

| Water cooled chillers ENW series and condenserless ENRC version, scroll compressors R410A, coaxial evaporator, plate condenser | | | | | | | | | | | | | | |
|--|-------------------|-----------|-----------|-----------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Process cooling Application | Model | 003 | 004 | 005 | 008 | 010 | 012 | 016 | 018 | 022 | 030 | 038 | 045 | 055 |
| NOMINAL COOLING CAPACITY (1) | kW | 3,8 | 4,5 | 5,7 | 8,6 | 9,8 | 13,0 | 14,3 | 19,7 | 22,0 | 29,9 | 37,6 | 44,2 | 57,4 |
| TOTAL COMPRESSORS NOMINAL ABSORBED POWER (1) | kW | 1,0 | 1,1 | 1,4 | 2,6 | 2,7 | 3,4 | 3,5 | 4,8 | 5,4 | 6,5 | 8,5 | 10,0 | 12,9 |
| EER (1) | | 3,98 | 4,02 | 4,04 | 3,32 | 3,66 | 3,80 | 4,14 | 4,08 | 4,10 | 4,60 | 4,45 | 4,42 | 4,45 |
| HYDRAULIC SECTION | | | | | | | | | | | | | | |
| NOMINAL WATER FLOW (1) | m ³ /h | 0,7 | 0,8 | 1,0 | 1,5 | 1,7 | 2,2 | 2,5 | 3,4 | 3,8 | 5,1 | 6,5 | 7,6 | 9,9 |
| EVAPORATOR PRESSURE DROP (1) | kPa | 27 | 28 | 28 | 29 | 22 | 31 | 23 | 34 | 29 | 31 | 35 | 37 | 56 |
| AVAILABLE PRESSURE P3 | kPa | 165 | 161 | 159 | 161 | 244 | 234 | 243 | 223 | 219 | 189 | 209 | 200 | 160 |
| AVAILABLE PRESSURE P5 | kPa | 418 | 427 | 419 | 396 | 593 | 557 | 542 | 451 | 540 | 393 | 581 | 541 | 457 |
| CONDENSING SECTION | | | | | | | | | | | | | | |
| NUMBER AND TYPE OF CONDENSERS | | | | | | | | | | | | | | |
| CONDENSER NOMINAL WATER FLOW RATE (1) | | | | | | | | | | | | | | |
| CONDENSER PRESSURE DROP EACH CONDENSER (1) (4) (5) | | | | | | | | | | | | | | |
| HYDRAULIC CONNECTIONS | | | | | | | | | | | | | | |
| nr.1 stainless steel brazed plate condenser | | | | | | | | | | | | | | |
| CONDENSER NOMINAL WATER FLOW RATE (1) | | | | | | | | | | | | | | |
| CONDENSER PRESSURE DROP EACH CONDENSER (1) (4) (5) | | | | | | | | | | | | | | |
| HYDRAULIC CONNECTIONS | | | | | | | | | | | | | | |
| BSP 3/4" 3/4" 3/4" 1" 1" 1" 1" 1" 1" 1/4" 1" 1/4" 1 1/2" 1 1/2" 1 1/2" 1 1/2" | | | | | | | | | | | | | | |
| Condenserless - ENRC version (6) | | | | | | | | | | | | | | |
| NOMINAL COOLING CAPACITY (2) | kW | 3,3 | 3,9 | 5,0 | 7,4 | 8,4 | 11,1 | 12,1 | 16,6 | 19,3 | 26,2 | 33,2 | 39,1 | 50,6 |
| TOTAL COMPRESSORS NOMINAL ABSORBED POWER (2) | kW | 1,1 | 1,4 | 1,7 | 3,2 | 3,3 | 4,3 | 4,3 | 6,1 | 6,7 | 8,2 | 10,5 | 12,2 | 15,8 |
| EER (2) | | 2,90 | 2,89 | 2,97 | 2,27 | 2,51 | 2,61 | 2,81 | 2,72 | 2,88 | 3,18 | 3,18 | 3,20 | 3,20 |
| NOMINAL WATER FLOW (2) | | 0,6 | 0,7 | 0,9 | 1,3 | 1,4 | 1,9 | 2,1 | 2,9 | 3,3 | 4,50 | 5,71 | 6,73 | 8,69 |
| EVAPORATOR PRESSURE DROP (1) | kPa | 21 | 21 | 21 | 21 | 16 | 22 | 17 | 24 | 22 | 24 | 27 | 29 | 43 |
| AVAILABLE PRESSURE P3 | kPa | 176 | 172 | 170 | 174 | 255 | 247 | 255 | 238 | 230 | 202 | 222 | 213 | 178 |
| AVAILABLE PRESSURE P5 | kPa | 430 | 439 | 430 | 409 | 604 | 570 | 554 | 466 | 552 | 406 | 594 | 554 | 475 |
| General Informations | | | | | | | | | | | | | | |
| Refrigerant circuits / Compressors / Partition steps | | 1 / 1 / 1 | 1 / 1 / 1 | 1 / 1 / 1 | 1 / 1 / 1 | 1 / 1 / 1 | 1 / 1 / 1 | 1 / 1 / 1 | 1 / 1 / 1 | 1 / 1 / 1 | 1 / 1 / 1 | 1 / 1 / 1 | 1 / 1 / 1 | 1 / 1 / 1 |
| NUMBER AND TYPE OF EVAPORATOR | | | | | | | | | | | | | | |
| no.1 coaxial evaporator | | | | | | | | | | | | | | |
| WATER FLOW RANGE | m ³ /h | 0,6 ÷ 2,2 | 0,6 ÷ 2,2 | 0,8 ÷ 2,2 | 1,2 ÷ 2,4 | 1,4 ÷ 3 | 1,2 ÷ 2,9 | 1,2 ÷ 2,9 | 2,5 ÷ 5 | 3 ÷ 6 | 4 ÷ 6 | 6 ÷ 12 | 6 ÷ 12 | 6 ÷ 12 |
| MAXIMUM PUMP ABSORBED POWER | P3 | 0,37 | 0,37 | 0,37 | 0,88 | 0,98 | 0,98 | 0,98 | 0,98 | 1,28 | 1,28 | 2,20 | 2,20 | 2,20 |
| MAXIMUM PUMP ABSORBED CURRENT | | 3,20 | 3,20 | 3,20 | 1,65 | 1,78 | 1,78 | 1,78 | 1,78 | 2,37 | 2,37 | 4,24 | 4,24 | 4,24 |
| MAXIMUM PUMP ABSORBED POWER | P5 | 0,74 | 0,74 | 0,74 | 1,10 | 1,10 | 1,10 | 1,10 | 1,47 | 1,47 | 1,47 | 2,94 | 2,94 | 2,94 |
| MAXIMUM PUMP ABSORBED CURRENT | | 3,22 | 3,22 | 3,22 | 2,17 | 2,17 | 2,17 | 2,17 | 2,86 | 2,86 | 2,32 | 5,83 | 5,83 | 5,83 |
| HYDRULIC CONNECTIONS | BSP | 3/4" | 3/4" | 3/4" | 1" | 1" | 1" | 1" | 1" | 1" | 1 1/2" | 1 1/2" | 1 1/2" | 1 1/2" |
| TANK VOLUME | dm ³ | 40 | 40 | 40 | 50 | 50 | 50 | 50 | 110 | 110 | 270 | 270 | 270 | 270 |
| TOTAL ELECTRIC DATA | | | | | | | | | | | | | | |
| IP54 protection rating, chillers suitable for outdoor installation | | | | | | | | | | | | | | |
| NOMINAL ABSORBED POWER (3) | kW | 1,6 | 1,8 | 2,2 | 3,5 | 4,4 | 4,9 | 6,2 | 6,8 | 8,0 | 9,7 | 13,7 | 14,6 | 19,5 |
| MAXIMUM ABSORBED CURRENT (F.L.A.) (3) | A | 9,2 | 10,1 | 12,0 | 9,0 | 9,4 | 10,6 | 11,5 | 15,8 | 18,3 | 21,6 | 28,7 | 34,2 | 40,7 |
| MAXIMUM PEAK CURRENT (L.R.A.) (3) | A | 26,6 | 39,6 | 45,5 | 48,9 | 48,9 | 68,6 | 68,6 | 72,0 | 102,5 | 117,6 | 141,2 | 175,4 | 226,2 |
| ELECTRIC FEED | V/Ph/Hz | 230/1/50 | | | 400/3/50/N | | | | 400/3/50 | | | | | |
| NOISE DATA | | | | | | | | | | | | | | |
| SOUND PRESSURE FOR STANDARD CONFIGURATION(3) (7) | dB(A) | 50,0 | 50,0 | 50,0 | 51,4 | 51,4 | 51,0 | 51,0 | 51,0 | 52,0 | 51,5 | 52,1 | 52,5 | 55,5 |
| SOUND PRESSURE FOR LOW NOISE CONFIGURATION (3) (7) | dB(A) | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | 50,5 | 50,8 | 51,0 | 52,5 |
| DIMENSIONS AND WEIGHT | | | | | | | | | | | | | | |
| LENGTH | mm | 600 | 600 | 600 | 820 | 820 | 820 | 820 | 1010 | 1010 | 1610 | 1610 | 1610 | 1610 |
| WIDTH | mm | 655 | 655 | 655 | 615 | 615 | 615 | 615 | 720 | 720 | 860 | 860 | 860 | 860 |
| HEIGHT | mm | 1035 | 1035 | 1035 | 1240 | 1240 | 1240 | 1240 | 1420 | 1420 | 1380 | 1380 | 1380 | 1380 |
| WEIGHT EMPTY | ENW | kg | 85 | 90 | 102 | 175 | 180 | 185 | 190 | 230 | 260 | 390 | 400 | 430 |
| WEIGHT EMPTY | ENRC | kg | 80 | 85 | 97 | 170 | 175 | 177 | 182 | 220 | 247 | 374 | 384 | 397 |

The manufacturer reserves the right to modify specifications without notice

Updated on 21/12/2016

Data referred to:

- Evaporator Inlet/Outlet water temperature = +12/+7 °C; Condenser Inlet/Outlet water temperature = +30/+35 °C; fouling factor = 0.000043 m²K/W.
- Evaporator Inlet/Outlet water temperature = +12/+7 °C; Condensing temperature = +50°C; fouling factor = 0.000043 m²K/W.
- Data referred to standard configuration WP (with pump P3)
- Pressure drops calculation includes condenser, pressostatic control valve and piping pressure drops

- Condenser included: 2 ways mechanical pressostatic condenser control valve for models 003-016; 2 ways electronic pressostatic condenser control valve for models 018-055
- Closed cabinet, chiller provided without refrigerant charge.

- Sound pressure level referred to measures according to normative ISO3744, pressure level at distance of 10 m, referred to free field on reflecting surface

Water cooled chillers ENW series and condenserless ENRC version, scroll compressors R410A, coaxial/shell&tube evaporator, shell&tube condenser

| Process cooling Application | Model | 061 | 070 | 075 | 090 | 100 | 130 | 160 | 185 | 200 | 230 | 280 | 340 | 370 | 430 | 480 |
|--|--------------|-------------------------------|------------|------------|------------|------------|--|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| NOMINAL COOLING CAPACITY (1) | kW | 59,8 | 67,5 | 75,2 | 88,3 | 101,6 | 119,6 | 150,4 | 176,7 | 203,2 | 229,6 | 288,1 | 330,2 | 372,3 | 424,3 | 476,3 |
| TOTAL COMPRESSORS NOMINAL ABSORBED POWER (1) | kW | 13,0 | 15,0 | 16,9 | 20,0 | 22,9 | 26,0 | 33,9 | 39,9 | 45,8 | 51,7 | 65,3 | 74,7 | 84,0 | 95,4 | 106,8 |
| EER | | 4,60 | 4,50 | 4,45 | 4,42 | 4,44 | 4,60 | 4,44 | 4,43 | 4,43 | 4,44 | 4,41 | 4,42 | 4,43 | 4,45 | 4,46 |
| HYDRAULIC SECTION | | | | | | | | | | | | | | | | |
| NOMINAL WATER FLOW | m3/h | 10,3 | 11,6 | 12,9 | 15,2 | 17,5 | 20,6 | 25,9 | 30,4 | 34,9 | 39,5 | 49,6 | 56,8 | 64,0 | 73,0 | 81,9 |
| EVAPORATOR PRESSURE DROP | kPa | 22 | 20 | 22 | 28 | 40 | 58 | 54 | 60 | 48 | 57 | 61 | 51 | 57 | 65 | 69 |
| AVAILABLE PRESSURE P3 | kPa | 199 | 202 | 182 | 184 | 156 | 149 | 153 | 137 | 217 | 201 | 184 | 191 | 175 | 151 | 138 |
| AVAILABLE PRESSURE P5 | kPa | 448 | 451 | 448 | 432 | 404 | 387 | 389 | 374 | 433 | 417 | 404 | 415 | 391 | 345 | 332 |
| CONDENSING SECTION | | | | | | | | | | | | | | | | |
| NUMBER AND TYPE OF CONDENSERS | | nr.1 shell and tube condenser | | | | | nr.2 shell and tube condensers (one per circuit) | | | | | | | | | |
| CONDENSER NOMINAL WATER FLOW RATE (1) | m3/h | 12,52 | 14,19 | 15,84 | 18,63 | 21,41 | 25,04 | 31,70 | 37,26 | 42,82 | 48,4 | 60,8 | 69,6 | 78,5 | 89,4 | 100,3 |
| CONDENSER PRESSURE DROP EACH CONDENSER (1) (4) (5) | kPa | 90 | 93 | 96 | 101 | 110 | 90 | 96 | 101 | 108 | 87 | 91 | 95 | 104 | 110 | 116 |
| HYDRAULIC CONNECTIONS | BSP/DN | 2" | 2" | 2" | 2" | 2" | 2 x 2" | 2 x 2" | 2 x 2" | 2 x 2" | 2xDN65 | 2xDN65 | 2xDN65 | 2xDN80 | 2xDN80 | 2xDN80 |
| Condenserless - ENRC version (6) | | | | | | | | | | | | | | | | |
| NOMINAL COOLING CAPACITY (1) | kW | 52,3 | 59,3 | 66,4 | 78,2 | 89,7 | 104,6 | 132,7 | 156,4 | 179,3 | 202,2 | 254,1 | 292,0 | 329,8 | 375,6 | 421,3 |
| TOTAL COMPRESSORS NOMINAL ABSORBED POWER (1) | kW | 16,5 | 18,7 | 20,9 | 24,4 | 28,0 | 32,9 | 41,8 | 48,8 | 56,0 | 63,2 | 79,9 | 91,4 | 102,9 | 116,1 | 129,3 |
| EER | | 3,18 | 3,18 | 3,17 | 3,20 | 3,20 | 3,18 | 3,17 | 3,20 | 3,20 | 3,20 | 3,18 | 3,19 | 3,21 | 3,24 | 3,26 |
| NOMINAL WATER FLOW | m3/h | 9,0 | 10,2 | 11,4 | 13,5 | 15,4 | 18,0 | 22,8 | 26,9 | 30,8 | 34,8 | 43,7 | 50,2 | 56,7 | 64,6 | 72,5 |
| EVAPORATOR PRESSURE DROP | kPa | 17 | 16 | 17 | 22 | 31 | 45 | 42 | 47 | 37 | 45 | 47 | 40 | 45 | 51 | 54 |
| AVAILABLE PRESSURE P3 | kPa | 209 | 211 | 191 | 195 | 169 | 167 | 170 | 155 | 232 | 218 | 202 | 207 | 192 | 170 | 158 |
| AVAILABLE PRESSURE P5 | kPa | 448 | 449 | 448 | 438 | 422 | 423 | 421 | 412 | 26 | 452 | 443 | 444 | 426 | 388 | 378 |
| General Informations | | | | | | | | | | | | | | | | |
| Refrigerant circuits/compressors/partition steps | | 2 / 1 / 2 | 2 / 1 / 2 | 2 / 1 / 2 | 2 / 1 / 2 | 2 / 1 / 2 | 4 / 2 / 4 | 4 / 2 / 4 | 4 / 2 / 4 | 4 / 2 / 4 | 4 / 2 / 4 | 4 / 2 / 4 | 4 / 2 / 4 | 4 / 2 / 4 | 4 / 2 / 4 | 4 / 2 / 4 |
| NUMBER AND TYPE OF EVAPORATOR | | no.1 coaxial evaporator | | | | | no.1 shell and tube evaporator with double circuit | | | | | | | | | |
| WATER FLOW RANGE | m3/h | 8 ÷ 18 | 10 ÷ 20 | 10 ÷ 20 | 10 ÷ 20 | 10 ÷ 20 | 14 ÷ 27 | 15,4 ÷ 31 | 17,5 ÷ 35 | 28 ÷ 40 | 25 ÷ 46 | 31 ÷ 58 | 38 ÷ 70 | 45 ÷ 80 | 52 ÷ 100 | 54 ÷ 100 |
| MAXIMUM PUMP ABSORBED POWER | P3 | kW | 2,53 | 2,53 | 2,53 | 2,53 | 2,53 | 4,56 | 4,56 | 4,56 | 8,30 | 8,30 | 8,30 | 10,20 | 10,20 | 10,20 |
| MAXIMUM PUMP ABSORBED CURRENT | | A | 4,56 | 4,56 | 4,56 | 4,56 | 4,56 | 7,75 | 7,75 | 7,75 | 14,10 | 14,10 | 14,10 | 14,10 | 17,40 | 17,40 |
| MAXIMUM PUMP ABSORBED POWER | P5 | kW | 6,12 | 6,12 | 6,12 | 6,12 | 6,12 | 10,20 | 10,20 | 10,20 | 16,22 | 16,22 | 16,22 | 16,22 | 19,94 | 19,94 |
| MAXIMUM PUMP ABSORBED CURRENT | | A | 10,40 | 10,40 | 10,40 | 10,40 | 10,40 | 17,40 | 17,40 | 17,40 | 26,60 | 26,60 | 26,60 | 26,60 | 32,70 | 32,70 |
| HYDRULIC CONNECTIONS | BSP | 2" | 2" | 2" | 2" | 2" | DN65 | DN65 | DN65 | DN125 | DN125 | DN125 | DN125 | DN150 | DN150 | DN150 |
| TANK VOLUME | dm3 | 410 | 410 | 410 | 410 | 410 | 390 | 390 | 390 | 390 | 390 | 390 | 390 | 500 | 500 | 500 |
| TOTAL ELECTRIC DATA | | | | | | | | | | | | | | | | |
| IP54 protection rating, chillers suitable for outdoor installation | | | | | | | | | | | | | | | | |
| NOMINAL ABSORBED POWER (3) | kW | 18,9 | 21,9 | 24,9 | 27,7 | 31,6 | 40,1 | 50,2 | 57,0 | 63,5 | 75,1 | 93,5 | 106,1 | 118,2 | 135,2 | 153,8 |
| MAXIMUM ABSORBED CURRENT(F.L.A.) (3) | A | 43,0 | 48,3 | 53,6 | 64,6 | 71,0 | 84,6 | 105,8 | 127,8 | 147,0 | 159,9 | 192,5 | 221,9 | 254,6 | 283,6 | 312,6 |
| MAXIMUM PEAK CURRENT (L.R.A.) (3) | A | 141,8 | 163,8 | 169,1 | 208,6 | 259,6 | 183,4 | 221,3 | 271,8 | 335,5 | 348,4 | 419,9 | 472,6 | 505,3 | 617,8 | 646,8 |
| ELECTRIC FEED | V/Ph/Hz | 400/3/50 | | | | | | | | | | | | | | |
| NOISE DATA | | | | | | | | | | | | | | | | |
| SOUND PRESSURE FOR STANDARD CONFIGURATION(3) (7) | dB(A) | 52,5 | 53,1 | 53,5 | 54,1 | 56,3 | 54,1 | 55,5 | 56,2 | 59,0 | 60,5 | 63,3 | 63,3 | 63,3 | 65,7 | 67,2 |
| SOUND PRESSURE FOR LOW NOISE CONFIGURATION (3) (7) | dB(A) | 51,0 | 51,2 | 51,5 | 51,8 | 53,1 | 51,8 | 52,5 | 53,0 | 55,3 | 56,5 | 58,8 | 58,8 | 58,8 | 61,2 | 62,5 |
| DIMENSIONS AND WEIGHT | | | | | | | | | | | | | | | | |
| LENGTH | mm | 2220 | 2220 | 2220 | 2220 | 2220 | 3355 | 3355 | 3355 | 4355 | 4355 | 4355 | 4355 | 5350 | 5350 | 5350 |
| WIDTH | mm | 1100 | 1100 | 1100 | 1100 | 1100 | 1105 | 1105 | 1105 | 1305 | 1305 | 1305 | 1305 | 1305 | 1305 | 1305 |
| HEIGHT | mm | 1900 | 1900 | 1900 | 1900 | 1900 | 1985 | 1985 | 1985 | 1985 | 1985 | 1985 | 1985 | 1985 | 1985 | 1985 |
| WEIGHT EMPTY | ENW | kg | 810 | 820 | 830 | 855 | 930 | 1550 | 1590 | 1650 | 1930 | 2210 | 2270 | 2730 | 3065 | 3365 |
| WEIGHT EMPTY | | ENRC | kg | 780 | 787 | 797 | 806 | 864 | 1473 | 1513 | 1535 | 1730 | 2040 | 2080 | 2480 | 2765 |

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Updated on 21/12/2016

Data referred to:

- Evaporator Inlet/Outlet water temperature = +12/+7 °C; Condenser Inlet/Outlet water temperature = +30/+35 °C; fouling factor = 0.000043 m²K/W.
- Evaporator Inlet/Outlet water temperature = +12/+7 °C; Condensing temperature = +50°C; fouling factor = 0.000043 m²K/W.
- Data referred to standard configuration WP (with pump P3)
- Pressure drops calculation includes condenser, pressostatic control valve and piping pressure drops

- Condenser included 2 ways electronic pressostatic condenser control valve.
The optional 3 ways electronic pressostatic condenser control valve is available from model ENW.130 on request.
- Closed cabinet, chiller provided without refrigerant charge.
- Sound pressure level referred to measures according to normative ISO3744, pressure level at distance of 10 m, referred to free field on reflecting surface