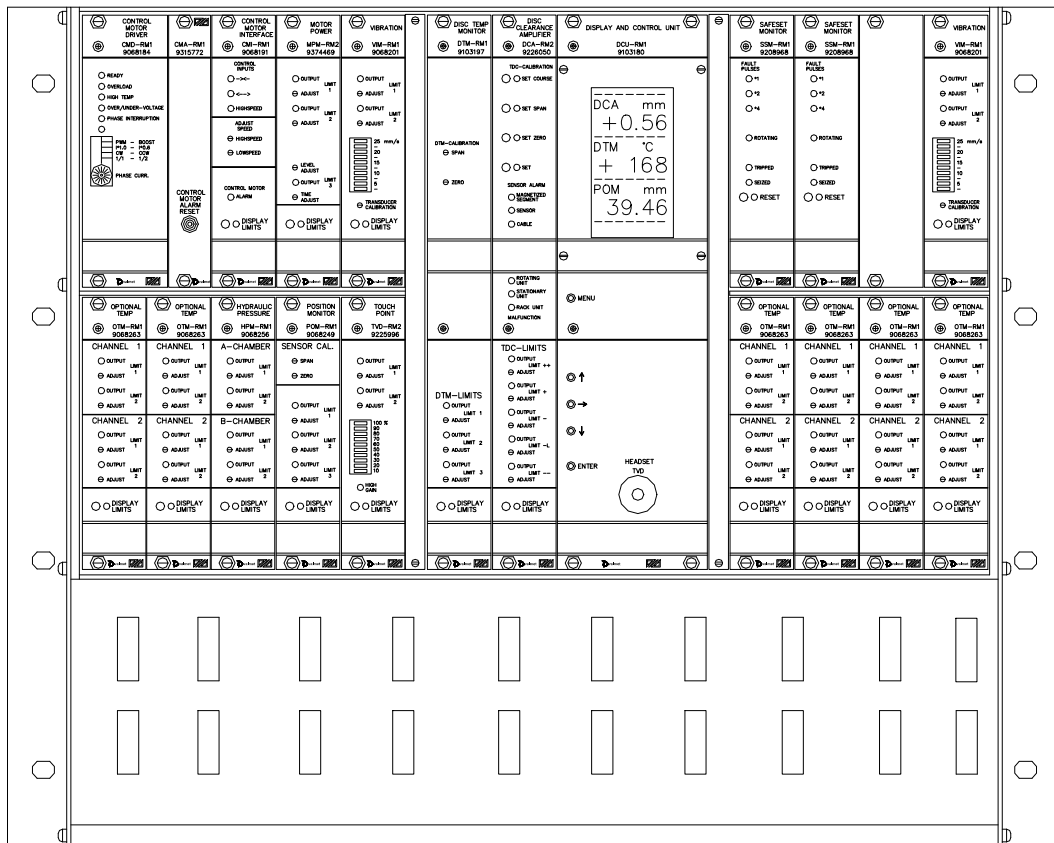




SYSTEM MANUAL

RMS-DD1



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1. UNITS**1.1 RACK AND INCLUDED UNITS**

RMS-DD1	DOUBLE DISC RACK	VAL0123039 / SKC9225989
CMD-RM1	CONTROL MOTOR DRIVER	VAL0122825 / SKC9068184
CMI-RM1	CONTROL MOTOR INTERFACE	VAL0122828 / SKC9068191
VIM-RM1	VIBRATION MONITOR	VAL0123136 / SKC9068201
MPM-RM2	MOTOR POWER MONITOR	VAL0122979 / SKC9374469
TVD-RM2	TOUCH POINT VIBRATION MONITOR	VAL0123116 / SKC9225996
POM-RM1	POSITION MONITOR	VAL0123032 / SKC9068249
HPM-RM1	HYDRAULIC PRESSURE MONITOR	VAL0122850 / SKC9068256
OTM-RM1	OPTIONAL TEMP MONITOR	VAL0122982 / SKC9068263
DCU-RM1	DISPLAY AND CONTROL UNIT	VAL0100517 / SKC9103180
DCA-RM2	DISC CLEARANCE AMPLIFIER	VAL0122834 / SKC9226050
DTM-RM1	DISC TEMP MONITOR	VAL0122841 / SKC9103197
SSM-RM1	SAFESET MONITOR	VAL0123053 / SKC9208968

1.2 STATIONARY AND ROTATING UNITS

RMS-DDS1	RMS-DD STATIONARY UNIT	VAL0123046 / SKC9315741
RMS-DDR1	RMS-DD ROTATING UNIT	VAL0123045 / SKC9315703
TR-S	RMS-DD STATIONARY TRANSFORMER	VAL / M-660185
TR-RA70	RMS-DD ROTATING TRANSFORMER	VAL0123114 / SKC9338333

1.3 PANEL DISPLAYS

PDU-RM4	PANEL DISPLAY UNIT	VAL0122990 / SKC9315765
DSI-01	DIGITAL SIGNAL INDICATOR	VAL0103221 / SKC9113709

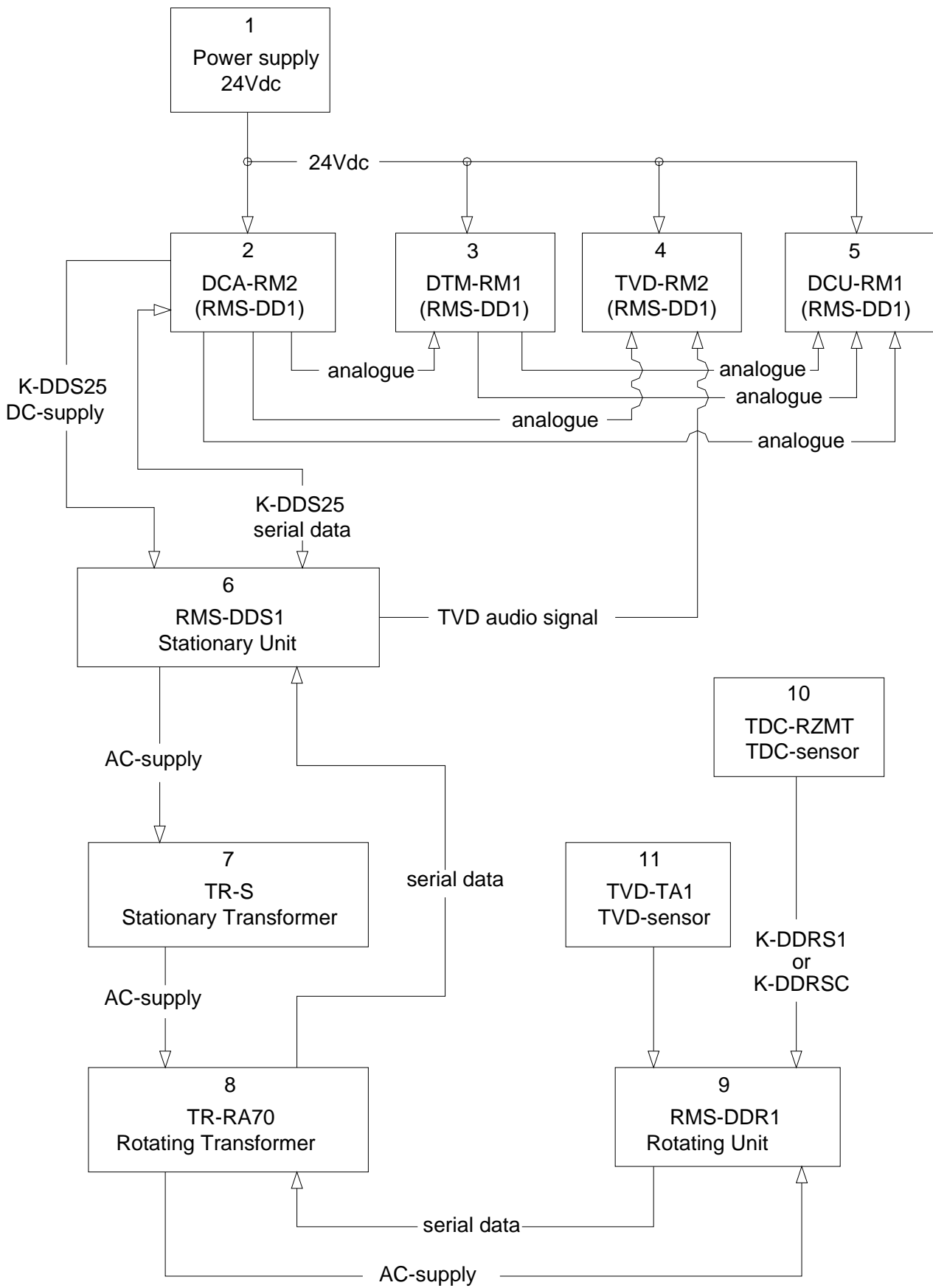
1.4 TRANSDUCERS

TDC-RZMT	TDC SENSOR (alt. 1)	VAL0131499 / SKC9315734
TDC-RZMC	TDC SENSOR (alt. 2)	VAL0131501 / SKC7322264
POT-50	POSITION TRANSDUCER 50 mm	VAL0103227 / SKC9069808
TVD-TA1	TOUCH POINT VIBRATION TRANSDUCER	VAL0123134 / SKC9226036
IG-30	INDUCTIVE TRANSDUCER SAFESET	VAL0122851 / SKC8528656
VIM-T2	VIBRATION TRANSDUCER	VAL0116214 / SKC9691128

1.5 CABLES

K-DDRS1	ROTATING CABLE (alt. 1)	VAL0122855 / SKC9315710
K-DDRSC	ROTATING CABLE (alt. 2)	VAL0142266 / SKC7314328
K-DDRS2	ROTATING CABLE TDC (RGPA-68DD)	VAL0142258 / SKC9635108
K-DDRT1	ROTATING CABLE TVD (RGPA-68DD)	VAL0122856 / SKC9315727
K-PDU3	CABLE PDU	VAL0122960 / SKC9113699
K-POT25	CABLE POT	VAL0122963 / SKC9069815
K-TVDS25	CABLE TVD	VAL0122971 / SKC9305689
K-VIMS25	CABLE VIM	VAL0122973 / SKC9691135
K-AT-10	CABLE SSM	VAL0122765 / SKC8102560
KB-01	CABLE BOX	VAL0122852 / SKC8331960
K-DDS25	CABLE DCA-DD	VAL0122858 / SKC9315758

2. BLOCK DIAGRAM



3. BLOCK DIAGRAM DESCRIPTION

Numbers according to block diagram on previous page. The description covers only the parts or signals that is exclusively for the DD-system. 1. The power supply. This is distributed to all RMS-units inside the rack.

2. DCA-RM2, Disc Clearance Amplifier. (Exclusively for the RMS-DD1 system). The unit connects the incoming power supply to the RMS-DDS1 unit trough the cable K-DDS25. The serial data from the RMS-DDS1 unit includes the TDC-distance, TVD-signal and other internal data for supervision. The unit must be calibrated after the TDC-sensor has been changed.

3. DTM-RM1, Disc Temperature Monitor. (Standard RMS unit).

An analogue signal proportional to the disc temperature is provided from the DCA-RM2 unit. The unit must be calibrated once to the DCA unit.

4. TVD-RM2, Touch point Vibration Detector. (Exclusively for the RMS-DD1 system).

The high frequency touch point vibration signal is converted to an analogue signal and then to a serial data signal in the Rotating unit, RMS-DDR1. The serial data is converted to an analogue signal, 1-5Vdc, in the DCA unit, and coupled to the TVD unit.

An audio signal of the TVD touch point signal is also detected in the Stationary unit and fed direct to the TVD unit. This signal is only used by the headset, and gives the operator a possibility to hear the touch point sound.

5. DCU-RM1, Display and Control Unit. (Standard RMS unit).

The analogue outputs, 1-5Vdc, is read by the unit and can be monitored on the display.

6. RMS-DDS1, Stationary unit. (Exclusively for the RMS-DD1 system).

The unit generate AC-power to the stationary transformer, and receives the modulated serial data from the transformer and converts the data to standard serial data.

It also detects the modulated touch point vibration sound signal and generates an analogue signal to the headset through the TVD unit.

7. TR-S, Stationary transformer. (Exclusively for the RMS-DD1 system).

This unit transforms power to the rotating transformer and receives the modulated serial data.

8. TR-RA70, Rotating transformer. (Exclusively for the RMS-DD1 system).

The unit receives the power from the stationary transformer and transforms the modulated serial data.

9. RMD-DDR1, Rotating unit. (Exclusively for the RMS-DD1 system).

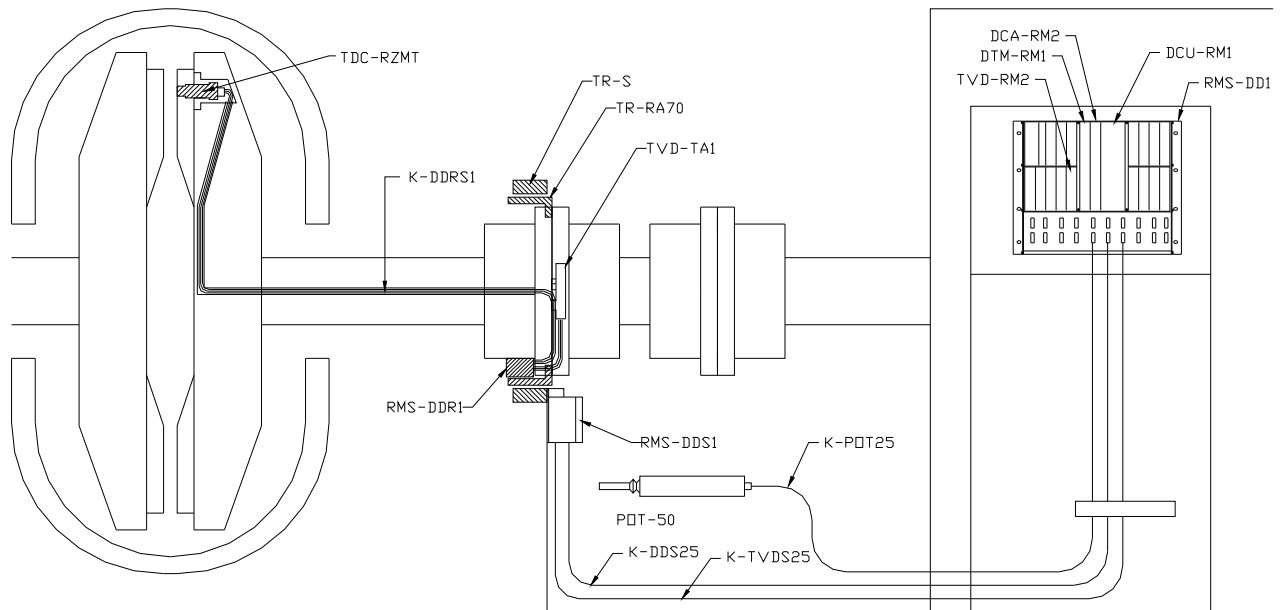
All the measuring circuits for the TDC and TVD levels are put in this units. The unit is mounted inside the rotating transformer. 10. TDC-RZMT, True Disc Clearance sensor, (Exclusively for the RMS-DD1 system).

The sensor is connected to the unit by the rotating cable, K-DDRS1.

11. TVD-TA1, Touch point Vibration Detector. (Exclusively for the RMS-DD1 system).

The TVD sensor is mounted direct to the refiner shaft, and measures the vibration signal that is generated by the touch point procedure during rotation.

4. WIRING DIAGRAM, RGP-68DD



5. WIRING DIAGRAM, RGPA-68DD

