D. All Input modules shall be segregated into groups, which relate to 24VDC supply commons. Where different supplies are apparent in input connections, these shall be segregated in accordance with supply common grouping.

E. Inputs signals from 'DUTY' equipment shall not be allocated to the same input module as signals from 'STANDBY' equipment performing the same function.

F. The analogue current input module shall be capable of converting 4, 8 or 16 channels of inputs in the range of 4 to 20 mA.

G. Resolution of the converted analogue current input signal shall be 12 bits binary

H. All analogue signals shall be updated each scan into a dedicated area of data registers.

I. The conversion speed for all analogue current input channels shall be within 2 - 10 milliseconds

1.3.22.15 Output Modules

A. Discrete AC output modules shall have separate and independent commons allowing each group to be used on different voltages.

B. Discrete AC output where used shall be provided with an RC snubber circuit to protect against transient electrical noise on the power line.

C. Discrete AC outputs shall be suitable for controlling a wide range of inductive and resistive loads by providing a high degree of inrush current (10x the rated current).

D. Discrete DC output modules shall be available with positive and negative logic characteristics in compliance with the IEC industry standard.

E. Discrete DC output modules shall be provided with a maximum of eight output points in two groups. with a common power input terminal per group.

F. Discrete DC output modules shall be compatible with a wide range of load devices, e.g. motor starters, valves, and indicators etc.

G. The current rating of the relay output shall be capable of supplying the load according to the applications.

H. The analogue voltage output module shall be capable of converting digital data to analogue outputs in the range of -10 to +10 volts.

I. Resolution of the converted output signal shall be minimum 12 bits.