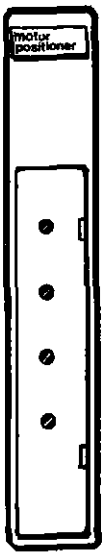
MOTOR POSITIONER



- Split phase a.c. drive
- Triac output
- Velocity mode operation with position feedback
- Electronic limits
- Position signal output

The 6510 motor positioner can drive split phase A.C. motors rated at up to 1 amp and 240 Volts. It has a 0 to 5V or 0 to 10V demand input, and requires the connection of a feedback pot on the motor. A 0 to 5 or 0 to 10V signal representing position is produced. The motor is moved to the required position in velocity mode with position feedback, the power to the motor being switched by triacs. The incoming demand signal can be electronically limited by two fascia mounted controls.

1.1. Issue 3

Turnbull Control Systems Limited
Broadwater Trading Estate Worthing Sussex BN14 8NW
Telephone Worthing (0903)205277
Telex 87437

INPUTS:

Demand signal input impedance (with limits inactive)	44KΩ
Feedback potentiometer impedance	minimum 50Ω maximum 5KΩ standard 135Ω
Voltage developed across feedback potentiometer	0.5V
Feedback signal input impedance	minimum 100KΩ

OUTPUTS:

Position output	0 to 10V or 0 to 5V
Maximum current from position output	5mA
Error output 0%	5V
+10%	7V
-10%	3V
Maximum current from error output	5mA

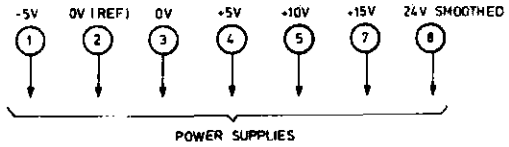
TRIAC OUTPUT:

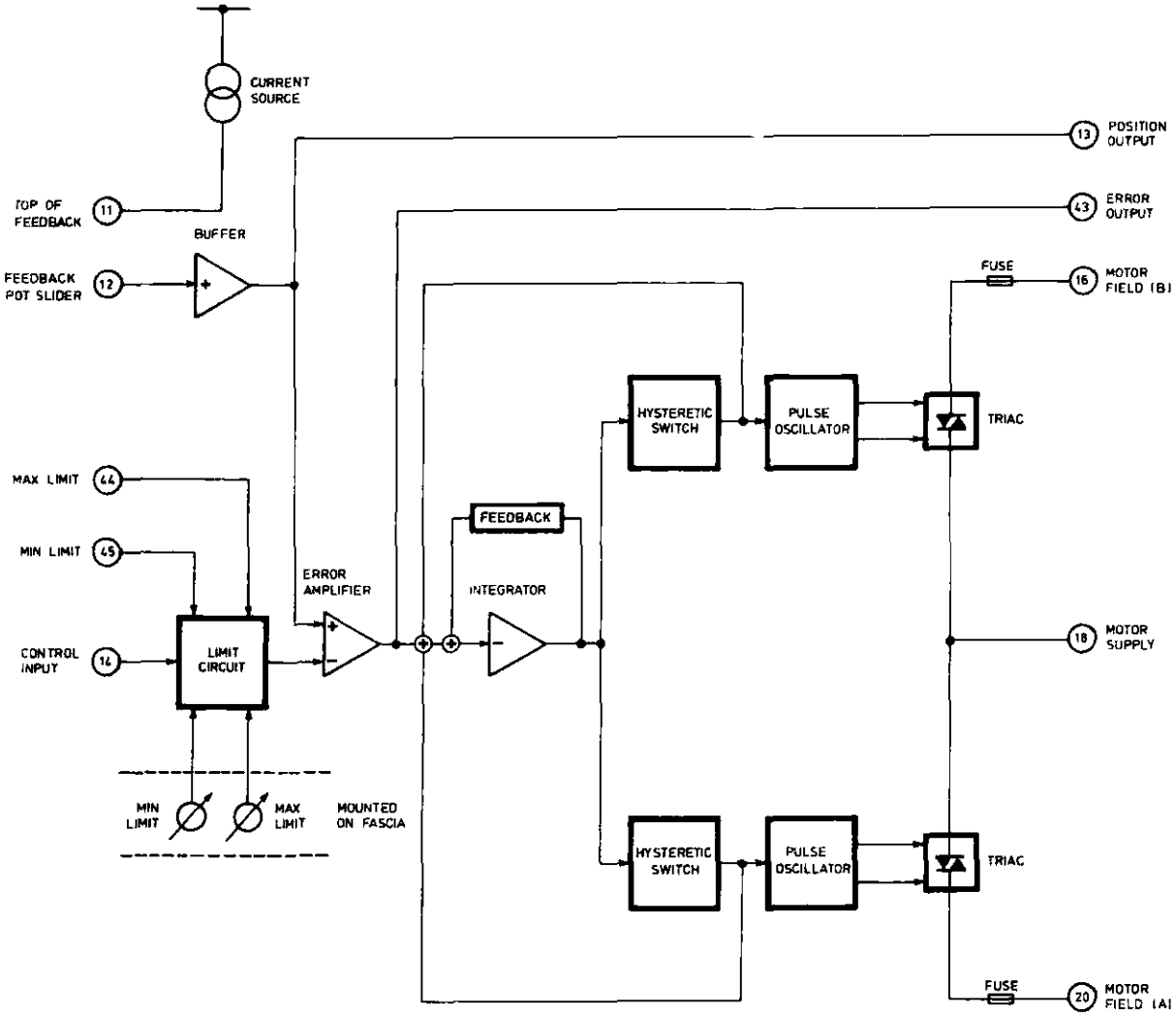
Maximum supply voltage	240V
Maximum supply current	1A
Output fuses	1A
CONTROL MODE	Velocity mode with position feedback. Time proportioning output when error < 10% 100% output when error > 10%

DESCRIPTION	ORDER CODE
SPLIT PHASE A.C. MOTOR POSITIONER Module width 24mm	6510
Motor voltage (maximum 240V) please specify	---V
Input demand signal 5V or 10V	5V 10V
Feedback potentiometer value 135Ω standard Max. value 5KΩ , min, value 50Ω	135Ω
Front Adjust Limits Max. and min. limits on input demand signal	LIM

EXAMPLE

6510/24V/5V/135Ω/LIM


-5V
0V (REF)
0V
+5V
+10V
+15V
24V SMOOTHED
1
2
3
4
5
7
8
POWER SUPPLIES


CURRENT SOURCE
TOP OF FEEDBACK
11
BUFFER
FEEDBACK POT SLIDER
12
13
POSITION OUTPUT
43
ERROR OUTPUT
FUSE
16
MOTOR FIELD (B)
HYSTERETIC SWITCH
PULSE OSCILLATOR
TRIAC
MAX LIMIT
44
MIN LIMIT
45
FEEDBACK
ERROR AMPLIFIER
INTEGRATOR
CONTROL INPUT
14
LIMIT CIRCUIT
18
MOTOR SUPPLY
MIN LIMIT
MAX LIMIT
MOUNTED ON FASCIA
HYSTERETIC SWITCH
PULSE OSCILLATOR
TRIAC
FUSE
20
MOTOR FIELD (A)