

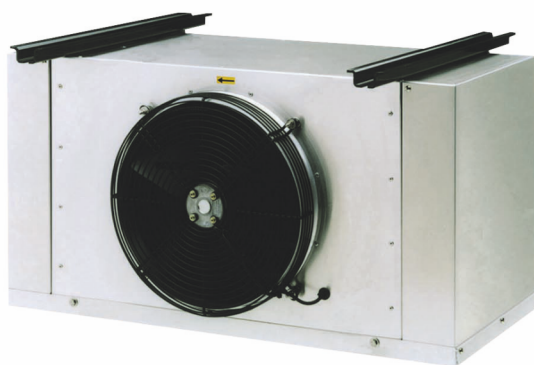


# technoblock



## BORA LB Units

*colder  
than ever*



## Komercyjne urządzenia typu Split z poziomym wydmuchem skraplacza.



## BORA LB Units

Urządzenia typu Split dla komercyjnych i przemysłowych komór. Kompaktowe urządzenia typu Split odpowiednie do sterowania dodatnimi i ujemnymi temperaturami w komorach chłodniczych, elastyczne w instalacji, proste w użytku, łatwe w utrzymaniu.

*Bi-block systems for the commercial refrigeration. Units suitable to control positive and negative cold rooms, quick to install, simple to use, easy to maintain. R404A refrigerant (GWP = 3.922), other on request.*



NIVIS<sup>®</sup>  
CHŁODNICTWO



| codice<br>code                               |                         | LBNH1050 | LBNH1060 | LBNH1075 | LBNH2100 | LBNH2122 | LBNH2120 | LBNH3150 | LBNH3200 |
|----------------------------------------------|-------------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| forma<br>form                                |                         |          |          |          |          |          |          |          |          |
| tensione<br>voltage                          | V/ph/Hz                 | 230/1/50 | 230/1/50 | 230/1/50 | 230/1/50 | 230/1/50 | 400/3/50 | 400/3/50 | 400/3/50 |
| max ass. el. in marcia<br>Max Run Abs        | kW                      | 0,75     | 0,96     | 1,2      | 1,55     | 1,55     | 1,6      | 2,3      | 2,4      |
| tipo di compressore<br>compressor type       |                         | H        | H        | H        | H        | H        | H        | H        | H        |
| volume spostato<br>displacement              | m <sup>3</sup> /h 50 Hz | 2,11     | 2,49     | 3,03     | 3,9      | 4,54     | 4,54     | 6,6      | 8,4      |
| tipo di sbrinamento<br>defrost type          |                         | ER       | ER       | ER       | ER       | ER       | ER       | ER       | ER       |
| assorbim. in sbrinam.<br>abs. during defrost | kW                      | 0,55     | 0,55     | 0,55     | 0,9      | 0,9      | 0,9      | 1,4      | 1,4      |

| CONDENSATORE<br>CONDENSER |  | Z2X1 | Z2X1 | Z2X1 | Z3K1 | Z3K1 | Z3K1 | 02M1 | 02M1 |
|---------------------------|--|------|------|------|------|------|------|------|------|
|---------------------------|--|------|------|------|------|------|------|------|------|

|                                                 |                   |       |       |       |       |       |       |       |       |
|-------------------------------------------------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| ventole<br>fans                                 | n°x Ø<br>(mm)     | 1x254 | 1x254 | 1x254 | 1x300 | 1x300 | 1x300 | 1x350 | 1x350 |
| assorbim. ventole cad.<br>fan absorption (each) | n°x W             | 1x68  | 1x68  | 1x68  | 1x110 | 1x110 | 1x110 | 1x140 | 1x140 |
| portata aria<br>airflow                         | m <sup>3</sup> /h | 1000  | 1000  | 1000  | 1460  | 1460  | 1460  | 2600  | 2600  |

| EVAPORATORE<br>EVAPORATOR |  | ES1A25 | ES1A25 | ES1A25 | ES2A25 | ES2A25 | ES2A25 | ES3A25 | ES3A25 |
|---------------------------|--|--------|--------|--------|--------|--------|--------|--------|--------|
|---------------------------|--|--------|--------|--------|--------|--------|--------|--------|--------|

|                                                 |                   |       |       |       |       |       |       |       |       |
|-------------------------------------------------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| ventole<br>fans                                 | n°x Ø<br>(mm)     | 1x254 | 1x254 | 1x254 | 2x254 | 2x254 | 2x254 | 3x254 | 3x254 |
| assorbim. ventole cad.<br>fan absorption (each) | n°x W             | 1x73  | 1x73  | 1x73  | 2x73  | 2x73  | 2x73  | 3x73  | 3x73  |
| portata aria<br>airflow                         | m <sup>3</sup> /h | 730   | 730   | 730   | 1360  | 1360  | 1360  | 2060  | 2060  |
| freccia aria<br>air-throw                       | m                 | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     |

## PESO UNITÁ - UNIT WEIGHT

|               |    |                   |                   |                   |                    |                    |                    |                    |                    |
|---------------|----|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| massa<br>mass | kg | UC = 41<br>UE = 9 | UC = 41<br>UE = 9 | UC = 44<br>UE = 9 | UC = 62<br>UE = 16 | UC = 62<br>UE = 16 | UC = 62<br>UE = 16 | UC = 75<br>UE = 24 | UC = 77<br>UE = 24 |
|---------------|----|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|

## TUBAZIONI - PIPING

|                        |    |    |    |    |    |    |    |    |    |
|------------------------|----|----|----|----|----|----|----|----|----|
| aspirazione<br>suction | mm | 12 | 12 | 12 | 16 | 16 | 16 | 16 | 16 |
| liquido<br>liquid      | mm | 8  | 8  | 8  | 10 | 10 | 10 | 10 | 10 |

| TABELLA DI SELEZIONE      SELECTION TABLE |       |          |                                 |          |                                 |          |                                 | spessore isolamento      insulation thickness = 100 mm |                                 |          |                                 |          |                                 |          |                                 |          |                                 |
|-------------------------------------------|-------|----------|---------------------------------|----------|---------------------------------|----------|---------------------------------|--------------------------------------------------------|---------------------------------|----------|---------------------------------|----------|---------------------------------|----------|---------------------------------|----------|---------------------------------|
|                                           |       | LBNH1050 |                                 | LBNH1060 |                                 | LBNH1075 |                                 | LBNH2100                                               |                                 | LBNH2122 |                                 | LBNH2120 |                                 | LBNH3150 |                                 | LBNH3200 |                                 |
| Ti °C                                     | Ta °C | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)                                                 | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> |
| -5°C                                      | 32°C  | 882      | 6,1                             | 1014     | 7,5                             | 1248     | 10,1                            | 1775                                                   | 16,6                            | 1996     | 18,5                            | 1997     | 18,5                            | 2818     | 30,9                            | 3167     | 36,3                            |
|                                           | 43°C  | 728      | 4,6                             | 835      | 5,6                             | 1109     | 8,5                             | 1545                                                   | 13,7                            | 1646     | 14,9                            | 1640     | 14,9                            | 2326     | 23,5                            | 2537     | 26,7                            |
| 0°C                                       | 32°C  | 1037     | 7,7                             | 1173     | 9,3                             | 1463     | 12,7                            | 2095                                                   | 20,0                            | 2362     | 24,0                            | 2353     | 23,9                            | 3321     | 38,6                            | 3689     | 44,3                            |
|                                           | 43°C  | 863      | 5,9                             | 982      | 7,2                             | 1327     | 11,1                            | 1808                                                   | 17,0                            | 1950     | 17,8                            | 1937     | 17,6                            | 2752     | 29,9                            | 2952     | 33,0                            |
| +5°C                                      | 32°C  | 1221     | 9,8                             | 1376     | 11,6                            | 1708     | 15,7                            | 2508                                                   | 26,2                            | 2823     | 31,0                            | 2770     | 30,2                            | 3902     | 47,7                            | 4324     | 54,3                            |
|                                           | 43°C  | 1037     | 7,7                             | 1165     | 9,2                             | 1416     | 12,1                            | 2098                                                   | 20,0                            | 2319     | 23,4                            | 2301     | 23,1                            | 3265     | 37,8                            | 3451     | 40,7                            |

## Legenda Legend

UC Unità Condensanti Condensing unit

UE Unità Evaporante Evaporating unit

Ta °C Temperatura esterna Outside temperature

Ti °C Temperatura della cella Coldroom temperature

Qo (W) Potenza frigorifera Refrigerating power

V<sub>100</sub> m<sup>3</sup> Volume della cella consigliato in m<sup>3</sup> con spessore isolamento 100 mm Suggested room volume in m<sup>3</sup> with insulation thickness 100 mm



| codice<br>code                                  |               | LBNH3151      | LBNH3201      | LBNH4250      | LBNH5250      | LBNH5300      | LBNH6350      | LBNH6450      | LBNH8600      |
|-------------------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| forma<br>form                                   |               |               |               |               |               |               |               |               |               |
| tensione<br>voltage                             | V/ph/Hz       | 400/3/50      | 400/3/50      | 400/3/50      | 400/3/50      | 400/3/50      | 400/3/50      | 400/3/50      | 400/3/50      |
| max ass. el. in marcia<br>Max Run Abs           | kW            | 2,23          | 2,33          | 3,09          | 3,27          | 4,17          | 5,42          | 6,63          | 8,52          |
| tipo di compressore<br>compressor type          |               | H             | H             | H             | H             | H             | H             | H             | H             |
| volume spostato<br>displacement                 | m³/h 50 Hz    | 6,6           | 8,4           | 9,4           | 9,4           | 11,8          | 14,9          | 18,7          | 23,6          |
| tipo di sbrinamento<br>defrost type             |               | ER            | ER            | ER            | ER            | ER            | ER            | ER            | ER            |
| assorbim. in sbrinam.<br>abs. during defrost    | kW            | 3,1           | 3,1           | 3,85          | 3,85          | 3,85          | 6,1           | 6,1           | 7,6           |
| <b>CONDENSATORE<br/>CONDENSER</b>               |               | <b>02M1</b>   | <b>02M1</b>   | <b>03M1</b>   | <b>12H1</b>   | <b>13H1</b>   | <b>22A1</b>   | <b>23A1</b>   | <b>33E1</b>   |
| ventole<br>fans                                 | n°x Ø<br>(mm) | 1x350         | 1x350         | 1x350         | 1x400         | 1x400         | 1x500         | 1x500         | 1x630         |
| assorbim. ventole cad.<br>fan absorption (each) | n°x W         | 1x140         | 1x140         | 1x140         | 1x160         | 1x160         | 1x640         | 1x640         | 1x610         |
| portata aria<br>airflow                         | m³/h          | 2600          | 2600          | 2400          | 3950          | 3640          | 6530          | 6220          | 9090          |
| <b>EVAPORATORE<br/>EVAPORATOR</b>               |               | <b>EC1A35</b> | <b>EC1B35</b> | <b>EC2A30</b> | <b>EC2A35</b> | <b>EC2B35</b> | <b>EC3A35</b> | <b>EB1B50</b> | <b>EB2A45</b> |
| ventole<br>fans                                 | n°x Ø<br>(mm) | 1x350         | 1x350         | 2x300         | 2x350         | 2x350         | 3x350         | 1x500         | 2x450         |
| assorbim. ventole cad.<br>fan absorption (each) | n°x W         | 1x140         | 1x140         | 2x58          | 2x140         | 2x140         | 3x140         | 1x680         | 2x400         |
| portata aria<br>airflow                         | m³/h          | 2320          | 2250          | 3080          | 4310          | 4170          | 6700          | 5970          | 8900          |
| freccia aria<br>air-throw                       | m             | 13            | 13            | 10            | 14            | 14            | 14            | 20            | 19            |

**PESO UNITÀ - UNIT WEIGHT**

|               |    |                    |                    |                     |                    |                    |                     |                     |                      |
|---------------|----|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|---------------------|----------------------|
| massa<br>mass | kg | UC = 81<br>UE = 40 | UC = 88<br>UE = 40 | UC = 104<br>UE = 46 | UC = 85<br>UE = 50 | UC = 87<br>UE = 54 | UC = 169<br>UE = 70 | UC = 171<br>UE = 96 | UC = 218<br>UE = 115 |
|---------------|----|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|---------------------|----------------------|

**TUBAZIONI - PIPING**

|                        |    |    |    |    |    |    |    |    |    |
|------------------------|----|----|----|----|----|----|----|----|----|
| aspirazione<br>suction | mm | 16 | 16 | 18 | 18 | 18 | 22 | 22 | 28 |
| liquido<br>liquid      | mm | 10 | 10 | 10 | 10 | 10 | 12 | 12 | 12 |

| TABELLA DI SELEZIONE |       | SELECTION TABLE |                     | spessore isolamento insulation thickness = 100 mm |                     |          |                     |          |                     |          |                     |          |                     |          |                     |          |                     |
|----------------------|-------|-----------------|---------------------|---------------------------------------------------|---------------------|----------|---------------------|----------|---------------------|----------|---------------------|----------|---------------------|----------|---------------------|----------|---------------------|
|                      |       | LBNH3151        |                     | LBNH3201                                          |                     | LBNH4250 |                     | LBNH5250 |                     | LBNH5300 |                     | LBNH6350 |                     | LBNH6450 |                     | LBNH8600 |                     |
| Ti °C                | Ta °C | Qo (W)          | V <sub>100</sub> m³ | Qo (W)                                            | V <sub>100</sub> m³ | Qo (W)   | V <sub>100</sub> m³ | Qo (W)   | V <sub>100</sub> m³ | Qo (W)   | V <sub>100</sub> m³ | Qo (W)   | V <sub>100</sub> m³ | Qo (W)   | V <sub>100</sub> m³ | Qo (W)   | V <sub>100</sub> m³ |
| -5°C                 | 32°C  | 2818            | 30,9                | 3277                                              | 38,0                | 3893     | 47,5                | 4083     | 50,5                | 5301     | 69,9                | 6616     | 91,4                | 8820     | 128,7               | 12169    | 187,7               |
|                      | 43°C  | 2326            | 23,5                | 2588                                              | 27,4                | 3046     | 34,4                | 3287     | 38,1                | 4342     | 54,6                | 5277     | 69,5                | 7096     | 99,4                | 9871     | 146,9               |
| 0°C                  | 32°C  | 3321            | 38,6                | 3839                                              | 46,7                | 4537     | 57,7                | 4861     | 62,8                | 6265     | 85,6                | 7869     | 112,4               | 10423    | 156,6               | 14336    | 227,2               |
|                      | 43°C  | 2752            | 29,9                | 3009                                              | 33,8                | 3579     | 42,6                | 3935     | 48,2                | 5142     | 67,4                | 6301     | 86,2                | 8431     | 122,0               | 11714    | 179,6               |
| +5°C                 | 32°C  | 3902            | 47,7                | 4531                                              | 57,6                | 5238     | 68,9                | 5895     | 79,6                | 7500     | 106,2               | 9514     | 140,7               | 12505    | 193,8               | 17171    | 280,0               |
|                      | 43°C  | 3265            | 37,8                | 3525                                              | 41,8                | 4166     | 51,8                | 4769     | 61,4                | 6194     | 84,5                | 7681     | 109,3               | 10178    | 152,3               | 14112    | 223,1               |

**Legenda Legend**

|                           |                                                                                                                                  |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>UC</b>                 | Unità Condensanti Condensing unit                                                                                                |
| <b>UE</b>                 | Unità Evaporante Evaporating unit                                                                                                |
| <b>Ta °C</b>              | Temperatura esterna Outside temperature                                                                                          |
| <b>Ti °C</b>              | Temperatura della cella Coldroom temperature                                                                                     |
| <b>Qo (W)</b>             | Potenza frigorifera Refrigerating power                                                                                          |
| <b>V<sub>100</sub> m³</b> | Volume della cella consigliato in m³ con spessore isolamento 100 mm Suggested room volume in m³ with insulation thickness 100 mm |



| codice<br>code                                  |                         | LBNH8750      | LBNH8800      | LBNH9100      | LBNS1075      | LBNS2100      | LBNS2120      | LBNS3200      | LBNS3201      |
|-------------------------------------------------|-------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| forma<br>form                                   |                         |               |               |               |               |               |               |               |               |
| tensione<br>voltage                             | V/ph/Hz                 | 400/3/50      | 400/3/50      | 400/3/50      | 400/3/50      | 400/3/50      | 400/3/50      | 400/3/50      | 400/3/50      |
| max ass. el. in marcia<br>Max Run Abs           | kW                      | 9,53          | 11,8          | 12,7          | 1             | 1,4           | 1,8           | 2,72          | 2,65          |
| tipo di compressore<br>compressor type          |                         | H             | H             | H             | S             | S             | S             | S             | S             |
| volume spostato<br>displacement                 | m <sup>3</sup> /h 50 Hz | 29,8          | 37,5          | 42,1          | 2,89          | 3,86          | 5,3           | 7,71          | 7,71          |
| tipo di sbrinamento<br>defrost type             |                         | ER            | ER            | ER            | ER            | ER            | ER            | ER            | ER            |
| assorbim. in sbrinam.<br>abs. during defrost    | kW                      | 7,6           | 10,1          | 11,1          | 0,55          | 0,9           | 0,9           | 1,4           | 3,1           |
| <b>CONDENSATORE<br/>CONDENSER</b>               |                         | <b>33E1</b>   | <b>35E1</b>   | <b>54A2</b>   | <b>Z2X1</b>   | <b>Z3K1</b>   | <b>Z3K1</b>   | <b>02M1</b>   | <b>02M1</b>   |
| ventole<br>fans                                 | n°x Ø<br>(mm)           | 1X630         | 1X630         | 2X500         | 1X254         | 1X300         | 1X300         | 1X350         | 1X350         |
| assorbim. ventole cad.<br>fan absorption (each) | n°x W                   | 1X610         | 1X610         | 2X640         | 1X73          | 1X58          | 1X58          | 1X140         | 1X140         |
| portata aria<br>airflow                         | m <sup>3</sup> /h       | 9090          | 8230          | 11100         | 1000          | 1460          | 1460          | 2600          | 2600          |
| <b>EVAPORATORE<br/>EVAPORATOR</b>               |                         | <b>EB2B45</b> | <b>EB2B45</b> | <b>EB2A50</b> | <b>ES1A25</b> | <b>ES2A25</b> | <b>ES2A25</b> | <b>ES3A25</b> | <b>EC1B35</b> |
| ventole<br>fans                                 | n°x Ø<br>(mm)           | 2x450         | 2x450         | 2x500         | 1x254         | 2x254         | 2x254         | 3x254         | 1x350         |
| assorbim. ventole cad.<br>fan absorption (each) | n°x W                   | 2x400         | 2x400         | 2x680         | 1x73          | 2x73          | 2x73          | 3x73          | 1x140         |
| portata aria<br>airflow                         | m <sup>3</sup> /h       | 8600          | 8600          | 12500         | 730           | 1360          | 1360          | 2060          | 2250          |
| freccia aria<br>air-throw                       | m                       | 19            | 19            | 22            | 6             | 6             | 6             | 6             | 13            |

**PESO UNITÀ - UNIT WEIGHT**

|               |    |                   |                   |                   |                    |                    |                    |                    |                    |
|---------------|----|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| massa<br>mass | kg | UC = 41<br>UE = 9 | UC = 41<br>UE = 9 | UC = 44<br>UE = 9 | UC = 62<br>UE = 16 | UC = 62<br>UE = 16 | UC = 62<br>UE = 16 | UC = 75<br>UE = 24 | UC = 77<br>UE = 24 |
|---------------|----|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|

**TUBAZIONI - PIPING**

|                        |    |    |    |    |    |    |    |    |    |
|------------------------|----|----|----|----|----|----|----|----|----|
| aspirazione<br>suction | mm | 28 | 28 | 35 | 12 | 16 | 16 | 16 | 16 |
| liquido<br>liquid      | mm | 16 | 16 | 16 | 8  | 10 | 10 | 10 | 10 |

| TABELLA DI SELEZIONE    SELECTION TABLE |       |          |                                 | spessore isolamento    insulation thickness = 100 mm |                                 |          |                                 |          |                                 |          |                                 |          |                                 |          |                                 |          |                                 |
|-----------------------------------------|-------|----------|---------------------------------|------------------------------------------------------|---------------------------------|----------|---------------------------------|----------|---------------------------------|----------|---------------------------------|----------|---------------------------------|----------|---------------------------------|----------|---------------------------------|
|                                         |       | LBNH8750 |                                 | LBNH8800                                             |                                 | LBNH9100 |                                 | LBNS1075 |                                 | LBNS2100 |                                 | LBNS2120 |                                 | LBNS3200 |                                 | LBNS3201 |                                 |
| Ti °C                                   | Ta °C | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)                                               | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> |
| -5°C                                    | 32°C  | 13450    | 211,0                           | 16188                                                | 261,6                           | 20388    | 341,0                           | 1190     | 9,4                             | 1860     | 17,6                            | 2294     | 23,0                            | 3116     | 35,5                            | 3183     | 36,5                            |
|                                         | 43°C  | 10733    | 162,1                           | 13125                                                | 205,0                           | 16506    | 267,5                           | 1007     | 7,4                             | 1545     | 13,7                            | 1915     | 17,3                            | 2581     | 27,3                            | 2584     | 27,4                            |
| 0°C                                     | 32°C  | 15901    | 256,2                           | 18835                                                | 311,5                           | 23620    | 402,8                           | 1370     | 11,6                            | 2125     | 20,5                            | 2676     | 28,8                            | 3460     | 40,8                            | 3567     | 42,5                            |
|                                         | 43°C  | 12773    | 198,8                           | 15440                                                | 247,6                           | 19159    | 317,6                           | 1143     | 8,9                             | 1739     | 16,1                            | 2197     | 21,5                            | 2857     | 31,5                            | 2903     | 32,2                            |
| +5°C                                    | 32°C  | 19146    | 317,4                           | 22358                                                | 378,6                           | 27698    | 480,5                           | 1548     | 13,7                            | 2375     | 24,2                            | 3020     | 34,0                            | 3947     | 48,4                            | 4108     | 50,9                            |
|                                         | 43°C  | 15471    | 248,2                           | 18494                                                | 305,0                           | 22551    | 382,3                           | 1260     | 10,3                            | 1921     | 17,4                            | 2462     | 25,5                            | 3265     | 37,8                            | 3338     | 38,9                            |

**Legenda    Legend****UC**    Unità Condensanti    *Condensing unit***UE**    Unità Evaporante    *Evaporating unit***Ta °C**    Temperatura esterna    *Outside temperature***Ti °C**    Temperatura della cella    *Coldroom temperature***Qo (W)**    Potenza frigorifera    *Refrigerating power***V<sub>100</sub> m<sup>3</sup>**    Volume della cella consigliato in m<sup>3</sup> con spessore isolamento 100 mm    *Suggested room volume in m<sup>3</sup> with insulation thickness 100 mm*





| codice<br>code                                  |               | LBNS4250            | LBNS5250            | LBNS5300            | LBNS6350            | LBNS6450            | LBNS8600             | LBNS8750             | LBNS8800             | LBNS91000            |
|-------------------------------------------------|---------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|
| forma<br>form                                   |               |                     |                     |                     |                     |                     |                      |                      |                      |                      |
| tensione<br>voltage                             | V/ph/Hz       | 400/3/50            | 400/3/50            | 400/3/50            | 400/3/50            | 400/3/50            | 400/3/50             | 400/3/50             | 400/3/50             | 400/3/50             |
| max ass. el. in marcia<br>Max Run Abs           | kW            | 3,29                | 3,47                | 4,31                | 5,35                | 6,76                | 8,32                 | 9,4                  | 10,41                | 12,58                |
| tipo di compressore<br>compressor type          |               | S                   | S                   | S                   | S                   | S                   | S                    | S                    | S                    | S                    |
| volume spostato<br>displacement                 | m³/h 50 Hz    | 9,88                | 9,88                | 11,64               | 14,74               | 19,98               | 22,83                | 27,33                | 31,88                | 38,06                |
| tipo di sbrinamento<br>defrost type             |               | ER                  | ER                  | ER                  | ER                  | ER                  | ER                   | ER                   | ER                   | ER                   |
| assorbim. in sbrinam.<br>abs. during defrost    | kW            | 3,85                | 3,85                | 3,85                | 6,1                 | 6,1                 | 7,6                  | 7,6                  | 10,1                 | 11,1                 |
| <b>CONDENSATORE<br/>CONDENSER</b>               |               | <b>03M1</b>         | <b>12H1</b>         | <b>13H1</b>         | <b>22A1</b>         | <b>23A1</b>         | <b>33E1</b>          | <b>33E1</b>          | <b>35E1</b>          | <b>54A2</b>          |
| ventole<br>fans                                 | n°x Ø<br>(mm) | 1x350               | 1x400               | 1x400               | 1x500               | 1x500               | 1x630                | 1x630                | 1x630                | 2x500                |
| assorbim. ventole cad.<br>fan absorption (each) | n°x W         | 1x140               | 1x160               | 1x160               | 1x640               | 1x640               | 1x610                | 1x610                | 1x610                | 2x640                |
| portata aria<br>airflow                         | m³/h          | 2400                | 3950                | 3640                | 6530                | 6220                | 9090                 | 9090                 | 8230                 | 11100                |
| <b>EVAPORATORE<br/>EVAPORATOR</b>               |               | <b>EC2A30</b>       | <b>EC2A35</b>       | <b>EC2B35</b>       | <b>EC3A35</b>       | <b>EB1B50</b>       | <b>EB2A45</b>        | <b>EB2B45</b>        | <b>EB2B45</b>        | <b>EB2A50</b>        |
| ventole<br>fans                                 | n°x Ø<br>(mm) | 2x300               | 2x350               | 2x350               | 3x350               | 1x500               | 2x450                | 2x450                | 2x450                | 2x500                |
| assorbim. ventole cad.<br>fan absorption (each) | n°x W         | 2x58                | 2x140               | 2x140               | 3x140               | 1x680               | 2x400                | 2x400                | 2x400                | 2x680                |
| portata aria<br>airflow                         | m³/h          | 3080                | 4310                | 4170                | 6700                | 5970                | 8900                 | 8600                 | 8600                 | 12500                |
| freccia aria<br>air-throw                       | m             | 10                  | 14                  | 14                  | 14                  | 20                  | 19                   | 19                   | 19                   | 22                   |
| <b>PESO UNITÀ - UNIT WEIGHT</b>                 |               |                     |                     |                     |                     |                     |                      |                      |                      |                      |
| massa<br>mass                                   | kg            | UC = 118<br>UE = 46 | UC = 101<br>UE = 50 | UC = 103<br>UE = 54 | UC = 188<br>UE = 70 | UC = 218<br>UE = 96 | UC = 265<br>UE = 115 | UC = 306<br>UE = 123 | UC = 350<br>UE = 123 | UC = 388<br>UE = 159 |
| <b>TUBAZIONI - PIPING</b>                       |               |                     |                     |                     |                     |                     |                      |                      |                      |                      |
| aspirazione<br>suction                          | mm            | 18                  | 18                  | 18                  | 22                  | 22                  | 28                   | 28                   | 28                   | 35                   |
| liquido<br>liquid                               | mm            | 10                  | 10                  | 10                  | 12                  | 12                  | 12                   | 16                   | 16                   | 16                   |

| <b>TABELLA DI SELEZIONE SELECTION TABLE</b> |       |          |                     |          |                     |          |                     |          |                     | <b>spessore isolamento insulation thickness = 100 mm</b> |                     |          |                     |          |                     |          |                     |           |                     |
|---------------------------------------------|-------|----------|---------------------|----------|---------------------|----------|---------------------|----------|---------------------|----------------------------------------------------------|---------------------|----------|---------------------|----------|---------------------|----------|---------------------|-----------|---------------------|
|                                             |       | LBNS4250 |                     | LBNS5250 |                     | LBNS5300 |                     | LBNS6350 |                     | LBNS6450                                                 |                     | LBNS8600 |                     | LBNS8750 |                     | LBNS8800 |                     | LBNS91000 |                     |
| Ti °C                                       | Ta °C | Qo (W)   | V <sub>100</sub> m³ | Qo (W)   | V <sub>100</sub> m³ | Qo (W)   | V <sub>100</sub> m³ | Qo (W)   | V <sub>100</sub> m³ | Qo (W)                                                   | V <sub>100</sub> m³ | Qo (W)   | V <sub>100</sub> m³ | Qo (W)   | V <sub>100</sub> m³ | Qo (W)   | V <sub>100</sub> m³ | Qo (W)    | V <sub>100</sub> m³ |
| -5°C                                        | 32°C  | 4065     | 50,2                | 4822     | 62,2                | 5517     | 73,4                | 6165     | 84,0                | 8760                                                     | 127,7               | 11374    | 173,5               | 12394    | 191,8               | 14668    | 233,3               | 18871     | 312,1               |
|                                             | 43°C  | 3269     | 37,8                | 4007     | 49,3                | 4594     | 58,6                | 5077     | 66,3                | 7144                                                     | 100,2               | 9317     | 137,3               | 10218    | 153,0               | 12118    | 186,8               | 15470     | 248,2               |
| 0°C                                         | 32°C  | 4600     | 58,7                | 5579     | 74,4                | 6390     | 87,7                | 7108     | 99,6                | 10169                                                    | 152,1               | 13231    | 207,0               | 14210    | 224,9               | 16898    | 274,9               | 21762     | 367,2               |
|                                             | 43°C  | 3722     | 44,9                | 4569     | 58,2                | 5347     | 70,7                | 5846     | 78,8                | 8343                                                     | 120,5               | 10918    | 165,4               | 11515    | 176,0               | 13945    | 220,0               | 17706     | 290,1               |
| +5°C                                        | 32°C  | 5295     | 69,8                | 6292     | 86,1                | 7465     | 105,6               | 8255     | 119,0               | 11813                                                    | 181,3               | 15388    | 246,7               | 16529    | 268,0               | 19466    | 323,4               | 25116     | 431,4               |
|                                             | 43°C  | 4280     | 53,6                | 5100     | 66,7                | 6180     | 84,2                | 6808     | 94,6                | 9623                                                     | 142,6               | 12627    | 196,0               | 13476    | 211,4               | 16083    | 259,6               | 20445     | 342,1               |

| <b>Legenda Legend</b>     |                                                                                                                                  |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>UC</b>                 | Unità Condensanti Condensing unit                                                                                                |
| <b>UE</b>                 | Unità Evaporante Evaporating unit                                                                                                |
| <b>Ta °C</b>              | Temperatura esterna Outside temperature                                                                                          |
| <b>Ti °C</b>              | Temperatura della cella Coldroom temperature                                                                                     |
| <b>Qo (W)</b>             | Potenza frigorifera Refrigerating power                                                                                          |
| <b>V<sub>100</sub> m³</b> | Volume della cella consigliato in m³ con spessore isolamento 100 mm Suggested room volume in m³ with insulation thickness 100 mm |



| codice<br>code                                  |                         | LBKH1100 | LBKH1120 | LBKH1170 | LBKH2170 | LBKH2200 | LBKH2250 | LBKH3250 | LBKH3300 |
|-------------------------------------------------|-------------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| forma<br>form                                   |                         |          |          |          |          |          |          |          |          |
| tensione<br>voltage                             | V/ph/Hz                 | 230/1/50 | 230/1/50 | 230/1/50 | 230/1/50 | 400/3/50 | 400/3/50 | 400/3/50 | 400/3/50 |
| max ass. el. in marcia<br>Max Run Abs           | kW                      | 0,89     | 1,15     | 1,4      | 1,5      | 1,8      | 2,6      | 2,75     | 2,6      |
| tipo di compressore<br>compressor type          |                         | H        | H        | H        | H        | H        | H        | H        | H        |
| volume spostato<br>displacement                 | m <sup>3</sup> /h 50 Hz | 3,03     | 4,54     | 5,99     | 5,99     | 8,3      | 11,8     | 11,8     | 12,9     |
| tipo di sbrinamento<br>defrost type             |                         | ER       | ER       | ER       | ER       | ER       | ER       | ER       | ER       |
| assorbim. in sbrinam.<br>abs. during defrost    | kW                      | 0,55     | 0,55     | 0,55     | 0,9      | 0,9      | 0,9      | 1,4      | 1,4      |
| CONDENSATORE<br>CONDENSER                       |                         | Z2X1     | Z2X1     | Z2X1     | Z3K1     | Z3K1     | Z3K1     | O2M1     | O2M1     |
| ventole<br>fans                                 | n°x Ø<br>(mm)           | 1X254    | 1X254    | 1X254    | 1X300    | 1X300    | 1X300    | 1X350    | 1X350    |
| assorbim. ventole cad.<br>fan absorption (each) | n°x W                   | 1X68     | 1X68     | 1X68     | 1X110    | 1X110    | 1X110    | 1X140    | 1X140    |
| portata aria<br>airflow                         | m <sup>3</sup> /h       | 1000     | 1000     | 1000     | 1460     | 1460     | 1460     | 2600     | 2600     |
| EVAPORATORE<br>EVAPORATOR                       |                         | ES1A25   | ES1A25   | ES1A25   | ES2A25   | ES2A25   | ES2A25   | ES3A25   | ES3A25   |
| ventole<br>fans                                 | n°x Ø<br>(mm)           | 1x254    | 1x254    | 1x254    | 2x254    | 2x254    | 2x254    | 3x254    | 3x254    |
| assorbim. ventole cad.<br>fan absorption (each) | n°x W                   | 1x73     | 1x73     | 1x73     | 2x73     | 2x73     | 2x73     | 3x73     | 3x73     |
| portata aria<br>airflow                         | m <sup>3</sup> /h       | 730      | 730      | 730      | 1360     | 1360     | 1360     | 2060     | 2060     |
| freccia aria<br>air-throw                       | m                       | 6        | 6        | 6        | 6        | 6        | 6        | 6        | 6        |

## PESO UNITÀ - UNIT WEIGHT

| massa<br>mass | kg | UC = 50<br>UE = 9 | UC = 52<br>UE = 9 | UC = 52<br>UE = 9 | UC = 63<br>UE = 16 | UC = 65<br>UE = 16 | UC = 65<br>UE = 16 | UC = 85<br>UE = 24 | UC = 85<br>UE = 24 |
|---------------|----|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
|---------------|----|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|

## TUBAZIONI - PIPING

| aspirazione<br>suction | mm | 12 | 12 | 12 | 16 | 16 | 16 | 18 | 18 |
|------------------------|----|----|----|----|----|----|----|----|----|
| liquido<br>liquid      | mm | 8  | 8  | 8  | 10 | 10 | 10 | 10 | 10 |

| TABELLA DI SELEZIONE SELECTION TABLE |       |          |                                 |          |                                 |          |                                 |          |                                 | spessore isolamento insulation thickness = 100 mm |                                 |          |                                 |          |                                 |          |                                 |
|--------------------------------------|-------|----------|---------------------------------|----------|---------------------------------|----------|---------------------------------|----------|---------------------------------|---------------------------------------------------|---------------------------------|----------|---------------------------------|----------|---------------------------------|----------|---------------------------------|
|                                      |       | LBKH1100 |                                 | LBKH1120 |                                 | LBKH1170 |                                 | LBKH2170 |                                 | LBKH2200                                          |                                 | LBKH2250 |                                 | LBKH3250 |                                 | LBKH3300 |                                 |
| Ti °C                                | Ta °C | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)                                            | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> |
| -18°C                                | 32 °C | 855      | 4,3                             | 1037     | 6,0                             | 1139     | 7,0                             | 1621     | 12,6                            | 2057                                              | 17,6                            | 2277     | 21,3                            | 2446     | 24,1                            | 2712     | 28,7                            |
|                                      | 43°C  | 689      | 3,0                             | 807      | 3,9                             | 881      | 4,5                             | 1243     | 8,1                             | 1592                                              | 12,2                            | 1709     | 13,7                            | 1921     | 15,4                            | 2123     | 18,7                            |
| -22°C                                | 32 °C | 726      | 3,2                             | 896      | 4,7                             | 985      | 5,5                             | 1408     | 10,0                            | 1753                                              | 14,3                            | 1951     | 15,9                            | 2091     | 18,2                            | 2337     | 22,3                            |
|                                      | 43°C  | 563      | 2,1                             | 688      | 3,0                             | 755      | 3,5                             | 1042     | 6,0                             | 1349                                              | 9,3                             | 1469     | 10,7                            | 1622     | 12,6                            | 1796     | 14,8                            |
| -25°C                                | 32°C  | 630      | 2,5                             | 799      | 3,8                             | 874      | 4,5                             | 1259     | 8,3                             | 1537                                              | 11,6                            | 1734     | 14,0                            | 1819     | 15,1                            | 2072     | 17,9                            |
|                                      | 43°C  | 469      | 1,5                             | 602      | 2,3                             | 660      | 2,8                             | 908      | 4,8                             | 1167                                              | 7,3                             | 1323     | 9,0                             | 1408     | 10,0                            | 1566     | 11,9                            |

## Legenda Legend

UC Unità Condensanti Condensing unit

UE Unità Evaporante Evaporating unit

Ta °C Temperatura esterna Outside temperature

Ti °C Temperatura della cella Coldroom temperature

Qo (W) Potenza frigorifera Refrigerating power

V<sub>100</sub> m<sup>3</sup> Volume della cella consigliato in m<sup>3</sup> con spessore isolamento 100 mm Suggested room volume in m<sup>3</sup> with insulation thickness 100 mm



| codice<br>code                                  |               | LBKH3400      | LBKH3301      | LBKH3401      | LBKH4450      | LBKH5450      | LBKH5500      | LBKH6600      | LBKH6800      |
|-------------------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| forma<br>form                                   |               |               |               |               |               |               |               |               |               |
| tensione<br>voltage                             | V/ph/Hz       | 400/3/50      | 400/3/50      | 400/3/50      | 400/3/50      | 400/3/50      | 400/3/50      | 400/3/50      | 400/3/50      |
| max ass. el. in marcia<br>Max Run Abs           | kW            | 3,4           | 2,53          | 3,3           | 3,87          | 4,06          | 5,24          | 8,09          | 10,22         |
| tipo di compressore<br>compressor type          |               | H             | H             | H             | H             | H             | H             | H             | H             |
| volume spostato<br>displacement                 | m³/h 50 Hz    | 16,7          | 12,9          | 16,7          | 18,8          | 18,8          | 23,7          | 37,4          | 47,1          |
| tipo di sbrinamento<br>defrost type             |               | ER            | ER            | ER            | ER            | ER            | ER            | ER            | ER            |
| assorbim. in sbrinam.<br>abs. during defrost    | kW            | 1,4           | 3,1           | 3,1           | 3,85          | 3,85          | 3,85          | 6,1           | 6,1           |
| <b>CONDENSATORE<br/>CONDENSER</b>               |               | <b>02M1</b>   | <b>02M1</b>   | <b>02M1</b>   | <b>03M1</b>   | <b>12H1</b>   | <b>13H1</b>   | <b>22A1</b>   | <b>23A1</b>   |
| ventole<br>fans                                 | n°x Ø<br>(mm) | 1X350         | 1X350         | 1X350         | 1X350         | 1X400         | 1X400         | 1X500         | 1X500         |
| assorbim. ventole cad.<br>fan absorption (each) | n°x W         | 1X140         | 1X140         | 1X140         | 1X140         | 1X160         | 1X160         | 1X640         | 1X640         |
| portata aria<br>airflow                         | m³/h          | 2600          | 2600          | 2600          | 2400          | 3950          | 3640          | 6530          | 6220          |
| <b>EVAPORATORE<br/>EVAPORATOR</b>               |               | <b>ES3A25</b> | <b>EC1A35</b> | <b>EC1B35</b> | <b>EC2A30</b> | <b>EC2A35</b> | <b>EC2B35</b> | <b>EC3A35</b> | <b>EB1A50</b> |
| ventole<br>fans                                 | n°x Ø<br>(mm) | 3x254         | 1x350         | 1x350         | 2x300         | 2x350         | 2x350         | 3x350         | 1x500         |
| assorbim. ventole cad.<br>fan absorption (each) | n°x W         | 3x73          | 1x140         | 1x140         | 2x58          | 2x140         | 2x140         | 3x140         | 1x680         |
| portata aria<br>airflow                         | m³/h          | 2060          | 2320          | 2250          | 3080          | 4310          | 4170          | 6700          | 6110          |
| freccia aria<br>air-throw                       | m             | 6             | 13            | 13            | 10            | 14            | 14            | 14            | 20            |

**PESO UNITÀ - UNIT WEIGHT**

|               |    |                    |                    |                     |                     |                    |                    |                     |                     |
|---------------|----|--------------------|--------------------|---------------------|---------------------|--------------------|--------------------|---------------------|---------------------|
| massa<br>mass | kg | UC = 87<br>UE = 24 | UC = 98<br>UE = 40 | UC = 121<br>UE = 40 | UC = 126<br>UE = 46 | UC = 96<br>UE = 50 | UC = 96<br>UE = 54 | UC = 196<br>UE = 70 | UC = 198<br>UE = 90 |
|---------------|----|--------------------|--------------------|---------------------|---------------------|--------------------|--------------------|---------------------|---------------------|

**TUBAZIONI - PIPING**

|                        |    |    |    |    |    |    |    |    |    |
|------------------------|----|----|----|----|----|----|----|----|----|
| aspirazione<br>suction | mm | 18 | 18 | 18 | 22 | 22 | 22 | 28 | 28 |
| liquido<br>liquid      | mm | 10 | 10 | 10 | 10 | 10 | 10 | 12 | 12 |

**TABELLA DI SELEZIONE SELECTION TABLE**

|       |       |          |                     |          |                     |          |                     |          |                     | spessore isolamento insulation thickness = 100 mm |                     |          |                     |          |                     |          |                     |
|-------|-------|----------|---------------------|----------|---------------------|----------|---------------------|----------|---------------------|---------------------------------------------------|---------------------|----------|---------------------|----------|---------------------|----------|---------------------|
|       |       | LBKH3400 |                     | LBKH3301 |                     | LBKH3401 |                     | LBKH4450 |                     | LBKH5450                                          |                     | LBKH5500 |                     | LBKH6600 |                     | LBKH6800 |                     |
| Ti °C | Ta °C | Qo (W)   | V <sub>100</sub> m³ | Qo (W)   | V <sub>100</sub> m³ | Qo (W)   | V <sub>100</sub> m³ | Qo (W)   | V <sub>100</sub> m³ | Qo (W)                                            | V <sub>100</sub> m³ | Qo (W)   | V <sub>100</sub> m³ | Qo (W)   | V <sub>100</sub> m³ | Qo (W)   | V <sub>100</sub> m³ |
| -18°C | 32°C  | 3147     | 36,4                | 2712     | 28,7                | 3307     | 39,3                | 3932     | 51,1                | 4289                                              | 58,0                | 5283     | 78,3                | 8015     | 140,0               | 10027    | 190,2               |
|       | 43°C  | 2438     | 24,0                | 2123     | 18,7                | 2549     | 25,9                | 2992     | 33,6                | 3258                                              | 38,4                | 4151     | 55,3                | 6098     | 95,8                | 7703     | 132,5               |
| -22°C | 32°C  | 2703     | 28,5                | 2337     | 22,3                | 2846     | 31,0                | 3347     | 40,1                | 3611                                              | 45,0                | 4531     | 62,8                | 6891     | 113,6               | 8551     | 153,0               |
|       | 43°C  | 2066     | 17,8                | 1796     | 14,8                | 2140     | 19,0                | 2493     | 24,9                | 2665                                              | 27,9                | 3482     | 42,6                | 5110     | 74,6                | 6444     | 103,4               |
| -25°C | 32°C  | 2343     | 22,4                | 2072     | 17,9                | 2492     | 24,9                | 2929     | 32,5                | 3124                                              | 36,0                | 3972     | 51,8                | 6079     | 95,3                | 7498     | 127,7               |
|       | 43°C  | 1789     | 14,7                | 1566     | 11,9                | 1842     | 15,4                | 2140     | 19,0                | 2282                                              | 21,3                | 3012     | 34,0                | 4425     | 60,7                | 5543     | 83,8                |

**Legenda Legend**

|                           |                                                                                                                                  |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>UC</b>                 | Unità Condensanti Condensing unit                                                                                                |
| <b>UE</b>                 | Unità Evaporante Evaporating unit                                                                                                |
| <b>Ta °C</b>              | Temperatura esterna Outside temperature                                                                                          |
| <b>Ti °C</b>              | Temperatura della cella Coldroom temperature                                                                                     |
| <b>Qo (W)</b>             | Potenza frigorifera Refrigerating power                                                                                          |
| <b>V<sub>100</sub> m³</b> | Volume della cella consigliato in m³ con spessore isolamento 100 mm Suggested room volume in m³ with insulation thickness 100 mm |



| codice<br>code                                  |                         | LBKS1170 | LBKS2200 | LBKS3300 | LBKS3301 | LBKS3401 | LBKS4450 | LBKS5450 | LBKS5500 |
|-------------------------------------------------|-------------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| forma<br>form                                   |                         |          |          |          |          |          |          |          |          |
| tensione<br>voltage                             | V/ph/Hz                 | 400/3/50 | 400/3/50 | 400/3/50 | 400/3/50 | 400/3/50 | 400/3/50 | 400/3/50 | 400/3/50 |
| max ass. el. in marcia<br>Max Run Abs           | kW                      | 1        | 1,9      | 3,11     | 3,11     | 3,41     | 3,92     | 4,1      | 5,52     |
| tipo di compressore<br>compressor type          |                         | S        | S        | S        | S        | S        | S        | S        | S        |
| volume spostato<br>displacement                 | m <sup>3</sup> /h 50 Hz | 5,3      | 7,71     | 12,17    | 12,17    | 15,94    | 17,53    | 17,53    | 23,31    |
| tipo di sbrinamento<br>defrost type             |                         | ER       | ER       | ER       | ER       | ER       | ER       | ER       | ER       |
| assorbim. in sbrinam.<br>abs. during defrost    | kW                      | 0,55     | 0,9      | 1,4      | 3,1      | 3,1      | 3,85     | 3,85     | 3,85     |
| CONDENSATORE<br>CONDENSER                       |                         | Z2X1     | Z3K1     | O2M1     | O2M1     | O2M1     | O3M1     | 12H1     | 13H1     |
| ventole<br>fans                                 | n°x Ø<br>(mm)           | 1x254    | 1x300    | 1x350    | 1x350    | 1x350    | 1x350    | 1x400    | 1x400    |
| assorbim. ventole cad.<br>fan absorption (each) | n°x W                   | 1x68     | 1x110    | 1x140    | 1x140    | 1x140    | 1x140    | 1x160    | 1x160    |
| portata aria<br>airflow                         | m <sup>3</sup> /h       | 1000     | 1460     | 2600     | 2600     | 2600     | 2400     | 3640     | 3640     |
| EVAPORATORE<br>EVAPORATOR                       |                         | ES1A25   | ES2A25   | ES3A25   | EC1A35   | EC1B35   | EC2A30   | EC2A35   | EC2B35   |
| ventole<br>fans                                 | n°x Ø<br>(mm)           | 1x254    | 2x254    | 3x254    | 1x350    | 1x350    | 2x300    | 2x350    | 2x350    |
| assorbim. ventole cad.<br>fan absorption (each) | n°x W                   | 1x73     | 2x73     | 3x73     | 1x140    | 1x140    | 2x58     | 2x140    | 2x140    |
| portata aria<br>airflow                         | m <sup>3</sup> /h       | 730      | 1360     | 2060     | 2320     | 2250     | 3080     | 4310     | 4170     |
| freccia aria<br>air-throw                       | m                       | 6        | 6        | 6        | 13       | 13       | 10       | 14       | 14       |

## PESO UNITÁ - UNIT WEIGHT

| massa<br>mass | kg | UC = 59<br>UE = 9 | UC = 83<br>UE = 16 | UC = 103<br>UE = 24 | UC = 116<br>UE = 40 | UC = 124<br>UE = 40 | UC = 131<br>UE = 46 | UC = 113<br>UE = 50 | UC = 115<br>UE = 54 |
|---------------|----|-------------------|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
|---------------|----|-------------------|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|

## TUBAZIONI - PIPING

| aspirazione<br>suction | mm | 12 | 16 | 18 | 18 | 18 | 22 | 22 | 22 |
|------------------------|----|----|----|----|----|----|----|----|----|
| liquido<br>liquid      | mm | 8  | 10 | 10 | 10 | 10 | 10 | 10 | 10 |

## TABELLA DI SELEZIONE SELECTION TABLE

spessore isolamento insulation thickness = 100 mm

|       |       | LBKS1170 |                                 | LBKS2200 |                                 | LBKS3300 |                                 | LBKS3301 |                                 | LBKS3401 |                                 | LBKS4450 |                                 | LBKS5450 |                                 | LBKS5500 |                                 |
|-------|-------|----------|---------------------------------|----------|---------------------------------|----------|---------------------------------|----------|---------------------------------|----------|---------------------------------|----------|---------------------------------|----------|---------------------------------|----------|---------------------------------|
| Ti °C | Ta °C | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> |
| -18°C | 32°C  | 1139     | 7,0                             | 1807     | 15,0                            | 2766     | 29,6                            | 2769     | 29,7                            | 3606     | 44,9                            | 4147     | 55,2                            | 4559     | 63,4                            | 5577     | 84,5                            |
|       | 43°C  | 939      | 5,1                             | 1547     | 11,7                            | 2313     | 21,9                            | 2226     | 20,4                            | 2906     | 32,1                            | 3295     | 39,1                            | 3738     | 47,4                            | 4639     | 65,0                            |
| -22°C | 32°C  | 978      | 5,4                             | 1485     | 10,9                            | 2400     | 23,3                            | 2385     | 23,1                            | 3157     | 36,6                            | 3644     | 45,6                            | 3996     | 52,3                            | 4926     | 70,8                            |
|       | 43°C  | 825      | 4,1                             | 1288     | 8,6                             | 1965     | 16,1                            | 1916     | 15,3                            | 2535     | 25,6                            | 2856     | 31,2                            | 3193     | 37,3                            | 4012     | 52,6                            |
| -25°C | 32°C  | 868      | 4,4                             | 1237     | 8,1                             | 2086     | 18,1                            | 2065     | 17,7                            | 2749     | 29,3                            | 3228     | 37,9                            | 3529     | 43,4                            | 4370     | 59,6                            |
|       | 43°C  | 735      | 3,3                             | 1078     | 6,4                             | 1732     | 14,0                            | 1662     | 13,1                            | 2219     | 20,3                            | 2553     | 25,9                            | 2564     | 26,1                            | 3581     | 44,4                            |

## Legenda Legend

UC Unità Condensanti Condensing unit

UE Unità Evaporante Evaporating unit

Ta °C Temperatura esterna Outside temperature

Ti °C Temperatura della cella Coldroom temperature

Qo (W) Potenza frigorifera Refrigerating power

V<sub>100</sub> m<sup>3</sup> Volume della cella consigliato in m<sup>3</sup> con spessore isolamento 100 mm Suggested room volume in m<sup>3</sup> with insulation thickness 100 mm



| codice<br>code                                  |                         | LBKS6600      | LBKS6650      | LBKS6800      | LBKS71000     | LBKS81250     | LBKS81500     |
|-------------------------------------------------|-------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| forma<br>form                                   |                         |               |               |               |               |               |               |
| tensione<br>voltage                             | V/ph/Hz                 | 400/3/50      | 400/3/50      | 400/3/50      | 400/3/50      | 400/3/50      | 400/3/50      |
| max ass. el. in marcia<br>Max Run Abs           | kW                      | 6,63          | 7,44          | 8,63          | 11,51         | 13,05         | 17,46         |
| tipo di compressore<br>compressor type          |                         | S             | S             | S             | S             | S             | S             |
| volume spostato<br>displacement                 | m <sup>3</sup> /h 50 Hz | 26,44         | 31,88         | 38,06         | 48,82         | 56,87         | 75,83         |
| tipo di sbrinamento<br>defrost type             |                         | ER            | ER            | ER            | ER            | ER            | ER            |
| assorbim. in sbrinam.<br>abs. during defrost    | kW                      | 6,1           | 6,1           | 6,1           | 7,6           | 10,1          | 10,1          |
| <b>CONDENSATORE<br/>CONDENSER</b>               |                         | <b>22A1</b>   | <b>23A1</b>   | <b>23A1</b>   | <b>33A1</b>   | <b>33E1</b>   | <b>35E1</b>   |
| ventole<br>fans                                 | n°x Ø<br>(mm)           | 1X500         | 1X500         | 1X500         | 1X500         | 1X630         | 1X630         |
| assorbim. ventole cad.<br>fan absorption (each) | n°x W                   | 1X640         | 1X640         | 1X640         | 1X640         | 1X610         | 1X610         |
| portata aria<br>airflow                         | m <sup>3</sup> /h       | 6530          | 6220          | 6220          | 6480          | 9090          | 8230          |
| <b>EVAPORATORE<br/>EVAPORATOR</b>               |                         | <b>EC3A35</b> | <b>EC3A35</b> | <b>EB1A50</b> | <b>EB1B50</b> | <b>EB2A45</b> | <b>EB2B45</b> |
| ventole<br>fans                                 | n°x Ø<br>(mm)           | 3x350         | 3x350         | 1x500         | 1x500         | 2x450         | 2x450         |
| assorbim. ventole cad.<br>fan absorption (each) | n°x W                   | 3x140         | 3x140         | 1x680         | 1x680         | 2x400         | 2x400         |
| portata aria<br>airflow                         | m <sup>3</sup> /h       | 6700          | 6700          | 6110          | 5970          | 8900          | 8600          |
| freccia aria<br>air-throw                       | m                       | 14            | 14            | 20            | 20            | 19            | 19            |

**PESO UNITÀ - UNIT WEIGHT**

|               |    |                     |                     |                     |                     |                      |                      |
|---------------|----|---------------------|---------------------|---------------------|---------------------|----------------------|----------------------|
| massa<br>mass | kg | UC = 221<br>UE = 70 | UC = 247<br>UE = 70 | UC = 247<br>UE = 90 | UC = 351<br>UE = 96 | UC = 358<br>UE = 115 | UC = 426<br>UE = 115 |
|---------------|----|---------------------|---------------------|---------------------|---------------------|----------------------|----------------------|

**TUBAZIONI - PIPING**

|                        |    |    |    |    |    |    |    |
|------------------------|----|----|----|----|----|----|----|
| aspirazione<br>suction | mm | 28 | 28 | 28 | 35 | 42 | 42 |
| liquido<br>liquid      | mm | 12 | 12 | 12 | 12 | 16 | 16 |

**TABELLA DI SELEZIONE SELECTION TABLE**

|       |       |          |                                 |          |                                 |          |                                 | spessore isolamento insulation thickness = 100 mm |                                 |           |                                 |           |                                 |
|-------|-------|----------|---------------------------------|----------|---------------------------------|----------|---------------------------------|---------------------------------------------------|---------------------------------|-----------|---------------------------------|-----------|---------------------------------|
|       |       | LBKS6600 |                                 | LBKS6650 |                                 | LBKS6800 |                                 | LBKS71000                                         |                                 | LBKS81250 |                                 | LBKS81500 |                                 |
| Ti °C | Ta °C | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)                                            | V <sub>100</sub> m <sup>3</sup> | Qo (W)    | V <sub>100</sub> m <sup>3</sup> | Qo (W)    | V <sub>100</sub> m <sup>3</sup> |
| -18°C | 32°C  | 7028     | 116,7                           | 8320     | 147,4                           | 10327    | 198,0                           | 11710                                             | 234,8                           | 13962     | 297,1                           | 18006     | 413,2                           |
|       | 43°C  | 5674     | 86,6                            | 6783     | 111,1                           | 8122     | 142,6                           | 9232                                              | 169,9                           | 11124     | 219,1                           | 14359     | 308,3                           |
| -22°C | 32°C  | 6118     | 96,2                            | 7303     | 123,1                           | 8908     | 161,8                           | 10251                                             | 196,1                           | 12269     | 250,0                           | 15998     | 355,1                           |
|       | 43°C  | 4874     | 69,8                            | 5877     | 90,9                            | 7138     | 119,3                           | 8138                                              | 142,9                           | 9829      | 185,1                           | 13001     | 270,2                           |
| -25°C | 32°C  | 5436     | 81,5                            | 6462     | 103,8                           | 7999     | 139,6                           | 9075                                              | 166,0                           | 10922     | 213,7                           | 14188     | 303,4                           |
|       | 43°C  | 4348     | 59,2                            | 5232     | 77,2                            | 6387     | 102,2                           | 7273                                              | 122,4                           | 8798      | 159,1                           | 11787     | 236,9                           |

**Legenda Legend**

|                                      |                                                                                                                                                          |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>UC</b>                            | Unità Condensanti Condensing unit                                                                                                                        |
| <b>UE</b>                            | Unità Evaporante Evaporating unit                                                                                                                        |
| <b>Ta °C</b>                         | Temperatura esterna Outside temperature                                                                                                                  |
| <b>Ti °C</b>                         | Temperatura della cella Coldroom temperature                                                                                                             |
| <b>Qo (W)</b>                        | Potenza frigorifera Refrigerating power                                                                                                                  |
| <b>V<sub>100</sub> m<sup>3</sup></b> | Volume della cella consigliato in m <sup>3</sup> con spessore isolamento 100 mm Suggested room volume in m <sup>3</sup> with insulation thickness 100 mm |



| codice<br>code                               |                         | LBQS5450 | LBQS5500 | LBQS6600 | LBQS6650 | LBQS6800 | LBQS71000 | LBQS81250 | LBQS81500 |
|----------------------------------------------|-------------------------|----------|----------|----------|----------|----------|-----------|-----------|-----------|
| forma<br>form                                |                         |          |          |          |          |          |           |           |           |
| tensione<br>voltage                          | V/ph/Hz                 | 400/3/50 | 400/3/50 | 400/3/50 | 400/3/50 | 400/3/50 | 400/3/50  | 400/3/50  | 400/3/50  |
| max ass. el. in marcia<br>Max Run Abs        | kW                      | 5,51     | 6,69     | 8,73     | 10,06    | 12,23    | 15,99     | 18,31     | 21,52     |
| tipo di compressore<br>compressor type       |                         | S        | S        | S        | S        | S        | S         | S         | S         |
| volume spostato<br>displacement              | m <sup>3</sup> /h 50 Hz | 18,05    | 23,13    | 27,33    | 31,88    | 38,06    | 48,82     | 56,87     | 75,83     |
| tipo di sbrinamento<br>defrost type          |                         | ER       | ER       | ER       | ER       | ER       | ER        | ER        | ER        |
| assorbim. in sbrinam.<br>abs. during defrost | kW                      | 3,85     | 3,85     | 6,1      | 6,1      | 6,1      | 7,6       | 10,1      | 11,1      |

| CONDENSATORE<br>CONDENSER |  | 12H1 | 13H1 | 22A1 | 23A1 | 23A1 | 33A1 | 33E1 | 35E1 |
|---------------------------|--|------|------|------|------|------|------|------|------|
|---------------------------|--|------|------|------|------|------|------|------|------|

| ventole<br>fans                                 | n°x Ø<br>(mm)     | 1X400 | 1X400 | 1X500 | 1X500 | 1X500 | 1X500 | 1X630 | 1X630 |
|-------------------------------------------------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| assorbim. ventole cad.<br>fan absorption (each) | n°x W             | 1X160 | 1X160 | 1X640 | 1X640 | 1X640 | 1X640 | 1X160 | 1X160 |
| portata aria<br>airflow                         | m <sup>3</sup> /h | 3950  | 3640  | 6530  | 6220  | 6220  | 6480  | 9090  | 8230  |

| EVAPORATORE<br>EVAPORATOR |  | EC2A35 | EC2B35 | EC3A35 | EC3A35 | EB1A50 | EB1B50 | EB2A45 | EB2B45 |
|---------------------------|--|--------|--------|--------|--------|--------|--------|--------|--------|
|---------------------------|--|--------|--------|--------|--------|--------|--------|--------|--------|

| ventole<br>fans                                 | n°x Ø<br>(mm)     | 2x350 | 2x350 | 3x350 | 3x350 | 1x500 | 1x500 | 2x450 | 2x450 |
|-------------------------------------------------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| assorbim. ventole cad.<br>fan absorption (each) | n°x W             | 2x140 | 2x140 | 3x140 | 3x140 | 1x680 | 1x680 | 2x305 | 2x305 |
| portata aria<br>airflow                         | m <sup>3</sup> /h | 4310  | 4170  | 6700  | 6700  | 6110  | 5970  | 8900  | 8600  |
| freccia aria<br>air-throw                       | m                 | 14    | 14    | 14    | 14    | 20    | 20    | 19    | 19    |

## PESO UNITÀ - UNIT WEIGHT

| massa<br>mass | kg | UC = 226<br>UE = 50 | UC = 231<br>UE = 54 | UC = 240<br>UE = 70 | UC = 266<br>UE = 70 | UC = 271<br>UE = 90 | UC = 327<br>UE = 96 | UC = 398<br>UE = 115 | UC = 425<br>UE = 123 |
|---------------|----|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|----------------------|
|---------------|----|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|----------------------|

## TUBAZIONI - PIPING

| aspirazione<br>suction | mm | 22 | 22 | 28 | 28 | 28 | 35 | 42 | 42 |
|------------------------|----|----|----|----|----|----|----|----|----|
| liquido<br>liquid      | mm | 10 | 10 | 12 | 12 | 12 | 16 | 16 | 16 |

## TABELLA DI SELEZIONE SELECTION TABLE

spessore isolamento insulation thickness = 100 mm

|       |       | LBQS5450 |                                 | LBQS5500 |                                 | LBQS6600 |                                 | LBQS6650 |                                 | LBQS6800 |                                 | LBQS71000 |                                 | LBQS81250 |                                 | LBQS81500 |                                 |
|-------|-------|----------|---------------------------------|----------|---------------------------------|----------|---------------------------------|----------|---------------------------------|----------|---------------------------------|-----------|---------------------------------|-----------|---------------------------------|-----------|---------------------------------|
| Ti °C | Ta °C | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)   | V <sub>100</sub> m <sup>3</sup> | Qo (W)    | V <sub>100</sub> m <sup>3</sup> | Qo (W)    | V <sub>100</sub> m <sup>3</sup> | Qo (W)    | V <sub>100</sub> m <sup>3</sup> |
| -5°C  | 32°C  | 4332     | 54,4                            | 5485     | 72,9                            | 6203     | 84,6                            | 7435     | 105,1                           | 9309     | 137,1                           | 11397     | 173,9                           | 13033     | 203,4                           | 16493     | 267,3                           |
|       | 43°C  | 3560     | 42,3                            | 4536     | 57,7                            | 5119     | 67,0                            | 6201     | 84,6                            | 7743     | 110,3                           | 9512      | 140,6                           | 10871     | 164,5                           | 13914     | 219,5                           |
| 0°C   | 32°C  | 5017     | 65,3                            | 6355     | 87,1                            | 7164     | 100,6                           | 8592     | 124,8                           | 10751    | 162,4                           | 13113     | 204,8                           | 15095     | 241,2                           | 18965     | 313,9                           |
|       | 43°C  | 4147     | 51,5                            | 5283     | 69,6                            | 5885     | 79,4                            | 7162     | 100,5                           | 8902     | 130,1                           | 10954     | 166,0                           | 12520     | 194,1                           | 15896     | 256,1                           |
| 5°C   | 32°C  | 5861     | 79,0                            | 7422     | 104,9                           | 8317     | 120,1                           | 9927     | 147,9                           | 12389    | 191,7                           | 15242     | 244,0                           | 17482     | 285,9                           | 21782     | 367,6                           |
|       | 43°C  | 4853     | 62,7                            | 6158     | 83,9                            | 6907     | 96,3                            | 8269     | 119,2                           | 10211    | 152,9                           | 12650     | 196,4                           | 14470     | 229,7                           | 18184     | 299,1                           |
| -18°C | 32°C  | 4559     | 63,4                            | 5577     | 84,5                            | 7028     | 116,7                           | 8320     | 147,4                           | 10327    | 198,0                           | 11710     | 234,8                           | 13962     | 297,1                           | 18006     | 413,2                           |
|       | 43°C  | 3738     | 47,4                            | 4639     | 65,0                            | 5674     | 86,6                            | 6783     | 111,1                           | 8122     | 142,6                           | 9232      | 169,9                           | 11124     | 219,1                           | 14359     | 308,3                           |
| -22°C | 32°C  | 3996     | 52,3                            | 4926     | 70,8                            | 6118     | 96,2                            | 7303     | 123,1                           | 8908     | 161,8                           | 10251     | 196,1                           | 12269     | 250,0                           | 15998     | 355,1                           |
|       | 43°C  | 3193     | 37,3                            | 4012     | 52,6                            | 4874     | 69,8                            | 5877     | 90,9                            | 7138     | 119,3                           | 8138      | 142,9                           | 9829      | 185,1                           | 13001     | 270,2                           |
| -25°C | 32°C  | 3529     | 43,4                            | 4370     | 59,6                            | 5436     | 81,5                            | 6462     | 103,8                           | 7999     | 139,6                           | 9075      | 166,0                           | 10922     | 213,7                           | 14188     | 303,4                           |
|       | 43°C  | 2564     | 26,1                            | 3581     | 44,4                            | 4348     | 59,2                            | 5232     | 77,2                            | 6387     | 102,2                           | 7273      | 122,4                           | 8798      | 159,1                           | 11787     | 236,9                           |





| codice<br>code                                  |                         | <b>LBXB6800</b> | <b>LBXB71000</b> | <b>LBXB81250</b> |
|-------------------------------------------------|-------------------------|-----------------|------------------|------------------|
| forma<br>form                                   |                         |                 |                  |                  |
| tensione<br>voltage                             | V/ph/Hz                 | 400/3/50        | 400/3/50         | 400/3/50         |
| max ass. el. in marcia<br>Max Run Abs           | kW                      | 6,34            | 8,86             | 12,62            |
| tipo di compressore<br>compressor type          |                         | SB              | SB               | SB               |
| volume spostato<br>displacement                 | m <sup>3</sup> /h 50 Hz | 32,3            | 45,9             | 69,3             |
| tipo di sbrinamento<br>defrost type             |                         | ER              | ER               | ER               |
| assorbim. in sbrinam.<br>abs. during defrost    | kW                      | 6,1             | 7,6              | 11,1             |
| <b>CONDENSATORE<br/>CONDENSER</b>               |                         | <b>23A1</b>     | <b>33A1</b>      | <b>35E1</b>      |
| ventole<br>fans                                 | n°x Ø<br>(mm)           | 1x500           | 1x500            | 1x630            |
| assorbim. ventole cad.<br>fan absorption (each) | n°x W                   | 1x640           | 1x640            | 1x610            |
| portata aria<br>airflow                         | m <sup>3</sup> /h       | 6220            | 6480             | 8230             |
| <b>EVAPORATORE<br/>EVAPORATOR</b>               |                         | <b>EB1A50</b>   | <b>EB1B50</b>    | <b>EB2B45</b>    |
| ventole<br>fans                                 | n°x Ø<br>(mm)           | 1x500           | 1x500            | 2x450            |
| assorbim. ventole cad.<br>fan absorption (each) | n°x W                   | 1x640           | 1x640            | 2x305            |
| portata aria<br>airflow                         | m <sup>3</sup> /h       | 6110            | 5970             | 8600             |
| freccia aria<br>air-throw                       | m                       | 20              | 20               | 19               |

**PESO UNITÀ - UNIT WEIGHT**

|               |    |                     |                     |                      |
|---------------|----|---------------------|---------------------|----------------------|
| massa<br>mass | kg | UC = 288<br>UE = 90 | UC = 347<br>UE = 96 | UC = 401<br>UE = 123 |
|---------------|----|---------------------|---------------------|----------------------|

**TUBAZIONI - PIPING**

|                        |    |    |    |    |
|------------------------|----|----|----|----|
| aspirazione<br>suction | mm | 28 | 28 | 35 |
| liquido<br>liquid      | mm | 12 | 12 | 12 |

**TABELLA DI SELEZIONE SELECTION TABLE**

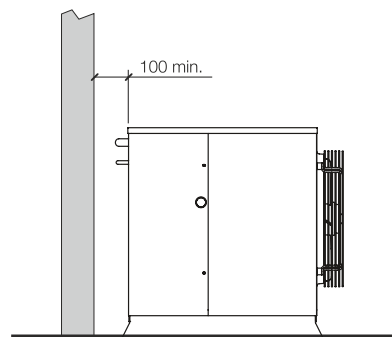
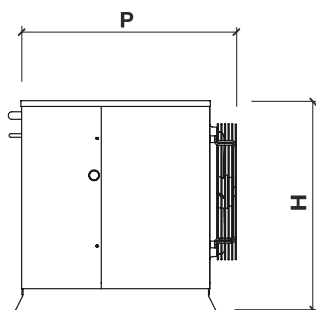
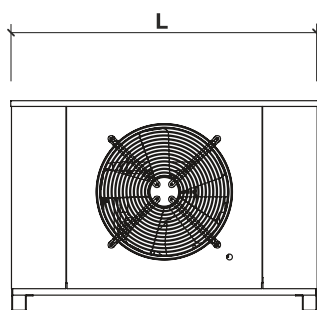
|       |       | <b>LBXB6800</b> | <b>LBXB71000</b> | <b>LBXB81250</b> |
|-------|-------|-----------------|------------------|------------------|
| Ti °C | Ta °C | Qo (W)          | Qo (W)           | Qo (W)           |
| -30°C | 32°C  | 5823            | 6871             | 10566            |
|       | 43°C  | 5623            | 6526             | 9984             |
| -35°C | 32°C  | 4936            | 5716             | 8985             |
|       | 43°C  | 4769            | 5418             | 8493             |
| -40°C | 32°C  | 4122            | 4670             | 7553             |
|       | 43°C  | 3970            | 4414             | 7156             |

**Legenda Legend**

|                                      |                                                                                                                                                          |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>UC</b>                            | Unità Condensanti Condensing unit                                                                                                                        |
| <b>UE</b>                            | Unità Evaporante Evaporating unit                                                                                                                        |
| <b>Ta °C</b>                         | Temperatura esterna Outside temperature                                                                                                                  |
| <b>Ti °C</b>                         | Temperatura della cella Coldroom temperature                                                                                                             |
| <b>Qo (W)</b>                        | Potenza frigorifera Refrigerating power                                                                                                                  |
| <b>V<sub>100</sub> m<sup>3</sup></b> | Volume della cella consigliato in m <sup>3</sup> con spessore isolamento 100 mm Suggested room volume in m <sup>3</sup> with insulation thickness 100 mm |

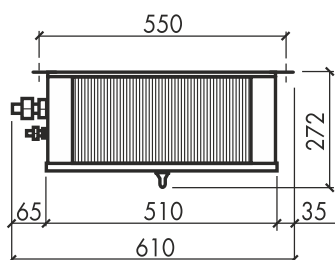


Dimensioni - Dimensions Z2X1 - Z3K1 - 02M1 - 03M1

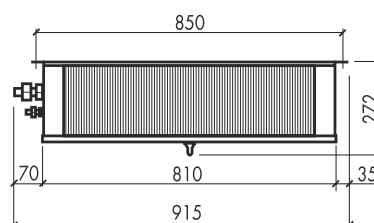


| form | L   | P   | H   |
|------|-----|-----|-----|
| Z2X1 | 745 | 515 | 485 |
| Z3K1 | 745 | 555 | 485 |
| 02M1 | 852 | 600 | 586 |
| 03M1 | 852 | 600 | 586 |

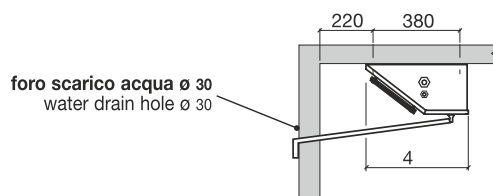
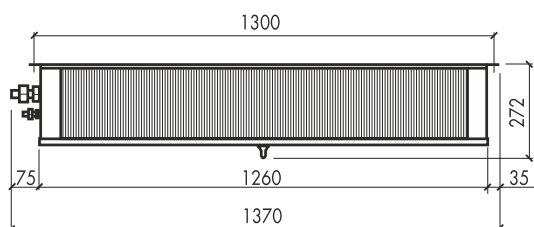
Dimensioni - Dimensions  
ES1A25



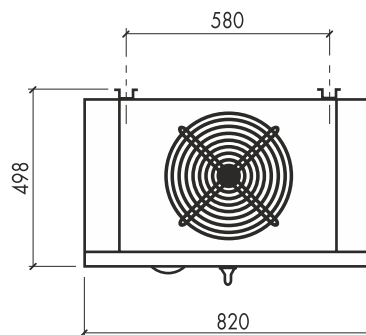
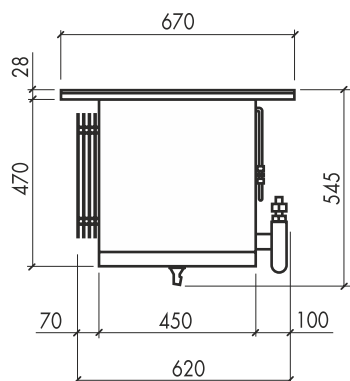
Dimensioni - Dimensions  
ES2A25



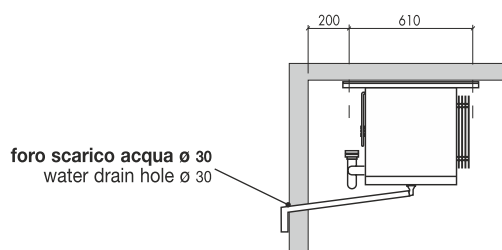
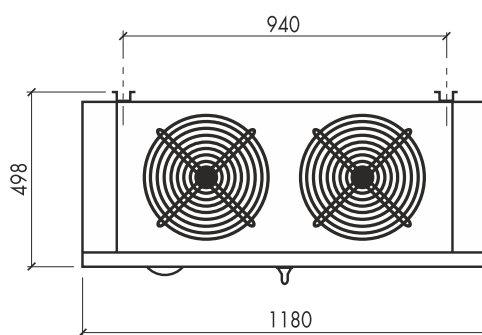
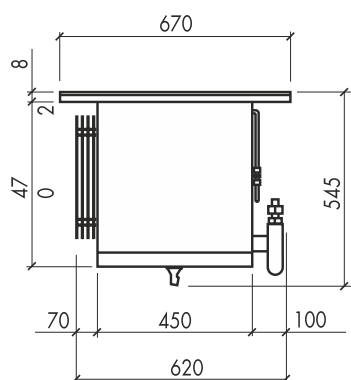
Dimensioni - Dimensions  
ES3A25



Dimensioni - Dimensions EC1A35 - EC1B35

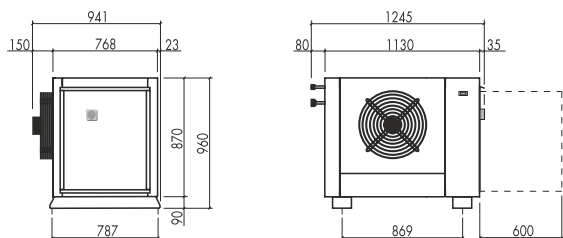


Dimensioni - Dimensions EC2A30 - EC2A35

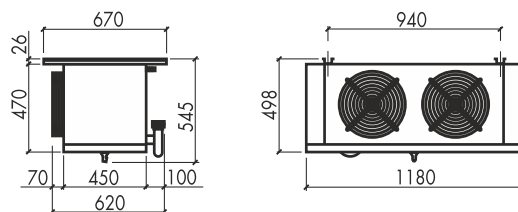




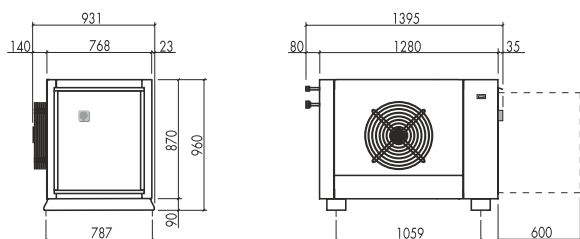
Dimensioni - Dimensions 12H1 - 13H1



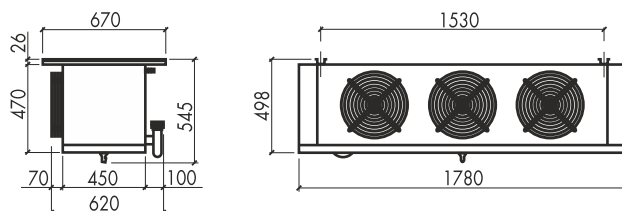
Dimensioni - Dimensions EC2A30 EC2A35 - EC2B35



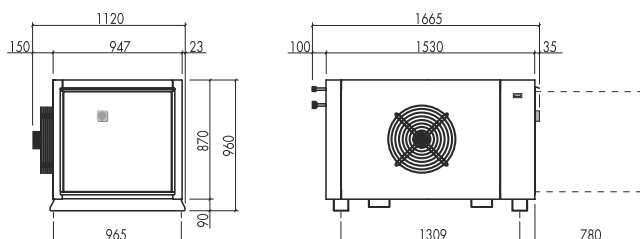
Dimensioni - Dimensions 22A1 - 23A1



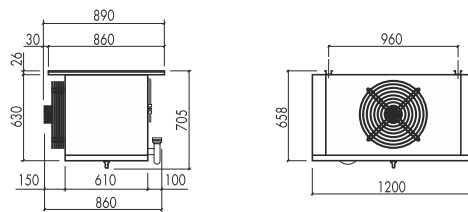
Dimensioni - Dimensions EC3A35



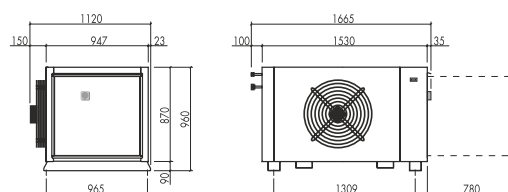
Dimensioni - Dimensions 33A1



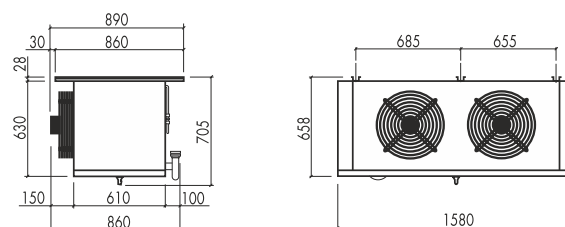
Dimensioni - Dimensions  
EB1A50 - EB1B50



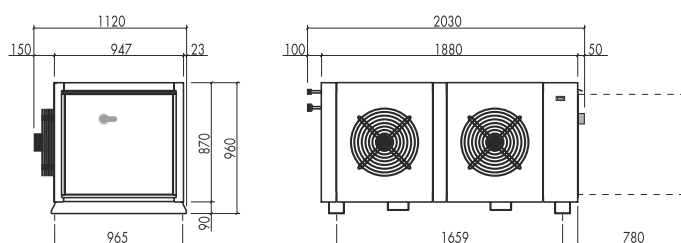
Dimensioni - Dimensions 33E1 - 35E1



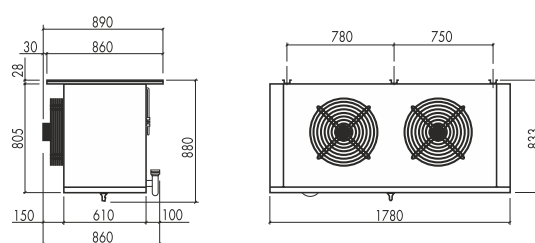
Dimensioni - Dimensions EB2A45 - EB2B45



Dimensioni - Dimensions 54A2 - 55B2 - 55C2



Dimensioni - Dimensions EB2A50 - EB2B50  
EB2C50



LETTURA CODICE - CODE DESCRIPTION - DESCRIPTION DE CODE  
CODEBESCHREIBUNG - LECTURA DE CODIGOS

|      |          |          |          |          |          |          |          |          |          |          |          |
|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| COD. | <b>L</b> | <b>B</b> | <b>N</b> | <b>S</b> | <b>4</b> | <b>2</b> | <b>5</b> | <b>0</b> | <b>X</b> | <b>1</b> | <b>4</b> |
|      | 1        |          | 2        | 3        | 4        |          | 5        |          |          | 6        |          |

|   |                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Serie<br>Range<br>Série<br>Baureihe<br>Serie                                                                                                                                         | <b>LB</b> = Bi-block Industriale<br><b>LB</b> = Industrial bi-block<br><b>LB</b> = Bi-block Industriel<br><b>LB</b> = Zweiblockindustrie<br><b>LB</b> = Bi-bloque Industriai Serie                                                                                                                           |
| 2 | Temperatura esercizio/Refrigerante<br>Working temperature/Refrigerant<br>Température de travail/Refrigerant<br>Betriebstemperatur/Kalteltemittel<br>Temperatura trabajo/Refrigerante | <b>N</b> = R404A, +5°C / -5°C - <b>K</b> = R404A, -18°C / -25°C<br><b>Q</b> = R404A, +5°C / -25°C - <b>X</b> = R404A, -30°C / -40°C<br><b>L</b> = R134a, +5°C / -5 °C<br><b>M</b> = R407F, +5°C / -5°C - <b>B</b> = R407F, -18°C / -25°C<br><b>P</b> = R407F, +5°C / -25°C - <b>C</b> = R407F, -30°C / -40°C |
| 3 | Tipo compressore<br>Compressor type<br>Type compresseur<br>Kompressor<br>Tipo de compresor                                                                                           | <b>H</b> = Ermetico - <b>S</b> = Semiermetico<br><b>H</b> = Hermetic - <b>S</b> = Semihermetic<br><b>H</b> = Hermétique - <b>S</b> = Semi-hermétique<br><b>H</b> = Hermetisch - <b>S</b> = Halbhermetischen<br><b>H</b> = Hermético - <b>S</b> = Semihermético                                               |
| 4 | Forma<br>Form<br>Forme<br>Form<br>Forme                                                                                                                                              | <b>4-5-6-7-8</b>                                                                                                                                                                                                                                                                                             |
| 5 | Modello / (Potenza)<br>Model/(Capacity)<br>Modèle/(Puissance)<br>Modell/(Leistung)<br>Modelo / (Potencia)                                                                            | <b>050+ ..... + 1500</b>                                                                                                                                                                                                                                                                                     |
| 6 | Numero progressivo di servizio<br>Progressive service number<br>Numèro progressif de travail<br>Änderungsnummer<br>Número progresivo de servicio                                     |                                                                                                                                                                                                                                                                                                              |

Descrizioni, dati tecnici e immagini sono da considerarsi indicativi e non vincolanti. Technoblock srl pubblica il presente documento su base tecnica e commerciale, riservandosi il diritto di modificare il contenuto senza preavviso, lasciandone inalterati i contenuti basilari.

©Copyright Technoblock srl Tutti i diritti sono riservati

È vietata qualsiasi utilizzazione, totale o parziale, dei contenuti inseriti nel presente documento, ivi inclusa la memorizzazione, riproduzione, rielaborazione, diffusione o distribuzione dei contenuti stessi mediante qualunque piattaforma tecnologica, supporto o rete telematica, senza previa autorizzazione scritta di Technoblock srl

Descriptions, technical data and pictures are to be considered as a guide and not binding. Technoblock srl reserves the right to bring such a literature, on technical and commercial grounds, at any time and without notice, any change supposed to be convenient, still being unchanged the basic features of the equipments.

©Copyright Technoblock srl All rights reserved

No part of these pages, either text or image may be used for any purpose other than personal use. Therefore, reproduction, modification, storage in a retrieval system or retransmission, in any form or by any means, electronic, mechanical or otherwise, for reasons other than personal use, is strictly prohibited without prior written permission by Technoblock srl



**CONDIZIONI DI CALCOLO VOLUMI - VOLUME CALCULATION CONDITIONS**

| Versione<br>Version                     | Tc<br>°C | d<br>Kg / m <sup>3</sup> | Csp<br>Kcal / Kg °C | h  | sp<br>mm | Ti<br>°C | mov<br>% |
|-----------------------------------------|----------|--------------------------|---------------------|----|----------|----------|----------|
| <b>N</b><br>Media temp.<br>Medium Temp. | 0        | 250                      | 0,77                | 18 | 80 - 100 | 25       | 10       |
| <b>K</b><br>Bassa temp.<br>Low Temp.    | -20      | 250                      | 0,44                | 18 | 80 - 100 | -5       | 10       |

**Legenda Legend**

|            |                                                               |
|------------|---------------------------------------------------------------|
| <b>N</b>   | Temperatura esercizio - Working temperature: +5 °C / -5 °C    |
| <b>K</b>   | Temperatura esercizio - Working temperature: -18 °C / -25 °C  |
| <b>Tc</b>  | Temperatura cella - Coldroom temperature                      |
| <b>d</b>   | Densità di carico - Load density                              |
| <b>Csp</b> | Calore specifico prodotto - Product specific heat             |
| <b>h</b>   | Ore processo prodotto Prod. - Process duration                |
| <b>sp</b>  | Spessore isolamento - Insulation thickness                    |
| <b>Ti</b>  | Temperatura di introduzione prodotto - Product entering temp. |
| <b>mov</b> | Movimentazione giornaliera prodotto - Product daily turnover  |



Il team TECHNOBLOCK progetta e produce da anni soluzioni per la refrigerazione industriale. Partendo da un piccolo staff di persone lazienda oggi può contare su una rete di vendita dislocata in tutto il mondo. Il brand Technoblock infatti è conosciuto ovunque grazie alla varietà e flessibilità dei prodotti offerti. Si tratta sia di soluzioni già pronte a catalogo sia soluzioni create su misura per soddisfare in pieno le richieste del cliente. Technoblock presenta la sua gamma di unità refrigeranti

Varietà nei tipi di applicazione.

Vasta scelta di modelli per ogni serie.

Qualità dei materiali usati.

Cura nella costruzione e nel collaudo.

Particolare attenzione allo sviluppo di nuove tecniche, all'impiego di nuovi materiali, secondo normativa europea.

Questo fa sì che il prodotto sia affidabile, sicuro e, soprattutto, sia la giusta soluzione per ogni vostra richiesta.

Facile trovare l'unità che fa al caso vostro avendo a disposizione questa scelta:

Applicazione a parete (tampone e accavallato), a soffitto, split e bi-block.

Compressore ermetico o semiermetico, a vite, scroll.

Condensazione ad aria o ad acqua.

Espansione del gas mediante tubo capillare o valvola termostatica.

Controllo di tipo elettromeccanico o elettronico, a bordo macchina o su pannello remoto.

Sbrinamento ad aria, a gas caldo, elettrico con resistenze.

Evacuazione dell'acqua di condensa mediante bacinella di evaporazione o diretta.

Le nostre unità sono costruite con strutture in lamiera d'acciaio protetta contro la corrosione e verniciata a polvere epossidica o in lamiera d'acciaio plastificata. Esse danno il massimo rendimento grazie alle batterie alettate dei condensatori e degli evaporatori realizzate in rame ed alluminio ed aventi una superficie di scambio termico scrupolosamente dimensionata; sono inoltre dotate di compressori e ventilatori con protezioni termiche interne.



Since years, Technoblock team projects and produces industrial refrigerating systems. Started with a small group of people, today Technoblock can count on a worldwide sales network. The Technoblock brand is known all over the world thanks to the variety and flexible range of products. Our solutions can be both hand-listed and custom-made, to fully meet our customers requests.

Technoblock presents its range of refrigerating units

Variety of applications.

Wide choice of models for each series.

Use of high quality materials and components.

Attention to manufacturing and testing.

Special care to the development of new technical solutions, to the use of new materials, as well as to the compliance with European standards.

This makes our products reliable, safe and, above all, the right solution to all your requirements.

It will be extremely easy for you to find the best solution that will suit you best having all these available options:

Wall-mounted (either through-the-wall or straddle-type), roof-mounted, split type or bi-block units.

Hermetic or semi-hermetic compressor, screw compressor or scroll compressor.

Air-cooled or water-cooled condenser.

Gas expansion by means of capillary tube or thermal expansion valve.

Electromechanical or electronic control, either built-in or on a remote control panel.

Defrost system by air, hot gas or electric heaters.

Direct drainage of condensate or self water evaporation in a specific tray.

Our units are built with a frame made either of epoxy powder painted steel sheet protected against corrosion or plastic-coated steel sheet. The high efficiency of our units is due to the carefully sized heat exchange surface of their finned copper/aluminium condenser and evaporator coils. They are also provided with compressors and fan motors with internal thermal protections.



## MONOBLOKI CHŁODNICZE TECHNOBLOCK

MISTRAL



**Monobloki chłodnicze**  
do montażu na ścianę i dach



BORA



**Urządzenia typu**  
**splity i bi-bloki**  
dla chłodnictwa  
komercyjnego i przemysłowego



NORTE



**Agregaty skraplające**  
**jedno i wielospężarkowe**  
dla małego i przemysłowego chłodnictwa



TAKU



**Agregaty wody lodowej**  
**Chillery**



ALIZÈ



**Chłodnice i skraplacze**



GHIBLI



**Specjalne urządzenia chłodnicze**

Pompy ciepła dedykowane do ogrzewania basenów  
Sezonowanie i suszenie  
Urządzenia do przechowywania wina





# technoblock



## BORA LB Units

*Colder  
than ever*

### MONOBLOKI CHŁODNICZE TECHNOBLOCK



PED Certification  
Bureau Veritas Italia SpA  
n° 1370



member of



[www.nivis.com.pl](http://www.nivis.com.pl)

**NIVIS**

ul. Janusza Kusocińskiego 4  
58-100 Świdnica, dolnośląskie

☎ Biuro i Magazyn Budynek A  
ul. Międzyńska 4 50-514 Wrocław

✉ [kontakt@nivis.com.pl](mailto:kontakt@nivis.com.pl)  
☎ +48 888 438 422



**TECHNOBLOCK SRL**

S.S. CISA - KM162 36/A 46029 SUZZARA (MN) ITALY

TEL. +39 0376 537011 FAX. +39 0376 537110

[WWW.TECHNOBLOCK.COM](http://WWW.TECHNOBLOCK.COM) [TECHNOBLOCK@TECHNOBLOCK.IT](mailto:TECHNOBLOCK@TECHNOBLOCK.IT)

0DEP226 February 2017