

( . : )

*permanent magnet generator ( PMG ) -*

*AC exciter ( EXC ) -*

*automatic voltage regulator I,II -*

*rectifier -*

*de excitation -*

-

*EXC*

*SCR*

*PMG*

*EXC*

*de - excitation*

*EXC*

*AVR*

*SCR*

*EXC*

*EXC*

*PTroom rectifier, I, II .*

*R - C*

-

*( dV / dt )*

-

-

*de – excitation*

*DC*

*(manualregulator)*

*(rectifier) ( )*

*s tan dby*

*EXC*

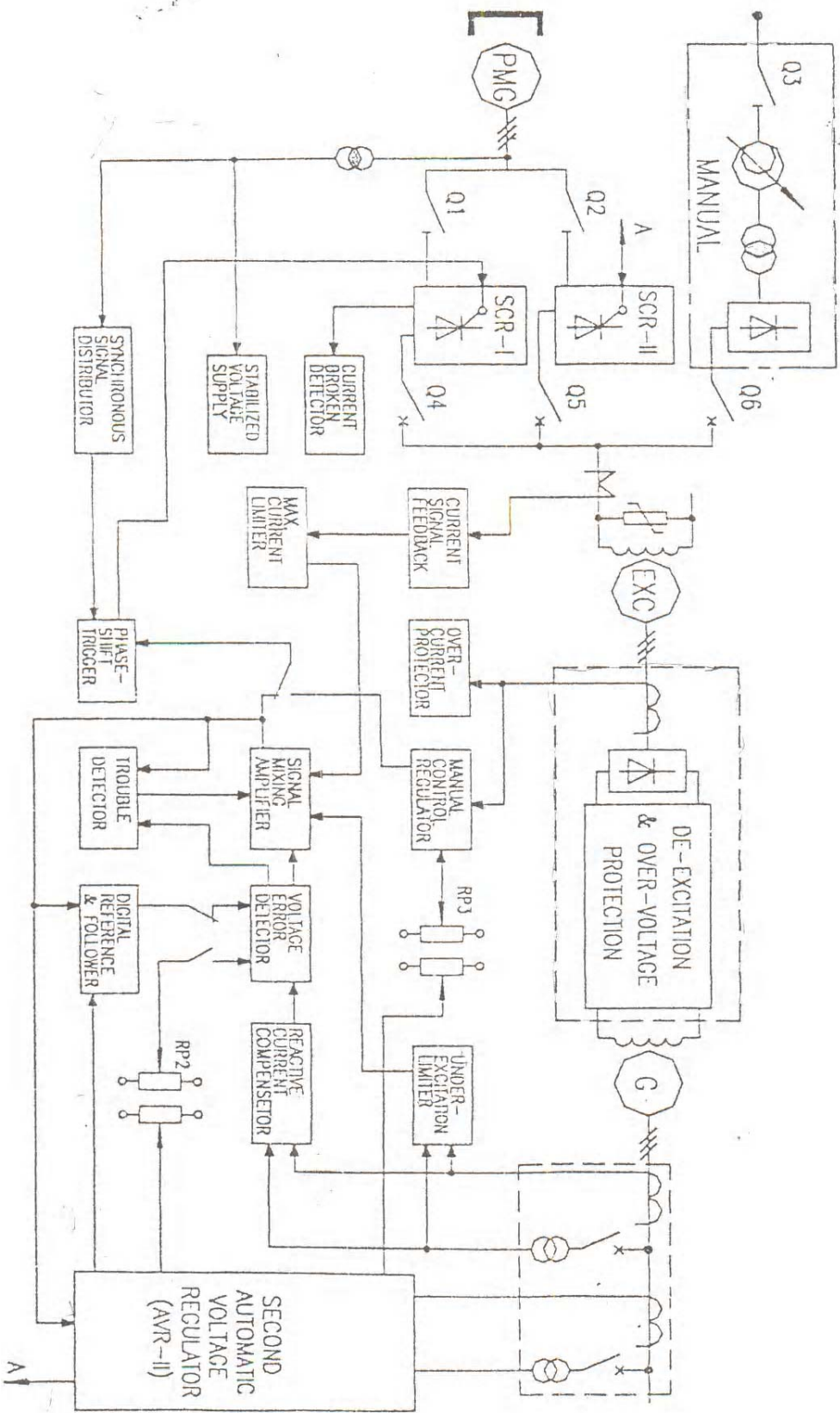
*AVR*

*manualregulator AVR*

*AVR*

	1000
	3500
20	7000
<i>dc</i>	2200

		<i>EXC</i>	<i>PMG</i>
	<i>KVA</i>	1710	75
	<i>V</i>	430	180
	<i>A</i>	2296	240
	0.92	0.92	0.875
	<i>HZ</i>	100	400
	<i>R/MIN</i>		3000
	-	4	16
	-		



AVR

:

AVR

-

-

$$300(A) / 1200(V)$$

R-C

-

(  $dV/dt$  )

-

-

:

-

-

-

-

-

-

manualcontrol Auto

manualcontrol Auto

AVR

VED

Auto

SMA

$\Delta U_G$

SMA



$VED$   $RP_1$   $U_G$  -1  
 $AVR$   $VED$   $U_{set}$  -2  
 $RP_2$   $AVR$   $DRF$   
 $M_1$   $AC$   
 $\Delta U_G$   $VED$   
 $SMA$   
 $DRF$   
*s tan dby*

$AVR$

*current signal feedback , max current limiter -*  
 (  $CSF$  ,  $MCL$  )

$CSF$   $EXC$   $TA_{10}$   
 $SMA$   $CSF$

$EXC$  (   
 $SMA$   $CSF$  (

$MCL$

$SMA$   $EXC$

*Over current protector (OCP) -3*

$OCP$   $OCP$   $EXC$   $T_8$

:

*inverse time delay protection -*

$$1.1I_{LN} < I_L < 3I_{LN}$$

*instantaneous protection -*

$$I_L \geq 3I_{LN}$$

*EXC : I<sub>L</sub>*

*EXC : I<sub>LN</sub>*

$$K_2 \quad K_1$$

*SMA*

*under excitation limiter (UEL) -*

*:*

*-*

*-*

*SMA*

*.*

*phase shift triyle (PST) -*

*MCR SMA V<sub>K</sub>*

*PST*

*.*

*:*

*PST*

*SSD U<sub>S</sub> -*

*MCR SMA V<sub>K</sub> -*

*T<sub>13</sub> U<sub>CH</sub> -*

*36 V<sub>MAX</sub> -*

*84 V<sub>MIN</sub> -*

*10° - 140° -*

*trouble detector (TDE) -*

ECP

*forced excitation*

AVR

*phase current broken detector -*

: CBD

CBD

CBD

*digital refrence voltage , follower ( DRF ) -*

DRF

*stabilizer voltage supply ( SVS ) -*

±12 DC ±5 DC ±12 SVS

±5

*synchronouse signal distributor ( SSD ) -*

PST SSD

*signal mixture ,amplifier -*

( SMA )

PST

$V_K$

*manual control regulation ( MCR ) -*

Auto

AC

$R_{14}$   $R_{13}$   $R_{12}$

$TA_{12}$

MCR  $T_8$

PST

(MCR)  $V_K$

*manualcontrol*    *Auto*

)  $M_2$

$RP_3$

$MCR$

(  $RP_3$

*reactive current compensator -*

$:V_F$

$:I_O$

$:S$

( *Forced excitation* )

*a*

*SCR*

*O.C*

*Forcedexcitation*

*ECP*

*TDE*

*a*

( 150 )

*ForcedDEexcitation*

$\phi$

$: V \propto dI/dt$  )

(

*Deexcitation.cubicle*

