



CSD92 & CSD94 STEPPING MOTOR DRIVES

LOW POWER PACKAGED DRIVES DC SUPPLY



Suitable for 17 or 23 frame motors.

DC unregulated power supply.

Upto 45V @ 4.4 Amp.

400 to 3200 step/rev resolution for smooth running at low speeds.

Protection from motor short, overtemperature and overvoltage.

Low cost.

Small size, high packing density.

Suitable for two phase motors, 4, 6 or 8 leads

LEDs for motor phase, overtemp, overvoltage and motor short.

Pull up or Pull down inputs..

The CSD92 and CSD94 are packaged versions of the CSD02 and CSD04. They are housed in metal enclosures for easy mounting in electrical cabinets. They are ideal for low power single and multi axis motion control applications where high speed and resolution are required. They are DC powered and many drives can be powered by the one supply. The inputs can be voltage or current sink (selectable pull-up or pull-down format), making them compatible with 5 or 12V motion controllers.

Two models are available, the CSD92 for lower current and the CSD94 higher current applications. Protection against motor short circuit and incorrect power supply voltage are also included. Electronic damping is included to reduce mechanical vibration and audible noise at low speeds. Power supply can be as low as 24 VDC which is useful for portable machine applications.

SPECIFICATIONS

LOGIC INPUTS

Voltage source 0 to 13V, pull-up/pull-down
Step (minimum pulse width 8µsec)
Direction
De-energise

MAXIMUM STEP FREQUENCY

60kHz

LOGIC OUTPUTS

Opto isolated (50V @ 10mA sink open collector)
Drive fault

RESOLUTION

400, 800, 1600, 3200 steps/rev

STANDBY CURRENT

automatic at 65%

MOTOR CURRENT

8 settings by DIP switch

OPERATING TEMPERATURE

5-45°C (Forced cooling may be required)
70°C max heatsink temperature.

WEIGHT

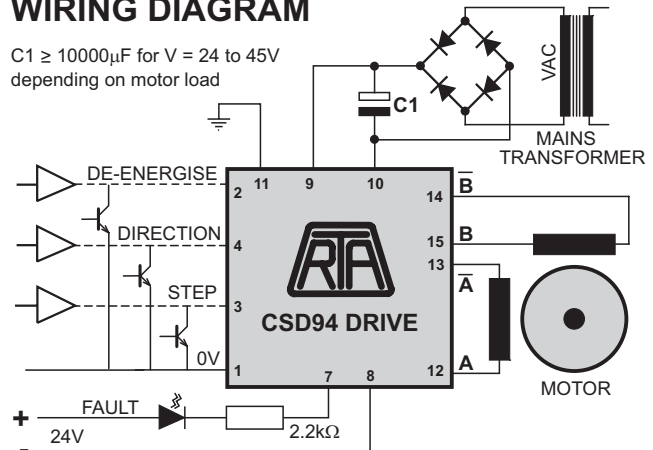
0.4kg.

SPECIFICATIONS

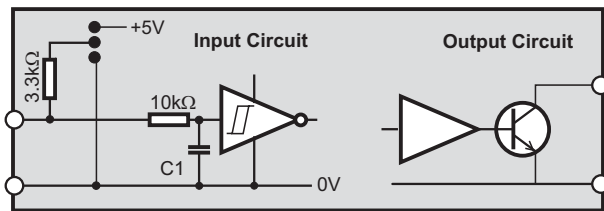
SPECIFICATIONS	CSD92	CSD94
SUPPLY RANGE (VDC)	24 - 45	24 - 45
TRANSFORMER (VAC)	17 - 33	17 - 33
SUPPLY (VDC) (maximum)	75	75
SUPPLY (VDC) (minimum)	24	24
MOTOR CURRENT (A) (maximum)	2.4	4.4
MOTOR CURRENT (A) (minimum)	0.7	2.6
CURRENT STEPS (A)	0.5 to 0.7	0.6

WIRING DIAGRAM

C1 ≥ 10000µF for V = 24 to 45V
depending on motor load

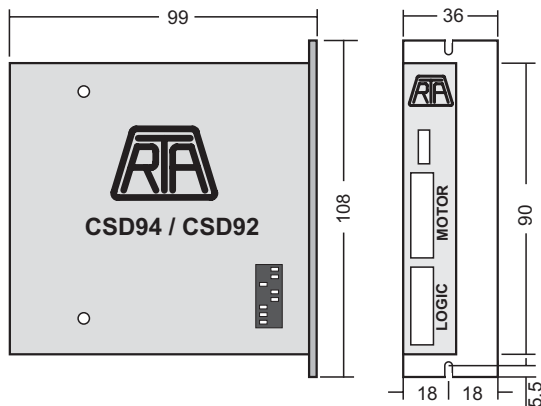


LOGIC SIGNALS



	STEP	DIRECTION	DE-ENERGISE
C1	470pF	4.7nF	47nF

DIMENSIONS (in mm)



CONNECTIONS

- | | |
|------------------------|--|
| 14 Motor | Motor winding B̄ (2B or B+) |
| 15 Motor | Motor winding B (2A or B-) |
| 13 Motor | Motor winding A (1B or A-) |
| 12 Motor | Motor winding A (1A or A+) |
| 16 Motor shield | Motor cable shield |
| 10 -Supply | - DC Power from rectifier and capacitor. |
| 9 +Supply | + DC Power from rectifier and capacitor. |
| 8 Fault GND | Normally shorted when drive is in working state but becomes open circuit when drive has shut down due to protection circuits. |
| 7 +Drive Fault | |
| 2 De-energise | When this signal is ON the drive is active. When this signal is OFF the drive is inhibited so motor current (and holding torque) is zero. |
| 4 Direction | When this signal is ON the motor direction is reversed. This signal must be on for at least 100µs before STEP input is received and must remain on for at least 100µs after the last step is received. |
| 3 Step | The motor steps once on the ON-OFF transition of this signal. Ideal duty cycle is 50%. |
| 1 Logic ground | 0V common for all logic signals. |
| 11 Drive ground | Internally connected to 1, 8 & 16. |

Motors, transformers, controllers, motion control software and motor couplings also available on request.
Continuous development may necessitate changes in models and specifications without notice.

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