



KHAN BROTHERS

Application Note: Pakistan Elektron Limited (PEL)
Date: 10th July 2013

AGRAMKOW

INTRODUCTION:

Pak Elektron Limited (PEL) is the pioneer manufacturer of electrical goods in Pakistan. It was established in 1956 and later it was taken over by Saigol Group of Companies. Since its inception, the company has always been contributing towards the advancement and development of the engineering sector in Pakistan by introducing a range of quality electrical equipments and home appliances and by producing hundreds of engineers, skilled workers and technicians through its apprenticeship schemes and training programs. The company comprises of two divisions:

- Appliances Division (AD)
- Power Division (PD)

System:

Pak Elektron Ltd. has the honor of being the pioneers to shift to Environmental friendly Refrigerant for their chest type deep freezers in Pakistan and for this they turned to R290a Refrigerant. They are using R290a **Secop Compressor & Danfoss Thermostat** in this application. According to its chemical Properties, this refrigerant makes the unit Eco Friendly and increases the performance of the unit itself as well, but R290a is a flammable Refrigerant, Therefore we recommend Agramkow Sara-Max-F charging station because it is designed to work with their existing production environment including following additional features:

- 1- **Safe Emergency Notification (EN) System** for Monitoring any Emergency
- 2- **Production Line Information System (PLIS)** compatibility for Data Logging
- 3- **Automatic Disconnection (ADC)** for Charging Gun Coupler
- 4- **Plug-in for Barcode Scanner** to scan customer defined bar codes



Commissioning:

Sara-Max-F Charging Station is installed and commissioned at PEL for R290a Charging and its working according to requirement. Ventilation ducts are installed to exhaust Refrigerant contaminated air by a Dual speed Exhaust Fan. **Blow-off Unit** is mounted in the repairing area to blow off Refrigerant. The system is running since **June 2012**, without any interruption.



SARA-MAX-F CHARGING STATION



BLOW OFF UNIT AND VENTILATION DUCT.

Importance of Ventilation and Exhaust fan is that in case of any emergency, SAFE EN System installed in the charging station will run the exhaust fan at full speed and it will run continuously unless the concentration of Refrigerant in charging area reaches below 15%. In normal operation the exhaust fan runs at its nominal speed.

Comments:

Imtiaz Ahmad Sheikh

Sr. Manager Production AD

“We are very satisfied with Agramkow/Khan Brothers Equipment Performance & its SAFE EN System that ensures maximum safety.”

Azam Aziz

G.M. Research & Development AD

“We have already installed Agramkow Equipment before, because it is top of the line with international and most importantly local support.”



REFRIGERANT R290a CHARGING in SECOP COMPRESSOR