

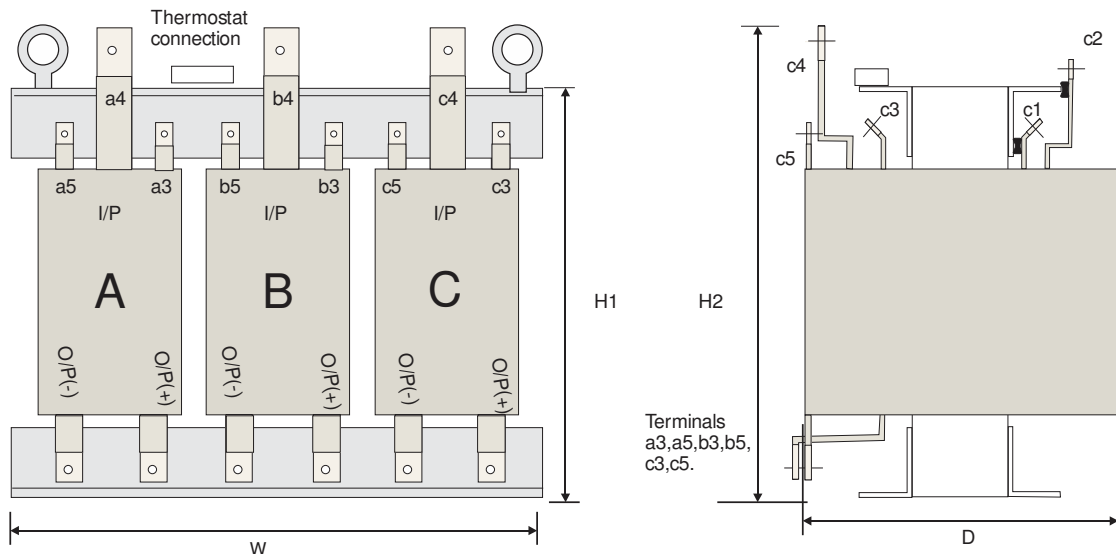
MPE POLYGONAL TRANSFORMERS

Polygonal transformers are special three phase autotransformers which provide two sets of output voltages with one set leading the input voltage by 15° and the other lagging by 15°.

This is particularly useful in reducing supply side harmonics caused by the operation of pairs of 6 pulse variable speed drives. By operating one drive from each output of the polygon transformer, the two drives perform as one 12 pulse system.

MPE polygonal transformers are significantly smaller in size and cost than single output phase shifting transformers, and provide a balanced impedance supply to each drive.

Construction:	Open type IP00 (as standard)
Cooling:	Air Natural (AN)
Standards:	AS 60776, AS 2735
Phase Shift:	±15°
Power Rating:	As specified
Input Voltage:	As specified
Output Voltage:	Approx equal to input voltage at full load
Max Ambient Temp:	55°C (as standard)
Insulation Class:	H
Temperature Rise:	<100°C
Winding Protection:	Circuit breaker protecting against load unbalance
Over Temp Protection:	Thermostats imbedded in all windings
Lifting Provision:	Appropriate for size and mass



±15° PHASE SHIFT POLYGON TRANSFORMERS - 50Hz, IP00						
Typical kVA ratings and prices. Prices include winding protection circuit breaker. July 2011						
kVA	W	D	H1	H2	Mass	Price
100	565	355	475	570	210	\$3,126
200	600	400	475	570	285	\$4,985
300	635	440	475	570	360	\$7,068
400	675	420	560	660	415	\$8,361
500	695	455	560	660	470	\$10,224
670	740	500	560	660	580	\$12,100
900	800	480	650	770	750	\$14,706
1000	825	535	650	770	820	\$15,650
1200	870	600	650	770	935	\$17,619
1400	905	570	710	850	1080	\$19,480
1600	930	630	710	850	1120	\$21,700
1800	970	610	750	915	1200	\$24,150
2000	1000	680	750	915	1280	\$26,910

The circuit diagram shows the internal connections of the transformer. It features three input terminals labeled A, B, and C at the top, with corresponding output terminals labeled A-, B-, and C- at the bottom. The diagram includes a 'Winding protection circuit breaker' and various terminal labels (a1-a5, b1-b5, c1-c5) connected to the transformer windings.