

## R290 M thermal Arctic HT Series



| R290 Arctic HT Series                             |                        |       | MHC-V4WD2N7 | MHC-V6WD2N7 | MHC-V8WD2N7 | MHC-V10WD2N7 |
|---------------------------------------------------|------------------------|-------|-------------|-------------|-------------|--------------|
| Seasonal space heating<br>energy efficiency class | Water outlet at 35°C   |       | A+++        |             |             |              |
|                                                   | Water outlet at 55°C   |       | A++         |             |             |              |
| SCOP                                              | Warmer climate         | 35°C  | 5.97        | 6.14        | 6.56        | 7.11         |
|                                                   |                        | 55°C  | 4.34        | 4.55        | 4.68        | 4.79         |
|                                                   | Average climate        | 35°C  | 5.07        | 4.89        | 5.19        | 5.07         |
|                                                   |                        | 55°C  | 3.79        | 3.82        | 3.82        | 3.82         |
|                                                   | Colder climate         | 35°C  | 4.03        | 4.24        | 4.44        | 4.54         |
|                                                   |                        | 55°C  | 3.18        | 3.38        | 3.46        | 3.49         |
| SEER                                              | Water outlet           | 7°C   | 5.23        | 5.32        | 5.86        | 5.55         |
|                                                   |                        | 18°C  | 6.36        | 6.65        | 8.14        | 8.16         |
| Erp Sound power level                             |                        | dB    | 56          | 58          | 60          | 61           |
| Sound power level                                 | Heating A7W35          | dB    | 56          | 58          | 60          | 61           |
|                                                   | Heating Max.           | dB    | 58          | 60          | 62          | 63           |
|                                                   | Heating Silence mode 1 | dB    | 54          | 56          | 58          | 59           |
|                                                   | Heating Silence mode 2 | dB    | 51          | 53          | 55          | 56           |
|                                                   | Cooling A35W18         | dB    | 56          | 58          | 60          | 61           |
|                                                   | Cooling max            | dB    | 58          | 60          | 62          | 63           |
|                                                   | Cooling Silence mode 1 | dB    | 54          | 56          | 57          | 58           |
|                                                   | Cooling Silence mode 2 | dB    | 51          | 53          | 54          | 55           |
| Sound pressure level (1m)                         | Heating A7W35          | dB(A) | 44          | 46          | 48          | 49           |
|                                                   | Heating Max.           | dB(A) | 46          | 48          | 50          | 51           |
|                                                   | Heating Silence mode 1 | dB(A) | 42          | 44          | 45          | 46           |
|                                                   | Heating Silence mode 2 | dB(A) | 40          | 42          | 42          | 43           |
|                                                   | Cooling A35W18         | dB(A) | 44          | 46          | 48          | 49           |
|                                                   | Cooling max            | dB(A) | 46          | 48          | 50          | 51           |
|                                                   | Cooling Silence mode 1 | dB(A) | 42          | 43          | 45          | 46           |
|                                                   | Cooling Silence mode 2 | dB(A) | 39          | 40          | 42          | 43           |
| Sound pressure level (2m)                         | Heating A7W35          | dB(A) | 40          | 42          | 44          | 45           |
|                                                   | Heating Max.           | dB(A) | 42          | 44          | 46          | 47           |
|                                                   | Heating Silence mode 1 | dB(A) | 38          | 40          | 41          | 42           |
|                                                   | Heating Silence mode 2 | dB(A) | 35          | 37          | 39          | 40           |
|                                                   | Cooling A35W18         | dB(A) | 40          | 42          | 44          | 45           |
|                                                   | Cooling max            | dB(A) | 42          | 44          | 46          | 47           |
|                                                   | Cooling Silence mode 1 | dB(A) | 38          | 40          | 41          | 42           |
|                                                   | Cooling Silence mode 2 | dB(A) | 35          | 37          | 39          | 40           |

| R290 Arctic HT Series                          |                        |       | MHC-V4W<br>D2N7-BE30 | MHC-V6W<br>D2N7-BE30 | MHC-V8W<br>D2N7-BE30 | MHC-V10W<br>D2N7-BE30 | MHC-V8W<br>D2N7-BER90 | MHC-V10W<br>D2N7-BER90 |
|------------------------------------------------|------------------------|-------|----------------------|----------------------|----------------------|-----------------------|-----------------------|------------------------|
| Seasonal space heating energy efficiency class | Water outlet at 35°C   |       | A+++                 |                      |                      |                       |                       |                        |
|                                                | Water outlet at 55°C   |       | A++                  |                      |                      |                       |                       |                        |
| SCOP                                           | Warmer climate         | 35°C  | 5.97                 | 6.14                 | 6.56                 | 7.11                  | 6.56                  | 7.11                   |
|                                                |                        | 55°C  | 4.34                 | 4.55                 | 4.68                 | 4.79                  | 4.68                  | 4.79                   |
|                                                | Average climate        | 35°C  | 5.07                 | 4.89                 | 5.19                 | 5.07                  | 5.19                  | 5.07                   |
|                                                |                        | 55°C  | 3.79                 | 3.82                 | 3.82                 | 3.82                  | 3.82                  | 3.82                   |
|                                                | Colder climate         | 35°C  | 4.03                 | 4.24                 | 4.44                 | 4.54                  | 4.44                  | 4.54                   |
|                                                |                        | 55°C  | 3.18                 | 3.38                 | 3.46                 | 3.49                  | 3.46                  | 3.49                   |
| SEER                                           | Water outlet           | 7°C   | 5.23                 | 5.32                 | 5.86                 | 5.55                  | 5.86                  | 5.55                   |
|                                                |                        | 18°C  | 6.36                 | 6.65                 | 8.14                 | 8.16                  | 8.14                  | 8.16                   |
| Erp Sound power level                          |                        | dB    | 56                   | 58                   | 60                   | 61                    | 60                    | 61                     |
| Sound power level                              | Heating A7W35          | dB    | 56                   | 58                   | 60                   | 61                    | 60                    | 61                     |
|                                                | Heating Max.           | dB    | 58                   | 60                   | 62                   | 63                    | 62                    | 63                     |
|                                                | Heating Silence mode 1 | dB    | 54                   | 56                   | 58                   | 59                    | 58                    | 59                     |
|                                                | Heating Silence mode 2 | dB    | 51                   | 53                   | 55                   | 56                    | 55                    | 56                     |
|                                                | Cooling A35W18         | dB    | 56                   | 58                   | 60                   | 61                    | 60                    | 61                     |
|                                                | Cooling max            | dB    | 58                   | 60                   | 62                   | 63                    | 62                    | 63                     |
|                                                | Cooling Silence mode 1 | dB    | 54                   | 56                   | 57                   | 58                    | 57                    | 58                     |
|                                                | Cooling Silence mode 2 | dB    | 51                   | 53                   | 54                   | 55                    | 54                    | 55                     |
| Sound pressure level (1m)                      | Heating A7W35          | dB(A) | 44                   | 46                   | 48                   | 49                    | 48                    | 49                     |
|                                                | Heating Max.           | dB(A) | 46                   | 48                   | 50                   | 51                    | 50                    | 51                     |
|                                                | Heating Silence mode 1 | dB(A) | 42                   | 44                   | 45                   | 46                    | 45                    | 46                     |
|                                                | Heating Silence mode 2 | dB(A) | 40                   | 42                   | 42                   | 43                    | 42                    | 43                     |
|                                                | Cooling A35W18         | dB(A) | 44                   | 46                   | 48                   | 49                    | 48                    | 49                     |
|                                                | Cooling max            | dB(A) | 46                   | 48                   | 50                   | 51                    | 50                    | 51                     |
|                                                | Cooling Silence mode 1 | dB(A) | 42                   | 43                   | 45                   | 46                    | 45                    | 46                     |
|                                                | Cooling Silence mode 2 | dB(A) | 39                   | 40                   | 42                   | 43                    | 42                    | 43                     |
| Sound pressure level (2m)                      | Heating A7W35          | dB(A) | 40                   | 42                   | 44                   | 45                    | 44                    | 45                     |
|                                                | Heating Max.           | dB(A) | 42                   | 44                   | 46                   | 47                    | 46                    | 47                     |
|                                                | Heating Silence mode 1 | dB(A) | 38                   | 40                   | 41                   | 42                    | 41                    | 42                     |
|                                                | Heating Silence mode 2 | dB(A) | 35                   | 37                   | 39                   | 40                    | 39                    | 40                     |
|                                                | Cooling A35W18         | dB(A) | 40                   | 42                   | 44                   | 45                    | 44                    | 45                     |
|                                                | Cooling max            | dB(A) | 42                   | 44                   | 46                   | 47                    | 46                    | 47                     |
|                                                | Cooling Silence mode 1 | dB(A) | 38                   | 40                   | 41                   | 42                    | 41                    | 42                     |
|                                                | Cooling Silence mode 2 | dB(A) | 35                   | 37                   | 39                   | 40                    | 39                    | 40                     |

# R290 M thermal Arctic HT Series



| R290 Arctic HT Series                          |                        |       | MHC-<br>V12WD2N7 | MHC-<br>V14WD2N7 | MHC-<br>V16WD2N7 | MHC-<br>V12WD2RN7 | MHC-<br>V14WD2RN7 | MHC-<br>V16WD2RN7 |
|------------------------------------------------|------------------------|-------|------------------|------------------|------------------|-------------------|-------------------|-------------------|
| Seasonal space heating energy efficiency class | Water outlet at 35°C   |       | A+++             |                  |                  |                   |                   |                   |
|                                                | Water outlet at 55°C   |       | A++              |                  |                  |                   |                   |                   |
| SCOP                                           | Warmer climate         | 35°C  | 5.9              | 5.85             | 6.05             | 5.9               | 5.85              | 6.05              |
|                                                |                        | 55°C  | 4.45             | 4.43             | 4.62             | 4.45              | 4.43              | 4.62              |
|                                                | Average climate        | 35°C  | 4.67             | 4.63             | 4.59             | 4.67              | 4.64              | 4.59              |
|                                                |                        | 55°C  | 3.62             | 3.61             | 3.57             | 3.62              | 3.61              | 3.57              |
|                                                | Colder climate         | 35°C  | 4.13             | 4.13             | 4.08             | 4.13              | 4.13              | 4.08              |
|                                                |                        | 55°C  | 3.26             | 3.23             | 3.29             | 3.26              | 3.23              | 3.29              |
| SEER                                           | Water outlet           | 7°C   | 5.19             | 5.18             | 5.12             | 5.19              | 5.18              | 5.12              |
|                                                |                        | 18°C  | 6.42             | 6.75             | 6.65             | 6.42              | 6.75              | 6.65              |
| Erp Sound power level                          |                        | dB    | 65               | 65               | 69               | 65                | 65                | 69                |
| Sound power Level                              | Heating A7W35          | dB    | 65               | 65               | 69               | 65                | 65                | 69                |
|                                                | Heating Max.           | dB    | 67               | 68               | 70               | 67                | 68                | 70                |
|                                                | Heating Silence mode 1 | dB    | 62               | 63               | 64               | 62                | 63                | 64                |
|                                                | Heating Silence mode 2 | dB    | 58               | 59               | 60               | 58                | 59                | 60                |
|                                                | Cooling A35W18         | dB    | 65               | 66               | 69               | 65                | 66                | 69                |
|                                                | Cooling max            | dB    | 66               | 67               | 70               | 66                | 67                | 70                |
|                                                | Cooling Silence mode 1 | dB    | 62               | 62               | 64               | 62                | 62                | 64                |
|                                                | Cooling Silence mode 2 | dB    | 58               | 59               | 60               | 58                | 59                | 60                |
| Sound pressure level (1m)                      | Heating A7W35          | dB(A) | 51               | 52               | 56               | 51                | 52                | 56                |
|                                                | Heating Max.           | dB(A) | 53               | 54               | 58               | 53                | 54                | 58                |
|                                                | Heating Silence mode 1 | dB(A) | 47               | 48               | 52               | 47                | 48                | 52                |
|                                                | Heating Silence mode 2 | dB(A) | 43               | 44               | 48               | 43                | 44                | 48                |
|                                                | Cooling A35W18         | dB(A) | 51               | 52               | 56               | 51                | 52                | 56                |
|                                                | Cooling max            | dB(A) | 53               | 54               | 58               | 53                | 54                | 58                |
|                                                | Cooling Silence mode 1 | dB(A) | 47               | 48               | 52               | 47                | 48                | 52                |
|                                                | Cooling Silence mode 2 | dB(A) | 44               | 45               | 48               | 44                | 45                | 48                |
| Sound pressure level (2m)                      | Heating A7W35          | dB(A) | 47               | 48               | 52               | 47                | 48                | 52                |
|                                                | Heating Max.           | dB(A) | 49               | 50               | 54               | 49                | 50                | 54                |
|                                                | Heating Silence mode 1 | dB(A) | 43               | 44               | 48               | 43                | 44                | 48                |
|                                                | Heating Silence mode 2 | dB(A) | 41               | 42               | 43               | 41                | 42                | 43                |
|                                                | Cooling A35W18         | dB(A) | 47               | 48               | 52               | 47                | 48                | 52                |
|                                                | Cooling max            | dB(A) | 49               | 50               | 54               | 49                | 50                | 54                |
|                                                | Cooling Silence mode 1 | dB(A) | 43               | 44               | 48               | 43                | 44                | 48                |
|                                                | Cooling Silence mode 2 | dB(A) | 41               | 42               | 43               | 41                | 42                | 43                |

| R290 Arctic HT Series                                |                        |       | MHC-V12W<br>D2N7-BE30 | MHC-V14W<br>D2N7-BE30 | MHC-V16W<br>D2N7-BE30 | MHC-V12W<br>D2RN7-BE30 | MHC-V14W<br>D2RN7-BE30 | MHC-V16W<br>D2RN7-BE30 |
|------------------------------------------------------|------------------------|-------|-----------------------|-----------------------|-----------------------|------------------------|------------------------|------------------------|
| Seasonal space<br>heating energy<br>efficiency class | Water outlet at 35°C   |       | A+++                  |                       |                       |                        |                        |                        |
|                                                      | Water outlet at 55°C   |       | A++                   |                       |                       |                        |                        |                        |
| SCOP                                                 | Warmer climate         | 35°C  | 5.9                   | 5.85                  | 6.05                  | 5.9                    | 5.85                   | 6.05                   |
|                                                      |                        | 55°C  | 4.45                  | 4.43                  | 4.62                  | 4.45                   | 4.43                   | 4.62                   |
|                                                      | Average climate        | 35°C  | 4.67                  | 4.63                  | 4.59                  | 4.67                   | 4.64                   | 4.59                   |
|                                                      |                        | 55°C  | 3.62                  | 3.61                  | 3.57                  | 3.62                   | 3.61                   | 3.57                   |
|                                                      | Colder climate         | 35°C  | 4.13                  | 4.13                  | 4.08                  | 4.13                   | 4.13                   | 4.08                   |
|                                                      |                        | 55°C  | 3.26                  | 3.23                  | 3.29                  | 3.26                   | 3.23                   | 3.29                   |
| SEER                                                 | Water outlet           | 7°C   | 5.19                  | 5.18                  | 5.12                  | 5.19                   | 5.18                   | 5.12                   |
|                                                      |                        | 18°C  | 6.42                  | 6.75                  | 6.65                  | 6.42                   | 6.75                   | 6.65                   |
| Erp Sound power level                                |                        | dB    | 65                    | 65                    | 69                    | 65                     | 65                     | 69                     |
| Sound power<br>Level                                 | Heating A7W35          | dB    | 65                    | 65                    | 69                    | 65                     | 65                     | 69                     |
|                                                      | Heating Max.           | dB    | 67                    | 68                    | 70                    | 67                     | 68                     | 70                     |
|                                                      | Heating Silence mode 1 | dB    | 62                    | 63                    | 64                    | 62                     | 63                     | 64                     |
|                                                      | Heating Silence mode 2 | dB    | 58                    | 59                    | 60                    | 58                     | 59                     | 60                     |
|                                                      | Cooling A35W18         | dB    | 65                    | 66                    | 69                    | 65                     | 66                     | 69                     |
|                                                      | Cooling max            | dB    | 66                    | 67                    | 70                    | 66                     | 67                     | 70                     |
|                                                      | Cooling Silence mode 1 | dB    | 62                    | 62                    | 64                    | 62                     | 62                     | 64                     |
|                                                      | Cooling Silence mode 2 | dB    | 58                    | 59                    | 60                    | 58                     | 59                     | 60                     |
| Sound pressure<br>level (1m)                         | Heating A7W35          | dB(A) | 51                    | 52                    | 56                    | 51                     | 52                     | 56                     |
|                                                      | Heating Max.           | dB(A) | 53                    | 54                    | 58                    | 53                     | 54                     | 58                     |
|                                                      | Heating Silence mode 1 | dB(A) | 47                    | 48                    | 52                    | 47                     | 48                     | 52                     |
|                                                      | Heating Silence mode 2 | dB(A) | 43                    | 44                    | 48                    | 43                     | 44                     | 48                     |
|                                                      | Cooling A35W18         | dB(A) | 51                    | 52                    | 56                    | 51                     | 52                     | 56                     |
|                                                      | Cooling max            | dB(A) | 53                    | 54                    | 58                    | 53                     | 54                     | 58                     |
|                                                      | Cooling Silence mode 1 | dB(A) | 47                    | 48                    | 52                    | 47                     | 48                     | 52                     |
|                                                      | Cooling Silence mode 2 | dB(A) | 44                    | 45                    | 48                    | 44                     | 45                     | 48                     |
| Sound pressure<br>level (2m)                         | Heating A7W35          | dB(A) | 47                    | 48                    | 52                    | 47                     | 48                     | 52                     |
|                                                      | Heating Max.           | dB(A) | 49                    | 50                    | 54                    | 49                     | 50                     | 54                     |
|                                                      | Heating Silence mode 1 | dB(A) | 43                    | 44                    | 48                    | 43                     | 44                     | 48                     |
|                                                      | Heating Silence mode 2 | dB(A) | 41                    | 42                    | 43                    | 41                     | 42                     | 43                     |
|                                                      | Cooling A35W18         | dB(A) | 47                    | 48                    | 52                    | 47                     | 48                     | 52                     |
|                                                      | Cooling max            | dB(A) | 49                    | 50                    | 54                    | 49                     | 50                     | 54                     |
|                                                      | Cooling Silence mode 1 | dB(A) | 43                    | 44                    | 48                    | 43                     | 44                     | 48                     |
|                                                      | Cooling Silence mode 2 | dB(A) | 41                    | 42                    | 43                    | 41                     | 42                     | 43                     |

| R290 Arctic HT Series                          |                        |       | MHC-V12W<br>D2N7-BER90 | MHC-V14W<br>D2N7-BER90 | MHC-V16W<br>D2N7-BER90 | MHC-V12W<br>D2RN7-BER90 | MHC-V14W<br>D2RN7-BER90 | MHC-V16W<br>D2RN7-BER90 |
|------------------------------------------------|------------------------|-------|------------------------|------------------------|------------------------|-------------------------|-------------------------|-------------------------|
| Seasonal space heating energy efficiency class | Water outlet at 35°C   |       | A+++                   |                        |                        |                         |                         |                         |
|                                                | Water outlet at 55°C   |       | A++                    |                        |                        |                         |                         |                         |
| SCOP                                           | Warmer climate         | 35°C  | 5.9                    | 5.85                   | 6.05                   | 5.9                     | 5.85                    | 6.05                    |
|                                                |                        | 55°C  | 4.45                   | 4.43                   | 4.62                   | 4.45                    | 4.43                    | 4.62                    |
|                                                | Average climate        | 35°C  | 4.67                   | 4.63                   | 4.59                   | 4.67                    | 4.64                    | 4.59                    |
|                                                |                        | 55°C  | 3.62                   | 3.61                   | 3.57                   | 3.62                    | 3.61                    | 3.57                    |
|                                                | Colder climate         | 35°C  | 4.13                   | 4.13                   | 4.08                   | 4.13                    | 4.13                    | 4.08                    |
|                                                |                        | 55°C  | 3.26                   | 3.23                   | 3.29                   | 3.26                    | 3.23                    | 3.29                    |
| SEER                                           | Water outlet           | 7°C   | 5.19                   | 5.18                   | 5.12                   | 5.19                    | 5.18                    | 5.12                    |
|                                                |                        | 18°C  | 6.42                   | 6.75                   | 6.65                   | 6.42                    | 6.75                    | 6.65                    |
| Erp Sound power level                          |                        | dB    | 65                     | 65                     | 69                     | 65                      | 65                      | 69                      |
| Sound power Level                              | Heating A7W35          | dB    | 65                     | 65                     | 69                     | 65                      | 65                      | 69                      |
|                                                | Heating Max.           | dB    | 67                     | 68                     | 70                     | 67                      | 68                      | 70                      |
|                                                | Heating Silence mode 1 | dB    | 62                     | 63                     | 64                     | 62                      | 63                      | 64                      |
|                                                | Heating Silence mode 2 | dB    | 58                     | 59                     | 60                     | 58                      | 59                      | 60                      |
|                                                | Cooling A35W18         | dB    | 65                     | 66                     | 69                     | 65                      | 66                      | 69                      |
|                                                | Cooling max            | dB    | 66                     | 67                     | 70                     | 66                      | 67                      | 70                      |
|                                                | Cooling Silence mode 1 | dB    | 62                     | 62                     | 64                     | 62                      | 62                      | 64                      |
|                                                | Cooling Silence mode 2 | dB    | 58                     | 59                     | 60                     | 58                      | 59                      | 60                      |
| Sound pressure level (1m)                      | Heating A7W35          | dB(A) | 51                     | 52                     | 56                     | 51                      | 52                      | 56                      |
|                                                | Heating Max.           | dB(A) | 53                     | 54                     | 58                     | 53                      | 54                      | 58                      |
|                                                | Heating Silence mode 1 | dB(A) | 47                     | 48                     | 52                     | 47                      | 48                      | 52                      |
|                                                | Heating Silence mode 2 | dB(A) | 43                     | 44                     | 48                     | 43                      | 44                      | 48                      |
|                                                | Cooling A35W18         | dB(A) | 51                     | 52                     | 56                     | 51                      | 52                      | 56                      |
|                                                | Cooling max            | dB(A) | 53                     | 54                     | 58                     | 53                      | 54                      | 58                      |
|                                                | Cooling Silence mode 1 | dB(A) | 47                     | 48                     | 52                     | 47                      | 48                      | 52                      |
|                                                | Cooling Silence mode 2 | dB(A) | 44                     | 45                     | 48                     | 44                      | 45                      | 48                      |
| Sound pressure level (2m)                      | Heating A7W35          | dB(A) | 47                     | 48                     | 52                     | 47                      | 48                      | 52                      |
|                                                | Heating Max.           | dB(A) | 49                     | 50                     | 54                     | 49                      | 50                      | 54                      |
|                                                | Heating Silence mode 1 | dB(A) | 43                     | 44                     | 48                     | 43                      | 44                      | 48                      |
|                                                | Heating Silence mode 2 | dB(A) | 41                     | 42                     | 43                     | 41                      | 42                      | 43                      |
|                                                | Cooling A35W18         | dB(A) | 47                     | 48                     | 52                     | 47                      | 48                      | 52                      |
|                                                | Cooling max            | dB(A) | 49                     | 50                     | 54                     | 49                      | 50                      | 54                      |
|                                                | Cooling Silence mode 1 | dB(A) | 43                     | 44                     | 48                     | 43                      | 44                      | 48                      |
|                                                | Cooling Silence mode 2 | dB(A) | 41                     | 42                     | 43                     | 41                      | 42                      | 43                      |