# Технические параметры компрессоров роторных

**Работа в режиме нагнетания**

| Δp, мбар | Тип | BP 85 | | | | | | | BP 86 (<3000) | | | | | BP 86 (>3000) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DN фланца | 150 | | | | | | | | | | | | 200 | |
| | DN блока | 150 | | | | | | | 200 | | | | | | |
| | $n_{эд}$, об/мин | 1500 | | 3000 | | | | | 1500 | | 3000 | | | | |
| | $n_{вал}$,об/мин | 1500 | 1800 | 2200 | 2600 | 2930 | 3400 | 3769 | 1470 | 1800 | 2200 | 2600 | 2960 | 3482 | 3769 |
| 200 | $Q_1$, м³/мин | 15,82 | 19,18 | 23,83 | 28,70 | 32,67 | 37,90 | **42,93** | 18,88 | 24,60 | 30,40 | 36,82 | **42,12** | 50,28 | **55,25** |
| | $Q_1$, м³/час | 949 | 1151 | 1430 | 1722 | 1960 | 2274 | 2576 | 1133 | 1476 | 1824 | 2209 | 2527 | 3017 | 3315 |
| | $N_{вал}$, кВт | 6,9 | 8,5 | 11,2 | 14,4 | 17,5 | 22,3 | 27,7 | 8,6 | 11,5 | 15,0 | 19,6 | 24,2 | 26,7 | 31,0 |
| | $N_{эд}$, кВт | 7,5 | 11,0 | 15,0 | 18,5 | 22,0 | 30,0 | 30,0 | 11,0 | 15,0 | 18,5 | 22,0 | 30,0 | 30,0 | 37,0 |
| | η (к.п.д.) | 0,76 | 0,75 | 0,71 | 0,66 | 0,62 | 0,57 | 0,52 | 0,73 | 0,71 | 0,68 | 0,63 | 0,58 | 0,63 | 0,59 |
| | Δt °C | 20 | 20 | 20 | 20 | 21 | 22 | 23 | 21 | 21 | 22 | 23 | 24 | 19 | 19 |
| | Lπ, δB(A) | 82 | 85 | 89 | 92 | 94 | 97 | 99 | 84 | 88 | 92 | 95 | 97 | 103 | 104 |
| 300 | $Q_1$, м³/мин | 15,32 | 18,70 | 23,27 | 28,20 | 32,28 | 37,33 | 41,93 | 18,10 | 23,73 | 29,78 | 35,87 | 41,27 | 49,65 | 53,05 |
| | $Q_1$, м³/час | 919 | 1122 | 1396 | 1692 | 1937 | 2240 | 2516 | 1086 | 1424 | 1787 | 2152 | 2476 | 2979 | 3183 |
| | $N_{вал}$, кВт | 10,0 | 12,2 | 15,5 | 19,6 | 23,4 | 28,8 | 34,5 | 12,3 | 16,1 | 20,7 | 26,1 | 31,6 | 35,9 | 39,3 |
| | $N_{эд}$, кВт | 11,0 | 15,0 | 18,5 | 22,0 | 30,0 | 37,0 | 45,0 | 15,0 | 18,5 | 30,0 | 30,0 | 37,0 | 45,0 | 45,0 |
| | η (к.п.д.) | 0,77 | 0,77 | 0,75 | 0,72 | 0,69 | 0,65 | 0,61 | 0,74 | 0,74 | 0,72 | 0,69 | 0,65 | 0,69 | 0,67 |
| | Δt °C | 30 | 30 | 30 | 30 | 30 | 31 | 32 | 32 | 32 | 32 | 32 | 33 | 28 | 28 |
| | Lπ, δB(A) | 83 | 87 | 90 | 94 | 96 | 99 | 101 | 85 | 90 | 93 | 97 | 99 | 104 | 106 |
| 400 | $Q_1$, м³/мин | 14,92 | 18,23 | 22,83 | 27,65 | 31,82 | 36,73 | 41,47 | 17,38 | 23,08 | 29,05 | 35,13 | 40,78 | 48,92 | 53,08 |
| | $Q_1$, м³/час | 895 | 1094 | 1370 | 1659 | 1909 | 2204 | 2488 | 1043 | 1385 | 1743 | 2108 | 2447 | 2935 | 3185 |
| | $N_{вал}$, кВт | 13,0 | 15,8 | 19,9 | 24,6 | 29,2 | 35,2 | 41,8 | 16,1 | 20,9 | 26,4 | 32,7 | 39,3 | 44,9 | 49,8 |
| | $N_{эд}$, кВт | 15,0 | 18,5 | 22,0 | 30,0 | 37,0 | 45,0 | 55,0 | 18,5 | 30,0 | 30,0 | 37,0 | 45,0 | 55,0 | 55,0 |
| | η (к.п.д.) | 0,77 | 0,77 | 0,76 | 0,75 | 0,73 | 0,70 | 0,66 | 0,72 | 0,74 | 0,73 | 0,72 | 0,69 | 0,73 | 0,71 |
| | Δt °C | 41 | 40 | 40 | 40 | 40 | 41 | 41 | 44 | 43 | 42 | 42 | 43 | 38 | 38 |
| | Lπ, δB(A) | 85 | 88 | 92 | 95 | 98 | 100 | 102 | 87 | 91 | 95 | 98 | 101 | 106 | 107 |
| 500 | $Q_1$, м³/мин | 14,50 | 17,88 | 22,55 | 27,23 | 31,57 | 36,02 | 41,05 | 16,82 | 22,45 | 28,42 | 35,18 | 40,13 | 48,28 | 51,55 |
| | $Q_1$, м³/час | 870 | 1073 | 1353 | 1634 | 1894 | 2161 | 2463 | 1009 | 1347 | 1705 | 2111 | 2408 | 2897 | 3093 |
| | $N_{вал}$, кВт | 16,1 | 19,4 | 24,4 | 29,8 | 35,2 | 41,4 | 49,2 | 19,9 | 25,6 | 32,0 | 40,2 | 46,8 | 53,9 | 58,3 |
| | $N_{эд}$, кВт | 18,5 | 22,0 | 30,0 | 37,0 | 45,0 | 45,0 | 55,0 | 22,0 | 30,0 | 37,0 | 45,0 | 55,0 | 75,0 | 75,0 |
| | η (к.п.д.) | 0,75 | 0,76 | 0,77 | 0,76 | 0,75 | 0,73 | 0,70 | 0,70 | 0,73 | 0,74 | 0,73 | 0,71 | 0,75 | 0,74 |
| | Δt °C | 53 | 51 | 50 | 50 | 50 | 50 | 51 | 57 | 54 | 53 | 53 | 53 | 48 | 47 |
| | Lπ, δB(A) | 86 | 90 | 93 | 97 | 99 | 101 | 104 | 88 | 93 | 96 | 100 | 102 | 107 | 108 |
| 600 | $Q_1$, м³/мин | 13,25 | 17,58 | 22,18 | 27,38 | 31,20 | 35,63 | 39,97 | 16,32 | 21,00 | 28,23 | 34,62 | 39,57 | 47,72 | 50,97 |
| | $Q_1$, м³/час | 795 | 1055 | 1331 | 1643 | 1872 | 2138 | 2398 | 979 | 1260 | 1694 | 2077 | 2374 | 2863 | 3058 |
| | $N_{вал}$, кВт | 18,2 | 23,2 | 28,8 | 35,6 | 41,1 | 48,0 | 55,3 | 23,8 | 29,2 | 38,2 | 47,0 | 54,4 | 62,9 | 67,8 |
| | $N_{эд}$, кВт | 22,0 | 30,0 | 37,0 | 45,0 | 45,0 | 55,0 | 75,0 | 30,0 | 37,0 | 45,0 | 55,0 | 75,0 | 75,0 | 75,0 |
| | η (к.п.д.) | 0,73 | 0,76 | 0,77 | 0,77 | 0,76 | 0,74 | 0,72 | 0,68 | 0,72 | 0,74 | 0,74 | 0,73 | 0,76 | 0,75 |
| | Δt °C | 66 | 63 | 61 | 60 | 60 | 60 | 60 | 71 | 67 | 64 | 63 | 64 | 57 | 57 |
| | Lπ, δB(A) | 87 | 91 | 95 | 98 | 100 | 103 | 105 | 90 | 93 | 98 | 101 | 103 | 109 | 110 |
| 700 | $Q_1$, м³/мин | 12,97 | 17,23 | 21,83 | 27,05 | 30,85 | 37,12 | 39,62 | 15,78 | 20,47 | 27,70 | 34,08 | 39,03 | 44,38 | |
| | $Q_1$, м³/час | 778 | 1034 | 1310 | 1623 | 1851 | 2227 | 2377 | 947 | 1228 | 1662 | 2045 | 2342 | 2663 | |
| | $N_{вал}$, кВт | 21,2 | 26,8 | 33,1 | 40,9 | 47,0 | 57,9 | 62,6 | 27,6 | 33,8 | 44,0 | 53,7 | 61,9 | 67,4 | |
| | $N_{эд}$, кВт | 30,0 | 30,0 | 37,0 | 45,0 | 55,0 | 75,0 | 75,0 | 30,0 | 37,0 | 55,0 | 75,0 | 75,0 | 75,0 | |
| | η (к.п.д.) | 0,71 | 0,75 | 0,77 | 0,77 | 0,76 | 0,75 | 0,74 | 0,67 | 0,70 | 0,73 | 0,74 | 0,73 | 0,77 | |
| | Δt °C | 79 | 74 | 72 | 70 | 70 | 70 | 70 | 85 | 79 | 76 | 74 | 74 | 68 | |
| | Lπ, δB(A) | 88 | 92 | 96 | 99 | 102 | 105 | 106 | 91 | 95 | 99 | 102 | 105 | 109 | |
| 800 | $Q_1$, м³/мин | 12,65 | 16,25 | 21,82 | 26,72 | 30,53 | 36,80 | | | | | | | | |
| | $Q_1$, м³/час | 759 | 975 | 1309 | 1603 | 1832 | 2208 | | | | | | | | |
| | $N_{вал}$, кВт | 24,1 | 29,4 | 38,0 | 46,1 | 52,8 | 64,7 | | | | | | | | |
| | $N_{эд}$, кВт | 30,0 | 37,0 | 45,0 | 55,0 | 75,0 | 75,0 | | | | | | | | |
| | η (к.п.д.) | 0,70 | 0,74 | 0,76 | 0,77 | 0,77 | 0,76 | | | | | | | | |
| | Δt °C | 92 | 87 | 83 | 81 | 80 | 80 | | | | | | | | |
| | Lπ, δB(A) | 89 | 93 | 97 | 101 | 103 | 106 | | | | | | | | |
| 900 | $Q_1$, м³/мин | 12,35 | 15,95 | 21,52 | 26,42 | 30,22 | 36,58 | | | | | | | | |
| | $Q_1$, м³/час | 741 | 957 | 1291 | 1585 | 1813 | 2195 | | | | | | | | |
| | $N_{вал}$, кВт | 27,1 | 32,9 | 42,5 | 51,4 | 58,7 | 71,8 | | | | | | | | |
| | $N_{эд}$, кВт | 30,0 | 37,0 | 55,0 | 55,0 | 75,0 | **90,0** | | | | | | | | |
| | η (к.п.д.) | 0,68 | 0,73 | 0,75 | 0,77 | 0,77 | 0,76 | | | | | | | | |
| | Δt °C | 106 | 100 | 94 | 92 | 91 | 90 | | | | | | | | |
| | Lπ, δB(A) | 90 | 94 | 99 | 102 | 104 | 107 | | | | | | | | |
| 1000 | $Q_1$, м³/мин | | | 21,23 | 26,13 | 29,93 | 36,30 | | | | | | | | |
| | $Q_1$, м³/час | | | 1274 | 1568 | 1796 | 2178 | | | | | | | | |
| | $N_{вал}$, кВт | | | 46,9 | 56,6 | 64,6 | 78,7 | | | | | | | | |
| | $N_{эд}$, кВт | | | 55,0 | 75,0 | 75,0 | **90,0** | | | | | | | | |
| | η (к.п.д.) | | | 0,75 | 0,77 | 0,77 | 0,77 | | | | | | | | |
| | Δt °C | | | 106 | 103 | 101 | 100 | | | | | | | | |
| | Lπ, δB(A) | | | 100 | 103 | 105 | 108 | | | | | | | | |