

| DX.A   |                        | 61            | 71       | 91       | 111      | 151      | 181      | 201      | 221      | 232      |
|--|------------------------|---------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Cooling capacity (Total) <sup>(1)</sup> ESP 20 Pa    | kW                     | 6,1           | 8,4      | 9,9      | 11,2     | 15,9     | 18,4     | 20,1     | 22,6     | 22,9     |
| Cooling capacity (Sensible) <sup>(1)</sup> ESP 20 Pa | kW                     | 6             | 8        | 9,6      | 11,2     | 14,5     | 17,9     | 20       | 21,7     | 22,9     |
| Tot. absorbed power <sup>(2)</sup> ESP 20 Pa         | kW                     | 1,9           | 2,5      | 2,7      | 3,6      | 4,6      | 5,4      | 5,5      | 6,4      | 6,9      |
| SHR  |                        | 0,99          | 0,96     | 0,97     | 1,00     | 0,91     | 0,97     | 1,00     | 0,96     | 1,00     |
| Air flow   | m <sup>3</sup> /h      | 2700          | 2700     | 2700     | 3900     | 3900     | 6050     | 6050     | 6050     | 8150     |
| Fan  | n°                     | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 1        |
| Max. ESP   | Pa                     | 542           | 521      | 479      | 506      | 465      | 655      | 612      | 612      | 446      |
| Unit EER without remote condenser to max. frequency  | W/W                    | 3,2           | 3,3      | 3,7      | 3,1      | 3,5      | 3,4      | 3,7      | 3,5      | 3,3      |
| Maximum absorbed power                               | Kw                     | 3,8           | 4,5      | 5        | 6,2      | 7,6      | 10,5     | 10,5     | 11,8     | 12       |
| Maximum absorbed current                             | A                      | 12,8          | 16,5     | 18,7     | 10,2     | 12,4     | 17       | 17       | 19,1     | 19,8     |
| starting current                                     | A                      | 41,4          | 64,4     | 66,4     | 50,4     | 65,4     | 71       | 71       | 78       | 60       |
| Power supply   | V/ph/Hz                | 400/3/50+N+PE |          |          |          |          |          |          |          |          |
| <b>Humidifier</b>                                    |                        |               |          |          |          |          |          |          |          |          |
| Steam production (nominal)                           | kg/h                   | 1,5           | 1,5      | 1,5      | 3        | 3        | 5        | 5        | 5        | 8        |
| Steam production (max.)                              | kg/h                   | 3             | 3        | 3        | 3        | 3        | 8        | 8        | 8        | 8        |
| Max. absorbed power                                  | kW                     | 1,12          | 1,12     | 1,12     | 2,25     | 2,25     | 3,75     | 3,75     | 3,75     | 6,0      |
| Max. absorbed current                                | A                      | 5,0           | 5,0      | 5,0      | 10,0     | 10,0     | 5,5      | 5,5      | 5,5      | 8,7      |
| Specific conductivity at 20°C (min/max)              | µS/cm                  | 300/1250      | 300/1250 | 300/1250 | 300/1250 | 300/1250 | 300/1250 | 300/1250 | 300/1250 | 300/1250 |
| Total hardness (min/max)                             | mg/l CaCO <sub>3</sub> | 100/400       | 100/400  | 100/400  | 100/400  | 100/400  | 100/400  | 100/400  | 100/400  | 100/400  |
| <b>Electrical heaters</b>                            |                        |               |          |          |          |          |          |          |          |          |
| Steps  | n°                     | 1             | 1        | 1        | 1        | 1        | 2        | 2        | 2        | 3        |
| Power  | kW                     | 3,0           | 3,0      | 3,0      | 4,5      | 4,5      | 6,0      | 6,0      | 6,0      | 9,0      |
| Absorbed current                                     | A                      | 4,3           | 4,3      | 4,3      | 6,5      | 6,5      | 8,7      | 8,7      | 8,7      | 13,0     |
| <b>Oversized electrical heaters</b>                  |                        |               |          |          |          |          |          |          |          |          |
| Steps  | n°                     | 1             | 1        | 1        | 2        | 2        | 3        | 3        | 3        | 3        |
| Power  | kW                     | 4,5           | 4,5      | 4,5      | 6,0      | 6,0      | 9,0      | 9,0      | 9,0      | 12,0     |
| Absorbed current                                     | A                      | 6,5           | 6,5      | 6,5      | 8,7      | 8,7      | 13,0     | 13,0     | 13,0     | 17,3     |
| <b>Hot water coil</b>                                |                        |               |          |          |          |          |          |          |          |          |
| Heating capacity <sup>(3)</sup>                      | kW                     | 4,9           | 4,9      | 4,9      | 7,3      | 7,3      | 10,6     | 10,6     | 10,6     | 16,7     |
| Water flow   | m <sup>3</sup> /h      | 0,85          | 0,85     | 0,85     | 1,3      | 1,3      | 1,86     | 1,86     | 1,86     | 2,91     |
| Pressure drop (coil + 3 way valve)                   | kPa                    | 36            | 36       | 36       | 31       | 31       | 48       | 48       | 48       | 56       |
| Coil internal volume                                 | dm <sup>3</sup>        | 1,1           | 1,1      | 1,1      | 1,4      | 1,4      | 2,1      | 2,1      | 2,1      | 3,3      |
| <b>On / Off Compressors</b>                          |                        |               |          |          |          |          |          |          |          |          |
| Circuits / Compressors                               | n°/n°                  | 1/1           | 1/1      | 1/1      | 1/1      | 1/1      | 1/1      | 1/1      | 1/1      | 2/2      |
| <b>Condensing water pump</b>                         |                        |               |          |          |          |          |          |          |          |          |
| Nominal flow   | l/h                    | 27,5          | 27,5     | 27,5     | 390,0    | 390,0    | 390,0    | 390,0    | 390,0    | 390,0    |
| Max. flow (prevalence = 0 m)                         | l/h                    | 34            | 34       | 34       | 500      | 500      | 500      | 500      | 500      | 500      |
| Max. discharge height (flow=0 m <sup>3</sup> /h )    | m                      | 15,0          | 15,0     | 15,0     | 5,4      | 5,4      | 5,4      | 5,4      | 5,4      | 5,4      |
| <b>Condensing water pump + humidifier</b>            |                        |               |          |          |          |          |          |          |          |          |
| Nominal flow   | l/h                    | -             | -        | -        | -        | -        | -        | -        | -        | 600      |
| Max. flow (prevalence = 0 m)                         | l/h                    | -             | -        | -        | -        | -        | -        | -        | -        | 900      |
| Max. discharge height (flow=0 m <sup>3</sup> /h )    | m                      | -             | -        | -        | -        | -        | -        | -        | -        | 6,0      |
| <b>Dimensions and weight</b>                         |                        |               |          |          |          |          |          |          |          |          |
| Frame  | n°                     | 1             | 1        | 1        | 2        | 2        | 3        | 3        | 3        | 4        |
| Width  | mm                     | 550           | 550      | 550      | 750      | 750      | 980      | 980      | 980      | 1160     |
| Depth  | mm                     | 550           | 550      | 550      | 550      | 550      | 750      | 750      | 750      | 850      |
| Height   | mm                     | 1980          | 1980     | 1980     | 1980     | 1980     | 1980     | 1980     | 1980     | 1980     |
| Weight (Configuration U)                             | Kg                     | 169           | 179      | 182      | 223      | 230      | 293      | 301      | 301      | 385      |
| Weight (Configuration V)                             | Kg                     | 171           | 181      | 185      | 226      | 232      | 297      | 305      | 305      | 390      |
| Weight (Configuration D)                             | Kg                     | 172           | 182      | 186      | 228      | 234      | 299      | 307      | 307      | 392      |
| Weight (Configuration B)                             | Kg                     | 171           | 181      | 185      | 226      | 232      | 297      | 305      | 305      | 390      |

Performances are referred to the following conditions:

- (1) Ambient temperature 24°C, Relative humidity 50%, Condensing temperature 48°C.
- (2) The fans electrical power has to be added to the ambient load.
- (3) Water temperature 40/45°C, Ambient temperature 20°C, Relative humidity 50%.

| DX.A   |                        | 251           | 301      | 321      | 322      | 391      | 392      | 431      | 442      | 451      |
|--|------------------------|---------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Cooling capacity (Total) <sup>(1)</sup> ESP 20 Pa    | kW                     | 24,3          | 29,5     | 33,3     | 32,4     | 39,3     | 39,1     | 42,8     | 44       | 45,7     |
| Cooling capacity (Sensible) <sup>(1)</sup> ESP 20 Pa | kW                     | 23,9          | 29,5     | 30,4     | 30,1     | 39,1     | 39       | 42,1     | 42,1     | 45,5     |
| Tot. absorbed power <sup>(2)</sup> ESP 20 Pa         | kW                     | 6,7           | 7,7      | 8,8      | 9        | 10,1     | 11,2     | 11,3     | 12,9     | 11,4     |
| SHR  |                        | 0,99          | 1,00     | 0,91     | 0,93     | 1,00     | 1,00     | 0,98     | 0,96     | 1,00     |
| Air flow   | m <sup>3</sup> /h      | 8150          | 8150     | 8150     | 8150     | 11500    | 11500    | 11500    | 11500    | 14500    |
| Fan  | n°                     | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 2        |
| Max. ESP   | Pa                     | 446           | 446      | 405      | 405      | 406      | 406      | 406      | 406      | 432      |
| Unit EER without remote condenser to max. frequency  | W/W                    | 3,6           | 3,8      | 3,8      | 3,6      | 3,9      | 3,5      | 3,8      | 3,4      | 4        |
| Maximum absorbed power                               | Kw                     | 11,7          | 12,3     | 14,2     | 14,8     | 16,6     | 18,4     | 18,3     | 21       | 20       |
| Maximum absorbed current                             | A                      | 20,2          | 22,4     | 25,8     | 24,2     | 30,6     | 29,6     | 36,6     | 33,8     | 39,4     |
| starting current                                     | A                      | 99,2          | 132,2    | 143,2    | 77,2     | 123,6    | 83,6     | 145,6    | 92,7     | 148,4    |
| Power supply   | V/ph/Hz                | 400/3/50+N+PE |          |          |          |          |          |          |          |          |
| <b>Humidifier</b>                                    |                        |               |          |          |          |          |          |          |          |          |
| Steam production (nominal)                           | kg/h                   | 8             | 8        | 8        | 8        | 8        | 8        | 8        | 8        | 8        |
| Steam production (max.)                              | kg/h                   | 8             | 8        | 8        | 8        | 8        | 8        | 8        | 8        | 8        |
| Max. absorbed power                                  | kW                     | 6,0           | 6,0      | 6,0      | 6,0      | 6,0      | 6,0      | 6,0      | 6,0      | 6,0      |
| Max. absorbed current                                | A                      | 8,7           | 8,7      | 8,7      | 8,7      | 8,7      | 8,7      | 8,7      | 8,7      | 8,7      |
| Specific conductivity at 20°C (min/max)              | µS/cm                  | 300/1250      | 300/1250 | 300/1250 | 300/1250 | 300/1250 | 300/1250 | 300/1250 | 300/1250 | 300/1250 |
| Total hardness (min/max)                             | mg/l CaCO <sub>3</sub> | 100/400       | 100/400  | 100/400  | 100/400  | 100/400  | 100/400  | 100/400  | 100/400  | 100/400  |
| <b>Electrical heaters</b>                            |                        |               |          |          |          |          |          |          |          |          |
| Steps  | n°                     | 3             | 3        | 3        | 3        | 3        | 3        | 3        | 3        | 3        |
| Power  | kW                     | 9,0           | 9,0      | 9,0      | 9,0      | 9,0      | 9,0      | 9,0      | 9,0      | 15,0     |
| Absorbed current                                     | A                      | 13,0          | 13,0     | 13,0     | 13,0     | 13,0     | 13,0     | 13,0     | 13,0     | 21,7     |
| <b>Oversized electrical heaters</b>                  |                        |               |          |          |          |          |          |          |          |          |
| Steps  | n°                     | 3             | 3        | 3        | 3        | 3        | 3        | 3        | 3        | 3        |
| Power  | kW                     | 12,0          | 12,0     | 12,0     | 12,0     | 12,0     | 12,0     | 12,0     | 12,0     | 18,0     |
| Absorbed current                                     | A                      | 17,3          | 17,3     | 17,3     | 17,3     | 17,3     | 17,3     | 17,3     | 17,3     | 26,0     |
| <b>Hot water coil</b>                                |                        |               |          |          |          |          |          |          |          |          |
| Heating capacity <sup>(3)</sup>                      | kW                     | 16,7          | 16,7     | 16,7     | 16,7     | 24,5     | 24,5     | 24,5     | 24,5     | 31,1     |
| Water flow   | m <sup>3</sup> /h      | 2,91          | 2,91     | 2,91     | 2,91     | 4,3      | 4,3      | 4,3      | 4,3      | 5,43     |
| Pressure drop (coil + 3 way valve)                   | kPa                    | 56            | 56       | 56       | 56       | 46       | 46       | 46       | 46       | 53       |
| Coil internal volume                                 | dm <sup>3</sup>        | 3,3           | 3,3      | 3,3      | 3,3      | 4,7      | 4,7      | 4,7      | 4,7      | 5,8      |
| <b>On / Off Compressors</b>                          |                        |               |          |          |          |          |          |          |          |          |
| Circuits / Compressors                               | n°/n°                  | 1/1           | 1/1      | 1/1      | 2/2      | 1/1      | 2/2      | 1/1      | 2/2      | 1/1      |
| <b>Condensing water pump</b>                         |                        |               |          |          |          |          |          |          |          |          |
| Nominal flow   | l/h                    | 390,0         | 390,0    | 390,0    | 390,0    | 390,0    | 390,0    | 390,0    | 390,0    | 390,0    |
| Max. flow (prevalence = 0 m)                         | l/h                    | 500           | 500      | 500      | 500      | 500      | 500      | 500      | 500      | 500      |
| Max. discharge height (flow=0 m <sup>3</sup> /h)     | m                      | 5,4           | 5,4      | 5,4      | 5,4      | 5,4      | 5,4      | 5,4      | 5,4      | 5,4      |
| <b>Condensing water pump + humidifier</b>            |                        |               |          |          |          |          |          |          |          |          |
| Nominal flow   | l/h                    | 600           | 600      | 600      | 600      | 600      | 600      | 600      | 600      | 600      |
| Max. flow (prevalence = 0 m)                         | l/h                    | 900           | 900      | 900      | 900      | 900      | 900      | 900      | 900      | 900      |
| Max. discharge height (flow=0 m <sup>3</sup> /h)     | m                      | 6,0           | 6,0      | 6,0      | 6,0      | 6,0      | 6,0      | 6,0      | 6,0      | 6,0      |
| <b>Dimensions and weight</b>                         |                        |               |          |          |          |          |          |          |          |          |
| Frame  | n°                     | 4             | 4        | 4        | 4        | 4,5      | 4,5      | 4,5      | 4,5      | 5        |
| Width  | mm                     | 1160          | 1160     | 1160     | 1160     | 1505     | 1505     | 1505     | 1505     | 1860     |
| Depth  | mm                     | 850           | 850      | 850      | 850      | 850      | 850      | 850      | 850      | 850      |
| Height   | mm                     | 1980          | 1980     | 1980     | 1980     | 1980     | 1980     | 1980     | 1980     | 1980     |
| Weight (Configuration U)                             | Kg                     | 342           | 360      | 361      | 398      | 429      | 454      | 433      | 454      | 522      |
| Weight (Configuration V)                             | Kg                     | 346           | 365      | 365      | 403      | 434      | 459      | 438      | 459      | 528      |
| Weight (Configuration D)                             | Kg                     | 349           | 367      | 368      | 405      | 437      | 462      | 441      | 462      | 531      |
| Weight (Configuration B)                             | Kg                     | 346           | 365      | 365      | 403      | 434      | 459      | 438      | 459      | 528      |

Performances are referred to the following conditions:

- (1) Ambient temperature 24°C, Relative humidity 50%, Condensing temperature 48°C.
- (2) The fans electrical power has to be added to the ambient load.
- (3) Water temperature 40/45°C, Ambient temperature 20°C, Relative humidity 50%.

| DX.A   |                        | 472           | 511      | 512      | 531      | 602      | 672      | 742      | 761      |
|--|------------------------|---------------|----------|----------|----------|----------|----------|----------|----------|
| Cooling capacity (Total) <sup>(1)</sup> ESP 20 Pa    | kW                     | 47,3          | 51       | 50,9     | 53,2     | 59,8     | 67,3     | 74,3     | 77       |
| Cooling capacity (Sensible) <sup>(1)</sup> ESP 20 Pa | kW                     | 47,1          | 50,8     | 50,7     | 53,1     | 59,7     | 64       | 66,8     | 76,6     |
| Tot. absorbed power <sup>(2)</sup> ESP 20 Pa         | kW                     | 12,9          | 13,3     | 13,5     | 13,9     | 15,6     | 17,8     | 19,5     | 20       |
| SHR  |                        | 1,00          | 1,00     | 1,00     | 1,00     | 1,00     | 0,95     | 0,90     | 1,00     |
| Air flow   | m <sup>3</sup> /h      | 14500         | 14500    | 14500    | 17600    | 17600    | 17600    | 17600    | 20900    |
| Fan  | n                      | 2             | 2        | 2        | 2        | 2        | 2        | 2        | 2        |
| Max. ESP   | Pa                     | 432           | 432      | 432      | 382      | 383      | 382      | 383      | 436      |
| Unit EER without remote condenser to max. frequency  | w/w                    | 3,7           | 3,8      | 3,8      | 3,8      | 3,8      | 3,8      | 3,8      | 3,8      |
| Maximum absorbed power                               | Kw                     | 22,7          | 22,2     | 23,4     | 22,2     | 24,6     | 28,4     | 31,3     | 33,2     |
| Maximum absorbed current                             | A                      | 36,6          | 42,4     | 40,4     | 42,4     | 44,8     | 51,6     | 58,4     | 61,2     |
| starting current                                     | A                      | 95,5          | 182,4    | 119,4    | 182,4    | 154,6    | 169,0    | 151,4    | 154,2    |
| Power supply   | V/ph/Hz                | 400/3/50+N+PE |          |          |          |          |          |          |          |
| <b>Humidifier</b>                                    |                        |               |          |          |          |          |          |          |          |
| Steam production (nominal)                           | kg/h                   | 8             | 8        | 8        | 8        | 8        | 8        | 8        | 8        |
| Steam production (max.)                              | kg/h                   | 8             | 8        | 8        | 8        | 8        | 8        | 8        | 8        |
| Max. absorbed power                                  | kW                     | 6,0           | 6,0      | 6,0      | 6,0      | 6,0      | 6,0      | 6,0      | 6,0      |
| Max. absorbed current                                | A                      | 8,7           | 8,7      | 8,7      | 8,7      | 8,7      | 8,7      | 8,7      | 8,7      |
| Specific conductivity at 20°C (min/max)              | µS/cm                  | 300/1250      | 300/1250 | 300/1250 | 300/1250 | 300/1250 | 300/1250 | 300/1250 | 300/1250 |
| Total hardness (min/max)                             | mg/l CaCO <sub>3</sub> | 100/400       | 100/400  | 100/400  | 100/400  | 100/400  | 100/400  | 100/400  | 100/400  |
| <b>Electrical heaters</b>                            |                        |               |          |          |          |          |          |          |          |
| Steps  | n°                     | 3             | 3        | 3        | 3        | 3        | 3        | 3        | 3        |
| Power  | kW                     | 15,0          | 15,0     | 15,0     | 18,0     | 18,0     | 18,0     | 18,0     | 24,0     |
| Absorbed current                                     | A                      | 21,7          | 21,7     | 21,7     | 26,0     | 26,0     | 26,0     | 26,0     | 34,6     |
| <b>Oversized electrical heaters</b>                  |                        |               |          |          |          |          |          |          |          |
| Steps  | n°                     | 3             | 3        | 3        | 3        | 3        | 3        | 3        | 3        |
| Power  | kW                     | 18,0          | 18,0     | 18,0     | 24,0     | 24,0     | 24,0     | 24,0     | 27,0     |
| Absorbed current                                     | A                      | 26,0          | 26,0     | 26,0     | 34,6     | 34,6     | 34,6     | 34,6     | 39,0     |
| <b>Hot water coil</b>                                |                        |               |          |          |          |          |          |          |          |
| Heating capacity <sup>(3)</sup>                      | kW                     | 31,1          | 31,1     | 31,1     | 37,4     | 37,4     | 37,4     | 37,4     | 48,9     |
| Water flow   | m <sup>3</sup> /h      | 5,43          | 5,43     | 5,43     | 6,5      | 6,5      | 6,5      | 6,5      | 8,5      |
| Pressure drop (coil + 3 way valve)                   | kPa                    | 53            | 53       | 53       | 34       | 34       | 34       | 34       | 48       |
| Coil internal volume                                 | dm <sup>3</sup>        | 5,8           | 5,8      | 5,8      | 7,1      | 7,1      | 7,1      | 7,1      | 10,45    |
| <b>On / Off Compressors</b>                          |                        |               |          |          |          |          |          |          |          |
| Circuits / Compressors                               | n°/n°                  | 2/2           | 1/1      | 2/2      | 1/1      | 2/2      | 2/2      | 2/2      | 1/2      |
| <b>Condensing water pump</b>                         |                        |               |          |          |          |          |          |          |          |
| Nominal flow   | l/h                    | 390,0         | 390,0    | 390,0    | 390,0    | 390,0    | 390,0    | 390,0    | 390,0    |
| Max. flow (prevalence = 0 m)                         | l/h                    | 500           | 500      | 500      | 500      | 500      | 500      | 500      | 500      |
| Max. discharge height (flow=0 m <sup>3</sup> /h)     | m                      | 5,4           | 5,4      | 5,4      | 5,4      | 5,4      | 5,4      | 5,4      | 5,4      |
| <b>Condensing water pump + humidifier</b>            |                        |               |          |          |          |          |          |          |          |
| Nominal flow   | l/h                    | 600           | 600      | 600      | 600      | 600      | 600      | 600      | 600      |
| Max. flow (prevalence = 0 m)                         | l/h                    | 900           | 900      | 900      | 900      | 900      | 900      | 900      | 900      |
| Max. discharge height (flow=0 m <sup>3</sup> /h)     | m                      | 6,0           | 6,0      | 6,0      | 6,0      | 6,0      | 6,0      | 6,0      | 6,0      |
| <b>Dimensions and weight</b>                         |                        |               |          |          |          |          |          |          |          |
| Frame  | n°                     | 5             | 5        | 5        | 6        | 6        | 6        | 6        | 7        |
| Width  | mm                     | 1860          | 1860     | 1860     | 2210     | 2210     | 2210     | 2210     | 2565     |
| Depth  | mm                     | 850           | 850      | 850      | 850      | 850      | 850      | 850      | 850      |
| Height   | mm                     | 1980          | 1980     | 1980     | 1980     | 1980     | 1980     | 1980     | 1980     |
| Weight (Configuration U)                             | Kg                     | 543           | 521      | 544      | 579      | 616      | 618      | 647      | 738      |
| Weight (Configuration V)                             | Kg                     | 549           | 528      | 551      | 586      | 624      | 625      | 654      | 746      |
| Weight (Configuration D)                             | Kg                     | 552           | 531      | 554      | 590      | 627      | 629      | 658      | 750      |
| Weight (Configuration B)                             | Kg                     | 549           | 528      | 551      | 586      | 624      | 625      | 654      | 746      |

Performances are referred to the following conditions:

- (1) Ambient temperature 24°C, Relative humidity 50%, Condensing temperature 48°C.
- (2) The fans electrical power has to be added to the ambient load.
- (3) Water temperature 40/45°C, Ambient temperature 20°C, Relative humidity 50%.