

## DLE6.5CN Energy-optimized LBP/MBP Compressor R290 115-127V 60Hz

### General

|                       |          |
|-----------------------|----------|
| Code number           | 102H3792 |
| Approvals             | UL984    |
| Compressors on pallet | 100      |

### Application

| Application                                    | LBP/MBP |    |           |  |
|------------------------------------------------|---------|----|-----------|--|
| Frequency                                      | Hz      | 50 | 60        |  |
| Evaporating temperature                        | °F      | –  | -31 to 45 |  |
| Voltage range                                  | V       | –  | 95 - 135  |  |
| Max. condensing temperature continuous (short) | °F      | –  | 149 (149) |  |
| Max. winding temperature continuous (short)    | °F      | –  | 257 (275) |  |

### Cooling requirements

| Frequency               | Hz | 50  |     |     | 60             |                |     |
|-------------------------|----|-----|-----|-----|----------------|----------------|-----|
| Application             |    | LBP | MBP | HBP | LBP            | MBP            | HBP |
| 90°F                    |    | —   | —   | —   | F <sub>2</sub> | F <sub>2</sub> | —   |
| 100°F                   |    | —   | —   | —   | F <sub>2</sub> | F <sub>2</sub> | —   |
| 110°F                   |    | —   | —   | —   | F <sub>2</sub> | F <sub>2</sub> | —   |
| Remarks on application: |    |     |     |     |                |                |     |

### Motor

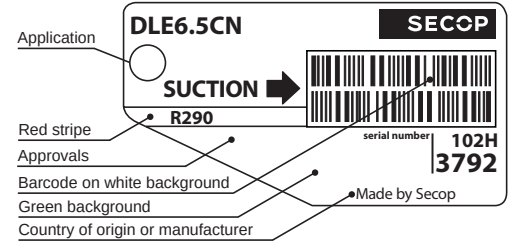
|                                           |                |      |      |  |
|-------------------------------------------|----------------|------|------|--|
| Motor type                                | CSIR/RSIR/RSCR |      |      |  |
| LRA (rated after 4 sec. UL984), HST   LST | A              | 22.8 | 16.7 |  |
| Cut in Current, HST   LST                 | A              | 22.8 | 29.0 |  |
| Resistance, main   start winding (77°F)   | Ω              | 2.5  | 5.0  |  |

### Design

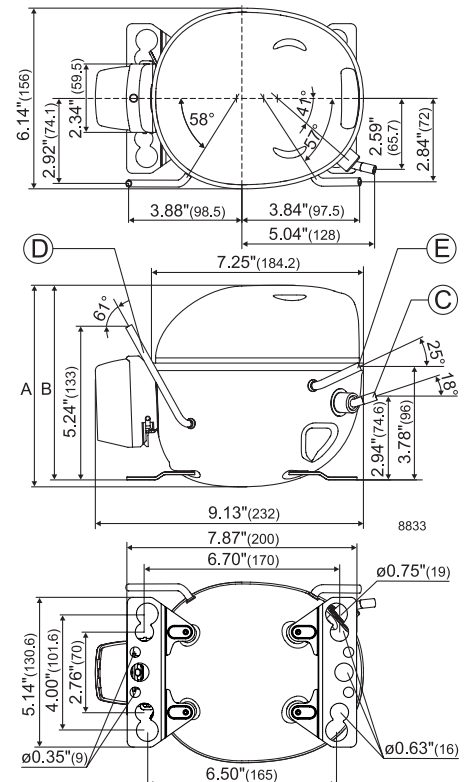
|                                     |        |                   |
|-------------------------------------|--------|-------------------|
| Displacement                        | cu.in  | 0.40              |
| Oil quantity (type)                 | fl.oz. | 7.8 (polyolester) |
| Maximum refrigerant charge          | oz.    | 5.3               |
| Free gas volume in compressor       | fl.oz. | 44.8              |
| Weight without electrical equipment | lbs.   | 18.7              |

### Dimensions

|                      |                            |                      |                   |
|----------------------|----------------------------|----------------------|-------------------|
| Height               | inch                       | A                    | 6.90              |
|                      |                            | B                    | 6.64              |
|                      |                            | B1                   | –                 |
|                      |                            | B2                   | –                 |
| Suction connector    | location, I.D. in.   angle | C                    | 0.320-0.327   18° |
|                      | material   comment         | Copper   Rubber plug |                   |
| Process connector    | location, I.D. in.   angle | D                    | 0.252-0.259   60° |
|                      | material   comment         | Copper   Rubber plug |                   |
| Discharge connector  | location, I.D. in.   angle | E                    | 0.252-0.259   25° |
|                      | material   comment         | Copper   Rubber plug |                   |
| Oil cooler connector | location, I.D. in.   angle | F                    | –                 |
|                      | material   comment         | –                    |                   |
| Remarks:             |                            |                      |                   |



- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s (compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary
- SG = Suction gas cooling normally sufficient
- = not applicable in this area



**ASHRAE LBP**115V, 60Hz, fan cooling F<sub>2</sub>

|                    |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |    |    |
|--------------------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|----|----|
| Evap. temp. in °F  | -49 | -40 | -30  | -20  | -13  | -10  | 0    | 10   | 14   | 20   | 30   | 32   | 40   | 41   | 45   | 50 | 59 |
| Capacity in BTU/h  |     |     | 722  | 984  | 1188 | 1282 | 1631 | 2048 | 2238 | 2551 | 3156 | 3291 | 3881 | 3961 | 4294 |    |    |
| Power cons. in W   |     |     | 191  | 221  | 242  | 251  | 281  | 311  | 323  | 341  | 372  | 378  | 403  | 406  | 419  |    |    |
| Current cons. in A |     |     | 2.83 | 2.97 | 3.09 | 3.14 | 3.33 | 3.55 | 3.63 | 3.77 | 4.02 | 4.07 | 4.27 | 4.30 | 4.40 |    |    |
| EER in BTU/Wh      |     |     | 3.78 | 4.46 | 4.91 | 5.11 | 5.81 | 6.59 | 6.92 | 7.47 | 8.48 | 8.7  | 9.63 | 9.75 | 10.3 |    |    |

**ASHRAE MBP/HBP**115V, 60Hz, fan cooling F<sub>2</sub>

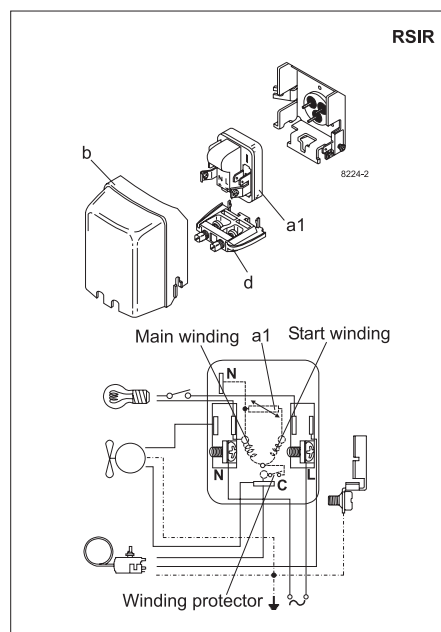
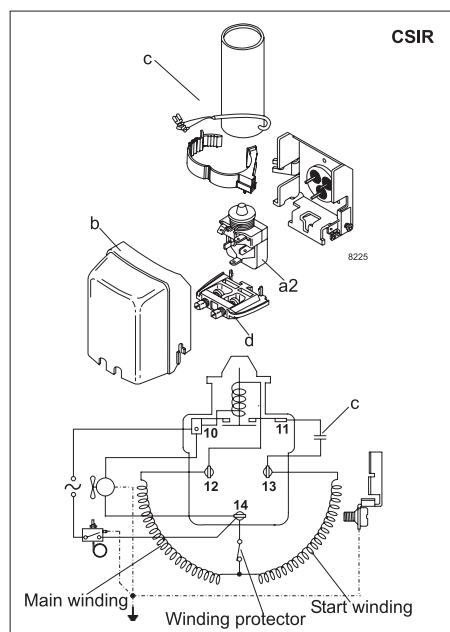
|                    |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |    |    |
|--------------------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|----|----|
| Evap. temp. in °F  | -49 | -40 | -30  | -20  | -13  | -10  | 0    | 10   | 14   | 20   | 30   | 32   | 40   | 41   | 45   | 50 | 59 |
| Capacity in BTU/h  |     |     | 645  | 880  | 1061 | 1145 | 1456 | 1827 | 1996 | 2274 | 2810 | 2930 | 3452 | 3522 | 3817 |    |    |
| Power cons. in W   |     |     | 189  | 219  | 239  | 248  | 278  | 308  | 320  | 338  | 368  | 374  | 398  | 401  | 413  |    |    |
| Current cons. in A |     |     | 2.83 | 2.97 | 3.09 | 3.14 | 3.33 | 3.55 | 3.63 | 3.77 | 4.02 | 4.07 | 4.27 | 4.30 | 4.40 |    |    |
| EER in BTU/Wh      |     |     | 3.41 | 4.02 | 4.43 | 4.61 | 5.24 | 5.94 | 6.24 | 6.73 | 7.64 | 7.84 | 8.67 | 8.78 | 9.23 |    |    |

**EN 12900 LBP**115V, 60Hz, fan cooling F<sub>2</sub>

|                    |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |    |    |
|--------------------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|----|----|
| Evap. temp. in °F  | -49 | -40 | -30  | -20  | -13  | -10  | 0    | 10   | 14   | 20   | 30   | 32   | 40   | 41   | 45   | 50 | 59 |
| Capacity in W      |     |     | 223  | 295  | 353  | 380  | 479  | 598  | 651  | 740  | 909  | 946  | 1109 | 1131 | 1222 |    |    |
| Power cons. in W   |     |     | 195  | 220  | 236  | 243  | 267  | 291  | 300  | 314  | 337  | 342  | 361  | 363  | 373  |    |    |
| Current cons. in A |     |     | 2.81 | 2.92 | 3.00 | 3.04 | 3.18 | 3.33 | 3.39 | 3.49 | 3.65 | 3.69 | 3.82 | 3.84 | 3.91 |    |    |
| COP in W/W         |     |     | 1.14 | 1.35 | 1.49 | 1.56 | 1.79 | 2.06 | 2.17 | 2.35 | 2.69 | 2.77 | 3.07 | 3.11 | 3.28 |    |    |

**EN 12900 MBP**115V, 60Hz, fan cooling F<sub>2</sub>

|                    |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |    |    |
|--------------------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|----|----|
| Evap. temp. in °F  | -49 | -40 | -30  | -20  | -13  | -10  | 0    | 10   | 14   | 20   | 30   | 32   | 40   | 41   | 45   | 50 | 59 |
| Capacity in W      |     |     | 204  | 272  | 325  | 350  | 443  | 553  | 604  | 686  | 844  | 879  | 1033 | 1053 | 1139 |    |    |
| Power cons. in W   |     |     | 198  | 224  | 243  | 251  | 277  | 303  | 313  | 329  | 356  | 361  | 382  | 385  | 396  |    |    |
| Current cons. in A |     |     | 2.82 | 2.94 | 3.03 | 3.08 | 3.23 | 3.40 | 3.47 | 3.58 | 3.76 | 3.8  | 3.96 | 3.98 | 4.06 |    |    |
| COP in W/W         |     |     | 1.03 | 1.21 | 1.34 | 1.40 | 1.60 | 1.83 | 1.93 | 2.08 | 2.37 | 2.44 | 2.70 | 2.73 | 2.88 |    |    |



| Accessories for         | DLE6.5CN                 | Figure | Code number |
|-------------------------|--------------------------|--------|-------------|
| ePTC starting device    | 1/4 in. spade connectors | a1     | 103N0058    |
| Starting relay          | 1/4 in. spade connectors | a2     | 117U7013    |
| Start. capacitor 240 µF | 1/4 in. spade connectors | c      | 117U5023    |
| Cover                   |                          | b      | 103N0492    |
| Cord relief             |                          | d      | 103N1010    |

| Test conditions         | EN 12900      |       | ASHRAE |       |
|-------------------------|---------------|-------|--------|-------|
|                         | LBP           | MBP   | LBP    | MBP   |
| Condensing temperature  | 104°F         | 113°F | 130°F  | 130°F |
| Ambient temperature     | 90°F          | 90°F  | 90°F   | 90°F  |
| Suction gas temperature | 68°F          | 68°F  | 90°F   | 95°F  |
| Liquid temperature      | no subcooling |       | 90°F   | 115°F |

| Mounting accessories     |            | Code number |
|--------------------------|------------|-------------|
| Bolt joint for one comp. | Ø: 3/4 in. | 118-1949    |
| Bolt joint for one comp. | Ø: 5/8 in. | 118-1946    |
| Snap-on for one comp.    | Ø: 5/8 in. | 118-1947    |

**ASHRAE LBP**115V, 60Hz, RC 15 µF, ePTC consumption incl., fan cooling F<sub>2</sub>

|                    |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |    |    |
|--------------------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|----|----|
| Evap. temp. in °F  | -49 | -40 | -30  | -20  | -13  | -10  | 0    | 10   | 14   | 20   | 30   | 32   | 40   | 41   | 45   | 50 | 59 |
| Capacity in BTU/h  |     |     | 736  | 1000 | 1206 | 1302 | 1656 | 2077 | 2267 | 2580 | 3181 | 3315 | 3896 | 3974 | 4301 |    |    |
| Power cons. in W   |     |     | 182  | 210  | 229  | 238  | 266  | 294  | 305  | 321  | 349  | 354  | 376  | 379  | 389  |    |    |
| Current cons. in A |     |     | 2.68 | 2.82 | 2.93 | 2.98 | 3.16 | 3.35 | 3.43 | 3.55 | 3.77 | 3.81 | 3.99 | 4.01 | 4.10 |    |    |
| EER in BTU/Wh      |     |     | 4.05 | 4.77 | 5.26 | 5.48 | 6.23 | 7.07 | 7.44 | 8.03 | 9.12 | 9.35 | 10.4 | 10.5 | 11.0 |    |    |

**ASHRAE MBP/HBP**115V, 60Hz, RC 15 µF, ePTC consumption incl., fan cooling F<sub>2</sub>

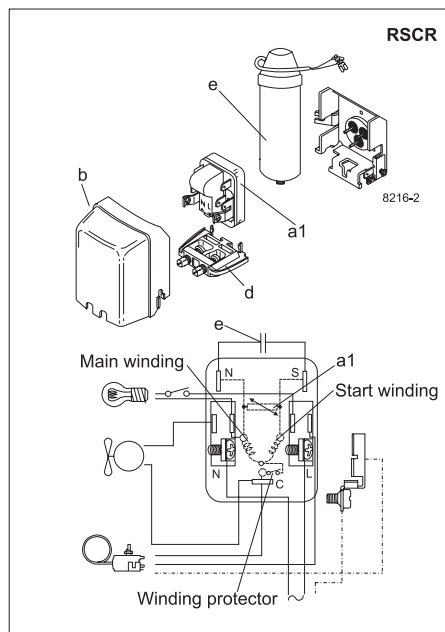
|                    |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |    |    |
|--------------------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|----|----|
| Evap. temp. in °F  | -49 | -40 | -30  | -20  | -13  | -10  | 0    | 10   | 14   | 20   | 30   | 32   | 40   | 41   | 45   | 50 | 59 |
| Capacity in BTU/h  |     |     | 658  | 894  | 1078 | 1163 | 1478 | 1853 | 2022 | 2300 | 2833 | 2951 | 3465 | 3534 | 3823 |    |    |
| Power cons. in W   |     |     | 180  | 208  | 227  | 235  | 263  | 291  | 302  | 318  | 345  | 350  | 371  | 374  | 385  |    |    |
| Current cons. in A |     |     | 2.68 | 2.82 | 2.93 | 2.98 | 3.16 | 3.35 | 3.43 | 3.55 | 3.77 | 3.81 | 3.99 | 4.01 | 4.10 |    |    |
| EER in BTU/Wh      |     |     | 3.66 | 4.31 | 4.75 | 4.94 | 5.62 | 6.38 | 6.71 | 7.23 | 8.21 | 8.43 | 9.33 | 9.45 | 9.94 |    |    |

**EN 12900 LBP**115V, 60Hz, RC 15 µF, ePTC consumption incl., fan cooling F<sub>2</sub>

|                    |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |    |    |
|--------------------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|----|----|
| Evap. temp. in °F  | -49 | -40 | -30  | -20  | -13  | -10  | 0    | 10   | 14   | 20   | 30   | 32   | 40   | 41   | 45   | 50 | 59 |
| Capacity in W      |     |     | 227  | 300  | 359  | 386  | 486  | 606  | 660  | 748  | 916  | 953  | 1113 | 1134 | 1224 |    |    |
| Power cons. in W   |     |     | 185  | 208  | 224  | 231  | 253  | 275  | 283  | 296  | 316  | 321  | 337  | 339  | 347  |    |    |
| Current cons. in A |     |     | 2.67 | 2.77 | 2.85 | 2.88 | 3.01 | 3.15 | 3.20 | 3.29 | 3.43 | 3.46 | 3.57 | 3.58 | 3.64 |    |    |
| COP in W/W         |     |     | 1.22 | 1.44 | 1.60 | 1.67 | 1.92 | 2.21 | 2.33 | 2.53 | 2.89 | 2.97 | 3.31 | 3.35 | 3.53 |    |    |

**EN 12900 MBP**115V, 60Hz, RC 15 µF, ePTC consumption incl., fan cooling F<sub>2</sub>

|                    |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |    |    |
|--------------------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|----|----|
| Evap. temp. in °F  | -49 | -40 | -30  | -20  | -13  | -10  | 0    | 10   | 14   | 20   | 30   | 32   | 40   | 41   | 45   | 50 | 59 |
| Capacity in W      |     |     | 208  | 276  | 331  | 356  | 450  | 561  | 611  | 694  | 851  | 886  | 1036 | 1057 | 1141 |    |    |
| Power cons. in W   |     |     | 188  | 213  | 230  | 237  | 262  | 286  | 296  | 310  | 334  | 338  | 357  | 359  | 368  |    |    |
| Current cons. in A |     |     | 2.68 | 2.79 | 2.88 | 2.92 | 3.06 | 3.21 | 3.27 | 3.37 | 3.53 | 3.56 | 3.69 | 3.71 | 3.78 |    |    |
| COP in W/W         |     |     | 1.10 | 1.30 | 1.44 | 1.50 | 1.72 | 1.96 | 2.07 | 2.24 | 2.55 | 2.62 | 2.90 | 2.94 | 3.10 |    |    |



| Accessories for                | DLE6.5CN                 | Figure | Code number |
|--------------------------------|--------------------------|--------|-------------|
| ePTC starting device           | 1/4 in. spade connectors | a1     | 103N0058    |
| Run capacitor 15 µF (optional) | 1/4 in. spade connectors | e      | 117-7118    |
| Cover                          |                          | b      | 103N0492    |
| Cord relief                    |                          | d      | 103N1010    |

| Test conditions         | EN 12900      |       | ASHRAE |       |
|-------------------------|---------------|-------|--------|-------|
|                         | LBP           | MBP   | LBP    | MBP   |
| Condensing temperature  | 104°F         | 113°F | 130°F  | 130°F |
| Ambient temperature     | 90°F          | 90°F  | 90°F   | 90°F  |
| Suction gas temperature | 68°F          | 68°F  | 90°F   | 95°F  |
| Liquid temperature      | no subcooling |       | 90°F   | 115°F |

| Mounting accessories                | Code number |
|-------------------------------------|-------------|
| Bolt joint for one comp. Ø: 3/4 in. | 118-1949    |
| Bolt joint for one comp. Ø: 5/8 in. | 118-1946    |
| Snap-on for one comp. Ø: 5/8 in.    | 118-1947    |

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