



PRODUCT DATA

HEENAN



HEENAN 200/6 EXCITATION UNIT

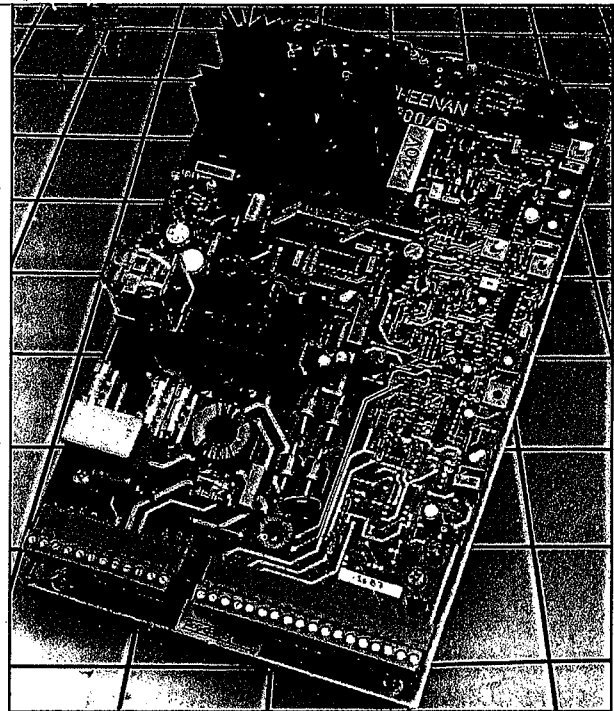
The Heenan 200/6 excitation unit provides an infinitely variable D.C. output for energising the field coil of a Heenan Eddy-Current Coupling. The Unit, when combined with a Drive Motor, eddy-current coupling and Tacho-generator, provides a Variable Speed Drive which will maintain its set speed level over a wide range of load.

TYPICAL SYSTEM DESCRIPTION

The input shaft of the Eddy-Current Coupling is driven by an A.C. Motor at a constant speed.

The output shaft of the Eddy-Current Coupling rotates at a speed determined by the field coil excitation and the load torque.

The Tacho-generator, which is an integral part of the Drive, gives an output voltage virtually proportional to speed. This output voltage is applied as a feedback signal to the Excitation Unit where it is rectified, smoothed and fed to the circuit to provide a constant speed characteristic to the Drive over a wide range of load torque. The basis of the Excitation Unit is a switched mode chopper, optically isolated from the main control circuit.

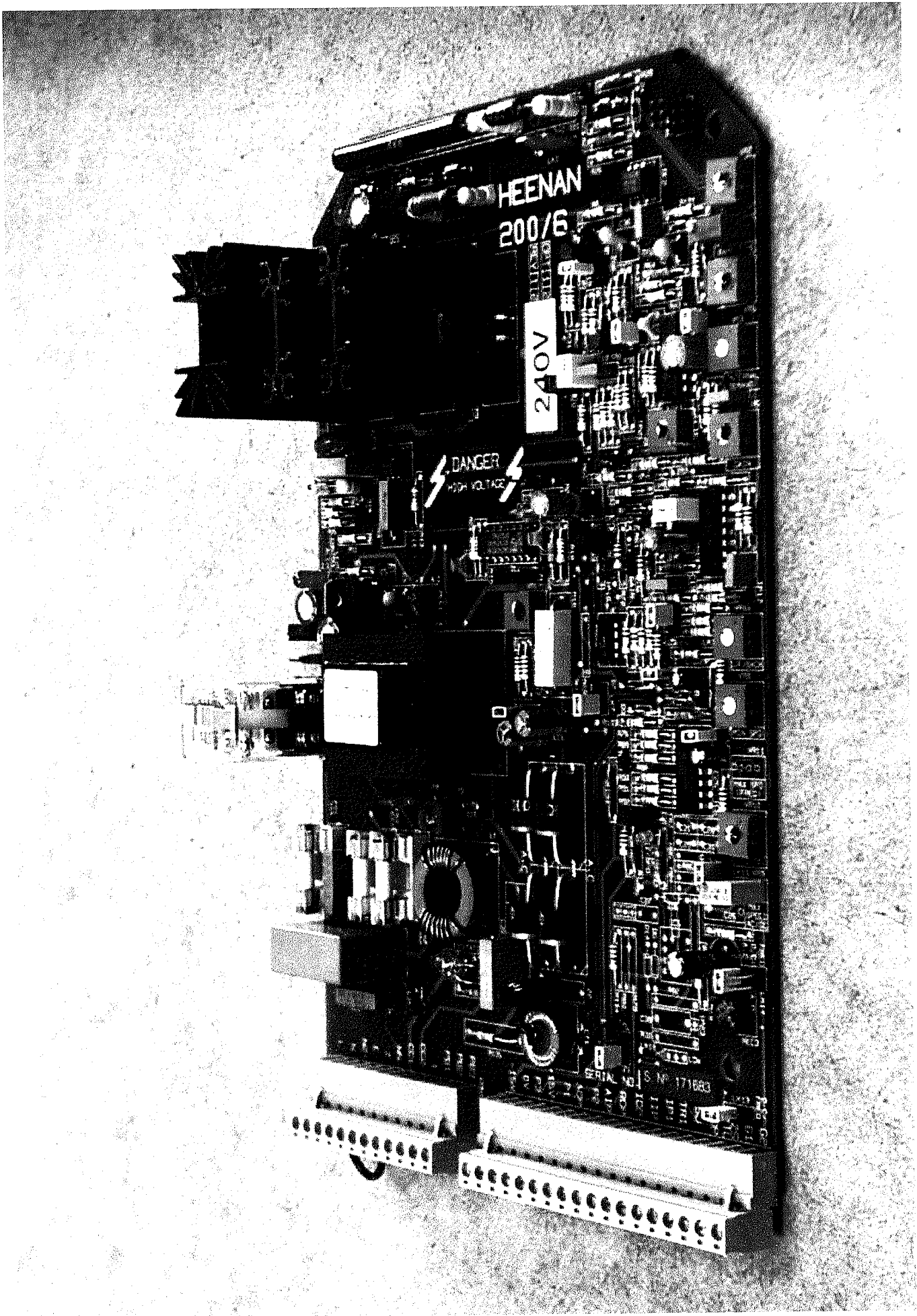


The D.C. output from this chopper is used to excite the field coil of the Coupling. The level of coil current is automatically regulated by a conventional speed control amplifier. The speed reference voltage is taken from a manual potentiometer or from a process signal. The speed feedback voltage is normally taken from the A.C. tachogenerator on the coupling output shaft.

The control circuit is solid state and no warm up time is necessary.

FEATURES

- Speed Control down to 50 rev/min
- Torque Control
- Load Sharing Capability
- On board ramp Accel/Decel control
- Isolated Signal Input for Automatic Speed/Torque Control
- Single PCB Construction
- Replaces all previous Heenan Controllers up to 300kW
- Low Harmonic Generation
- 110 Volt Supply Option
- Adjustable Torque/Speed Characteristic
- Plug-in Terminal Block
- PLC friendly



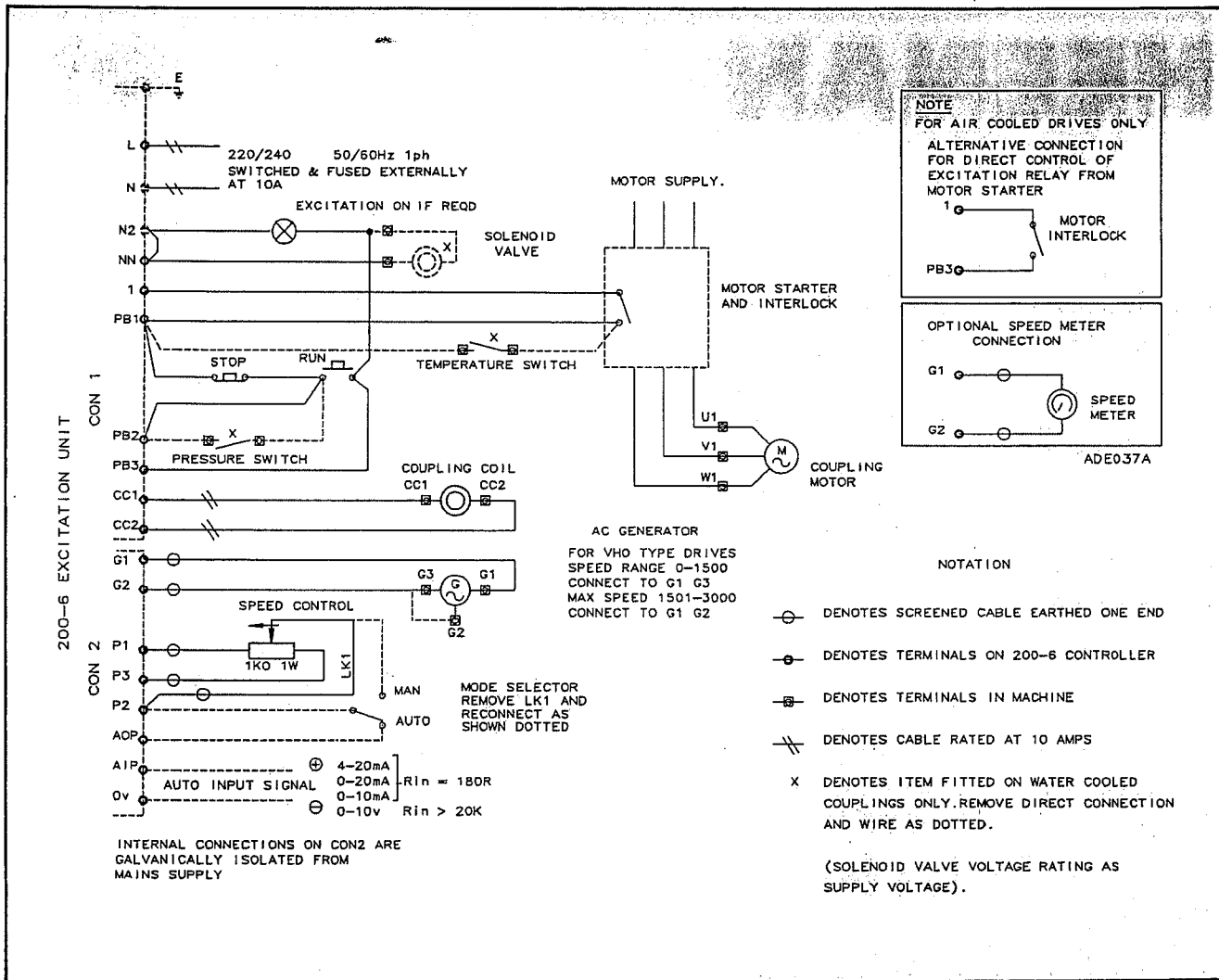
HEENAN
200/6

240V

DANGER
HIGH VOLTAGE

SERIAL NO. S. M. 171683

TYPICAL EXTERNAL CONNECTION DIAGRAM



SPECIFICATION

Main Supply

240/220/110V $\pm 6\%$, 50Hz or 60Hz, single-phase fused at 10A.

Speed Holding

Inherent drift of $\pm 0.1\%$ of maximum speed in steady state conditions; that is, with mains supply, load and ambient temperature all constant.

Regulation (speed drop when load torque changes from 15% to 100% of full load): 0.5% of maximum speed. Speed variation $\pm 0.1\%$ of set speed when mains voltage variation is $\pm 6\%$.

Ambient Temperature Limits

Unit only, mounted in free air: -5°C to $+50^{\circ}\text{C}$.
Unit mounted in ventilated C-type case: -5°C to $+40^{\circ}\text{C}$.

Input Impedance

10K at P2, IP1 and TRI input terminals.
By fitting LK11 it is possible to fit an external source impedance.

Input Reference

0-10V d.c./2-10V d.c.
0-20mA d.c./4-20mA d.c.

The unit will also accept reference signals from older Heenan units.

Output

900VA max; 150V at 6A on 240/220V.
75V at 6A on 110V.

Note maximums quoted for Heenan Eddy Current Coupling Coils.
For increased output consult Heenan Drives Limited.

Speed Range

20:1 when using an a.c. tacho generator.
100:1 when using a d.c. tacho generator.
Note that these figures are finally determined by the heat dissipation capacity of the drive.

Thermal Drift

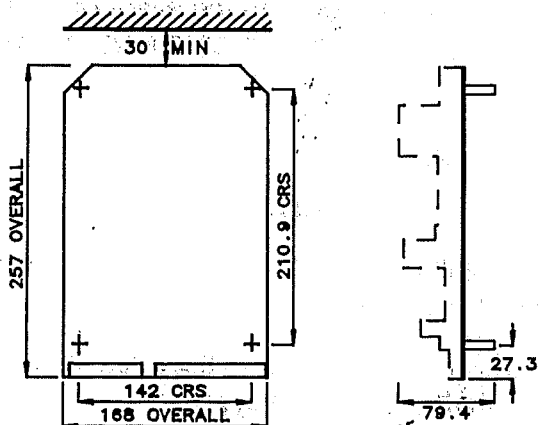
0.03% of set speed per degree centigrade.

Weight

680g (1lb 8oz)

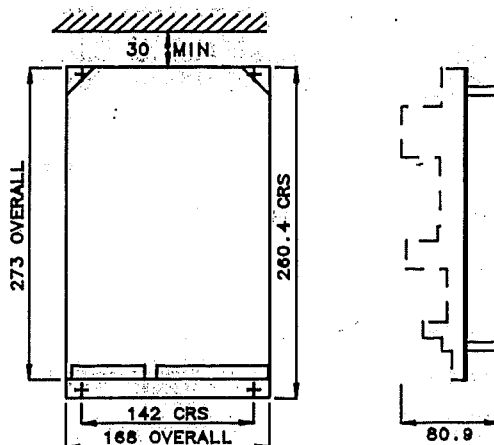
DIMENSIONS

STD UNIT. SINGLE PCB WITH MTG PILLARS



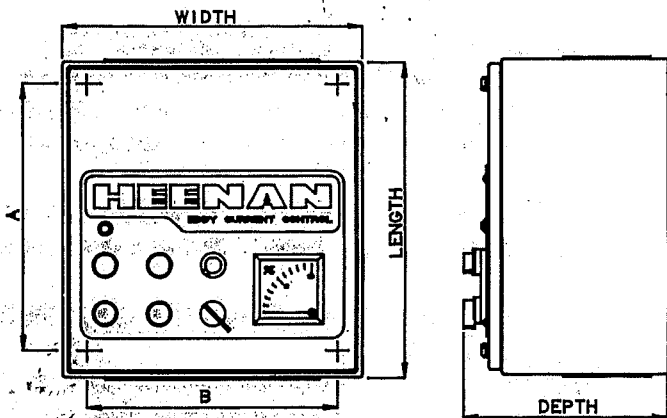
HEENAN PART Nos: 205-0011-xx (240V)
205-0021-xx (110V)

STD UNIT. MOUNTED ON STEEL BACKPLATE



HEENAN PART Nos: 205-0031-xx (240V)
205-0041-xx (110V)

CASES

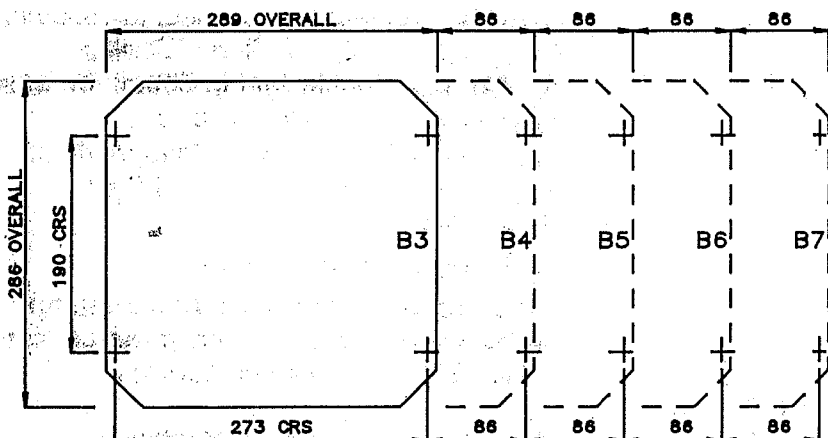


SUPPLIED WITH CONTROLS DOOR MOUNTED
OR ALTERNATIVELY
DOOR MAY BE LEFT BLANK

CASE SIZE	DEPTH	LENGTH	WIDTH	FIXING CRS A	FIXING CRS B
C3	216.5	323	307	273	257
C4	216.5	323	393	273	343
C5	216.5	323	479	273	429
C6	216.5	323	565	273	514

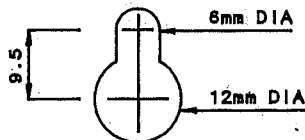
FIXING HOLES ARE 6mm DIAMETER
ON THE CENTRES SHOWN

BACKPLATES



SIZE APPLIES TO BOTH PLUG IN
AND TERMINAL BLOCK UNITS.

FOUR KEYHOLE SLOTS
PER PLATE SIZE



DIMENSIONS ARE MILLIMETERS

Heenan maintain a policy of continuous research and development and specifications are subject to alteration without notice.



HEENAN

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