

Mechanical Services Switch Boards (MSSB's)

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Australian Standard – AS3491

- > Forms of Segregation
- > Light & Power
- > Power Generation
- > Mining
- > MSSB Segregation is based on this standard but has evolved over time.

Form 1

> Main Criteria

- No Segregation of Components

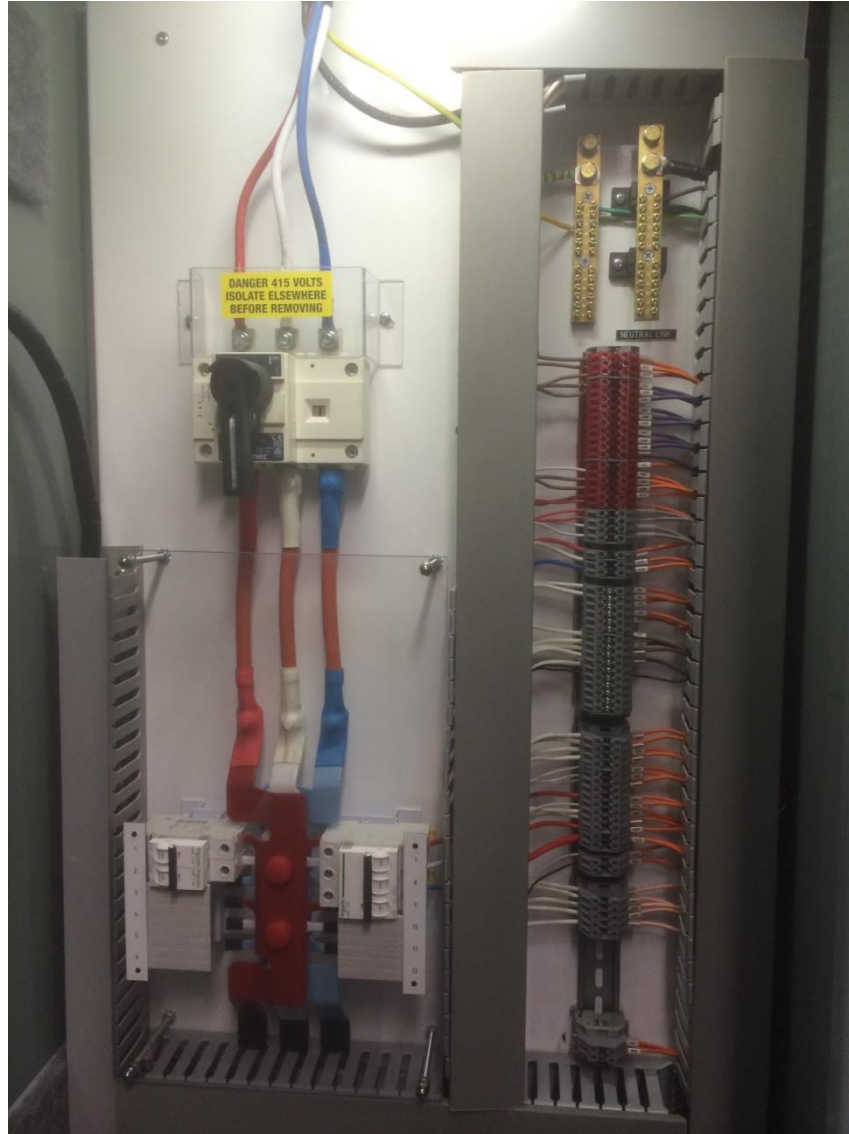
> Used for

- Low current MSSB's
- Tenancies (Shopping Centres)
- Lift motor room
- Cold rooms

> Disadvantages

- Terminals still alive when main switch is off
- BMS/415 Volts are mixed

Form 1



Form 2A

- > Represents 90% of MSSB installations for HVAC
- > Main Criteria
 - Main switch is segregated from all other equipment

Form 2A



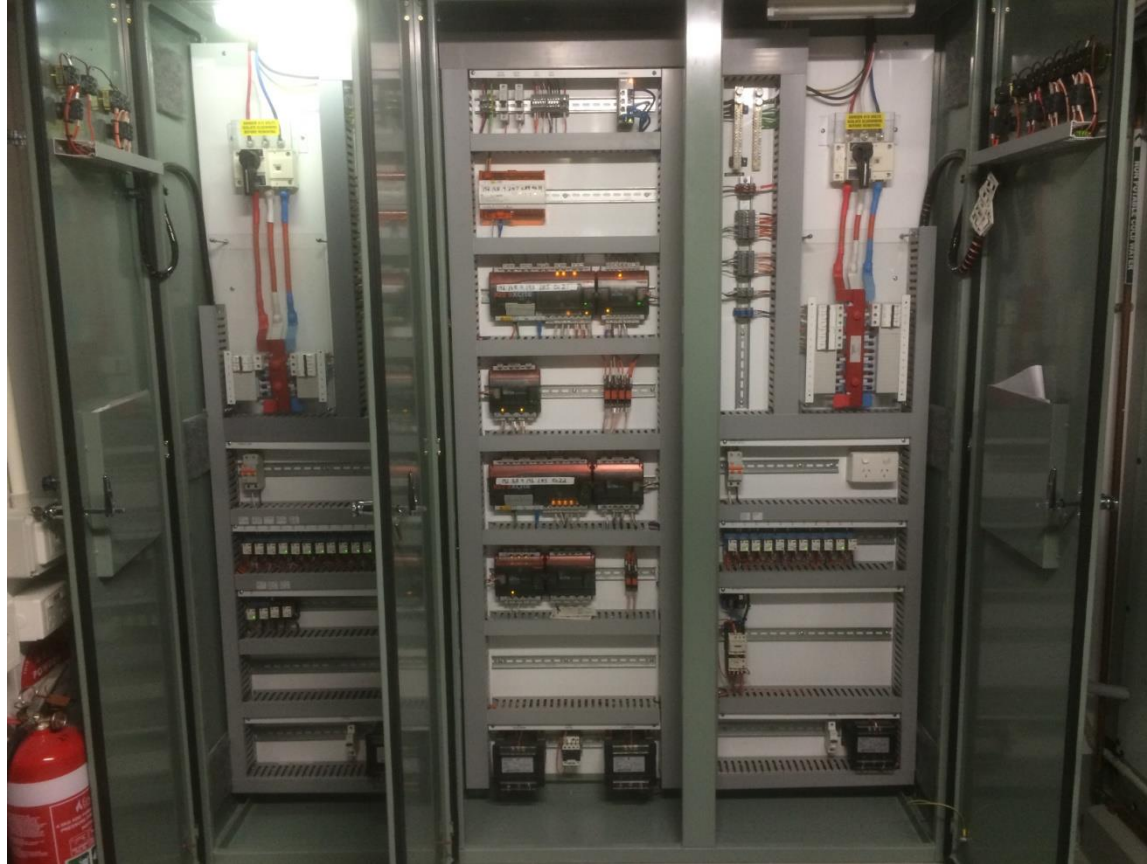
Form Variant

- > A variation of Form 1 & 2A is to integrate the BMS

Form Variant



Form Variant



Form 3

- > Energy Plants
- > Chiller Plantrooms
- > Larger motors (above 55KW)

Form 3

> Main Criteria

- Segregation between Bus bar system and Functional units
- Segregation between each Functional unit

Form 3



Form 3

> Advantages

- Catastrophic failure of each system is isolated
- Maintenance/Shutdown of each system can be isolated

> Disadvantage

- Quadruple the size of Form 2A

High Voltage Chillers and MSSB's



Thank you

Questions?

