream. Check the rated flow of the air compressor.
	Excessive free moisture	Check the separator and drain system and compressor after cooler ahead of the dryer.	In some systems there may be an accumulation of free moisture in the line ahead of the dryer. If this moisture is pumped into the dryer intermittently, the water removal capacity may not be sufficient. A water separator should be installed in the line before the dryer.
	Excessive compressed air inlet temperature.	Be sure that dryer is working lower than design conditions	The dryer is designed to work for calculated design conditions. Should the conditions be exceeded, the dryer will be overfilled, dew point will go up and protecting devices can switch off.
	Clogged condenser fins	Clear fins of all obstructions	The clogged fins in the condenser will restrict air passage and reduce refrigerant capacity causing water downstream. Fins should be periodically checked and cleaned.
	Shortage of refrigerant	Fix the leak and add a charge of refrigerant.	Loss of refrigerant will cause improper functioning. A qualified refrigeration specialist should perform the necessary repairs, or factory should be contacted if the unit is in warranty.
	Refrigeration system is not functioning	Check to be certain refrigerant compressor is running	To check if the compressor is running, check compressor-on light. It is possible for the fan to be operating but not the compressor. Compressor not running can be caused by several factors. A qualified refrigeration technician should check all refrigerant and electrical controls.
High pressure drop	Excessive compressed air flow or too low air inlet pressure.	Check actual pressure and flow through the dryer.	This dryer is designed for a maximum air flow. If too much air is pumped into the dryer, water removal capacity may not be sufficient, resulting in liquid carry-over downstream. Check the rated flow of the air compressor.
	Freeze up	Check that compressor room ambient,	Frosting of the lines is an indication that controls are set too low. The following should be done by an experienced refrigeration technician.
		Fan switch could have failed in closed position keeping fan on.	Controls may be adjusted in the fields by means of the hot gas bypass valve. This is to be done by a qualified refrigerant technician.
The unit will not run or cycles off and on.	Clogged heat exchanger	Clean heat exchanger with reverse air flow.	Dryer are supposed to be used with compressed air free of any aggressive contaminants. Some contamination may require extra maintenance of the heat exchanger.
	Line disconnect switch is open.	Close the start or disconnect switch.	If the dryer is not operating, check the disconnect switch or circuit breaker to be certain it is on.
	Fuse or breaker is open	Replace fuse or reset breaker.	The fuse to the power line should be checked and replaced if needed. Never replace a burnt fuse with an oversized fuse.
	Faulty refrigerant compressor or controls.	Determine the cause and make correction	Failure of compressor to run may be caused by several factors. A qualified refrigeration specialist should check all electrical and refrigeration controls, or factory should be contacted if unit is in warranty.
	Excessive compressed air inlet temperature.	Design conditions and correction factors are described in this manual. Be sure that dryer is working in ambient temperatures below design conditions.	The dryer is designed for working into calculated design conditions. Should the conditions be exceeded, the dryer will be overfilled, dew point will go up and protecting devices may trip.

Problem	Possible Cause	Repair	Comments
The unit will not run or cycles off and on.	Excessive ambient temperature	Designed conditions and correction factors are described in dryer . Be sure that dryer is working lower than design conditions.	A high ambient temperature may cause the refrigerant system to operate at higher than normal pressures. Results will be a higher than normal evaporator temperature. Important: there should be adequate air circulation around the dryer, and proper ventilation in the equipment room should guarantee a low enough ambient temperature.
	Clogged condenser fins	Clear fins of all obstructions.	The clogged fins in the condenser will restrict the air passage and reduce the refrigeration capacity, causing high temperature in the evaporator. Fins should be periodically checked and cleaned.
	Shortage of refrigerant	Fix the leak and add a charge of refrigerant.	Loss of refrigerant will cause improper functioning. Dryers are equipped with a temperature switch which maintains the amount of refrigerant to maintain proper cooling of the compressor. A shortage of refrigerant may cause suction line to become very hot, causing the temperature switch to trip. A qualified refrigeration specialist should perform the necessary repairs.
Error sign occurs on digital temperature control device	The dew point is too low or too high.	Check refrigerant gas and make sure that the working conditions are within the correct range.	If there is not enough refrigerant gas or if the working temperature and inlet temperatures are very high, the dew point will increase.

11.WARRANTY



Refrigerated Dryer (KRAD 10-1200) WARRANTY POLICY

When used under the conditions recommended by the manufacturer KELTEC, KRAD Dryer is warranted to be free from defects in material and workmanship for a period of twenty-four (24) months from date of receipt, not to exceed thirty (30) months from the factory ship date, provided KELTEC is furnished the customer's name, address, and date of shipment information.

The heat exchanger will be warranted for two (2) years. This warranty is limited to the replacement of the heat exchangers, F.O.B. Factory, and subject to the same restrictions as outlined below concerning misuse, abuse or accident. The standard equipment external float drain and optional automatic drain carry a 90-day warranty.

This warranty will apply to equipment installed, operated and maintained in accordance with the procedures and recommendations as outlined in the owner's manual published by KELTEC During the life of this warranty, KELTEC will repair or replace (at KELTEC option) any defective part or assembly free of charge F.O.B. its warehouse if such defect occurred in normal service and was not due to apparent misuse, abuse or accident.

This Warranty is not transferable.

Any warranty service performed in the field must be authorized by KELTEC Unauthorized service voids the warranty and any resulting charges will not be paid by KELTEC

KELTEC makes no other warranties or guarantees, expressed or implied. The merchantability of the components is expressly excluded. The manufacturer assumes no liability for indirect or consequential damages.