

Presión - Temperatura | Guía para Aire Acondicionado

Nomenclatura: Verde (in de Hg) = Vacío  
Regular (psig) = Vapor Saturado (calcular sobrecalentamiento)  
**Negritas (psig) = Líquido Saturado (calcular subenfriamiento)**

|              | Freon™<br>410A<br>(R-410A) | Freon™<br>32<br>R-32 | Opteon™<br>XL41<br>(R-454B) | Opteon™<br>YF<br>(R-1234yf) |              |
|--------------|----------------------------|----------------------|-----------------------------|-----------------------------|--------------|
| SAFETY GROUP | A1                         | A2L                  | A2L                         | A2L                         | SAFETY GROUP |
| °C           | psig                       | psig                 | psig                        | psig                        | °F           |
| -46          | 4.9                        | 5.2                  | 3.1                         | 16.0                        | -50          |
| -43          | 7.6                        | 8.0                  | 5.6                         | 13.9                        | -45          |
| -40          | 10.7                       | 11.0                 | 8.4                         | 11.5                        | -40          |
| -37          | 14.0                       | 14.4                 | 11.5                        | 8.9                         | -35          |
| -34          | 17.7                       | 18.2                 | 14.8                        | 6.0                         | -30          |
| -32          | 21.8                       | 22.3                 | 18.5                        | 2.8                         | -25          |
| -29          | 26.2                       | 26.8                 | 22.6                        | 0.4                         | -20          |
| -28          | 28.1                       | 28.7                 | 24.3                        | 1.1                         | -18          |
| -27          | 30.0                       | 30.7                 | 26.1                        | 1.9                         | -16          |
| -26          | 32.0                       | 32.8                 | 27.9                        | 2.7                         | -14          |
| -24          | 34.1                       | 34.9                 | 29.8                        | 3.5                         | -12          |
| -23          | 36.3                       | 37.1                 | 31.8                        | 4.4                         | -10          |
| -22          | 38.5                       | 39.4                 | 33.8                        | 5.3                         | -8           |
| -21          | 40.8                       | 41.7                 | 35.9                        | 6.2                         | -6           |
| -20          | 43.2                       | 44.2                 | 38.1                        | 7.2                         | -4           |
| -19          | 45.7                       | 46.7                 | 40.4                        | 8.2                         | -2           |
| -18          | 48.2                       | 49.3                 | 42.7                        | 9.2                         | 0            |
| -17          | 50.8                       | 51.9                 | 45.1                        | 10.3                        | 2            |
| -16          | 53.5                       | 54.7                 | 47.6                        | 11.4                        | 4            |
| -14          | 56.3                       | 57.5                 | 50.1                        | 12.5                        | 6            |
| -13          | 59.2                       | 60.5                 | 52.7                        | 13.7                        | 8            |
| -12          | 62.2                       | 63.5                 | 55.4                        | 14.9                        | 10           |
| -11          | 65.2                       | 66.6                 | 58.2                        | 16.2                        | 12           |
| -10          | 68.4                       | 69.8                 | 61.1                        | 17.5                        | 14           |
| -9           | 71.6                       | 73.1                 | 64.1                        | 18.8                        | 16           |
| -8           | 74.9                       | 76.5                 | 67.1                        | 20.2                        | 18           |
| -7           | 78.4                       | 80.0                 | 70.3                        | 21.6                        | 20           |
| -6           | 81.9                       | 83.6                 | 73.5                        | 23.1                        | 22           |
| -4           | 85.5                       | 87.3                 | 76.8                        | 24.6                        | 24           |
| -3           | 89.2                       | 91.1                 | 80.3                        | 26.2                        | 26           |
| -2           | 93.1                       | 95.1                 | 83.8                        | 27.8                        | 28           |
| -1           | 97.0                       | 99.1                 | 87.4                        | 29.4                        | 30           |
| 0            | 101.1                      | 103.2                | 91.1                        | 31.1                        | 32           |
| 1            | 105.2                      | 107.5                | 94.9                        | 32.9                        | 34           |
| 2            | 109.5                      | 111.9                | 98.8                        | 34.7                        | 36           |
| 3            | 113.9                      | 116.3                | 102.9                       | 36.5                        | 38           |
| 4            | 118.4                      | 121.0                | 107.0                       | 38.4                        | 40           |
| 6            | 123.0                      | 125.7                | 111.2                       | 40.4                        | 42           |
| 7            | 127.7                      | 130.5                | 115.6                       | 42.4                        | 44           |
| 8            | 132.6                      | 135.5                | 120.0                       | 44.5                        | 46           |
| 9            | 137.5                      | 140.6                | 124.6                       | 46.6                        | 48           |
| 10           | 142.6                      | 145.9                | 129.3                       | 48.8                        | 50           |
| 11           | 148.4                      | 151.2                | 140.0                       | 51.0                        | 52           |
| 12           | 153.8                      | 156.7                | 145.1                       | 53.3                        | 54           |
| 13           | 159.3                      | 162.4                | 150.3                       | 55.7                        | 56           |
| 14           | 164.9                      | 168.1                | 155.7                       | 58.1                        | 58           |
| 16           | 170.7                      | 174.1                | 161.1                       | 60.6                        | 60           |
| 18           | 185.8                      | 189.5                | 175.4                       | 67.0                        | 65           |
| 21           | 201.8                      | 205.8                | 190.5                       | 73.9                        | 70           |
| 24           | 218.7                      | 223.2                | 206.5                       | 81.3                        | 75           |
| 27           | 236.5                      | 241.5                | 223.4                       | 89.0                        | 80           |
| 28           | 244.0                      | 249.1                | 230.4                       | 92.3                        | 82           |
| 29           | 251.6                      | 256.9                | 237.6                       | 95.6                        | 84           |
| 30           | 259.3                      | 264.9                | 244.9                       | 98.9                        | 86           |
| 31           | 267.3                      | 273.0                | 252.4                       | 102.4                       | 88           |
| 32           | 275.4                      | 281.3                | 260.1                       | 105.9                       | 90           |
| 33           | 283.6                      | 289.8                | 267.9                       | 109.6                       | 92           |
| 34           | 292.1                      | 298.5                | 275.8                       | 113.3                       | 94           |
| 36           | 300.7                      | 307.4                | 284.0                       | 117.0                       | 96           |
| 37           | 309.5                      | 316.4                | 292.3                       | 120.9                       | 98           |
| 38           | 318.5                      | 325.7                | 300.8                       | 124.9                       | 100          |
| 39           | 327.7                      | 335.1                | 309.4                       | 128.9                       | 102          |
| 40           | 337.1                      | 344.8                | 318.3                       | 133.0                       | 104          |
| 41           | 346.7                      | 354.6                | 327.3                       | 137.2                       | 106          |
| 42           | 356.5                      | 364.6                | 336.5                       | 141.5                       | 108          |
| 43           | 366.4                      | 374.9                | 345.9                       | 145.9                       | 110          |
| 44           | 376.6                      | 385.3                | 355.5                       | 150.4                       | 112          |
| 46           | 387.0                      | 396.0                | 365.2                       | 155.0                       | 114          |
| 47           | 397.6                      | 406.9                | 375.2                       | 159.6                       | 116          |
| 48           | 408.4                      | 418.0                | 385.3                       | 164.4                       | 118          |
| 49           | 419.4                      | 429.3                | 395.7                       | 169.2                       | 120          |
| 50           | 430.7                      | 440.9                | 406.2                       | 174.2                       | 122          |
| 51           | 442.1                      | 452.7                | 417.0                       | 179.3                       | 124          |
| 52           | 453.8                      | 464.7                | 427.9                       | 184.4                       | 126          |
| 53           | 465.8                      | 477.0                | 439.1                       | 189.7                       | 128          |
| 54           | 477.9                      | 489.5                | 450.5                       | 195.0                       | 130          |
| 57           | 509.4                      | 521.8                | 480.0                       | 208.9                       | 135          |
| 60           | 542.5                      | 555.8                | 510.7                       | 223.4                       | 140          |
| 66           | 613.9                      | 628.8                | 576.8                       | 254.7                       | 150          |

NO MEZCLE REFRIGERANTES

No usar los refrigerantes Opteon™ XL para retrofit, ya que están clasificados como A2L.

Los refrigerantes A2L solo pueden ser usados en equipo nuevo.  
Siempre retire el líquido del cilindro.

Para soporte relacionado con nuestros refrigerantes, póngase en contacto con nuestro equipo:

infolatam@chemours.com  
800 7375 623



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|              | Freon™<br>22<br>(R-22) | Freon™<br>MO99<br>(R-438A) | Freon™<br>407C<br>(R-407C) | Opteon™<br>XP20<br>(R-449C) |              |
|--------------|------------------------|----------------------------|----------------------------|-----------------------------|--------------|
| SAFETY GROUP | A1                     | A1                         | A2L                        | A1                          | SAFETY GROUP |
| °C           | psig                   | psig                       | psig                       | psig                        | °F           |
| -46          | 5.8                    | 11.2                       | 10.8                       | 9.2                         | -50          |
| -43          | 2.6                    | 8.4                        | 8.0                        | 6.1                         | -45          |
| -40          | 0.6                    | 5.2                        | 4.6                        | 2.4                         | -40          |
| -37          | 2.6                    | 1.6                        | 0.8                        | 0.7                         | -35          |
| -34          | 4.9                    | 1.2                        | 1.6                        | 2.8                         | -30          |
| -32          | 7.4                    | 3.5                        | 3.9                        | 5.2                         | -25          |
| -29          | 10.2                   | 5.9                        | 6.5                        | 7.9                         | -20          |
| -28          | 11.4                   | 7.0                        | 7.6                        | 9.0                         | -18          |
| -27          | 12.6                   | 8.1                        | 8.7                        | 10.1                        | -16          |
| -26          | 13.9                   | 9.2                        | 9.9                        | 11.4                        | -14          |
| -24          | 15.2                   | 10.4                       | 11.1                       | 12.6                        | -12          |
| -23          | 16.5                   | 11.6                       | 12.3                       | 13.9                        | -10          |
| -22          | 17.9                   | 12.9                       | 13.7                       | 15.3                        | -8           |
| -21          | 19.4                   | 14.2                       | 15.0                       | 16.7                        | -6           |
| -20          | 20.9                   | 15.6                       | 16.4                       | 18.1                        | -4           |
| -19          | 22.4                   | 17.0                       | 17.9                       | 19.6                        | -2           |
| -18          | 24.0                   | 18.5                       | 19.4                       | 21.2                        | 0            |
| -17          | 25.7                   | 20.0                       | 21.0                       | 22.8                        | 2            |
| -16          | 27.4                   | 21.6                       | 22.6                       | 24.5                        | 4            |
| -14          | 29.2                   | 23.2                       | 24.3                       | 26.2                        | 6            |
| -13          | 31.0                   | 24.9                       | 26.1                       | 28.0                        | 8            |
| -12          | 32.8                   | 26.6                       | 27.9                       | 29.8                        | 10           |
| -11          | 34.8                   | 28.4                       | 29.8                       | 31.7                        | 12           |
| -10          | 36.8                   | 30.3                       | 31.7                       | 33.7                        | 14           |
| -9           | 38.8                   | 32.2                       | 33.7                       | 35.7                        | 16           |
| -8           | 40.9                   | 34.2                       | 35.7                       | 37.8                        | 18           |
| -7           | 43.1                   | 36.2                       | 37.9                       | 39.9                        | 20           |
| -6           | 45.3                   | 38.3                       | 40.1                       | 42.1                        | 22           |
| -4           | 47.6                   | 40.5                       | 42.3                       | 44.4                        | 24           |
| -3           | 50.0                   | 42.8                       | 44.7                       | 46.8                        | 26           |
| -2           | 52.4                   | 45.1                       | 47.1                       | 49.2                        | 28           |
| -1           | 55.0                   | 47.5                       | 49.6                       | 51.7                        | 30           |
| 0            | 57.5                   | 49.9                       | 52.1                       | 54.3                        | 32           |
| 1            | 60.2                   | 52.5                       | 54.8                       | 56.9                        | 34           |
| 2            | 62.9                   | 55.1                       | 57.5                       | 59.7                        | 36           |
| 3            | 65.7                   | 57.7                       | 60.3                       | 62.5                        | 38           |
| 4            | 68.6                   | 60.5                       | 63.2                       | 65.4                        | 40           |
| 6            | 71.5                   | 63.3                       | 66.1                       | 68.3                        | 42           |
| 7            | 74.5                   | 66.3                       | 69.2                       | 71.4                        | 44           |
| 8            | 77.6                   | 69.3                       | 72.3                       | 74.5                        | 46           |
| 9            | 80.8                   | 72.3                       | 75.5                       | 77.7                        | 48           |
| 10           | 84.1                   | 75.5                       | 78.8                       | 81.1                        | 50           |
| 11           | 87.4                   | 94.6                       | 82.2                       | 102.3                       | 52           |
| 12           | 90.8                   | 98.3                       | 85.7                       | 106.2                       | 54           |
| 13           | 94.4                   | 102.1                      | 89.3                       | 110.1                       | 56           |
| 14           | 98.0                   | 105.9                      | 93.0                       | 114.2                       | 58           |
| 16           | 101.6                  | 109.8                      | 96.8                       | 118.4                       | 60           |
| 18           | 111.3                  | 120.1                      | 128.9                      | 129.2                       | 65           |
| 21           | 121.4                  | 131.0                      | 140.5                      | 140.7                       | 70           |
| 24           | 132.2                  | 142.5                      | 152.8                      | 152.9                       | 75           |
| 27           | 143.6                  | 154.7                      | 165.8                      | 165.7                       | 80           |
| 28           | 148.4                  | 159.8                      | 171.3                      | 171.0                       | 82           |
| 29           | 153.2                  | 165.0                      | 176.8                      | 176.5                       | 84           |
| 30           | 158.2                  | 170.3                      | 182.4                      | 182.1                       | 86           |
| 31           | 163.2                  | 175.7                      | 188.2                      | 187.7                       | 88           |
| 32           | 168.4                  | 181.2                      | 194.1                      | 193.6                       | 90           |
| 33           | 173.7                  | 186.8                      | 200.1                      | 199.5                       | 92           |
| 34           | 179.1                  | 192.6                      | 206.3                      | 205.5                       | 94           |
| 36           | 184.6                  | 198.5                      | 212.5                      | 211.7                       | 96           |
| 37           | 190.2                  | 204.5                      | 219.0                      | 218.0                       | 98           |
| 38           | 195.9                  | 210.6                      | 225.5                      | 224.5                       | 100          |
| 39           | 201.8                  | 216.8                      | 232.2                      | 231.0                       | 102          |
| 40           | 207.7                  | 223.2                      | 239.0                      | 237.7                       | 104          |
| 41           | 213.8                  | 229.7                      | 245.9                      | 244.5                       | 106          |
| 42           | 220.0                  | 236.4                      | 253.0                      | 251.5                       | 108          |
| 43           | 226.4                  | 243.1                      | 260.3                      | 258.6                       | 110          |
| 44           | 232.8                  | 250.1                      | 267.6                      | 265.8                       | 112          |
| 46           | 239.4                  | 257.1                      | 275.1                      | 273.2                       | 114          |
| 47           | 246.1                  | 264.3                      | 282.8                      | 280.7                       | 116          |
| 48           | 253.0                  | 271.6                      | 290.6                      | 288.4                       | 118          |
| 49           | 260.0                  | 279.1                      | 298.6                      | 296.2                       | 120          |
| 50           | 267.1                  | 286.7                      | 306.7                      | 304.1                       | 122          |
| 51           | 274.3                  | 294.4                      | 315.0                      | 312.2                       | 124          |
| 52           | 281.7                  | 302.3                      | 323.4                      | 320.5                       | 126          |
| 53           | 289.2                  | 310.4                      | 332.0                      | 328.9                       | 128          |
| 54           | 296.9                  | 318.5                      | 340.7                      | 337.4                       | 130          |
| 57           | 316.7                  | 339.7                      | 363.3                      | 359.5                       | 135          |
| 60           | 337.4                  | 361.9                      | 387.0                      | 382.6                       | 140          |
| 66           | 381.7                  | 409.2                      | 437.5                      | 431.9                       | 150          |



Para conocer nuestros distribuidores autorizados escanea este código QR

Para conocer más sobre nuestra oferta de refrigerantes, visite [opteon.com/es](https://opteon.com/es)

