

CKD

INSTALLATION, MAINTENANCE MANUAL

REFRIGERATED (COMPRESSED) AIR DRYER Xeroaqua G-Series

GT5055
GT5075
GT7055
GT7075
GT7095
GT7120
GT7150
GT7200
GT7250
GT7300
GT7400
GT7480

- Be sure to read this manual before operating your dryer.
- Keep this manual within the reach of an operator all the time.

C K D Corporation

06-08 7th edition SM-12305-A

Discontinue



Safety instructions

This dryer must be operated by a person who has basic knowledge of electric, compressed air, liquid, piping, refrigerant, etc. We are not responsible for any accidents caused when a person who does not have the basic knowledge or who is not well trained installation, operation, repair, etc.

Improper operation may cause poor performance of the dryer or may cause accidents. We applied a variety of safety measures to our dryers, but improper handling of dryers could cause accidents. Thus, be sure to read and fully understand this manual before using them. "Keep this manual together with the dryer".

Caution for safety

Cautions at operation are indicated in the following two ways.



WARNING



CAUTION



WARNING

used when improper handling could kill or seriously harm operators



CAUTION

used when improper handling could harm operators or damage objects



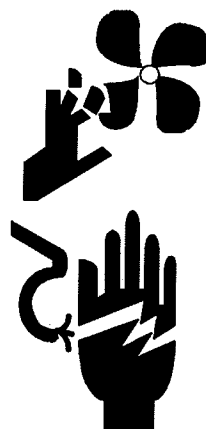
WARNING: ROTATION

- ★The fan may start rotating suddenly and may be harmful. Do not put your hands or objects into the fan area.
- Be sure to turn off the power before inspection.



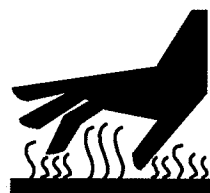
WARNING: ELECTRICAL SHOCK

- ★Power supply terminal box, switches, etc. may cause you electrical shock.
- Be sure to turn off the power before inspection. Do not operate the dryer with your wet hands.



CAUTION: HIGH TEMPERATURE

- ★The dryer is hot for a while after shut down the dryer.
- Be sure to turn off the power and to confirm that dryer becomes cool before inspection.



CAUTION: FOOT HOLD

- ★You could fall if you climb on the panel.
- Do not climb on the panel.



EARTH CONNECTION

- ★Be sure to connect earth to prevent electrical shock.



This dryer is industrials. Be sure to fully attend to using the dryer.

Table of Contents

Safety instructions

1. Introduction	1
2. Warranty	1
3. Certificate of pressure vessel	2
4. Cautions	3
4.1 Transportation	3
4.2 Operation environment	3
4.3 Cautions at operation	3
5. Installation	4
5.1 The beginning	4
5.2 Structure	5~7
5.3 Installation features	8
5.4 Fixation	8
5.5 Air piping	9
5.6 Drain piping	10
5.7 Electrical wiring	11,12
6. Maintenance and check point	13
6.1 Items of maintenance and check point	13
6.2 Please connect drain piping on the manual drain outlet	13
6.3 Cleaning of dust filter for condenser	14
6.4 Consumables and maintenance parts	15
6.5 Trouble shooting	16,17
6.6 Long term keeping	18
6.7 After sale service	18
7. Specifications	19
8. Outline drawing	20~22
9. Electrical circuit diagram	23~27
10. Operating panel	28
11. Electric box	29,30
12. System diagram	31~33

Discontinue

1. Introduction

- Thank you very much for purchasing our refrigerated air dryer, Xeroaqua G Series.
- This manual explains basic points of operation to have our dryer performs at their best.
- Be sure to read this manual before using your dryer.
- Keep this manual together with the dryer.

2. Warranty

Assure next contents.

(1) Warranty period

One year from the date of purchase (date on delivery or invoice date).

(2) Repair free of charge (Note: applied dryers to use in Japan)

- a. We will repair your dryer free of charge during the warranty period if it breaks down and is used properly as indicated in this manual and labels on your dryer.
- b. We will charge you repair service fee even during our warranty period if the following apply.
 - * breakdown or damage due to improper operation, repair, or remodeling.
 - * breakdown or damage due to relocation after installation, drop, or transportation damage.
 - * breakdown or damage due to transportation by automobile, ship, etc.
 - * breakdown or damage due to fire, earthquake, flood, thunder, other natural disaster, pollution, salt hazard, gas hazard, abnormal voltage, abnormal water pressure or quality, congelation, or other external causes.
 - * breakdown or damage not caused by your dryer.
 - * travel expense



Warranty valid is only in Japan.

(3) After warranty expiration

Repair costs are needed for you.

(4) Periodical inspection (charge)

Ask us for this service.

(5) No second compensations

Our warranty policy is covered only for our products. We do not compensate for other equipments, products or compensation for business what are caused by this machine's accidents or failures. Please protect second compensations by your warning systems or nonlife insurances.

3. Certificate of pressure vessel

1. Keep the certificate of pressure vessel

This machine is installed a pressure vessel that is applied the second class pressure vessel of boiler and pressure vessel safety regulation by the Japan Ministry of Labor. The machine is shipped with a certificate of the second class pressure vessel. This certificate should be kept carefully with this machine while this machine is operated. (It is not necessary to submit the relevant documents to the labor standard inspection office from October 1, 1990.)

2. Handling for the second class pressure vessel certificate

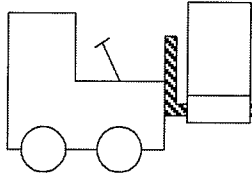
- 1) Second class pressure vessel cannot be transferred, rent, and installed without the requirements of structure. The certificates of the second class pressure vessel supplied with the machine are important documents that certify the pressure vessels meet the requirement for the structure.
- 2) Carefully keep certificates of the second class pressure vessel in a safe place so that it is not damaged, broken, or lost.
- 3) If you want reissue the certificates of second class pressure vessel, it must be within one year from individual inspection. Otherwise, it is absolutely necessary to inspect the pressure vessel again.
- 4) Inspect following items once a year by your self, then please keep those results for three years after installation of second class pressure vessels.
 - ① Check the main body for damage.
 - ② Check the lid tightening bolts for wear.
 - ③ Check the piping and valves for damage.



4. Cautions

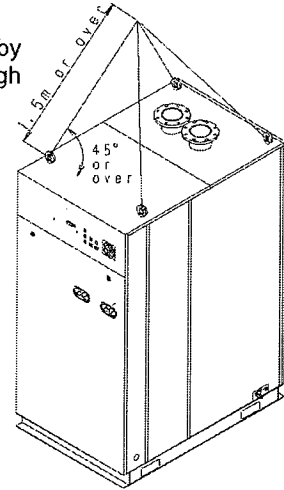
4.1 Transportation

- 1) Always carefully deliver and transport the dryer so that personal injury or damage to the dryer does not occur, because this dryer is heavy.
- 2) The dryer is transported by the lifting fork holes in the dryer base with a forklift or hold the dryer up by putting cable through hooks.



Always put out fork heads of forklift with extending forks when that is transported.

Hold the dryer up by putting cable through hooks



Move the dryer by lift

*The dryer fall to the ground and internal parts could get damaged or the forklift fall down.

- 3) Do not fall down the dryer. Also do not give vibration or impact to the dryer.
*Internal parts could get damaged.
- 4) Do not climb up on the dryer or put objects on the dryer.
*Workers could get hurt.

4.2 Operation environment

- 1) Do not install the dryer outdoor.
*This product does not have water-proof structure. Water or rain splashing to its electrical system could result in leak or fire.
- 2) Operating ambient temperature should be 2 to 43°C (no condensation).
*Drain freezes under the temperature of 2°C or below, and this could cause break-down.
Operation under the temperature of 43°C or above could stop the operation abnormally or could shorten the service life of the product.
- 3) Do not use the dryer in a place with direct sun light, powder dust and side of heating elements. Also, place the dryer without corrosive gas, explosive gas, ignitable gas or combustible gas.
*Breakdown, explosion, or fire may result.

4.3 Cautions at operation

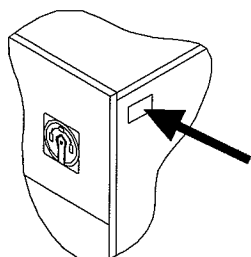
- 1) Do not use the dryer to remove humidity of except compressed air.
*Breakdown, explosion, or fire may result.
- 2) Install an earth leakage breaker on the power supply.
*Electric shock may result.
- 3) Need to earth wiring.
*Causes of an electric shock or a fire.
- 4) Operate the dryer within specification ranges.
*Operation may stop abnormally, or the product's service life may be shortened.
- 5) Do not turn on and turn off the dryer frequently more than 6 times an hour. Keep it running 5 minutes or more before turning it off and hold restarting it on 5 minutes or longer.
Do not operate while 3 minutes after stop this dryer, because the restart prevention circuit is operated.
*Breakdown or shorter service life of the product may result.
- 6) Do not turn on the power switch without enclosures.
*Electric shock or heat injury may result, or rotation parts could hurt workers.
- 7) Do not remode this dryer.
*Break-down or shorter life time of the product may result. If you did, the warranty is expired.
- 8) Do not use the dryer for pneumatic caisson shield or respiratory medical equipment.
*It could cause an accident includes injury.
- 9) Do not use the dryer for transportation devices such as automobile, ship etc.
*Vibration could be a cause of break down of the internal components.



5. Installation

5.1 The beginning.

- 1) Confirm the contents on the label. (Model No., Spec. etc.)



REFRIGERATED AIR DRYER				
①				
POWER	3φ AC380V 50Hz	MAX. PRESS.	1.0MPa	
MAX. AIR TEMP.	② °C	AIR FLOW	⑤ m ³ /min	ANR
CURRENT	③ A	MASS	⑥ kg	
REFRIGERANT	R407C ④ kg	SERIAL		
CKD		CKD Corporation MADE IN JAPAN		

①	②	③	④	⑤	⑥
GT5055-AC200V	80	9.3/10.2	1.7	9.6/10.6	220
GT5075-AC200V	80	13.3/14.3	2.7	13/14.3	285
GT7055-AC200V	60	5.0/5.4	0.8	9.6/10.6	145
GT7075-AC200V	60	5.9/6.3	1.35	13/14.3	175
GT7095-AC200V	60	7.4/8.5	1.55	16/18.8	260
GT7120-AC200V	60	9.3/10.2	1.7	20/23.5	260
GT7150-AC200V	60	13.3/14.3	3.5	25/30	360
GT7200-AC200V	60	16.3/17.2	4.0	32/37.6	390
GT7250-AC200V	60	18.6/19.8	4.3	39/46	610
GT7300-AC200V	60	25.6/27.5	2.5/2.5	48/56.5	800
GT7400-AC200V	60	31.9/33.4	3.3/3.3	67/79	1050
GT7480-AC200V	60	37.1/38.8	3.9/3.9	78/92	1100

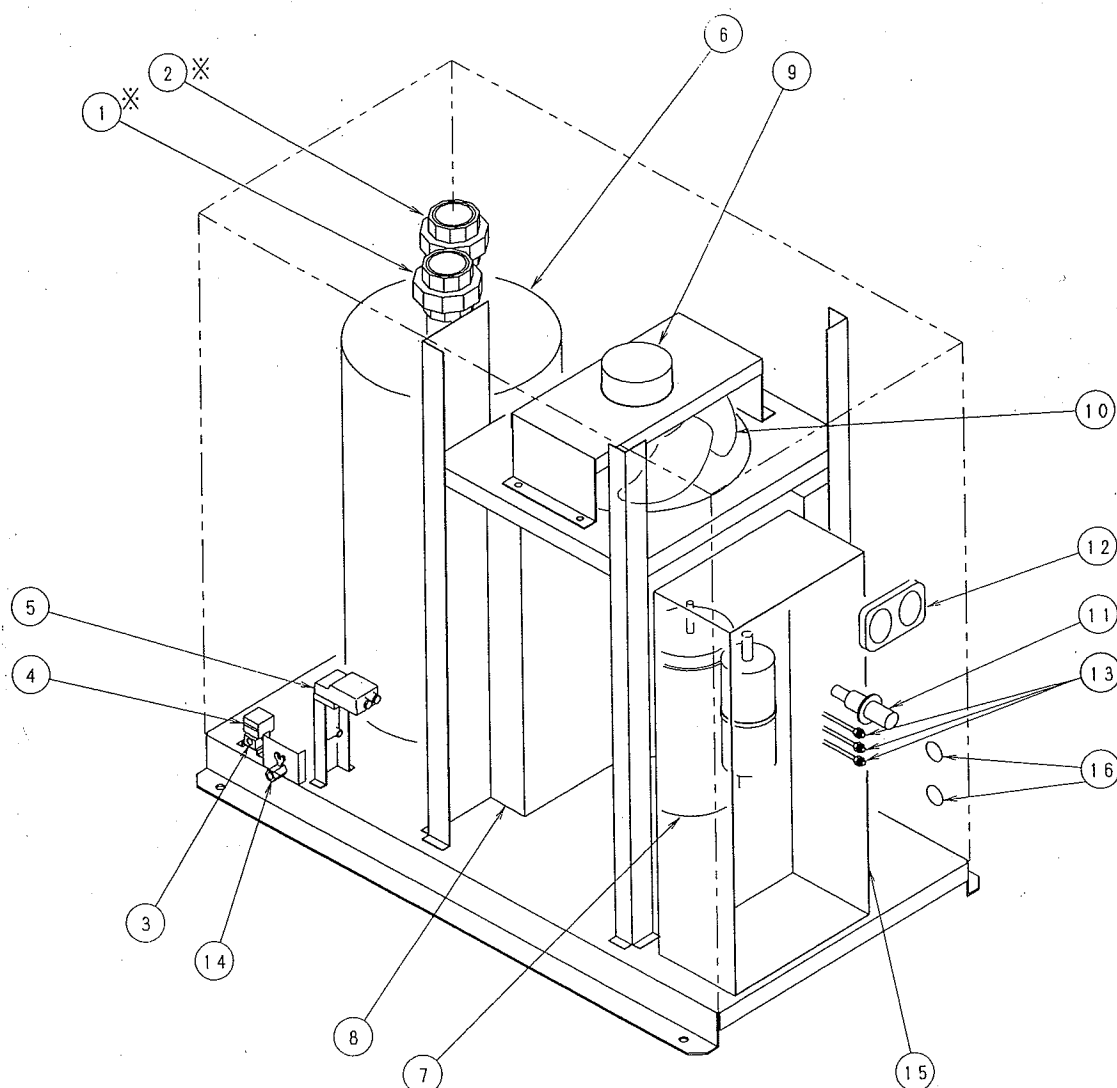
*If the contents are not clear or there are any questions, please contact CKD or distributors before using the dryer.

- 2) Confirm damage or transformation that is made during the transportation.
- 3) Attachment list.

Parts name	Quantity	Remarks
◎Installation, Maintenance manual	1	
◎Owner / Operator manual	1	
◎Certificate of the second class pressure vessel	1 set	

5.2 Structure

5.2.1 GT5055,7055,7075,7095,7120



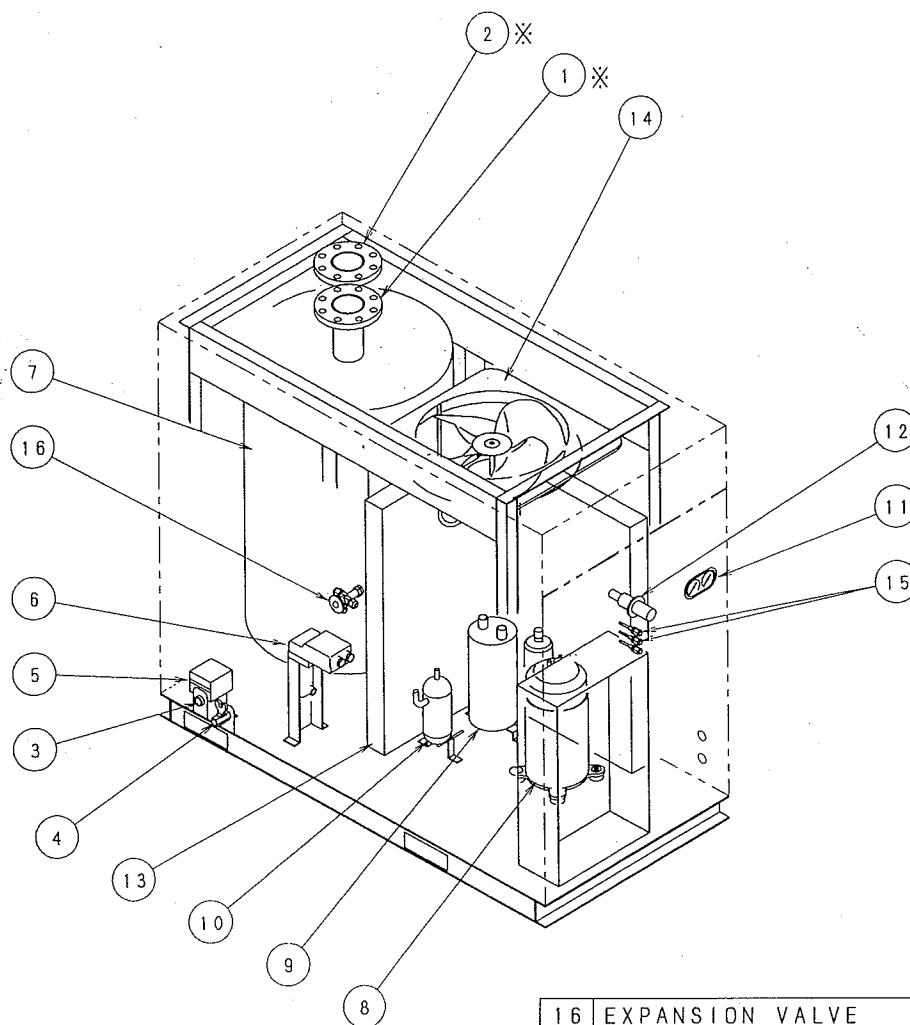
※ Air inlet and outlet

GT5055,7055,7075 : Rc2(Union)

GT7095,7120 : 2 $\frac{1}{2}$ B 10K Flange

16	POWER SOURCE HOLE	2
15	ELECTRIC BOX	1
14	MANUAL DRAIN OUTLET	1
13	SERVICE VALVE	3
12	REFRIG. PRESS. GAUGE	1
11	HOT GAS BY-PASSVALVE	1
10	FAN BLADE	1
9	FAN MOTOR	1
8	CONDENSER	1
7	REFRIG. COMPRESSOR	1
6	HEAT EXCHANGER	1
5	DRAIN SENSOR	1
4	SOLENOID VALVE	1
3	DRAIN OUTLET	1
2	AIR OUTLET	1
1	AIR INLET	1
No.	PARTS	Q'TY

5.2.2 GT5075,7150,7200,7250



※ Air inlet and outlet

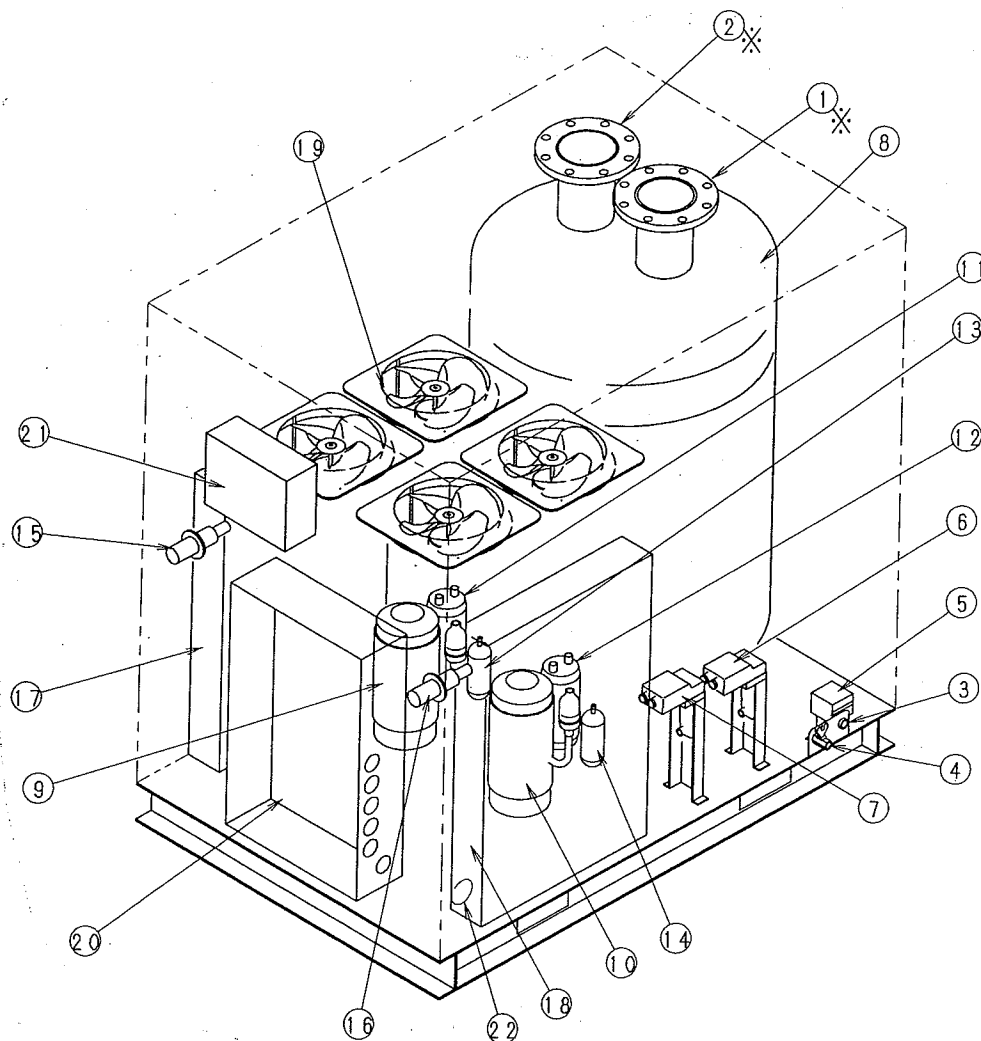
GT5075 : Rc2 (UNION)

GT7150,7200 : 3B 10K Flange

GT7250 : 4B 10K Flange

16	EXPANSION VALVE	1
15	SERVICE VALVE	3
14	FAN MOTOR	1
13	CONDENSER	3
12	HOT GAS BY-PASS VALVE	1
11	REFIRG. PRESS. GAUGE	1
10	OIL SEPARATOR	1
9	ACCUMULATOR	1
8	REFRIG. COMPRESSOR	1
7	HEAT EXCHANGER	1
6	DRAIN SENSOR	1
5	SOLENOID VALVE	1
4	MANUAL DRAIN OUTLET	1
3	DRAIN OUTLET	1
2	AIR OUTLET	1
1	AIR INLET	1
No.	PARTS	Q' TY

5.2.1 GT7300,7400,7480



※ Air inlet and outlet

GT7300 : 4B 10K Flange

GT7400,7480 : 6B 10K Flange

22	POWER HOLE	1	
21	FAN CONTROLLER BOX	1	
20	ELECTRIC BOX	1	
19	FAN·FAN MOTOR	4	
18	CONDENSER	1	SYSTEM2
17	CONDENSER	1	SYSTEM1
16	HOT GAS BY-PASS VALVE	1	SYSTEM2
15	HOT GAS BY-PASS VALVE	3	SYSTEM1
14	OIL SEPARATOR	1	SYSTEM2
13	OIL SEPARATOR	3	SYSTEM1
12	ACCUMULATOR	1	SYSTEM2
11	ACCUMULATOR	1	SYSTEM1
10	REFRIG. COMPRESSOR	1	SYSTEM2
9	REFRIG. COMPRESSOR	1	SYSTEM1
8	HEAT EXCHANGER	1	
7	OVER DRAIN SENSOR	1	
6	DRAIN SENSOR	1	
5	SOLENOID VALVE	1	
4	MANUAL DRAIN OUTLET	1	Rc1/2
3	DRAIN OUTLET	1	Rc1/2
2	AIR OUTLET	1	
1	AIR INLET	1	
No.	PARTS	Q'TY	REMARK

5.3 Installation features



- 1) Do not install the dryer outdoor or high humidity place.

*This product does not have waterproof structure.

Water or rain splashing, high humidity (=85% RH or over) could cause leak or fire to electrical systems.



- 2) Operating ambient temperature should be 2 to 43°C with no condensation.

*Drain freeze under the temperature of 2°C or below, and this could cause breakdown.

Operation under the temperature of 43°C or above could stop the operation abnormally or could shorten the service life of the product.



- 3) Install the dryer without direct sunlight, powder dust, heating elements, corrosive gas, explosive gas, inflammable gas or combustibles.

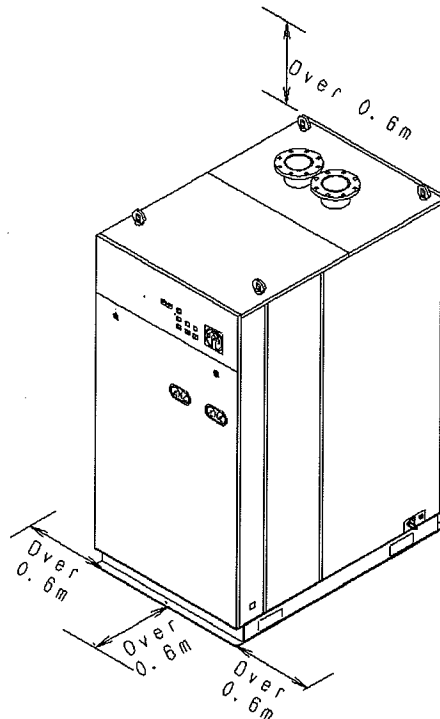
*Breakdown, explosion or ignition may result.

- 4) The installation floor should have a solid concrete foundation with level and flat surface.

*Weak or inclin foundation may cause noise and vibration.

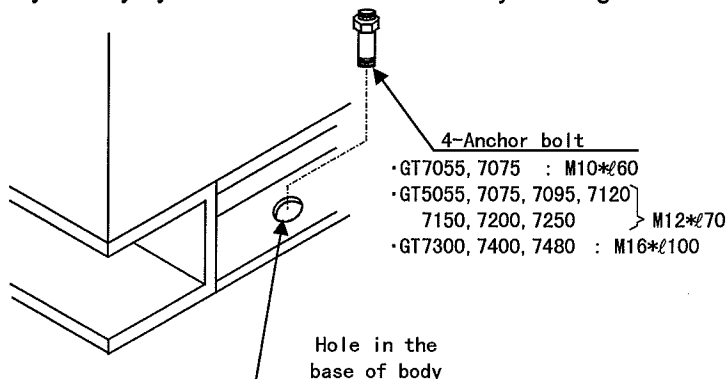


- 5) Need to keep spaces as a following figure for maintenance.



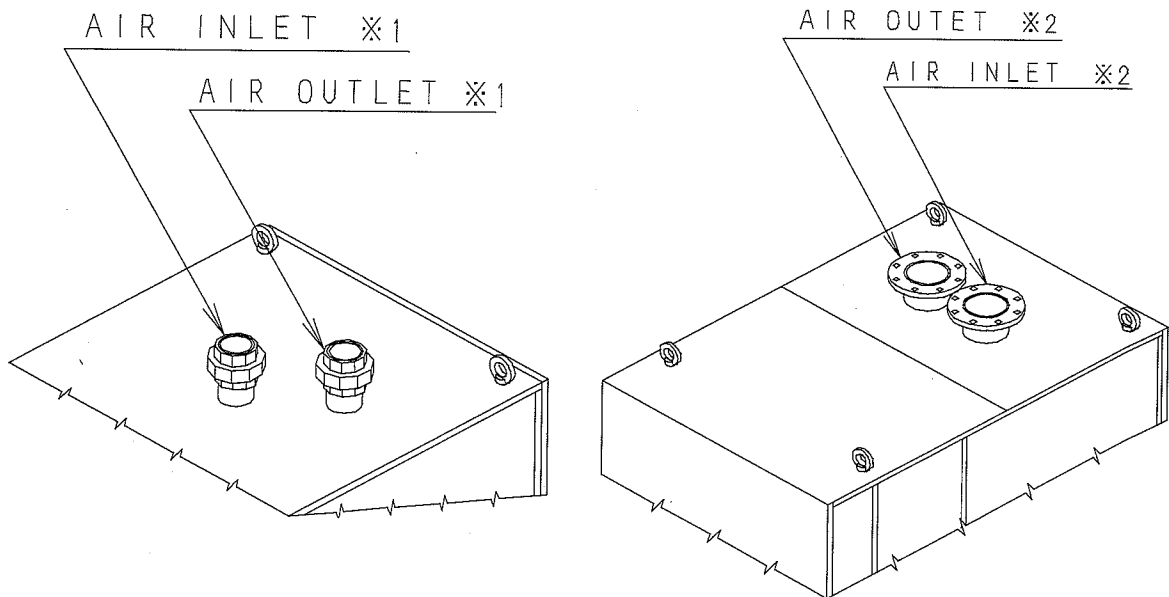
5.4 Fixixation

Fix the dryer body by anchor bolts to avoid the dryer falling due to earthquake or impact.



5.5 Air piping

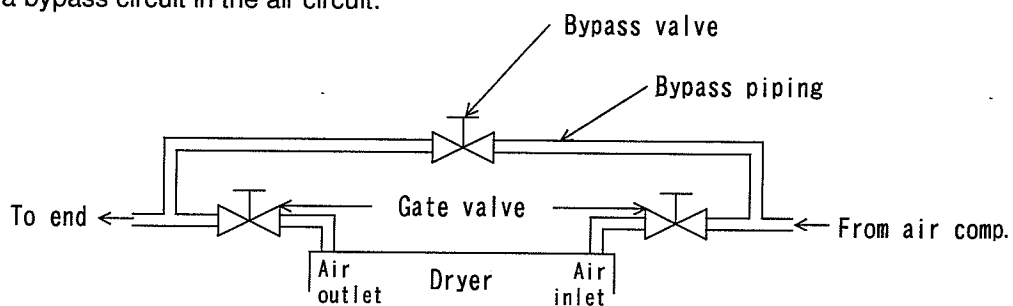
- 1) Confirm which is Air inlet or Air outlet before piping.



※1 GT5055,5075,7055,7075 : Rc2 (UNION)
 GT7095,7120 : 2¹/₂B 10K FLANGE
 GT7150,7200 : 3B 10K FLANGE
 GT7250 : 4B 10K FLANGE

※2 GT7300 : 4B 10K FLANGE
 GT7400,7480 : 6B 10K FLANGE

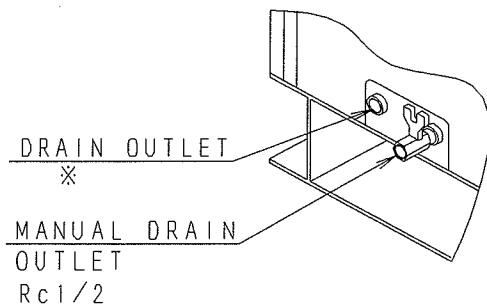
- 2) Install a bypass circuit in the air circuit.



- 3) Make sure that the weight of the piping is not directly exerted on the dryer.
- 4) Make piping without transmitting vibration from the dryer operation on the dryer.
- 5) Piping must be able to endure the operating pressure and temperature.
 No air leakage is allowed from pipe connections.
- 6) Use zinc plated steel pipe or stainless steel pipe.
- 7) Make air flushing for pipes before piping to remove dusts.

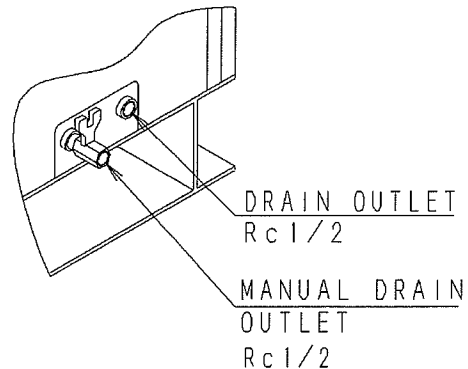
5.6 Drain piping

- 1) Confirm the drain outlet location before piping.



GT5055, 5075, 7055, 7075, 7095
7120, 7150, 7200, 7250

View-Bottom on the left side panel



GT7300, 7400, 7480

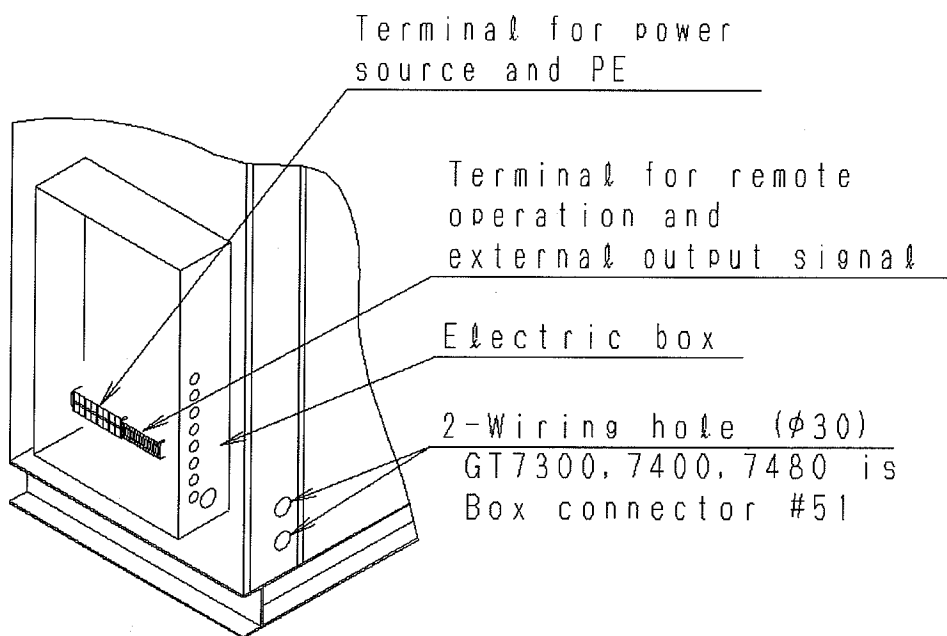
View-Bottom on the right side panel

※	GT5055, 5075, 7095, 7120, 7150, 7200, 7250	: Rc1/2
	GT7055, 7075	: Rc1/4

- 2) The drain pipe end should be opened to atmosphere.
- 3) Drain may not be discharged due to back pressure if some pipes rise up from the drain port or the drain pipe is too long or narrow. The drain piping may have declivity for smooth drain flow.
- 4) Fix drain discharge tube firmly, because the tube shakes strongly when drain is discharged automatically by air pressure.
- 5) Drain must be treated if oil is mixed in it. Consult with industrial waste treatment companies about this treatment.
- 6) Please connect drain piping on the manual drain outlet. Please open the manual drain valve once or twice of about ten seconds a week, because contaminant that is accumulated in the pressure vessel need to be exhausted.

5.7 Electrical wiring

- 1) Supply voltage should be within $\pm 10\%$ of rated voltage.
3 phase / 180~220V AC 50Hz, 180~242V AC 60Hz
- 2) Have an earth leakage breaker with over-load protection that has 100mA sensitivity current on the power supply line.
- 3) Connection for power supply, external output signal, remote operation and Ground.



· Insert a power cable, an output signal cable, a remote operation cable and a ground cable to wire each terminals firmly without looseness or coming off.

*Looseness or coming off wiring could causes of a fire.

*Do not wire the ground line to a water pipe, gas pipe, a lighting conductor. It should wire to a ground terminal.

Discontinue

·Recommended electrical wiring

Model #	Breaker capacity(A)	Cable size(mm ²)			
		Length 10m	Length 20m	Length 30m	Length 50m
GT5055	20	3.5	8.0	14.0	22.0
GT5075	30	8.0	14.0	22.0	22.0
GT7055	10	2.0	3.5	5.5	8.0
GT7075	15	3.5	3.5	5.5	8.0
GT7095	15	3.5	8.0	8.0	14.0
GT7120	20	3.5	8.0	8.0	14.0
GT7150	30	8.0	14.0	22.0	22.0
GT7200	30	14.0	14.0	22.0	30.0
GT7250	30	14.0	14.0	22.0	30.0
GT7300	40	14.0	14.0	22.0	30.0
GT7400	50	22.0	22.0	22.0	38.0
GT7480	75	22.0	22.0	30.0	60.0

- Recommended wire is type IV (600V vinyl insulated wire) at ambient temperature is 40 °C.
- Minimum power cable and ground cable sizes are shown by the cable size list as the above chart.

· Number of terminal and connect the wire

Model #	Terminal No.	Terminal size	Description	Type of contact	Mode	Capacity
—	L1	※	Power source	—	—	—
—	L2	※	Power source	—	—	—
—	L3	※	Power source	—	—	—
—	PE	※	Ground	—	—	—
GT5055 GT5075	D1-D2	M3	Remote start and stop	Input; non-voltage contact by a pulse input signal	Start at close Stop at open	—
GT7055 GT7075 GT7095	D3-D4	M3	Operation signal	Output; non-voltage Contact (a-contact)	Close contact at operation	Contact capacity; AC125V/DC110V 2A,62.5VA,30W
GT7120 GT7150	D5-D6-D7	M3	Alarm signal	Output; non-voltage Contact (c-contact)	Close contact at (D5-D7) alarm	Contact capacity; AC125V/DC110V 2A,62.5VA,30W
GT7200 GT7250	D8-D9-D10	M3	Abnormal dew point signal	Output; non-voltage Contact (c-contact)	Close contact at (D8-D10) dew point alarm	Contact capacity; AC125V/DC110V 2A,62.5VA,30W
GT7300 GT7400 GT7480	D1-D2	M3	Remote start	Input; non-voltage contact by a pulse input signal	Start at momentary close contact	Minimum 0.5sec
	D3-D4	M3	Remote stop	Input; non-voltage contact by a pulse input signal	Stop at momentary close contact	Minimum 0.5sec
	D5-D6	M3	Operation signal	Output; non-voltage Contact (a-contact)	Close contact at operation	Contact capacity; AC125V/DC110V 2A,62.5VA,30W
	D7-D8	M3	Alarm signal	Output; non-voltage Contact (a-contact)	Close contact at abnormal condition	Contact capacity; AC125V/DC110V 2A,62.5VA,30W
	D9-D10	M3	Abnormal dew point signal	Output; non-voltage Contact (a-contact)	Close contact at abnormal dew point	Contact capacity; AC125V/DC110V 2A,62.5VA,30W
	D11-D12	M3	Drain over-flow signal	Output; non-voltage Contact (a-contact)	Close contact at drain over-flow	Contact capacity; AC125V/DC110V 2A,62.5VA,30W

※GT7055,7075 : M3.5
 GT5055,7095,7120 : M4
 GT5075,7150,7200,7250,7300 : M5
 GT7400,7480 : M6

6. Maintenance and check point

6.1 Items of maintenance and check point

Check following items for full performance and longer service life of the dryer.

Checking item	Contents		Checking cycle			
			Daily	Weekly	Monthly	6-Month
"RUN" lamp	"RUN" lamp is lighting.		X			
"DEW POINT" indicator	"DEW POINT" indicator lamp indicates in the green area.		X			
Refrigerant pressure	Before operation	Equivalent to the ambient temperature by R407C.		X		
	In operation	0.35~0.6MPa				
Refrigerant high pressure	Before operation	Equivalent to the ambient temperature by R407C.		X		
	During operation	1.1~2.5MPa				
Running signal	Check conduction between terminal number ※1 in operation.				X	
Drain switch	When you push "DRAIN" switch on the operation panel, drain is discharged properly.		X			
Dust filter	Dust filter is not dirty.				X	
Fan motor	No abnormal noise is generated.		X			
Refrigerant compressor						
Air leak	No air leaks.				X	

※1 D3-D4
 GT5055,5075,7055,7075,7095,7120,7150,7200,7250
 D5-D6
 GT7300,7400,7480

6.2 Please connect drain piping on the manual drain outlet

Please open the manual drain valve once or twice of about ten seconds a week, because contaminant that is accumulated in the pressure vessel need to be exhausted.

6.3 Cleaning of dust filter for condenser

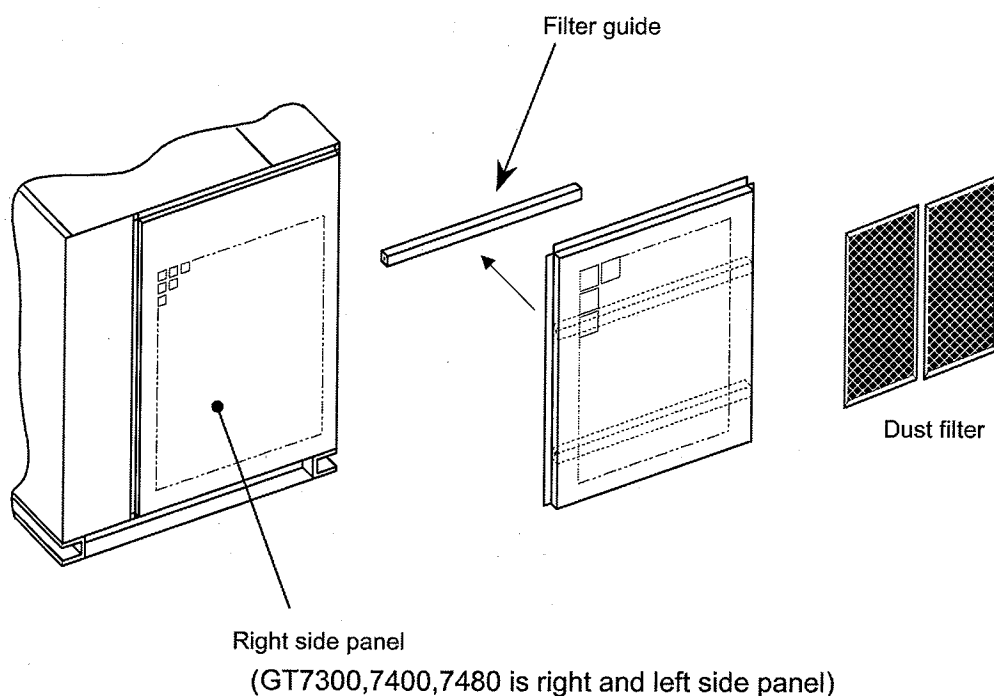
Please keep clean dust filter. Otherwise, do not keep full performance of the dryer or there is a possibility to have abnormal stops when dust filter become clogging.



Neglect of dust filter cleaning will cause machine trouble.

Cleaning diagram

- ① Take apart the right side panel.
- ② Take apart the filter guide.
- ③ Take apart for clean or replace the dust filter.
- ④ Assembling dust filter and others.



6.4 Consumables and maintenance parts

(Note: pcs/set is use quantity per 1 set of these devices.)

● Consumables

(The parts which will be exchanged if the state exhausting was checked periodically and it has exhausted.)

Inspect the following parts periodically, and exchange it based on Exchange judgment standard.

Parts name	pcs/set	Inspection frequency	Exchange judgment standard※
Dust filter	Note(a)	Monthly	When it damages. When it does not come off.
Fuse	1	Each time	When being cut off.

※ Be careful that it is not a guarantee value since the operation time (years) indicated changes with operating conditions (ambient temperature, installation environment, etc.). Years are a standard at the time of considering as 12 hours/day (Japan Electrical Manufacturer's Association (JEMA)) x 300 days of operating ratios.

※ We recommend you to keep a fuse as spare parts.

● Periodic maintenance parts (The main parts for which exchange is needed with a use situation)

Check the following parts periodically and exchange them based on standard exchange time.

Parts name	pcs /set	How to exchange	Standard exchange time ※
Compressor	Note(b)	B	20,000 hours (6 years)
Main body of solenoid valve	Note(c)	B	20,000 hours (6 years)
Coil of solenoid valve	Note(c)	A	20,000 hours (6 years)
Pressure fan	Note(d)	A	20,000 hours (6 years)
Electromagnetic switch (For compressor)	Note(b)	A	20,000 hours (6 years)
Electromagnetic switch (For pressure fan)	Note(b)	A	20,000 hours (6 years)
Fan controller	Note(b)	A	20,000 hours (6 years)
Solenoid valve	1	A	20,000 hours (6 years)

※ Keep in mind that it is not a guarantee value since the operation time (years) indicated above changes with operating conditions (ambient temperature, installation environment, etc.). Years are a standard at the time of considering as 12 hours/day (Japan Electrical Manufacturers' Association (JEMA)) x 300 days of operating ratios. Moreover, since time for the rate of failure in the case where you use it above this time to increase is shown, although it is not necessary to necessarily exchange, this exchange time is exchanged when the case where there are abnormalities at the time of check, and preventive maintenance are performed

• How to exchange

A : Those who have the knowledge and experience of piping, electricity, etc. Need to perform exchange of parts.

(When there are not these knowledge and experiences, ask our company or a special contractor.)

B : Before part exchange, refrigerant recovery is required. Moreover, since technical knowledge is needed for exchange work, ask our company or a special contractor.

Note(a) : 1 pcs/set (GT5055,5075,7055,7075,GT7095,7120,7150)

2 pcs/set (GT7300,7400,7480)

3 pcs/set (GT7200,7250)

Note(b) : 1 pcs/set (GT5055,5075,7055,7075,7095,7120,7150,7200,7250)

2 pcs/set (GT7300,7400,7480)

Note(c) : 2 pcs/set (GT5075,7150,7200,7250) Other models are intact.

Note(d) : 1 pcs/set (GT5055,5075,7055,7075,7095,7120,7150,7200,7250)

4 pcs/set (GT7300,7400,7480)

6.5 Trouble shooting

Condition		Causes	Measures	
"DEW POINT" lamp does not turn on		Power supply did not turn on.	Turn on the power supply.	
		Main switch did not turn on.	Turn on the main switch.	
	Fuse was failed	FU01	Replace the transformer(TC01).	
		FU02	Replace the fuse.	
		FU03	Replace the fuse.	
		FU04	Replace the transformer(TC02).	
		Different power supply phase pattern.	Adjust the phase	
	Main control board (SA01) was failed.	Replace the main control board.		
"RUN" lamp does not turn on when the push "START" button.		GT5055,5075,7055,7075,7095,7120,7150,7200,7250		
		Local-Remote change over switch (SA05) was set at "REMOTE".	Set "LOCAL" on the Local-Remote change over switch.	
		Main control board(SA01) was failed.	Replace the main control board.	
		Start switch(SB01) was failed.	Replace the main control board.	
		GT7300,7400,7480		
		Local-Remote change over switch (SA06) was set at "REMOTE".	Set "LOCAL" on the Local-Remote change over switch.	
		Start switch (SA07,08) was set at "OFF".	Set "ON" on the start switch.	
		Run lamp (HL07,08) bulb was failed.	Replace the run lamp bulb.	
		Start switch (SB01) was failed.	Replace the start switch.	
	Dew point is abnormal	Yellow lamp (High temp. side of "DEW POINT" lamp) is turned on.	Refer to "*" mark in water comes out when the dryer is running.	
		Dew point sensor(RT01) was short-circuited.	Replace the dew point sensor.	
Yellow lamp (Low temp. side of "DEW POINT" lamp) is turned on.		Ambient temp. was low.	Adjust the temp.(2°C or higher)	
		Inlet air temp. was low.	Adjust the temp.(5°C or higher)	
		Dew point sensor(RT01) was burned out.	Replace the dew point sensor.	
Water comes out when the dryer is running	Dew point is normal, but water comes out to the end of piping	The pipe temp. coming out from the dryer was lower than the dew point.	Insulate the pipe from ambient temp.	
		By-pass circuit is open.	Close the by-pass circuit.	
		Too much flow rate.	Reduce the flow (Less than rated condition.)	
		Low inlet air pressure.	Increase the air pressure.	
		Solenoid valve(YV01) for drain discharge was failed.	Open the manual drain valve	Replace the solenoid valve.
		Drain piping is clogged.		Take apart and clean the drain pipe.
		Too much drain capacity.		Watch drain do not flow in the dryer.
		Drain sensor (SQ01) is broke down.		Replace the drain sensor.
	"DEW POINT" lamp is on, and water comes out to the end of piping.(*)	Over spec the load.		Reduce the ambient temp.
		High ambient temp.		Reduce the inlet air temp.
		High inlet air temp.		Increase the air press.
		Low inlet air press.		Lower the treated flow rate.
		Large treated flow rate.		Adjust the voltage.
		Low or high power supply voltage.		Clean the dust filter.
		Dust filter was contaminated.		
		GT5075,7150,7200,7250		
		Operation mode select switch (SA05) was set at "HALF".	Set "FULL" on the operation mode select switch.	
GT7300,7400,7480				
Start switch (SA07,08) was set at "OFF".	Set "ON" on the start switch.			

Discontinue

Condition		Causes		Measures	
The dryer suddenly stops.	"ALARM" lamp turns on.	Some safety devices were turning on. · Refrigerant gas leakage. · Over spec the load.		Remove causes of problems and reset · Repair the parts leaking gas and refill refrigerant. · Refer the P15 * mark.	
	All the lamps turn off, and the dryer stops.	Power supply was turned off.		Turn on the power supply.	
		Low or high power supply voltage.		Adjust the voltage.	
		Fuse was failed	FU01	Replace the transformer.(TC01)	
			FU02	Replace the fuse.	
	FU03		Replace the fuse.		
		FU04	Replace the transeformer (TC02).		
"RUN" lamp is turns on when the dryer stops.	Momentary power failure.		Wait until the dryer is restarted by automatically. (Reactivate the dryer immediately after power recovery, if instantaneous power failure is less than 0.5 seconds. Also, reactivate the dryer 3 minutes later after power recovery, if instantaneous power failure is less than 2 seconds.)		
"RUN" lamp is turns off, and the dryer stops.	Power failure is occurred more than two seconds.		Please restart after three minutes or more. (Do not operate while 5 minutes after stop this dryre, because the restart prevention circuit is operated.)		
Pressure drop before/after the dryer is too large.		Stopper valves before/after the dryer is closed.		Fully open the valves.	
		Treated flow rate is too large.		Lower the flow rate.	
		Congelation in the dryer.		· Increase ambient temp. · Increase the inlet air temp.	
Drain on pressurized air is exhausted continuously from the drain solenoid valve.		Solenoid valve(YV01) for drain discharge was failed.		Take apart for clean or replace the solenoid valve.	
		Inlet air temp. sensor (RT02) was burned out.		Replace the inlet air temp. sensor.	
"DRAIN ALARM" lamp(HL09) is turns on, and "DRAIN OVER-FLOW" signal is output.		GT7300,7400,7480			
		Drain discharge circuit was failed or drain pipe is choked up.		Open the manual drain valve	Take apart for clean or replace the solenoid valve.
		Inlet air temp. sensor (RT02) was short-circuited.			Exchange the inlet air temp. senser.

6.6 Long term keeping

If the dryer is not used long term, keep the dryer with the following procedure.

- 1) Close the stop valves before/after the dryer.
- 2) Open the manual drain valve, because contaminant that is accumulated in the pressure vessel need to be exhausted.
- 3) Turn off the power supply and main switch.
- 4) Clean the dust filter.
- 5) Put a sheet over the dryer for keeping.

Keep the dryer in a place where environment is the same as the operating specification.

- 6) When the dryer is started again, inspect the dryer parts and start it as the instruction in this manual.

6.7 After sale service

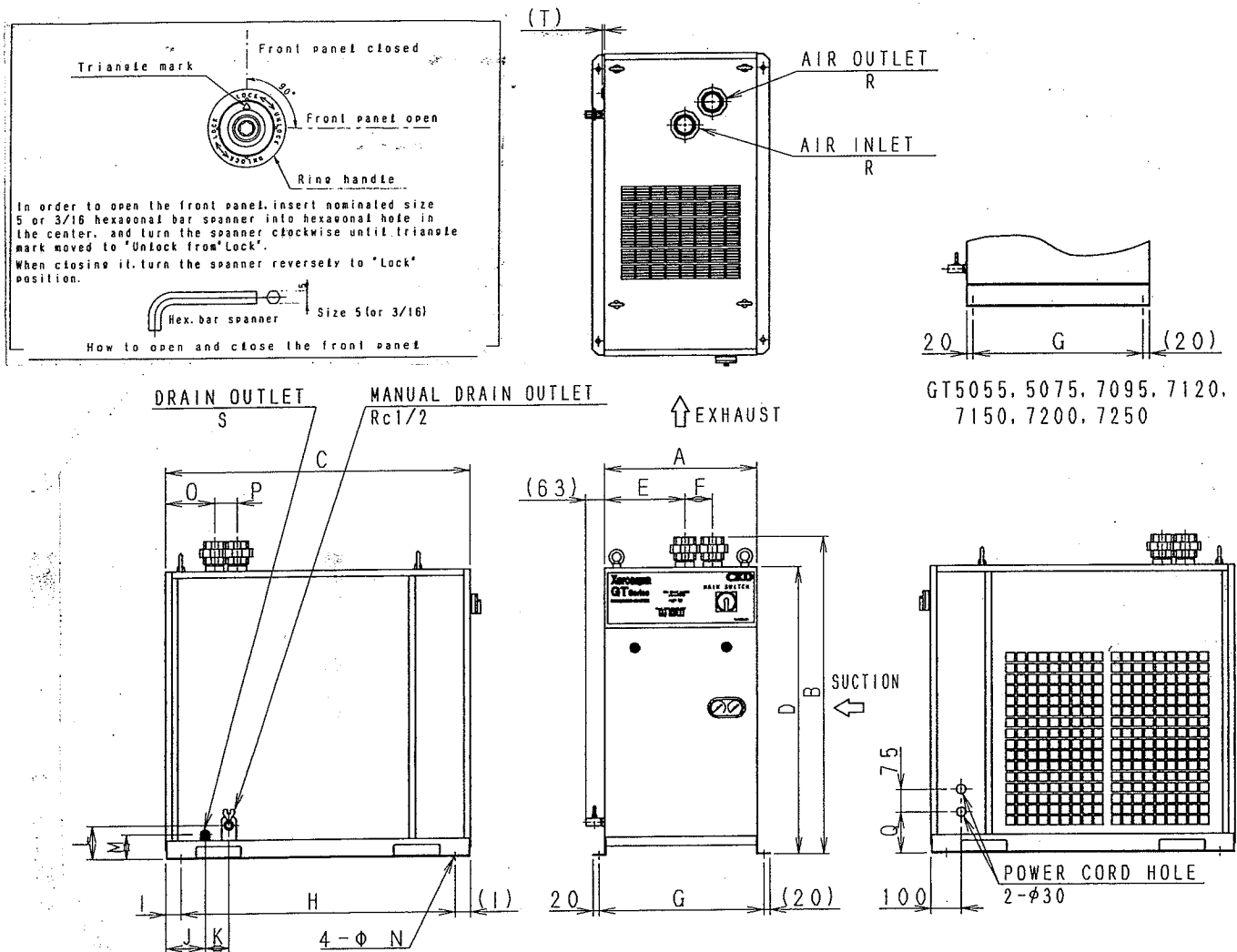
- 1) Contact your store, distributor or CKD you purchased this dryer to request repair services.
- 2) Provide the following information when requesting the repair service.
 - *model number of the dryer.
 - *serial number
 - *date of installation
 - *name of the store where you purchased the dryer
 - *conditions of the dryer
- 3) We will repair your dryer even after the warranty period expires onerously. We will supply parts for seven years after production of your dryer is terminated except special orders.

7. Specifications

Model number			GT5055-AC200V	GT5075-AC200V	GT7055-AC200V	GT7075-AC200V	GT7095-AC200V	GT7120-AC200V	GT7150-AC200V	GT7200-AC200V	GT7250-AC200V	GT7300-AC200V	GT7400-AC200V	GT7480-AC200V		
Description																
Using condition	Media		Compressed air													
	Inlet air temp.		℃		5~80		5~60									
	Inlet air pressure		MPa		0.2~1.0											
	Ambient temp.		℃		2~43											
Rated conditions	Air flow rate		m ³ /min ANR		9.6/10.6	13/14.3	9.6/10.6	13/14.3	16/18.8	20/23.5	25/30	32/37.6	39/46	48/56.5	67/79	78/92
	Inlet air temp.		℃		55		40									
	Inlet air press.		MPa		0.7											
Performance	Air outlet dew point		℃		10											
	Press. Drop		MPa		0.0088/0.0108	0.0101/0.0122	0.0088/0.0108	0.0101/0.0122	0.0046/0.0064	0.0073/0.010	0.0083/0.012	0.013/0.018	0.010/0.014	0.0099/0.014	0.0077/0.011	0.010/0.015
Electric characteristics	Electric power		3 phase AC200V 50Hz, AC200V-220V 60Hz													
	Power consumption		kW		2.4/2.9	3.5/4.4	1.3/1.5	1.6/2.0	2.1/2.6	2.4/2.9	3.5/4.4	4.3/5.4	5.1/6.3	6.6/8.1	8.6/10.4	10.0/12.0
	Operation current		A		9.3/10.2	13.3/14.3	5.0/5.4	5.9/6.3	7.4/8.5	9.3/10.2	13.3/14.3	16.3/17.2	18.6/19.8	25.6/27.5	31.9/33.4	37.1/38.8
	Starting current		A		55/50	93/88	27.5/26.5	46/42	45/42	55/50	93/88	115/108	133/122	105/101	130/124	150/140
Refrigerant			R407C													
Piping size of air inlet and outlet			Rc2 (Union)					2 ¹ / ₂ B 10K Flange		3B 10K Flange		4B 10K Flange		6B 10K Flange		
Piping size of drain outlet (main & manual)			2-Rc1/2		Rc1/2,Rc1/4			2-Rc1/2								
Mass		kg	220	285	145	175	260	260	360	390	610	800	1050	1100		

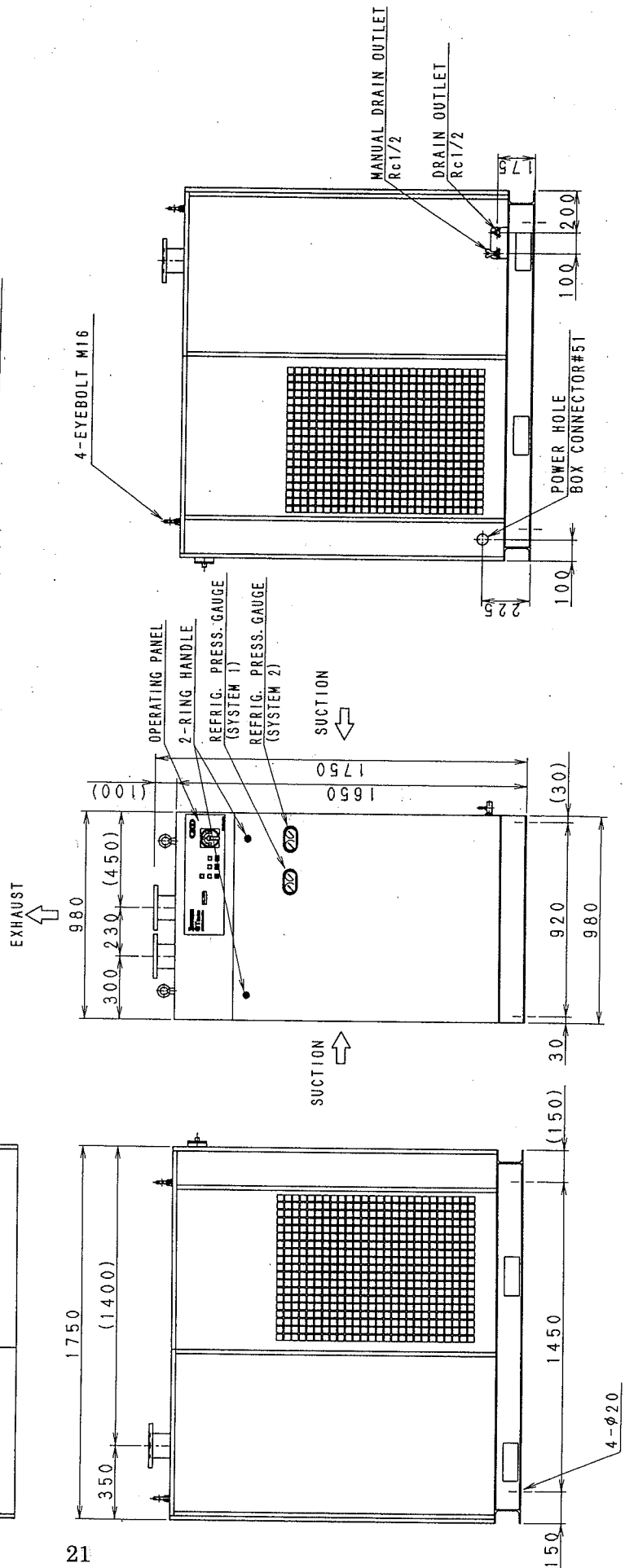
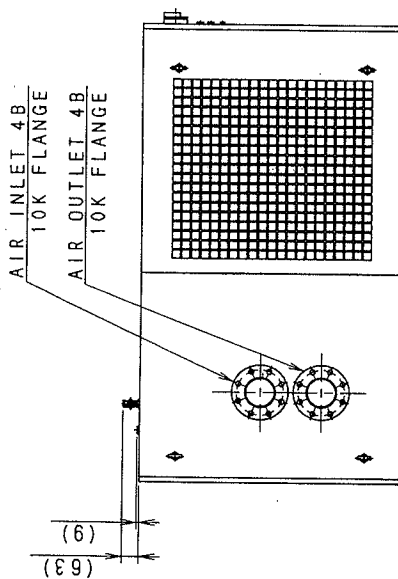
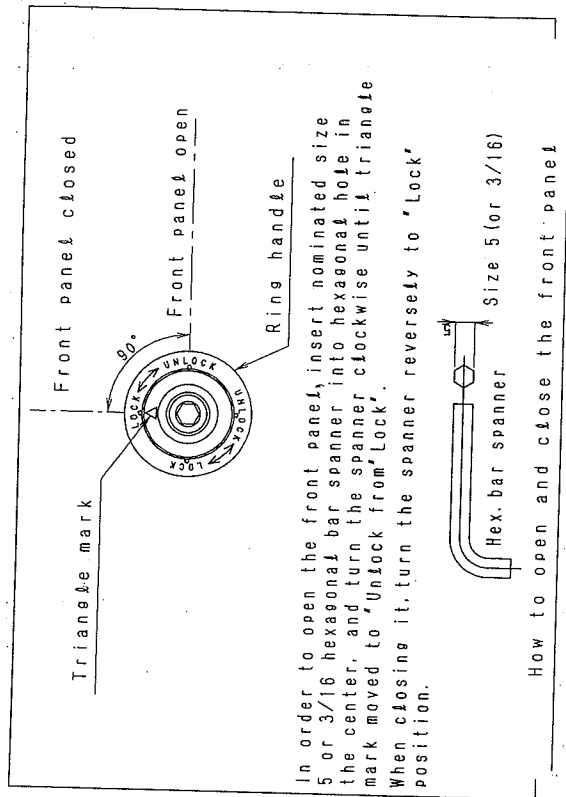
8. Outline drawing

8.1. GT5055,5075,7055,7075,7095,7120,7150,7200,7250

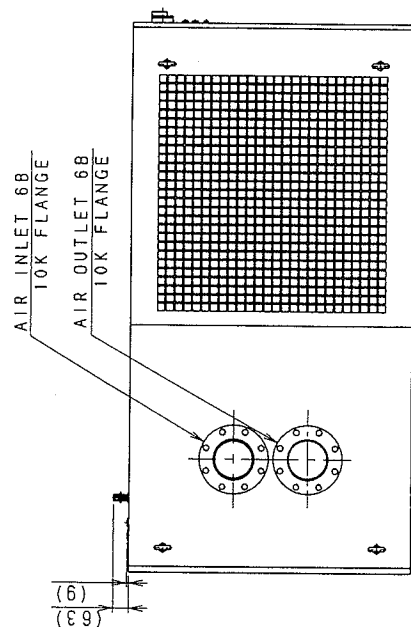
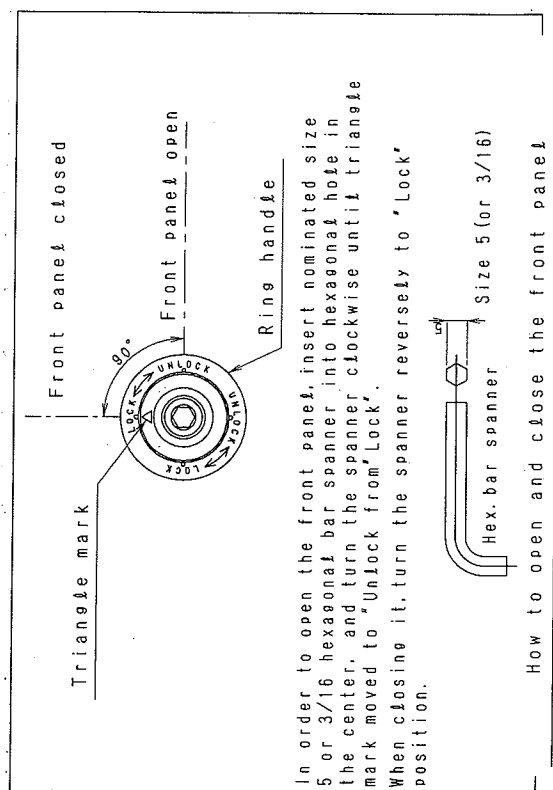


Mark Model #	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
GT5055	600	1065	1250	965	315	90	560	1100	75	150	100	125	125	φ 15	180	76	150	Rc2 Union	Rc1/2	9
GT5075	700	1095	1450	995	385	90	660	1250	100	150	100	125	125	φ 15	232	76	150	Rc2 Union	Rc1/2	9
GT7055	500	1050	1000	950	265	90	540	900	50	130	80	110	81	φ 13	162	76	135	Rc2 Union	Rc1/4	-5
GT7075	550	1080	1100	980	285	90	590	1000	50	130	80	110	81	φ 13	182	76	135	Rc2 Union	Rc1/4	-5
GT7095	600	1175	1250	1100	290	160	560	1100	75	150	100	125	125	φ 15	215	90	150	2 1/2 B Flange	Rc1/2	9
GT7120	600	1175	1250	1100	290	160	560	1100	75	150	100	125	125	φ 15	215	90	150	2 1/2 B Flange	Rc1/2	9
GT7150	700	1375	1450	1300	350	140	660	1250	100	150	100	125	125	φ 15	230	140	150	3B Flange	Rc1/2	9
GT7200	800	1375	1550	1300	430	140	760	1350	100	150	100	125	125	φ 15	230	140	150	3B Flange	Rc1/2	9
GT7250	850	1600	1700	1500	392	156	810	1500	100	150	100	125	125	φ 15	242	156	150	4B Flange	Rc1/2	9

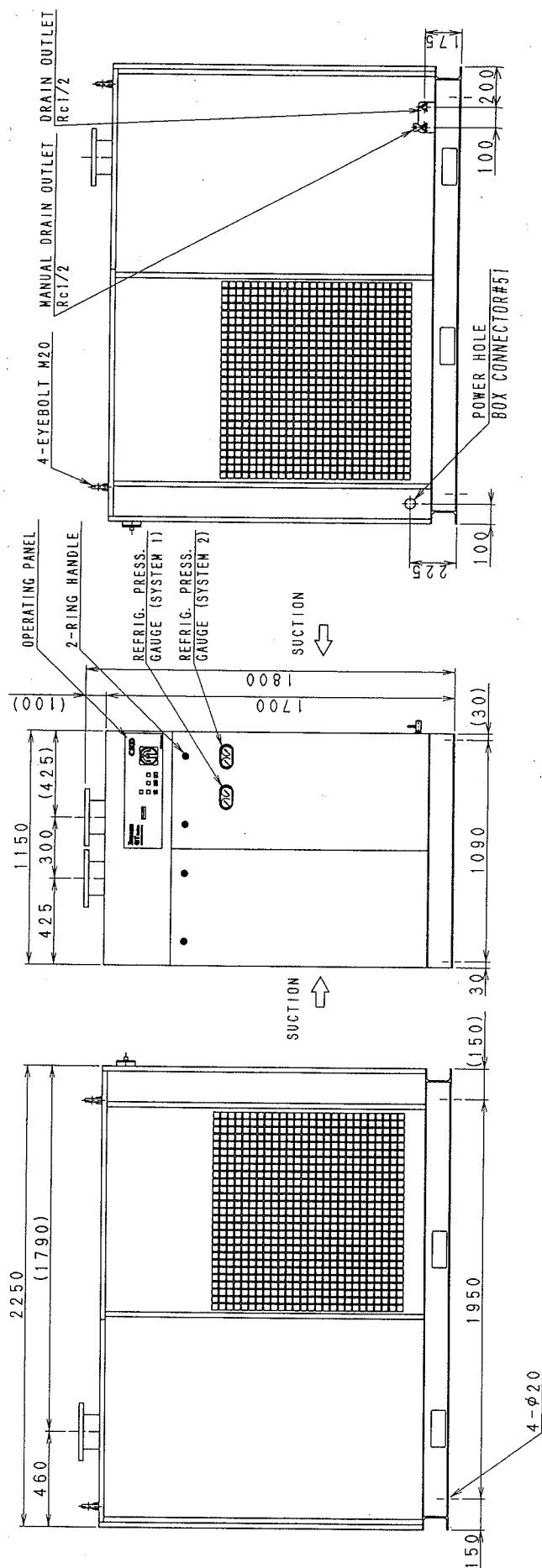
8.2. GT7300



8.3. GT7400,7480

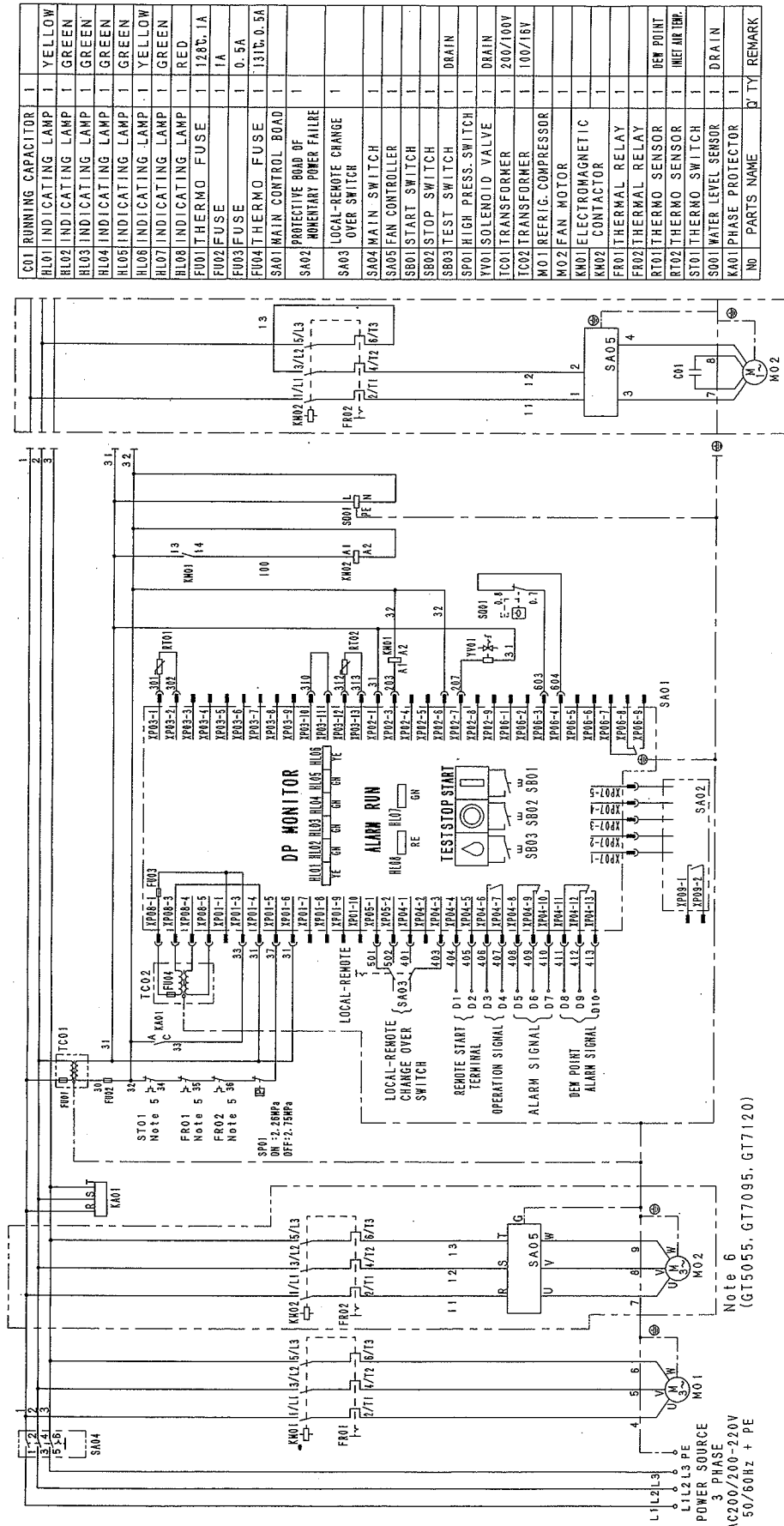


EXHAUST



9. Electrical circuit diagram

9.1. GT5055,7055,7075,7095,7120



NOTE

1. Remote start terminal DI-02 non voltage input. Set up switches SA03 and SA04 as following when the dryer is operated by remote control. SA03:REMOTE, SA04:ON
2. Operation signal is non voltage a-contact, alarm, dew point alarm signal are non-voltage c-contact. (Operation:03-04 close, Alarm:05-07 close, Dew point alarm:08-010 close)
Contact capacity:125VAC/110VDC, 2A, 62.5VA, 30W
3. Reactivate the dryer immediately after power recovery, if instantaneous power failure is less than 0.5 seconds. Also, reactivate the dryer 3 minutes later after power recovery, if instantaneous power failure is less than 2 seconds.
4. Do not operate while 5 minutes after stop this dryer, because the restart prevention circuit is operated.

5. Set point for safety devices

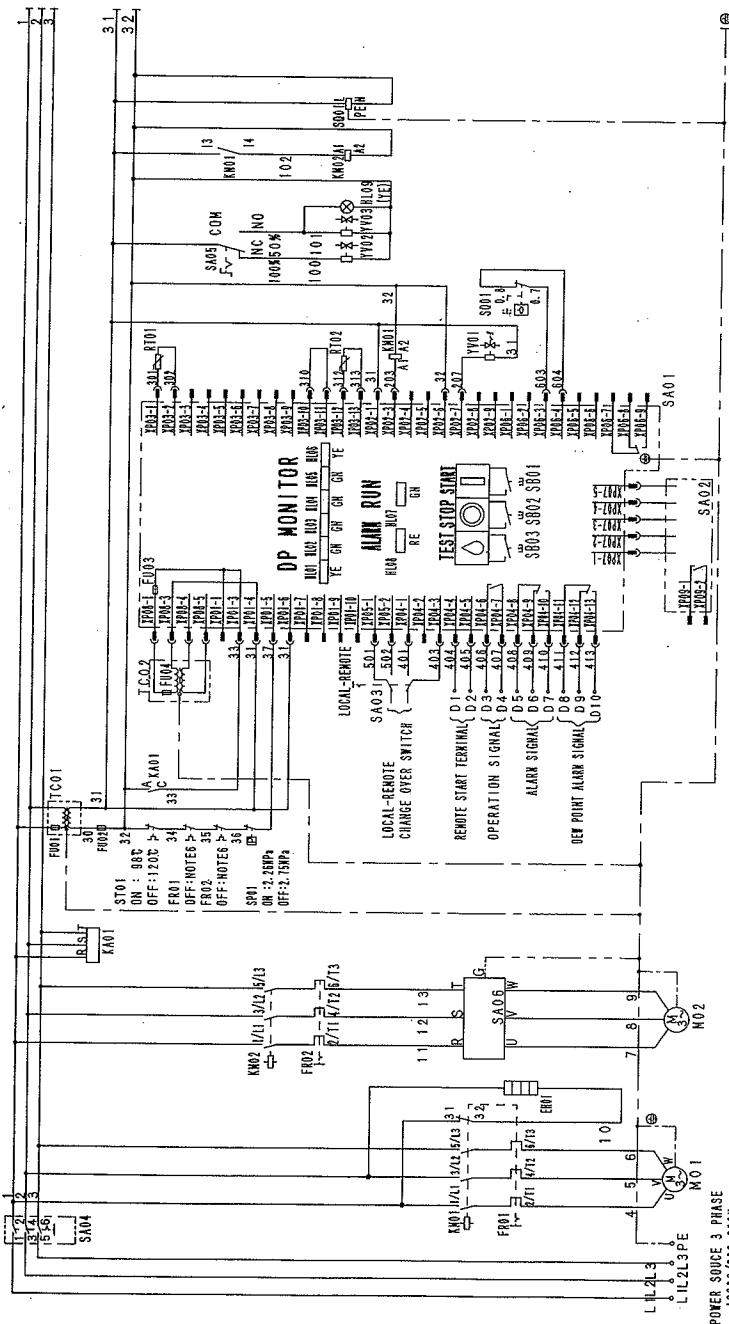
	Set point	
ST01	FR01	FR02
GT5055	ON=85°C OFF=115°C	OFF=1.1A
GT7055	ON=13°C OFF=135°C	OFF=0.50A
GT7075		OFF=1.1A
GT7095	ON=85°C OFF=115°C	OFF=0.72A
GT7120		OFF=1.1A

6. It changes with models.

Note 6
(GT7055)

9.2. GT5075,7150,7200,7250

HL01 INDICATING LAMP	1	YELLOW
HL02 INDICATING LAMP	1	GREEN
HL03 INDICATING LAMP	1	GREEN
HL04 INDICATING LAMP	1	GREEN
HL05 INDICATING LAMP	1	GREEN
HL06 INDICATING LAMP	1	YELLOW
HL07 INDICATING LAMP	1	GREEN
HL08 INDICATING LAMP	1	RED
HL09 INDICATING LAMP	1	YELLOW
EH01 CRANK CASE HEATER	1	
FU01 THERMO FUSE	1	128°C. 1A
FU02 FUSE	1	1A
FU03 FUSE	1	0.5A
FU04 THERMO FUSE	1	131°C. 0.5A
SA01 MAIN CONTROL BOARD	1	
SA02 PROTECTIVE BOARD OF MOMENTARY POWER FAILURE	1	
SA03 LOCAL-REMOTE CHANGE OVER SWITCH	1	
SA04 MAIN SWITCH	1	
SA05 OPERATION MODE SELECT SWITCH	1	
SA06 FAN CONTROLLER	1	
SB01 START SWITCH	1	
SB02 STOP SWITCH	1	
SB03 TEST SWITCH	1	DRAIN
SP01 HIGH PRESS. SWITCH	1	DRAIN
YV01 SOLENOID VALVE	1	DRAIN
YV02 SOLENOID VALVE	1	
YV03 SOLENOID VALVE	1	
TC01 TRANSFORMER	1	200/100V
TC02 TRANSFORMER	1	100/16V
M01 REFRIG. COMPRESSOR	1	
M02 FAN MOTOR	1	
KN01 ELECTROMAGNETIC CONTACTOR	1	
FR01 THERMAL RELAY	1	
FR02 THERMAL RELAY	1	
RT01 THERMO SENSOR	1	DEW POINT
RT02 THERMO SENSOR	1	INLET AIR TEMP.
ST01 THERMO SWITCH	1	
SO01 WATER LEVEL SENSOR	1	DRAIN
KA01 PHASE PROTECTOR	1	
NO	PARTS NAME	QTY REMARK



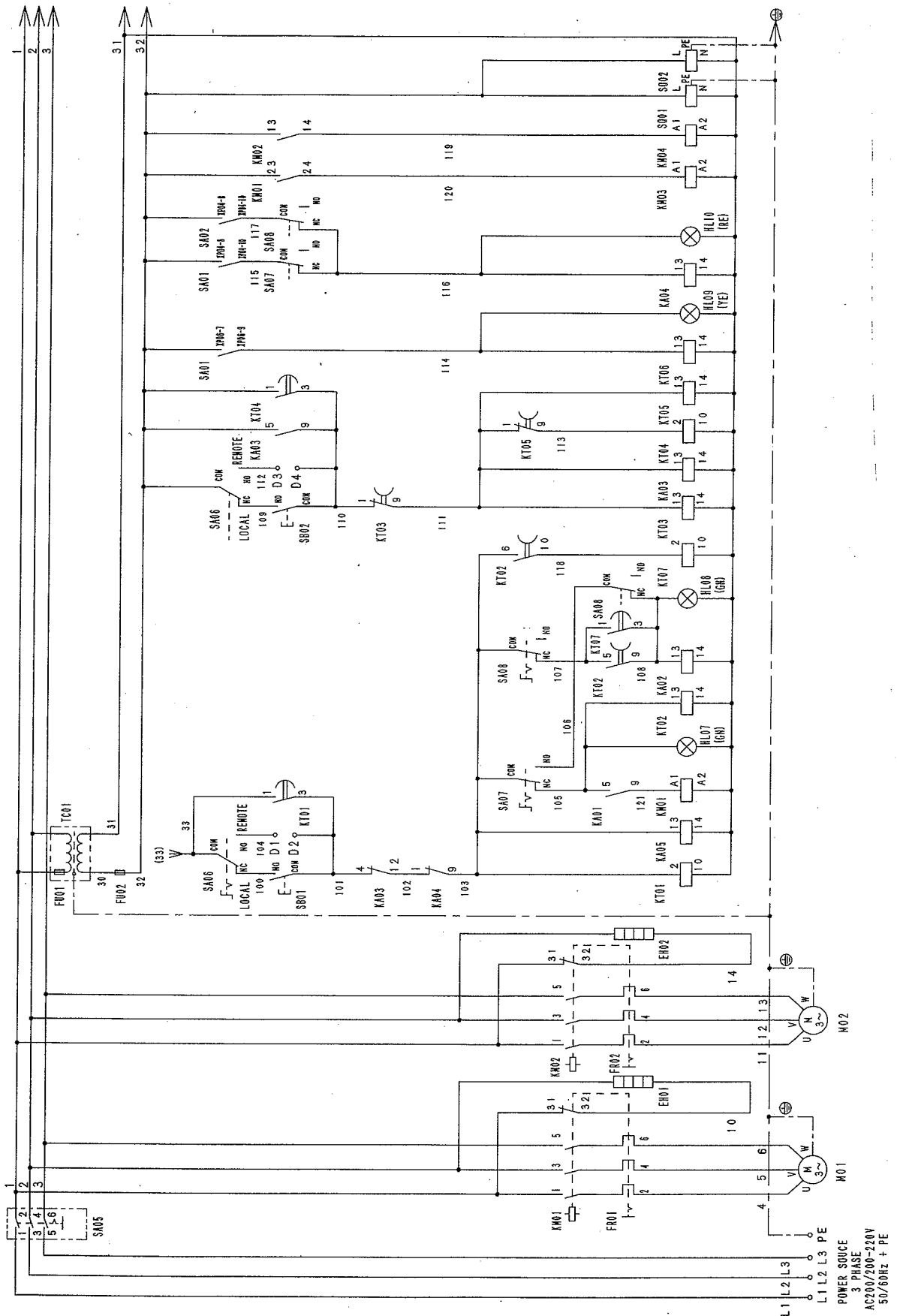
NOTE

- Remote start terminal D1-D2 non voltage input. Set up switches SA03 and SA04 as following when the dryer is operated by remote control. SA03:REMOTE, SA04:ON
- Operation signal is non voltage a-contact, alarm, dew point alarm signal are non-voltage c-contact. (Operation:D3-D4 close, Alarm:D5-D7 close, Dew point alarm:D8-D10 close) Contact capacity:125VAC/110VDC, 2A, 62.5VA, 30W
- Reactivate the dryer immediately after power recovery, if instantaneous power failure is less than 0.5 seconds. Also, reactivate the dryer 3 minutes later after power recovery, if instantaneous power failure is less than 2 seconds.
- Do not operate while 5 minutes after stop this dryer, because the restart prevention circuit is operated.
- Do not turn off main power supply and main switch while the dryer is stop, because crank case need to be heated by electric heater.

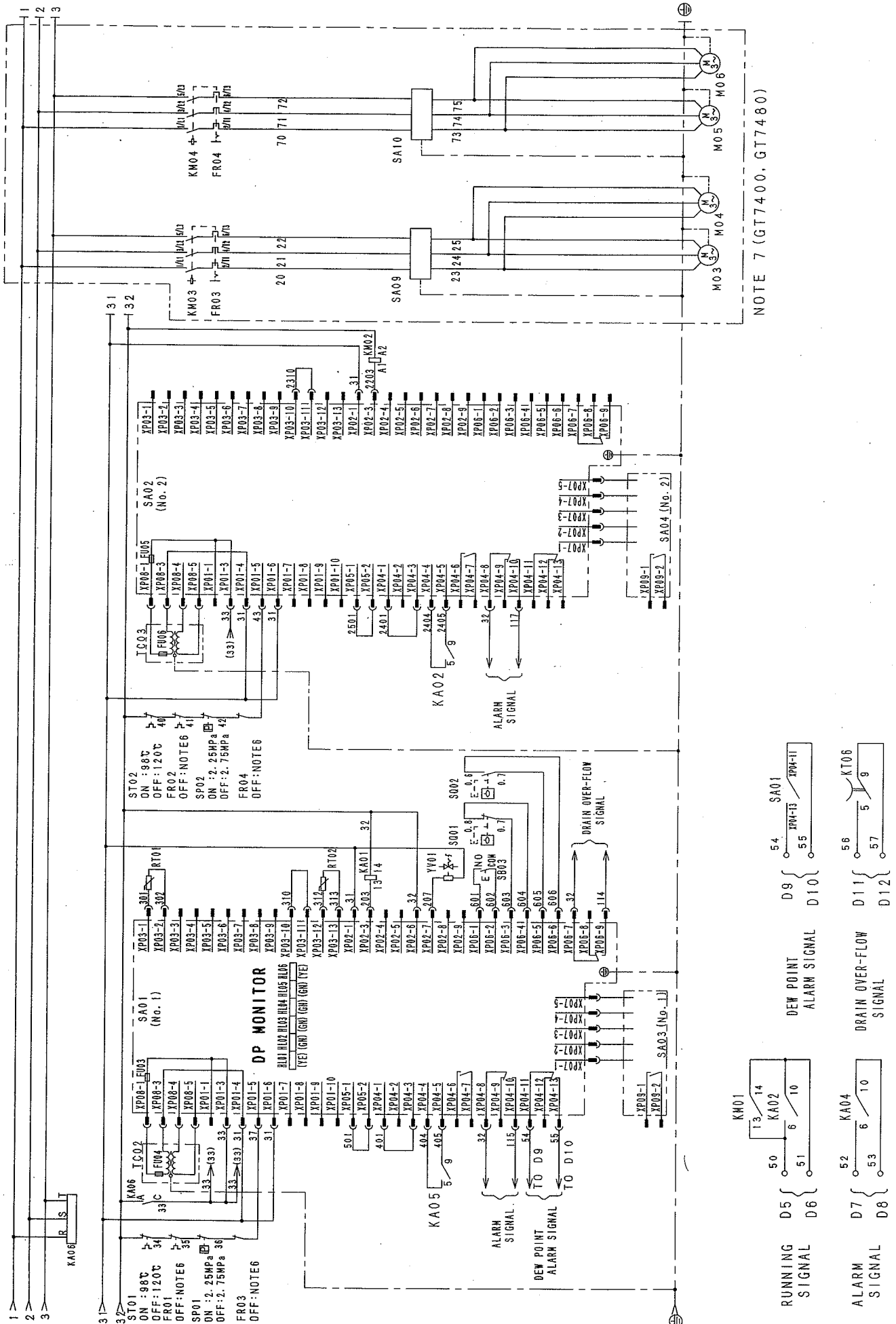
6. Set point for thermal relay. (FR01, 02)

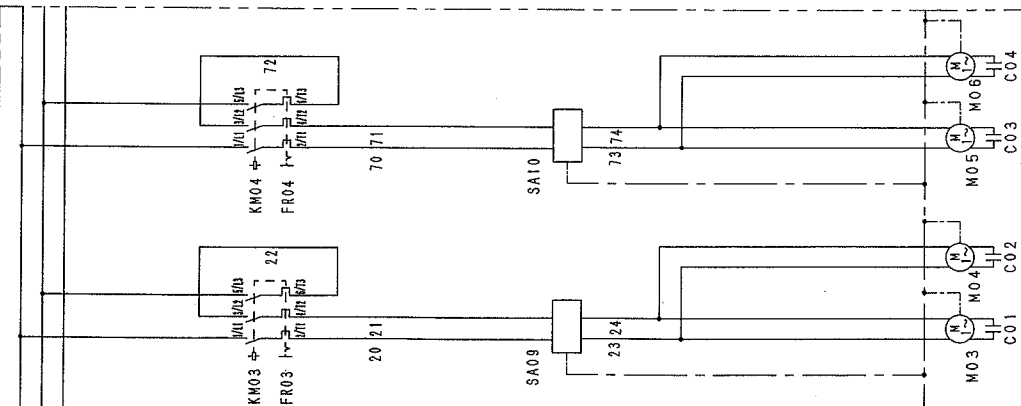
Model No.	Set point	
	FR01	FR02
GT5075	22A	2.4A
GT7150	22A	2.4A
GT7200	27.5A	2.6A
GT7250	34A	3.5A

9.3. GT7300,7400,7480



Discontinue





NOTE 7 (GT7300)

NOTE

1. Remote start terminal D1-D2 and remote stop terminal D3-D4 are momentary no-voltage input. Set up switches SA05 and SA06 as following when the dryer is operated by remote control. SA05:ON, SA06:REMOTE
2. Operation signal, alarm, dew point alarm and drain over flow signal are non-voltage a-contact. (Operation: D5-D6 close, Alarm: D7-D8 close, Dew point alarm: D9-D10 close, Drain over flow: D11-D12 close.) Contact capacity: 125VAC/110VDC, 2A, 62.5VA, 30W
3. Reactivate the dryer immediately after power recovery, if instantaneous power failure is less than 0.5 seconds. Also, reactivate the dryer 3 minutes later after power recovery, if instantaneous power failure is less than 2 seconds.
4. Do not operate while 5 minutes after stop this dryer, because the restart prevention circuit is operated.
5. Do not turn off main power supply and main switch while the dryer is stop, because crank case need to be heated by electric heater.
6. Set point for safety devices

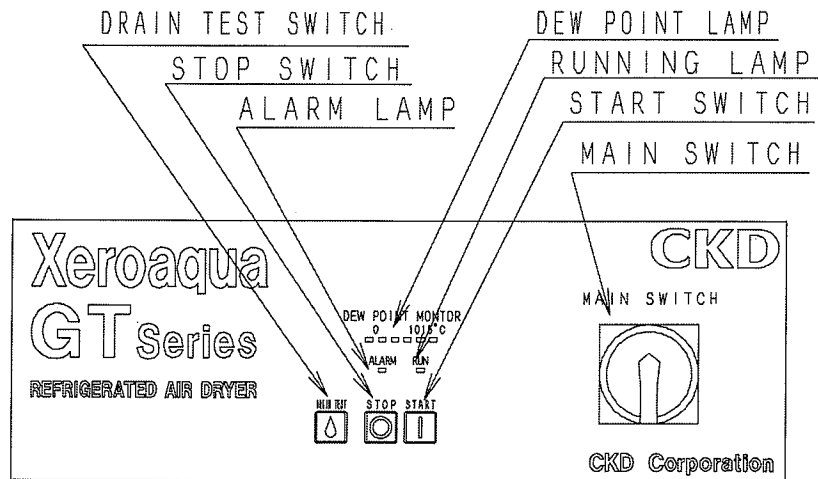
	Set point	
	FR01.02	FR03.04
GT7300	OFF: 22A	OFF: 1.2A
GT7400	OFF: 27.5A	OFF: 1.5A
GT7480	OFF: 34A	OFF: 2.2A

7. It changes with models.

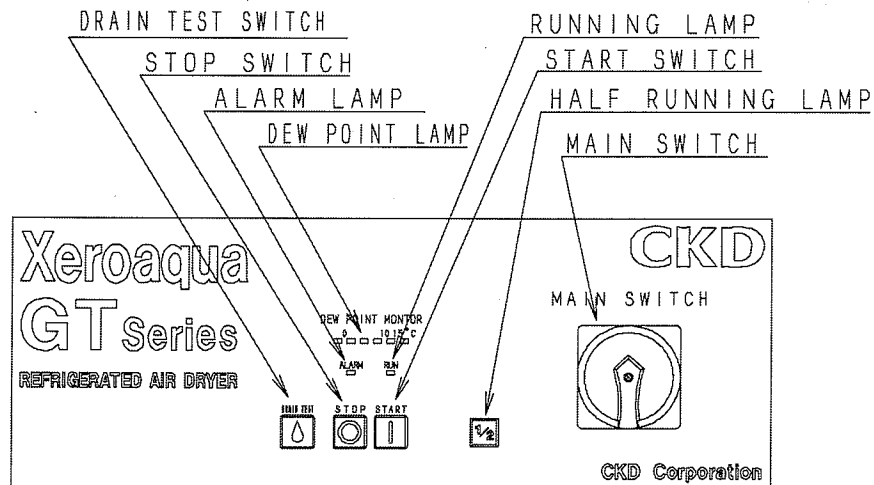
C01-04	RUNNING CAPACITOR	EACH	
FR03.04	THERMAL RELAY	EACH	
KM03.04	ELECTROMAGNETIC CONDUCTOR	EACH	
SM03.10	FAN CONTROLLER	EACH	
M03-06	FAN MOTOR	EACH	
KT04	TIMER (OFF DELAY)	1	3sec
KT03	TIMER (ON DELAY)	1	5min
KM05.06	TIMER (ON DELAY)	EACH	5sec
KT01.07	TIMER (OFF DELAY)	EACH	2sec
KM06	PHASE PROTECTOR	1	
KM1-05	AUXILIARY RELAY	EACH	
YV01	SOLENOID VALVE	1	
SB03	DRAIN TEST SWITCH	1	
SB02	STOP SWITCH	1	
SB01	START SWITCH	1	
SP01.02	HIGH PRESSURE SWITCH	EACH	
ST01.02	INTERNAL THERMO-STAT	EACH	
SA08	No. 2 START/STOP SWITCH	1	
SA07	No. 1 START/STOP SWITCH	1	
SA06	LOCAL-REMOTE CHANGE OVER SWITCH	1	
SA05	MAIN SWITCH	1	
SM03.04	PROTECTIVE BOARD OF MOMENTARY POWER FAILURE	EACH	
SM01.02	MAIN CONTROL BOARD	EACH	
HL01	INDICATING LAMP (ALARM)	1	RED
HL09	INDICATING LAMP (OVER FLOW)	1	YELLOW
HL07.08	INDICATING LAMP (START)	EACH	GREEN
HL06	INDICATING LAMP (DEW POINT)	1	YELLOW
HL02-5	INDICATING LAMP (DEW POINT)	EACH	GREEN
HL01	INDICATING LAMP (DEW POINT)	1	YELLOW
RT02	TEMPERATURE SENSOR	1	INLET AIR TEMP.
RT01	TEMPERATURE SENSOR	1	DEW POINT
FU04.06	TEMPERATURE FUSE	EACH	128°C, 0.5A
FU03.05	FUSE	EACH	0.5A
FU02	FUSE	1	2A
FU01	TEMPERATURE FUSE	1	131°C, 2A
S002	WATER LEVEL SENSOR (OVER FLOW)	1	
S001	WATER LEVEL SENSOR	1	
TC02.03	TRANSFORMER	EACH	100/16V
TC01	TRANSFORMER	1	200/100V
EH01.02	CRANK CASE HEATER	EACH	
FR01.02	THERMAL RELAY	EACH	
KM01.02	ELECTROMAGNETIC CONDUCTOR	EACH	
M01.02	COMPRESSOR MOTOR	EACH	
No	PART	Q'TY	REMARK

10. Operating panel

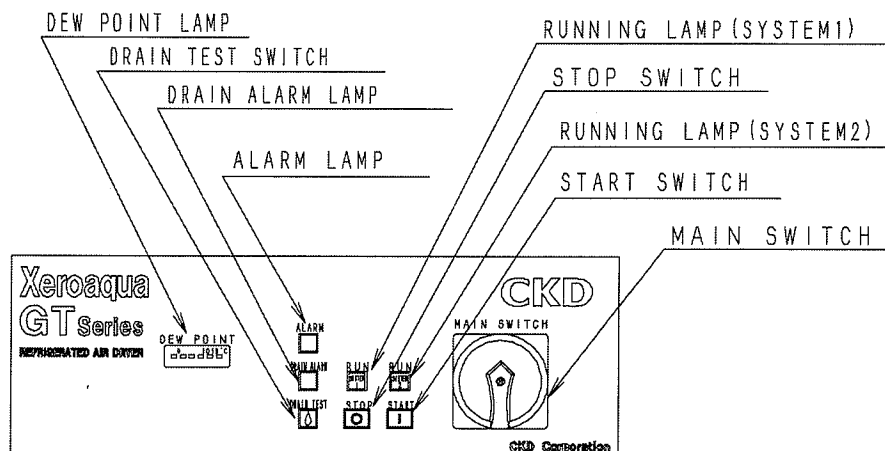
10.1. GT5055,7055,7075,7095,7120



10.2. GT5075,7150,7200,7250

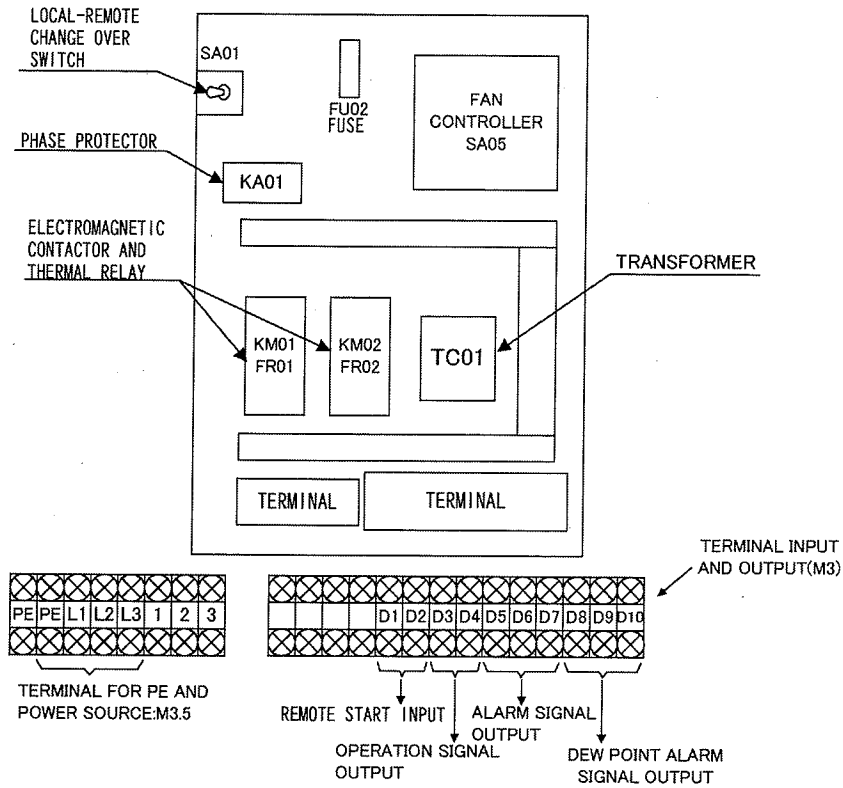


10.3. GT7300,7400,7480

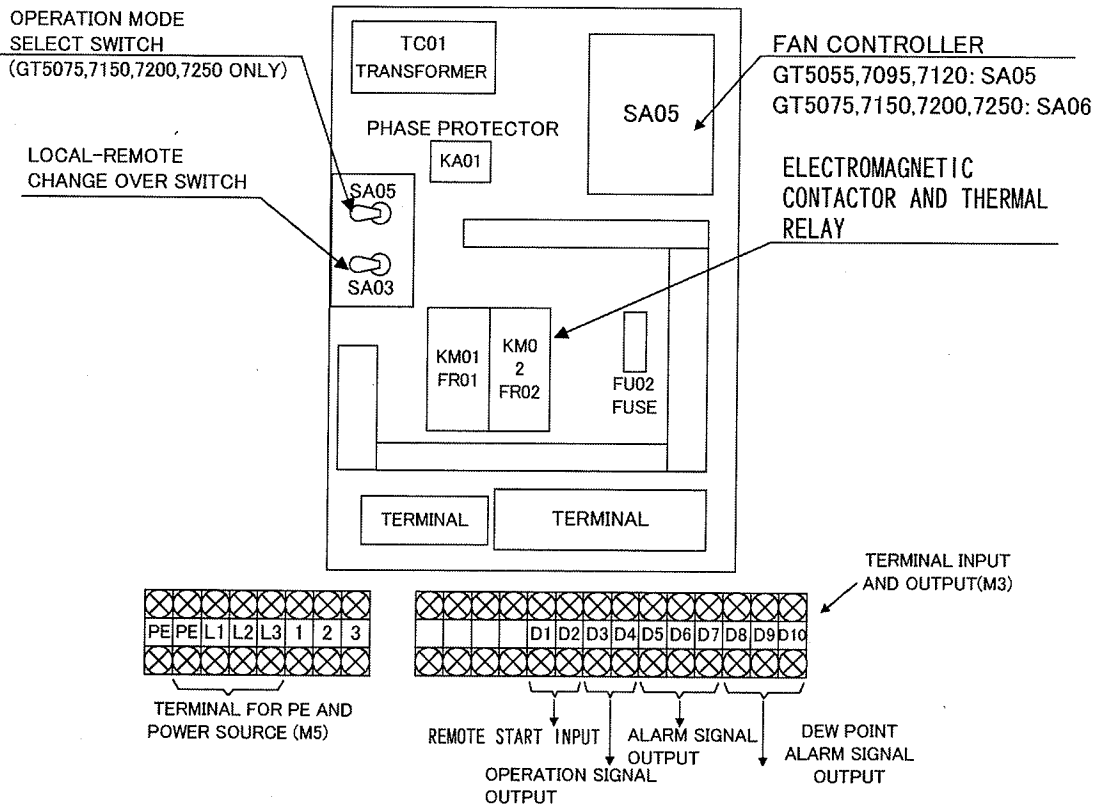


11. Electric box

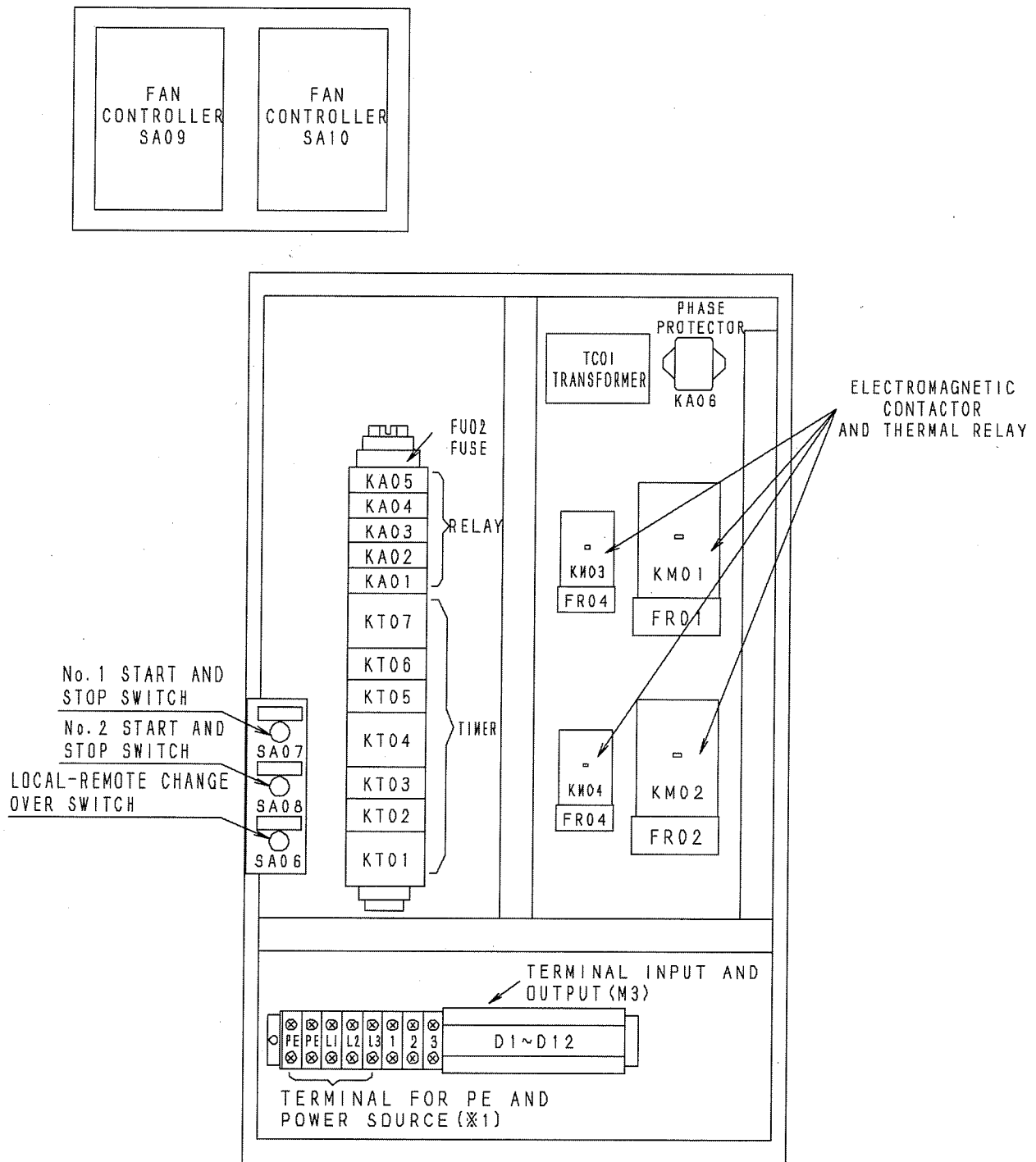
11.1 GT7055,7075



11.2 GT5055,5075,7095,7120,7150,7200,7250



11.3. GT7300,7400,7480

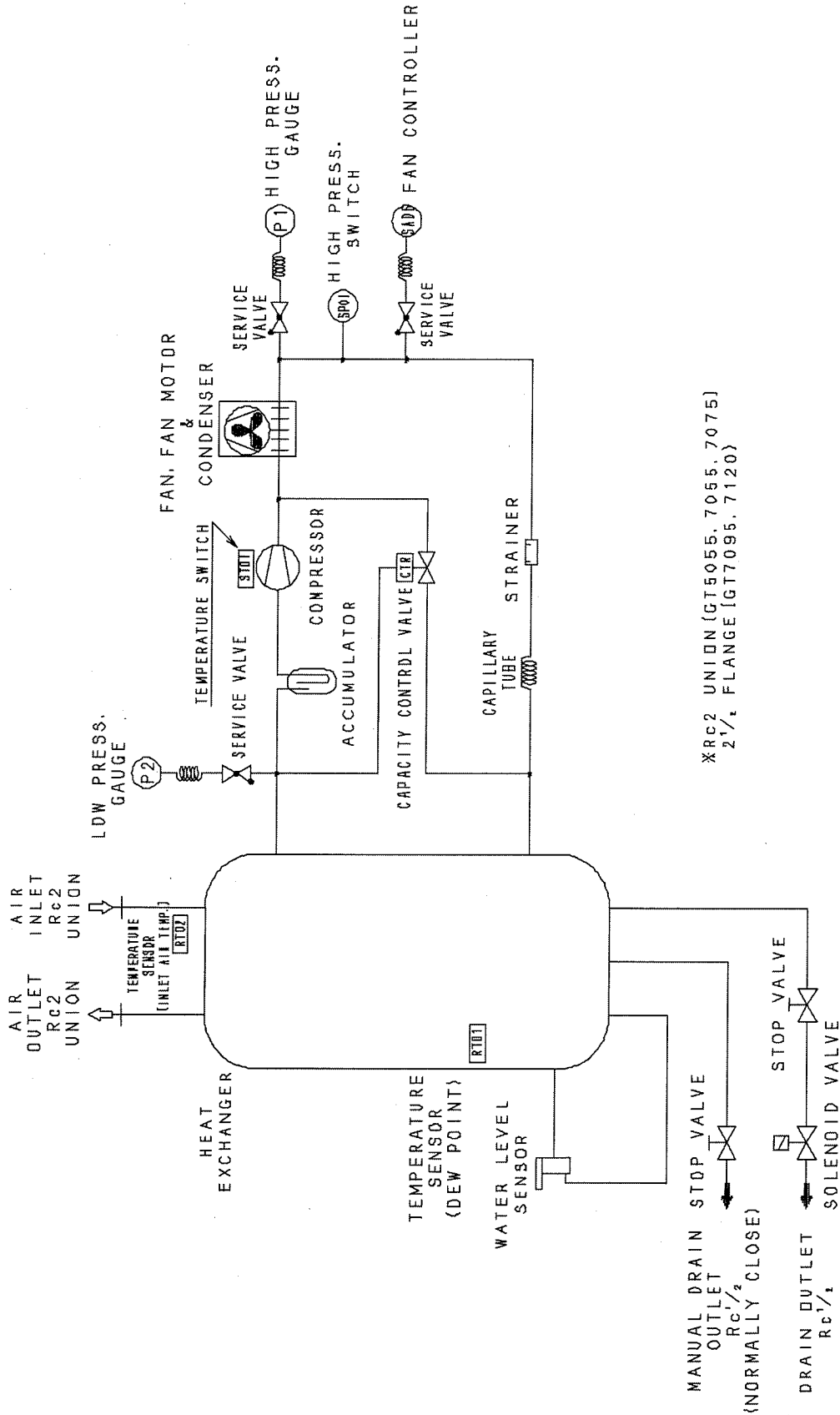


※1
GT7300 : M5
GT7400, 7480 : M6

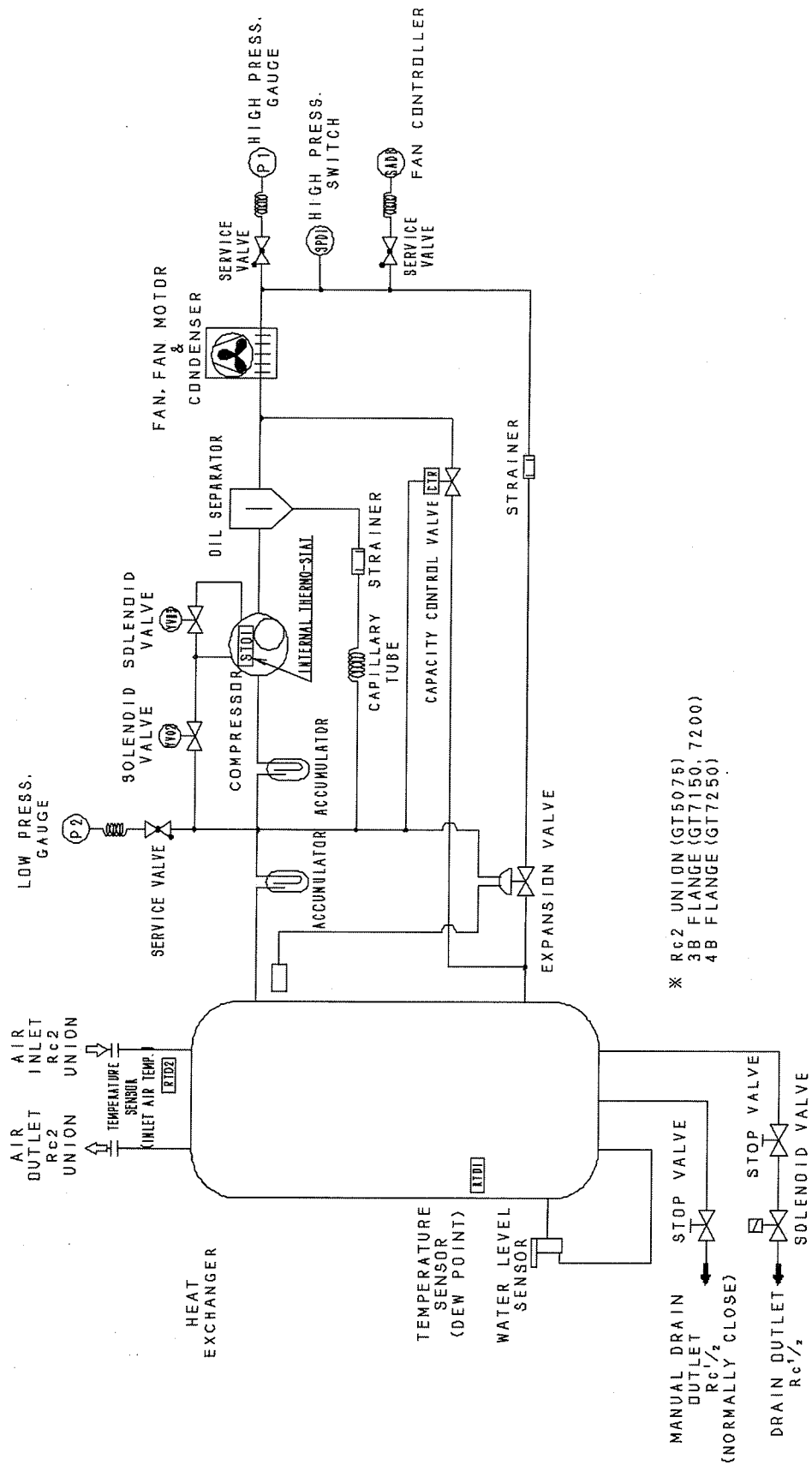
※2
D1-D2 : REMOTE START TERMINAL
D3-D4 : REMOTE STOP TERMINAL
D5-D6 : RUNNING SIGNAL
D7-D8 : ALARM SIGNAL
D9-D10 : DEW POINT ALARM SIGNAL
D11-D12 : DRAIN OVER FLOW SIGNAL

12. Flow chart

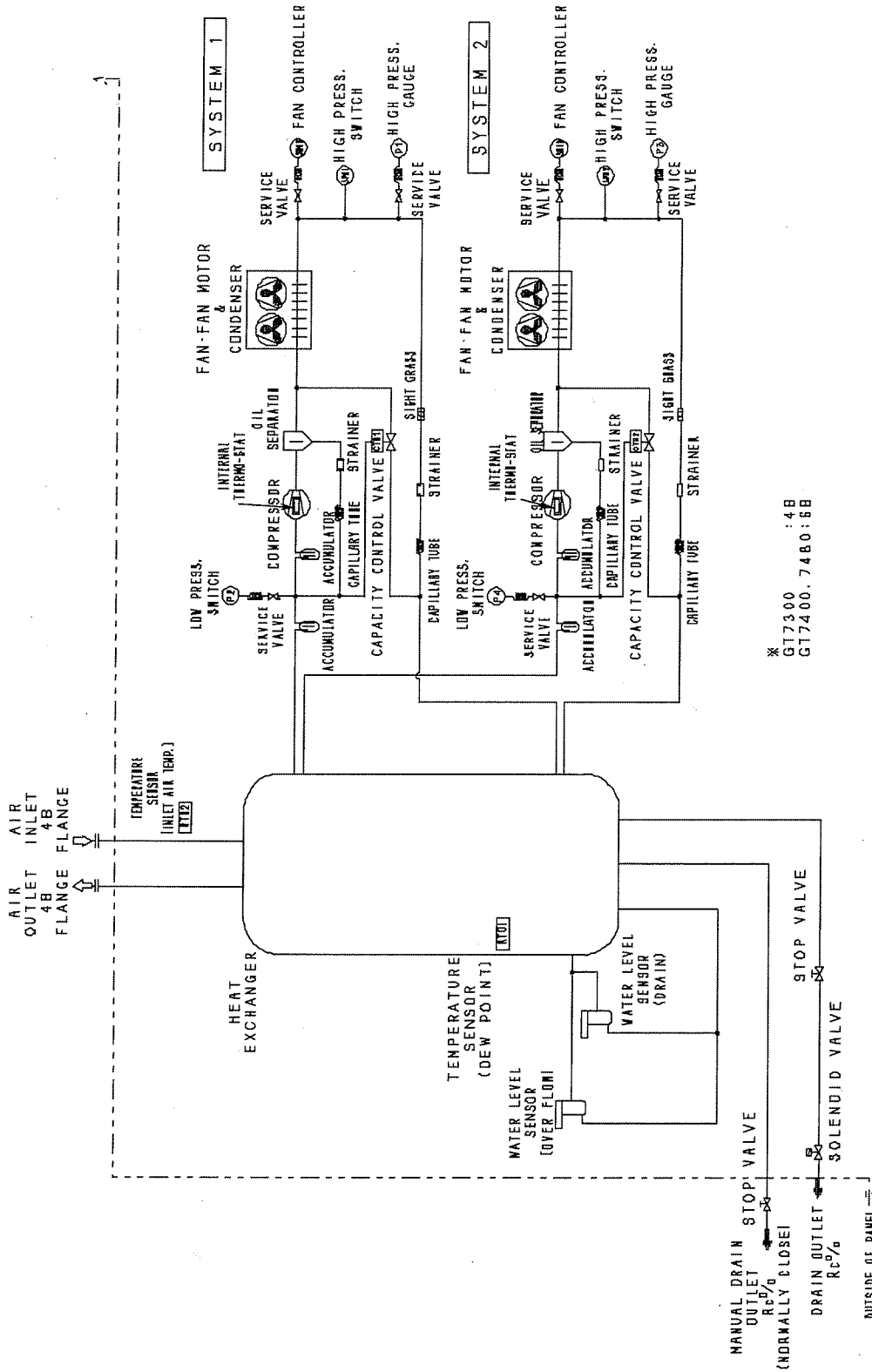
12.1. GT5055,7055,7075,7095,7120



12.2. GT5075,7150,7200,7250



12.3. GT7300,7400,7480



Discontinue

CKD株式会社

北海道

●札幌営業所

〒060-0032 札幌市中央区北 2 条東 14-26(苗穂駅前ビル 1 階)
TEL(011)232-1760 FAX(011)232-9050

東北

●北上営業所

〒024-0034 岩手県北上市諏訪町 2-4-26
TEL(0197)63-4147 FAX(0197)63-4186

●仙台営業所

〒984-0015 仙台市若林区卸町 2-2-1(パックス 2-1 階)
TEL(022)239-1851 FAX(022)239-1856

●山形営業所

〒990-0834 山形県山形市清住町 2-6-24
TEL(023)644-6391 FAX(023)644-7273

●郡山営業所

〒963-8034 福島県郡山市島 1-16-9
TEL(0249)23-6348 FAX(0249)24-0862

北関東

●大宮営業所

〒330-0812 さいたま市北区宮原町 3-429-1(第一清水ビル 2 階)
TEL(048)652-3811 FAX(048)652-3816

●茨城営業所

〒300-0847 茨城県土浦市卸町 1-1-1(関鉄つくばビル 4 階 C)
TEL(029)841-7490 FAX(029)841-7495

●宇都宮営業所

〒321-0953 栃木県宇都宮市東宿郷 3-1-7(NBF 宇都宮ビル 3 階)
TEL(028)638-5770 FAX(028)638-5790

●太田営業所

〒373-0813 群馬県太田市内ヶ島町 946-2(大機総合ビル 1 階)
TEL(0276)45-8935 FAX(0276)46-5628

南関東

●東京営業所

〒105-0013 東京都港区浜松 1-31-1(文化放送メディアプラス 4 階)
TEL(03)5402-3628 FAX(03)5402-0122

●立川営業所

〒190-0022 東京都立川市錦町 3-2-30(朝日生命立川ビル 3 階)
TEL(042)527-3773 FAX(042)527-3782

●千葉営業所

〒260-0021 千葉県中央区新宿 2-5-19(千葉南ビル 3 階)
TEL(043)248-2815 FAX(043)248-2818

●横浜営業所

〒222-0033 横浜港北地区新横浜 2-17-19(日経第 15 ビル 4 階)
TEL(045)475-3471 FAX(045)475-3470

●厚木営業所

〒243-0035 神奈川県厚木市愛甲 1212-3
TEL(046)226-5201 FAX(046)226-5208

●甲府営業所

〒409-3867 山梨県中巨摩郡昭和町清水新居 1509
TEL(055)224-5256 FAX(055)224-3540

●東京支店

〒105-0013 東京都港区浜松 1-31-1(文化放送メディアプラス 4 階)
TEL(03)5402-3620 FAX(03)5402-0120

北陸・信越

●長岡営業所

〒940-0088 新潟県長岡市柏町 1-4-33(高野不動産ビル 2 階)
TEL(0258)33-5446 FAX(0258)33-5381

●上田営業所

〒386-0034 長野県上田市大字中之条 323-6(NF ビル 103 号)
TEL(0268)24-2392 FAX(0268)24-2394

●松本営業所

〒399-0033 長野県松本市大字笹賀 5945
TEL(0263)25-0711 FAX(0263)25-1334

●富山営業所

〒939-8064 富山県富山市赤田中町 494-1
TEL(076)421-7828 FAX(076)421-8402

●金沢営業所

〒920-0025 石川県金沢市駅西本町 3-16-8
TEL(076)262-8491 FAX(076)262-8493

東海

●名古屋営業所

〒485-8551 愛知県小牧市応時 2-250
TEL(0568)74-1371 FAX(0568)77-3291

●豊田営業所

〒473-0912 愛知県豊田市広田町広田 103
TEL(0565)54-4771 FAX(0565)54-4755

●静岡営業所

〒422-8035 静岡県静岡市駿河区宮竹 1-3-5
TEL(054)237-4424 FAX(054)237-1945

●浜松営業所

〒453-0016 静岡県浜松市和田町 438
TEL(053)463-3021 FAX(053)463-4910

●四日市営業所

〒510-0064 三重県四日市市新正 5-3-20
TEL(0593)51-3151 FAX(0593)51-6788

●名古屋支店

〒485-8551 愛知県小牧市応時 2-250
TEL(0568)74-1356 FAX(0568)77-3317

関西

●大阪営業所

〒542-0073 大阪市中央区日本橋 1-17-17(銀泉 日本一ビル)
TEL(06)6635-2773 FAX(06)6643-5950

●大阪東営業所

〒577-0083 大阪府守口市京阪本通 1-2-3
(損保ジャパン守口ビル 6 階)
TEL(06)4250-6333 FAX(06)6991-7477

●堺営業所

〒591-8021 大阪府堺市新金岡町 5-5-6(泉マンション 1 階)
TEL(072)253-0071 FAX(072)253-0054

●滋賀営業所

〒524-0033 滋賀県守山市浮気町字中ノ町 300-21(第 2 小島ビル 4 階)
TEL(077)514-2650 FAX(077)583-4198

●京都営業所

〒612-8414 京都市伏見区竹田段川原町 35-3
TEL(075)645-1130 FAX(075)645-4747

●奈良営業所

〒639-1123 奈良県大和郡山田町 480-15(オアシス・ロジナ 1 階)
TEL(0743)57-6831 FAX(0743)57-6821

●神戸営業所

〒673-0016 兵庫県明石市松の内 2-6-8(西明石スポーツビル 3 階)
TEL(078)923-2121 FAX(078)923-0212

●大阪支店

〒542-0073 大阪市中央区日本橋 1-17-17(銀泉 日本一ビル)
TEL(06)6635-2765 FAX(06)6643-5015

中国

●広島営業所

〒730-0022 広島市中区銀山町 3-1(ひろしまハイビル 21 12 階)
TEL(082)545-5125 FAX(082)244-2010

●岡山営業所

〒700-0916 岡山県岡山市西之町 10-104
TEL(086)244-3433 FAX(086)241-8872

●山口営業所

〒747-0034 山口県防府市天神 2-2-2
TEL(0835)38-3556 FAX(0835)22-6371

四国

●高松営業所

〒760-0055 香川県高松市観光通 2-2-15(ダイヤビル)
TEL(087)834-9640 FAX(087)834-9633

●松山営業所

〒790-0053 愛媛県松山市竹原 2-1-33(サンライト竹原 1 階)
TEL(089)931-6135 FAX(089)931-6139

九州

●北九州営業所

〒802-0976 北九州市小倉南区南方 5-13-34
TEL(093)964-0785 FAX(093)964-0910

●福岡営業所

〒812-0013 福岡市博多区博多駅東 1-10-2(アステア博多ビル 5 階)
TEL(092)473-7136 FAX(092)473-5540

●大分営業所

〒871-0015 大分県中津市牛神町 1-11-1
TEL(0979)26-0725 FAX(0979)23-6866

●熊本営業所

〒869-1103 熊本県菊池郡菊陽町久保田 2799-13
TEL(096)340-2580 FAX(096)340-2584

本社

●本社・工場

〒485-8551 愛知県小牧市応時 2-250
TEL(0568)77-1111 FAX(0568)77-1123

●営業本部

〒485-8551 愛知県小牧市応時 2-250
TEL(0568)74-1303 FAX(0568)77-3410

●海外営業部

〒485-8551 愛知県小牧市応時 2-250
TEL(0568)74-1338 FAX(0568)77-3461

CKD Corporation

□ 2-250 Uji Komaki, Aichi 485-8551, Japan
□ PHONE +81-(0)568-74-1336 FAX +81-(0)568-77-3412

U.S.A

CKD USA CORPORATION

●HEADQUARTERS

4080 Winnetka Avenue, Rolling Meadows, IL 60008 USA
PHONE +1-847-368-0539 FAX +1-847-788-0575

●CINCINNATI OFFICE

●SAN ANTONIO OFFICE

●SAN JOSE OFFICE

Europe

CKD EUROPE BRANCH

De Fruittuinen 28 Hoofddorp 2132NZ The Netherlands
PHONE +31-(0)23-5541490 FAX +31-(0)23-5541491

Malaysia

M-CKD PRECISION SDN.BHD.

●HEADQUARTERS

Lot No.6, Jalan Modal 23/2, Seksyen 23, Kawasan, MIEL,
Fasa 8, 40300 Shah Alam, Selangor Darul Ehsan, Malaysia
PHONE +60-(0)3-5541-1468 FAX +60-(0)3-5541-1533

●JOHOR BAHRU OFFICE

●MELAKA OFFICE

●PENANG OFFICE

Thailand

CKD THAI CORPORATION LTD.

●SALES HEADQUARTERS-BANGKOK OFFICE

Suwan Tower, 14/1 Soi Saladaeng 1, North Sathorn Rd., Bangkok,
Bangkok 10500 Thailand
PHONE +66-(0)2-267-6300 FAX +66-(0)2-267-6305

●LAEMCHABANG OFFICE

●NAVANAKORN OFFICE

●RAYONG OFFICE

●LAMPHUN OFFICE

●KORAT OFFICE

●AMATANAKORN OFFICE

Singapore

CKD SINGAPORE PTE LTD.

705 Sims Drive #03-01/02, Shun Li Industrial Complex,
387384 Singapore
PHONE +65-6744-2623 FAX +65-6744-2486

Taiwan

日商喜開理 有限公司台湾分公司

CKD CORPORATION TAIWAN BRANCH

中華民國台灣省台北市中山北路二段 96 號嘉新大樓第 14 樓 1405 室
Rm.1405, 14F, No.96, Sec.2, Chung Shan N.Rd., Taipei, Taiwan, R.O.C
PHONE +886-(0)2-2523-0374 FAX +886-(0)2-2523-5081

China

喜開理(上海)機器有限公司

CKD(SHANGHAI) CORPORATION

●営業部/上海事務所

(SALES HEADQUARTERS / SHANGHAI OFFICE)

中国上海市黄浦区九江路 333 号金融广场 19 楼 1903 室

Room 1903, 333 Jiujiang Road, Shanghai, 200001, China

PHONE +86-(0)21-63602277 FAX +86-(0)21-63511661

●無錫事務所(WUXI OFFICE)

●南京事務所(NANJING OFFICE)

●杭州事務所(HANGZHOU OFFICE)

●武漢事務所(WUHAN OFFICE)

●青島事務所(QINGDAO OFFICE)

●蘇州事務所(SUZHOU OFFICE)

●北京事務所(BEIJING OFFICE)

●天津事務所(TIANJING OFFICE)

●長春事務所(CHANG CHUN OFFICE)

●大連事務所(DALIAN OFFICE)

●瀋陽事務所(SHENYANG OFFICE)

●西安事務所(XIAN OFFICE)

●重慶事務所(CHONGQING OFFICE)

●成都事務所(CHENGDU OFFICE)

●広州事務所(GUANGZHOU OFFICE)

●深圳事務所(SHENZHEN OFFICE)

Korea

CKD KOREA CORPORATION

Room No.1105, 11th FL, The Korea Teachers Pension B/L 27-2,

Yoido-Dong, Youngdeungpo-Gu, Seoul, 150-742, Korea

PHONE +82-(0)2-783-5201~5203 FAX +82-(0)2-783-5204