TAMCO™

GV3 (Single Bus) And GV3D (Double Bus) GAS INSULATED SWITCHGEAR

GENERAL

TAMCO has been manufacturing Gas Insulated Switchgear (GIS) type GV3 and GV3D since 1998. TAMCO's GIS utilizes vacuum circuit breaker in SF6 gas tank and offer a sealed-for-life solution in the substation. The products have been widely used in Asia, Australia, Middle East and as far as Trinidad and Tobago in the Southern Caribbean.

KEY FEATURES

- Compact design and occupy minimum space in the substation
- Totally sealed tank design suitable for polluted environments
- No fire risk
- Superior SF6 gas insulation
- Reliable vacuum circuit breaker in SF6 tank with independent short circuit performance
- Minimum maintenance required since all primary components are sealed
- Utilizing On-Off-Earthed Disconnector Switch that is fully mechanical-interlocked with VCB
- Fault-making earthing through VCB up to 100kA
- Utilizing motorized DS and VCB mechanisms for Remote, DCS and SCADA applications
- CT bushing design for mounting up to 4 sets of metering & protection CTs.
- Plug-in VTs with spring loaded ON-OFF disconnecting switch
- Ample space in metering panel for mounting meters and protection relays
- Generous space for plug-in type cable terminations up to DIN Size 4
- Strong base channels are provided for easy installation
- Fully extensible at site
- Type tested at KEMA and CESI

SAFETY

TAMCO regards safety as the most important specification of switchgear design and operation and the following proven safety features have been built into (GIS) type GV3 and GV3D:

- No exposure to live parts
- Passive interlocks to prohibit unintended operations
- Comprehensive pad-locking facilities
- Mimic diagrams and position indicators to guide the operator
- Fully fault rated earthing switch (through VCB)
- Arc fault tested

QUALITY

TAMCO operates a Quality System in line with ISO9001 and ISO14001

In addition to in-house routine and QC test, all switchgear products are fully type tested and certified by CESI/ KEMA.

TECHNICAL OF PARAMETERS OF GV3 (*) AND GV3D (*)

	Model	*-30M25	*-30P25	*-30M32	*-30P32	*-30Q32	*-30P40	*-30Q40
RATED	Voltage (kV)	36-40.5						
	Current (A)	1250	2000	1250	2000	2500	2000	2500
	Frequency (Hz)	50/60						
	Impulse Withstand (kVp)	170/195						
	1 - min. Power Frequency (kV)	70/80						
	Operating Sequence	0-0.3 sec - CO - 3 min - CO						
	Short-time withstand Current (kA)	25		31.5			40	
	Peak Withstand Current (kA)	62.5		80			100	
	Duration of Short Circuit (S)	3						
	Short-circuit Making Current (kA)	62.5		80			100	
	Short-circuit Breaking Current (kA)	25		31.5			40	
	LC1 (Line Charging Current) (A)	10		10			10	
	CC1 (Cable Charging Current) (A)	50		50			50	
	BC1 / CC2 (Cable Charging Current) (A)	125		125			125	
	BC2 (Back to Back Capacitor Bank) Breaking Current (A)	630		800			800	

GV3
(Bottom Busbar)

GV3
(Top Busbar)

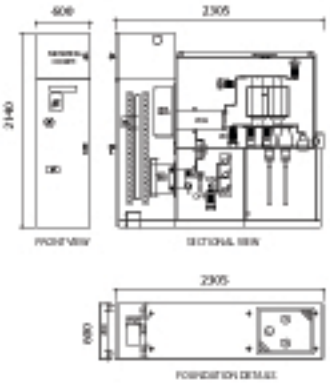
GV3D

Model	*-30M25	*-30P25	*-30M32	*-30P32	*-30Q32	*-30P40	*-30Q40
Opening time (mS)	20 - 50						
Breaking time	< 3 cycles						
Closing time (mS)	30 - 60						
Closing / tripping voltage (VDC)	110 (-30% +10%) (other voltages are available)						
Operating mechanism	Motor spring charged stored energy						
Rated Operating Pressure of SF6	1.35 bar absolute pressure at 20°C						
Minimum Operating Pressure of SF6	1.20 bar absolute pressure at 20°C						
SF6 Gas leakage rate per year	< 1%						
Internal Arc Fault Tested (AFLR)	25 kA 1 S		31.5 kA 1 S			40 kA 1 S	
IEC Standards	62271-200, 62271-100, 62271-102						
Ambient temperature range	-25°C to +40°C						
Dimension (mm) width	600	800	800	800	800	800	800
Approximate weight (kg)	1500	2000	2000	2000	2000	2000	2000

Note : (*) higher value in accordance with national standards on request
(**) other auxiliary voltage on request

600W

GV3 (BOTTOM BUS)

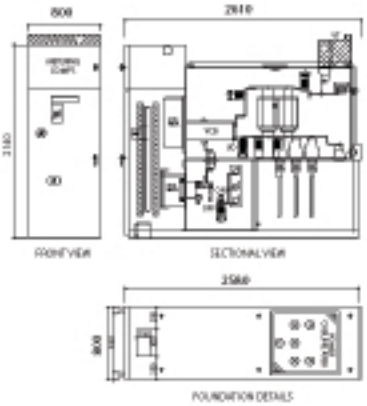


GV3 (TOP BUS)

GV3D (DOUBLE BUS)

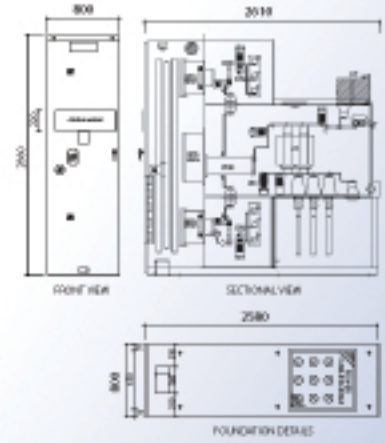
800W

GV3 (BOTTOM BUS C/W VT)

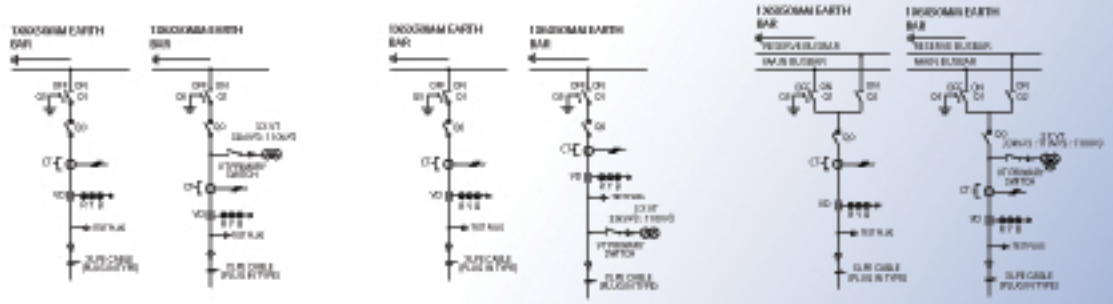


GV3 (TOP BUS C/W VT)

GV3 (DOUBLE BUS C/W VT)



1 LINE



The information contained herein is correct at time of going to press, but as the products and its manufacturing processes are being developed continously, this information is subject to change without notice, and the company cannot be held liable for any alleged misinterpretation howsoever arising.

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