

Analysis of Effectiveness of Eco-Friendly Refrigerant Combinations in a Domestic Air Conditioner System

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I. INTRODUCTION

Many published literature shows Hydroflourocarbon (HFC) and hydro carbons (HC) refrigerant mixture as the favorable replacement for HCFC22 in refrigeration and air-conditioning systems. Moreover, it was assumed that the addition of HCs(290/600) to HFC152a makes it compatible with POE oil .In this chapter the various factors that were considered to select a suitable HFC and HC mixture refrigerants with various mass proportions as drop-in substitute for HCFC22 are discussed. Since HC mixture is zeotropic in nature, the refrigerant mixture preparation and handling procedure followed for the selected mixture is also discussed.

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