

Phase Control Power Thyristors



- designed for high power industrial and power transmission applications
- optimized for low on-state voltage drop
- matched Q_{rr} and V_T values available for series and/or parallel connections

| Part number | V_{DRM} | V_{RRM} | I_{TAVM} | I_{TSM} | | V_{T0} | r_T | T_{VJM} | R_{thJC} | R_{thCH} | F_m | Housing |
|--------------|-----------|-----------|------------------------|-----------|------|-----------|------------|-----------|------------|------------|-------|---------|
| | T_{VJM} | | $T_C=70^\circ\text{C}$ | 8.3ms | 10ms | T_{VJM} | | | | | | |
| | V | A | A | kA | kA | V | m Ω | | | | | |
| 5STP 10D1601 | 1600 | | 969 | 16.0 | 15.0 | 0.93 | 0.302 | 125 | 32.0 | 7.5 | 10 | D |
| 5STP 20F1601 | 1600 | | 1901 | 29.2 | 27.3 | 0.95 | 0.152 | 125 | 16.0 | 4.0 | 22 | F |
| 5STP 34H1601 | 1600 | | 3370 | 52.3 | 49.0 | 0.94 | 0.066 | 125 | 10.0 | 3.0 | 50 | H |
| 5STP 07D1800 | 1800 | | 730 | 9.5 | 9.0 | 0.80 | 0.540 | 125 | 36.0 | 7.5 | 10 | D |
| 5STP 09D1801 | 1800 | | 932 | 14.6 | 13.7 | 0.94 | 0.341 | 125 | 32.0 | 7.5 | 10 | D |
| 5STP 18F1800 | 1800 | | 1660 | 22.0 | 21.0 | 0.83 | 0.230 | 125 | 17.0 | 4.0 | 22 | F |
| 5STP 18F1801 | 1800 | | 1825 | 28.0 | 26.2 | 0.97 | 0.170 | 125 | 16.0 | 4.0 | 22 | F |
| 5STP 27H1800 | 1800 | | 3000 | 53.3 | 50.5 | 0.88 | 0.103 | 125 | 10.0 | 2.0 | 50 | H |
| 5STP 30H1801 | 1800 | | 3108 | 50.2 | 47.0 | 0.98 | 0.081 | 125 | 10.0 | 3.0 | 50 | H |
| 5STP 50Q1800 | 1800 | | 6100 | 100.0 | 94.0 | 0.90 | 0.050 | 125 | 5.0 | 1.0 | 90 | Q |
| 5STP 09D2201 | 2200 | | 862 | 12.8 | 12.0 | 1.00 | 0.404 | 125 | 32.0 | 7.5 | 10 | D |
| 5STP 17F2201 | 2200 | | 1702 | 27.2 | 25.5 | 0.99 | 0.206 | 125 | 16.0 | 4.0 | 22 | F |
| 5STP 29H2201 | 2200 | | 2855 | 48.1 | 45.0 | 1.00 | 0.107 | 125 | 10.0 | 3.0 | 50 | H |
| 5STP 06D2800 | 2800 | | 620 | 8.5 | 8.0 | 0.92 | 0.780 | 125 | 36.0 | 7.5 | 10 | D |
| 5STP 08D2801 | 2800 | | 793 | 11.3 | 10.6 | 1.02 | 0.510 | 125 | 32.0 | 7.5 | 10 | D |
| 5STP 16F2800 | 2800 | | 1400 | 19.0 | 18.0 | 0.82 | 0.370 | 125 | 17.0 | 4.0 | 22 | F |
| 5STP 16F2801 | 2800 | | 1512 | 25.2 | 23.6 | 1.02 | 0.265 | 125 | 16.0 | 4.0 | 22 | F |
| 5STP 24H2800 | 2800 | | 2625 | 46.0 | 43.0 | 0.85 | 0.160 | 125 | 10.0 | 2.0 | 50 | H |
| 5STP 27H2801 | 2800 | | 2670 | 45.9 | 43.0 | 1.04 | 0.127 | 125 | 10.0 | 3.0 | 50 | H |
| 5STP 33L2800 | 2800 | | 3740 | 65.0 | 60.0 | 0.95 | 0.100 | 125 | 7.0 | 1.5 | 70 | L |
| 5STP 45N2800 | 2800 | | 5080 | 79.0 | 75.0 | 0.86 | 0.070 | 125 | 5.7 | 1.0 | 90 | N |
| 5STP 45Q2800 | 2800 | | 5490 | 79.0 | 75.0 | 0.86 | 0.070 | 125 | 5.0 | 1.0 | 90 | Q |
| 5STP 04D4200 | 4200 | | 470 | 7.0 | 6.4 | 1.00 | 1.500 | 125 | 36.0 | 7.5 | 10 | D |
| 5STP 12F4200 | 4200 | | 1150 | 16.0 | 15.0 | 0.95 | 0.575 | 125 | 17.0 | 4.0 | 22 | F |
| 5STP 18H4200 | 4200 | | 2075 | 35.0 | 32.0 | 0.96 | 0.285 | 125 | 10.0 | 2.0 | 50 | H |
| 5STP 28L4200 | 4200 | | 3170 | 55.6 | 52.0 | 0.97 | 0.158 | 125 | 7.0 | 1.5 | 70 | L |
| 5STP 38N4200 | 4200 | | 3960 | 65.0 | 60.0 | 0.95 | 0.130 | 125 | 5.7 | 1.0 | 90 | N |
| 5STP 38Q4200 | 4200 | | 4275 | 65.0 | 60.0 | 0.95 | 0.130 | 125 | 5.0 | 1.0 | 90 | Q |

Please refer to page 21 for part numbering structure.

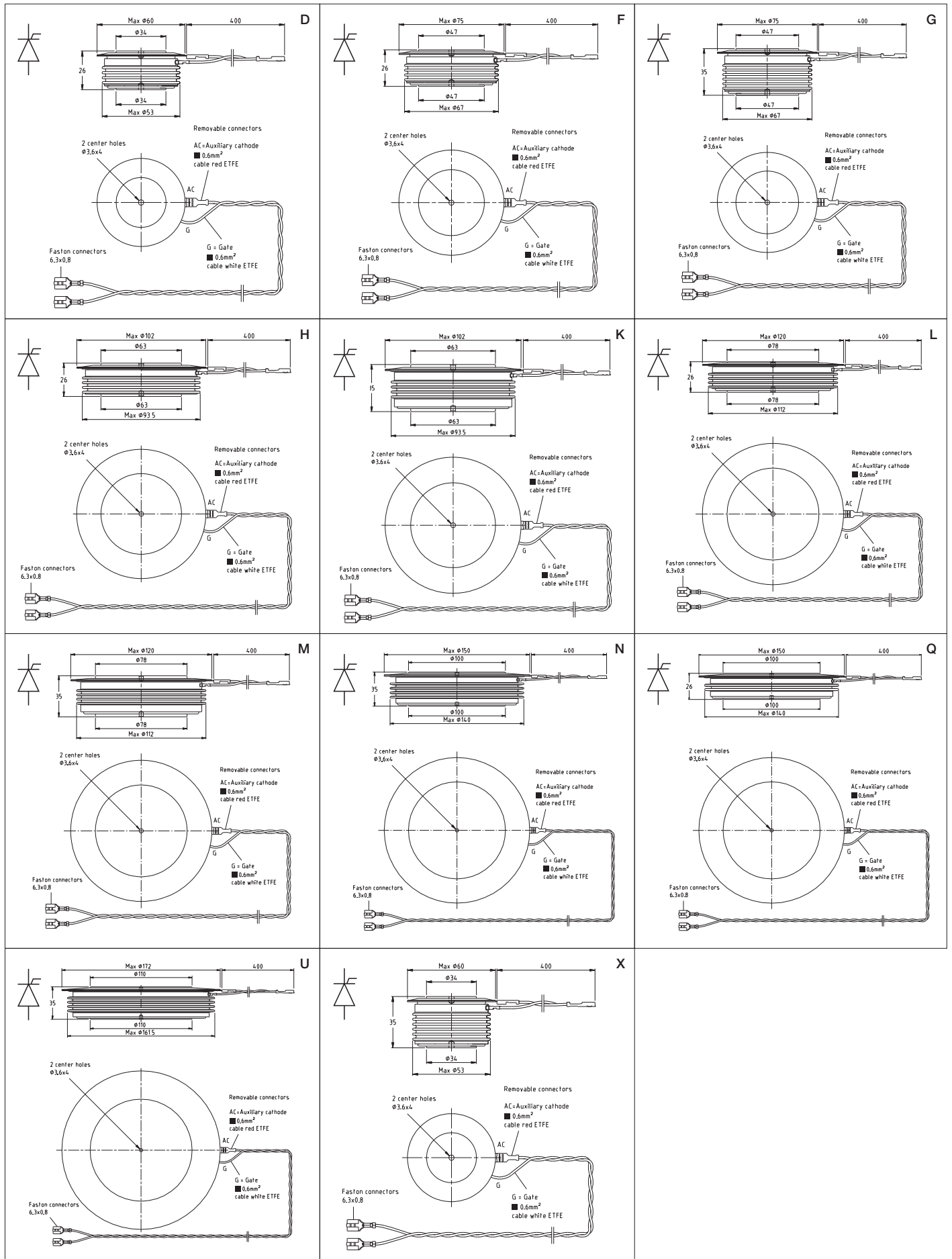
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| Part number | V_{DRM} | V_{RRM} | I_{TAVM} | I_{TSM} | | V_{TO} | r_T | T_{VJM} | R_{thJC} | R_{thCH} | F_m | Housing |
|--------------|-----------|-----------|------------------------|-----------|------|-----------|------------|-----------|------------|------------|-------|---------|
| | T_{VJM} | | $T_C=70^\circ\text{C}$ | 8.3ms | 10ms | T_{VJM} | | | | | | |
| | V | A | A | kA | kA | V | m Ω | | | | | |
| 5STP 04D5200 | 5200 | | 440 | 5.4 | 5.0 | 1.20 | 1.600 | 125 | 36.0 | 7.5 | 10 | D |
| 5STP 17H5200 | 5200 | | 1975 | 31.0 | 29.0 | 1.02 | 0.320 | 125 | 10.0 | 2.0 | 50 | H |
| 5STP 25L5200 | 5200 | | 2760 | 45.0 | 42.0 | 1.00 | 0.225 | 125 | 7.0 | 1.5 | 70 | L |
| 5STP 25M5200 | 5200 | | 2540 | 45.0 | 42.0 | 1.00 | 0.225 | 125 | 9.0 | 1.5 | 70 | M |
| 5STP 34N5200 | 5200 | | 3600 | 60.0 | 55.0 | 1.03 | 0.160 | 125 | 5.7 | 1.0 | 90 | N |
| 5STP 34Q5200 | 5200 | | 3875 | 60.0 | 55.0 | 1.03 | 0.160 | 125 | 5.0 | 1.0 | 90 | Q |
| 5STP 52U5200 | 5200 | | 4120 | 90.3 | 82.5 | 1.04 | 0.115 | 110 | 4.0 | 0.8 | 135 | U |
| 5STP 03D6500 | 6500 | | 380 | 4.8 | 4.5 | 1.20 | 2.300 | 125 | 36.0 | 7.5 | 10 | D |
| 5STP 08F6500 | 6500 | | 830 | 12.8 | 11.8 | 1.24 | 1.015 | 125 | 17.0 | 4.0 | 22 | F |
| 5STP 08G6500 | 6500 | | 720 | 12.8 | 11.8 | 1.24 | 1.015 | 125 | 22.0 | 4.0 | 22 | G |
| 5STP 12K6500 | 6500 | | 1370 | 23.4 | 21.9 | 1.18 | 0.632 | 125 | 11.0 | 2.0 | 50 | K |
| 5STP 18M6500 | 6500 | | 1800 | 35.0 | 32.0 | 1.20 | 0.430 | 125 | 9.0 | 1.5 | 70 | M |
| 5STP 26N6500 | 6500 | | 2810 | 50.0 | 45.0 | 1.12 | 0.290 | 125 | 5.7 | 1.0 | 90 | N |
| 5STP 42U6500 | 6500 | | 3430 | 76.2 | 71.4 | 1.24 | 0.162 | 110 | 4.0 | 0.8 | 135 | U |
| 5STP 03X6500 | 6500 | | 350 | 4.8 | 4.5 | 1.20 | 2.300 | 125 | 45.0 | 7.5 | 10 | X |
| 5STP 12N8500 | 8500 | | 1200 | 38.0 | 35.0 | 1.25 | 0.480 | 90 | 5.7 | 1.0 | 90 | N |

Please refer to page 21 for part numbering structure.



Dimensions in mm