

VACON Inverter Control System for Compressors



1. If the factory has 2 compressors of same capacity connected to common header, then customer can choose single VACON inverter of the similar capacity of 1 compressor. This is also applicable for 3 Compressors
2. Suppose the factory has 1 Compressor with higher Kw and other with lower Kw connected to common header, then the customer to choose VACON Inverter of highest Kw of the Compressor. This is also applicable for 3 Compressors.
3. In the Common Header, Pressure Transmitter to be fitted and the feed back have to be given to the VACON Inverter.
4. In VACON Inverter, set point required for the system to be programmed by the customer.

CASE 1:

Suppose 2 compressors are controlled by VACON Inverter and panel board supplied by ABHURVA IMPEX which contains Auxiliary Contactors and the control circuit, the modus operandi is as follows:

1. When the Customer switches on the system, VACON Inverter first starts the 1st compressor and the pressure is measured for the set point.
2. If the required pressure is not met by the compressor which is started by the inverter, immediately 2nd Compressor will be started through the auxiliary contactors (through DOL) where by the required pressure will be reached immediately.
3. Once the Set pressure is reached, the Compressor which is running through the VACON Inverter will reduce the speed stage by stage by verifying the set point, there by maintaining the pressure required. The power saving will be to the extent of 10% to 40% depending upon the system operation.
4. The customer can Pre- Program the VACON inverter to operate uniformly either Compressor 1 and compressor 2 at a preset interval, there by reducing the maintenance cost.

CASE 2:

Suppose 3 compressors are controlled to the common header, with 3rd compressor being the stand by compressor, which are connected to VACON Inverter and panel board which contains Auxiliary contactors and the control circuit as supplied by Abhurva Impex,

1. When the Customer switches on the system, VACON Inverter first starts the 1st compressor and the pressure is measured for the set point.
2. If the required pressure is not met by the compressor which is started by the inverter, immediately 2nd Compressor will be started through the auxiliary contactors (through DOL) where by the required pressure will be reached immediately.

3. Once the Set pressure is reached, the Compressor which is running through the VACON Inverter will reduce the speed stage by stage by verifying the set point, there by maintaining the pressure required. The power saving will be to the extent of 10% to 40% depending upon the system operation.

4. Since the 3rd Compressor is standby compressor, VACON will interchange the standby compressor one by one as per the required time interval , so that all the 3 compressors are utilized evenly there by reducing the maintenance cost.