

INSTRUCTION MANUAL

REFRIGERATED COMPRESSED AIR DRYER Xeroaqua GX Series

GX3108, GX3111, GX3115, GX3122,
GX3137
GX5103, GX5104, GX5106, GX5108,
GX5111, GX5115, GX5122, GX5137

Operation manual for option

- This instruction manual is for option, read together with attached manual (SM-366338-A).
- Please read this instruction manual carefully before using this product, particularly the section describing safety.
- Retain this instruction manual with the product for further consultation whenever necessary.



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.

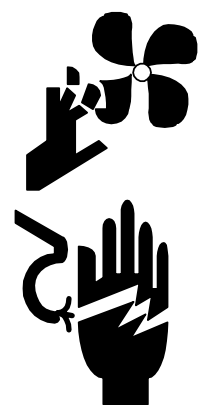
- Be sure to turn off the power before inspection.



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 industrial. Be sure to fully attend to using the dryer.

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1 . Introduction

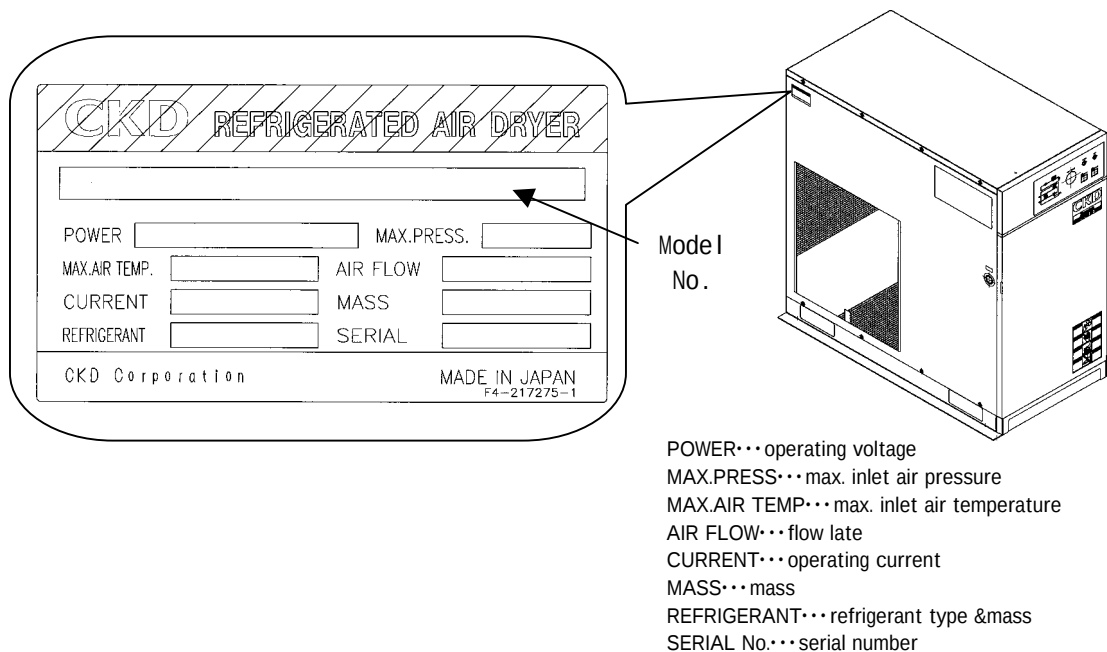
Thank you very much for purchasing CKD Product.

This manual explains basic points of installation, operation, etc. to have our refrigerated air dryer, Xeroaqua GX Series perform at their best. Be sure to read this manual before using your dryer. Keep this manual together with the dryer.

2 . Installation

2.1 Confirm the following.

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



- 2) Option mark

G X O O O O - O - A C O O O V



G : Optional voltage

H : English documentation

M1 : Operation signal output (GX3108,GX5103,5104,5106,5108)

M : Remote control & operation/fault signal output
 (GX3111,3115,3122,3137,GX5111,5115,5122,5137)

N1 : Copper tube rust proof coating

Y2 : Product photo

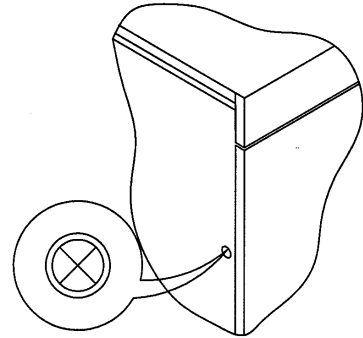


[Caution] If the contents are not clear or there are any questions, please contact CKD or distributors before using the dryer.

2.2 Electrical wiring

- 1) Supply voltage should be within $\pm 10\%$ of optional voltage.
- 2) Mount an earth leakage breaker with over-load protection that has 30mA sensitivity current on the power supply line.
- 3) Connect for power supply.

- Make a hole for wiring on the rubber bushing at the upper back part of the dryer.



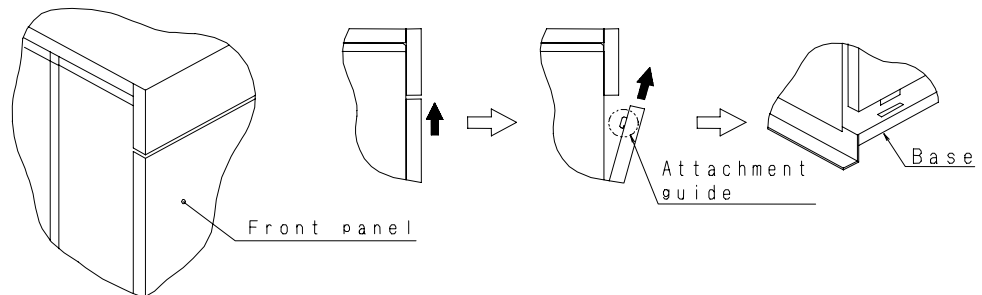
- Remove the front panel.

Procedure

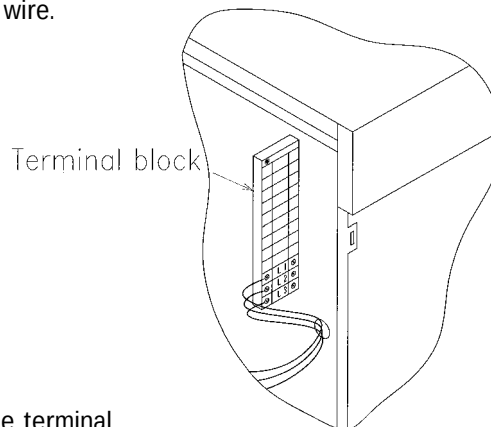
The front panel is lifted upwards.

The attachment guide is removed from the right-and-left side panel.

The front panel is lifted upwards and it extracts from the plug part of the base.



- Connect the terminal block L1, L2,(L1,L2,L3 if three phase type), and the earth leakage breaker by wire.



- Use round ring-style terminal.
- Two cored required for single phase type, and three cored required for three phase type.
- Power cord (with plug) is attached to AC100V model.

[CAUTION]

- 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.

4) How to connect earth wire

- As power supply code connection, connect the earth wire to the terminal box PE and the earth terminal in the panel.(The D sort grounding construction by the electric construction contractor is required.)

⚠【CAUTION】Do not connect the earth wire to a water pipe, gas pipe, lightning conductor, etc.

3 . Option

3.1 Optional voltage (Option mark : G)

It becomes the specified power supply voltage.

- 1) Voltage must be within $\pm 10\%$ of rated voltage.
- 2) Mount an earth leakage bleaker with over load protection (sensitivity current 30mA or less) to power supply.

3.2 English documentation (Option mark : H)

This option provides the nameplates and instruction manuals written in English.

3.3 Copper tube rust proof coating (Option mark : N1)

This option provides painting on copper pipes to improve corrosion resisting performance.

3.4 Product photo (Option mark : Y2)

This option provides photos of the finish product together with the panel on which the construction and contractor names are identified.

3.5 Operation signal output (Option mark : M1)

< Model : GX3108,GX5103,5104,5106,5108 >

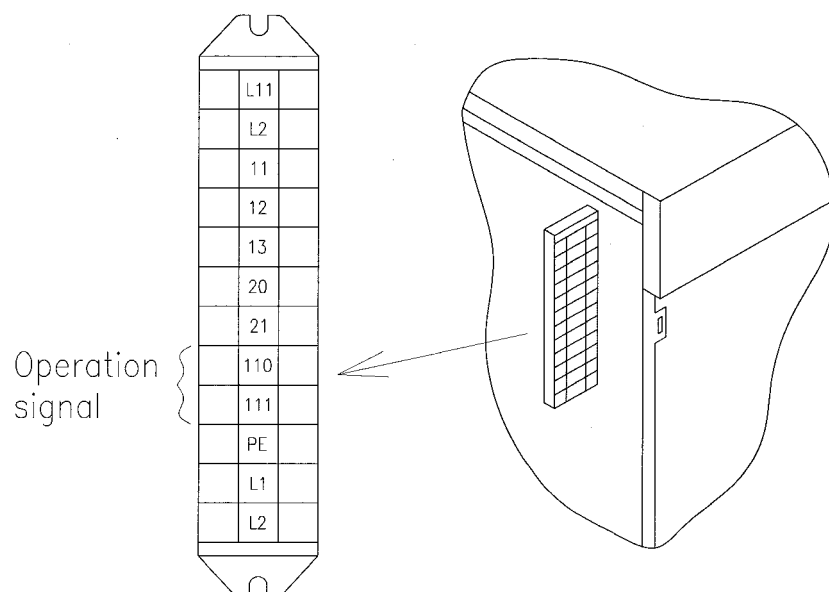
Operation signal is outputted.

Operation signal : non-voltage a-contact (running : 110-111 close)

Contact capacity : AC250V,10A/DC125V,10A resistance load.

When remote control would be needed, start-stop switch (SW01) turns on and control by power supply supplement.

⚠【CAUTION】Don't use small direct current for contact.



3.6 Remote control & operation/fault signal output(Option mark : M)

< Model : GX3111,GX3115,3122,3137,GX5111,5115,5122,5137 >

Remote control and operation, alarm, dew point alarm is outputted.

1) Remote control

Select remote on the Local-Remote switch (SA03).

Operation is non-voltage a-contact between D1 and D2.

(Running : D1-D2 close)

⚠ [CAUTION]

- Must not operate Local-Remote switch during operation.
Abnormal stop may be caused.
- When remote switch is selected, operation is impossible to use operation panel.

2) Operation, Alarm, Dew point alarm output

Operation signal : non-voltage a-contact (Running : D3-D4 close)

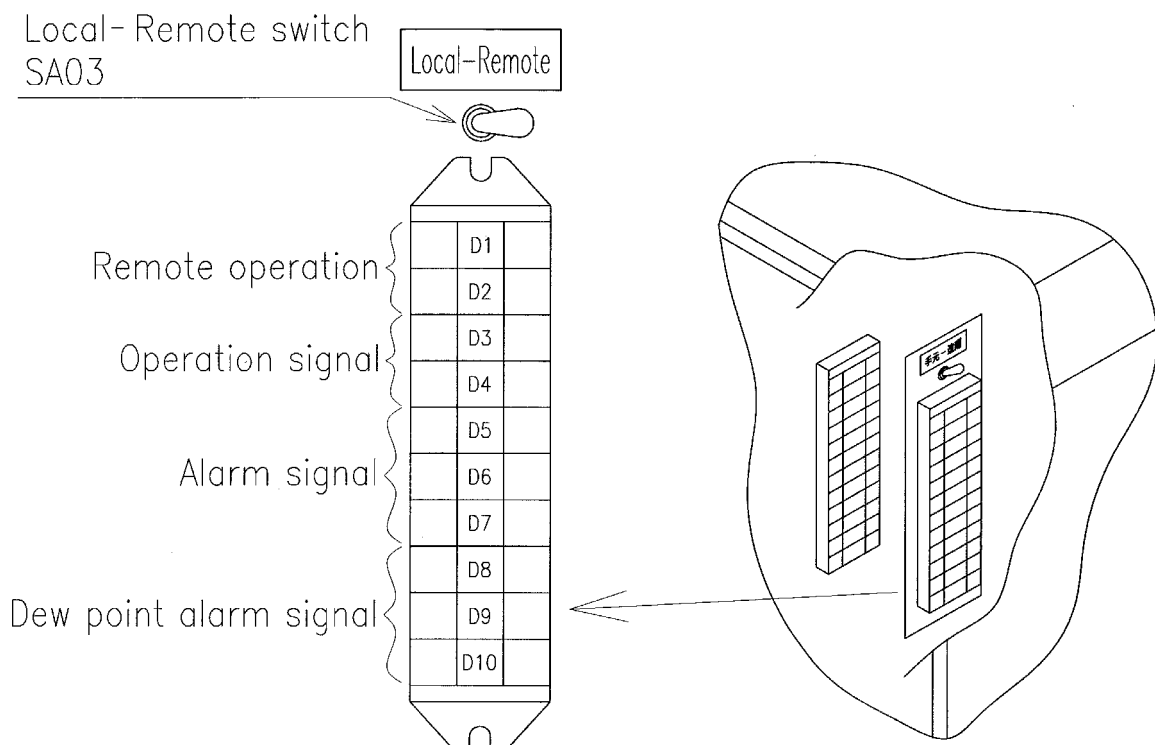
Alarm signal : non-voltage c-contact (Alarm : D5-D7 close)

Dew point alarm signal : non-voltage c-contact (Dew point alarm : D8-D10 close)

Contact capacity : AC125V,0.5A/DC30V,1A resistance load

⚠ [CAUTION]

- Even if dew point signal is outputted, dryer does not stop.
- Don't use small direct current for contact.



4 . Specifications

These are specifications about optional voltage.

Refer to standard instruction manual about other specifications.

< GX3108 - G - AC V >

Voltage (single phase)	Operating current (A)		Starting current (A)		Recommendation breaker capacity (A)	Mass (kg)
	50Hz	60Hz	50Hz	60Hz		
AC-V						
115	4.1	4.5	16.1	14.9	10	44
127	3.7	4.1	14.6	13.5	10	52
220	2.3	2.4	9.2	8.5	5	44
230	2.2	2.3	8.8	8.1	5	44
240	2.1	2.2	8.4	7.8	5	44
380	1.3	1.4	5.3	4.9	5	52
400	1.3	1.3	5.0	4.7	5	52
415	1.2	1.3	4.9	4.5	5	52
440	1.1	1.2	4.6	4.2	5	52
460	1.1	1.1	4.4	4.1	5	52
480	1.1	1.1	4.2	3.9	5	52

< GX3111 - G - AC V >

Voltage (single phase)	Operating current (A)		Starting current (A)		Recommendation breaker capacity (A)	Mass (kg)
	50Hz	60Hz	50Hz	60Hz		
AC-V						
220	6.2	6.4	25.5	23.4	15	70
230	5.9	6.1	24.4	22.4	15	71
240	5.7	5.9	23.4	21.4	15	72
380	3.6	3.7	14.8	13.5	10	79
400	3.4	3.5	14.0	12.9	10	79
415	3.3	3.4	13.5	12.4	10	80
440	3.1	3.2	12.7	11.7	10	80
460	3.0	3.1	12.2	11.2	10	81
480	2.8	2.9	11.7	10.7	10	81

< GX3115 - G - AC V >

Voltage (single phase)	Operating current (A)		Starting current (A)		Recommendation breaker capacity (A)	Mass (kg)
	50Hz	60Hz	50Hz	60Hz		
AC-V						
220	6.3	6.5	25.5	23.4	15	70
230	6.0	6.2	24.4	22.4	15	71
240	5.8	6.0	23.4	21.4	15	72
380	3.6	3.8	14.8	13.5	10	79
400	3.5	3.6	14.0	12.9	10	79
415	3.3	3.4	13.5	12.4	10	80
440	3.2	3.2	12.7	11.7	10	80
460	3.0	3.1	12.2	11.2	10	81
480	2.9	3.0	11.7	10.7	10	81

Discontinue

< GX 3 1 2 2 - G - AC V >

Voltage (single phase)	Operating current (A)		Starting current (A)		Recommendation breaker capacity	Mass
AC-V	50Hz	60Hz	50Hz	60Hz	(A)	(kg)
220	6.4	6.7	25.5	23.4	15	88
230	6.1	6.4	24.4	22.4	15	89
240	5.9	6.1	23.4	21.4	15	90
380	3.7	3.9	14.8	13.5	10	97
400	3.5	3.7	14.0	12.9	10	97
415	3.4	3.5	13.5	12.4	10	98
440	3.2	3.3	12.7	11.7	10	98
460	3.1	3.2	12.2	11.2	10	99
480	2.9	3.1	11.7	10.7	10	99

< GX 3 1 3 7 - G - AC V >

Voltage (three phase)	Operating current (A)		Starting current (A)		Recommendation breaker capacity	Mass
AC-V	50Hz	60Hz	50Hz	60Hz	(A)	(kg)
220	5.2	5.7	26.5	23.6	15	112
230	4.9	5.5	25.4	22.6	15	117
240	4.7	5.3	24.3	21.6	15	117
380	3.0	3.3	15.4	13.7	10	127
400	2.8	3.2	14.6	13.0	10	127
415	2.7	3.0	14.1	12.5	10	137
440	2.6	2.9	13.3	11.8	10	137
460	2.5	2.7	12.7	11.3	10	137
480	2.4	2.6	12.2	10.8	10	137

Discontinue

< GX 5 1 0 3 - G - AC V >

Voltage (single phase)	Operating current (A)		Starting current (A)		Recommendation breaker capacity (A)	Mass (kg)
	50Hz	60Hz	50Hz	60Hz		
AC-V						
115	2.9	2.5	7.9	7.4	5	30
127	2.6	2.2	7.1	6.7	5	30
220	1.3	1.2	3.9	3.6	5	30
230	1.3	1.2	3.7	3.5	5	30
240	1.2	1.1	3.6	3.3	5	30
380	0.8	0.7	2.3	2.1	5	33
400	0.7	0.7	2.2	2.0	5	33
415	0.7	0.7	2.1	1.9	5	33
440	0.7	0.6	2.0	1.8	5	33
460	0.6	0.6	1.9	1.7	5	33
480	0.6	0.6	1.8	1.7	5	33

< GX 5 1 0 4 - G - AC V >

Voltage (single phase)	Operating current (A)		Starting current (A)		Recommendation breaker capacity (A)	Mass (kg)
	50Hz	60Hz	50Hz	60Hz		
AC-V						
115	2.9	2.6	7.9	7.4	5	30
127	2.6	2.3	7.1	6.7	5	30
220	1.3	1.3	3.9	3.6	5	30
230	1.3	1.3	3.7	3.5	5	30
240	1.2	1.2	3.6	3.3	5	30
380	0.8	0.8	2.3	2.1	5	33
400	0.7	0.7	2.2	2.0	5	33
415	0.7	0.7	2.1	1.9	5	33
440	0.7	0.7	2.0	1.8	5	33
460	0.6	0.6	1.9	1.7	5	33
480	0.6	0.6	1.8	1.7	5	33

< GX 5 1 0 6 - G - AC V >

Voltage (single phase)	Operating current (A)		Starting current (A)		Recommendation breaker capacity (A)	Mass (kg)
	50Hz	60Hz	50Hz	60Hz		
AC-V						
115	4.3	4.6	16.1	14.9	10	44
127	3.9	4.1	14.6	13.5	10	52
220	2.3	2.3	9.2	8.5	5	44
230	2.2	2.2	8.8	8.1	5	44
240	2.1	2.1	8.4	7.8	5	44
380	1.3	1.3	5.3	4.9	5	52
400	1.3	1.3	5.0	4.7	5	52
415	1.2	1.2	4.9	4.5	5	52
440	1.1	1.1	4.6	4.2	5	52
460	1.1	1.1	4.4	4.1	5	52
480	1.1	1.1	4.2	3.9	5	52

Discontinue

< GX 5 1 0 8 - G - AC V >

Voltage (single phase)	Operating current (A)		Starting current (A)		Recommendation breaker capacity	Mass
AC-V	50Hz	60Hz	50Hz	60Hz	(A)	(kg)
115	4.3	4.6	16.1	14.9	10	44
127	3.9	4.1	14.6	13.5	10	52
220	2.3	2.4	9.2	8.5	5	44
230	2.2	2.3	8.8	8.1	5	44
240	2.1	2.2	8.4	7.8	5	44
380	1.3	1.4	5.3	4.9	5	52
400	1.3	1.3	5.0	4.7	5	52
415	1.2	1.3	4.9	4.5	5	52
440	1.1	1.2	4.6	4.2	5	52
460	1.1	1.1	4.4	4.1	5	52
480	1.1	1.1	4.2	3.9	5	52

< GX 5 1 1 1 - G - AC V >

Voltage (single phase)	Operating current (A)		Starting current (A)		Recommendation breaker capacity	Mass
AC-V	50Hz	60Hz	50Hz	60Hz	(A)	(kg)
220	6.4	6.7	25.5	23.4	15	70
230	6.1	6.4	24.4	22.4	15	71
240	5.9	6.1	23.4	21.4	15	72
380	3.7	3.9	14.8	13.5	10	79
400	3.5	3.7	14.0	12.9	10	79
415	3.4	3.5	13.5	12.4	10	80
440	3.2	3.3	12.7	11.7	10	80
460	3.1	3.2	12.2	11.2	10	81
480	2.9	3.1	11.7	10.7	10	81

< GX 5 1 1 5 - G - AC V >

Voltage (three phase)	Operating current (A)		Starting current (A)		Recommendation breaker capacity	Mass
AC-V	50Hz	60Hz	50Hz	60Hz	(A)	(kg)
220	5.6	6.2	26.5	23.6	15	86
230	5.4	5.9	25.4	22.6	15	91
240	5.2	5.7	24.3	21.6	15	91
380	3.3	3.6	15.4	13.7	10	101
400	3.1	3.4	14.6	13.0	10	101
415	3.0	3.3	14.1	12.5	10	111
440	2.8	3.1	13.3	11.8	10	111
460	2.7	3.0	12.7	11.3	10	111
480	2.6	2.8	12.2	10.8	10	111

< GX 5 1 2 2 - G - AC V >

Voltage (three phase)	Operating current (A)		Starting current (A)		Recommendation breaker capacity	Mass
AC-V	50Hz	60Hz	50Hz	60Hz	(A)	(kg)
220	5.3	5.9	26.5	23.6	15	112
230	5.1	5.7	25.4	22.6	15	117
240	4.9	5.4	24.3	21.6	15	117
380	3.1	3.4	15.4	13.7	10	127
400	2.9	3.3	14.6	13.0	10	127
415	2.8	3.1	14.1	12.5	10	137
440	2.7	3.0	13.3	11.8	10	137
460	2.6	2.8	12.7	11.3	10	137
480	2.5	2.7	12.2	10.8	10	137

< GX 5 1 3 7 - G - AC V >

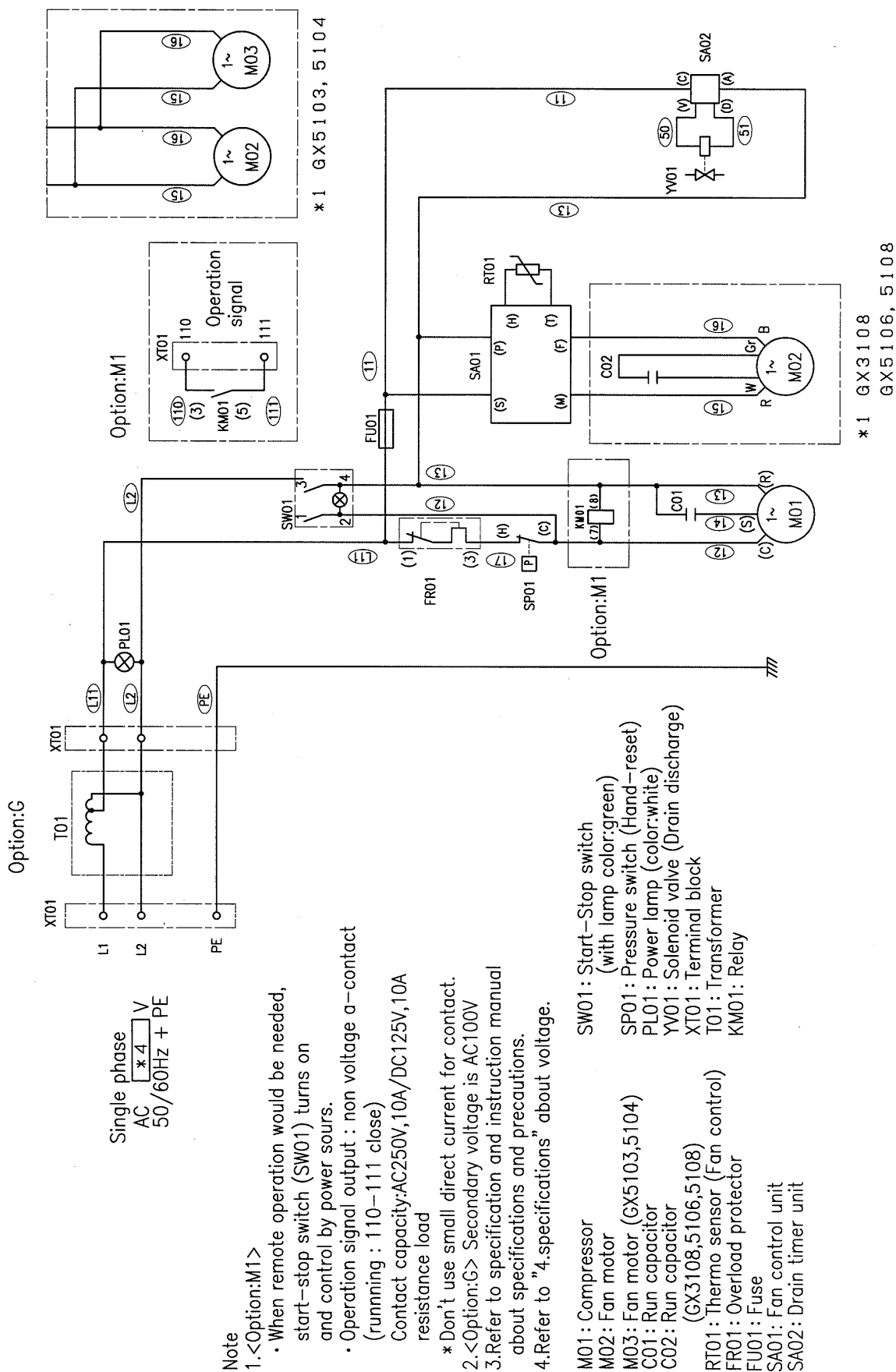
Voltage (three phase)	Operating current (A)		Starting current (A)		Recommendation breaker capacity	Mass
AC-V	50Hz	60Hz	50Hz	60Hz	(A)	(kg)
220	8.6	9.7	65	57	15	140
230	8.2	9.3	62	55	15	140
240	7.9	8.9	60	53	15	140
380	5.0	5.6	38	33	10	159
400	4.7	5.4	36	32	10	159
415	4.6	5.2	34	30	10	166
440	4.3	4.9	32	29	10	166
460	4.1	4.7	31	27	10	166
480	3.9	4.5	30	26	10	166

5 . Dimensions

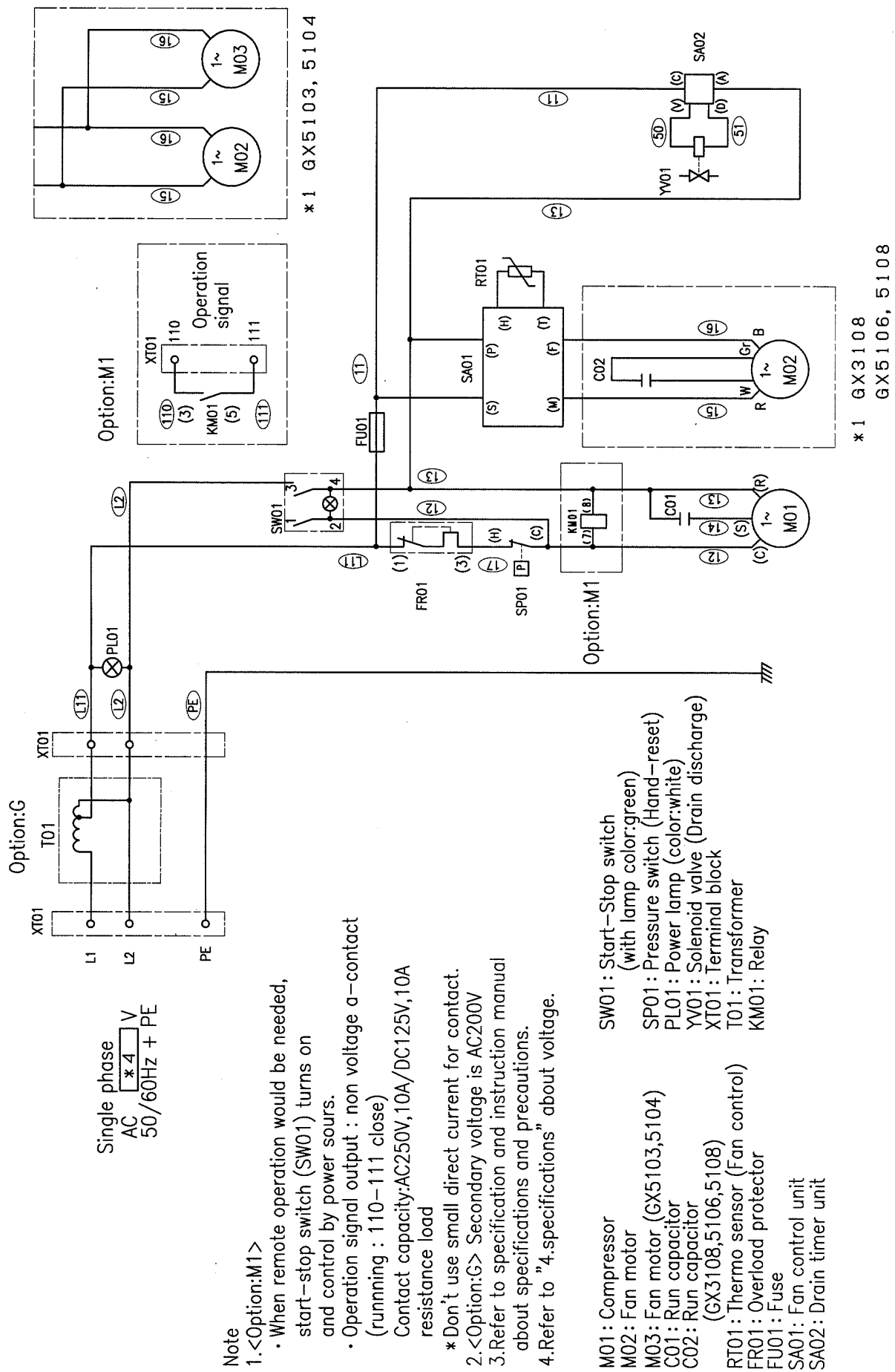
Outside dimensions are same as a standard.
Refer to the standard instruction manual.

6 . Circuit diagram

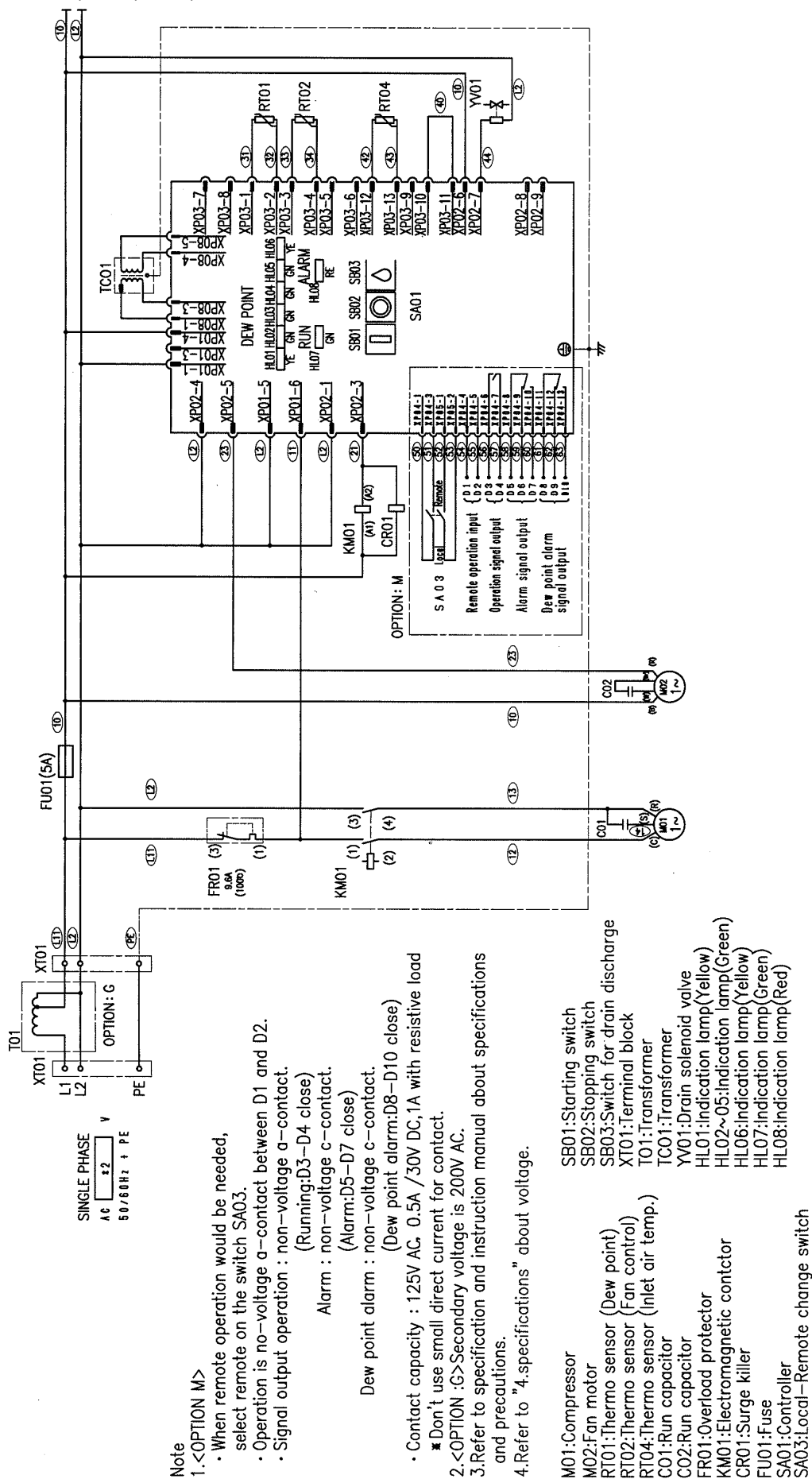
1) GX3108,GX5103,5104,5106,5108 (Primary voltage : less than AC200V)



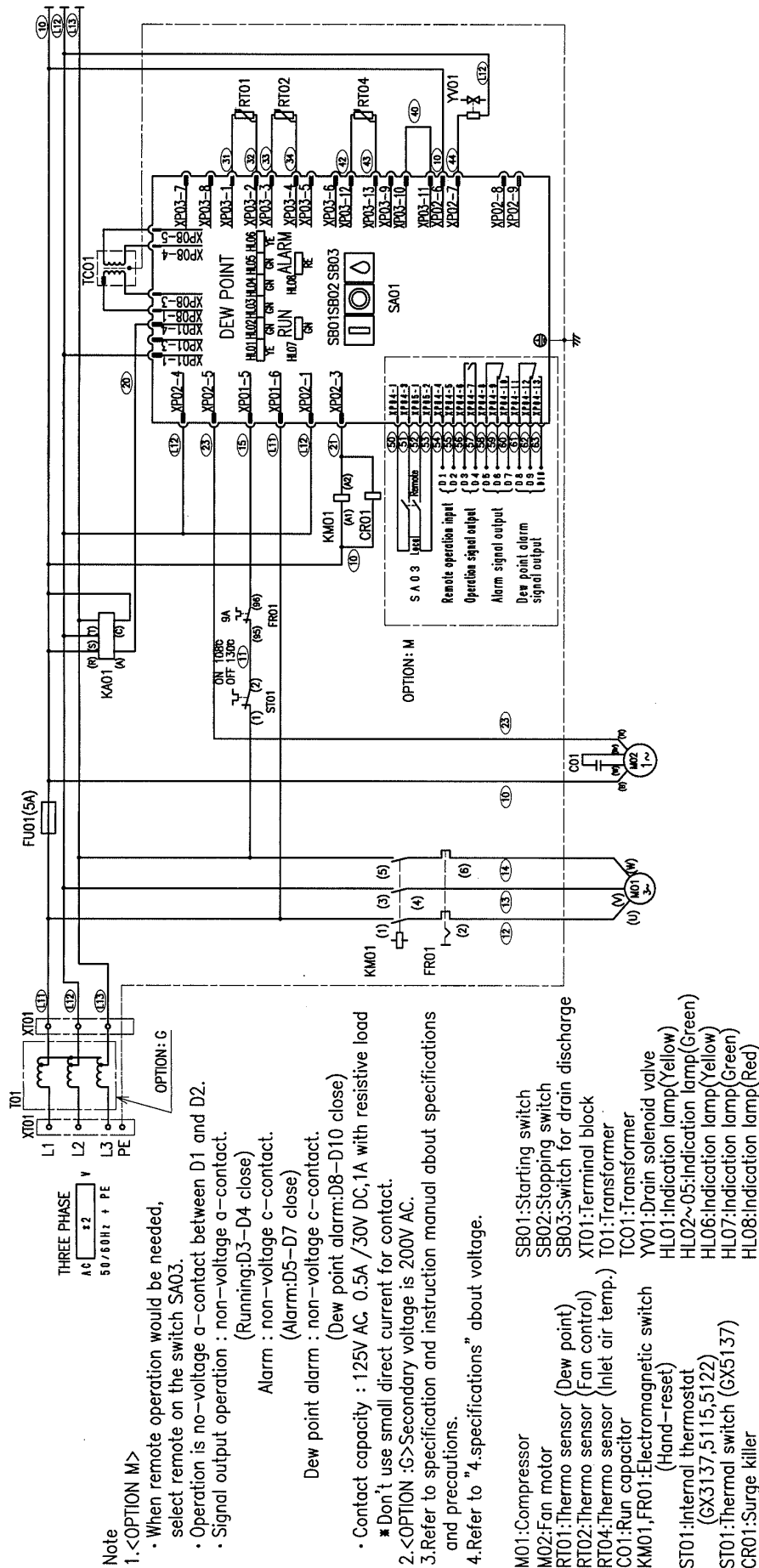
2) GX3108,GX5103,5104,5106,5108 (Primary voltage : more than AC200V)



3) GX3111, 3115, 3122, GX5111



4) GX3137, GX5115, 5122, 5137



12 . CKD WARRANTY

1. Warranty period

Warranty period of this product is one year after purchase. Warranty period of refrigerant circuit is two years after purchase. However, when the hours of operation reach to 10,000 hours within two years, it is considered as the end of the warranty period.

2. Scope of warranty

If any malfunction or damage occurs on the CKD's own responsibility within above warranty period, we will repair the product immediately free of charge.

However, the following are excluded from warranty.

When using the product under the conditions or environment deviating from this specification.

When the malfunction or damage results from mishandling or improper control.

When the malfunction is caused by factors other than CKD product.

When the product is used improperly.

When the malfunction or damage results from the modification of functions, structures or specifications which CKD is not involved in, or repairs which is not designated by CKD after delivery.

When the damage can be avoided if Atlas Copco's air compressor which CKD product is installed in has functions and structures which commonly equipped with in the industry.

When the malfunction or damage results from unforeseeable causes with the technology applied at the time of delivery.

When the malfunction or damage results from fire, earthquake, flood, thunder, other natural disaster, pollution, salt hazard, gas hazard, abnormal voltage, abnormal water pressure or quality, congelation, or other external causes.

In the case of repair parts which are used excessively.

The warranty refers to only delivered products. We do not warrant for any secondary damage or loss caused by the faults of delivered products.

This product is premised on transaction and use in Japan.

As for the warranty of the product which is exported outside Japan, the following are applied.

- 1 CKD will repair the products which returned to our factory freight prepaid. (We do not compensate transportation cost)
- 2 After repairing the product we will deliver it to the designated domestic place in Japan with domestic packaging specifications.

CKD corporation

〒485 - 8551 250, OUJI 2-CHOME, KOMAKI, AICHI 485-8551 JAPAN

PHONE 0568 - 77 - 1111

Purchased air dryer

Model name	
Manufacture number	
Purchase date	
Beginning of using date	

Sales shop name

TEL	
Charge	