



### Cabinets and Panels:

Cabinets and/or panels are available in many types, sizes, colors and methods of construction. They can be outfitted with many different accessories depending on your needs. In general, each cabinet is custom engineered, to meet many different parameters. Care must be taken to specify a cabinet or panel that meets all your needs and specifications. This application note is provided as a guide to prepare a specification and needs to be provided along with a complete equipment listing of all systems being mounted in the cabinet.

### Cabinet Location:

Cabinets are mounted either indoors or outdoors. Indoor cabinets can be mounted in a control, electrical or switchgear room. Outdoor cabinets may be mounted close to or on the machine deck exposed to the elements. Indoor cabinets are normally painted steel and meet Nema 12 requirements. Outdoor cabinets can be painted steel for Nema 4 or Stainless Steel for Nema 4x requirements.

1. Indoor
2. Outdoor
3. Nema 4
4. Nema 4x

### Environment:

Both indoor and especially outdoor cabinet environments need to be looked at for special environmental concerns and requirements. Temperature is a common issue for outdoor cabinets. Both the annual temperature extremes of the proposed cabinet location and the heat generating capacity of the equipment to be installed in the cabinet must be carefully considered. Heating and/or Air Conditioning will be installed as required.

Min.Temp \_\_\_\_\_ C/F. Max. Temp \_\_\_\_\_ C/F

### Type and Manufacture of Cabinet:

Cabinets come in two (2) basic types, Solid and Modular. Solid Cabinets have welded seams where modular cabinets are bolted together. Solid cabinets will generally be used outdoors and modular cabinets indoors. In some cases a customer may have a preference between manufactures.

Solid G Modular G Manufacture \_\_\_\_\_

### Access:

The location that the cabinet is to be installed in needs to be looked at carefully as to access for maintenance and repair of the installed equipment. In general most cabinets have access front and rear. In some cases where a cabinet is to mounted against a wall only side or front access is available. We always recommend Front and Back Access as any other type is difficult and expensive unless absolutely required. If side access is necessary, specify which side as if you are looking from the front.

1. Front & Back
2. Front & L/R
3. Front Only

### Dimensions or Size:

Size is in the end determined by the installed equipment and required options. In most cases a desired size is specified and then will be changed as engineering requires. Other existing cabinets and the desire to have the installed equipment close to eye height normally determine height. Height will normally be between 78" (2000 mm) and 82" (2100 mm). Width will be determined by available space and the installed equipment and will be 19" EIA, 24" (610 mm) or 36" (914 mm). Depth is determined by the depth of the installed equipment and will be either 26" (650 mm) or 34" (850 mm).

Height \_\_\_\_\_ Width \_\_\_\_\_ Depth \_\_\_\_\_

### Power Distribution and Lighting:

Power distribution is recommended and is usually provided. A power distribution panel with breakers and two (2) accessory power outlets will be provided. Lighting will be provided in the top of the panel for ease of maintenance. Top or Bottom power and wire entry to the cabinet needs to be specified along with input voltage.

1. Top
2. Bottom
3. 110 VAC
4. 220 VAC



### Intermediate Terminal Blocks:

Intermediate terminal blocks are a required feature on most cabinets. This allows for all the pre-wiring of the installed equipment to take place at the cabinet shop. Only power and external wiring need to be attached to the terminal blocks. A listing of the equipment to be installed, installed transducers, recorder outputs and required relays along with a percentage of spare terminal blocks to be supplied is required. As an alternative, direct wiring to the installed equipment can be accomplished.

1. Intermediate Terminals
2. Direct

2-Wire Transducers \_\_\_\_\_  
3-Wire Transducers \_\_\_\_\_  
Recorder Outputs \_\_\_\_\_  
Relay's Required \_\_\_\_\_  
% Spares Required \_\_\_\_\_

### Paint and Color:

The specific exterior paint color of the cabinet may be optionally specified to meet existing cabinet specifications or preferences. Any color other than standard OEM colors must be specified in advance. Non stock paints will effect price and lead times.

1. Standard Grey
2. Specified \_\_\_\_\_

### Doors:

Doors need to be specified as either left hinged or right hinged. On a left hinged door the hinges will be on the left and the door will open with the right hand.

1. Left Hinged
2. Right Hinged

### Drawing Package:

Please see our standard drawing package as a starting point of drawing package options. Drawings can be provided in AutoCAD Format (Standard) as well as Intergraph. Drawings can be provided in prints, reproducible and digital formats.

1. AutoCAD
2. Intergraph
3. Mechanical Drawing Package
4. Electrical Drawing Package
5. Field Transducer Interconnect Package

### Accessories:

1. Smoke Detector
2. Heat Sensor
3. BNC Connectors
4. Slave Relays
5. Special Transportation
6. Lifting Eye Bolts
7. Door Locks
8. Heating/Air Conditioning
9. Glass Front Door
10. Fan G w/Filter
11. Air Purging Y or Z

### Checklist:

1. Cabinet location
2. Type and Manufacture
3. Access
4. Dimensions or Size
5. Power Distribution/Lighting
6. Intermediate Terminal Blocks
7. Paint/Color
8. Doors
9. Drawing Package
10. Accessories