Older Unico Replacement Guide

The purpose of this guide is to assist you in upgrading older Unico System's, or other small duct systems, and provide recommendations for a successful replacement project. This guide is categorized by the specific model # of the Unico System, and then by the serial #. Simply click the model #'s you have and it will go to the specific page to let you know exactly what to do.

It's easy to determine the age of the Unico System by the serial #. Simply locate the first 4 digits of the serial #. The first 2 digits are the year and the next two digits are the month. For instance, a serial # 0012A123456 would have been manufactured in December of 2000.

1st generation Unico model #'s (1985 – 1992) (one-piece air handlers)

Upgrading 1st generation systems from R-22 refrigerant to R410A requires some modifications to the system. These are one-piece fan coil air handlers and our current equipment is modular, so upgrading to R410A requires changing the entire system. Also, with today's larger, higher SEER outdoor units, the indoor equipment needs to move more air than the older generation equipment, so the duct system needs to be sized properly to move the additional air required of today's systems. The Unico System is designed to operate at 250 CFM/ton.

- HP2436
- **VP2436**
- HP4860
- **VP4860**

2nd generation Unico model #'s (1993 - 2003)

Depending on the tonnage of the outdoor unit, upgrading 2nd generation equipment can be easier than upgrading 1st generation equipment. They still require more airflow, but a lot of today's parts can be used with these older systems so depending on the size of the outdoor unit, and condition of existing equipment, it may not be necessary to change all modules.

When the industry changed to 13 SEER equipment, the 2436 became our 2430 and the 4260 became the 3642. This meant that the 2436 (2430) was no longer compatible with modern, 13 SEER or greater 3 ton outdoor units. This is the same for the 4260 (3642) on 5 ton outdoor units.

| <u>0</u> | d Blowers | <u>Coils</u> |
|----------|--|---------------------------------|
| - | MB2436L or MB2436H | - MC2436C, MC2436C-A or MC2436H |
| | • If in Vertical configuration, click here | |
| - | MB4260L or MB4260H | - MC4260C, MC4260C-A or MC4260H |
| | • If in Vertical configuration, click here | |
| - | If you are replacing parts on 2436 and staying v | <u>vith R22, click here.</u> |
| - | If you are replacing parts on 4260 and staying v | vith R22, click here. |

3rd generation Unico model #'s (2003 - 2010)

Third generation equipment is much easier to replace than 1st or 2nd generation equipment. Most of the parts are compatible with today's equipment and the design rules and principles back then were the same as they are now, so when changing this equipment out, you can usually simply swap out with the latest generation nomenclature.

The 3036 was not added until 2010, and has always used the current nomenclature.

| <u>0</u> | <u>d Blowers</u> | Older Coils |
|----------|-----------------------|----------------------------|
| - | MB2430L or MB2430L+CB | <u>- MC2430C / MC2430H</u> |
| - | MB3642L or MB3642L+CB | <u>- MC3642C / MC3642H</u> |
| - | MB4860L or MB4860L+CB | <u>- MC4860C / MC4860H</u> |

Spacepak/Hi-V Replacements

Changing out these types of older systems is easier than you think! All you need is the tonnage of the outdoor condensing unit to determine the Unico equipment to use.

- <u>Click here to get to the page.</u>

What if I can't add outlets or increase the plenum size?

As you read through the guide, we preach a lot about updating the duct system to accommodate more air. There are times when this simply isn't possible. There are ways around this though.

- <u>Click here to get to the page</u>

1218 Replacement Systems

The 1218 has had several changes throughout the years, with new nomenclature and also transitioning from a one-piece set up to the modular. They all use the same replacement parts though.

- <u>Click here to get to the page</u>

HP2436

The HP units were horizontal position units. The models below will explain how to keep the system horizontally configured.

If upgrading to 410A, what is the tonnage of the outdoor unit?

If the outdoor is 2 or 2.5 ton, below are the model #'s to upgrade to:

Blower – M2430BL1-EC2

Coil – M2430CL1-B or E - (which coil to use depends on the specific outdoor model. Call Unico Customer Support for further assistance)

Hot Water Coil - M2430CL1-H (optional - only needed if existing system has hot water coil)

System size – These units will be larger than the older system so here are the dimensions of the new system once assembled for the 2430.

Without hot water module – 28'' (supply to return) x 17.5'' H x 25'' W With hot water module - 40'' (supply to return) x 17.5'' H x 25'' (wide)

If the outdoor is a 3 ton, below are the model #'s to upgrade to:

Blower – M3036BL1-EC2 Coil – M3036CL1-B or E - (which coil to use depends on the specific outdoor model. Call Unico Customer Support for further assistance) Hot Water Coil – M3036CL1-H (optional - only needed if existing system has hot water coil) **System size** – These units will be larger than the older system so here are the dimensions of the new system once assembled with the 3036.

Without hot water module – 28'' (supply to return) x 17.5" H x 30" W With hot water module - 40'' (supply to return) x 17.5" H x 30" (wide)

Below are the minimum requirements for the duct system to ensure proper capacity and performance.

| HP2436 | | | | |
|--------------------|---------------------------------|----------------------|----------------------|--|
| Tonnage of outdoor | Required Duct size | Required return size | Minimum # of outlets | |
| | | | | |
| 2 ton | 7" round or 6.5"x6.5" square | 14" or equivalent | 12 | |
| 2.5 ton | 7" round or 6.5"x6.5" square | 14" or equivalent | 15 | |
| 3 ton | 9" round or 8.5"x8.5" | 16" or equivalent | 18 | |

Minimum duct requirements for upgrading to R410A

Replacement Parts for HP2436

Motor - A00054-001 (8WV20) Wheel - A00082-002 Relay - A00056-G02 Valve (R22 only) - A00031-003 Transformer - A02701-K01 Frost Switch - A00060-K03

VP2436

The VP units were vertical position units. The models below will explain how to keep the system vertically configured.

If upgrading to 410A, what is the tonnage of the outdoor unit?

If the outdoor is 2 or 2.5 ton, below are the model #'s to upgrade to:

Blower – M2430BL1-EC2

Coil – M2430CL1-B or E - (which coil to use depends on the specific outdoor model. Call Unico Customer Support for further assistance)

Vertical Plenum Module – M2430V2 (Make sure that you also install the spacer that comes with this module.) Hot Water Coil – HW-2430 (optional - only needed if existing system has hot water coil – Will slide into M2430V2)

System size – These units will be larger than the older system so here are the dimensions of the new system once assembled for the 2430.

56" H x 17.5" D x 25" W

If the outdoor is a 3 ton, below are the model #'s to upgrade to:

Blower – M3036BL1-EC2

Coil – M3036CL1-B or E - (which coil to use depends on the specific outdoor model. Call Unico Customer Support for further assistance)

Vertical Plenum Module - M3036V2 (Make sure that you install the spacer that comes with this.)

Hot Water Coil – HW-3036 (optional - only needed if existing system has hot water coil – Will slide into M3036V2)

System size – These units will be larger than the older system so here are the dimensions of the new system once assembled with the 3036.

56" H x 17.5" D x 30" W

We also offer Vertical one piece units which are designed specifically for Vertical installations. These are available in three different sizes – 2430, 3036 and 3642. <u>Click here for more information</u>.

Below are the minimum requirements for the duct system to ensure proper capacity and performance.

Minimum duct requirements for upgrading to R410A

| | HP2436 | | | | |
|--------------------|---------------------------------|----------------------|----------------------|--|--|
| Tonnage of outdoor | Required Duct size | Required return size | Minimum # of outlets | | |
| 2 ton | 7" round or 6.5"x6.5" square | 14" or equivalent | 12 | | |
| 2.5 ton | 7" round or 6.5"x6.5" square | 14" or equivalent | 15 | | |
| 3 ton | 9" round or 8.5"x8.5" | 16" or equivalent | 18 | | |

Replacement Parts for HP2436

Motor – A00054-001 (8WV20) Wheel – A00082-002 Relay – A00056-G02 Valve (R22 only) – A00031-003 Transformer – A02701-K01 Frost Switch – A00060-K03

HP4860

The HP units were horizontal position units. The models below will explain how to keep the system horizontally configured.

If upgrading to 410A, what is the tonnage of the outdoor unit?

If the outdoor is 4 or 5 tons, below are the model #'s to upgrade to:

Blower – M4860BL1-EC2 Coil – M4860CL1-B or E (Always install the spacer when using the 4860) (Also, which coil depends on the specific outdoor model. Call Unico Customer Support for further assistance) Hot Water Coil – M4860CL1-H (optional - only needed if existing system has hot water coil)

System size – These units will be larger than the older system so here are the dimensions of the new system once assembled for the 4860.

Without hot water module – 38'' (supply to return) x 17.5'' H x 38'' W With hot water module - 50'' (supply to return) x 17.5'' H x 38'' (wide)

Below are the minimum requirements for the duct system to ensure proper capacity and performance.

Minimum duct requirements for upgrading to R410A

| HP4860 | | | | |
|-----------------------|----------------------------------|----------------------|-----------------------------|--|
| Tonnage of outdoor | Required Duct size | Required return size | <i>Minimum</i> # of outlets | |
| | | | | |
| 4 ton | 9" round or 8.5"x8.5" square | 18" or equivalent | 24 | |
| 5 ton | 10" round or 9.5"x9.5" square | 20" or equivalent | 30 | |

Replacement Parts for HP4860

Motor - A00141-001 (8WV21) Wheel - A00036-002 Relay - A00056-G02 Valve (R22 only) - A00031-004 Transformer - A02701-K01 Frost Switch - A00060-K03

VP4860

The VP units were vertical position units. The models below will explain how to keep the system vertically configured.

If upgrading to 410A, what is the tonnage of the outdoor unit?

If the outdoor is 4 or 5 tons, below are the model #'s to upgrade to:

Blower – M4860BL1-EC2 Coil – M4860CL1-B or E (Always install the spacer when using the 4860) (Also, which coil depends on the specific outdoor model. Call Unico Customer Support for further assistance) Vertical Plenum Module – M4860V2 Hot Water Coil – HW-4860 (optional - only needed if existing system has hot water coil – Will slide into M4860V2)

System size – These units will be larger than the older system so here are the dimensions of the new system once assembled for the 4860.

56" H x 24" D x 38" W

Below are the minimum requirements for the duct system to ensure proper capacity and performance.

Minimum duct requirements for upgrading to R410A

| HP4860 | | | | |
|--------------------|----------------------------------|----------------------|----------------------|--|
| Tonnage of outdoor | Required Duct size | Required return size | Minimum # of outlets | |
| | | | | |
| 4 ton | 9" round or 8.5"x8.5" square | 18" or equivalent | 24 | |
| 5 ton | 10" round or 9.5"x9.5" square | 20" or equivalent | 30 | |

Replacement Parts for VP4860

Motor – A00141-001 (8WV21) Wheel – A00036-002 Relay – A00056-G02 Valve (R22 only) – A00031-004 Transformer – A02701-K01 Frost Switch – A00060-K03

MB/MC2436 – Horizontally Configured

If upgrading to 410A, what is the tonnage of the outdoor unit?

If the outdoor is 2 or 2.5 ton, below are the model #'s to upgrade to:

Blower – M2430BL1-EC2 Coil – M2430CL1-B or E - (which coil to use depends on the specific outdoor model. Call Unico Customer Support for further assistance) Hot Water Coil – M2430CL1-H (optional - only needed if existing system has hot water coil)

System size – In this case, the replacement system will be the same physical dimension as the original equipment.

Without hot water module – 28'' (supply to return) x 17.5'' H x 25'' W With hot water module - 40'' (supply to return) x 17.5'' H x 25'' (wide)

If the outdoor is a 3 ton, below are the model #'s to upgrade to:

Blower – M3036BL1-EC2 Coil – M3036CL1-B or E - (which coil to use depends on the specific outdoor model. Call Unico Customer Support for further assistance) Hot Water Coil – M3036CL1-H (optional - only needed if existing system has hot water coil)

System size – For the 3 ton, these units will be larger than the older system so here are the dimensions of the new system once assembled with the 3036.

Without hot water module – 28'' (supply to return) x 17.5" H x 30" W With hot water module - 40'' (supply to return) x 17.5" H x 30" (wide)

Below are the minimum requirements for the duct system to ensure proper capacity and performance.

Minimum duct requirements for upgrading to R410A

| | MB/MC2436 | | | | |
|--------------------|--------------------|----------------------|----------------------|--|--|
| Tonnage of outdoor | Required Duct size | Required return size | Minimum # of outlets | | |
| | | | | | |
| 2 ton | 7" round or | 14" or equivalent | 12 | | |
| | 6.5"x6.5" square | | | | |
| 2.5 ton | 7" round or | 14" or equivalent | 15 | | |
| | 6.5"x6.5" square | | | | |
| 3 ton | 9" round or | 16" or equivalent | 18 | | |
| | 8.5″x8.5″ | | | | |

| ι | Jnit | Motor | Wheel | Relay | TX Valve (R22 sweat only) | Frost Switch | Transformer |
|---|---------|--------------------|------------|------------|---------------------------|--------------|-------------|
| ſ | MB2436L | A00138-001 (8WV09) | A00137-001 | A00056-G02 | A00031-003 | А00060-К03 | А02701-К01 |
| ſ | MB2436H | A00054-001 (8WV20) | A00082-002 | A00056-G02 | A00031-003 | А00060-К03 | A02701-K01 |

MB/MC2436 – Vertically Configured

If upgrading to 410A, what is the tonnage of the outdoor unit?

If the outdoor is 2 or 2.5 ton, below are the model #'s to upgrade to:

Blower – M2430BL1-EC2

Coil – M2430CL1-B or E - (which coil to use depends on the specific outdoor model. Call Unico Customer Support for further assistance)

Vertical Plenum Module – M2430V2 (Only needed if existing return box requires replacement, or, if adding a hot water coil to system) (Make sure that you also install the spacer that comes with this module.)

Hot Water Coil – HW-2430 (optional - only needed if existing system has hot water coil – Will slide into M2430V2 or old vertical plenum module)

System size – In this case, the replacement system will be the same physical dimension as the original equipment.

56" H x 17.5" D x 25" W

If the outdoor is a 3 ton, below are the model #'s to upgrade to:

Blower - M3036BL1-EC2

Coil – M3036CL1-B or E - (which coil to use depends on the specific outdoor model. Call Unico Customer Support for further assistance)

Vertical Plenum Module – M3036V2

Hot Water Coil – HW-3036 (optional - only needed if existing system has hot water coil – Will slide into M3036V2 or old vertical plenum module)

System size – For the 3 ton, these units will be larger than the older system so here are the dimensions of the new system once assembled with the 3036. 56" H x 17.5" D x 30" W

We also offer Vertical one piece units which are designed specifically for Vertical installations. These are available in three different sizes – 2430, 3036 and 3642. <u>Click here for more information</u>.

Below are the minimum requirements for the duct system to ensure proper capacity and performance.

Minimum duct requirements for upgrading to R410A

| MB/MC2436 | | | | |
|--------------------|---------------------------------|----------------------|----------------------|--|
| Tonnage of outdoor | Required Duct size | Required return size | Minimum # of outlets | |
| 2 ton | 7" round or 6.5"x6.5" square | 14" or equivalent | 12 | |
| 2.5 ton | 7" round or 6.5"x6.5" square | 14" or equivalent | 15 | |
| 3 ton | 9" round or 8.5"x8.5" | 16" or equivalent | 18 | |

| Unit | Motor | Wheel | Relay | TX Valve (R22 sweat only) | Frost Switch | Transformer |
|---------|--------------------|------------|------------|---------------------------|--------------|-------------|
| MB2436L | A00138-001 (8WV09) | A00137-001 | A00056-G02 | A00031-003 | A00060-K03 | A02701-K01 |
| MB2436H | A00054-001 (8WV20) | A00082-002 | A00056-G02 | A00031-003 | A00060-K03 | A02701-K01 |

MB/MC2436 – Keeping R22

If the system is going to stay R22, individual modules can be replaced with current nomenclature. The charts below explain what the older nomenclature can get upgraded to.

Blower

| Old Blower | New Blower |
|--------------------|--------------|
| MB2436L or MB2436H | M2430BL1-EC2 |
| | |

Coil – If wanting to upgrade full coil module

| Old Coil | New Coil |
|----------------------|------------|
| MC2436C or MC2436C-A | M2430CL1-B |
| MC2436H | M2430CL1-E |

Coil – If wanting to change just the coil (No cabinet)

| Old Coil | New Coil |
|----------------------|------------|
| MC2436C or MC2436C-A | A00791-K01 |
| MC2436H | А00793-К01 |

Hot Water coil

| Old Coil | New Coil |
|--------------------------------|------------|
| MH2436 – Full hot water module | M2430CL1-H |
| HW-2436 – Hot water coil only | HW-2430 |

Valve – If changing the coil (either a full module OR just the coil, use the valves below). Again, the right valve depends on the outdoor unit.

2 ton R-22 valve – A00808-002 3 ton R-22 valve – A00808-004

MB/MC4260 – Horizontally Configured

If upgrading to 410A, what is the tonnage of the outdoor unit?

If the outdoor is 3.5 tons, below are the model #'s to upgrade to:

Blower – M3642BL1-EC2 Coil – M3642CL1-B or E - (which coil to use depends on the specific outdoor model. Call Unico Customer Support for further assistance) Hot Water Coil – M3642CL1-H (optional - only needed if existing system has hot water coil)

System size – In this case, the replacement system will be the same physical dimension as the original equipment.

Without hot water module – 28'' (supply to return) x 17.5" H x 38'' W With hot water module - 40'' (supply to return) x 17.5" H x 38'' (wide)

If the outdoor is 4 or 5 tons, below are the model #'s to upgrade to:

Blower – M4860BL1-EC2 Coil – M4860CL1-B or E - (which coil to use depends on the specific outdoor model. Call Unico Customer Support for further assistance) Hot Water Coil – M4860CL1-H (optional - only needed if existing system has hot water coil)

System size – For the 4 and 5 ton systems, these units will be larger than the older system so here are the dimensions of the new system once assembled with the 4860.

Without hot water module – 38'' (supply to return) x 17.5'' H x 38'' W With hot water module - 50'' (supply to return) x 17.5'' H x 38'' (wide)

Below are the minimum requirements for the duct system to ensure proper capacity and performance.

Minimum duct requirements for upgrading to R410A

| MB/MC4260 | | | |
|--------------------|----------------------------------|----------------------|----------------------|
| Tonnage of outdoor | Required Duct size | Required return size | Minimum # of outlets |
| 3.5 ton | 9" round or 8.5"x8.5" square | 18" or equivalent | 21 |
| 4 ton | 9" round or 8.5"x8.5" square | 18" or equivalent | 24 |
| 5 ton | 10" round or 9.5"x9.5" square | 20" or equivalent | 30 |

| Unit | Motor | Wheel | Relay | TX Valve (R22 sweat only) | Frost Switch | Transformer |
|---------|--------------------|------------|------------|------------------------------|--------------|-------------|
| MB4260L | A00139-001 (9AKR6) | A00137-002 | A00056-G02 | A00031-004 | A00060-K03 | A02701-K01 |
| MB4260H | A00141-001 (8WV21) | A00082-004 | A00056-G02 | A00031-004 | A00060-K03 | A02701-K01 |

MB/MC4260 – Vertically Configured

If the outdoor is 3.5 tons, below are the model #'s to upgrade to:

Blower – M3642BL1-EC2

Coil – M3642CL1-B or E - (which coil to use depends on the specific outdoor model. Call Unico Customer Support for further assistance)

Vertical Plenum Module – M3642V2 (Only needed if existing return box requires replacement, or, if adding a hot water coil to system) (Make sure that you also install the spacer that comes with this module.)

Hot Water Coil – HW-3642 (only needed if existing system has hot water coil – Will slide into M3642V2 or old vertical plenum module)

System size – In this case, the replacement system will be the same physical dimension as the original equipment.

56" H x 17.5" D x 38" W

If the outdoor is 4 or 5 tons, below are the model #'s to upgrade to:

Blower – M4860BL1-EC2 Coil – M4860CL1-B or E - (which coil to use depends on the specific outdoor model. Call Unico Customer Support for further assistance)

Vertical Plenum Module – M4860V2

Hot Water Coil - HW-4860 (optional - only needed if existing system has hot water coil - Will slide right into M4860V2)

System size – These units will be larger than the older system so here are the dimensions of the new system once assembled with the 4860.

56" H x 24" D x 38" W

Below are the minimum requirements for the duct system to ensure proper capacity and performance.

| MB/MC4260 | | | |
|--------------------|----------------------------------|----------------------|----------------------|
| Tonnage of outdoor | Required Duct size | Required return size | Minimum # of outlets |
| 3.5 ton | 9" round or 8.5"x8.5" square | 18" or equivalent | 21 |
| 4 ton | 9" round or 8.5"x8.5" square | 18" or equivalent | 24 |
| 5 ton | 10" round or 9.5"x9.5" square | 20" or equivalent | 30 |

Minimum duct requirements for upgrading to R410A

| Unit | Motor | Wheel | Relay | TX Valve (R22 sweat only) | Frost Switch | Transformer |
|---------|--------------------|------------|------------|---------------------------|--------------|-------------|
| MB4260L | A00139-001 (9AKR6) | A00137-002 | A00056-G02 | A00031-004 | A00060-K03 | A02701-K01 |
| MB4260H | A00141-001 (8WV21) | A00082-004 | A00056-G02 | A00031-004 | A00060-K03 | A02701-K01 |

MB/MC4260 – Keeping R22

If the system is going to stay R22, individual modules can be replaced with current nomenclature. The charts below explain what the older nomenclature can get upgraded to.

Blower

| Old Blower | New Blower |
|--------------------|--------------|
| MB4260L or MB4260H | M3642BL1-EC2 |
| | |

Coil – If wanting to upgrade full coil module

| Old Coil | New Coil |
|----------------------|------------|
| MC4260C or MC4260C-A | M3642CL1-B |
| MC4260H | M3642CL1-E |

Coil – If wanting to change just the coil (No cabinet)

| Old Coil | New Coil |
|----------------------|------------|
| MC4260C or MC4260C-A | А00790-К01 |
| MC4260H | А00792-К01 |

Hot Water coil

| Old Coil | New Coil |
|--------------------------------|------------|
| MH4260 – Full hot water module | M3642CL1-H |
| HW-4260 – Hot water coil only | HW-3642 |

Valve – If changing the coil (either a full module OR just the coil, use the valves below). Again, the right valve depends on the outdoor unit.

3.5 ton R-22 valve – A00808-004 4-5 ton R-22 valve – A00808-005

MB/MC2430 – 3rd Generation Nomenclature

Because the 3rd generation basically uses the same equipment as the current nomenclature, replacing these modules is very easy. The design rules are the same on this older equipment as the current equipment, so changing the equipment is normally all that is required.

Blower

| Old Blower | New Blower |
|-----------------------|--------------|
| MB2430L or MB2430L+CB | M2430BL1-EC2 |
| | |

Coil – If wanting to upgrade full coil module

| Old Coil | New Coil |
|---------------------|------------|
| MC2430C or MC2430CX | M2430CL1-B |
| MC2430H or MC2430HX | M2430CL1-E |

Coil – If wanting to change just the coil (No cabinet)

| Old Coil | New Coil |
|---------------------|------------|
| MC2430C or MC2430CX | A00791-K01 |
| MC2430H or MC2430HX | А00793-К01 |

Hot Water coil

| Old Coil | New Coil |
|--------------------------------|------------|
| MH2430 – Full hot water module | M2430CL1-H |
| HW-2430 – Hot water coil only | HW-2430 |

Valve – If changing the coil (either a full module OR just the coil, use the valves below). Again, the right valve depends on the outdoor unit.

2 - 2.5 ton R-22 valve - A00808-002

2 -2.5 ton R-410 valve - A00808-K13 - Included in the coil module

| Unit | Motor | Wheel | Relay | TX Valve (R22) | TX Valve (R410) | Control Board | Frost Switch | Transformer |
|--------------------|------------|------------|------------|-------------------|--------------------|------------------|--------------|-------------|
| MB2430L | A01018-G05 | A00584-K01 | A00802-001 | A00808-002 | A00808-K13 | | A00060-G04 | A02701-K01 |
| MB2430L+CB | A01018-G07 | A00584-K01 | | A00808-002 | A00808-K13 | A01802-K01 | A00060-G04 | A02701-K01 |
| M2430BL1-ST2 | A01018-G05 | A00584-K01 | A00802-001 | A00808-002 | A00808-K13 | | A00060-G04 | A02701-K01 |
| M2430BL2-ST2 | A01018-G05 | A00584-K01 | A00056-G02 | A00808-002 | A00808-K13 | | A00060-G04 | A02701-K01 |
| M2430BL1-EC1 / EC2 | A01018-G20 | A00584-K03 | | A00808-002 | A00808-K13 | A01469-K03 | A00060-G04 | A02701-K01 |

MB/MC3642 – 3rd Generation Nomenclature

Because the 3rd generation basically uses the same equipment as the current nomenclature, replacing these modules is very easy. The design rules are the same on this older equipment as the current equipment, so changing the equipment is normally all that is required.

Blower

| Old Blower | New Blower |
|-----------------------|--------------|
| MB3642L or MB3642L+CB | M3642BL1-EC2 |
| | |

Coil – If wanting to upgrade full coil module

| Old Coil | New Coil |
|---------------------|------------|
| MC3642C or M3642CX | M3642CL1-B |
| MC3642H or MC3642HX | M3642CL1-E |

Coil – If wanting to change just the coil (No cabinet)

| Old Coil | New Coil |
|---------------------|------------|
| MC3642C or MC3642CX | А00790-К01 |
| MC3642H or MC3642HX | А00792-К01 |

Hot Water coil

| Old Coil | New Coil |
|--------------------------------|------------|
| MH3660 – Full hot water module | M3642CL1-H |
| HW-3660 – Hot water coil only | HW-3642 |

Valve – If changing the coil (either a full module OR just the coil, use the valves below). Again, the right valve depends on the outdoor unit.

3 – 3.5 ton R-22 valve – A00808-004

3 - 3.5 ton R-410 valve - A00808-K14 - Included in the coil module

| Unit | Motor | Wheel | Relay | TX Valve (R22) | TX Valve (R410) | Control Board | Frost Switch | Transformer |
|--------------------|------------|------------|------------|----------------|--------------------|------------------|--------------|-------------|
| MB3642L | A01018-G09 | A00582-K01 | A00802-001 | A00808-004 | A00808-K14 | | A00060-G04 | A02701-K01 |
| MB3642L+CB | A01018-G14 | A00582-K01 | | A00808-004 | A00808-K14 | A01802-K01 | A00060-G04 | A02701-K01 |
| M3642BL1-ST2 | A01018-G09 | A00582-K01 | A00802-001 | A00808-004 | A00808-K14 | | A00060-G04 | A02701-K01 |
| M3642BL2-ST2 | A01018-G09 | A00582-K01 | A00056-G02 | A00808-004 | A00808-K14 | | A00060-G04 | A02701-K01 |
| M3642BL1-EC1 / EC2 | A01018-G21 | A00582-K03 | | A00808-004 | A00808-K14 | A01469-K03 | A00060-G04 | A02701-K01 |

MB/MC4860 – 3rd Generation Nomenclature

Because the 3rd generation basically uses the same equipment as the current nomenclature, replacing these modules is very easy. The design rules are the same on this older equipment as the current equipment, so changing the equipment is normally all that is required.

Blower

| Old Blower | New Blower |
|-----------------------|--------------|
| MB4860L or MB4860L+CB | M4860BL1-EC2 |
| | |

Coil – If wanting to upgrade full coil module

| Old Coil | New Coil |
|---------------------|------------|
| MC4860C or MC4860CX | M4860CL1-B |
| MC4860H or MC4860HX | M4860CL1-E |

Coil – If wanting to change just the coil (No cabinet)

| Old Coil | New Coil |
|---------------------|------------|
| MC4860C or MC4860CX | A00811-K01 |
| MC4860H or MC4860HX | A00811-K02 |

Hot Water coil

| Old Coil | New Coil |
|--------------------------------|------------|
| MH3660 – Full hot water module | M4860CL1-H |
| HW-4860 – Hot water coil only | HW-4860 |

Valve – If changing the coil (either a full module OR just the coil, use the valves below). Again, the right valve depends on the outdoor unit.

4-5 ton R-22 valve – A00808-005

4-5 ton R-410 valve - A00808-K15 - included with the coil module

| Unit | Motor | Wheel | Relay | TX Valve (R22) | TX Valve (R410) | Control Board | Frost Switch | Transformer |
|--------------------|------------|------------|------------|----------------|--------------------|------------------|--------------|-------------|
| MB4860L | A01018-G09 | A00580-K01 | A00802-001 | A00808-005 | A00808-K15 | | A00060-G04 | A02701-K01 |
| MB4860L+CB | A01018-G14 | A00580-K01 | | A00808-005 | A00808-K15 | A01802-K01 | A00060-G04 | A02701-K01 |
| M4860BL1-ST2 | A01018-G09 | A00580-K01 | A00802-001 | A00808-005 | A00808-K15 | | A00060-G04 | A02701-K01 |
| M4860BL2-ST2 | A01018-G09 | A00580-K01 | A00056-G02 | A00808-005 | A00808-K15 | | A00060-G04 | A02701-K01 |
| M4860BL1-EC1 / EC2 | A01018-G21 | A00580-K03 | | A00808-005 | A00808-K15 | A01469-K03 | A00060-G04 | A02701-K01 |

Spacepak / Hi-V replacements

To change older Spacepak, Hi-V, or other small duct systems, the size of the outdoor condensing unit is the most important factor. Below is a chart that details the Unico equipment to be used to change out those other systems based on the condensing unit and also the duct requirements for upgrading.

| | Other SDHV manufacturers | | | | | | | |
|--------------------|--------------------------|---------------------|----------------------------|--|--|--|--|--|
| Tonnage outdoor | Recommended blower | Recommended coil | Vertical configuration? | Hot Water? | | | | |
| 2 - 2.5 ton | M2430BL1-EC2 | M2430CL1-B | lf yes, order M2430V2 | HW-2430 for use with M2430V2 M2430CL1-H if horizontal | | | | |
| 3 | M3036BL1-EC2 | M3036CL1-B | lf yes, order M3036V2 | HW-3036 for use with M3036V2 M3036CL1-H if horizontal | | | | |
| 3.5 | M3642BL1-EC2 | M3642CL1-B | lf yes, order M3642V2 | HW-3642 for use with M3642V2 M3642CL1-H if horizontal | | | | |
| 4 - 5 | M4860BL1-EC2 | MC4860L1-B | lf yes, order M4860V2 | HW-4860 for use with M4860V2 M4860CL1-H if horizontal | | | | |

Minimum duct requirements for upgrading

| Tonnage of outdoor | Required Duct size | Required return size | Minimum # of outlets |
|--------------------|----------------------------------|----------------------|----------------------|
| | | | |
| 2 ton | 7" round or 6.5"x6.5" square | 14" or equivalent | 12 |
| 2.5 ton | 9" round or 6.5"x6.5" square | 14" or equivalent | 15 |
| 3 ton | 9" round or 8.5"x8.5" square | 16" or equivalent | 18 |
| 3.5 ton | 9" round or 8.5"x8.5" square | 18" or equivalent | 21 |
| 4 ton | 9" round or 8.5"x8.5" square | 18" or equivalent | 24 |
| 5 ton | 10" round or 9.5"x9.5" square | 20" or equivalent | 30 |

What if I can't add outlets or increase the plenum size?

There are times when inaccessibility of the plenum, or general cost of changing the duct system means you simply can't increase the size of the old plenum, or add additional outlets. This is a problem because with newer systems we need to move more air across the coil, or risk short cycling, under-performing systems, or both. There are some ways around this, though.

- If the duct system comes off the unit and hits a tee, it's acceptable to increase the size of the main trunk to the tee, and then reduce back down to the current duct size on either side of the tee.
- If the plenum is a shotgun style, increase the size of the trunkline through the first 40% of the outlets, then you can reduce back down.
- If you can't add outlets to the system, or increase the size of the plenum, creating a dump zone is a last resort to move the amount of air needed across the coil, even if you can't deliver it to the conditioned space.
 - The plenum will need to be increased coming off the unit, at least several feet with the dump zone coming off the larger piece, then the plenum can be reduced.
 - Generally, a 4" (or 5" for 4 or 5 tons) hole in the duct (try to stay 2' away from a tee, elbow, etc.) will work. It's helpful to install it with some type of volume damper to further regulate the air.
 - Try to pipe the dump zone to an inconspicuous area, such as a closet, basement or other area that could use additional cooling.
 - **DO NOT** run it back to the return on the system.
 - Upgrading to the EC blower will also help in this scenario as the blower will maintain the highest air flow possible, despite high RPM's of the restrictive duct system. However, once the blower hits the RPM limit (1800 RPM), it can't move more air.

1218 Replacement Systems

The 1218 systems were originally one piece units, but are now modular. The chart below shows the replacements for those older systems.

| Item Code | Description | Blower | Coil | Hot Water |
|-----------------|--------------------------------|--------------|------------|------------|
| M1218 | FCU, 1-1.5T, Blower only | M1218BL1-EC2 | | |
| M1218+AC | FCU, 1-1.5T, AC, R22 | M1218BL1-EC2 | M1218CL1-E | |
| M1218+AC+HW+CB | FCU, 1-1.5T, AC, HWC, ACB | M1218BL1-EC2 | M1218CL1-E | M1218CL1-H |
| M1218+AC,CB | FCU, 1-1.5T, AC, R22, ACB | M1218BL1-EC2 | M1218CL1-E | |
| M1218+AC,HW | FCU, 1-1.5T, AC, R22, HWC | M1218BL1-EC2 | M1218CL1-E | M1218CL1-H |
| M1218+AC,HW,CB | FCU, 1-1.5T, AC, R22, HWC, ACB | M1218BL1-EC2 | M1218CL1-E | M1218CL1-H |
| M1218+ACX | FCU, 1-1.5T, AC, R410A (rename | M1218BL1-EC2 | M1218CL1-E | |
| M1218+ACX,CB | FCU, 1-1.5T, AC, R410A, ACB | M1218BL1-EC2 | M1218CL1-E | |
| M1218+ACX,HW | FCU, 1-1.5T, AC, R410A, HWC | M1218BL1-EC2 | M1218CL1-E | M1218CL1-H |
| M1218+ACX,HW,CB | FCU, 1-1.5T, AC, R410A, HWC, A | M1218BL1-EC2 | M1218CL1-E | M1218CL1-H |
| M1218+CB | FCU, 1-1.5T, Blower only, ACB | M1218BL1-EC2 | | |
| M1218+CW | FCU, 1-1.5T, CWC | M1218BL1-EC2 | M1218CL1-C | |
| M1218+CW,CB | FCU, 1-1.5T, CWC,ACB | M1218BL1-EC2 | M1218CL1-C | |
| M1218+CW,HW | FCU, 1-1.5T, CWC, HWC | M1218BL1-EC2 | M1218CL1-C | M1218CL1-H |
| M1218+CW,HW,CB | FCU, 1-1.5T, CWC, HWC, ACB | M1218BL1-EC2 | M1218CL1-C | M1218CL1-H |
| M1218+HP | FCU, 1-1.5T, HP | M1218BL1-EC2 | M1218CL1-E | |
| M1218+HP,CB | FCU, 1-1.5T, HP, ACB | M1218BL1-EC2 | M1218CL1-E | |
| M1218+HP,HW | FCU, 1-1.5T, HP, HWC | M1218BL1-EC2 | M1218CL1-E | M1218CL1-H |
| M1218+HP,HW,CB | FCU, 1-1.5T, HP, R22, HWC, ACB | M1218BL1-EC2 | M1218CL1-E | M1218CL1-H |
| M1218+HPX | FCU, 1-1.5T, HP , R410A | M1218BL1-EC2 | M1218CL1-E | M1218CL1-H |
| M1218+HPX,CB | FCU, 1-1.5T, HP , R410A, ACB | M1218BL1-EC2 | M1218CL1-E | |
| M1218+HPX,HW | FCU, 1-1.5T, HP , R410A, HWC | M1218BL1-EC2 | M1218CL1-E | M1218CL1-H |
| M1218+HPX,HW,CB | FCU, 1-1.5T, HP , R410A, HWC, | M1218BL1-EC2 | M1218CL1-E | M1218CL1-H |
| M1218+HW | FCU, 1-1.5T, HWC | M1218BL1-EC2 | | M1218CL1-H |
| M1218+HW,CB | FCU, 1-1.5T, HWC, ACB | M1218BL1-EC2 | | M1218CL1-H |

Replacement Parts for 1218

| Unit | Motor | Wheel | Relay | TX Valve (410) | Coil - Refrigeration | Control Board | Frost Switch | Transformer |
|-----------------|------------|------------|------------|----------------|-------------------------|------------------|--------------|-------------|
| Standard 1218 | A01018-G01 | A00757-001 | A00056-G02 | A00366-K02 | A00326-K01 | N/A | A00060-G04 | A02701-K01 |
| 1218+CB | A01018-G03 | A00757-001 | N/A | A00366-K02 | A00326-K01 | A01802-K01 | A00060-G04 | A02701-K01 |
| 1218-EC1 or EC2 | A01018-G20 | A00757-001 | N/A | A00366-K02 | A00326-K01 | A01469-K03 | A00060-G04 | A02701-K01 |

1218 Replacement Systems - continued

The 1218 systems were originally one piece units, but are now modular. The chart below shows the replacements for those older systems.

| Item Code | Description | Blower | Coil | Hot Water |
|---------------|--|--------------|------------|------------|
| U1218L-1EC1EH | U1218 FCU, 110V, EC, w/Heat Pump Coil, R-410A + Hot Water Coil | M1218BL1-EC2 | M1218CL1-E | M1218CL1-H |
| U1218L-1EC1EX | U1218 FCU, 110V, EC, w/Heat Pump Coil, R-410A | M1218BL1-EC2 | M1218CL1-E | |
| U1218L-1EC1XX | U1218 FCU, 110V, EC, Blower Only | M1218BL1-EC2 | | |
| U1218L-1EC1CH | U1218 FCU, 110V, EC, w/ Chilled Water Coil + Hot Water Coil | M1218BL1-EC2 | M1218CL1-C | M1218CL1-H |
| U1218L-1EC1CX | U1218 FCU, 110V, EC, w/Chilled Water Coil | M1218BL1-EC2 | M1218CL1-C | |
| U1218L-1EC2EH | U1218 FCU, 220V EC with Heat Pump Coil, R-410A + Hot Water Coil | M1218BL1-EC2 | M1218CL1-E | M1218CL1-H |
| U1218L-1EC2EX | U1218 FCU, 220V EC, with Heat Pump Coil, R-410A | M1218BL1-EC2 | M1218CL1-E | |
| U1218L-1EC2XH | U1218 FCU, 220V EC with Hot Water Coil Only | M1218BL1-EC2 | | M1218CL1-H |
| U1218L-1EC2XX | U1218 FCU, 220V EC, no cooling coil or drain pan, no heating coil | M1218BL1-EC2 | | |
| U1218L-1EC2CH | U1218 FCU, 220V EC with Chilled Water + Hot Water Coil | M1218BL1-EC2 | M1218CL1-C | M1218CL1-H |
| U1218L-1EC2CX | U1218 FCU, 220V EC, with Chilled Water Coil | M1218BL1-EC2 | M1218CL1-C | |
| U1218L-1ST2CH | U1218 FCU, 1-1.5T, CWC & HWC | M1218BL2-ST2 | M1218CL1-C | M1218CL1-H |
| U1218L-1ST2CX | U1218 FCU, 1-1.5T, Chilled Water Coil | M1218BL2-ST2 | M1218CL1-C | |
| U1218L-1ST2EH | U1218 FCU + H Coil, R-410A TXV, Hot Water Coil | M1218BL2-ST2 | M1218CL1-E | M1218CL1-H |
| U1218L-1ST2EX | U1218 FCU + Heat Coil, R-410A TXV | M1218BL2-ST2 | M1218CL1-E | |
| U1218L-1ST2XH | U1218 FCU, 1-1.5T, HWC ONLY | M1218BL2-ST2 | | M1218CL1-H |
| U1218L-1ST2XX | U1218 FCU, Blower Only | M1218BL2-ST2 | | |

Replacement Parts for 1218

| Unit | Motor | Wheel | Relay | TX Valve (410) | Coil - Refrigeration | Control Board | Frost Switch | Transformer |
|-----------------|------------|------------|------------|----------------|-------------------------|------------------|--------------|-------------|
| Standard 1218 | A01018-G01 | A00757-001 | A00056-G02 | A00366-K02 | A00326-K01 | N/A | A00060-G04 | A02701-K01 |
| 1218+CB | A01018-G03 | A00757-001 | N/A | A00366-K02 | A00326-K01 | A01802-K01 | A00060-G04 | A02701-K01 |
| 1218-EC1 or EC2 | A01018-G20 | A00757-001 | N/A | A00366-K02 | A00326-K01 | A01469-K03 | A00060-G04 | A02701-K01 |