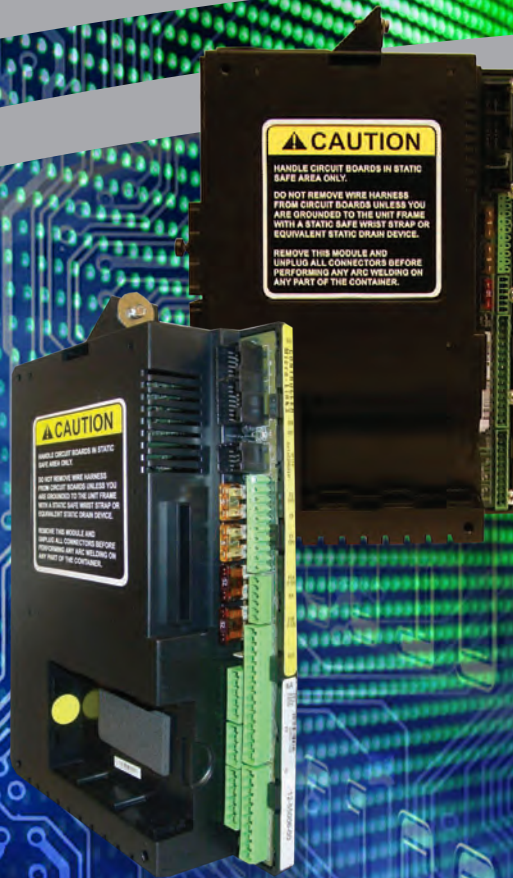




Electronics Repair Service Container



**Carrier Transicold, the global
experts in electronics repair service.**

Terms and Conditions

Warranty

We offer a one year warranty, applicable on all repaired electronics listed, in accordance with Carrier Transicold document 62-10670, *Manufacturer's Warranty & Limitation of Liability - Service Parts or Components*.



Samples of Carrier authorized electronic repair and warranty seals

Note, warranty is void if seals are broken or damaged

Return Procedure

Before returning electronics for repair, please contact your local authorized Carrier Transicold Dealer to obtain the proper shipping location information and procedures for your area. This prior notification will assist us in providing you the quickest turnaround and highest quality of service.

Note: To prevent damage during transport and shipping, make sure all returned items are packaged properly.

CAUTION - Electrostatic Discharge

When repairing, replacing, or working on electronic components it is necessary to wear ESD (electrostatic discharge) protection. If not worn, ESD through the human body can damage the electronics. The damage caused by ESD may not always be detected and can appear at a later date. ESD protection equipment can be purchased through the Carrier Transicold Performance Parts Group (PPG).



Work mat and strap - 07-00277-00

Unit wrist strap - 07-00304-00

Repairable / Un-Repairable Electronics

The following are examples of what cannot be repaired:



Broken printed circuit board



Badly corroded printed circuit board



Badly burned printed circuit board

Other Services We Offer

Data Downloading

Can't download trip data?
In many cases we can help.



Reconfiguration

Not sure if you have the correct
configured electronics for your
unit? We can help you change
the configuration.



Testing

We offer a wide array of testing
and simulations to diagnose
electronic operation and
performance.



These are just a few examples of the many added services we can offer.
Contact your customer service center and ask about the specific
service(s) you require.

Index

NU Analog Series

Temperature Set-Station Board	1
Phase Sequence Board.....	1

NT Analog Series

Simulation Board	2
Digital Display.....	2
Timing Control Board (no current control).....	2
Timing & Current Control Board.....	2
Power Supply Board.....	2
Temperature Control Board	3
Mother Board	3
Status Indicator	3
Temperature Setpoint Selector.....	4
DataCorder Assembly	4
Temperature Selector.....	4
Phase Reversal Board.....	4

MicroLink 1 Series

Microprocessor MicroLink1 (Blue).....	5
Microprocessor MicroLink1 (White).....	5
Logic Board.....	5
I/O Board.....	6
Display Assembly	6
Display Keypad.....	6
Annunciator Board	6
Annunciator Board	7
Digital Display Board	7
USDA Battery Charger	7
USDA Battery Charger Board	7

MicroLink 2 / 2i / 3 Series

High Voltage Module	8
CA Interface Module.....	8
Display Module LCD.....	8
Display Module LED	8
Expansion Module	8
MicroLink 2 Controller Recip (SWR12xx).....	9
MicroLink 2i Controller Recip (SWR12xx).....	9
MicroLink 2i Controller Recip (SWR51xx).....	10
MicroLink 2i Controller Scroll (SWR53xx).....	10
MicroLink 2i Controller Scroll (SWR53xx).....	11
MicroLink 2i Controller CA (SWR31xx)	11
MicroLink 2 DataCorder (SWR21xx).....	12
MicroLink 3 Controller.....	12
Keypad Assembly (CA).....	13
Electronic Recorder.....	13

Datareader	13
FlashCard Programmer	14
PC Card Adapter	14
Tester (ML2i / ML3)	14

Gen Set

Battery Charger	14
-----------------------	----

Seacold / RMC Series

PCB DCU3R	15
PCB DCU3A	15
DCU3 Display and Control Unit	15
Control Board RFC92..ZP	15
Setpoint Selector	15
Controller DCM8	16
Controller DCM9	16
Controller CMS01	16
Controller CMS01a	16
Controller CMS02	17
Phase Reversal Board	17
Phase Reversal Module	17

Sabroe* / Klinge Series

Thermostat	18
MPCII Thermostat	18
MPCII Display Board	18
Phase Sensor	18
Remote Monitoring Module	18

Thermo King* Series

Thermoguard uC Controller	19
Thermoguard uP Controller	19
Thermoguard uP-A Controller	20
Thermoguard uP-A+ Controller	21
Phase Contactor	22
Thermoguard uP-G Controller	22
Relay Board uP-G	22
Thermoguard uP-D Controller	22
Power Board uP-D	23
Output Module uP-D	23
MPC2000 Controller	24
MPC2000id / MP3000 Controllers	25
MPC2000 / MP3000 Display	25
Remote Monitoring Module (RMM)	25
MPC2000 Main Relay Board	26
MP3000 Main Relay Board	26
MP3000-A Main Relay Board	26
MPC2000 Datalogger 365 Days	26

Daikin* Series

DECOS Controller	27
D Terminal Board	27
D Analog board, Repaired	27
D CPU Board	27
D I/O Board	27
D Power Source Board	28
D Solid State Relay Board	28
D Thumb Wheel Board	28
D Display Board	28
Super DECOS Controller	28
SD CPU Board	29
SD Analog Board	29
SD Power I/O Board	29
SD Display Board	29
SD Relay Board	29
Decos IIIa	30
Decos IIIa CPU Board	30
Decos IIIa I/O Board	30
Decos IIIa LED Board	30
Decos IIIa LCD Board	30
Decos IIIb Controller	31
Decos IIIc Controller	31
Decos IIId Controller	31
Decos IIIb /c /d CPU Board	32
Decos IIIb /c /d I/O Board	32
Decos IIIb /c /d SMV Board	32
Decos IIIb /c /d LCD Board	32
PT & CT Board	33

Mitsubishi* Series

MER Controller	34
MMCC Controller	35
MMCC Panel Setter & LED	36
MMCC Temperature Display	36
MMCC PCB S Board	36
MMCC PCB C Board	37
MMCCII Controller	38
MMCC3 Controller	39
MMCC3 Display	39
MMCC3 Relay Board	39
MMCC3 CPU Board	40
MMCC3 Source Board	40
MMCC3A Relay Board	40
MMCC3A Main Board	40
MMCC3A Controller	41
MMCC3A Display	43

Service Tools

Extractor, Pin (AMP Connector)44

Kit, Static Dissipate44

Extractor (EPROM)44

Inserter (EPROM)44

Strap, Grounding44

Extractor Pin.....45

Extractor, ML2, ML2i & ML3 Connectors45

Tester, ML2i / ML345

* Sabroe is a trademark of Johnson Controls, Inc.
Thermo King is a trademark of Thermo King Corporation
Daikin is a trademark of Daikin Industries, Ltd.
Mitsubishi is a trademark of Mitsubishi Electric Corporation

NU Analog Series

Temperature Set-Station Board



Before Repair

09-00205-00
09-00220-00
09-00220-01
09-00221-01
09-00227-00
09-00229-00
09-00230-00
09-00242-00

After Repair

09-00205-00RB
09-00220-01RB
09-00220-01RB
09-00220-01RB
09-00220-01RB
09-00229-00RB
09-00229-00RB
09-00242-00RB

Phase Sequence Board



Before Repair

10-01102-xx
76-50030-00

After Repair

10-01102-00RB



NT Analog Series

Simulation Board



Before Repair
07-00207-00
07-00226-00

After Repair
07-00207-00RB
07-00226-00RB

Digital Display



Before Repair
12-00418-xx
12-01069-xx
12-01073-xx

After Repair
12-00418-00RB
12-01069-00RB
12-01073-00RB

All types are interchangeable and can be used in the same units.

Timing Control Board (no current control)



Before Repair
12-01058-02
12-01058-12
12-01058-22
12-01058-32

After Repair
12-01058-02RB
12-01058-12RB
12-01058-02RB
12-01058-12RB

Timing & Current Control Board



Before Repair
12-01058-00
12-01058-10
12-01058-13
12-01058-20
12-01058-30

After Repair
12-01058-00RB
12-01058-10RB
12-01058-13RB
12-01058-00RB
12-01058-10RB

Power Supply Board



Before Repair
12-01059-00
12-01059-10
12-01059-20
12-01059-30

After Repair
12-01059-00RB
12-01059-10RB
12-01059-00RB
12-01059-10RB

The difference between the -00 and the -10 types:
-00 type is single soldered
-10 type is soldered at both sides
Both boards are interchangeable and can be used in the same units.



NT Analog Series

Temperature Control Board



Before Repair

12-01064-00
12-01064-01
12-01064-02
12-01064-09
12-01064-11
12-01064-12
12-01064-19
12-01064-21
12-01064-29
12-01064-31
12-01064-32
12-01064-39

After Repair

12-01064-01RB
12-01064-01RB
12-01064-02RB
12-01064-09RB
12-01064-11RB
12-01064-12RB
12-01064-19RB
12-01064-01RB
12-01064-09RB
12-01064-11RB
12-01064-12RB
12-01064-19RB

Temperature Control Board



Before Repair

12-01085-00
12-01085-02
12-01085-03
12-01085-09
12-01085-20
12-01085-22
12-01085-23
12-01085-29

After Repair

12-01085-00RB
12-01085-02RB
12-01085-03RB
12-01085-09RB
12-01085-00RB
12-01085-02RB
12-01085-03RB
12-01085-09RB

Mother Board



Before Repair

22-02226-02RB
22-02226-02RB
22-02226-12RB
22-02226-02RB
22-02226-12RB
22-02269-01RB
22-02269-11RB

After Repair

22-02226-02RB
22-02226-02RB
22-02226-12RB
22-02226-02RB
22-02226-12RB
22-02269-01RB
22-02269-11RB

Status Indicator



-00 xx/green/red/amber/xx
-01 blue/green/red/amber/xx
-02 green/blue/red/amber/xx
-03 white/amber/amber/green/xx
-04 green/red/red/amber/xx
-05 green/white/red/amber/xx
-06 green/amber/amber/red/white
-07 white/amber/amber/green/blue
xx = no lamp installed

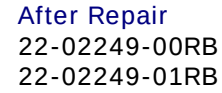
Before Repair

12-01078-00
12-01078-01
12-01078-02
12-01078-03
12-01078-04
12-01078-05
12-01078-06
12-01078-07

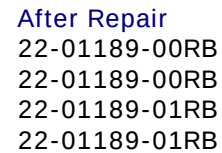
After Repair

12-01078-00RB
12-01078-01RB
12-01078-02RB
12-01078-03RB
12-01078-04RB
12-01078-05RB
12-01078-06RB
12-01078-07RB





Difference between the -00 and the -01:
-00 has a C & F scale
-01 has an F Scale



Difference between the -00 and the -01:
-00 has an F scale
-01 has a C & F Scale



MicroLink 1 Series

Microprocessor MicroLink1 (Blue)



Before Repair
69NT--41---598-x
69NT41-598-xxx

After Repair
69NT41-598-xxxRB

When servicing more than one type model unit, it can be useful to stock un-configured microprocessors. Technicians can then specifically configure the microprocessor prior to installation with the help of a configuration sheet, which comes with the microprocessor.

Unit with refrigeration R12	NT41-598-R12RB
Unit with refrigeration R134a	NT41-598-R134ARB

If you would like to have an un-configured microprocessor rather than a model specific version, order one of the following, based on the type of unit you wish to support.

NT41-598-R12RB
NT41-598-R134ARB

Microprocessor MicroLink1 (White)



Before Repair
69NT--42---334-x
69NT42-334-xxx

After Repair
69NT42-334-xxxRB

When servicing more than one type model unit, it can be useful to stock un-configured microprocessors. Technicians can then specifically configure the microprocessor prior to installation with the help of a configuration sheet, which comes with the microprocessor.

Unit with refrigeration R12	NT42-334-R12RB
Unit with refrigeration R134a	NT42-334-R134ARB

If you would like to have an un-configured microprocessor rather than a model specific version, order one of the following, based on the type of unit you wish to support.

NT42-334-R12RB
NT42-334-R134ARB

Logic Board



Before Repair
12-00292-xx
12-00297-xx

After Repair
12-00292-xxRB
12-00297-xxRB

12-00298-xx
12-00326-xx

12-00326-xxRB
12-00326-xxRB

12-00432-xx
12-01121-xx
12-01131-xx

12-00432-xxRB
12-01121-xxRB
12-01131-xxRB



MicroLink 1 Series

I/O Board



Before Repair
12-01120-xx
12-01123-xx
12-01123-xxSV

After Repair
12-01123-00SVRB

12-01130-xx

12-01130-00RB

Note: After repair the I/O board is returned to its un-configured state and must be field configured for the specific unit model before use.

Diode Definitions	Leave In	Cut Out
D18-Probes	2	4
D19-DataCorder	No	Yes
D20-Dehumid.	Yes	No
D21-EFM Speed	Single	Dual
D26-SSV	Yes	No
D28-Quench	Solenoid	QXV
For units with field added DataCorder, the removal of D18 & D19 is also required		

Display Assembly



Before Repair
12-00313-00
12-00313-00SV
12-01084-00
12-01116-00
12-01127-00
12-01127-00SV

After Repair
12-00313-00SVRB

Display Keypad



Before Repair
12-01084-01

After Repair
12-01084-01RB

Annunciator Board



Before Repair
12-00313-01

After Repair
12-00313-01RB

MicroLink 1 Series

Annunciator Board



Before Repair
12-01084-03

After Repair
12-01084-03RB

Annunciator Board



Before Repair
12-01127-03

After Repair
12-01127-03RB

Digital Display Board



Before Repair
12-01116-02

After Repair
12-01116-02RB

12-01116-22

USDA Battery Charger



Before Repair
69NT40-177-x
69NT--40---177-x

After Repair
69NT40-177-1RB

USDA Battery Charger Board



Before Repair
12-01111-00

After Repair
12-01111-00RB

MicroLink 2 / 2i / 3 Series

High Voltage Module



Before Repair
12-00329-00
12-00329-20

After Repair
12-00329-00RB

CA Interface Module



Before repair
12-00344-00

After repair
12-00344-00RB

Display Module LCD



Before Repair
12-00333-00
12-00333-03
12-00333-20
12-00333-23
12-00433-00

After Repair
12-00433-00RB

CA = Controlled Atmosphere

12-00333-01
12-00433-01

12-00433-01RB CA only

Display Module LED



Before Repair
12-00433-02

After Repair
12-00433-02RB LED Type

Expansion Module



Before repair
12-00535-00
12-55484-00

After repair
12-55535-00RB

MicroLink 2 / 2i / 3 Series

MicroLink 2 Controller Recip (SWR12xx)



Before Repair

12-00327-xx/12xx
12-00367-xx/12xx
12-00388-xx/12xx
12-00414-xx/12xx
12-50026-xx/12xx
12-50029-xx/12xx
12-50031-xx/12xx
12-50034-xx/12xx
12-50038-xx/12xx
12-50050-xx/12xx
12-50054-xx/12xx
12-55058-xx/12xx
12-55060-xx/12xx
12-55388-xx/12xx

After Repair

12-56000

12-56000

12-56388-xx/12xx

MicroLink 2i Controller Recip (SWR12xx)



Before Repair

12-00373-xx/12xx
12-00378-xx/12xx
12-00379-xx/12xx
12-00386-xx/12xx
12-00425-xx/12xx
12-00442-xx/12xx
12-00458-xx/12xx
12-50032-xx/12xx
12-50035-xx/12xx
12-50051-xx/12xx
12-50055-xx/12xx
12-50386-xx/12xx
12-55001
12-55057-xx/12xx
12-55061-xx/12xx
12-55386-xx/12xx
12-55425-xx/12xx
12-55442-xx/12xx
12-55458-xx/12xx

After Repair

12-56001

12-56001

12-56386-xx/12xx

12-56425-xx/12xx

12-56442-xx/12xx

12-56458-xx/12xx



MicroLink 2 / 2i / 3 Series

MicroLink 2i Controller Recip (SWR51xx)



Before Repair

12-00373-xx/51xx
12-00378-xx/51xx
12-00379-xx/51xx
12-00386-xx/51xx
12-00425-xx/51xx
12-00442-xx/51xx
12-00458-xx/51xx
12-50032-xx/51xx
12-50035-xx/51xx
12-50051-xx/51xx
12-50055-xx/51xx
12-50386-xx/51xx
12-55002
12-55057-xx/51xx
12-55061-xx/51xx
12-55386-xx/51xx
12-55425-xx/51xx
12-55442-xx/51xx
12-55458-xx/51xx

After Repair

12-56002

12-56002
12-56386-xx/51xx
12-56425-xx/51xx
12-56442-xx/51xx
12-56458-xx/51xx

MicroLink 2i Controller Scroll (SWR53xx)



Before Repair

12-00373-xx/53xx
12-00378-xx/53xx
12-00379-xx/53xx
12-00386-xx/53xx
12-00425-xx/53xx
12-00442-xx/53xx
12-00458-xx/53xx
12-50032-xx/53xx
12-50035-xx/53xx
12-50051-xx/53xx
12-50055-xx/53xx
12-50386-xx/53xx

After Repair

12-56003

Continued on next page



MicroLink 2 / 2i / 3 Series

MicroLink 2i Controller Scroll (SWR53xx)



Before Repair

12-55003
12-55057-xx/53xx
12-55061-xx/53xx
12-55386-xx/53xx
12-55425-xx/53xx
12-55442-xx/53xx
12-55458-xx/53xx

After Repair

12-56003

12-56003
12-56386-xx/53xx
12-56425-xx/53xx
12-56442-xx/53xx
12-56458-xx/53xx

MicroLink 2i Controller CA (SWR31xx)



Before Repair

12-00373-xx/31xx
12-00378-xx/31xx
12-00379-xx/31xx
12-00386-xx/31xx
12-00425-xx/31xx
12-00442-xx/31xx
12-00458-xx/31xx
12-50032-xx/31xx
12-50035-xx/31xx
12-50051-xx/31xx
12-50055-xx/31xx
12-50386-xx/31xx
12-55004
12-55057-xx/31xx
12-55061-xx/31xx
12-55386-xx/31xx
12-55425-xx/31xx
12-55442-xx/31xx
12-55458-xx/31xx

After Repair

12-56004

12-56004
12-56386-xx/31xx
12-56425-xx/31xx
12-56442-xx/31xx
12-56458-xx/31xx

All modules are equipped with the latest good working operational software and are **un-configured**.
The real time clock (RTC) battery is checked and in most cases replaced during the repair service.



MicroLink 2 / 2i / 3 Series

MicroLink 2 DataCorder (SWR21xx)



Before Repair

12-00328-xx/21xx
12-00356-xx/21xx
12-00358-xx/21xx
12-00387-xx/21xx
12-50036-xx/21xx
12-50356-xx/21xx
12-55005
12-55036-xx/21xx
12-55062-xx/21xx
12-55066-xx/21xx
12-55356-xx/21xx

After Repair

12-56005

12-56005
12-56328-xx/21xx
12-56356-xx/21xx
12-56358-xx/21xx
12-56387-xx/21xx
12-56463-xx/21xx
12-56476-xx/21xx

MicroLink 3 Controller



Before Repair

12-55006
12-56006
12-55007
12-56007
12-55008
12-56008
12-55009
12-56009

After Repair

12-56008
12-56009
12-56008
12-56009

Remarks

Recip
Scroll
Recip
Scroll

All modules are equipped with the latest good working operational software and are **un-configured**.
The real time clock (RTC) battery is checked and in most cases replaced during the repair service.



MicroLink 2 / 2i / 3 Series

Keypad Assembly (CA)



Before Repair
12-00290-01
12-00290-03
69NT--43---159-1
79-01706-01
79-01706-01SV

After Repair
79-01706-01SVRB

Electronic Recorder



-07RB = special customer req.
-08RB = Standard model

Before Repair
12-00464-00
12-00464-01
12-00464-02
12-00464-03
12-00464-04
12-00464-05
12-00464-06
12-00464-07
12-00464-08

After Repair
12-00464-07RB
12-00464-08RB
12-00464-08RB
12-00464-07RB
12-00464-08RB
12-00464-07RB
12-00464-08RB
12-00464-07RB
12-00464-08RB

Datreader



Before Repair
07-00321-xx
07-00321-xx/2.x
12-00377-xx/2.x

After Repair
12-56377

Repair includes update to latest operational software



MicroLink 2 / 2i / 3 Series

FlashCard Programmer



Before Repair
PB10

After Repair
PB10RB

PC Card Adapter



Before repair
07-00461-00

After repair
07-00461-00RB

Tester (ML2i / ML3)



Before Repair
07-00428-xx
07-00428-xxSV

After Repair
07-00428-00SVRB

For repair - please send the analyzer complete with all cables and software cards.

Gen Set

Battery Charger



Before Repair
30-00460-xx

After Repair
30-00460RB

Seacold / RMC Series

PCB DCU3R



Before Repair
SC56-3-830-01

After Repair
SC56-3-830-01RB

PCB DCU3A



Before Repair
SC56-3-830-02

After Repair
SC56-3-830-02RB

DCU3 Display and Control Unit



Before Repair
SC56-4-822-00

After Repair
SC56-4-822-00RB

Control Board RFC92..ZP



Before Repair
SC56-4-823-00

After Repair
SC56-4-823-00RB

Setpoint Selector



Before Repair
SC56-4-826-00

After Repair
SC56-4-826-00RB



Seacold / RMC Series

Controller DCM8



Before Repair

DCM8
DCM8R
DCM8RM
DCM8P
SC56-4-044

After Repair

DCM8-RB
DCM8R-RB
DCM8RM-RB
SC56-4-044RB
SC56-4-044RB

Controller DCM9



Before Repair

DCM9
DCM9R
DCM9RM

After Repair

DCM9-RB
DCM9R-RB
DCM9RM-RB

Controller CMS01



Before Repair

SC56-4-033

After Repair

SC56-4-033RB

Controller CMS01a



Before Repair

12-50052-00

After Repair

12-50052-00RB



Seacold / RMC Series

Controller CMS02



Before Repair
SC56-4-048

After Repair
SC56-4-048RB

Phase Reversal Board



Before Repair
SC52-0-130
SC52-0-140

After Repair
SC52-0-130RB
SC52-0-140RB

Phase Reversal Module



Before Repair
SC52-0-206

After Repair
SC52-0-206RB



Sabroe / Klinge Series

Thermostat



Before Repair	After Repair
K31-00821-10	20-K3100821-10RB
K31-00835-20	20-K3100835-20RB
K31-00871-10	20-K3100871-10RB
K31-53199-00	20-K3153199-00RB

MPCII Thermostat



Before Repair	After Repair	Remarks
K31-50010-00	20-K3150010-00RB	2 Compressors
K31-51692-00	20-K3151692-00RB	1 Compressor
K31-51750-00	20-K3151750-00RB	2 Compressors
K31-51792-00	20-K3151792-00RB	1 Compressor
K31-51962-00	20-K3151962-00RB	1 Compressor
K31-52125-00	20-K3152125-00RB	1 Compressor
K31-52215-00	20-K3152215-00RB	1 Compressor
K31-72006-00	20-K3172006-00RB	1 Compressor
K31-72057-00	20-K3172057-00RB	1 SSV

MPCII Display Board



Before Repair	After Repair	Remarks
K31-50011-00	20-K3150011-00RB	2 Compressors
K31-51631-00	20-K3151631-00RB	1 Compressor
K31-51751-00	20-K3151751-00RB	2 Compressors
K31-51959-00	20-K3151959-00RB	1 Compressor

Phase Sensor



Before Repair	After Repair	
K31-51550-00	20-K3151550-00RB	380 / 400V
K31-51555-00	20-K3151555-00RB	220 / 240V
K31-00809-00	K31-00809-00RB	380 / 400V

Remote Monitoring Module



Before Repair	After Repair
12-00275-xx	12-00275-04SVRB
12-00275-xxSV	

Thermo King Series

Thermoguard uC Controller



Before Repair	After Repair	Model	SWR
45-1347	20-451347RB	CFIIM2, M3, M5, M6, M8 CFIIM5A, B, C, D, E, G, J, L CFIIM28	3.2C
45-1554	20-451554RB	CFIIM2, M3, M5, M5A, B, C, D, E, G, J, L	3.3L

Thermoguard uP Controller



Before Repair	After Repair	Model	SWR
45-1313	20-451313RB	CEIIM4/M6	1.4
45-1325	20-451325RB	CFIIM17/M20	1.8
45-1331	20-451331RB	CFIIM21/M23/M24	1.11
45-1338	20-451338RB	CFIIM1B/M1C/M31	1.5
45-1339	20-451339RB	CFIIM14/M14A/M14C/M18	1.5
45-1340	20-451340RB	CFIIM14A/M14D/M14E/M14F	1.5
45-1341	20-451341RB	CFIIM14B	1.10
45-1342	20-451342RB	CFIIM18	1.7C
45-1343	20-451343RB	CFIIM19A/M19B/M19B	1.6H
45-1344	20-451344RB	CFIIM21/M23/M24	1.11
45-1345	20-451345RB	CFIIM22/M26	1.10
45-1346	20-451346RB	CFIIM14G/M27/M30	1.6D
45-1348	20-451348RB	CEIIM4/M6	1.4
45-1354	20-451354RB	CFIIM1/M1A/M4	1.12A
45-1376	20-451376RB	CFIIM30	1.6G
45-1382	20-451382RB	CFIIM4	1.12A
45-1397	20-451397RB	CFIIM7/M4A	1.12A
45-1399	20-451399RB	CFIIM7/M4A	2.2B
45-1462	20-451462RB	CFIIM1B/M1C/M31	2.1L
45-1463	20-451463RB	CFIIM14A/M14B/M14E/M14F	2.1L
45-1518	20-451518RB	CFIIM7A	2.2B



Thermo King Series

Thermoguard uP-A Controller



Before Repair	After Repair	Model	SWR
45-1428	20-451428RB	CFIIM30A,B,C/4C/32,A/33,1,2/M35	3.4M
45-1453	20-451453RB	CFIIM30A,B,C/4C/32,A/33,1,2/M35	3.4M
		CFIIM4B, M7B, M9, M9A, B,C	
45-1472	20-451472RB	CFIIM34, M36	3.8H
45-1474	20-451474RB	CFIIM19.1, M19.2, M19.3, M19.5, M19.6	3.5D
45-1489	20-451489RB	CFIIM19/M19A/M19B	7.6A
45-1490	20-451490RB	CFIIM14G/M27	7.6A
45-1491	20-451491RB	CFIIM30/M14B	7.6A
45-1493	20-451493RB	CFIIM14/M14A/M14C	7.6A
45-1495	20-451495RB	CFIIM1B/M1C/M31	8.1A
45-1497	20-451497RB	CFIIM14A/M14D/M14E/M14F	8.1A
45-1506	20-451506RB	CFIIM19.4	3.5D
45-1507	20-451507RB	CFIIM22/M26	7.6A
45-1508	20-451508RB	CFIIM21/M23/M24	7.11A
45-1509	20-451509RB	CFIIM36	3.8H
45-1526	20-451526RB	CFIIM35M35A	3.7D
45-1529	20-451529RB	CEIIM4/M6	7.4A
45-1532	20-451532RB	CFIIM7B	3.10B
45-1539	20-451539RB	CFIIM17/M20	7.8A
45-1559	20-451559RB	CFIIM7/M4A	8.2
45-1561	20-451561RB	CFIIM7/M4A	8.2
45-1571	20-451571RB	CFIIM37	4.2D
45-1574	20-451574RB	CFIIM33/M33A/M33.1/M33.3	4.1
45-1577	20-451577RB	CFIIM37.1	4.2D
45-1581	20-451581RB		3.4M
45-1722	20-451722RB	CFIIM1/M1A/M4	7.12
45-1723	20-451723RB	CFIIM33/M33.1/M33.3	4.6D



Thermo King Series

Thermoguard uP-A+ Controller



Before Repair	After Repair	Model	SWR
45-1599	20-451599RB	Unconfigured	CFG01
45-1629	20-451629RB	CFIIM19.7/M19.8/M19.9/M19.10	CFG02
45-1630	20-451630RB	CFIIM37/M37.1/M37.2/M37.3	CFG05
45-1631	20-451631RB	CFIIM37.3	CFG05
45-1632	20-451632RB	CFIIM38/M39/M39.2	CFG03
45-1633	20-451633RB	CFIIM40	CFG07
45-1636	20-451636RB	CFIIM32E/M32F/M32G/M32H	CFG06
45-1684	20-451684RB	CFIIM40/M40.1	CFG07
45-1687	20-451687RB	CFIIM41/M41.1	CFG08
45-1715	20-451715RB	CFIIM42.1 SCROLL R404A	CFG10
45-1730	20-451730RB	CFIIM46/M51/M52/M52.1/M54	CFG09
45-1741	20-451741RB	CFIIM21/M23/M24	9.22
45-1742	20-451742RB	CFIIM1/M1A/M4	9.25
45-1743	20-451743RB	CFIIM4/M6	9.20
45-1744	20-451744RB	CFIIM19/M19A/M19B	9.21
45-1746	20-451746RB	CFIIM30/M14B	9.21
45-1748	20-451748RB	CFIIM14/M14A/M14C	9.21
45-1750	20-451750RB	CFIIM22/M26	9.21
45-1751	20-451751RB	CFIIM17/M20	9.24
45-1752	20-451752RB	CFIIM1B/M1C/M31	9.23
45-1754	20-451754RB	CFIIM14A/M14D/M14E/M14F	9.23
45-1755	20-451755RB	CFIIM7/M4A	9.26
45-1757	20-451757RB	CFIIM7A	9.26
45-1758	20-451758RB	CFIIM19.1/M19.2/M19.3/M19.5 M19.6	9.05
45-1759	20-451759RB	CFIIM34/M36	9.04B
45-1760	20-451760RB	CFIIM19.4	9.05
45-1761	20-451761RB	CFIIM35M35A	9.03
45-1762	20-451762RB	CFIIM7B	9.01
45-1763	20-451763RB	CFIIM37/M37.1/M37.2/M37.3	9.11
45-1764	20-451764RB	CFIIM30x/M4C/M32x/M33x/M35	9.02
45-1765	20-451765RB	CFIIM33/M33A/M33.1/M33.3	9.12
45-1777	20-451777RB	CFIIM42 SCROLL R134A	CFG11
45-1778	20-451778RB	CFIIM39.3	CFG12
45-1779	20-451779RB	CFIIM53/M53.1	CFG13
45-1787	20-451787RB	CFIIM39	CFG04
45-1795	20-451795RB	CFIIM46.1	CFG14



Thermo King Series

Phase Contactor



Before Repair	After Repair	Remarks
44-5752	20-445752RB	380V
44-5753	20-445753RB	220V
44-5755	20-445755RB	380V
41-1971	20-411971RB	380V

Thermoguard uP-G Controller



Before Repair	After Repair
45-1797	20-451797RB

Relay Board uP-G



Before Repair	After Repair
45-5219	20-455219RB

Thermoguard uP-D Controller



Before Repair	After Repair
45-1827	20-451949RB
45-1845	
45-1846	
45-1847	
45-1850	
45-1860	
45-1861	
45-1862	
45-1916	
45-1949	

Thermo King Series

Power Board uP-D



Before Repair

45-1792
45-1806
45-1817

After Repair

20-451792RB
20-451806RB
20-451817RB

Output Module uP-D



Before Repair

45-1711

After Repair

20-451711RB

Output Module uP-D



Before Repair

45-1853

After Repair

20-451853RB



Thermo King Series

MPC2000 Controller



Before Repair	After Repair	Remarks
45-1907	20-451907-00RB	Multiload (only Controller)
45-1907	20-451907-01RB	Multiload (incl. Datalogger)
45-1907	20-451907-02RB	Multiload (incl. RMU)
45-1907	20-451907-03RB	Multiload (incl. Data + RMU)
K31-72520-00	20-K3172520-00RB	Multiload (only Controller)
K31-72520-00	20-K3172520-01RB	Multiload (incl. Datalogger)
K31-72520-00	20-K3172520-02RB	Multiload (incl. RMU)
K31-72520-00	20-K3172520-03RB	Multiload (incl. Data + RMU)
K31-72519-00	20-K3172519-00RB	Multiload (only Controller)
K31-72519-00	20-K3172519-01RB	Multiload (incl. Datalogger)
K31-72519-00	20-K3172519-02RB	Multiload (incl. RMU)
K31-72519-00	20-K3172519-03RB	Multiload (incl. Data + RMU)
K31-52181-00	20-K3152181-00RB	Unload (only Controller)
K31-52181-00	20-K3152181-01RB	Unload (incl. Datalogger)
K31-52181-00	20-K3152181-02RB	Unload (incl. RMU)
K31-52181-00	20-K3152181-03RB	Unload (incl. Data + RMU)
K31-72155-00	20-K3172155-00RB	KVQ (only Controller)
K31-72155-00	20-K3172155-01RB	KVQ (incl. Datalogger)
K31-72155-00	20-K3172155-02RB	KVQ (incl. RMU)
K31-72155-00	20-K3172155-03RB	KVQ (incl. Data + RMU)
K31-72056-00	20-K3172056-00RB	KVQ (only Controller)
K31-72056-00	20-K3172056-01RB	KVQ (incl. Datalogger)
K31-72056-00	20-K3172056-02RB	KVQ (incl. RMU)
K31-72056-00	20-K3172056-03RB	KVQ (incl. Data + RMU)



Thermo King Series

MPC2000id / MP3000 Controllers



Before Repair	After Repair	Remarks
MPC2000id		
45-1851	20-451851-00RB	MPC2000id (only Controller)
45-1851	20-451851-01RB	MPC2000id (incl. RMM)

Compatible with unit type MPC2000

MP3000		
45-1909	20-451909-00RB	MPC3000 (only Controller)
45-1909	20-451909-01RB	MPC3000 (incl. RMM)

Compatible with unit type MPC2000(id)

MP3000-A		
45-2009	20-452009-00RB	MPC3000-A (only Controller)
45-2009	20-452009-01RB	MPC3000-A (incl. RMM)

Compatible with unit type MPC2000(id) and MP3000

RMM = Remote Monitoring Module

MPC2000 / MP3000 Display



Before Repair	After Repair	Remarks
41-4919	20-414919-00RB	MPC2000
41-4919	20-414919-01RB	MP3000

Note: Both types **are NOT** interchangeable. When one of the displays needs service, please let us know for which type the display will be used. You can use your Return authorization form to mention this.

Remote Monitoring Module (RMM)



Before Repair	After Repair	Remarks
K31-52169-00	20-K3152169-00RB	MPC2000(id) RMM
45-1898	20-451898RB	MP3000(a) RMM

Thermo King Series

MPC2000 Main Relay Board



Before Repair	After Repair	Remarks
K31-52088-00	20-K3152088-00RB	No Zero Current
K31-52197-00	20-K3152197-00RB	With Zero Current
K31-72007-00	20-K3172386-00RB	No Zero Current
K31-72008-00	20-K3172387-00RB	With Zero Current
K31-72386-00	20-K3172386-00RB	No Zero Current
K31-72387-00	20-K3172387-00RB	With Zero Current

MP3000 Main Relay Board



Before Repair	After Repair	Remarks
45-2834	20-452834-00RB	With Zero Current

Compatible with unit type MPC2000(id)

MP3000-A Main Relay Board



Before Repair	After Repair	Remarks
45-2010	20-452010-00RB	No Zero Current

Compatible with unit type MPC2000(id) and MP3000

MP3000-A Main Relay Board



Before Repair	After Repair	Remarks
45-2010*	20-452010-x1RB	No Zero Current

* MRB with redesigned phase correction sense circuit

Compatible with unit type MPC2000(id) and MP3000

MPC2000 Datalogger 365 Days



Before Repair	After Repair
K31-52122-00	20-K3152122-00RB
K31-72052-00	20-K3172052-00RB
K31-81436-00	20-K3181436-00RB
45-1904	20-451904-00RB

Daikin Series

DECOS Controller



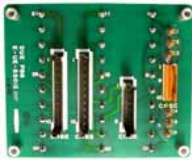
Before Repair

690611
690613
690621
690631
690641
690661
690662
690664
690665

After Repair

D690611RB
D690613RB
D690621RB
D690631RB
D690641RB
D690661RB
D690662RB
D690664RB
D690665RB

D Terminal Board



Before Repair

698207

After Repair

D698207RB

D Analog board, Repaired



Before Repair

690623
698202
698210

After Repair

D690623RB
D698202RB
D698210RB

D CPU Board



Before Repair

690622
690635
690642
698201
698209

After Repair

D690622RB
D690635RB
D690642RB
D698201RB
D698209RB

D I/O Board



Before Repair

690624
698203
698211

After Repair

D690624RB
D698203RB
D698211RB



Daikin Series

D Power Source Board



Before Repair
698205
698213

After Repair
D698205RB
D698213RB

D Solid State Relay Board



Before Repair
698206

After Repair
D698206RB

D Thumb Wheel Board



Before Repair
690627
690628
690630
698214

After Repair
D690627RB
D690628RB
D690630RB
D698214RB

D Display Board



Before Repair
690601
690602
690625
690632
690633
698204
698212

After Repair
D690601RB
D690602RB
D690625RB
D690632RB
D690633RB
D698204RB
D698212RB

Super DECOS Controller



Before Repair
690674
690675
690688
0184751
0454955
0480682

After Repair
D690674RB
D690675RB
D690688RB
D0184751RB
D0454955RB
D0480682RB



Daikin Series

SD CPU Board



Before Repair
690676
0184737
0454962
0480699

After Repair
D690676RB
D0184737RB
D0454962RB
D0480699RB

SD Analog Board



Before Repair
690677

After Repair
D690677RB

SD Power I / O Board



Before Repair
690678

After Repair
D690678RB

SD Display Board



Before Repair
690679
0108632

After Repair
D690679RB
D0108632RB

SD Relay Board



Before Repair
690680
0569307

After Repair
D690680RB
D0569307RB



Daikin Series

Decos IIIa



Before Repair

0598932
0766968
0777083
0953128
1062861
1062878
1456853

After Repair

D1456853RB

Decos IIIa CPU Board



Before Repair

0598514
0734442
0798725
0953135

After Repair

D0598514RB
D0734442RB
D0798725RB
D0953135RB

Remarks

EC9322
EC9549-1
EC9549-2
EC9549-4

Decos IIIa I/O Board



Before Repair

0598521
0734459

After Repair

D0598521RB
D0734459RB

Remarks

EC9323
EC9550

Decos IIIa LED Board



Before Repair

0598949
0622176
0734466

After Repair

D0598949RB
D0622176RB
D0734466RB

Remarks

EC9324
EC9551

Decos IIIa LCD Board



Before Repair

598538
0734473

After Repair

D0598538RB
D0734473RB

Remarks

EC9325
EC9552

Daikin Series

Decos IIb Controller



Before Repair	After Repair	Remarks
1241501	D1241501RB	
1241518	D1241518RB	1
1241549	D1241549RB	2

Decos IIc Controller



Before Repair	After Repair	Remarks
1562804	D0598538RB	
1601312	D1601312RB	1
1601329	D1601329RB	1 & 2
1684014	D1684014RB	2

Decos IIId Controller



Before Repair	After Repair	Remarks
1739356	D1739356RB	4
1750586	D1750586RB	3
1787502	D1787502RB	2
1775477*	D1775477RB	

* I/O PCB without connector CN25

1 = PC port (D-sub) equipped	3 = Controller cover straight
2 = Power board (for backlight) equipped	4 = Controller cover curved



Daikin Series

Decos IIIb /c /d CPU Board

	Before Repair	After Repair	Remarks
	IIIb		
	1241556	D1241556RB	EC9753A-xx
	IIIc		
	1562811	D1562811RB	EC0076
	1581379	D1581379RB	EC0278
	IIId		
	1642553	D1642553RB	EC0076
	1637070	D1637070RB	EC0278
	1642560	D1642560RB	EC0338
	1775321	D1775321RB	EC0510(B)

Decos IIIb /c /d I/O Board

	Before Repair	After Repair	Remarks
	0954594	D0954594RB	EC9754
	1378751	D1378751RB	EC0279
	1775484*	D1775484RB	EC0630(A)
	* PCB without connector CN25		

Decos IIIb /c /d SMV Board

	Before Repair	After Repair	Remarks
	1250783	D1250783RB	EC0058

Decos IIIb /c /d LCD Board

	Before Repair	After Repair	Remarks
	1095645*	D1913394RB	EC9755
	1913394*		
	0954602	D1010815RB	EC9755-1
	1010815		EC9755-2

* PCB including backlight

Daikin Series

PT & CT Board



Before Repair

0980788 – 10HP-Dual
0598545 – 5HP-Dual
0954633 – 10HP-Single

After Repair

D0991050-01RB
D0991050-02RB
D0991050-03RB

Remarks

EC9756-1
EC9239-1
EC9756-3



Mitsubishi Series

MER Controller



Before Repair	After Repair	Model
MER-5B3	MER-5B3-RB	CPE10-3BWJ3
MER-5Y2	MER-5Y2-RB	CPE10-3BWH2
MER-5Y2A	MER-5Y2A-RB	-----
MER-5Y3	MER-5Y3-RB	CPE10-3BWG
MER-5Y3A	MER-5Y3A-RB	CPE10-3BWD
MER-5Y4	MER-5Y4-RB	CPE10-3BWF3/3BWF4/3BWE CPE51-3TWF2/3BWH CPE10-3BWK/CPE51-3TWK
MER-5Y4A	MER-5Y4A-RB	-----
MER-5Y5	MER-5Y5-RB	-----
MER-5Y5A	MER-5Y5A-RB	-----
MER-5Y6	MER-5Y6-RB	CPE51-3BWF
MER-5Y6A	MER-5Y6A-RB	-----
MER-5Y7	MER-5Y7-RB	CPE10-3BWA7/CPE51-3TWA4
MER-5Y7A	MER-5Y7A-RB	CPE10-3BWA
MER-5Y8	MER-5Y8-RB	CPE10-3BWJ4/CPE51-3BWJ,2
MER-5Y8B	MER-5Y8B-RB	CPE12-3BWM
MER-5Y9A	MER-5Y9A-RB	-----
MER-5YFA	MER-5YFA-RB	CPE10-1BWA
MER-5YM	MER-5YM-RB	Spare part
MER-5YMA	MER-5YMA-RB	Spare part
MER-5YP	MER-5YP-RB	Spare part
MER-5YPA	MER-5YPA-RB	Spare part
MER-5YSA	MER-5YSA-RB	CPE51-3BWDA
MER-6B3	MER-6B3-RB	-----
MER-6Y1	MER-6Y1-RB	CPE51-3BWD
MER-6Y3	MER-6Y3-RB	-----
MER-6YM	MER-6YM-RB	Spare part
MER-6YS	MER-6YS-RB	-----
MER-7Y1	MER-7Y1-RB	CPE51-3BWD2
MER-7Y3	MER-7Y3-RB	Spare part
MER-8Y4A	MER-8Y4A-RB	CPE10-1BAA/CPE51-BAN



Mitsubishi Series

MMCC Controller



Before Repair	After Repair	Model
MMCC-1	MMCC-1-RB	CPE51-3BWA
MMCC-1II	MMCC-1II-RB	CPE51-3BWA
MMCC-3	MMCC-3-RB	CPE51-2BAA CPE10-2BAA/2BAB CPE51-3BWB/3BWC
MMCC-3C	MMCC-3C-RB	CPE51-3BWB/3BWC
MMCC-3CII	MMCC-3CII-RB	-----
MMCC-3CIIA	MMCC-3CIIA-RB	CPE10-2BAA/2BAA2/2BAA3
MMCC-3E	MMCC-3E-RB	CPE10-2BAA/2BAA2/2BAA3
MMCC-3EII	MMCC-3EII-RB	CPE10-3BWA/3BWK CPE51-3TWA/3TWK
MMCC-3N	MMCC-3N-RB	CPE10/ CPE51-3BAB
MMCC-3W	MMCC-3W-RB	CPE10/ CPE51-3BAB
MMCC-3WII	MMCC-3WII-RB	CPE51-2BAB
MMCC-4	MMCC-4-RB	CPE51-2BAB
MMCC-4II	MMCC-4II-RB	-----
MMCC-4IIA	MMCC-4IIA-RB	CPE51-3TAA
MMCC-5	MMCC-5-RB	CPE10-3BWA1/3BWA4/3BWA6 CPE51-1BAB CPE10-3BWA9
MMCC-7	MMCC-7-RB	CPE10-3BWA1/3BWA4/3BWA6 CPE51-1BAB CPE10-3BWA/3BWK CPE51-3TWA/3TWK
MMCC-7CIIA	MMCC-7CIIA-RB	CPE10-3BWA/3BWK CPE51-3TWA/3TWK CPE11-1BAB
MMCC-7II	MMCC-7II-RB	Spare part
MMCC-8N	MMCC-8N-RB	CPE51-3BWE/3BWG/3BWJ CPE51-3BWJ2/3TWJ/3TWJ2 CPE51-3TWJ3 CPE10-3BWE/3BWG/3BWH CPE10-3BWH2/3BWJ/3BWJ2 CPE10-3BWJ3/3BWJ4/3BWH2
MMCC-8NII	MMCC-8NII-RB	CPE10-3BWE2 CPE51-3BWJ3/3BWE2 CPE51-1BAN
MMCC-9	MMCC-9-RB	CPE10-3BWF
MMCC-9A	MMCC-9A-RB	CPE10-1BWA/3BWD
MMCC-10	MMCC-10-RB	-----
MMCC-10A	MMCC-10A-RB	CPE10-3BWA2/3BWA3 CPE10-3BWA5/3BWA7 CPE51-3TWA2/3TWA3/3TWA4 CPE10-3BWA8 / CPE51-3TWA5 CPE51-3BWD/3BWD2/3BWD3 CPE51-3BWD4
MMCC-10B	MMCC-10B-RB	CPE10-3BWF2/3BWF3/3BWF4 CPE51-3TWF/3TWF2 CPE10-3BWF5 / CPE51-3TWF3
MMCC-10K	MMCC-10K-RB	CPE11-3BWA
MMCC-10Y	MMCC-10Y-RB	
MMCC-10YA	MMCC-10YA-RB	
MMCC-11N	MMCC-11N-RB	
MMCC-11NA	MMCC-11NA-RB	
MMCC-12	MMCC-12-RB	
MMCC-12A	MMCC-12A-RB	
MMCC-13K	MMCC-13K-RB	
MMCC-13KA	MMCC-13KA-RB	
MMCC-14N	MMCC-14N-RB	



Mitsubishi Series

MMCC Controller - Continued



Before Repair	After Repair	Model
MMCC-15	MMCC-15-RB	CPE51-3BWF
MMCC-15A	MMCC-15A-RB	Spare part
MMCC-16	MMCC-16-RB	CPE51-3BWZ
MMCC-17	MMCC-17-RB	CPE51-3BWH
MMCC-18	MMCC-18-RB	CPE10-3BWL CPE51-3BWK/3BWK2
MMCC-19	MMCC-19-RB	CPE11-3BWB

MMCC Panel Setter & LED



Before Repair	After Repair
TSA501A003	501T001BRB
TSA501B006	501T001ARB
TSA501C002	501T001ARB
TSA501C003	501T001ARB
TSA501C007	501T001ARB
TSA501C012	501T001ARB
TSA501C012A	501T001ARB
TSA501T001	501T001ARB
TSA501T001A	501T001ARB
TSA501T001B	501T001BRB

MMCC Temperature Display



Before Repair	After Repair
TSA503A018	503A018RB

MMCC PCB S Board



Before Repair	After Repair
TSA501A023	501S004RB
TSA501B004	
TSA501B019	
TSA501B020A	
TSA501B048	
TSA501S004	



Mitsubishi Series

MMCC PCB C Board



Before Repair	After Repair	Remarks, Controller Type
TSA501B003A	501S047RB	MMCC-3/3E/3C/3W/10/10A/10B
TSA501B013	501S047BRB	MMCC-5/10K/13K/13KA
TSA501B014	501S014RB	MMCC-4/4II/4IIA
TSA501B015	501S047RB	MMCC-3/3E/3C/3W/10/10A/10B
TSA501B015A	501S047RB	MMCC-3/3E/3C/3W/10/10A/10B
TSA501B017	501S017RB	MMCC-9/9A
TSA501B018	501S047RB	MMCC-3/3E/3C/3W/10/10A/10B
TSA501B018B	501S047RB	MMCC-3/3E/3C/3W/10/10A/10B
TSA501B018C	501S047BRB	MMCC-5/10K/13K/13KA
TSA501B018D	501S047DRB	MMCC-1/12/17/12A
TSA501B018F	501S047BRB	MMCC-5/10K/13K/13KA
TSA501B018G	501S047CRB	MMCC-15/15A
TSA501B021	501S047ARB	MMCC-3N/8N/8II/11N/11NA
TSA501B023	501S047DRB	MMCC-1/12/17/12A
TSA501B025	501S014RB	MMCC-4/4II/4IIA
TSA501B026	501S047ARB	MMCC-3N/8N/8II/11N/11NA
TSA501B026A	501S047ARB	MMCC-3N/8N/8II/11N/11NA
TSA501B047	501S047RB	MMCC-3/3E/3C/3W/10/10A/10B
TSA501B047B	501S047BRB	MMCC-5/10K/13K/13KA
TSA501B047C	501S047CRB	MMCC-15/15A
TSA501B047F	501S047FRB	MMCC-7/7II/7IIA
TSA501B047G	501S047GRB	MMCC-18
TSA501B062	501S047RB	MMCC-3/3E/3C/3W/10/10A/10B
TSA501S003	501S047RB	MMCC-3/3E/3C/3W/10/10A/10B
TSA501S014	501S014RB	MMCC-4/4II/4IIA
TSA501S015	501S047RB	MMCC-3/3E/3C/3W/10/10A/10B
TSA501S015A	501S047RB	MMCC-3/3E/3C/3W/10/10A/10B
TSA501S015B	501S047DRB	MMCC-1/12/17/12A
TSA501S015C	501S047BRB	MMCC-5/10K/13K/13KA
TSA501S015D	501S047CRB	MMCC-15/15A
TSA501S017	501S017RB	MMCC-9/9A
TSA501S021	501S047ARB	MMCC-3N/8N/8II/11N/11NA
TSA501S022	501S047DRB	MMCC-1/12/17/12A
TSA501S047	501S047RB	MMCC-3/3E/3C/3W/10/10A/10B
TSA501S047A	501S047ARB	MMCC-3N/8N/8II/11N/11NA
TSA501S047B	501S047BRB	MMCC-5/10K/13K/13KA
TSA501S047C	501S047CRB	MMCC-15/15A
TSA501S047D	501S047DRB	MMCC-1/12/17/12A
TSA501S047F	501S047FRB	MMCC-7/7II/7IIA
TSA501S047G	501S047GRB	MMCC-18



Mitsubishi Series

MMCCII Controller



Before Repair	After Repair	Model
MMCC2	MMCC2-RB	Spare part (°C)
MMCC2-1	MMCC2-1-RB	CPE10-3BWIIA/3BWIIK
MMCC2-2	MMCC2-2-RB	CPE51-3TWIIK
MMCC2-4	MMCC2-4-RB	CPE10-1BAIIA/3BWIID
MMCC2-5	MMCC2-5-RB	CPE10-1BWIIA
MMCC2-6	MMCC2-6-RB	CPE12-3BWIIIM



Mitsubishi Series

MMCC3 Controller



Before Repair	After Repair	Model
MMCC3-2	MMCC3-2-RB	CPE52-3TWIIK
MMCC3-2A	MMCC3-2A-RB	CPE52-3BWIIK
MMCC3-2B	MMCC3-2B-RB	CPE13-3BWIIK
MMCC3-2C	MMCC3-2C-RB	CPE14-3BWIIK
MMCC3-3	MMCC3-3-RB	CPE52-3BWIIA
MMCC3-3A	MMCC3-3A-RB	CPE52-3BWIIIP/T2/G
MMCC3-3B	MMCC3-3B-RB	CPE13-3BWIIIP
MMCC3-3C	MMCC3-3C-RB	CPE14-3BWIIIP
MMCC3-4	MMCC3-4-RB	CPE14-2BAIIA
MMCC3-4C	MMCC3-4C-RB	CPE14-2BAIIA2/A3
MMCC3-5A	MMCC3-5A-RB	CPE51-3BAIIIG
MMCC3-5B	MMCC3-5B-RB	CPE10-3BAIIIG
MMCC3-6	MMCC3-6-RB	CPE14-1BAIIA
MMCC3-7A	MMCC3-7A-RB	CPE52-3BWIIIM/M2
MMCC3-7B	MMCC3-7B-RB	CPE13-3BWIIIM/M2
MMCC3-7C	MMCC3-7C-RB	CPE14-3BWIIIM/M2/M3
MMCC3-7H	MMCC3-7H-RB	CPE52-3TWIIIM3
MMCC3-8A	MMCC3-8A-RB	CPE53-3BWIIIG
MMCC3-9A	MMCC3-9A-RB	CPE52-3BWIIIT
MMCC3-9B	MMCC3-9B-RB	CPE13-3BWIIIT
MMCC3-9C	MMCC3-9C-RB	CPE14-3BWIIIT/N
MMCC3-YB	MMCC3-YB-RB	CPE13-1BAIIA
MMCC3-YB2	MMCC3-YB2-RB	CPE13-1BAIIB

MMCC3 Display



Before Repair	After Repair
TSA501S044	501S044RB
TSA505A014	
TSA505S044	

MMCC3 Relay Board



Before Repair	After Repair	Remark
TSA501S045	501S045ARB	All relays fitted
TSA501S045A		All relays fitted
TSA505A015	505A015RB	relay 3, 4, 5 & 18 missing
TSA505A015A	505A015ARB	relay 4, 5, 14 & 18 missing

Mitsubishi Series

MMCC3 CPU Board



Before Repair	After Repair
TSA501S042	501S042ARB
TSA501S042A	
TSA505A013A	
TSA505A013K	
TSA505A013N	
TSA505A013V	
TSA501S051	501S051RB
TSA505A013F	
TSA505A013R	

MMCC3 Source Board



Before Repair	After Repair
TSA501S043	501S043ARB
TSA501S043A	
TSA505A012A	
TSA505A012C	
TSA505A012G	

MMCC3A Relay Board



Before Repair	After Repair	Remarks
TSA501S084	501S084RB	w/ transformer, relays
	501S084-00RB	w/o transformer, relays
	501S084-01RB	w/ transformer, w/o relays

MMCC3A Main Board



Before Repair	After Repair	Remarks
TSA505A016	505A016RB	Version 1
TSA505A022	505A022RB	Version 2
TSA505A032	505A032RB	Version 3
TSA505A034	505A034RB	Version 4
TSA505A038	505A038RB	Version 5
TSA505A045	505A045RB	Version 6
TSA505A046	505A046RB	Version 7
TSA505A061	505A061RB	Version 8
TSA505A075	505A075RB	Version 9



Mitsubishi Series

MMCC3A Controller



Before Repair	After Repair	Model
MMCC3A-1	MMCC3A-1-RB	CPE15-2BAIIIIE/3BAIIIF CPE53-3BWIIIG2/3BAIIIH
MMCC3A-2	MMCC3A-2-RB	CPE14-3BAIIICS CPE52-3TAIIICS CPE52-3BWIIIG2S/BS CPE52-3BWIIINS/N2S CPE14-3BWIIINS/PS/TS
MMCC3A-3	MMCC3A-3-RB	CPE15-2BAIIIH
MMCC3A-4	MMCC3A-4-RB	CPE15-3BWIIIC CPE53-3BWIIIC
MMCC3A-5	MMCC3A-5-RB	CPE14-2BAIIIES/2S CPE14-3BWIIJS/MS CPE14-3BWIIIM2S/AS CPE52-3BWIIJS/MS/AS
MMCC3A-6	MMCC3A-6-RB	CPE15-2BAIIIE2
MMCC3A-7	MMCC3A-7-RB	CPE15-3BAIIIF/D CPE53-3BAIIID CPE53-3BWIIJAU/AU CPE15-3BWIIINU
MMCC3A-8	MMCC3A-8-RB	CPE14-1TAIIIAS CPE52-1TAIIIAS/A2S CPE14-1BAIIIA2S
MMCC3A-9	MMCC3A-9-RB	CPE14-3BWIIIT2S
MMCC3A-10	MMCC3A-10-RB	CPE14-1BAIIIBS
MMCC3A-12	MMCC3A-12-RB	CPE15-2BAIIIH2 CPE15-3BAIIIH/H2
MMCC3A-13	MMCC3A-13-RB	CPE15-2BAIIIE3
MMCC3A-14	MMCC3A-14-RB	CPE15-3BAIIIA
MMCC3A-16	MMCC3A-16-RB	CPE16-3BWIIIX CPE54-3BWIIIX CPE16-3BWIIIXF CPE54-3BWIIIXF
MMCC3A-17	MMCC3A-17-RB	CPE14-2BAIIIES CPE14-3BWIIIAS/TS
MMCC3A-18	MMCC3A-18-RB	CPE15-3BWIIIAU CPE53-3BWIIIAU
MMCC3A-19	MMCC3A-19-RB	CPE15-3BAIIIH3
MMCC3A-21	MMCC3A-21-RB	CPE15-3BAIIIF2/D2/M/VU CPE53-3BAIIIFU/DU/MU/ CPE53-3BAIIIVU/NU CPE15-3BWIIICU CPE53-3BWIIICU CPE15-1BAIIIAU CPE53-1BAIIIAU/A2U CPE53-1TAIIIAU/A2U CPE15-2BAIIIVU
MMCC3A-22	MMCC3A-22-RB	CPE53-3BAIIIKU
MMCC3A-25	MMCC3A-25-RB	CPE15-2BAIIIE3
MMCC3A-26	MMCC3A-26-RB	CPE14-3BAIIIMF
MMCC3A-27	MMCC3A-27-RB	CPE53-3BAIIITU CPE53-3BWIIIKU
MMCC3A-28	MMCC3A-28-RB	CPE14-3BWIIIT3S/NTS
MMCC3A-29	MMCC3A-29-RB	
MMCC3A-30	MMCC3A-30-RB	

Continued on next page



Mitsubishi Series

MMCC3A Controller



Before Repair	After Repair	Model
MMCC3A-31	MMCC3A-31-RB	CPE14-1BAIIIAS/A2S CPE52-1BAIIIAS/A2S CPE14-1TAIIIAS/A2S CPE52-1TAIIIAS CPE14-3BAIIID2S CPE15-2BAIIY CPE15-3BAIIY CPE53-2BAIIIPU
MMCC3A-32	MMCC3A-32-RB	CPE14-2BAIIIES/EU
MMCC3A-33	MMCC3A-33-RB	CPE14-1BAIIIBS/B2S
MMCC3A-34	MMCC3A-34-RB	CPE52-3BWIIIND/N2D CPE52-3BWIIITD/PD CPE14-3BWIIIN2S
MMCC3A-36	MMCC3A-36-RB	CPE15-3BAIIY2 CPE52-3BWIIIN3D
MMCC3A-38	MMCC3A-38-RB	CPE16-2BAIIIAV/A2V/A3V
MMCC3A-39	MMCC3A-39-RB	CPE14-3BWIIIKS
MMCC3A-40	MMCC3A-40-RB	CPE14-3BWIIINF CPE52-3BWIIINDF
MMCC3A-41	MMCC3A-41-RB	CPE15-3BAIIIMV
MMCC3A-42	MMCC3A-42-RB	CPE16-3BAIIIA2V
MMCC3A-43	MMCC3A-43-RB	CPE16-2BAIIIEV CPE16-2BAIIIEV/E2V/EVU CPE16-1TAIIIA2V
MMCC3A-44	MMCC3A-44-RB	CPE16-3BWIIINV
MMCC3A-45	MMCC3A-45-RB	CPE15-3BAIIIT
MMCC3A-46	MMCC3A-46-RB	CPE16-2BAIIIA4V/A5V CPE16-2BAIIIA6V/A7V CPE16-2BAIIIA8V
MMCC3A-47	MMCC3A-47-RB	CPE15-2BWIIINV CPE15-3BAIIIAV/A2V CPE15-2BAIIINV/FV CPE16-1TAIIIA2V
MMCC3A-48	MMCC3A-48-RB	CPE16-2BAIIIE2V/E3V
MMCC3A-49	MMCC3A-49-RB	CPE15-2BAIIIAV/NV CPE15-3BAIIIAV
MMCC3A-51	MMCC3A-51-RB	CPE16-3TAIIIA2V CPE16-1TAIIIA2V CPE16-2BAIIIE4V
MMCC3A-52	MMCC3A-52-RB	
MMCC3A-55	MMCC3A-55-RB	
MMCC3A-56	MMCC3A-56-RB	
MMCC3A-57	MMCC3A-57-RB	



Mitsubishi Series

MMCC3A Display



Before repair	After repair
TSA505A033	501S116RB
TSA501S077	501S116RB
TSA501S116	501S116RB
TSA501S142	501S142RB

MMCC3A Display



Before repair	After repair
TSA501S180	501S180RB

MMCC3A Display



Before repair	After repair
TSA505A035	501S136RB
TSA501S136	

MMCC3A Display



TSA505A039	505A039RB
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MMCC3A Display



TSA505A041	505A041RB
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MMCC3A Display



Before repair	After repair	Remarks
TSA505A049	505A049RB	12 pins orange connector
TSA505A063	505A063RB	12 pins black connector



Service Tools

Extractor, Pin (AMP Connector)



Part Number
07-00254-00

Remarks
For removal of terminal connector pins from connectors used with auto-start and microprocessor harnesses.

Kit, Static Dissipate



Part Number
07-00277-00

Remarks
A work surface to prevent electrostatic discharge from damaging solid-state electronic devices and components during service

Extractor (EPROM)



Part Number
07-00297-00

Remarks
Extractor for EPROM on microprocessors.

Inserter (EPROM)



Part Number
07-00298-00

Remarks
Inserter for EPROM on microprocessors.

Strap, Grounding



Part Number
07-00304-00

Remarks
A wrist Strap Grounding to prevent electrostatic discharge from damaging solid-state electronic devices and components during service.



Service Tools

Extractor Pin



Part Number
07-00326-00

Remarks
Packard connectors.

Extractor, ML2, ML2i & ML3 Connectors



Part Number
07-00329-00

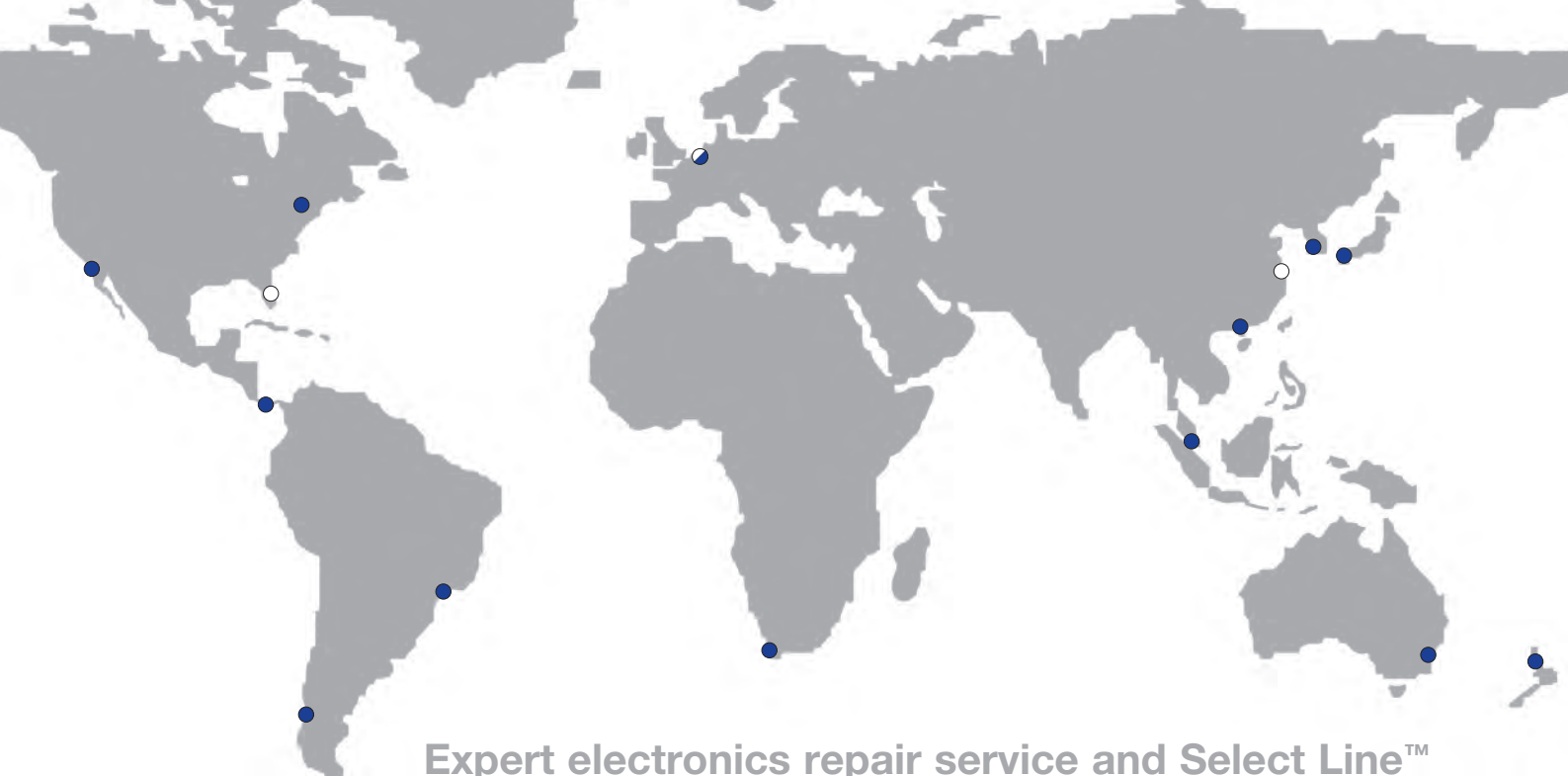
Remarks

Tester, ML2i / ML3



Part Number
07-00428-00SV

Remarks
This is a tester used to determine the integrity of the ML2i and ML3 microprocessors.



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