

Phase Control Thyristors - Capsule Types

We provide one of the most comprehensive ranges of standard phase control thyristors in the industry.

Device with voltage ranges from 600V to 4500V are available, making them suitable for applications with line voltages from 230V to over 1000V (higher voltage applications are now served by our range of Medium Voltage Thyristors). Westcode is a leading supplier of phase control products into demanding markets such as industrial DC drives, induction melting, marine/rail propulsion systems, wind power converters, electrochemical power supplies and soft starters. These devices are optimised to give low conduction losses and are primarily intended for applications with line frequencies up to 400Hz.

Type		V_{DRM}	I_{TAV}	I_{TSM}	I^2t	V_{T0}	r_T	T_{JM}	R_{thJK}		Fig. No.
Part No.	Old Part No.	V_{RRM}	$T_K=55^\circ C$	10ms ½ sine, $V_R \leq 60\% V_{RRM}$	A^2s	@ T_{JM}			180° Sine	120° Rect.	
		V	A	A		V	mΩ	°C	K/W	K/W	
N0194WC120	N086CH12	1200	194	1700	14.5×10^3	1.570	2.290	125	0.135	0.190	W8
N0194WC160	N086CH16	1600	194	1700	14.5×10^3	1.570	2.290	125	0.135	0.190	W8
N0255WC120	N105CH12	1200	255	2450	30.0×10^3	0.900	1.790	125	0.135	0.190	W8
N0255WC160	N105CH16	1600	255	2450	30.0×10^3	0.900	1.790	125	0.135	0.190	W8
N0339WC120	N170CH12	1200	339	4200	88.2×10^3	1.080	1.300	125	0.095	0.110	W8
N0339WC160	N170CH16	1600	339	4200	88.2×10^3	1.080	1.300	125	0.095	0.110	W8
N0392WC120	N195CH12	1200	392	4650	108×10^3	0.920	0.990	125	0.095	0.110	W8
N0392WC160	N195CH16	1600	392	4650	108×10^3	0.920	0.990	125	0.095	0.110	W8
N0491WC020	N275CH02	200	491	6000	180×10^3	0.850	0.535	125	0.095	0.110	W8
N0491WC080	N275CH08	800	491	6000	180×10^3	0.850	0.535	125	0.095	0.110	W8
N0606YS200	N282SH20	2000	606	7100	252×10^3	1.103	0.804	125	0.050	0.058	W9
N0606YS250	N/A	2500	606	7100	252×10^3	1.103	0.804	125	0.050	0.058	W9
N0616LC400	N255CH40	4000	616	5250	138×10^3	1.220	1.530	125	0.032	0.040	W10
N0616LC450	N255CH45	4500	616	5250	138×10^3	1.220	1.530	125	0.032	0.040	W10
N0634LC380	N257CH38	3800	634	7000	245×10^3	1.100	1.500	125	0.032	0.040	W10
N0634LC420	N257CH42	4200	634	7000	245×10^3	1.100	1.500	125	0.032	0.040	W10
N0646LC300	N260CH30	3000	646	5700	162×10^3	1.210	1.360	125	0.032	0.040	W10
N0646LC360	N260CH36	3600	646	5700	162×10^3	1.210	1.360	125	0.032	0.040	W10
N0676YS120	N281SH12	1200	676	7500	281×10^3	1.090	0.587	125	0.050	0.058	W9
N0676YS180	N281SH18	1800	676	7500	281×10^3	1.090	0.587	125	0.050	0.058	W9
N0734YS120	N280SH12	1200	734	8400	353×10^3	1.030	0.483	125	0.050	0.058	W9
N0734YS160	N280SH16	1600	734	8400	353×10^3	1.030	0.483	125	0.050	0.058	W9
N0782YS120	N283SH12	1200	782	9420	444×10^3	0.920	0.450	125	0.050	0.058	W9
N0782YS140	N283SH14	1600	782	9420	444×10^3	0.920	0.450	125	0.050	0.058	W9
N0882NC400	N320CH40	4000	882	7700	296×10^3	1.300	0.920	125	0.024	0.030	W11
N0882NC450	N320CH45	5000	882	7700	296×10^3	1.300	0.920	125	0.024	0.030	W11
N0910LS200	N330SH20	2000	910	9200	423×10^3	1.040	0.606	125	0.032	0.040	W10a
N0910LS260	N330SH26	2600	910	9200	423×10^3	1.040	0.606	125	0.032	0.040	W10a
N0992YS020	N310SH02	200	992	11000	605×10^3	0.820	0.240	125	0.050	0.058	W9
N0992YS060	N310SH06	600	992	11000	605×10^3	0.820	0.240	125	0.050	0.058	W9
N1010NC300	N360CH30	3000	1010	12100	732×10^3	1.170	0.687	125	0.024	0.030	W11
N1010NC380	N360CH38	3800	1010	12100	732×10^3	1.170	0.687	125	0.024	0.030	W11
N1042LS120	N350SH12	1200	1042	11500	661×10^3	1.080	0.395	125	0.032	0.040	W10a
N1042LS180	N350SH18	1800	1042	11500	661×10^3	1.080	0.395	125	0.032	0.040	W10a



Figure W8 - 19mm - 70g

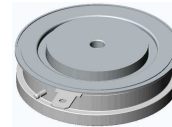


Figure W9 - 25mm - 90g



Figure W10 - 34mm - 340g

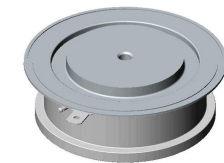


Figure W10a - 34mm - 340g



Figure W11 - 47mm - 510g

Type		V_{DRM} / V_{RRM}	I_{TAV} $T_K=55^\circ\text{C}$	I_{TSM} 10ms ½ sine $V_R \leq 60\% V_{RRM}$	I^2t $V_R \leq 60\% V_{RRM}$	V_{TO}	r_T @ T_{JM}	T_{JM}	R_{thJK}		Fig. No.
Part No.	Old Part No.	V	A	A	A^2s	V	$\text{m}\Omega$	$^\circ\text{C}$	180° Sine K/W	120° Rect. K/W	
N1114LS120	N370SH12	1200	1114	12700	806×10^3	1.000	0.349	125	0.032	0.040	W10a
N1114LS180	N370SH18	1800	1114	12700	806×10^3	1.000	0.349	125	0.032	0.040	W10a
N1132NC300	N390CH30	3000	1132	14300	1.02×10^6	1.150	0.510	125	0.024	0.030	W11
N1132NC320	N390CH32	3200	1132	14300	1.02×10^6	1.150	0.510	125	0.024	0.030	W11
N1159NC380	N500CH38	3800	1159	14500	1.05×10^6	1.100	0.574	125	0.022	0.027	W11
N1159NC420	N500CH42	4200	1159	14500	1.05×10^6	1.100	0.574	125	0.022	0.027	W11
N1265LS120	N520SH12	1200	1226	15000	1.13×10^6	0.883	0.297	125	0.032	0.040	W10a
N1265LS160	N520SH16	1600	1226	15000	1.13×10^6	0.883	0.297	125	0.032	0.040	W10a
N1297NS200	N450SH20	2000	1297	17600	1.55×10^6	1.030	0.380	125	0.024	0.030	W11a
N1297NS260	N450SH26	2600	1297	17600	1.55×10^6	1.030	0.380	125	0.024	0.030	W11a
N1314NC300	N570CH30	3000	1314	16600	1.38×10^6	1.000	0.437	125	0.024	0.030	W11
N1314NC360	N570CH36	3600	1314	16600	1.38×10^6	1.000	0.437	125	0.024	0.030	W11
N1351VC400	N560CH40	4000	1351	17500	1.53×10^6	1.200	0.553	125	0.017	0.020	W12
N1351VC450	N560CH45	4500	1351	17500	1.53×10^6	1.200	0.553	125	0.017	0.020	W12
N1351VD400	N/A	4000	1351	17500	1.53×10^6	1.200	0.553	125	0.017	0.020	W50
N1351VD450	N/A	4500	1351	17500	1.53×10^6	1.200	0.553	125	0.017	0.020	W50
N1467NS200	N490SH20	2000	1467	21500	2.31×10^6	1.000	0.272	125	0.024	0.030	W11a
N1467NS260	N490SH26	2600	1467	21500	2.31×10^6	1.000	0.272	125	0.024	0.030	W11a
N1479NS240	N620SH24	2400	1436	21000	2.21×10^6	1.000	0.342	125	0.022	0.026	W11a
N1479NS300	N620SH30	3000	1436	21000	2.21×10^6	1.000	0.342	125	0.022	0.026	W11a
N1547NS160	N510SH16	1600	1547	23300	2.71×10^6	0.920	0.252	125	0.024	0.030	W11a
N1547NS200	N510SH20	2000	1547	23300	2.71×10^6	0.920	0.252	125	0.024	0.030	W11a
N1588NS200	N680SH20	2000	1588	22500	2.53×10^6	0.951	0.268	125	0.022	0.027	W11a
N1588NS260	N680SH26	2600	1588	22500	2.53×10^6	0.951	0.268	125	0.022	0.027	W11a
N1661VC300	N630CH30	3000	1661	23000	2.65×10^6	1.040	0.350	125	0.017	0.020	W12
N1661VC360	N630CH36	3600	1661	23000	2.65×10^6	1.040	0.350	125	0.017	0.020	W12
N1661VD300	N/A	3000	1661	23000	2.65×10^6	1.040	0.350	125	0.017	0.020	W50
N1661VD360	N/A	3600	1661	23000	2.65×10^6	1.040	0.350	125	0.017	0.020	W50
N1712VC240	N640CH24	2400	1712	24500	3.00×10^6	1.050	0.320	125	0.017	0.020	W12
N1712VC300	N640CH30	3000	1712	24500	3.00×10^6	1.050	0.320	125	0.017	0.020	W12
N1712VD240	N/A	2400	1712	24500	3.00×10^6	1.050	0.320	125	0.017	0.020	W50
N1712VD300	N/A	3000	1712	24500	3.00×10^6	1.050	0.320	125	0.017	0.020	W50
N1718NS120	N540SH12	1200	1718	27200	3.70×10^6	0.979	0.169	125	0.024	0.030	W11a
N1718NS180	N540SH18	1800	1718	27200	3.70×10^6	0.979	0.169	125	0.024	0.030	W11a
N1802NS120	N600SH12	1200	1802	29600	4.38×10^6	0.855	0.171	125	0.024	0.030	W11a
N1802NS160	N600SH16	1600	1802	29600	4.38×10^6	0.855	0.171	125	0.024	0.030	W11a
N2046NS120	N740SH12	1200	2046	29200	4.26×10^6	0.980	0.114	125	0.022	0.026	W11a
N2046NS160	N740SH16	1600	2046	29200	4.26×10^6	0.980	0.114	125	0.022	0.026	W11a

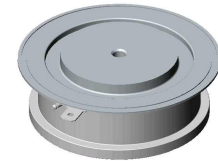


Figure W10a - 34mm - 340g



Figure W11 - 47mm - 510g



Figure W11a - 47mm - 510g



Figure W12 - 63mm - 1000g



Figure W50 - 63mm - 750g

Type		V_{DRM} / V_{RRM}	I_{TAV} $T_K=55^\circ\text{C}$	I_{TSM} 10ms ½ sine	I^2t $V_R \leq 60\% V_{RRM}$	V_{TO}	r_T @ T_{JM}	T_{JM}	R_{thJK}		Fig. No.
Part No.	Old Part No.	V	A	A	A^2s	V	mΩ	°C	180° Sine K/W	120° Rect. K/W	
N2086NS060	N610SH06	600	2086	35000	6.13×10^6	0.840	0.108	125	0.024	0.030	W11a
N2086NS100	N610SH10	1000	2086	35000	6.13×10^6	0.840	0.108	125	0.024	0.030	W11a
N2172ZC400	N750CH40	4000	2172	28000	3.92×10^6	1.350	0.294	125	0.011	0.012	W13
N2172ZC450	N750CH45	4500	2172	28000	3.92×10^6	1.350	0.294	125	0.011	0.012	W13
N2172ZD400	N750DH40	4000	2172	28000	3.92×10^6	1.350	0.294	125	0.011	0.012	W46
N2172ZD450	N750DH45	4500	2172	28000	3.92×10^6	1.350	0.294	125	0.011	0.012	W46
N2293VC180	N760CH18	1800	2293	33800	5.71×10^6	0.956	0.148	125	0.017	0.020	W12
N2293VC220	N760CH22	2200	2293	33800	5.71×10^6	0.956	0.148	125	0.017	0.020	W12
N2293VD180	N/A	1800	2293	33800	5.71×10^6	0.956	0.148	125	0.017	0.020	W50
N2293VD220	N/A	2200	2293	33800	5.71×10^6	0.956	0.148	125	0.017	0.020	W50
N2418ZC300	N850CH30	3000	2418	30000	4.50×10^6	1.160	0.246	125	0.011	0.012	W13
N2418ZC360	N850CH36	3600	2418	30000	4.50×10^6	1.160	0.246	125	0.011	0.012	W13
N2418ZD300	N/A	3000	2418	30000	4.50×10^6	1.160	0.246	125	0.011	0.012	W46
N2418ZD360	N/A	3600	2418	30000	4.50×10^6	1.160	0.246	125	0.011	0.012	W46
N2500VC120	N990CH12	1200	2500	37000	6.85×10^6	0.880	0.124	125	0.017	0.020	W12
N2500VC160	N990CH16	1600	2500	37000	6.85×10^6	0.880	0.124	125	0.017	0.020	W12
N2500VD120	N/A	1200	2500	37000	6.85×10^6	0.880	0.124	125	0.017	0.020	W50
N2500VD160	N/A	1600	2500	37000	6.85×10^6	0.880	0.124	125	0.017	0.020	W50
N2543ZC240	N880CH24	2400	2543	32000	5.12×10^6	0.780	0.274	125	0.011	0.012	W13
N2543ZC300	N880CH30	3000	2543	32000	5.12×10^6	0.780	0.274	125	0.011	0.012	W13
N2543ZD240	N/A	2400	2543	32000	5.12×10^6	0.780	0.274	125	0.011	0.012	W46
N2543ZD300	N/A	3000	2543	32000	5.12×10^6	0.780	0.274	125	0.011	0.012	W46
N3012ZC200	N900CH20	2000	3012	45100	10.2×10^6	0.920	0.160	125	0.011	0.012	W13
N3012ZC260	N900CH26	2600	3012	45100	10.2×10^6	0.920	0.160	125	0.011	0.012	W13
N3012ZD200	N/A	2000	3012	45100	10.2×10^6	0.920	0.160	125	0.011	0.012	W46
N3012ZD260	N/A	2600	3012	45100	10.2×10^6	0.920	0.160	125	0.011	0.012	W46
N3476TC360	N1463CH36	3600	3476	46800	10.95×10^6	0.970	0.180	125	0.008	0.009	W14
N3476TC420	N1463CH42	4200	3476	46800	10.95×10^6	0.970	0.180	125	0.008	0.009	W14
N3476TD360	N1463DH36	3600	3476	46800	10.95×10^6	0.970	0.180	125	0.008	0.009	W19
N3476TD420	N1463DH42	4200	3476	46800	10.95×10^6	0.970	0.180	125	0.008	0.009	W19



Figure W13 - 73mm - 1700g



Figure W46 - 73mm - 1200g



Figure W14 - 75mm - 1300g



Figure W19 - 75mm - 1700g

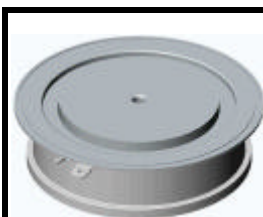


Figure W11a
47mm - 510g



Figure W12
63mm - 1000g



Figure W50
63mm - 750g

Type		V_{DRM} / V_{RRM}	I_{TAV}	I_{TSM}	I^2t	V_{TO}	r_T	T_{JM}	R_{thJK}		Fig. No.
Part No.	Old Part No.	V	$T_K=55^\circ C$ A	10ms ½ sine, $V_R \leq 60\% V_{RRM}$ A	A^2s	V	mΩ	°C	180° sin K/W	120° rec K/W	
N3533ZC140	N1400CH14	1400	3533	50000	12.50×10^6	0.970	0.095	125	0.011	0.012	W13
N3533ZC220	N1400CH22	2200	3533	50000	12.50×10^6	0.970	0.095	125	0.011	0.012	W13
N3533ZD140	N/A	1400	3533	50000	12.50×10^6	0.970	0.095	125	0.011	0.012	W46
N3533ZD220	N/A	2200	3533	50000	12.50×10^6	0.970	0.095	125	0.011	0.012	W46
N3839TC300	N1663CH30	3000	3839	49500	12.25×10^6	0.950	0.140	125	0.008	0.012	W14
N3839TC350	N1663CH35	3500	3839	49500	12.25×10^6	0.950	0.140	125	0.008	0.012	W14
N3839TD300	N1663DH30	3000	3839	49500	12.25×10^6	0.950	0.140	125	0.008	0.012	W19
N3839TD350	N1663DH35	3500	3839	49500	12.25×10^6	0.950	0.140	125	0.008	0.012	W19
N4085ZC080	N1600CH08	800	4085	64000	20.5×10^6	0.850	0.070	125	0.011	0.012	W13
N4085ZC120	N1600CH12	1200	4085	64000	20.5×10^6	0.850	0.070	125	0.011	0.012	W13
N4085ZD080	N/A	800	4085	64000	20.5×10^6	0.850	0.070	125	0.011	0.012	W46
N4085ZD120	N/A	1200	4085	64000	20.5×10^6	0.850	0.070	125	0.011	0.012	W46
N4151FC360	N1483CH36	3600	4151	54000	14.6×10^6	0.850	0.170	125	0.0065	0.0068	W15
N4151FC420	N1483CH42	4200	4151	54000	14.6×10^6	0.850	0.170	125	0.0065	0.0068	W15
N4151FD360	N1483DH36	3600	4151	54000	14.6×10^6	0.850	0.170	125	TBC	TBC	W48
N4151FD420	N1483DH42	4200	4151	54000	14.6×10^6	0.850	0.170	125	TBC	TBC	W48
N4400TC120	N1863CH12	1200	4400	54000	14.6×10^6	0.900	0.100	125	0.008	0.0085	W14
N4400TC280	N1863CH28	2800	4400	54000	14.6×10^6	0.900	0.100	125	0.008	0.0085	W14
N4400TD120	N1863DH12	1200	4400	54000	14.6×10^6	0.900	0.100	125	0.008	0.0085	W19
N4400TD280	N1863DH28	2800	4400	54000	14.6×10^6	0.900	0.100	125	0.008	0.0085	W19
N4803FC300	N1683CH30	3000	4803	60000	18.0×10^6	0.920	0.110	125	0.0065	0.0068	W15
N4803FC350	N1683CH35	3500	4803	60000	18.0×10^6	0.920	0.110	125	0.0065	0.0068	W15
N4803FD300	N/A	3000	4803	60000	18.0×10^6	0.920	0.110	125	TBC	TBC	W48
N4803FD350	N/A	3500	4803	60000	18.0×10^6	0.920	0.110	125	TBC	TBC	W48
N5177FC200	N1883CH20	2000	5177	67500	22.8×10^6	0.800	0.100	125	0.0065	0.0068	W15
N5177FC280	N1883CH28	2800	5177	67500	22.8×10^6	0.800	0.100	125	0.0065	0.0068	W15
N5177FD200	N/A	2000	5177	67500	22.8×10^6	0.800	0.100	125	TBC	TBC	W48
N5177FD280	N/A	2800	5177	67500	22.8×10^6	0.800	0.100	125	TBC	TBC	W48
N5946FC180	N1983CH18	1800	5946	72000	25.9×10^6	0.855	0.065	125	0.0065	0.0068	W15
N5946FC220	N1983CH22	2200	5946	72000	25.9×10^6	0.855	0.065	125	0.0065	0.0068	W15
N5946FD180	N/A	1800	5946	72000	25.9×10^6	0.855	0.065	125	TBC	TBC	W48
N5946FD220	N/A	2200	5946	72000	25.9×10^6	0.855	0.065	125	TBC	TBC	W48



Figure W13 - 73mm - 1700g



Figure W14 - 75mm - 1300g



Figure W19 - 75mm - 1700g



Figure W15 - 99mm - 2800g

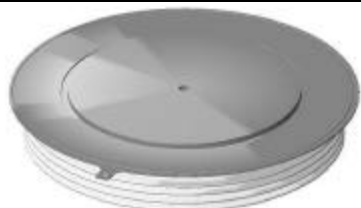


Figure W46
75mm - 1200g

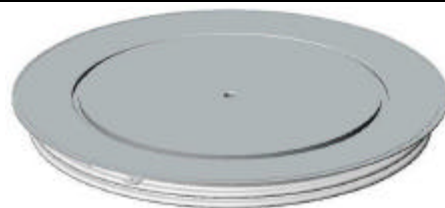


Figure W48
99mm - 1200g