

SOLID STATE INDUCTION POWER SUPPLY

type **GRC**

TECHNICAL DATA

ELECTRICAL

POWER REGULATION	15 - 100%
CONVERTER EFFICIENCY	93%
MAINS STANDARD	3 X 400 V +/- 10 %
FREQUENCY RANGE	90 - 130 kHz
COIL VOLTAGE	100 - 180V max.
COIL CURRENT	150 - 1000 Amax.
TRANSFORMER RATIO	1:10, 1:4

MECHANICAL

AMBIENT TEMPERATURE	5 -40 °C
COOLING	WATER
WATER INLET TEMP.	MAX 40 °C
WATER PRESSURE	3 - 6 bar
ENCLOSURE ¹⁾	IP 21 GENERALLY FOR CABINET MOUNTING
COIL	NUMBER OF TURNS AND DIAMETER AGRID WITH PRODUCER

¹⁾ THE OTHER TYPE OF ENCLOSURE
COULD BE DELIVERED ON REQUEST



GENERATOR GRC 10/100

GENERATOR TYPE	OUTPUT POWER / COIL CURRENT	DIMENSIONS GENERATOR TRANSFORMER	WEIGHT GENERAT. TRANSF.	OPTIONS
GRC10/100	10 kW 90 – 130kHz 1000A max./180Vmax	230 x 300 x 350 mm 180 x 180 x 260 mm r. desk 135 x 135 x 100mm	10 kg 13 kg 1kg	EXTERNAL CLOSED COOLING SYSTEM 5 l/min
GRC 30/30	30 kW 17 – 30 kHz 1100 A max/270Vmax	370 x 670 x 450 mm with transformer	45 kg	EXTERNAL CLOSED COOLING SYSTEM 12 l/min

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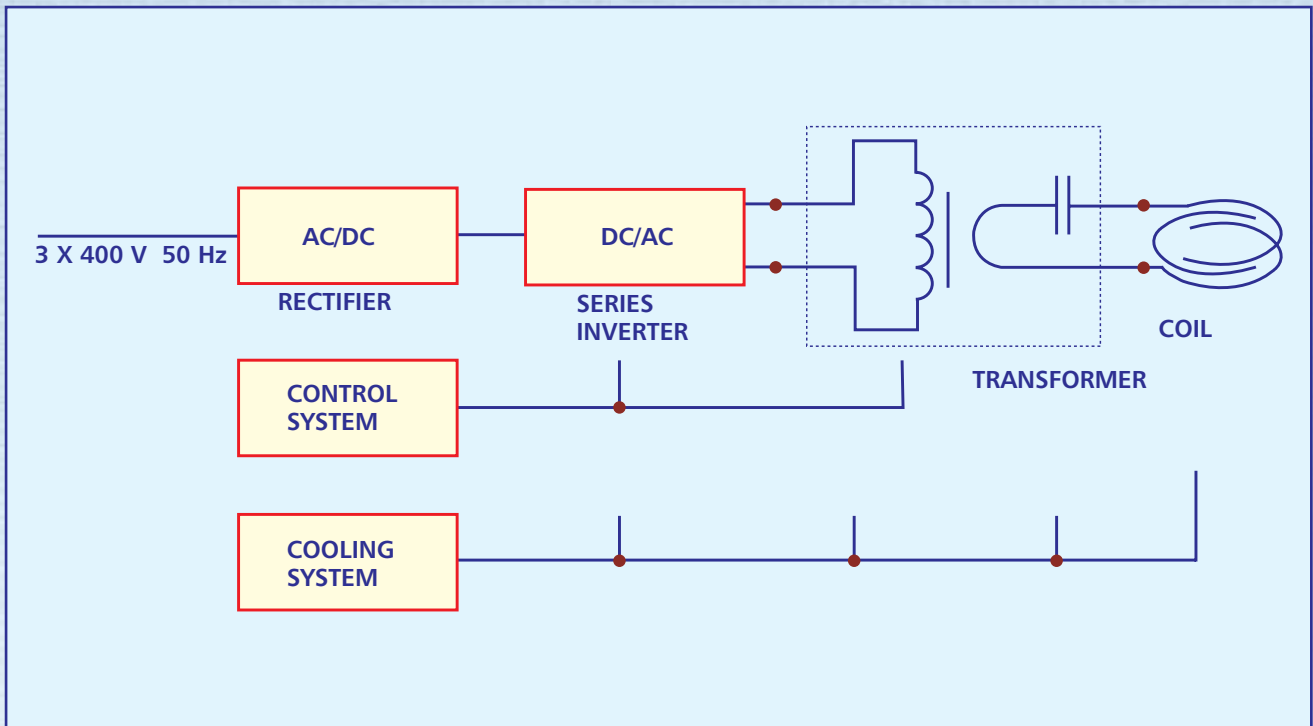
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Induction heating units GRC 10/100, GRC 30/30 are designed for brazing, soldering, hardening forging etc. Power supply could be programmed and monitored by remote control desk with LCD display. Transformer station is connected to generator with flexible cable up to 1.5 m long. The coil should be connected as close as possible to transformer terminals in order to eliminate an extra inductance. Due small dimensions and small weight units could be installed directly in place of heating process. Generator is based on series resonance voltage fed inverter, working with twice energy conversion AC/DC/ACHF. High efficiency (about 93 %) of device is obtained due new IGBT technology used. Water cooling requirements are kept minimum, since all cooled components are on low voltage side of matching transformer. The output power can be continuously controlled either manually or by external signals in MODBUS II standard.



Blok diagram of GRC generator

The control circuit provides all protection functions (short circuit , overvoltages, undervoltages, overtemperatures etc.) as well as enables flexible control of heating proces.



TRANSFORMER WITH COIL



REMOTE CONTROL DESK