Appendix A

Though the 6th order polynomials have been considered for calculations, the 3rd order and 9th order polynomial solutions for different amount of refrigerant (R-22) in the split airconditioner are also relevant for other purposes. Some of the 3rd and 9th order polynomials are shown below:

**Figure A1** 9th order polynomial equations (sample)

**Figure A2** 9th order polynomial curve for compressor outlet temperature for 10% less refrigerant at different ambient temperatures.
Figure A3 3rd order polynomial curve for 20% less refrigerant