

## 4160 Voltage Switch Gear

### Siemens Medium Voltage Switchgear:

Siemens Type GMSG Medium Voltage Switchgear  
 2000 Amp main bus, 4760 Volt, 50/60Hz, 63KA Interrupting Capacity  
 Single ended source or double ended source substations available .  
 3000A, 2000A and 1200A Siemens Type GMSG Circuit Breakers, Mechanically Operated,  
 Electrically Operated, with adjustable solid state protective relays .

#### Switchgear Features:

- Fiber-optic and Modbus (RS-485) communications to power meter and relays.
- Siemens 9610 Digital Power Meter
- Protective Relays , Basler BE1-87T Transformer Differential (ANSI 87T function), Basler BE1-87B Bus Differential (ANSI 87B function), Siemens type 7SJ6215 TOC and Instantaneous (ANSI 50 /51 function), ABB Circuit Shield Sync Check (ANSI 25 function).
- Line VT's and Bus VT's
- Control Power Transformer
- Arc Flash Safety provisions for "Closed Door Remote Racking Motor", receptacles for remote racking and remote operation of breakers.
- Mimic bus on front of switchgear.
- Test plugs for maintenance testing of components.
- Infrascan ports in rear of switchgear
- Siemens switchgear and breakers are currently in production so spare parts and upgrades are readily available.

### 5 Sections:

#### Siemens Medium Voltage Switchgear Inventory:

AF= Amp Frame, M.O.= Mechanically Operated, E.O.= Electrically Operated.

<b>Switchgear ID:</b>	P192USM5	<b>Siemens S.O.#</b>	30072821-1500-11
<b>Manufacturer:</b>	Siemens	<b>Type:</b>	GMSG
<b>Current Rating:</b>	3000A	<b>Voltage Rating:</b>	4.76 KV
<b>Configuration:</b>	3phase, 3 wire	<b>Hertz:</b>	50 / 60
<b>Interrupting Rating:</b>	63 KAIC	<b>Main Breaker: QTY 0</b>	None
<b>Tie Breaker: QTY 1</b>	3000AF M.O. & E.O.	<b>Feeder Breakers: QTY 5</b>	(5)1200AF M.O.& E.O.
<b>Sections: (5)</b>	11 thru 15	<b>CPT:</b>	1
<b>Line VT's:</b>	1 (3phase)	<b>Bus VT's:</b>	0

<b>Switchgear ID:</b>	P192USM4	<b>Siemens S.O.#</b>	30072821-1500-06
<b>Manufacturer:</b>	Siemens	<b>Type:</b>	GMSG
<b>Current Rating:</b>	3000A	<b>Voltage Rating:</b>	4.76 KV
<b>Configuration:</b>	3phase, 3 wire	<b>Hertz:</b>	50 / 60
<b>Interrupting Rating:</b>	63 KAIC	<b>Main Breaker: QTY 1</b>	3000 AF, M.O.& E.O
<b>Tie Breaker: QTY 1</b>	3000AF M.O. & E.O.	<b>Feeder Breakers: QTY 5</b>	(4)1200AF (1) 2000AF M.O.& E.O.
<b>Sections: (5)</b>	6 thru 10	<b>CPT:</b>	0
<b>Line VT's:</b>	0	<b>Bus VT's:</b>	1 (3phase)

<b>Switchgear ID:</b>	P192USM1	<b>Siemens S.O.#</b>	30072821-1400-01
<b>Manufacturer:</b>	Siemens	<b>Type:</b>	GMSG
<b>Current Rating:</b>	3000A	<b>Voltage Rating:</b>	4.76 KV
<b>Configuration:</b>	3phase, 3 wire	<b>Hertz:</b>	50 / 60
<b>Interrupting Rating:</b>	63 KAIC	<b>Main Breaker: QTY 1</b>	3000 AF, M.O.& E.O
<b>Tie Breaker: QTY 0</b>	None	<b>Feeder Breakers: QTY 7</b>	(7)1200AF M.O.& E.O.
<b>Sections: (5)</b>	1 thru 5	<b>CPT:</b>	1
<b>Line VT's:</b>	1 (3phase)	<b>Bus VT's:</b>	1 (3phase)

<b>Switchgear ID:</b>	P192USM1	<b>Siemens S.O.#</b>	30072821-1500-06
<b>Manufacturer:</b>	Siemens	<b>Type:</b>	GMSG
<b>Current Rating:</b>	3000A	<b>Voltage Rating:</b>	4.76 KV
<b>Configuration:</b>	3phase, 3 wire	<b>Hertz:</b>	50 / 60
<b>Interrupting Rating:</b>	63 KAIC	<b>Main Breaker: QTY 1</b>	3000 AF, M.O.& E.O
<b>Tie Breaker: QTY 1</b>	3000 AF, M.O.& E.O	<b>Feeder Breakers: QTY 4</b>	(4)1200AF M.O.& E.O.
<b>Sections: (5)</b>	6 thru 10	<b>CPT:</b>	1
<b>Line VT's:</b>	1 (3phase)	<b>Bus VT's:</b>	1 (3phase)Used

<b>Switchgear ID:</b>	P192USM7	<b>Siemens S.O.#</b>	30087666-100-01
<b>Manufacturer:</b>	Siemens	<b>Type:</b>	GMSG
<b>Current Rating:</b>	1200A	<b>Voltage Rating:</b>	4.76 KV
<b>Configuration:</b>	3phase, 3 wire	<b>Hertz:</b>	50 / 60
<b>Interrupting Rating:</b>	63 KAIC	<b>Main Breaker: QTY 1</b>	1200 AF, M.O.& E.O
<b>Tie Breaker: QTY 0</b>	None	<b>Feeder Breakers: QTY 3</b>	(3)1200AF M.O.& E.O.
<b>Sections: (4)</b>	1 thru 4	<b>CPT:</b>	1
<b>Line VT's:</b>	1 (3phase)	<b>Bus VT's:</b>	1 (3phase)