

# Commercial Unit Coolers



- Optimised 3/8" Rifle Bore Tube Coils
- Light Weight Alu Case
- High Airflow External Rotor Motors
- Turbo Heat Exchangers
- Reversible Drain Trays
- Low Temp Heater Safety Klixon

**P** SERIES

2.2 21.5 kW

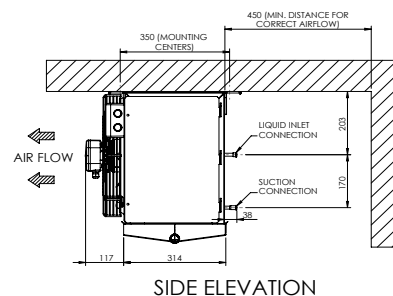
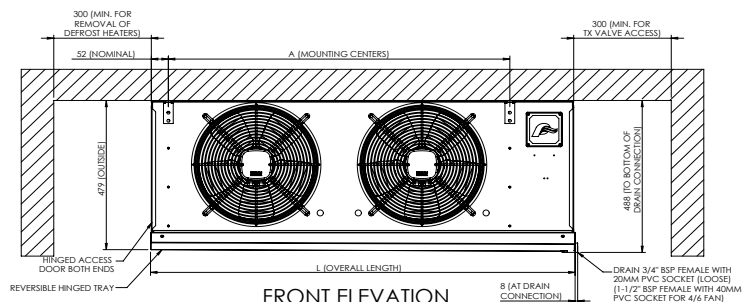
## MEDIUM TEMP

| MODELS                                                                              | PM    | 30    | 40   | 50   | 60   | 70   | 80   | 95    | 105   | 110   | 130   | 140   | 160   | 190   | 210   |
|-------------------------------------------------------------------------------------|-------|-------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| Capacity                                                                            | R404A | 3.03  | 4.17 | 5.04 | 6.09 | 7.17 | 8.28 | 9.72  | 10.65 | 11.28 | 13.29 | 14.34 | 16.38 | 19.41 | 21.48 |
| kW @ 6 KTD<br>-4°C SST                                                              | R407F | 3.18  | 4.38 | 5.28 | 6.39 | 7.53 | 8.70 | 10.20 | 11.16 | 11.85 | 13.95 | 15.06 | 17.19 | 20.37 | 22.53 |
|                                                                                     | R22   | 2.97  | 4.08 | 4.92 | 5.97 | 7.02 | 8.10 | 9.54  | 10.44 | 11.04 | 13.02 | 14.04 | 16.05 | 19.02 | 21.06 |
|                                                                                     | R134a | 2.76  | 3.78 | 4.59 | 5.55 | 6.54 | 7.53 | 8.85  | 9.69  | 10.26 | 12.09 | 13.05 | 14.91 | 17.67 | 19.53 |
| T.X Valve                                                                           | R404A | 1SC   | 3S2  | 3S2  | 4S2  | 4S2  | 4S2  | 5S2   | 5S2   | 5S2   | 6S2   | 6S2   | TE5-2 | TE5-2 | TE5-3 |
| TE2-S / TE5                                                                         | R407F | 1HC   | 2X2  | 3X2  | 3X2  | 3X2  | 4X2  | 4X2   | 5X2   | 5X2   | 5X2   | 6X2   | 6X2   | TE5-2 | TE5-2 |
|  | R22   | 1HC   | 2X2  | 3X2  | 3X2  | 3X2  | 4X2  | 4X2   | 5X2   | 5X2   | 5X2   | 6X2   | 6X2   | TE5-2 | TE5-2 |
|                                                                                     | R134a | 3/4MC | 3N2  | 4N2  | 4N2  | 5N2  | 6N2  | 6N2   | 6N2   | TE5-1 | TE5-2 | TE5-2 | TE5-2 | TE5-3 | TE5-3 |

## LOW TEMP

| MODELS                                                                              | PL    | 22   | 30   | 45   | 60   | 70    | 80    | 95    | 120   | 130   |
|-------------------------------------------------------------------------------------|-------|------|------|------|------|-------|-------|-------|-------|-------|
| Capacity                                                                            | R404A | 2.25 | 3.12 | 4.56 | 6.21 | 7.11  | 8.25  | 9.63  | 12.30 | 13.29 |
| kW @ 6 KTD<br>-24°C SST                                                             | R407F | 2.22 | 3.09 | 4.50 | 6.15 | 7.05  | 8.16  | 9.54  | 12.18 | 13.14 |
|                                                                                     | R22   | 2.19 | 3.03 | 4.41 | 6.00 | 6.90  | 8.01  | 9.33  | 11.94 | 12.90 |
|                                                                                     | R134a | 1.92 | 2.64 | 3.87 | 5.28 | 6.03  | 7.02  | 8.19  | 10.44 | 11.31 |
| T.X Valve                                                                           | R404A | 3S2  | 4S2  | 5S2  | 6S2  | 6S2   | TE5-1 | TE5-2 | TE5-2 | TE5-3 |
| TE2-S / TE5                                                                         | R407F | 2X2  | 3X2  | 4X2  | 4X2  | 5X2   | 5X2   | 6X2   | TE5-1 | TE5-2 |
|  | R22   | 2X2  | 3X2  | 4X2  | 4X2  | 5X2   | 5X2   | 6X2   | TE5-1 | TE5-2 |
|                                                                                     | R134a | 3N2  | 4N2  | 5N2  | 6N2  | TE5-1 | TE5-1 | TE5-2 | TE5-3 | TE5-3 |

## DIMENSIONS



NTS (mm)

## MEDIUM TEMP

| MODELS             | PM                    | 30              | 40   | 50   | 60   | 70   | 80   | 95   | 105  | 110  | 130    | 140    | 160    | 190    | 210    |
|--------------------|-----------------------|-----------------|------|------|------|------|------|------|------|------|--------|--------|--------|--------|--------|
| Air Throw          | m                     | 8.0             | 8.5  | 8.0  | 11.5 | 11.0 | 14.5 | 13.0 | 15.0 | 15.5 | 15.0   | 16.0   | 18.0   | 17.5   | 18.5   |
| Air Volume         | l/sec                 | 860             | 875  | 790  | 1720 | 1550 | 1750 | 1580 | 2320 | 2460 | 2220   | 3100   | 3520   | 3180   | 4650   |
| Fan Motors Ø 350mm | Num.                  | 1               | 1    | 1    | 2    | 2    | 2    | 2    | 3    | 3    | 3      | 4      | 4      | 4      | 6      |
|                    | Watts                 | 175             | 175  | 175  | 350  | 350  | 350  | 350  | 525  | 525  | 525    | 700    | 700    | 700    | 700    |
|                    | Amps                  | 0.75            | 0.75 | 0.75 | 1.5  | 1.5  | 1.5  | 1.5  | 2.25 | 2.25 | 2.25   | 3.0    | 3.0    | 3.0    | 3.0    |
| Coil               | Circuit Vol.          | dm <sup>3</sup> | 2.20 | 3.30 | 3.30 | 4.41 | 4.41 | 6.60 | 6.60 | 6.60 | 8.82   | 8.82   | 8.82   | 13.36  | 13.36  |
|                    | Connection Dist Inlet |                 | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 5/8" | 5/8" | 5/8" | 7/8"   | 7/8"   | 7/8"   | 7/8"   | 7/8"   |
|                    | F.Sw Suct Outlet      |                 | 3/4" | 3/4" | 3/4" | 7/8" | 7/8" | 7/8" | 7/8" | 7/8" | 1-1/8" | 1-1/8" | 1-1/8" | 1-3/8" | 1-3/8" |
|                    | fpi                   |                 | 6    | 6    | 8    | 6    | 8    | 6    | 8    | 8    | 6      | 8      | 8      | 6      | 8      |
|                    | Defrost Watts         |                 | 1500 | 2090 | 2090 | 2590 | 2590 | 3620 | 3620 | 3620 | 3650   | 3650   | 3650   | 5410   | 5410   |
| Dimensions         | L                     |                 | 799  | 1051 | 1051 | 1309 | 1309 | 1813 | 1813 | 1813 | 2329   | 2329   | 2329   | 3349   | 3349   |
|                    | A                     |                 | 540  | 792  | 792  | 1050 | 1050 | 1554 | 1554 | 1554 | 2070   | 2070   | 2070   | 3090   | 3090   |
| Net Weight         | kg                    |                 | 19   | 22   | 23   | 29   | 30   | 44   | 45   | 50   | 61     | 62     | 66     | 72     | 82     |

## LOW TEMP

| MODELS             | PL                    | 22              | 30   | 45   | 60   | 70   | 80   | 95     | 120    | 130    |
|--------------------|-----------------------|-----------------|------|------|------|------|------|--------|--------|--------|
| Air Throw          | m                     | 8.0             | 8.5  | 11.5 | 12.5 | 14.0 | 15.0 | 16.0   | 17.0   | 18.0   |
| Air Volume         | l/sec                 | 775             | 790  | 1550 | 1580 | 2095 | 2220 | 2800   | 3180   | 4200   |
| Fan Motors Ø 350mm | Num.                  | 1               | 1    | 2    | 2    | 3    | 3    | 4      | 4      | 6      |
|                    | Watts                 | 175             | 175  | 350  | 350  | 525  | 525  | 700    | 700    | 1050   |
|                    | Amps                  | 0.75            | 0.75 | 1.5  | 1.5  | 2.25 | 2.25 | 3.0    | 3.0    | 4.5    |
| Coil               | Circuit Vol.          | dm <sup>3</sup> | 2.20 | 3.30 | 4.41 | 6.60 | 6.60 | 8.82   | 8.82   | 13.36  |
|                    | Connection Dist Inlet |                 | 1/2" | 1/2" | 1/2" | 5/8" | 5/8" | 7/8"   | 7/8"   | 7/8"   |
|                    | F.Sw Suct Outlet      |                 | 3/4" | 3/4" | 7/8" | 7/8" | 7/8" | 1-1/8" | 1-1/8" | 1-3/8" |
|                    | fpi                   |                 | 6    | 6    | 6    | 6    | 6    | 6      | 6      | 6      |
|                    | Defrost Watts         |                 | 2400 | 3200 | 4120 | 5780 | 5780 | 7300   | 7300   | 10820  |
| Dimensions         | L                     |                 | 799  | 1051 | 1309 | 1813 | 1813 | 2329   | 2329   | 3349   |
|                    | A                     |                 | 540  | 792  | 1050 | 1554 | 1554 | 2070   | 2070   | 3090   |
| Net Weight         | kg                    |                 | 20   | 23   | 29   | 45   | 50   | 60     | 65     | 83     |

### CAPACITY CORRECTION

| PMN @ °C SST | PLN @ °C SST |
|--------------|--------------|
| 5°           | 1.17         |
| 0°           | 1.07         |
| -5°          | 0.99         |
| -10°         | 0.93         |

### RELATIVE HUMIDITY GUIDE

| Temp Diff | R.H % | Temp Diff | R.H % |
|-----------|-------|-----------|-------|
| 2K        | 94    | 10K       | 77    |
| 4K        | 89    | 12K       | 73    |
| 6K        | 84    | 14K       | 70    |
| 8K        | 81    | 16K       | 66    |

### NOTES:

- Air throw based on CRMA standard@ 20°C  
Multiply figures by 0.94 for 2°C and 0.87 for -18°C
- Fan motors 220-240V/1/50Hz
- Defrost heaters 220-240V/1/50Hz  
Connect in Y for 380-420V/3/50Hz supply

Specifications subject to change without notice

# Commercial Unit Coolers



- Optimised 3/8" Rifle Bore Tube Coils
- Light Weight Alu Case
- High Airflow External Rotor Motors
- Turbo Heat Exchangers
- Reversible Drain Trays
- Low Temp Heater Safety Klixon

**P** SERIES

2.2 21.5 kW

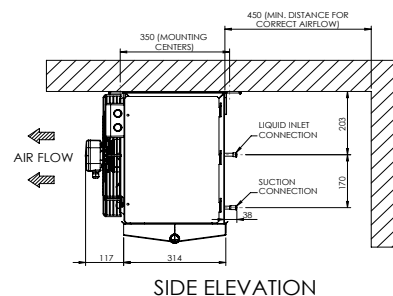
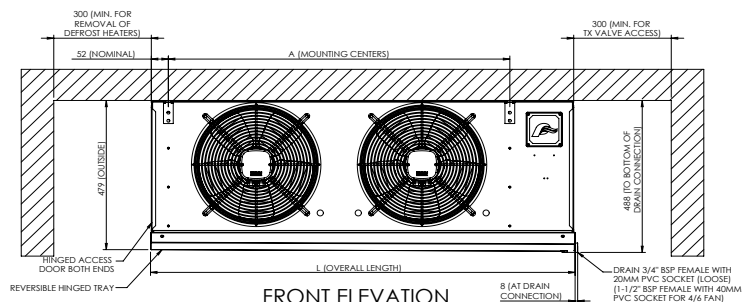
## MEDIUM TEMP

| MODELS                                                                              | PM    | 30    | 40      | 50      | 60      | 70      | 80      | 95      | 105     | 110     | 130     | 140     | 160     | 190     | 210     |
|-------------------------------------------------------------------------------------|-------|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Capacity                                                                            | R404A | 3.03  | 4.17    | 5.04    | 6.09    | 7.17    | 8.28    | 9.72    | 10.65   | 11.28   | 13.29   | 14.34   | 16.38   | 19.41   | 21.48   |
| kW @ 6 KTD<br>-4°C SST                                                              | R407F | 3.18  | 4.38    | 5.28    | 6.39    | 7.53    | 8.70    | 10.20   | 11.16   | 11.85   | 13.95   | 15.06   | 17.19   | 20.37   | 22.53   |
|                                                                                     | R22   | 2.97  | 4.08    | 4.92    | 5.97    | 7.02    | 8.10    | 9.54    | 10.44   | 11.04   | 13.02   | 14.04   | 16.05   | 19.02   | 21.06   |
|                                                                                     | R134a | 2.76  | 3.78    | 4.59    | 5.55    | 6.54    | 7.53    | 8.85    | 9.69    | 10.26   | 12.09   | 13.05   | 14.91   | 17.67   | 19.53   |
| T.X Valve                                                                           | R404A | 1SC   | 1SC     | 1-1/4SC | 1-1/2SC | 1-1/2SC | 2SC     | 2SC     | 3-1/2SC | 3-1/2SC | 3-1/2SC | 3-1/2SC | 3-1/2SC | 5SC     | 5SC     |
| HFKESEC                                                                             | R407F | 1HC   | 1-1/2HC | 1-1/2HC | 1-1/2HC | 2HC     | 2HC     | 2-1/2HC | 2-1/2HC | 3HC     | 3HC     | 5-1/2HC | 5-1/2HC | 5-1/2HC | 5-1/2HC |
|  | R22   | 1HC   | 1-1/2HC | 1-1/2HC | 1-1/2HC | 2HC     | 2HC     | 2-1/2HC | 2-1/2HC | 3HC     | 3HC     | 5-1/2HC | 5-1/2HC | 5-1/2HC | 5-1/2HC |
|                                                                                     | R134a | 3/4MC | 1MC     | 1MC     | 1-1/2MC | 1-1/2MC | 1-3/4MC | 2-1/2MC | 2-1/2MC | 2-1/2MC | 4MC     | 4MC     | 4MC     | 4MC     | 4MC     |

## LOW TEMP

| MODELS                                                                              | PL    | 22    | 30   | 45      | 60      | 70      | 80      | 95      | 120     | 130     |
|-------------------------------------------------------------------------------------|-------|-------|------|---------|---------|---------|---------|---------|---------|---------|
| Capacity                                                                            | R404A | 2.25  | 3.12 | 4.56    | 6.21    | 7.11    | 8.25    | 9.63    | 12.30   | 13.29   |
| kW @ 6 KTD<br>-24°C SST                                                             | R407F | 2.22  | 3.09 | 4.50    | 6.15    | 7.05    | 8.16    | 9.54    | 12.18   | 13.14   |
|                                                                                     | R22   | 2.19  | 3.03 | 4.41    | 6.00    | 6.90    | 8.01    | 9.33    | 11.94   | 12.90   |
|                                                                                     | R134a | 1.92  | 2.64 | 3.87    | 5.28    | 6.03    | 7.02    | 8.19    | 10.44   | 11.31   |
| T.X Valve                                                                           | R404A | 1SZ   | 1SZ  | 1-1/2SZ | 2SZ     | 2SZ     | 3-1/2SZ | 3-1/2SZ | 3-1/2SZ | 5SZ     |
| HFKESEC                                                                             | R407F | 1HC   | 1HC  | 1-1/2HC | 2HC     | 2HC     | 2-1/2HC | 3HC     | 3HC     | 5-1/2HC |
|  | R22   | 1HC   | 1HC  | 1-1/2HC | 2HC     | 2HC     | 2-1/2HC | 3HC     | 3HC     | 5-1/2HC |
|                                                                                     | R134a | 3/4MC | 1MC  | 1-1/2MC | 1-3/4MC | 2-1/2MC | 2-1/2MC | 4MC     | 4MC     | 4MC     |

## DIMENSIONS



NTS (mm)

## MEDIUM TEMP

| MODELS             | PM                    | 30              | 40   | 50   | 60   | 70   | 80   | 95   | 105  | 110  | 130    | 140    | 160    | 190    | 210    |
|--------------------|-----------------------|-----------------|------|------|------|------|------|------|------|------|--------|--------|--------|--------|--------|
| Air Throw          | m                     | 8.0             | 8.5  | 8.0  | 11.5 | 11.0 | 14.5 | 13.0 | 15.0 | 15.5 | 15.0   | 16.0   | 18.0   | 17.5   | 18.5   |
| Air Volume         | l/sec                 | 860             | 875  | 790  | 1720 | 1550 | 1750 | 1580 | 2320 | 2460 | 2220   | 3100   | 3520   | 3180   | 4650   |
| Fan Motors Ø 350mm | Num.                  | 1               | 1    | 1    | 2    | 2    | 2    | 2    | 3    | 3    | 3      | 4      | 4      | 4      | 6      |
|                    | Watts                 | 175             | 175  | 175  | 350  | 350  | 350  | 350  | 525  | 525  | 525    | 700    | 700    | 700    | 700    |
|                    | Amps                  | 0.75            | 0.75 | 0.75 | 1.5  | 1.5  | 1.5  | 1.5  | 2.25 | 2.25 | 2.25   | 3.0    | 3.0    | 3.0    | 3.0    |
| Coil               | Circuit Vol.          | dm <sup>3</sup> | 2.20 | 3.30 | 3.30 | 4.41 | 4.41 | 6.60 | 6.60 | 6.60 | 8.82   | 8.82   | 8.82   | 13.36  | 13.36  |
|                    | Connection Dist Inlet |                 | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 5/8" | 5/8" | 5/8" | 7/8"   | 7/8"   | 7/8"   | 7/8"   | 7/8"   |
|                    | F.Sw Suct Outlet      |                 | 3/4" | 3/4" | 3/4" | 7/8" | 7/8" | 7/8" | 7/8" | 7/8" | 1-1/8" | 1-1/8" | 1-1/8" | 1-3/8" | 1-3/8" |
|                    | fpi                   |                 | 6    | 6    | 8    | 6    | 8    | 6    | 8    | 8    | 6      | 8      | 8      | 6      | 8      |
|                    | Defrost Watts         |                 | 1500 | 2090 | 2090 | 2590 | 2590 | 3620 | 3620 | 3620 | 3650   | 3650   | 3650   | 5410   | 5410   |
| Dimensions         | L                     |                 | 799  | 1051 | 1051 | 1309 | 1309 | 1813 | 1813 | 1813 | 2329   | 2329   | 2329   | 3349   | 3349   |
|                    | A                     |                 | 540  | 792  | 792  | 1050 | 1050 | 1554 | 1554 | 1554 | 2070   | 2070   | 2070   | 3090   | 3090   |
| Net Weight         | kg                    |                 | 19   | 22   | 23   | 29   | 30   | 44   | 45   | 50   | 61     | 62     | 66     | 72     | 82     |

## LOW TEMP

| MODELS             | PL                    | 22              | 30   | 45   | 60   | 70   | 80   | 95     | 120    | 130    |
|--------------------|-----------------------|-----------------|------|------|------|------|------|--------|--------|--------|
| Air Throw          | m                     | 8.0             | 8.5  | 11.5 | 12.5 | 14.0 | 15.0 | 16.0   | 17.0   | 18.0   |
| Air Volume         | l/sec                 | 775             | 790  | 1550 | 1580 | 2095 | 2220 | 2800   | 3180   | 4200   |
| Fan Motors Ø 350mm | Num.                  | 1               | 1    | 2    | 2    | 3    | 3    | 4      | 4      | 6      |
|                    | Watts                 | 175             | 175  | 350  | 350  | 525  | 525  | 700    | 700    | 1050   |
|                    | Amps                  | 0.75            | 0.75 | 1.5  | 1.5  | 2.25 | 2.25 | 3.0    | 3.0    | 4.5    |
| Coil               | Circuit Vol.          | dm <sup>3</sup> | 2.20 | 3.30 | 4.41 | 6.60 | 6.60 | 8.82   | 8.82   | 13.36  |
|                    | Connection Dist Inlet |                 | 1/2" | 1/2" | 1/2" | 5/8" | 5/8" | 7/8"   | 7/8"   | 7/8"   |
|                    | F.Sw Suct Outlet      |                 | 3/4" | 3/4" | 7/8" | 7/8" | 7/8" | 1-1/8" | 1-1/8" | 1-3/8" |
|                    | fpi                   |                 | 6    | 6    | 6    | 6    | 6    | 6      | 6      | 6      |
|                    | Defrost Watts         |                 | 2400 | 3200 | 4120 | 5780 | 5780 | 7300   | 7300   | 10820  |
| Dimensions         | L                     |                 | 799  | 1051 | 1309 | 1813 | 1813 | 2329   | 2329   | 3349   |
|                    | A                     |                 | 540  | 792  | 1050 | 1554 | 1554 | 2070   | 2070   | 3090   |
| Net Weight         | kg                    |                 | 20   | 23   | 29   | 45   | 50   | 60     | 65     | 83     |

### CAPACITY CORRECTION

| PMN @ °C SST | PLN @ °C SST |
|--------------|--------------|
| 5°           | 1.17         |
| 0°           | 1.07         |
| -5°          | 0.99         |
| -10°         | 0.93         |

### RELATIVE HUMIDITY GUIDE

| Temp Diff | R.H % | Temp Diff | R.H % |
|-----------|-------|-----------|-------|
| 2K        | 94    | 10K       | 77    |
| 4K        | 89    | 12K       | 73    |
| 6K        | 84    | 14K       | 70    |
| 8K        | 81    | 16K       | 66    |

### NOTES:

- Air throw based on CRMA standard@ 20°C  
Multiply figures by 0.94 for 2°C and 0.87 for -18°C
- Fan motors 220-240V/1/50Hz
- Defrost heaters 220-240V/1/50Hz  
Connect in Y for 380-420V/3/50Hz supply

Specifications subject to change without notice