



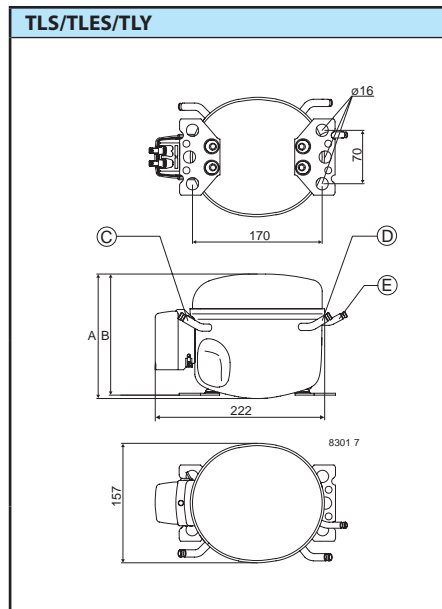
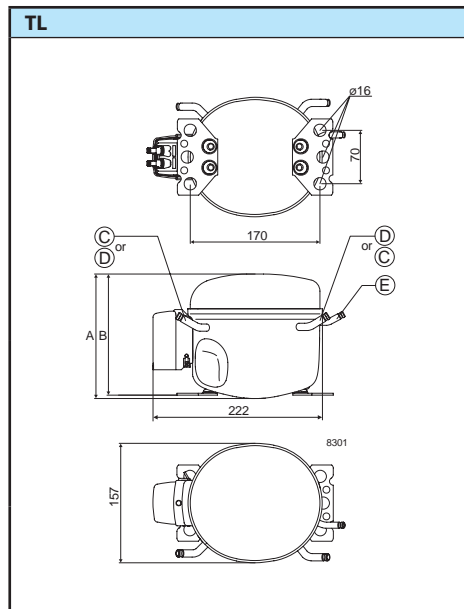
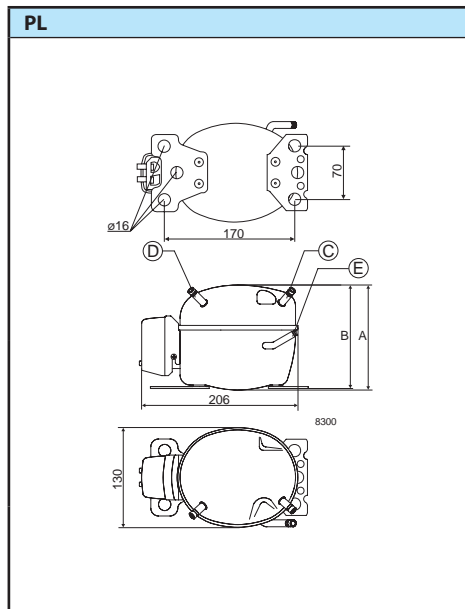
R134a

Danfoss Compressors

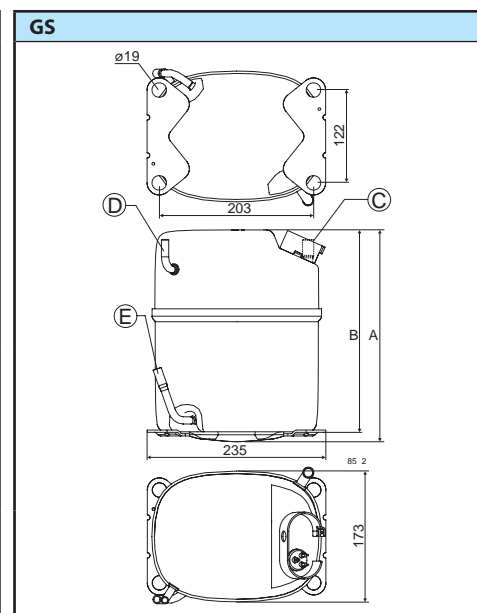
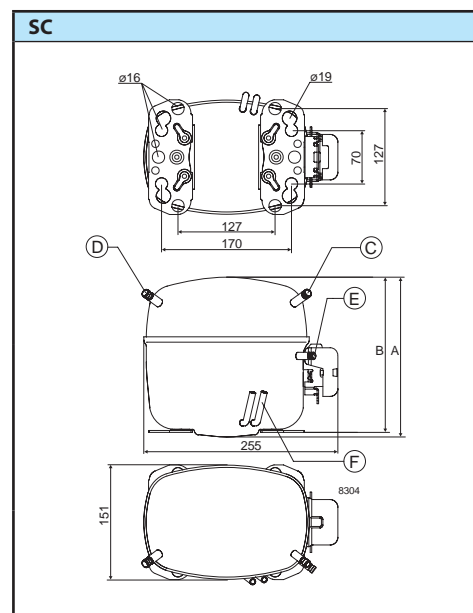
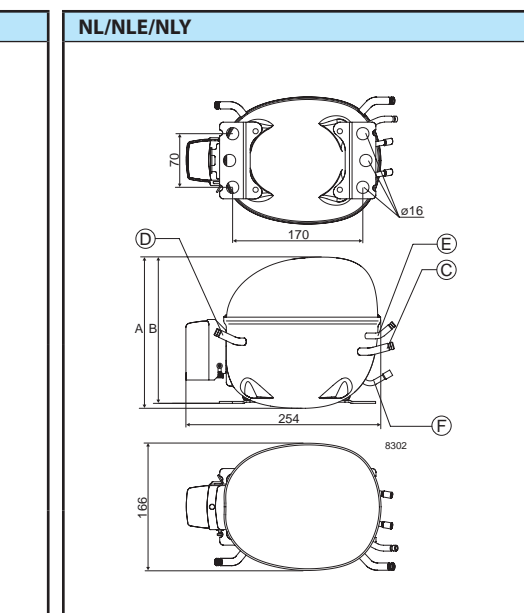
LBP/MBP programme

220-240 V • 50 Hz & 60 Hz

| Level | Application | Compressor | Code numbers | | EN 12900 (CECOMAF) | | | | | | | EN 12900 (CECOMAF) at | | | ASHRAE subcooled at | | | | | | |
|--------------------------------------|------------------|-------------|--------------|------------------------------|------------------------------|------|------|------|------|------|------|-------------------------------|----------------|---------------------------------|-----------------------------------|-------|----------------|------|-------------|-------|-----------|
| | | | Com-pressor | Com-pressor with oil cooling | Capacity [W] | | | | | | | LBP rating point -25°C / 55°C | | | LBP rating point -23.3°C / 54.4°C | | | | | | |
| | | | | | Evaporating temperature [°C] | | | | | | | Cooling Capacity | COP without RC | COP with RC | Cooling Capacity | | COP without RC | | COP with RC | | |
| | | | | | -35 | -30 | -20 | -15 | -10 | -5 | 0 | | | | [W] | [W/W] | [W/W] | [W] | [kcal/h] | [W/W] | [kcal/Wh] |
| Standard | MBP | PL20F | 101G0100 | | | 25 | 37 | 50 | 65 | 83 | 16 | 0.38 | | 23 | 20 | 0.54 | 0.47 | | | | |
| | | PL35F | 101G0202 | | | 45 | 60 | 79 | 101 | 125 | 32 | 0.64 | | 44 | 38 | 0.85 | 0.73 | | | | |
| | | PL50F (HST) | 101G0222 | | | 56 | 74 | 95 | 120 | 148 | 40 | 0.69 | | 56 | 48 | 0.92 | 0.79 | | | | |
| | | TL2.5F | 102G4200 | | | 47 | 65 | 86 | 110 | 137 | 32 | 0.59 | | 45 | 39 | 0.79 | 0.68 | | | | |
| | | TL3F | 102G4300 | | | 60 | 82 | 108 | 138 | 173 | 42 | 0.64 | | 59 | 51 | 0.85 | 0.73 | | | | |
| | | NL6.1MF | 105G6660 | | | 141 | 189 | 245 | 312 | 390 | 245 | 1.31 | | | | | | | | | |
| | | NL7.3MF | 105G6772 | | | 179 | 236 | 304 | 385 | 480 | 304 | 1.34 | | | | | | | | | |
| | | NL8.4MF | 105G6879 | | | 213 | 277 | 353 | 445 | 553 | 353 | 1.36 | | | | | | | | | |
| | | NL10MF | 105G6885 | 105G6887 | | | 266 | 346 | 441 | 554 | 687 | 441 | 1.37 | | | | | | | | |
| | | NL11MF | 105G6151 | | | 292 | 380 | 485 | 609 | 756 | 485 | 1.35 | | ■ MBP rating point -10°C / 55°C | | | | | | | |
| | | GS26MFX | 107B0700 | | | 754 | 989 | 1266 | 1591 | 1970 | 1069 | 1.45 | | | | | | | | | |
| | GS34MFX | 107B0701 | | | 998 | 1296 | 1596 | 2063 | 2550 | 1393 | 1.42 | | | | | | | | | | |
| | LBP | PL50F | 101G0220 | | 14 | 26 | 56 | 74 | 95 | | 40 | 0.67 | | 56 | 48 | 0.89 | 0.77 | | | | |
| | | TL4F | 102G4400 | | 31 | 44 | 81 | 107 | 137 | | 61 | 0.75 | | 83 | 72 | 0.98 | 0.84 | | | | |
| | | TL5F | 102G4501 | | 43 | 60 | 110 | 144 | 183 | | 82 | 0.81 | | 112 | 97 | 1.05 | 0.90 | | | | |
| | | TLS5F | 102G4520 | | 48 | 71 | 131 | 170 | 216 | | 98 | 0.88 | | 134 | 116 | 1.14 | 0.98 | | | | |
| | | TLS6F | 102G4620 | | 58 | 77 | 139 | 183 | 235 | | 104 | 0.87 | | 142 | 122 | 1.13 | 0.97 | | | | |
| | | TLS7F | 102G4720 | | 66 | 89 | 160 | 208 | 264 | | 120 | 0.88 | | 163 | 140 | 1.14 | 0.98 | | | | |
| | | NL6F | 105G6606 | | 52 | 77 | 151 | 200 | 258 | | 110 | 0.93 | | 151 | 130 | 1.21 | 1.04 | | | | |
| | | NL7F | 105G6706 | | 71 | 99 | 182 | 238 | 303 | | 136 | 0.93 | | 186 | 160 | 1.20 | 1.03 | | | | |
| | | NL8F | 105G6822 | | 82 | 112 | 194 | 249 | 317 | | 149 | 0.97 | | 201 | 173 | 1.24 | 1.08 | | | | |
| | | NL9F | 105G6802 | 105G6812 | 74 | 111 | 207 | 268 | 340 | | 155 | 0.93 | | 213 | 183 | 1.21 | 1.03 | | | | |
| | | NL11F | 105G6900 | 105G6910 | 102 | 146 | 268 | 351 | 453 | | 200 | 0.94 | | 274 | 236 | 1.22 | 1.05 | | | | |
| | | SC15F | 104G8500 | 104G8510 | 100 | 155 | 325 | 439 | 573 | 726 | | 230 | 0.84 | | 320 | 275 | 1.10 | 0.95 | | | |
| | SC18F | 104G8800 | 104G8810 | 129 | 194 | 388 | 518 | 669 | 842 | | 280 | 0.90 | | 387 | 334 | 1.17 | 1.01 | | | | |
| | SC21F | 104G8100 | 104G8110 | 186 | 246 | 454 | 602 | 780 | 987 | | 335 | 0.88 | | 458 | 394 | 1.14 | 0.98 | | | | |
| | Energy-optimized | MBP | PLE35F | 101G0201 | | | 45 | 60 | 79 | 100 | 125 | 32 | | 0.73 | 44 | 38 | | | 0.96 | 0.83 | |
| | | | PLE50F | 101G0221 | | | 58 | 76 | 97 | 122 | 150 | 42 | | 0.81 | 58 | 50 | | | 1.07 | 0.92 | |
| | | | TLES3F | 102G4310 | | | 70 | 93 | 121 | 155 | 193 | 50 | 0.81 | 0.83 | 69 | 59 | 1.07 | 0.82 | 1.10 | 0.95 | |
| | | LBP | NLE10MF | 105G6888 | | 88 | 137 | 262 | 343 | 440 | 554 | 688 | 194 | 0.98 | 1.00 | 268 | 231 | 1.28 | 1.10 | 1.31 | 1.12 |
| | | | TLES4F | 102G4410 | | 33 | 50 | 95 | 124 | 160 | | 70 | 0.88 | 0.93 | 96 | 83 | 1.15 | 0.99 | 1.22 | 1.05 | |
| | | | TLES5F | 102G4510 | | 50 | 72 | 130 | 169 | 216 | | 98 | 0.93 | 0.97 | 134 | 115 | 1.21 | 1.04 | 1.27 | 1.09 | |
| | | | TLES6F | 102G4610 | | 58 | 77 | 139 | 183 | 235 | | 104 | 0.93 | 0.97 | 142 | 122 | 1.20 | 1.03 | 1.26 | 1.09 | |
| TLES7F | | | 102G4710 | | 66 | 89 | 160 | 208 | 264 | | 120 | 0.94 | 0.98 | 163 | 140 | 1.22 | 1.05 | 1.28 | 1.10 | | |
| NLE7F | | | 105G6702 | | 68 | 97 | 182 | 238 | 302 | | 135 | 1.03 | 1.06 | 185 | 158 | 1.33 | 1.14 | 1.36 | 1.17 | | |
| NLE8FK | | | 105G6827 | | 82 | 112 | 194 | 249 | 317 | | 149 | 1.03 | 1.06 | 201 | 172 | 1.32 | 1.14 | 1.36 | 1.17 | | |
| NLE9F | 105G6803 | | 82 | 112 | 207 | 271 | 346 | | 154 | 1.03 | 1.06 | 210 | 181 | 1.32 | 1.14 | 1.36 | 1.17 | | | | |
| High Energy-opt. | LBP | TLY4F | 102G4441 | | 35 | 52 | 97 | 127 | 162 | | 72 | 0.94 | 0.99 | 98 | 84 | 1.22 | 1.05 | 1.29 | 1.11 | | |
| | | TLY5FK | 102G4547 | | 50 | 72 | 130 | 169 | 216 | | 98 | 0.96 | 1.01 | 134 | 115 | 1.24 | 1.07 | 1.31 | 1.13 | | |
| | | NLY5.5FK | 105G6631 | | 58 | 87 | 166 | 218 | 280 | | 123 | | 1.18 | 169 | 145 | | | 1.54 | 1.33 | | |
| | | NLY6F | 105G6630 | | 80 | 104 | 182 | 235 | 299 | | 138 | | 1.17 | 187 | 161 | | | 1.50 | 1.29 | | |
| | | NLY7F | 105G6730 | | 94 | 121 | 206 | 265 | 334 | | 158 | | 1.18 | 213 | 183 | | | 1.52 | 1.31 | | |
| NLY9FK | 105G6830 | | 94 | 130 | 230 | 297 | 380 | | 175 | | 1.15 | 237 | 204 | | | 1.49 | 1.28 | | | | |
| Tropical & Energy-optimized tropical | LBP | TLS3FT | 102G4324 | | 21 | 34 | 69 | 92 | 120 | | 50 | 0.80 | | 69 | 59 | 1.06 | 0.91 | | | | |
| | | TLS4FT | 102G4424 | | 27 | 43 | 88 | 117 | 152 | | 63 | 0.72 | | 88 | 76 | 0.96 | 0.83 | | | | |
| | | TLS5FT | 102G4524 | | 48 | 71 | 131 | 170 | 216 | | 98 | 0.86 | | 134 | 116 | 1.12 | 0.97 | | | | |
| | | TLES5.7FT.3 | 102G4615 | | 66 | 90 | 156 | 200 | 253 | | 120 | 1.00 | 1.04 | 163 | 140 | 1.36 | 1.17 | 1.41 | 1.22 | | |
| | | NL6FT | 105G6628 | | 60 | 84 | 152 | 198 | 253 | | 115 | 0.93 | | 156 | 134 | 1.21 | 1.04 | | | | |
| | | NL6.1FT | 105G6620 | | 60 | 84 | 152 | 198 | 253 | | 115 | 0.93 | | 156 | 134 | 1.21 | 1.04 | | | | |
| | | NL7FT | 105G6728 | 105G6738 | 71 | 100 | 181 | 235 | 299 | | 136 | 0.94 | | 185 | 159 | 1.21 | 1.04 | | | | |
| | | NL7.3FT | 105G6726 | 105G6731 | 71 | 100 | 181 | 235 | 299 | | 136 | 0.94 | | 185 | 159 | 1.21 | 1.04 | | | | |
| | | NL8.4FT | 105G6865 | 105G6866 | 87 | 120 | 213 | 275 | 350 | | 162 | 0.95 | | 219 | 189 | 1.23 | 1.06 | | | | |
| | | NL9FT | 105G6828 | 105G6838 | 87 | 120 | 213 | 275 | 350 | | 162 | 0.95 | | 219 | 189 | 1.23 | 1.06 | | | | |
| | | NL10FT | 105G6829 | 105G6839 | 115 | 158 | 274 | 352 | 444 | | 210 | 0.98 | | 284 | 245 | 1.25 | 1.09 | | | | |
| | | SC12FT | 104G8205 | 104G8215 | 103 | 163 | 314 | 408 | 517 | 645 | | 233 | 0.88 | | 320 | 276 | 1.15 | 0.99 | | | |
| | | SC15FT | 104G8505 | 104G8515 | 126 | 197 | 376 | 489 | 620 | 772 | | 280 | 0.90 | | 385 | 331 | 1.18 | 1.02 | | | |
| SC18FTX | 104G8805 | | 144 | 229 | 437 | 567 | 719 | 896 | | 325 | 0.89 | | 445 | 383 | 1.16 | 1.00 | | | | | |
| SC21FTX | 104G8105 | | 192 | 296 | 553 | 713 | 901 | 1119 | | 415 | 0.97 | | 567 | 488 | 1.26 | 1.08 | | | | | |



| Displacement | Recommended compressor cooling at ambient temperature | | | Voltage and frequencies | Electrical Equipment | | | | | | | | | | Compressor | |
|--------------|---|------------------|-------------------|-------------------------|--|----------|---------------------------------------|----------|------------------------------|------------------------|----------------|--------------------|-----------------|-------------|----------------------------------|-------------|
| | | | | | LST (RSIR) | | LST (RSCR) | | Run capacitor 4 µF | | HST (CSIR) | | HST (CSR) | LST/HST | | |
| | | | | | PTC Starting device without RC connector | | PTC Starting device with RC connector | | 1) optional 2) compulsory | | Starting relay | Starting capacitor | Starting device | Cord relief | | Cover |
| | | | | | spades | | spades | | spades | | spades | | spades | | | |
| [cm³] | 32°C | 38°C | 43°C | 6.3 mm | 4.8 mm | 6.3 mm | 4.8 mm | 6.3 mm | 4.8 mm | 6.3 mm | 6.3 mm | 6.3 mm | | | | |
| 1.41 | S | S | | 1 | 103N0011 | 103N0018 | | | | | | | | 103N1010 | 103N0491 | PL20F |
| 2.00 | S | S | | 1 | 103N0011 | 103N0018 | | | | | | | | 103N1010 | 103N0491 | PL35F |
| 2.50 | F ₂ | F ₂ | | 1 | | | | | | | 117U6021 | 117U5014 | | 103N1010 | 103N0491 | (HST) PL50F |
| 2.61 | S | S | | 1 | 103N0011 | 103N0018 | | | | | | | | 103N1010 | 103N2010 | TL2.5F |
| 3.13 | S | S | | 1 | 103N0011 | 103N0018 | | | | | 117U6007 | 117U5014 | | 103N1010 | 103N2010 | TL3F |
| 6.13 | F ₁ | F ₁ | F ₁ | 2/3 | 103N0011 | 103N0018 | | | | | 117U6015 | 117U5015 | | 103N1010 | 103N2011 | NL6.1MF |
| 7.27 | F ₁ | F ₁ | F ₁ | 2/3 | 103N0011 | 103N0018 | | | | | 117U6016 | 117U5015 | | 103N1010 | 103N2011 | NL7.3MF |
| 8.35 | F ₁ | F ₁ | F ₁ | 2/3 | 103N0011 | 103N0018 | | | | | 117U6016 | 117U5015 | | 103N1010 | 103N2011 | NL8.4MF |
| 10.10 | O/F ₁ | O/F ₁ | O/F ₁ | 2/3 | 103N0011 | 103N0018 | | | | | 117U6022 | 117U5018 | | 103N1010 | 103N2011 | NL10MF |
| 11.15 | F ₂ | F ₂ | F ₂ | 2 | 103N0011 | 103N0018 | | | | | 117U6022 | 117U5018 | | 103N1010 | 103N2011 | NL11MF |
| 26.30 | F ₂ | F ₂ | F ₂ | 1 | | | | | | | | | | 117-7055 | 107B9100/9001/9104 ³⁾ | GS26MFX |
| 33.80 | F ₂ | F ₂ | F ₂ | 1 | | | | | | | | | | 117-7056 | 107B9100/9001/9104 ³⁾ | GS34MFX |
| 2.50 | S | S | | 1 | 103N0011 | 103N0018 | | | | | | | | 103N1010 | 103N0491 | PL50F |
| 3.86 | S | S | | 1 | 103N0011 | 103N0018 | | | | | 117U6009 | 117U5014 | | 103N1010 | 103N2010 | TL4F |
| 5.08 | S | S | | 1 | 103N0011 | 103N0018 | | | | | 117U6004 | 117U5014 | | 103N1010 | 103N2010 | TL5F |
| 5.08 | S | S | | 1 | 103N0011 | 103N0018 | | | | | 117U6004 | 117U5014 | | 103N1010 | 103N2010 | TL55F |
| 5.70 | S | S | | 1 | 103N0011 | 103N0018 | | | | | 117U6004 | 117U5014 | | 103N1010 | 103N2010 | TL56F |
| 6.49 | S | S* | | 1 | 103N0011 | 103N0018 | 103N0016 | 103N0021 | 117-7117 | 117-7119 | 117U6000 | 117U5014 | | 103N1010 | 103N2010 | TL57F |
| 6.13 | S | S | | 1 | 103N0011 | 103N0018 | | | | | 117U6004 | 117U5015 | | 103N1010 | 103N2010 | NL6F |
| 7.27 | S | S | | 1 | 103N0011 | 103N0018 | | | | | 117U6000 | 117U5015 | | 103N1010 | 103N2010 | NL7F |
| 7.95 | S | S | | 1 | 103N0011 | 103N0018 | | | | | 117U6001 | 117U5015 | | 103N1010 | 103N2010 | NL8F |
| 8.35 | S | S | | 1 | 103N0011 | 103N0018 | | | | | 117U6001 | 117U5015 | | 103N1010 | 103N2010 | NL9F |
| 11.15 | O/F ₁ | O/F ₁ | | 1 | 103N0011 | 103N0018 | | | | | 117U6002 | 117U5015 | | 103N1010 | 103N2010 | NL11F |
| 15.28 | O/F ₁ | O/F ₁ | | 1 | 103N0002 | | | | | | 117U6003 | 117U5017 | | 103N1004 | 103N2009 | SC15F |
| 17.69 | O/F ₁ | O/F ₁ | | 1 | | | | | | | 117U6005 | 117U5017 | | 103N1004 | 103N2009 | SC18F |
| 20.95 | O/F ₁ | O/F ₁ | | 1 | | | | | | | 117U6019 | 117U5017 | | 103N1004 | 103N2009 | SC21F |
| 2.00 | S* | S* | | 1 | | | 103N0016 | 103N0021 | 117-7117 ²⁾ | 117-7119 ²⁾ | | | | 103N1010 | 103N0491 | PLE35F |
| 2.50 | S* | S* | | 1 | | | 103N0016 | 103N0021 | 117-7117 ²⁾ | 117-7119 ²⁾ | | | | 103N1010 | 103N0491 | PLE50F |
| 3.13 | S | S | S | 1 | 103N0011 | 103N0018 | 103N0016 | 103N0021 | 117-7117 ¹⁾ | 117-7119 ¹⁾ | | | | 103N1010 | 103N2010 | TLES3F |
| 10.10 | F ₁ | F ₁ | F ₁ | 1 | 103N0011 | 103N0018 | | | | | 117U6003 | 117U5015 | | 103N1010 | 103N2011 | NLE10MF |
| 3.86 | S | S | S | 1 | 103N0011 | 103N0018 | 103N0016 | 103N0021 | 117-7117 ¹⁾ | 117-7119 ¹⁾ | | | | 103N1010 | 103N2010 | TLES4F |
| 5.08 | S | S | S*** | 1 | 103N0011 | 103N0018 | 103N0016 | 103N0021 | 117-7117 ¹⁾ | 117-7119 ¹⁾ | | | | 103N1010 | 103N2010 | TLES5F |
| 5.70 | S | S* | S* | 1 | 103N0011 | 103N0018 | 103N0016 | 103N0021 | 117-7117 ¹⁾ | 117-7119 ¹⁾ | | | | 103N1010 | 103N2010 | TLES6F |
| 6.49 | S | S* | | 1 | 103N0011 | 103N0018 | 103N0016 | 103N0021 | 117-7117 ¹⁾ | 117-7119 ¹⁾ | | | | 103N1010 | 103N2010 | TLES7F |
| 7.27 | S | S | | 1 | 103N0011 | 103N0018 | 103N0016 | 103N0021 | 117-7117 ¹⁾ | 117-7119 ¹⁾ | | | | 103N1010 | 103N2010 | NLE7F |
| 7.95 | S | S | | 1 | 103N0011 | 103N0018 | 103N0016 | 103N0021 | 117-7117 ¹⁾ | 117-7119 ¹⁾ | | | | 103N1010 | 103N2010 | NLE8FK |
| 8.35 | S | S | | 1 | 103N0011 | 103N0018 | 103N0016 | 103N0021 | 117-7117 ¹⁾ | 117-7119 ¹⁾ | | | | 103N1010 | 103N2010 | NLE9F |
| 3.86 | S | S | S | 1 | 103N0011 | 103N0018 | 103N0016 | 103N0021 | 117-7117 ¹⁾ | 117-7119 ¹⁾ | | | | 103N1010 | 103N2010 | TLY4F |
| 5.08 | S | S | S* | 1 | 103N0011 | 103N0018 | 103N0016 | 103N0021 | 117-7117 ¹⁾ | 117-7119 ¹⁾ | | | | 103N1010 | 103N2010 | TLY5FK |
| 6.13 | S* | S* | S* | 1 | | | 103N0016 | 103N0021 | 117-7117 ²⁾ | 117-7119 ²⁾ | | | | 103N1010 | 103N2010 | NLY5.5FK |
| 6.70 | S* | S* | S* | 1 | | | 103N0016 | 103N0021 | 117-7117 ²⁾ | 117-7119 ²⁾ | | | | 103N1010 | 103N2010 | NLY6F |
| 7.27 | S* | S* | S* | 1 | | | 103N0016 | 103N0021 | 117-7117 ²⁾ | 117-7119 ²⁾ | | | | 103N1010 | 103N2010 | NLY7F |
| 8.35 | S* | S* | S* | 1 | | | 103N0016 | 103N0021 | 117-7117 ²⁾ | 117-7119 ²⁾ | | | | 103N1010 | 103N2010 | NLY9FK |
| 3.13 | S | S | S | 2 | 103N0011 | 103N0018 | | | | | 117U6007 | 117U5014 | | 103N1010 | 103N2010 | TLS3FT |
| 3.86 | S | S | S | 2 | 103N0011 | 103N0018 | | | | | 117U6004 | 117U5014 | | 103N1010 | 103N2010 | TLS4FT |
| 5.08 | S | S | S | 2 | 103N0011 | 103N0018 | | | | | 117U6000 | 117U5014 | | 103N1010 | 103N2010 | TLS5FT |
| 5.70 | S | S | S | 2 | 103N0011 | 103N0018 | 103N0016 | 103N0021 | 117-7117 ¹⁾ | 117-7119 ¹⁾ | 117U6004 | 117U5014 | | 103N1010 | 103N2010 | TLES5.7FT.3 |
| 6.13 | S | S | S | 2/3 | 103N0011 | 103N0018 | | | | | 117U6000 | 117U5015 | | 103N1010 | 103N2010 | NL6FT |
| 6.13 | S | S | S | 2 | 103N0011 | 103N0018 | | | | | 117U6000 | 117U5015 | | 103N1010 | 103N2010 | NL6.1FT |
| 7.27 | S | S | O/F ₁ | 2 | 103N0011 | 103N0018 | | | | | 117U6001 | 117U5015 | | 103N1010 | 103N2010 | NL7FT |
| 7.27 | S | O/F ₁ | O/F ₁ | 2 | 103N0011 | 103N0018 | | | | | 117U6001 | 117U5015 | | 103N1010 | 103N2010 | NL7.3FT |
| 8.35 | S | O/F ₁ | O/F ₁ | 2 | 103N0011 | 103N0018 | | | | | 117U6001 | 117U5015 | | 103N1010 | 103N2010 | NL8.4FT |
| 8.35 | S | O/F ₁ | O/F ₁ | 2 | 103N0011 | 103N0018 | | | | | 117U6015 | 117U5015 | | 103N1010 | 103N2010 | NL9FT |
| 10.10 | S | O/F ₁ | O/F ₁ | 2 | 103N0011 | 103N0018 | | | | | 117U6002 | 117U5015 | | 103N1010 | 103N2010 | NL10FT |
| 12.87 | O/F ₁ | O/F ₁ | F ₂ ** | 2/3 | 103N0002 | | | | | | 117U6003 | 117U5017 | | 103N1004 | 103N2009 | SC12FT |
| 15.28 | O/F ₁ | O/F ₁ | F ₂ ** | 2/3 | 103N0002 | | | | | | 117U6005 | 117U5017 | | 103N1004 | 103N2009 | SC15FT |
| 17.69 | F ₂ | F ₂ | F ₂ | 2/3 | | | | | | | 117U6019 | 117U5017 | | 103N1004 | 103N2009 | SC18FTX |
| 20.95 | F ₂ | F ₂ | F ₂ | 2 | | | | | | | 117U6019 | 117U5017 | | 103N1004 | 103N2009 | SC21FTX |



Hermetic Compressors R134a • 220-240 V • 50 Hz & 60 Hz LBP/MBP Programme

Applications

- LBP:** Low Back Pressure
HBP: High Back Pressure
MBP: Medium Back Pressure

Motor types

- RSIR:** Resistant Start Induction Run
RSCR: Resistant Start Capacitor Run
CSIR: Capacitor Start Induction Run
CSR: Capacitor Start Run

Starting devices

- LST:** Low Starting Torque
 LST is used with capillary tube control and pressure equalizing. (Pressure equalizing may exceed 10 minutes). The PTC starting device requires 5 minutes cooling before each start.
Note: To fulfil the requirements of EN 60355-2-34 the protection screen 103N0476 must be applied to the PTC starting device.

- HST:** High Starting Torque
 HST consisting of relay and starting capacitor, is used for expansion valve control or for capillary tube control without pressure equalizing.

Electrical Equipment

- 1) Run capacitor 4 µF optional
- 2) Run capacitor 4 µF compulsory
- 3) Cover, clamp, gasket parts of compressor

Test conditions EN 12900 (CECOMAF)

- PL/TL/TLS/TLES/TLY/NL/NLE/NLY/SC**
 Application **R134a**
 Condensing temperature 55°C
 Ambient temperature 32°C
 Suction gas temperature 32°C
 Liquid temperature 55°C
 220 V / 50 Hz

Test conditions EN 12900

- GS**
 Application **R134a, MBP**
 Condensing temperature 45°C
 Ambient temperature 32°C
 Suction gas temperature 20°C
 Liquid temperature no subcooling
 220 V / 50 Hz

Conversion of capacity (R134a)

If a stated capacity is required at 32°C liquid temperature, multiply the capacity with the following factor:
 from 55°C to 32°C liquid: 1.231

$$1 \text{ Watt} = 0.86 \text{ kcal/h}$$

$$1 \text{ Watt} = 3.41 \text{ Btu/h}$$

Compressor cooling

- S = Static cooling normally sufficient
 O = Oil cooling
 F_1 = Fan cooling 1.5 m/s
 (compressor compartment temp. equal to ambient temperature)
 F_2 = Fan cooling 3.0 m/s necessary

- * = Run capacitor compulsory
 ** = O/F₁ possible at 220 V nominal (187-242 V)
 *** = Run capacitor recommended in 43°C ambient temperature

Voltages and frequencies

- 1 = 198-254 V, 50 Hz
- 2 = 187-254 V, 50 Hz
- 3 = 198-254 V, 60 Hz

| Model designation | | | | | |
|-------------------|--|--|--------------------------------------|---|------------------------------------|
| Compressor design | Optimization level | Compressor size | Application range | Start characteristics | Generation |
| PL | Blank Standard energy level | Nominal displacement in cm ³ Exception: For PL compressors the capacity at rating point is stated. | F R134a LBP/(MBP) | Blank => universal (principal rule) | Blank => first generation |
| TL | S Semi-direct intake | | | | |
| NL | E Energy-optimized (optimized motor) | | | | |
| FR | Y High Energy-optimized (high optimization level) | | | | |
| SC | | | | | |
| GS | | | | | |
| | | | FT R134a LBP/(MBP) tropical | K = LST characteristics (capillary tube) | .2 => second generation |
| | | | MF R134a MBP | X = HST characteristics (expansion valve) | .3 => third generation etc. |

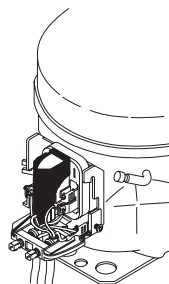
Examples

| | | | | | |
|----|----|-----|----|---|----|
| TL | ES | 5,7 | F | T | .3 |
| NL | Y | 9 | F | K | |
| SC | | 21 | FT | X | |
| GS | | 26 | MF | X | |

Protection screen for PTC

Note:

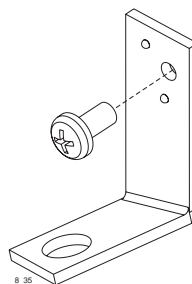
To fulfil the requirements of EN 60355-2-34 the protection screen 103N0476 must be applied to the PTC starting device.



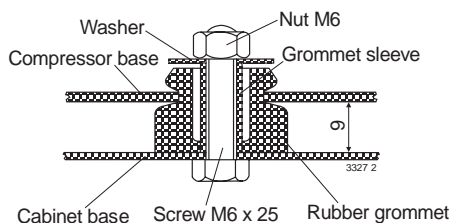
Run capacitor holder

A run capacitor holder is available for the „Energy-optimized“ and „High Energy-optimized“ compressor range. This optional part enables to fix the run capacitor for 220V directly and earth-connected on the compressor shell, concentrating all electrical accessories on the compressor. This will save space in the machine compartment.

Code numbers:
run capacitor holder 117-0300
screw M4 x 8 PZD 2 117-0301

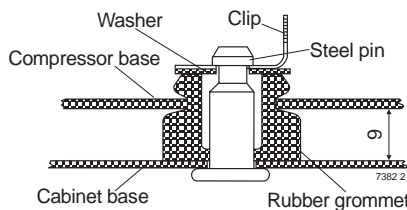


Mounting accessories



Bolt joint for one compressor: 118-1917
in quantities: 118-1918

Bolt joint for one GS compressor: 107B9150



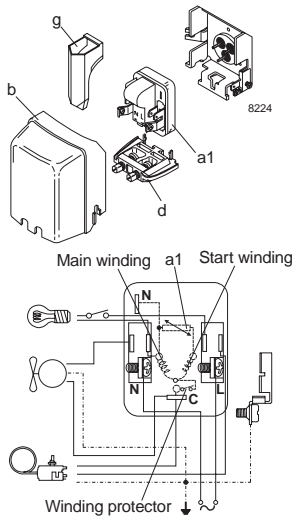
Snap-on in quantities: 118-1919

The mounting accessories for the compressors are available in two versions, with bolt joint or snap-on joint.
 The rubber grommets are designed for the 16 mm holes of the baseplate.

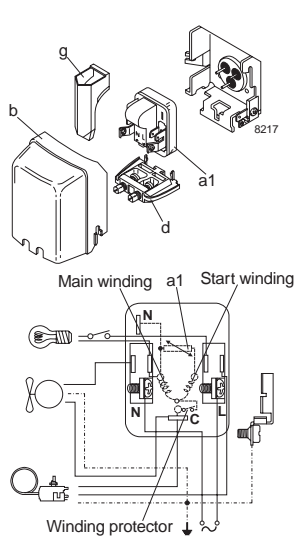
| Dimensions | | | | | | |
|-------------|-----|-------------------------------|------------|--------------|--------------|--|
| Height [mm] | | Connectors location/I.D. [mm] | | | | |
| A | B | Suc-tion C | Pro-cess D | Dis-charge E | Oil cooler F | |
| 129 | 127 | 6.2 | 6.2 | 5.0 | | |
| 134 | 132 | 6.2 | 6.2 | 5.0 | | |
| 137 | 135 | 6.2 | 6.2 | 5.0 | | |
| 163 | 159 | 6.2 | 6.2 | 5.0 | | |
| 163 | 159 | 6.2 | 6.2 | 5.0 | | |
| 190 | 184 | 8.2 | 6.2 | 6.2 | | |
| 197 | 191 | 8.2 | 6.2 | 6.2 | | |
| 197 | 191 | 8.2 | 6.2 | 6.2 | | |
| 203 | 197 | 8.2 | 6.2 | 6.2 | 6.2 | |
| 203 | 197 | 8.2 | 6.2 | 6.2 | | |
| 259 | 247 | 12.9 | 6.5 | 8.2 | | |
| 259 | 247 | 12.9 | 6.5 | 8.2 | | |
| 137 | 135 | 6.2 | 6.2 | 5.0 | | |
| 163 | 159 | 6.2 | 6.2 | 5.0 | | |
| 173 | 169 | 6.2 | 6.2 | 5.0 | | |
| 173 | 169 | 6.2 | 6.2 | 5.0 | | |
| 173 | 169 | 6.2 | 6.2 | 5.0 | | |
| 188 | 181 | 6.2 | 6.2 | 5.0 | | |
| 190 | 183 | 6.2 | 6.2 | 5.0 | | |
| 197 | 191 | 6.2 | 6.2 | 5.0 | | |
| 197 | 191 | 8.2 | 6.2 | 6.2 | 6.2 | |
| 203 | 197 | 8.2 | 6.2 | 6.2 | 6.2 | |
| 209 | 203 | 8.2 | 6.2 | 6.2 | 6.2 | |
| 209 | 203 | 10.2 | 6.2 | 6.2 | 6.2 | |
| 219 | 213 | 10.2 | 6.2 | 6.2 | 6.2 | |
| 137 | 135 | 6.2 | 6.2 | 5.0 | | |
| 140 | 138 | 6.2 | 6.2 | 5.0 | | |
| 173 | 169 | 6.2 | 6.2 | 5.0 | | |
| 203 | 197 | 8.2 | 6.2 | 6.2 | | |
| 173 | 169 | 6.2 | 6.2 | 5.0 | | |
| 173 | 169 | 6.2 | 6.2 | 5.0 | | |
| 173 | 169 | 6.2 | 6.2 | 5.0 | | |
| 173 | 169 | 6.2 | 6.2 | 5.0 | | |
| 197 | 191 | 6.2 | 6.2 | 5.0 | | |
| 197 | 191 | 6.2 | 6.2 | 5.0 | | |
| 197 | 191 | 8.2 | 6.2 | 6.2 | | |
| 173 | 169 | 6.2 | 6.2 | 5.0 | | |
| 173 | 169 | 6.2 | 6.2 | 5.0 | | |
| 203 | 197 | 6.2 | 6.2 | 5.0 | | |
| 203 | 197 | 6.2 | 6.2 | 5.0 | | |
| 203 | 197 | 8.2 | 6.2 | 6.2 | | |
| 173 | 169 | 6.2 | 6.2 | 5.0 | | |
| 173 | 169 | 6.2 | 6.2 | 5.0 | | |
| 173 | 169 | 6.2 | 6.2 | 5.0 | | |
| 197 | 191 | 6.2 | 6.2 | 5.0 | | |
| 188 | 182 | 6.2 | 6.2 | 5.0 | | |
| 197 | 191 | 6.2 | 6.2 | 5.0 | 5.0 | |
| 188 | 182 | 6.2 | 6.2 | 5.0 | 5.0 | |
| 190 | 184 | 6.2 | 6.2 | 5.0 | 5.0 | |
| 197 | 191 | 6.2 | 6.2 | 5.0 | 5.0 | |
| 203 | 197 | 8.2 | 6.2 | 6.2 | 6.2 | |
| 209 | 203 | 8.2 | 6.2 | 6.2 | 6.2 | |
| 209 | 203 | 10.2 | 6.2 | 6.2 | 6.2 | |
| 219 | 213 | 10.2 | 6.2 | 6.2 | | |
| 219 | 213 | 10.2 | 6.2 | 6.2 | | |

LST - RSIR

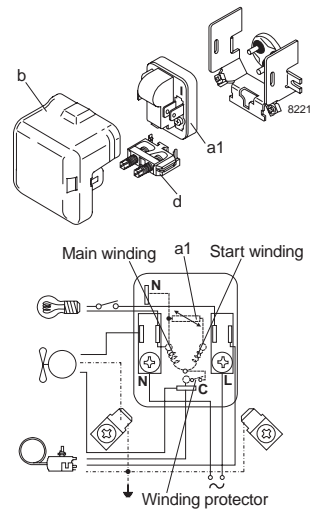
PL



TL-TLES-TLS-NL-NLE

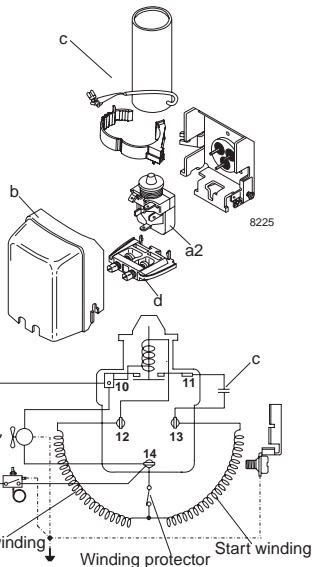


SC

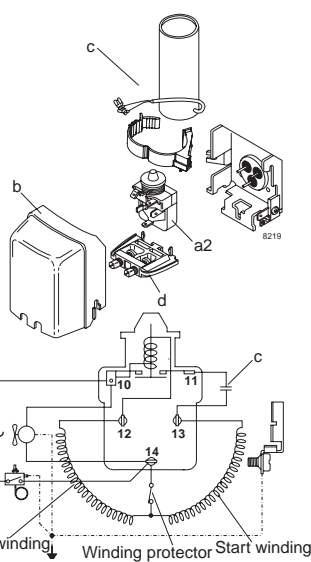


HST - CSIR

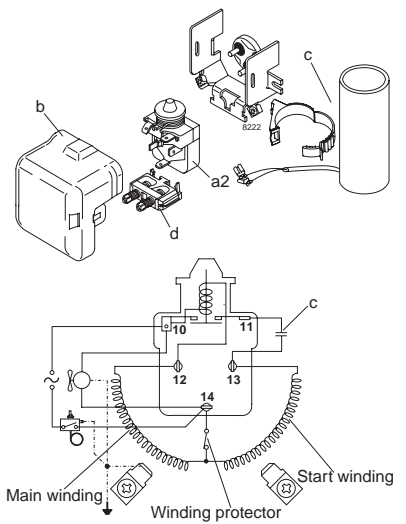
PL



TL-TLS-NL

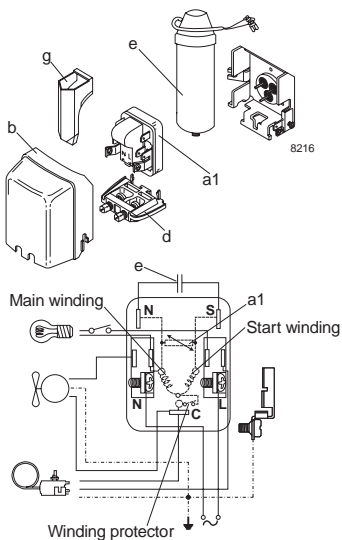


SC

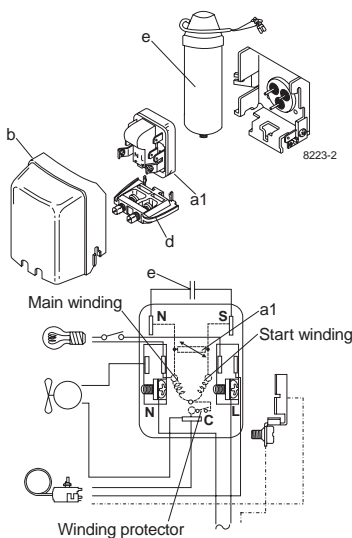


LST - RSCR

PLE

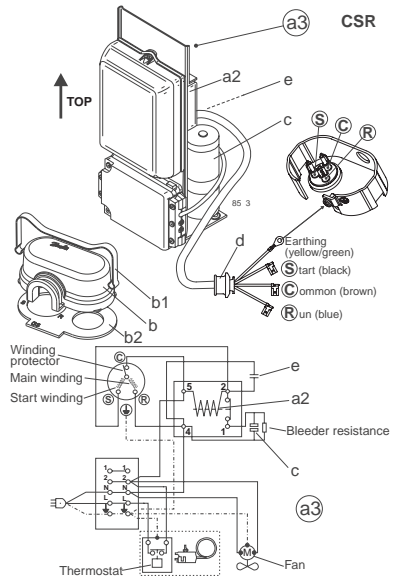


TLES-TLS-TLY-NLE-NLY



HST - CSR

GS



Legend

a1: PTC starting device
a2: Starting relay
a3: Starting device

b: Cover
b1: Clamp (part of compressor)
b2: Gasket (part of compressor)

c: Starting capacitor
d: Cord relief
e: Run capacitor
g: Protection screen for PTC



Applications

Our compressor range will perfectly fit various applications like:

- Refrigerators and freezers
- Laboratory and medical equipment
- Clip-on and condensing units
- Compressed air dryers
- Glass door merchandisers
- Bakery refrigeration equipment
- Low temperature display cabinets
- Vending machines
- Ice making machines
- Slush and frozen beverage makers
- Bottle coolers

Refrigeration Controls programme consists of:

| | | | |
|--------------------------------------|--|--|--|
| | | | |
| <p>Thermostatic expansion valves</p> | <p>Hermetic filter drier with solid core</p> | <p>Direct or servo operated solenoid valve</p> | <p>Sight glass with moisture indicator</p> |