

Refrigerator & Freezer Micro Controller

| 제품 카탈로그 |

- Main Controller
- Display
- Digital Thermometer
- Parts



R&A Corporation
TAE SEUNG Electronics

Product

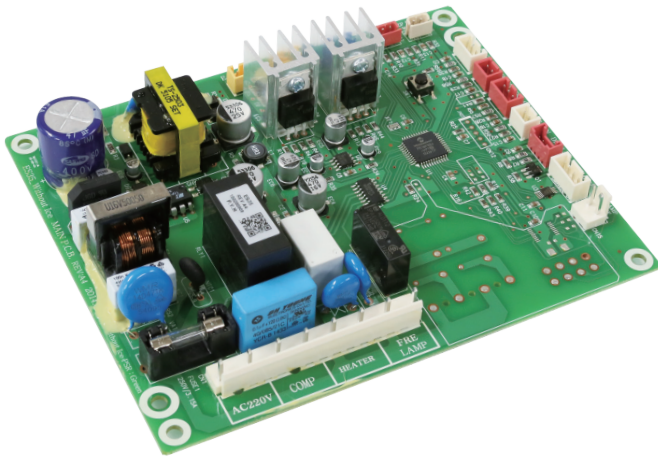
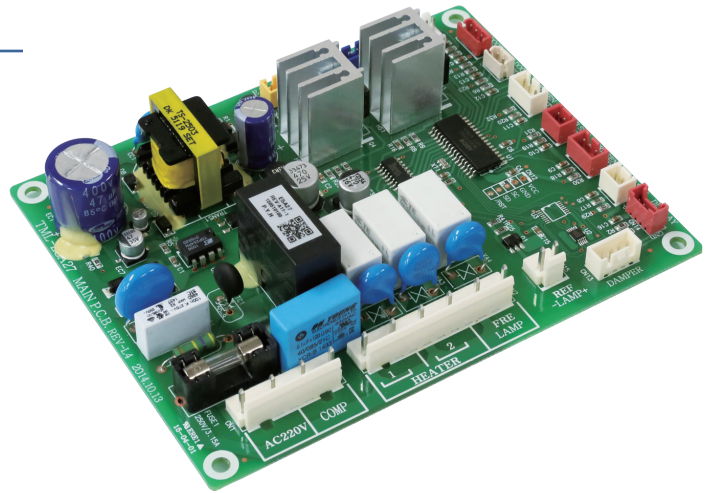
Main Controller

메인 컨트롤러 [Combi, Refrigerator, Freezer]

메인 컨트롤러 • Combi • C-1

Specification

- Power : AC220V, 50/60Hz
- 1 Damper (Electronic Type)
- 4 Sensor (Ref , Fre , Fre Eva , Amb)
- PCB Size : 110*140 (FR-4)
- 2 Door Lamp (Ref : LED Lamp , Fre : AC Lamp)
- 2 Door Switch (Ref , Fre)
- 2 FAN (Fre Eva , Con)



메인 컨트롤러 • Combi • C-2

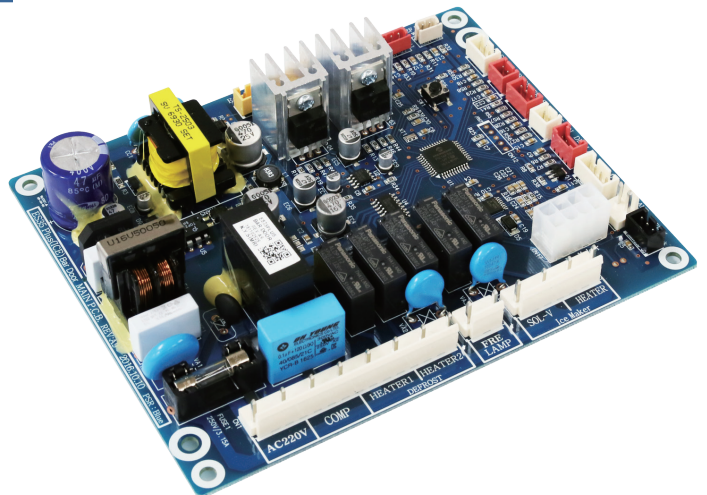
Specification

- Power : AC220V, 50/60Hz
- 1 Damper (Electronic Type)
- 4 Sensor (Ref , Fre , Fre Eva , Amb)
- PCB Size : 110*140 (FR-4)
- 2 Door Lamp (Ref : LED Lamp , Fre : AC Lamp)
- 2 Door Switch (Ref , Fre)
- 2 FAN (Fre Eva , Con)

메인 컨트롤러 • Combi & Ice Maker • C-3

Specification

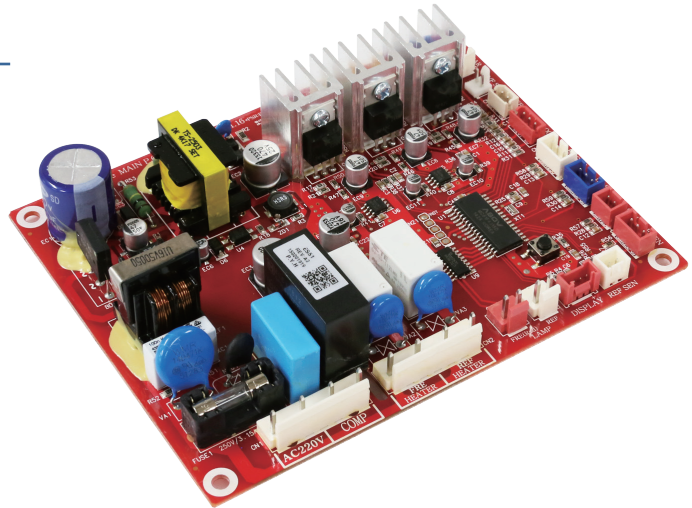
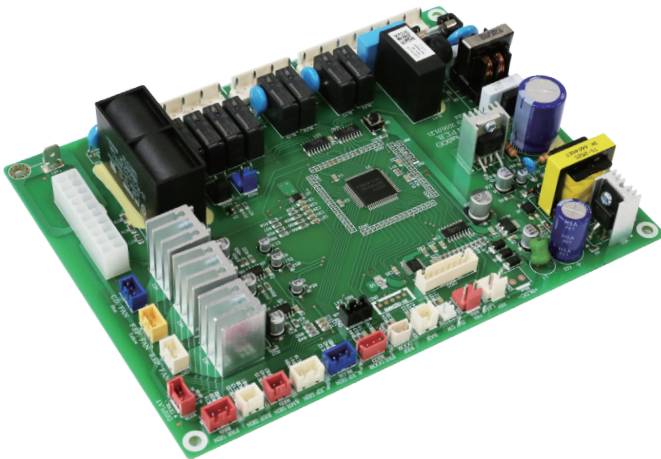
- Power : AC220V, 50/60Hz
- 1 Damper (Electronic Type)
- 4 Sensor (Ref, Fre, Fre Eva, Amb)
- PCB Size : 110*148 (FR-4)
- ICE Maker (Twist Type)
- 2 Door Lamp (Ref : LED Lamp, Fre : AC Lamp)
- 2 Door Switch (Ref, Fre)
- 2 Fan (Fre Eva, Con)



메인 컨트롤러 • Combi • C-4

Specification

- Power : AC220V, 50/60Hz
- 5 Sensor (Ref, Fre, Ref Eva, Fre Eva, Amb)
- PCB Size : 110*140 (FR-4)
- 2 Door Lamp (Ref : LED Lamp, Fre : LED Lamp)
- 3 Door Switch (Ref, Fre, Bar door)
- 2 Evaporator Type
- 3 Fan (Ref Eva, Fre Eva, Con)



메인 컨트롤러 • Combi & Ice Maker • C-5

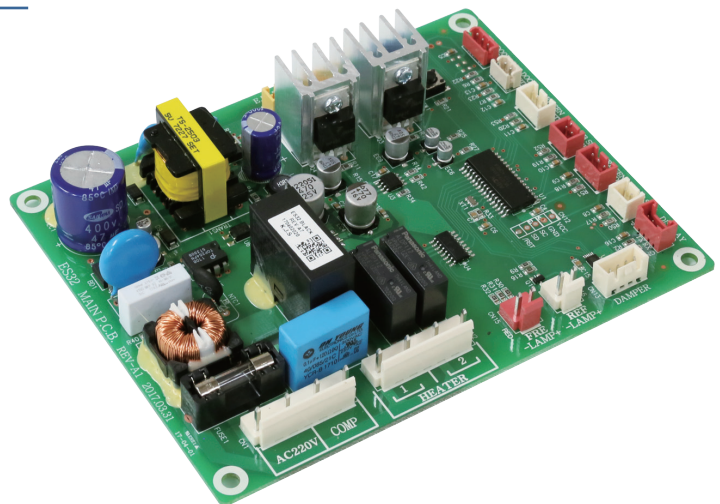
Specification

- Power : AC220V, 50/60Hz
- 6 Sensor (Ref, Fre, Ref Eva, Fre Eva, Dis, Amb)
- PCB Size : 197*148 (FR-4)
- ICE Maker (Automatic Type)
- ICE Cube & Crusher
- 3 Door Lamp (Ref, Fre, Bar : LED Lamp)
- 3 Door Switch (Ref, Fre, Bar)
- 3 Fan (Ref Eva, Fre Eva, Con)
- Water Dispensor · 2 Evaporator Type · Flux Sensor

메인 컨트롤러 • Combi • C-6

Specification

- Power : AC220V, 50/60Hz
- 1 Damper (Electronic Type)
- 4 Sensor (Ref, Fre, Fre Eva, Amb)
- PCB Size : 111*141 (FR-4)
- 2 Door Lamp (Ref : LED Lamp, Fre : LED Lamp)
- 2 Door Switch (Ref, Fre)
- 3 Fan (Ref Eva, Fre Eva, Con)



Product

Main Controller

메인 컨트롤러 [Combi, Refrigerator, Freezer]

메인 컨트롤러 • Combi • C-7

Specification

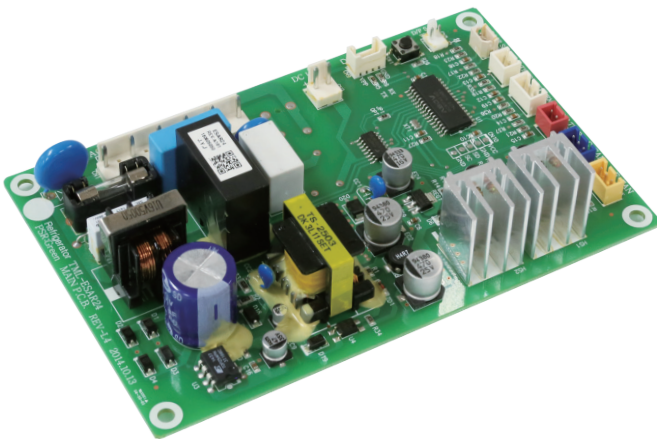
- Power : AC220V, 50/60Hz
- 1 Damper (Electronic Type)
- 4 Sensor (Ref, Fre, Fre Eva, Amb)
- PCB Size : 120*148 (FR-4)
- 2 Door Lamp (Ref : LED Lamp, Fre : LED Lamp)
- 4 Door Switch (Ref*2, Fre*2)
- 4 Door type
- 2 FAN (Fre Eva, Con)



메인 컨트롤러 • Refrigerator • R-1

Specification

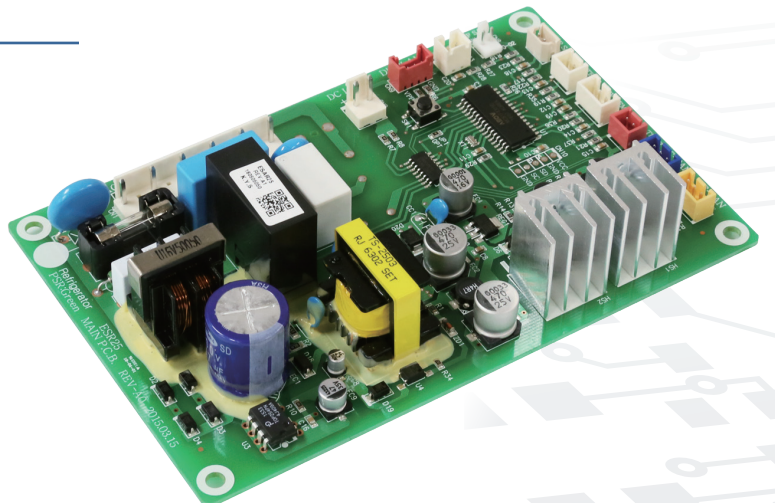
- Power : AC220V, 50/60Hz
- 3 Sensor (Ref, Ref Eva, Amb)
- PCB Size : 148*95 (FR-4)
- 1 Door Lamp (Ref : LED Lamp)
- 1 Door Switch (Ref)
- 2 FAN (Ref Eva , Fre)
- Only refrigerator



메인 컨트롤러 • Refrigerator • R-2

Specification

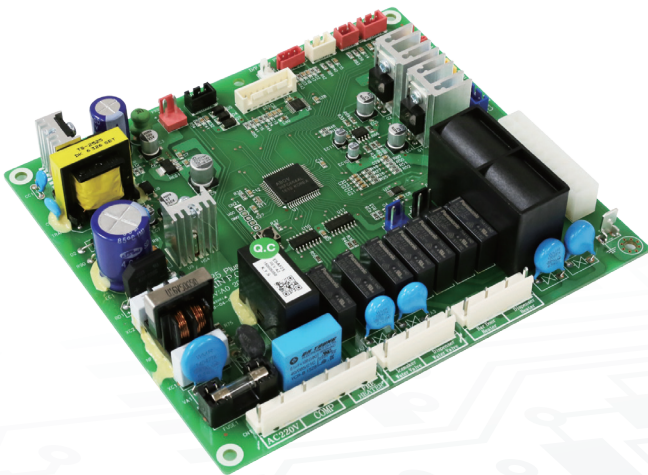
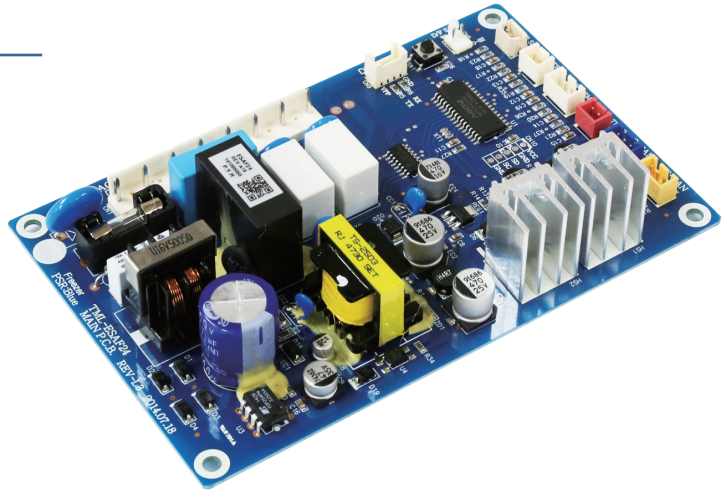
- Power : AC220V, 50/60Hz
- 3 Sensor (Ref, Ref Eva, Amb)
- PCB Size : 148*95 (FR-4)
- 1 Door Lamp (Ref : LED Lamp)
- 1 Door Switch (Ref)
- 2 FAN (Ref Eva , Fre)
- Only refrigerator



메인 컨트롤러 • Freezer • F-1

Specification

- Power : AC220V, 50/60Hz
- 3 Sensor (Fre, Fre Eva, Amb)
- PCB Size : 148*95 (FR-4)
- 1 Door Lamp (Fre : AC Lamp)
- 1 Door Switch (Fre)
- 2 Fan (Fre Eva, Con)



메인 컨트롤러 • Freezer • F-2

Specification

- Power : AC220V, 50/60Hz
- 3 Sensor (Fre , Fre Eva , Amb)
- PCB Size : 164*148 (FR-4)
- ICE Maker (Automatic type)
- ICE Cube & Crusher
- 1 Door Switch (Fre)
- 2 Door Lamp (Fre , Bar : LED Lamp)
- 2 FAN (Fre Eva , Con)
- Water Dispensor · 2 Evaporator Type · Flux Sensor



디스플레이 • Combi FND •

Specification

- Color : Blue
- FND (LED)
- Size : 127*80
- Touch Switch



디스플레이 • Combi FND •

Specification

- Color : Blue (Negative)
- FND (LED)
- Size : 190*70
- Touch Switch



디스플레이 • Combi FND •

Specification

- Color : Blue (Negative)
- FND (LED)
- Size : 219*123
- Touch Switch



디스플레이 • Combi FND •

Specification

- Color : Blue (Negative)
- FND (LED)
- Size : 222*125
- Touch Switch

Product

Display

디스플레이 [Refrigerator, Freezer]

디스플레이 • Refrigerator LCD •

Specification

- Color : Blue (Negative)
- LCD
- Size : 218*63
- Touch Switch



디스플레이 • Refrigerator FND •

Specification

- Color : Blue
- FND (LED)
- Size : 127*80
- Tact Switch



디스플레이 • Refrigerator FND •

Specification

- Color : Blue
- FND (LED)
- Size : 190*70
- Touch Switch



디스플레이 • Freezer LCD •

Specification

- Color : Blue (Negative)
- LCD
- Size : 218*63
- Touch Switch





디스플레이 • Freezer FND •

Specification

- Color : Blue
- FND (LED)
- Size : 127*80
- Tact Switch



디스플레이 • Freezer FND •

Specification

- Color : Blue
- FND (LED)
- Size : 219*123
- Touch Switch



디지털온도계 • Digital Thermometer 100 •

Specification

- 2 Sensor (Ref , Ref Eva)
- Size : 75*64*35
- Out put : 16A*1ea , 10A*1ea
- Power : AC220V, 50/60Hz



디지털온도계 • Digital Thermometer 200 •

Specification

- 3 Sensor (Ref , Ref Eva , Amb)
- Size : 91*75*35
- Out put : 16A*1ea , 5A*3ea
- Power : AC220V, 50/60Hz

Product

Parts

부품 [Water Filter, Ice Maker, Geared Motor, Water Valve]

워터 필터 • Water Filter •



SPEC	VALUE
Model	YM-400
Capacity	800Gallons (3028L)
Operating Press	Min 20psi (137kpa) / Max 125psi (862kpa)
Operating Temp	Min 33°F (0.6°C) / Max 100°F (38°C)
Flow Rate	0.5gpm (1.9lpm)
Chlorine Taste and Odor	Yes
Sediment	Yes
Rust	Yes (Not NSF Tested)
Function	Chemical / Mechanical
Change Cartridges at least every 6 Months	

아이스메이커

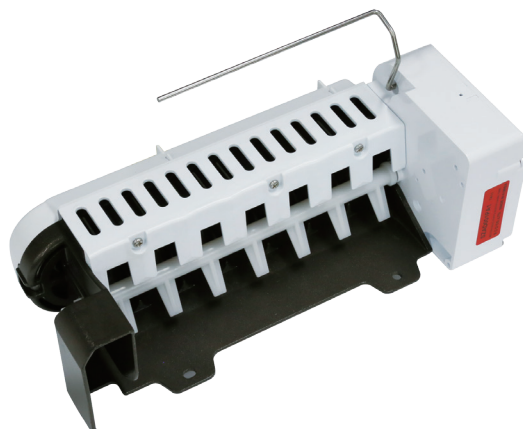
• Ice Maker (Twist Type) •



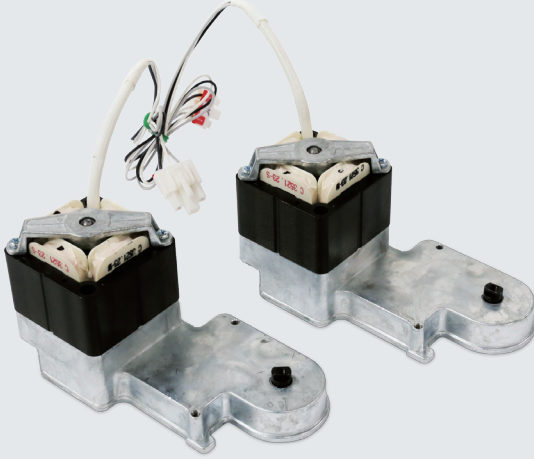
SPEC	Comparative Advantage Against Other Competitors	Remark
Positioning Advantage	cw&ccw Direction is Available, for which user can design any lay-out of Ice-Making unit according to the location of actuator	
Strong Point & Competitiveness	Noise	Under 75dB
	Size	103X62X53 (Drive Unit)
	Cold Resistance	It can be Used On Extremely Low Temperature
	Rating	DC 12V
	Output Torque	400N·CM
Specification	DC 12V Brush Motor	
	Built in ice detecting switch	
	Detecting ice Lever In upper and Lower Direction of ice Detecting Operation	
	Plastic Tray Which Can Detach Ices in Clockwise Direction	

아이스메이커 • Ice Maker (Heating Type / Full Automatic Type) •

SPEC	VALUE
Motor	DC 12V Stepping 333pps
Heater	115V AC130W
Thermal Protector	70°C
RPM (rev/min)	0.8 ± 0.1 min
Torque	4 kgfcm ↑



기어드 모터 • Geared Motor •



SPEC		A	C
Rated Voltage (V±20%)		220V 50/60 Hz	115V 60 Hz
Marked Voltage		220V 50/60 Hz	115V 60 Hz
Start' Voltage		110V Max	58V Max
No Load	Current(A±10%) BK-WH	0.74 / 0.73	1.35
	BK-GY	0.33 / 0.38	0.7
	Watt'(W±10%) BK-WH	143 / 148	138
	BK-GY	73 / 83	77
	Torgue (Kg.cm)Min. Motor/ (Load) Part		
	Start	BK-WH 1.10(184) Min	0.87(172) Min
	BK-GY	0.58(103) Min	0.52(92) Min
	Stall	BK-WH 1.40(245) Min	1.40(245) Min
	BK-GY	0.78(135) Min	0.82(145) Min
R.P.M		15.5 / 19.0	19.0±1
Rated Load		80 Kg.Cm	80 Kg.Cm
Rated Time		1Min. 30Sec	2 Minute
COIL Insulation		Class B	Class B
Temp Rising		95 Max.	95 Max.
Resistance(±10%, at 25°C)	BK-WH	81.2	20.53
	BK-GY	128.2	30.8
Color(Name Plate)		YL / RED Line	L / BLUE
Coil Spec		φ0.22x700T+φ0.19x630T	φ0.3x340T+φ0.27x410T
Size	L0	35.0±0.5	35.0±0.5
	L1	<82.8±0.5>	<82.8±0.5>
	L2	660±10	660±10
Capacitor		4μF 450VAC	14μF 240VAC
Counter-Rotating System		○	○
Applying ul wiring harness		×	○
Thermal Protector		90°C	95°C

밸브 • One Way Water Valve •



SPEC	VALUE
Rated Voltage	AC 110 ~ 127V, AC 220 ~ 240V(Optional)
Wattage	Single 20W / 35W, Dis 20W / 16W
Pressure Range	1 ~ 8.4 kgf/cm ²
Coil Insulation Grade	E Type (Option)
Duty Cycle	Intermit Rating
Inlet Type	Cu-Fitting (Option)
Rating Frequency	50 ~ 60Hz
Terminal	#187 (13/15mm), #250 (13/15mm)
Flow Rate	1L ↑ / 1min
Temperature	Service Water Temperature 50°C ↓ Ambient Temperature 5 ~ 40°C
Overseas Certify Standard	UL, CSA, CQC
Outlet Type	5/16" QUICL Connector Type

밸브 • Two Way Water Valve •



SPEC	VALUE
Rated Voltage	AC 110 ~ 127V, AC 220 ~ 240V (Option)
Wattage	ICE 20W / 35W, Dis 20W / 16W
Pressure Range	1 ~ 8.4 kgf/cm ²
Coil Insulation Grade	E Type (Option)
Duty Cycle	Intermit Rating
Inlet Type	Cu-Pe-Fitting 1/4", 5/16" - Q/C (Option)
Rating Frequency	50 ~ 60Hz
Terminal	#187 (13/15mm), #250 (13/15mm)
Flow Rate	ICE 110±20cc / 6sec, DIS 100cc ↑ / 6sec
Temperature	Service Water Temperature 50°C ↓ Ambient Temperature 5 ~ 40°C
Overseas Certify Standard	UL, CSA, CQC
Outlet Type	ICE 1/4", DIS 5/16 Q/C Type



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