

REFRIGERATOR MANUFACTURER
Turbo air

Commercial
Refrigerator
Service Manual

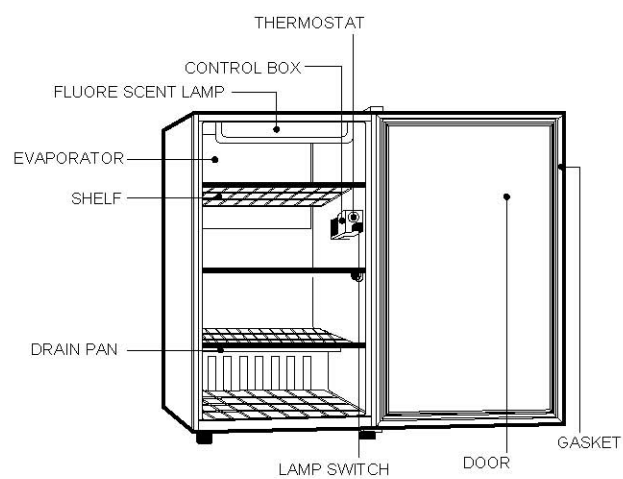
Model No. : TGM-5R-N6
TGM-11RV-N6
TGM-14RV-N6
TGM-22RV-N6
TGM-35R-N
TGM-48R-N
TGM-50RS-N
TGM-69R-N
TGM-72RS-N

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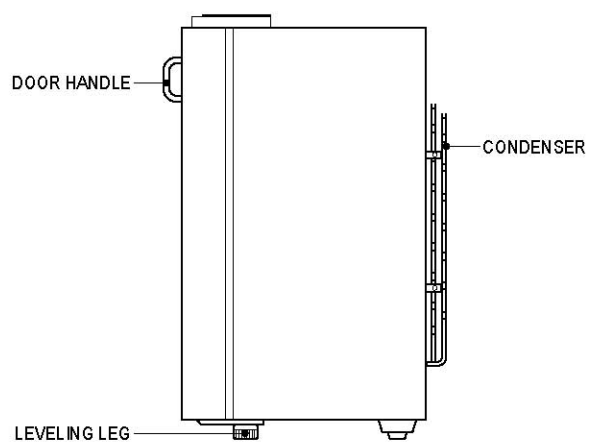
1. FEATURE CHART

• Model : TGM-5R



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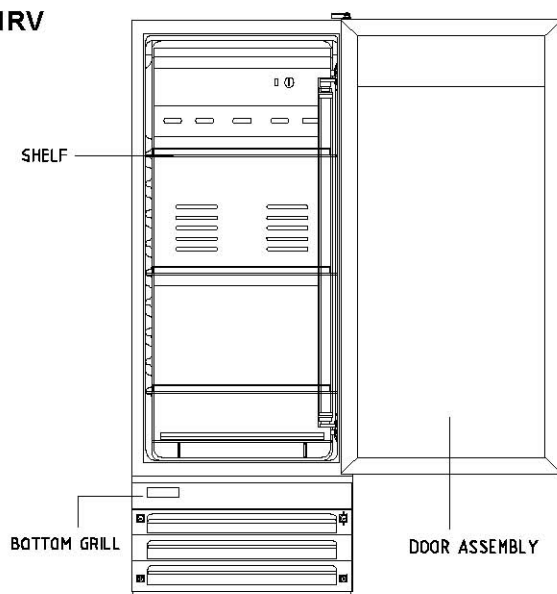
• Model : TGM-5R



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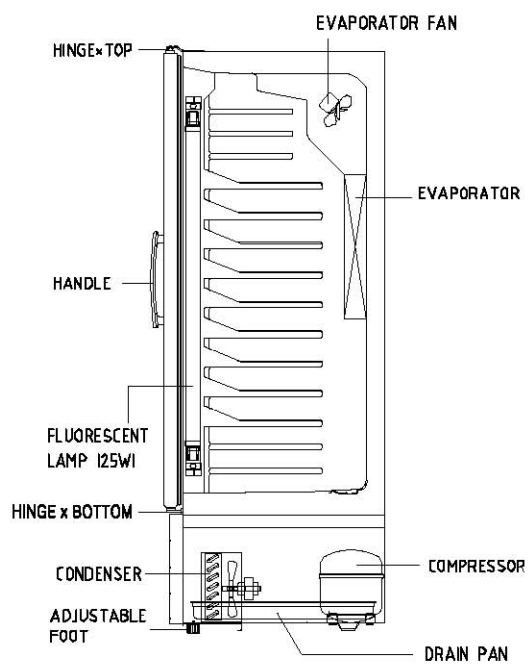
1. FEATURE CHART

• Model : TGM-11RV



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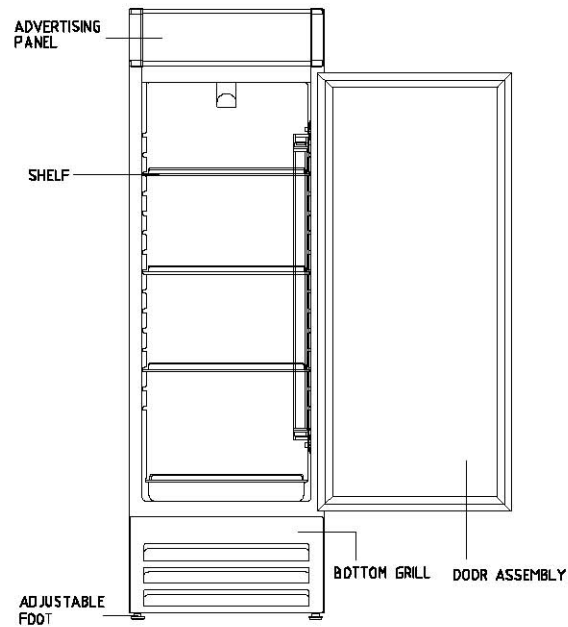
• Model : TGM-11RV



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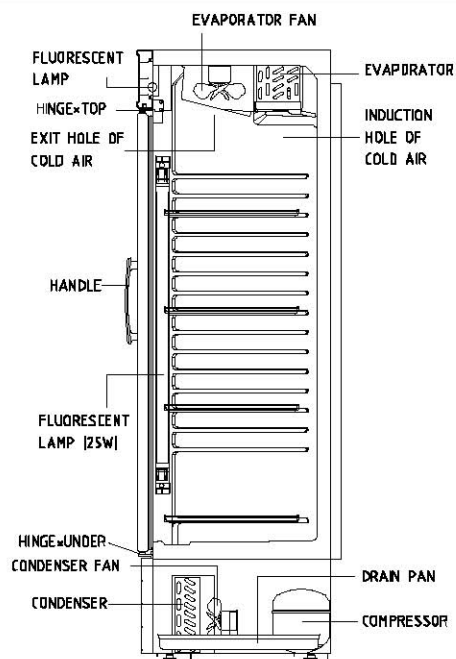
1. FEATURE CHART

• Model : TGM-14RV



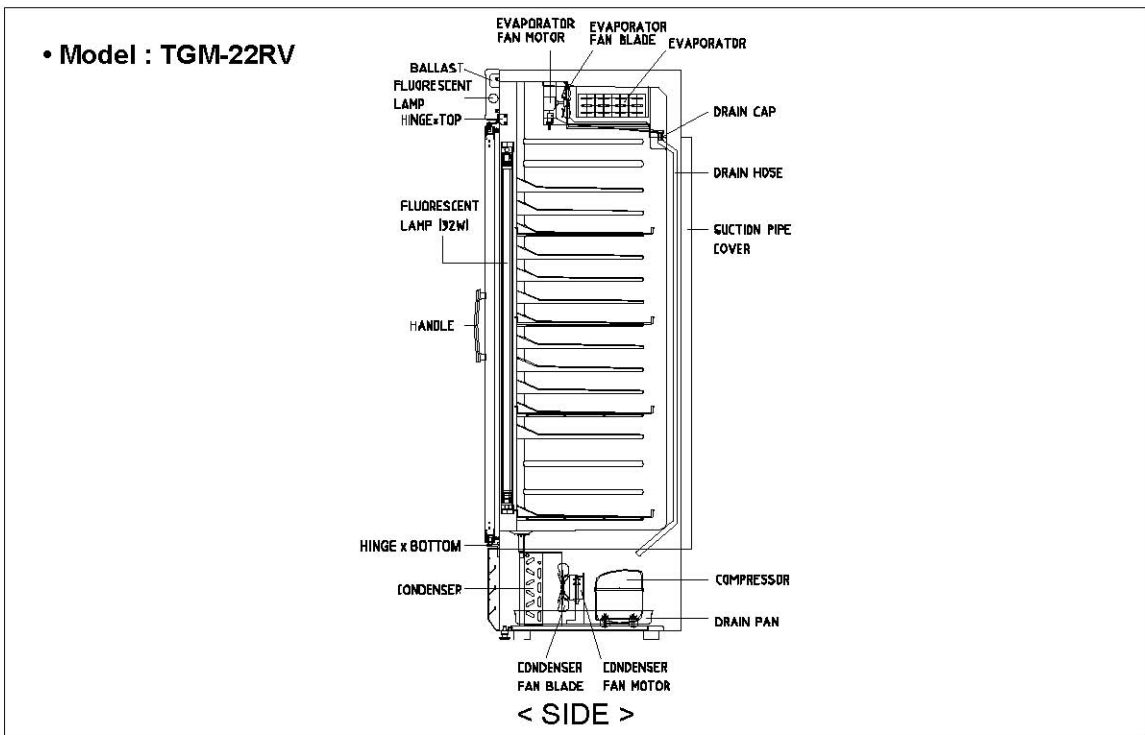
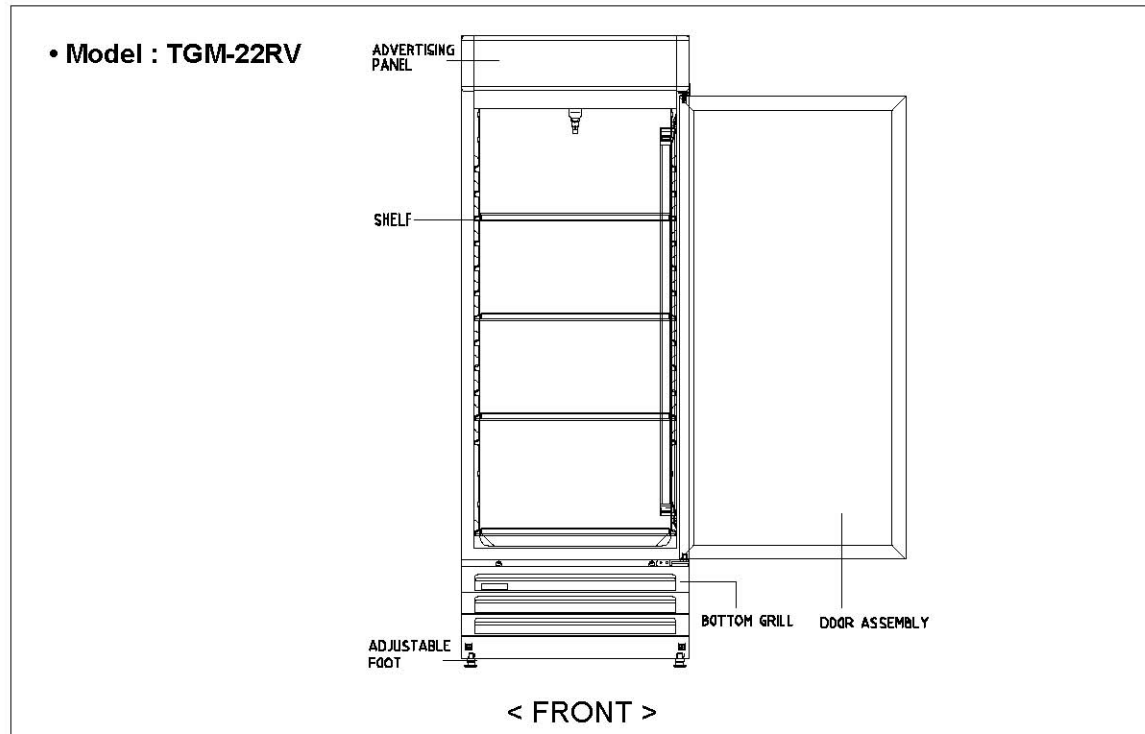
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• Model : TGM-14RV



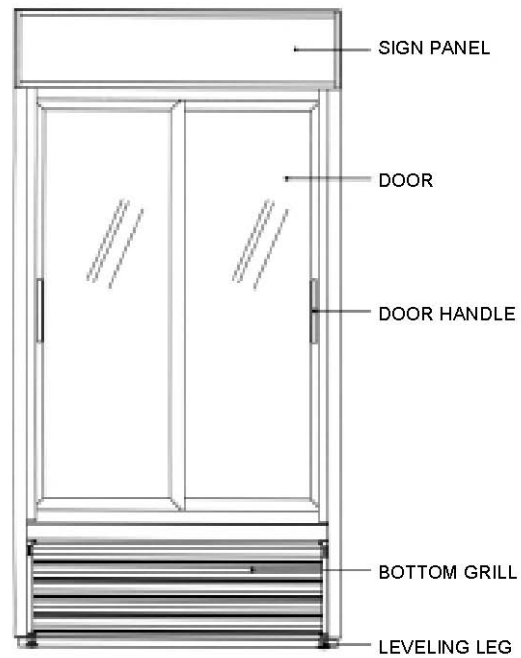
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1. FEATURE CHART



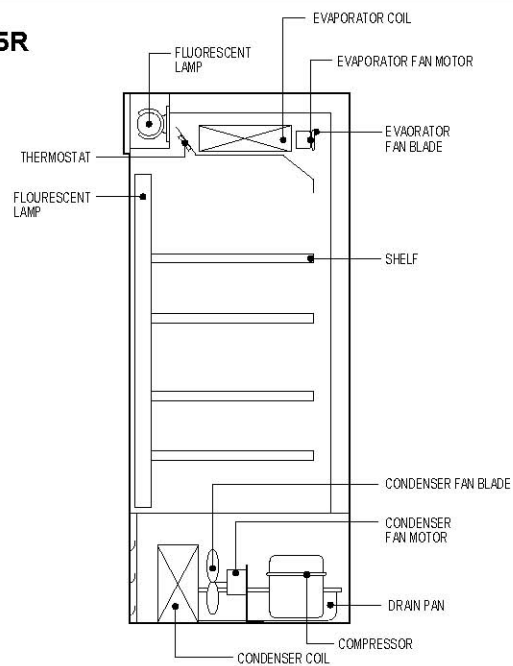
1. FEATURE CHART

• Model : TGM-48R, 35R



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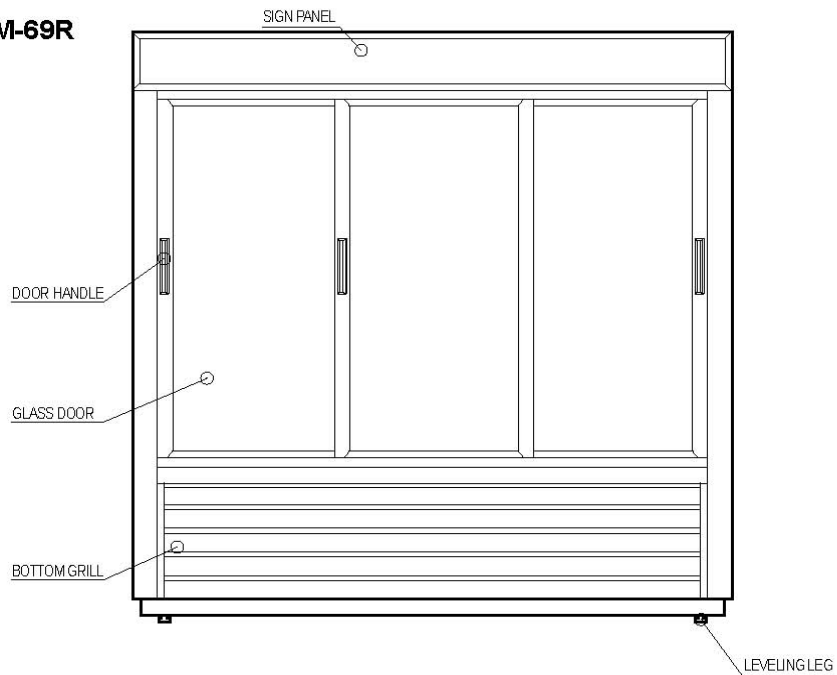
• Model : TGM-48R, 35R



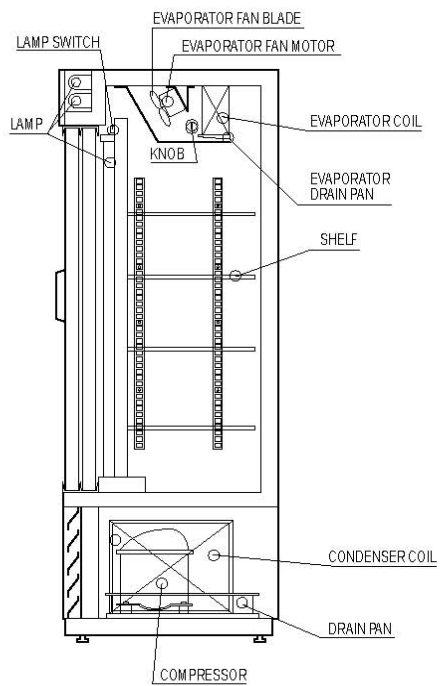
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1. FEATURE CHART

• Model : TGM-69R



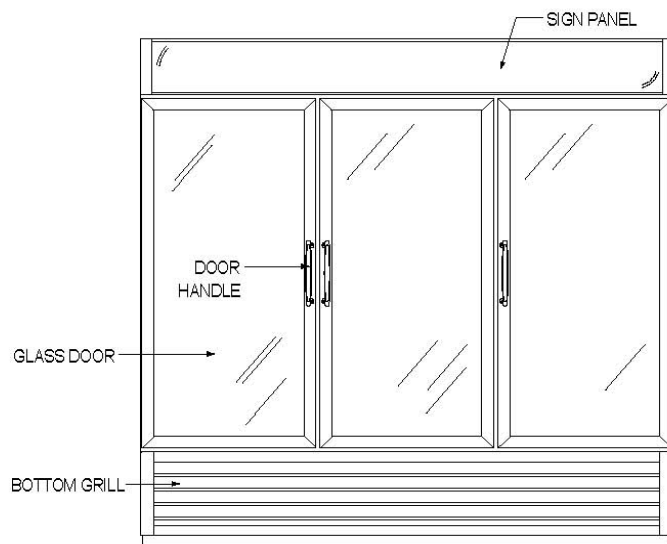
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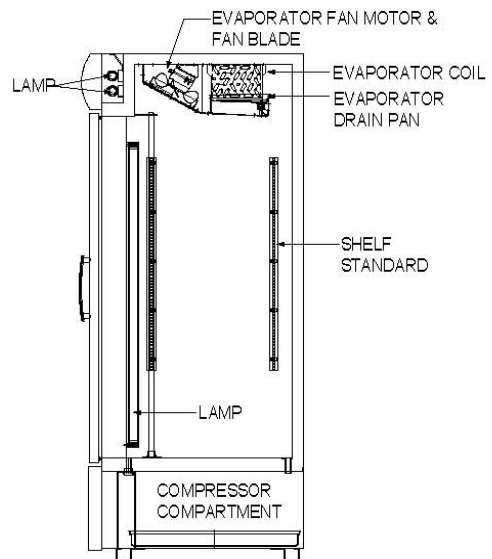
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1. FEATURE CHART

• Model : TGM-72RS

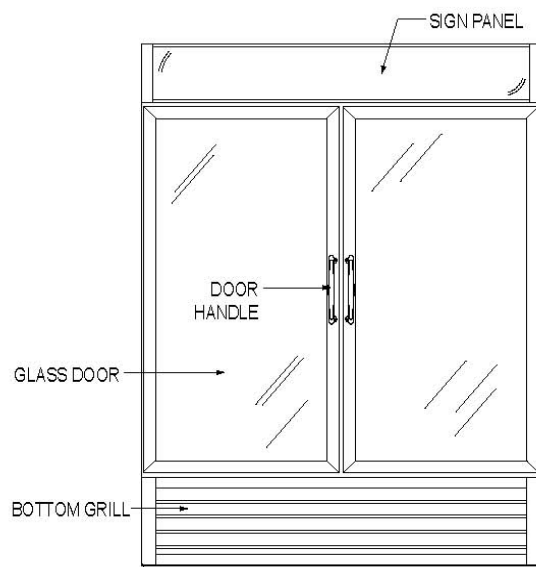


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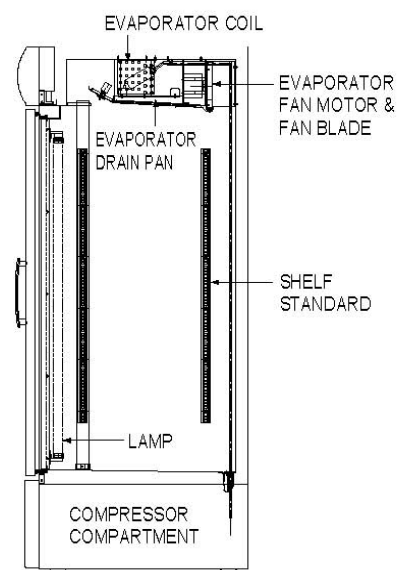


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• Model : TGM-50RS



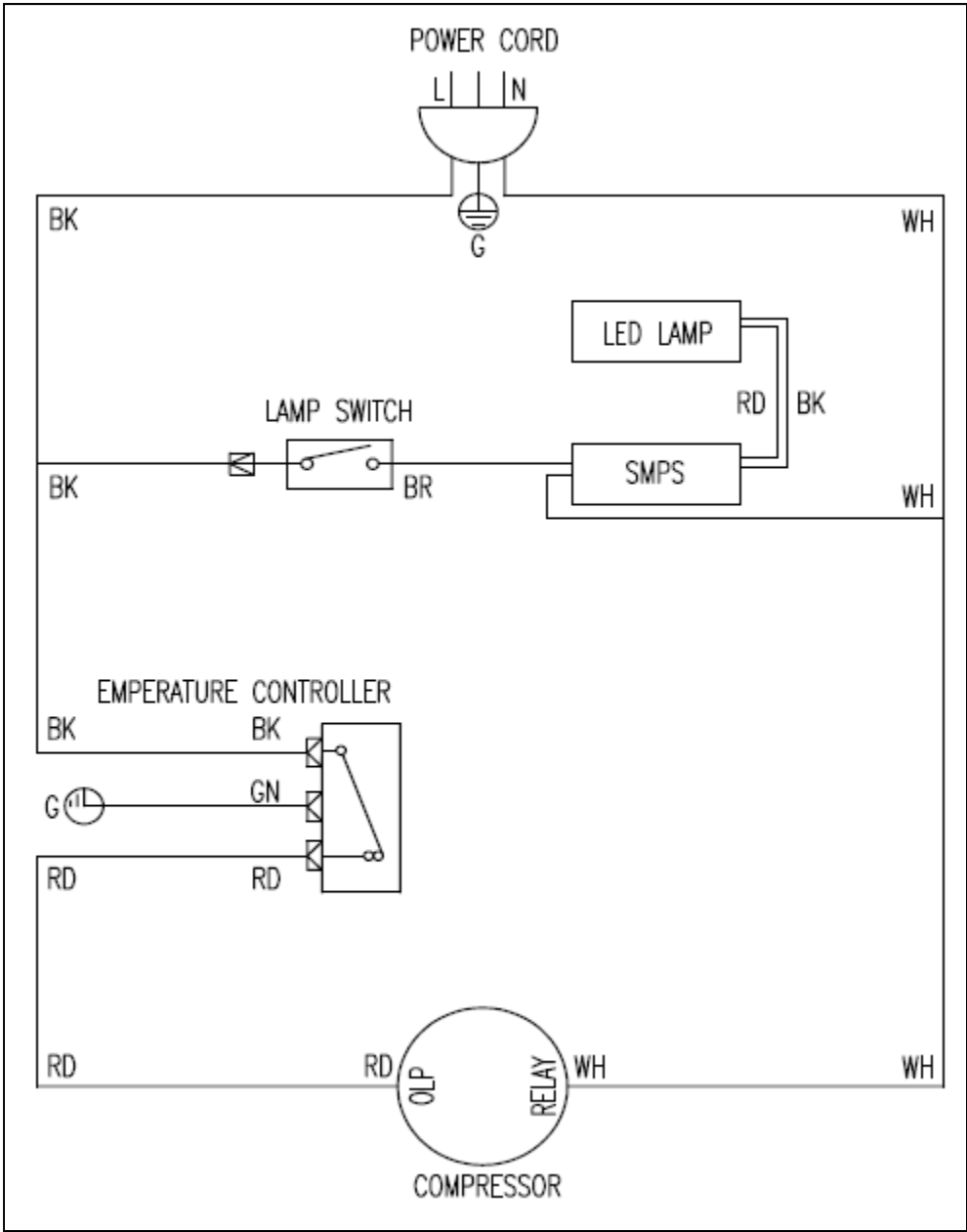
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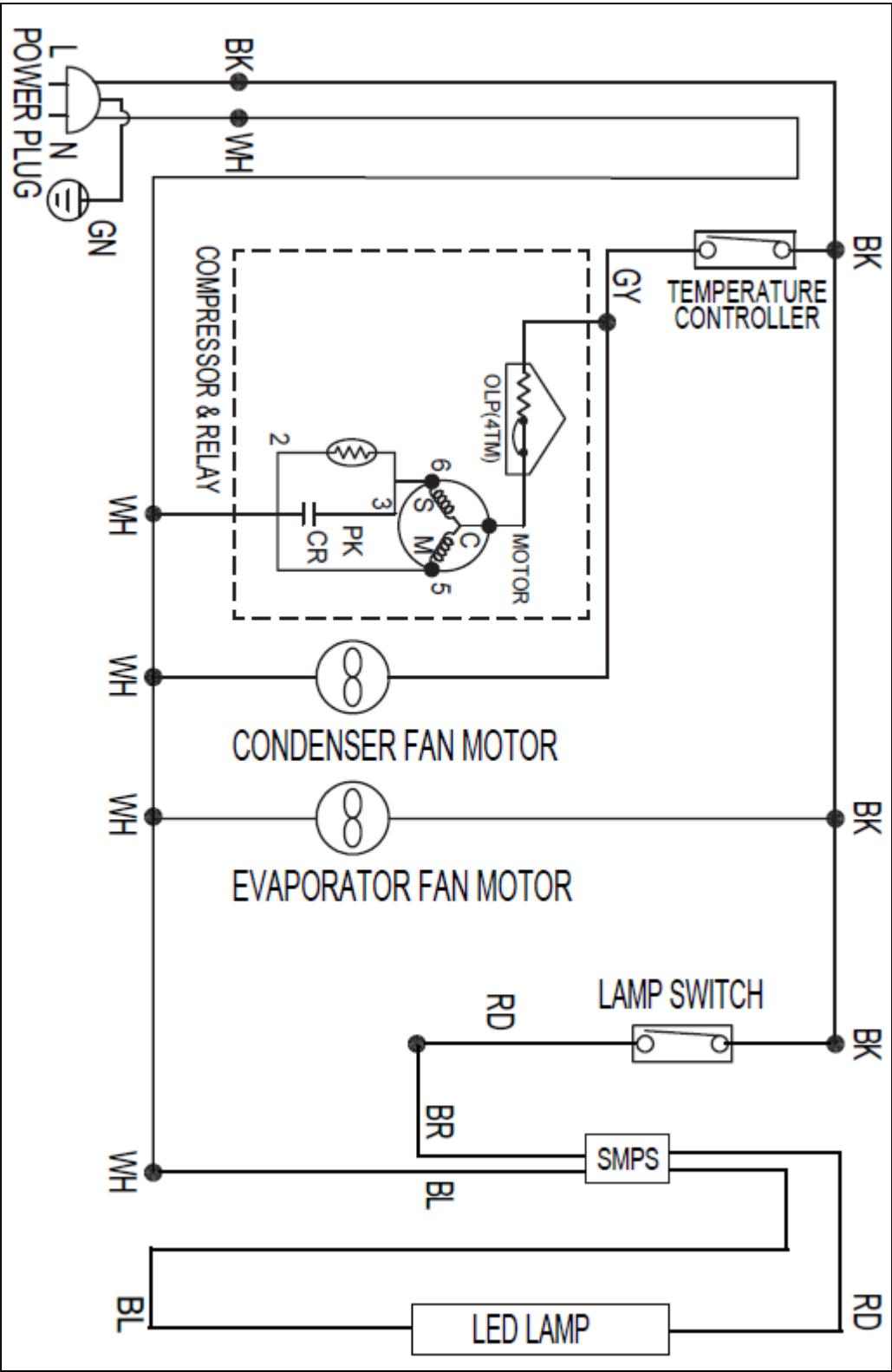
2. WIRING DIAGRAM

2-1. TGM-5R-N6



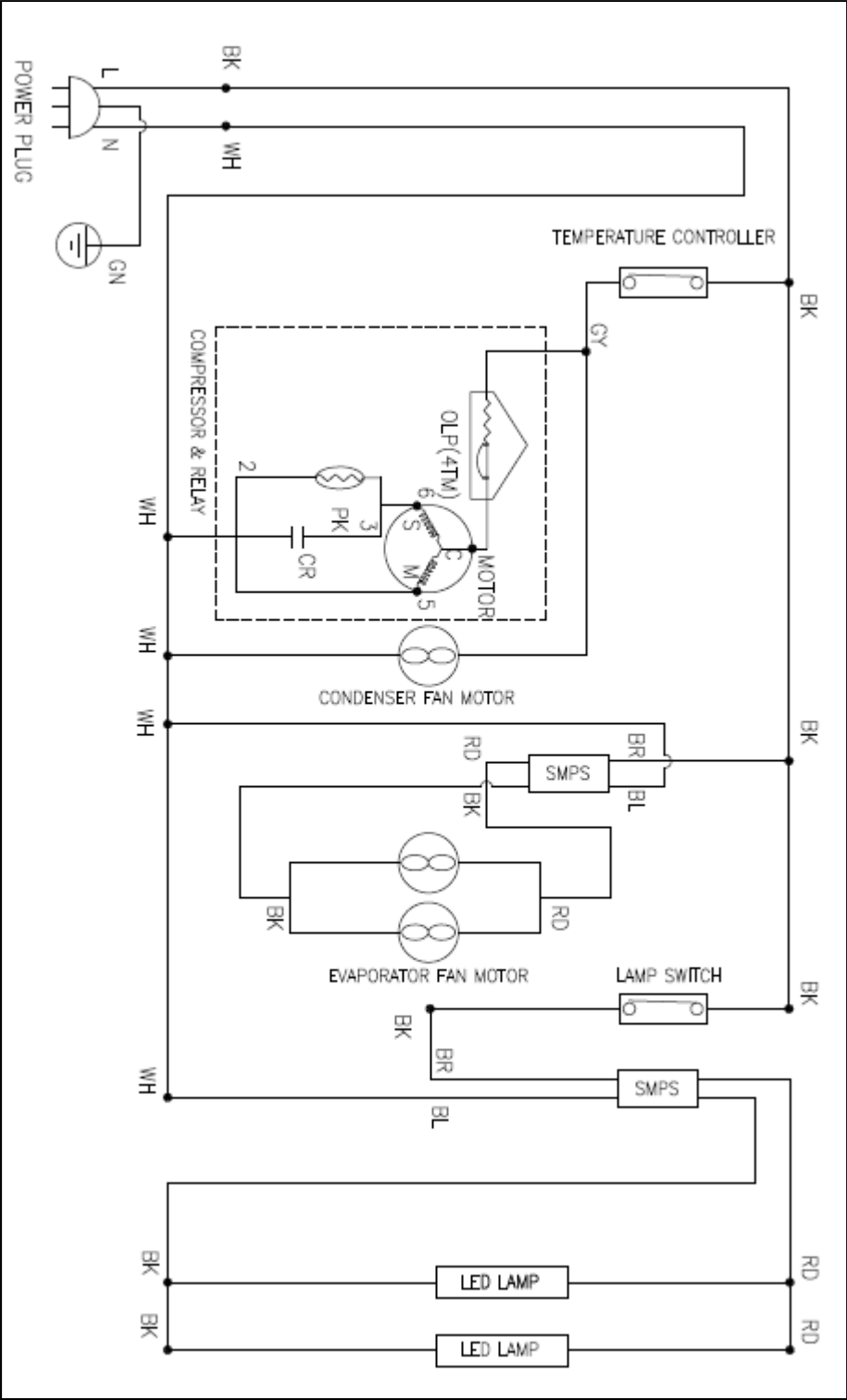
WIRING DIAGRAM

2-2. TGM-11RV-N6



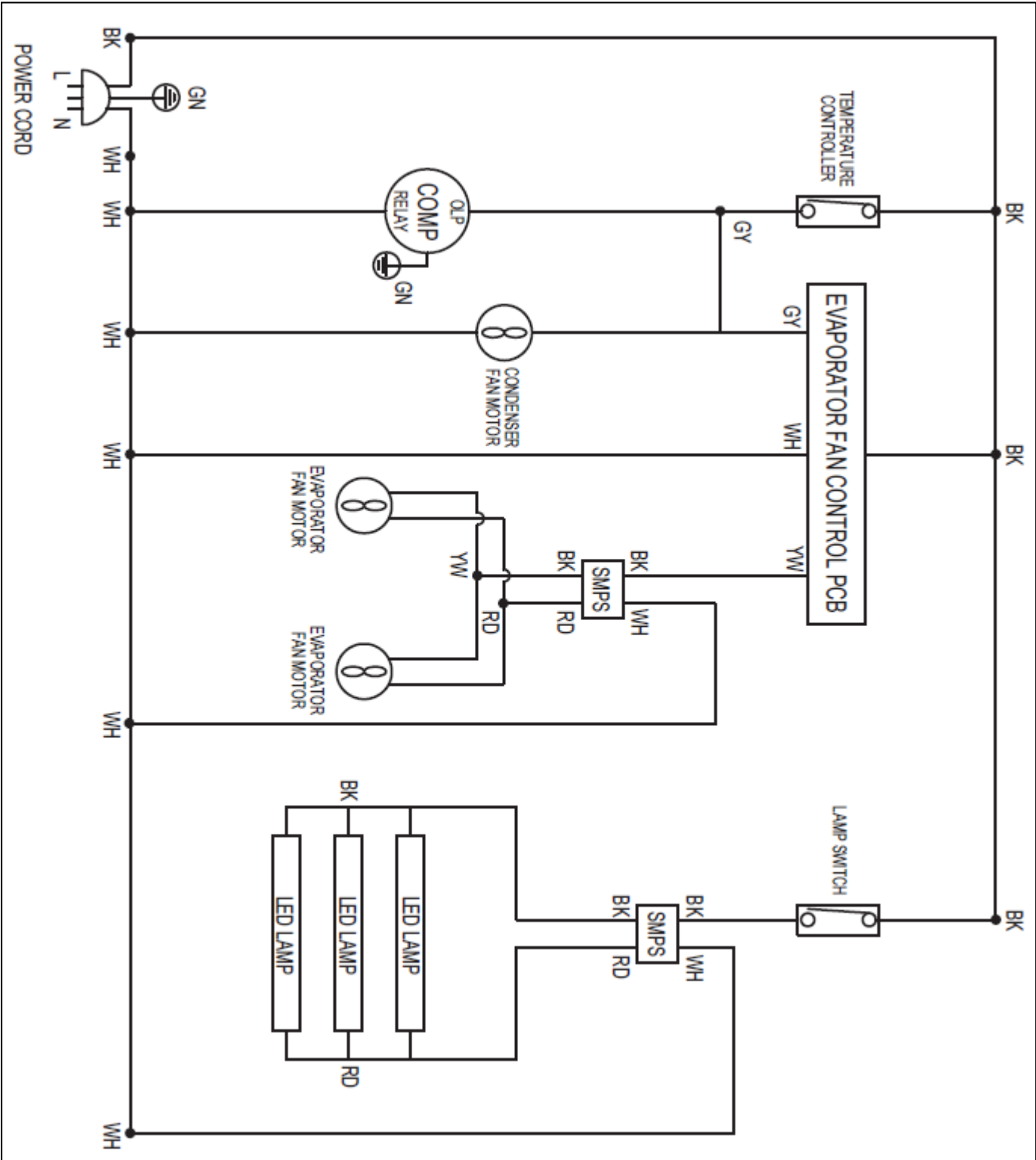
WIRING DIAGRAM

2-3. TGM-22RV-N6



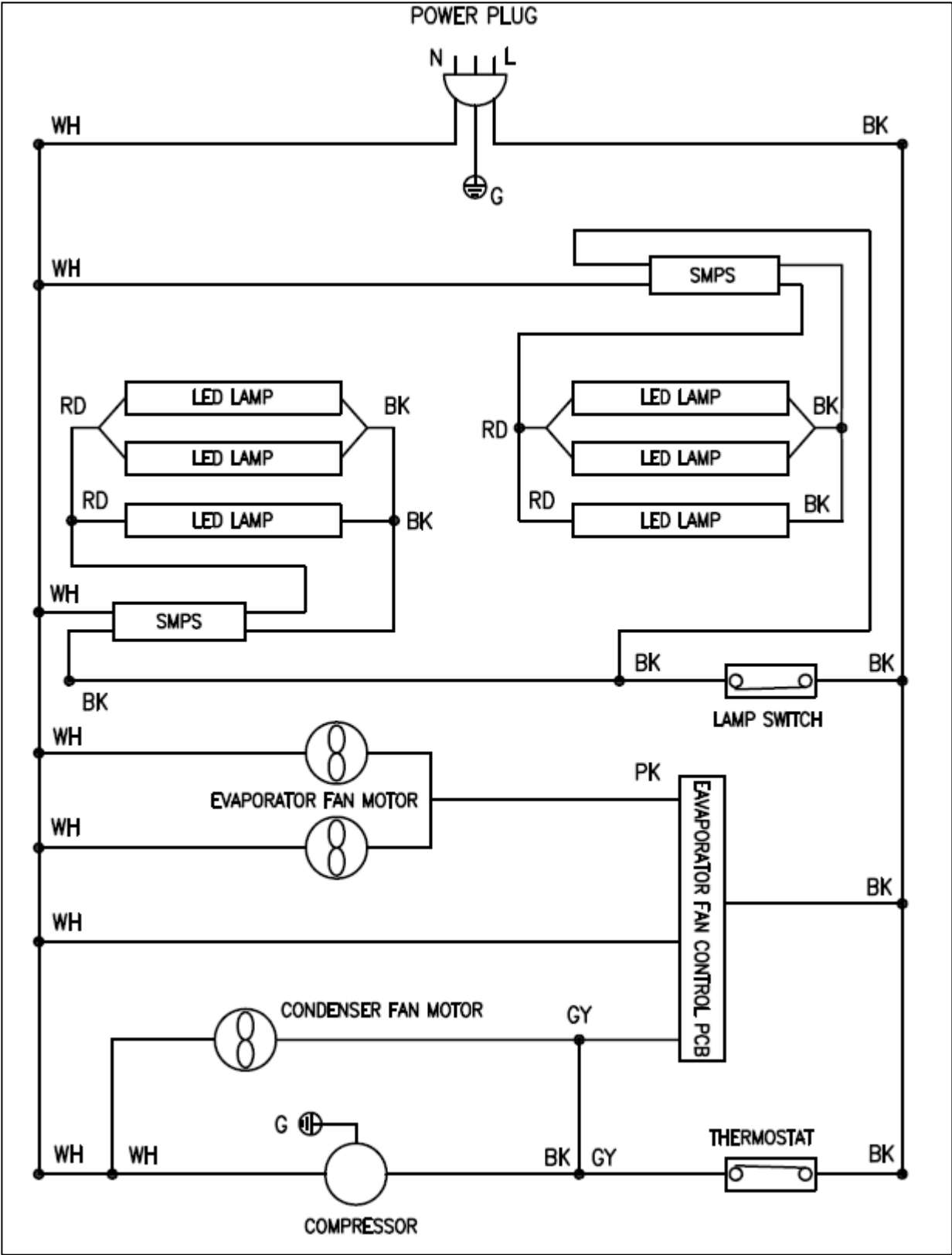
WIRING DIAGRAM

2-4. TGM-35R-N, TGM-48R-N, TGM-50Rs-N



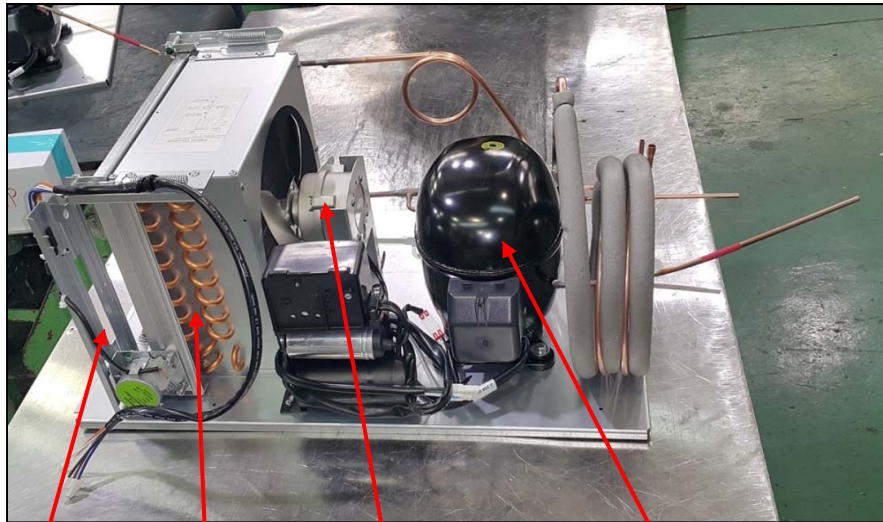
WIRING DIAGRAM

2-5. TGM-69R-N, TGM-72RS-N



PART DETAILS

3-1. Refrigeration Compartment

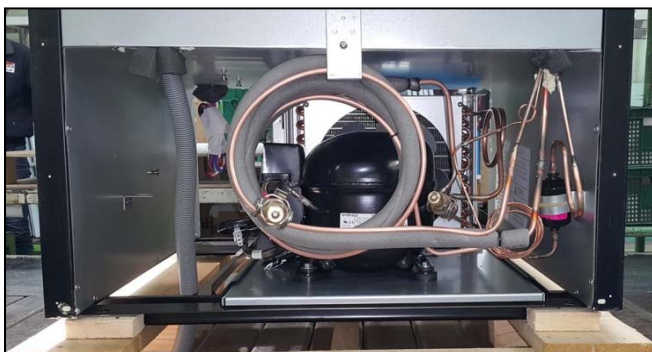


Condenser Cleaner

Condenser Coil

Fan Motor Assy

Compressor



TGF-23F-N <1CYCLE>



TGF-49F-N <1CYCLE>



TGF-72F-N <2CYCLE>

4. MAIN COMPONENTS

1. COMPRESSOR

MODEL	PART NAME	PART NO.	REFRIGERANT	HORSE POWER	CAPACITY	TYPE MOTOR	Current	MAKER
TGM-5R-N6	EMU40CLP	P0189E0900	R-600a	1/8 HP	393 BTU/h (99 kcal/h)	LBP RSIR	1.33A	EMBRACO
TGM-11RV-N6 TGM-14RV-N6 TGM-22RV-N6	MSE4A0C-S1H	P0189E0200	R-600a	1/5 HP	738 BTU/h (186 kcal/h)	LBP RSCR	1.08A	SAMSUNG
TGM-35R-N TGM-50RS-N	EM2X3125U	P0189E0300	R-290	1/3 HP	1217 BTU/h (307 kcal/h)	LBP RSCR	1.89A	EMBRACO
TGM-48R-N TGM-69R-N TGM-72RS-N	NEU2140U	P0189E0400	R-290	1/2 HP	2075 BTU/h (523 kcal/h)	LBP CSCR	5.03A	EMBRACO

2. COMPRESSOR RELAY, OVERLOAD

MODEL	RELAY	OVERLOAD PROTECTOR
TGM-5R-N6	7M4R7MC1	4TM283RFBYY-53
TGM-11RV-N6 TGM-14RV-N6 TGM-22RV-N6	100MD2	4TM308RHBYY-53
TGM-35R-N TGM-50RS-N	7M4RMD3	CP4TMC460N61
TGM-48R-N TGM-69R-N TGM-72RS-N	MTRPH-60-59	T0808

3. COMPRESSOR CAPACITOR

MODEL	STARTING CAPACITOR	RUNNING CAPACITOR
TGM-5R-N6	-	-
TGM-11RV-N6 TGM-14RV-N6 TGM-22RV-N6	-	250VAC / 12 μ F
TGM-35R-N TGM-50RS-N	-	180VAC / 20 μ F
TGM-48R-N TGM-69R-N TGM-72RS-N	250VAC / 189-227 μ F	-

MAIN COMPONENTS

4. EVAPORATOR FAN MOTOR

MODEL	PART NAME	PART NO.	VOLTAGE	AMOUNT	BLADE	SIZE	MAKER
TGM-5R-N6	-	-	-	-	-	-	-
TGM-11RV-N6	ADL-5846PMEA	P0193S0100	115V	1	PA66 + GF(14%)	110mm	SPG (SUNG-SHIN)
TGM-14RV-N6	ADL-5846PMEE	P0193S0500	115V	1	ABS	150mm	SPG (SUNG-SHIN)
TGM-22RV-N6	DLA-5985PMEA	P0193S0700	DC12V	2	PA66 + GF(14%)	110mm	SPG (SUNG-SHIN)
TGM-35R-N TGM-48R-N TGM-50RS-N	DLA-5985PMEB	P0193S0800	DC12V	2	ABS	150mm	SPG (SUNG-SHIN)
TGM-69R-N TGM-72RS-N	KD083010	P0191A0800	115V	2	Aluminum	175mm	KOH-A JUNG GONG

5. CONDENSER FAN MOTOR

MODEL	PART NAME	PART NO.	VOLTAGE	AMOUNT	BLADE	SIZE	MAKER
TGM-5R-N6	-	-	-	-	-	-	-
TGM-11RV-N6	DAI-6202DEC	3963330500	115V	1	ABS	150mm	DAE-YOUNG
TGM-14RV-N6 TGM-22RV-N6	KD08301A	P0191A0810	115V	1	Aluminum	175mm	KOH-A JUNG GONG
TGM-35R-N TGM-48R-N TGM-50RS-N	KD08301A	P0191A0810	115V	1	Aluminum	225mm	KOH-A JUNG GONG
TGM-69R-N TGM-72RS-N	KD08301A	P0191A0810	115V	1	Aluminum	250mm	KOH-A JUNG GONG

6. EVAPORATOR

MODEL	ROWS / COLIMN	MATERIAL	WIDTH	PART NO	AMOUNT	MAKER
TGM-5R-N6	ROLL BENDING	-	-	P0170E1800	1	-
TGM-11RV-N6	2 / 8	AL	350mm	30270G0103	1	HUNG JIN
TGM-14RV-N6	6 / 3	CU	340mm	P0170E2601	1	SHIN KWANG
TGM-22RV-N6	8 / 3	AL	442mm	30270H0104	1	HUNG JIN
TGM-35R-N TGM-48R-N TGM-50RS-N	5 / 5	CU	564mm	P0170E0100	1	SHIN KWANG
TGM-69R-N TGM-72RS-N	7 / 5	CU	753mm	P0170E2200	1	SHIN KWANG

MAIN COMPONENTS

7. CONDENSER

MODEL	ROWS / COLIMN	MATERIAL	WIDTH	PART NO	AMOUNT	MAKER
TGM-5R-N6	1 / 18	STEEL	296mm	P0156E0121	1	M&K KOREA
TGM-11RV-N6 TGM-14RV-N6 TGM-22RV-N6	2 / 7	CU	216mm	P0156E1200	1	SHIN KWANG
TGM-35R-N TGM-48R-N TGM-50RS-N	4 / 8	CU	336mm	P0156E0400	1	SHIN KWANG
TGM-69R-N TGM-72RS-N	4 / 8	CU	336mm	P0156E0410	1	SHIN KWANG

8. THERMOSTAT

MODEL	PART NAME	PART NO.	MAKER
TGM-35R-N TGM-48R-N	GNA-900	P0183E0100	SHIN-HAN
TGM-11RV-N6 TGM-50RS-N	GNA-904	P0183E0500	SHIN-HAN
TGM-14RV-N6 TGM-22RV-N6 TGM-69R-N TGM-72RS-N	GNF-100	P0183E0800	SHIN-HAN

► THERMOSTAT ON/OFF SPEC.

MODEL	WARM		NORMAL		COLD	
	On	Off	On	Off	On	Off
GNA-900	7.0	-5.0	5.0	-7.0	4.0 ±1.5	-8.0 ±1.5
GNA-904	10.0	-2.5	6.0±1.5	-7.0±1.5	4.0	-9.0
GNF-100	12.0	0.5	8.0±1.5	-5.0±1.5	7.0	-6.0

MAIN COMPONENTS

10. LED

MODEL	APPLICATION	SPEC	PART NO.	AMOUNT
TGM-5R-N6	Inside of advertising display panel	-	-	-
	Inside of Cabinet	2.7W	601360002000	1
TGM-11RV-N6	Inside of advertising display panel	-	-	-
	Inside of Cabinet	12.5W	P0136L0301	1
TGM-14RV-N6	Inside of advertising display panel	6.5W	P0136L0212	1
	Inside of Cabinet	12.5W	P0136L0301	1
TMG-22RV-N6	Inside of advertising display panel	6.5W	P0136L0212	1
	Inside of Cabinet	16.5W	P0136L0401	1
TGM-35R-N	Inside of advertising display panel	12.5W	P0136L0301	1
	Inside of Cabinet	16.5W	P0136L0401	2
TGM-48R-N TGM-50RS-N	Inside of advertising display panel	16.5W	P0136L0401	1
	Inside of Cabinet	16.5W	P0136L0401	2
TGM-69R-N TGM-72RS-N	Inside of advertising display panel	12.5W	P0136L0301	2
	Inside of Cabinet	16.5W	P0136L0401	4

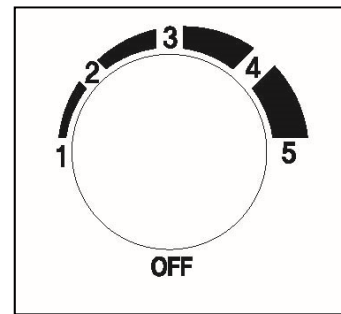
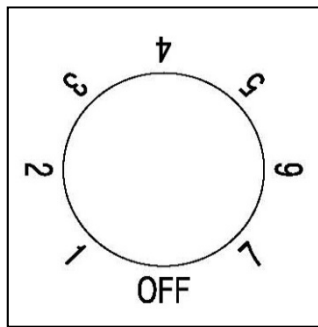
11. SMPS

MODEL	PART NAME	PART NO.	AMOUNT	MAKER
TGM-5R-N6	SMT-012-012VW	P0184R0400	1	KYUNG SIN
TGM-11RV-N6	LPV-20-12	30284R0800	1	KYUNG SIN
TGM-14RV-N6	LPV-35-12	30227M4401	1	KYUNG SIN
TGM-22RV-N6	LPV-20-12	30284R0500	1	KYUNG SIN
	LPV-35-12	30227M4401	1	KYUNG SIN
TGM-35R-N TGM-48R-N TGM-50RS-N	LPV-20-12	30284R0500	1	KYUNG SIN
	LPV-60-12	30284R0700	1	KYUNG SIN
TGM-69R-N TGM72RS-N	LPV-60-12	30284R0700	2	KYUNG SIN

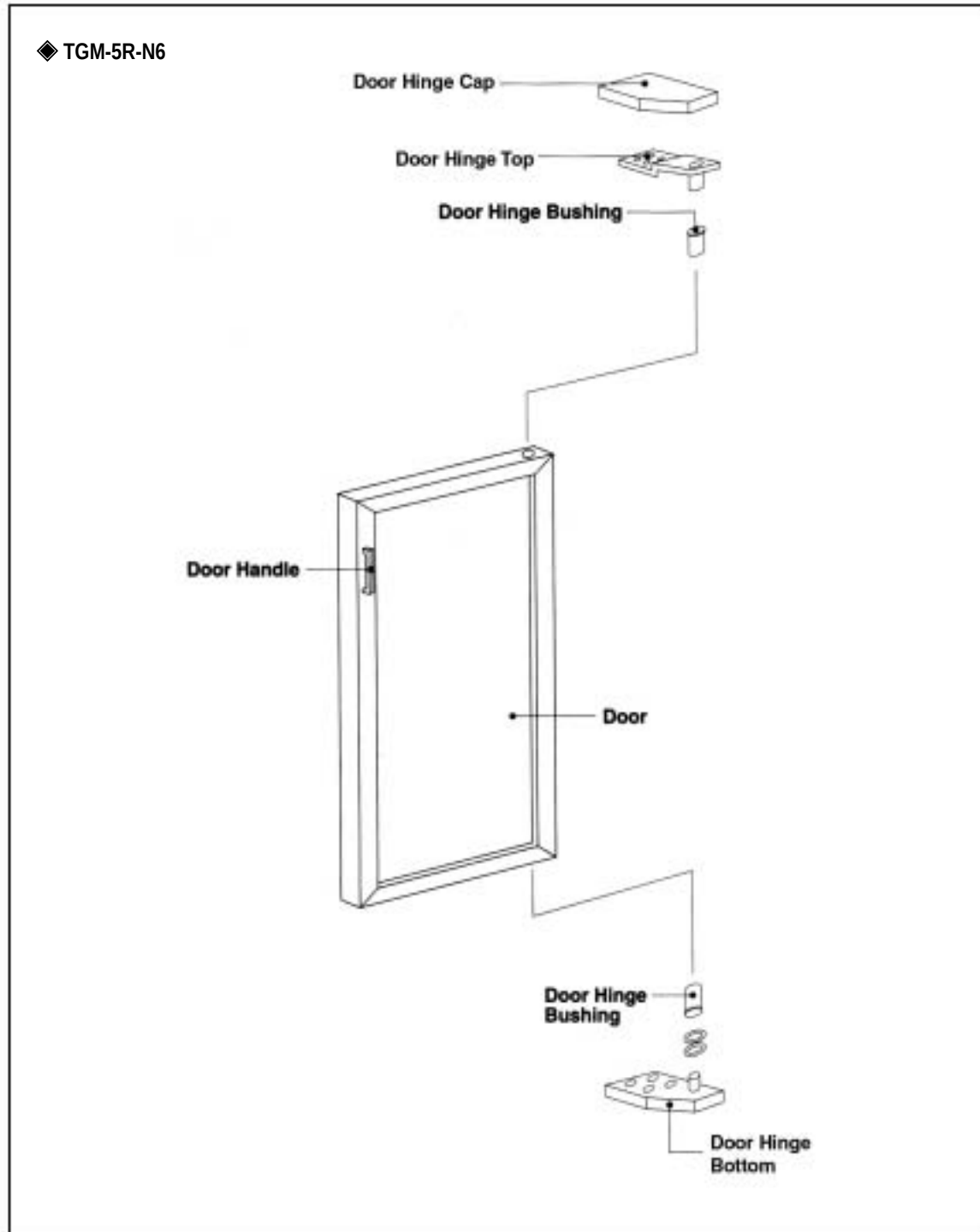
5. TEMPERATUR CONTROL INSTRUCTION

5-1. HOW TO USE THE TEMPERATURE CONTROL

- ▶ Temperature can be controlled by the user.
- ▶ Settings can be changed by “Dial Knob”.
- ▶ Compressor is automatically turned on and off by thermostat.

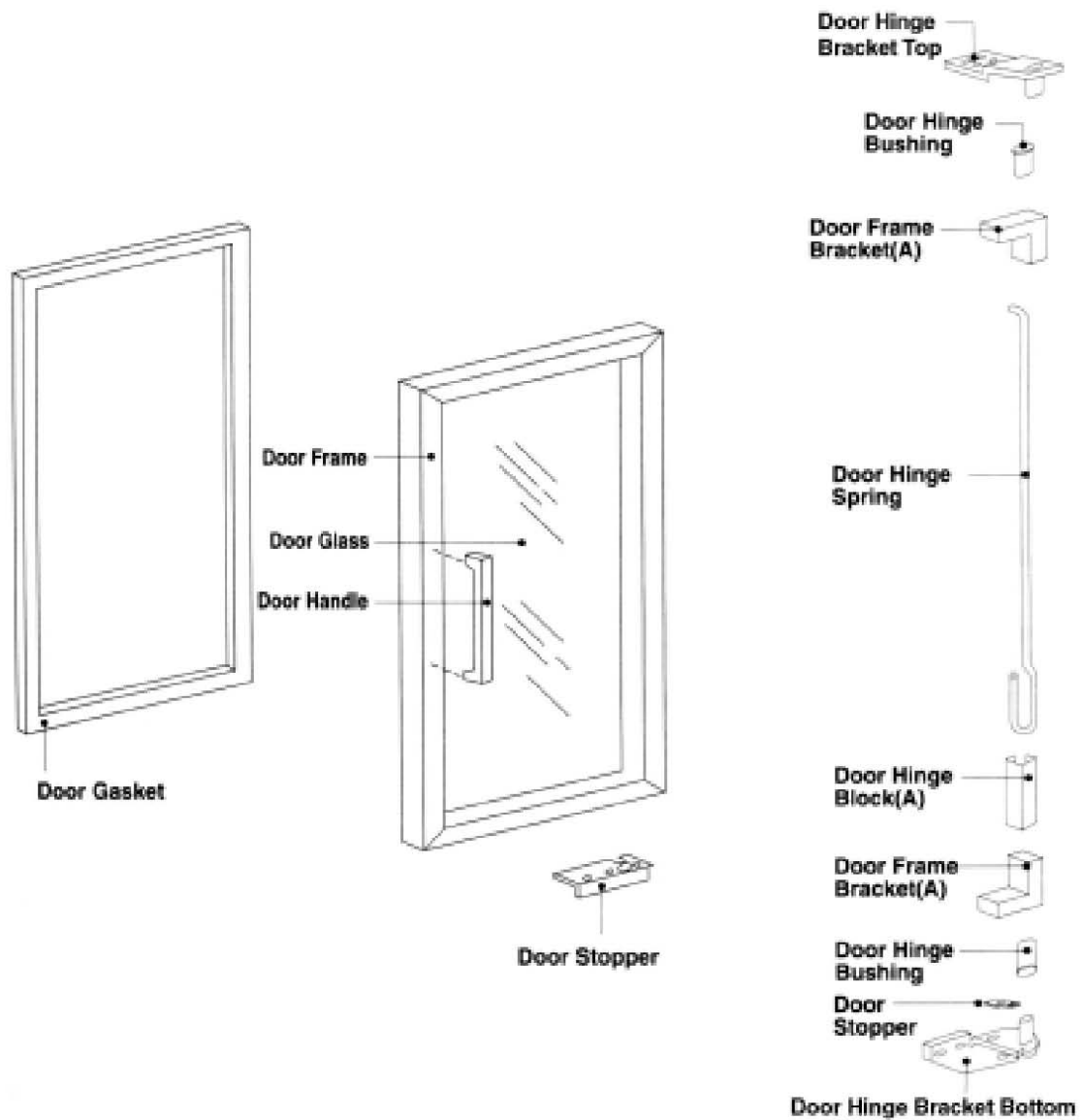


5-2. DOOR PARTS



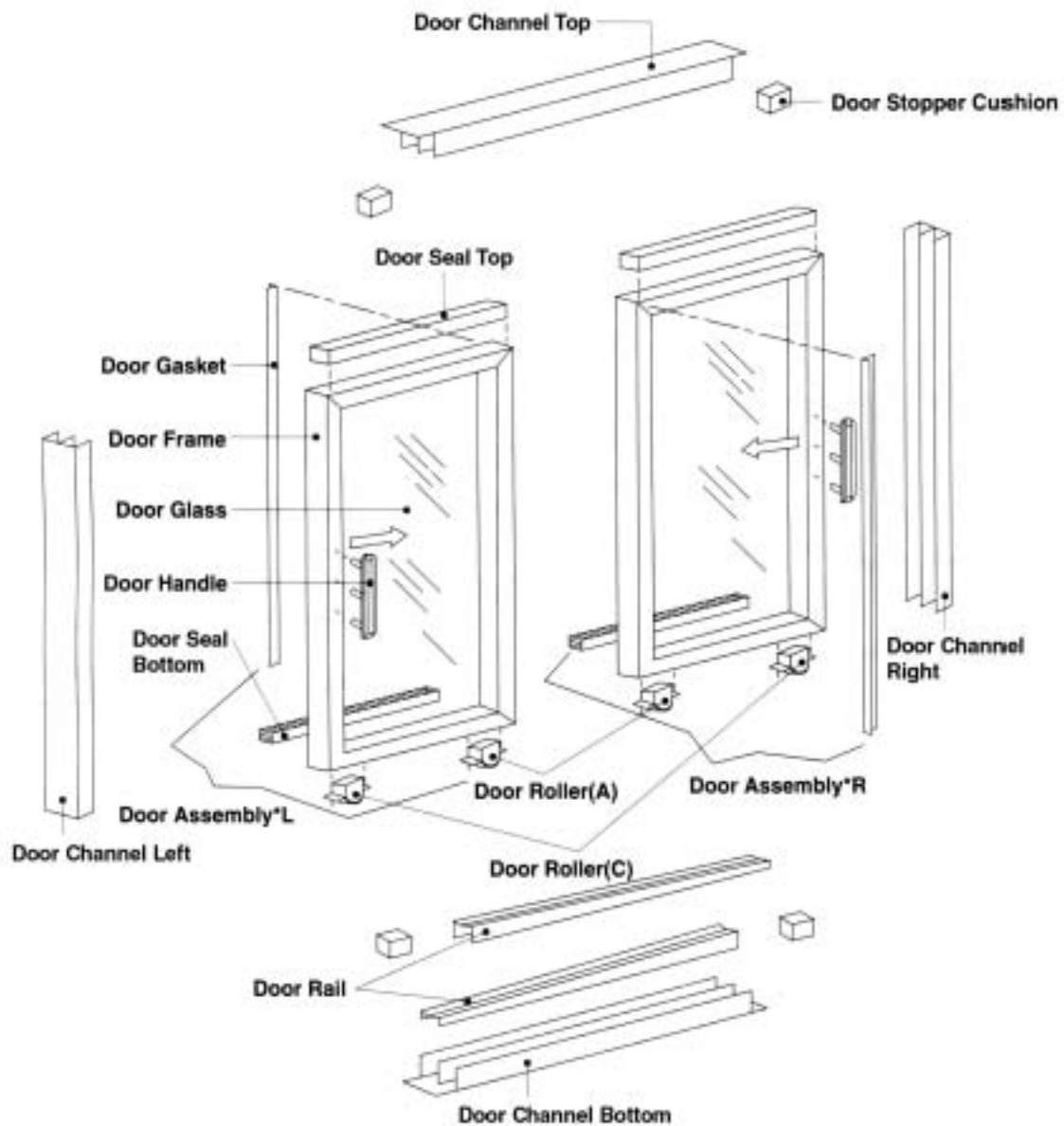
PARTS DIAGRAM

◆ TGM-11RV-N6, TGM-14RV-N6, TGM-22RV-N6



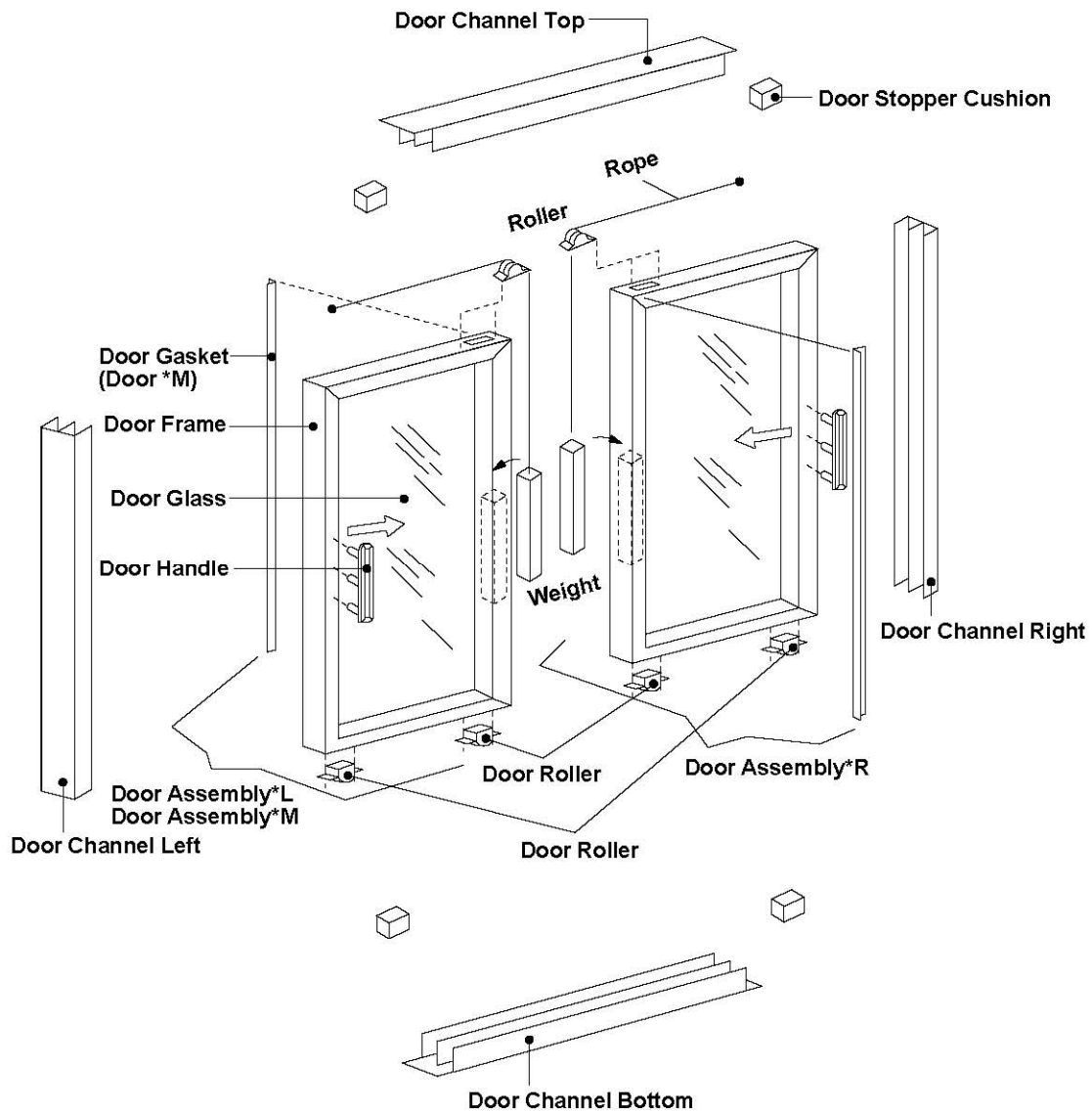
PARTS DIAGRAM

◆ TGM-35R-N, TGM-48R-N

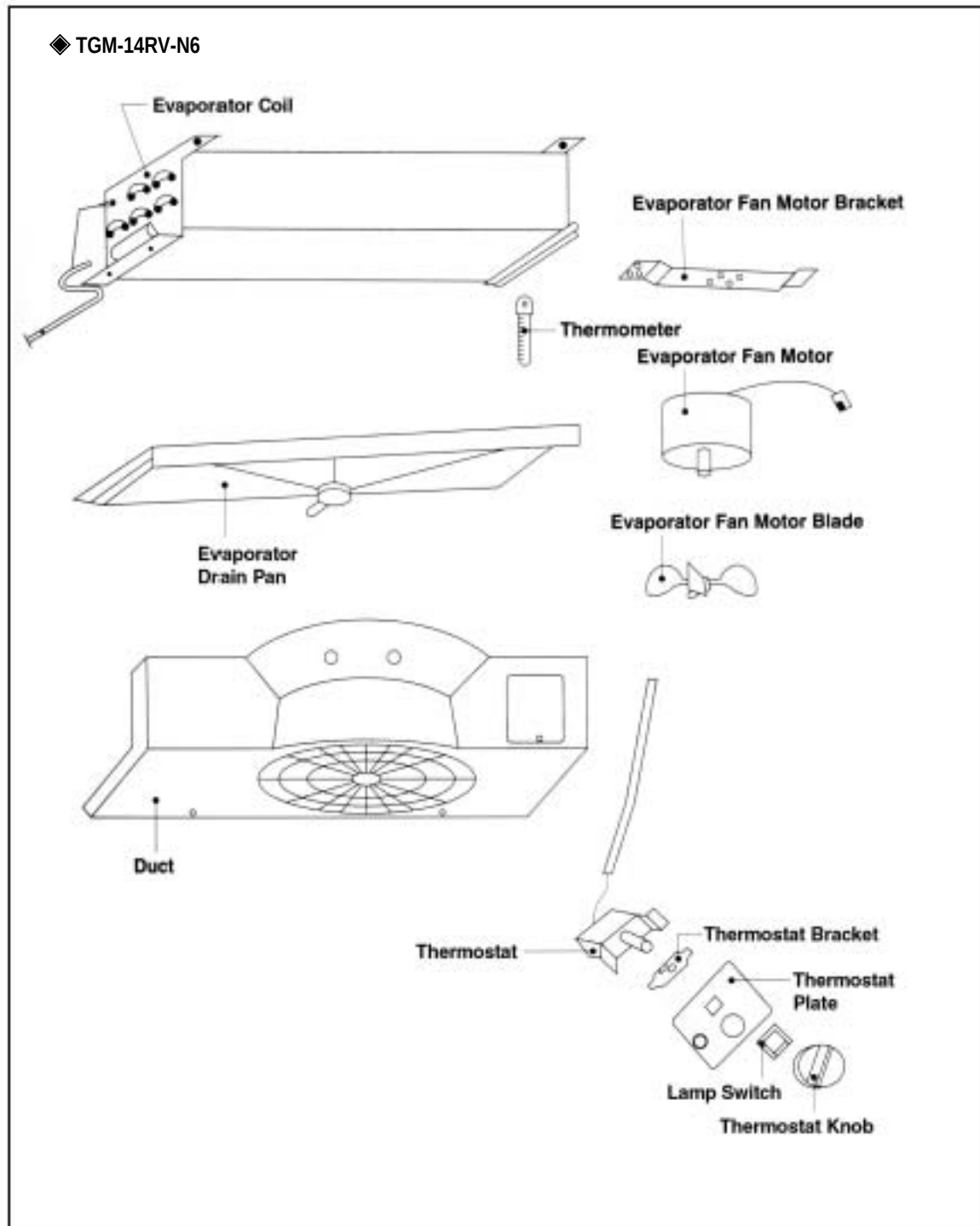


PARTS DIAGRAM

◆ TGM-69R-N

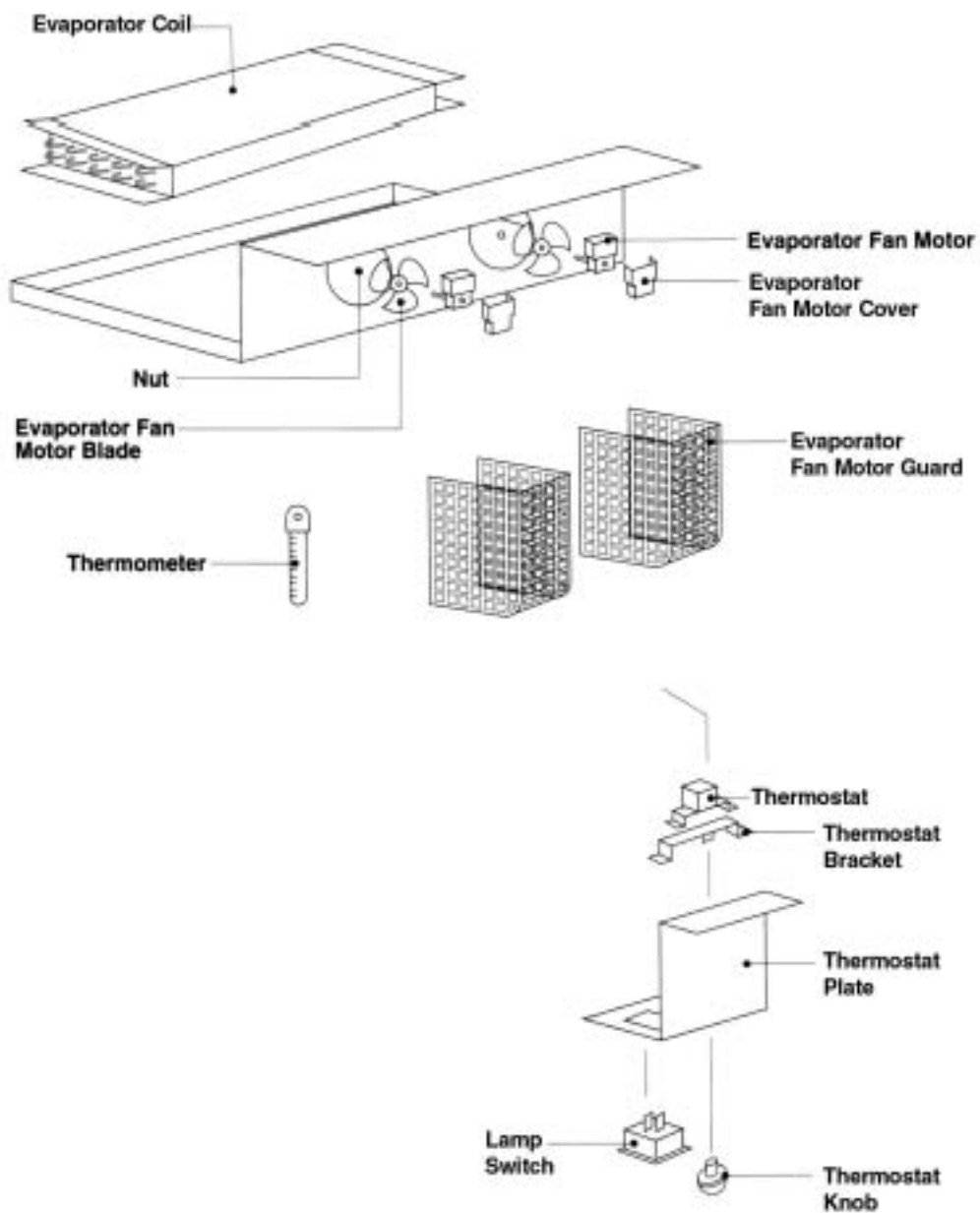


5-3. EVAPORATOR PARTS



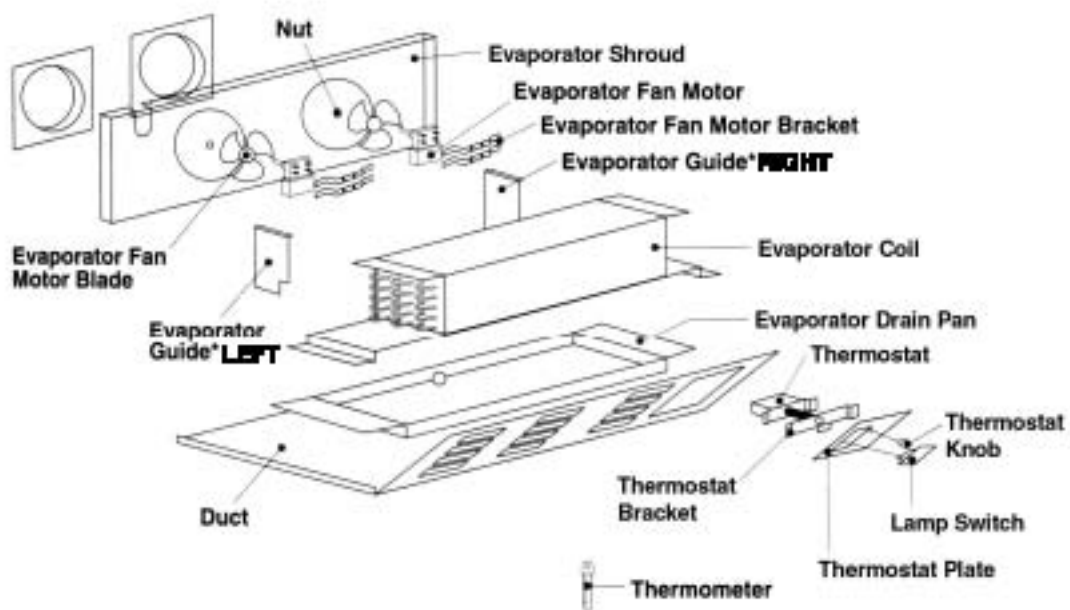
PARTS DIAGRAM

◆ TGM-22RV-N6



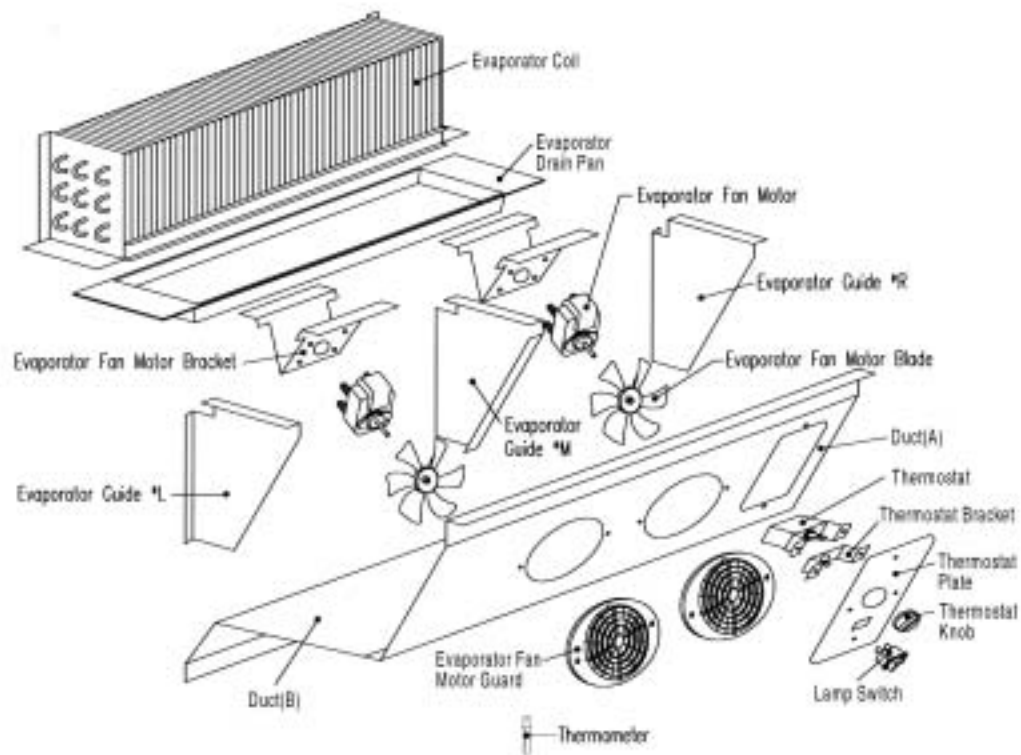
PARTS DIAGRAM

◆ TGM-35R-N, TGM-48R-N, TGM-50RS-N



PARTS DIAGRAM

◆ TGM-69R-N, TGM-72RS-N



6. PARTS LIST

Part name	Part Number	Description	Model							
			TGM- 11RV-N6	TGM- 14RV-N6	TGM- 22RV-N6	TGM- 35R-N	TGM- 48R-N	TGM- 50RS-N	TGM- 69R-N	TGM- 72RS-N
Evaporator										
Evaporator Coil	30270G0104	AL	1							
Evaporator Coil	P0170E2600	CU		1						
Evaporator Coil	30270H0104	CU			1					
Evaporator Coil	P0170E0100	CU				1	1	1		
Evaporator Coil	P0170E2200	CU							1	1
Evaporator Fan Motor Guard	P0114A6600					2	1	2		
DUCT *T	30269F0201			1						
DUCT T	P0169E0011				1					
Evaporator Fan Motor Guard	30214K0100	HIPS F175							2	2
SWITCH POWER	P0181E0020		1	1	1	1	1	1	1	1
Evaporator Fan Motor Blade	30115802210	110	1		2					
Evaporator Fan Motor Blade	P0118J0000	150		1		2	2	2		
Evaporator Fan Motor Blade	30218U0100	Ø175							2	2
SMPS	30284R0500	LPV-20-12			1	1	1	1		
Evaporator Fan Motor	P0193S0500	ADL-5846PMEE		1						
Evaporator Fan Motor	P0193S0100	ADL-5846PMEA	1		2					
Evaporator Fan Motor	P0191A0800	KD083010							2	2
Evaporator Fan Motor	P0193S0800	DLA-5985PMEB				2	2	2		

6. PARTS LIST

Part name	Part Number	Description	Model							
			TGM- 11RV-N6	TGM- 14RV-N6	TGM- 22RV-N6	TGM- 35R-N	TGM- 48R-N	TGM- 50RS-N	TGM- 69R-N	TGM- 72RS-N
Door										
Door Assembly	P0100A0310		1							
Door Assembly	30200F2800			1						
Door Assembly	P0100F0120				1					
Door Assembly LF	P0100A0180					1				
Door Assembly RH	P0100A0190					1				
Door Assembly LF	P0100A0160						1			
Door Assembly RH	P0100A0150						1			
Door Assembly LF	P0100A0220							1		
Door Assembly R H	P0100A0210							1		
Door Assembly LF	P0100K1170								1	
Door Assembly RH	P0100K1190								1	
Door Assembly MIDDLE	P0100K1180								1	
Door Assembly LF	P0100K1360									1
Door Assembly RH	P0100K1370									1
Door Assembly MI DDLE	P0100K1380									1
Door Glass	30255G1100	T24X1169X534(T)	1							
Door Glass	30255F1300	T24X1286X534(T)		1						
Door Glass	30255H1100	T24X1424X664(T)			1					
Door Glass	30255A0110					1				
Door Glass	30255D0200						2			
Door Glass	30255S0100							2		
Door Glass	30255K0100								3	
Door Glass	30255S0200									3
Door Gasket	30223G0602	PVC-S,565X1190	1							
Door Gasket	30223F0601	PVC-S,565X1310	1	1						
Door Gasket	30223H0402	PVC-S,695X1445			1					
Door Gasket	30223S0200	PVC-S, 660*1336						2		
Door Gasket	30223S0300	PVC-S, 610*1336								3
Door Handle	30226G0101	ZNDC-2/CR	1	1	1			2		3
Door Handle	30226A0110	ABS				2	2		3	

6. PARTS LIST

Part name	Part Number	Description	Model							
			TGM- 11RV-N6	TGM- 14RV-N6	TGM- 22RV-N6	TGM- 35R-N	TGM- 48R-N	TGM- 50RS-N	TGM- 69R-N	TGM- 72RS-N
PCB										
Temperature Contr oller	P0183E0500	GNA-904	1							
Temperature Contr oller	P0183E0800	GNF-100		1	1				1	1
Temperature Contr oller	P0183E0100	GNA-900				1	1	1		
FAN CONTROL PC B	P0143A0100					1	1	1	1	1
SHELF										
Shelf	30278G0701		3							
Shelf	30278G0401		1							
Shelf	30278F0304			3						
Shelf	30278F0211			1						
Shelf	30278H0630				4					
Shelf	30278A0230					8				
Shelf	30278D0220						8	8		
Shelf	30278K0101								12	12
Shelf Support	3022000703					4	4	6	4	4
Shelf Clip	30220A0600					24	24	24	36	321
Castor										
Caster	4034C29021	TP 4R-2	4							