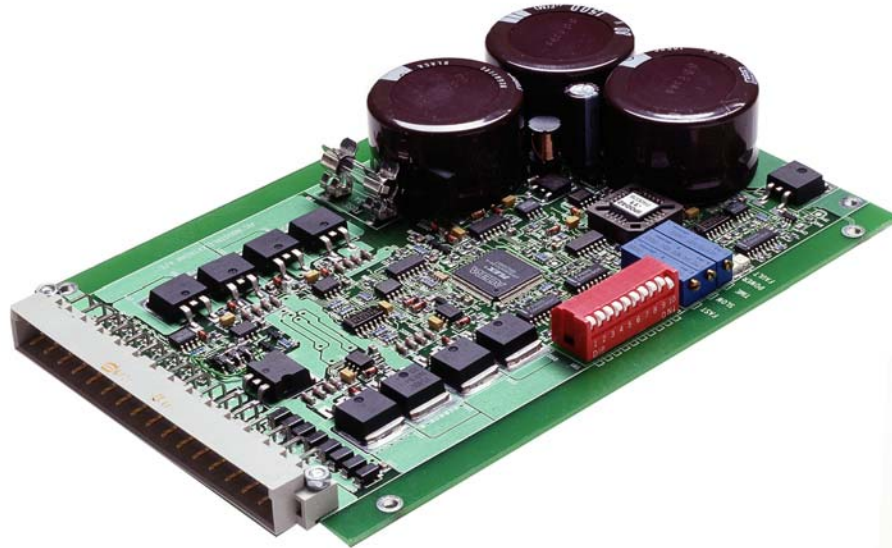


Multi-function Step Motor Driver PA0076



This driver is an advanced multi-function step motor driver which can be controlled both by external step pulses, but also from an internal step generator which controls the speed, acceleration etc. of the motor.

This makes it possible to connect it directly to a PC/PLC with or without axis control board dependant on the actual job.

It is possible to choose between 200, 400, 1000, 2000 or 4000 mini step/full step, which gives resonance free running of the motor at low speed, less noise and a finer resolution. It is also possible to connect an AC voltage directly, so that an external power supply is not necessary. Change of step resolution, selection of internal/ external functions etc. is made via a dipswitch.

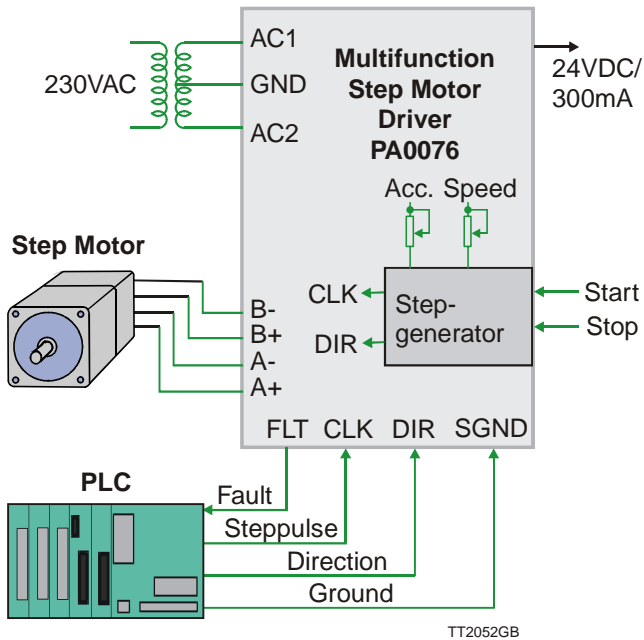
The driver is functionally and connector-wise compatible with Parker Compumotor driver series SD12-15, but is improved on several points. E.g. single power supply, built-in potmeter for control of speed, ministep up to 4000 step/rev. etc.

- Highly effective MOS FET secures less development of heat.
- Single supply power supply, 12-54VAC or 17-75VDC, means simpler wiring and makes double power supply unnecessary.
- Built-in potmeters so that speed and acceleration also can be set on the board. This reduces costs in the external installations and reduces the possibilities of errors.

- Several possibilities for ministep up to 4000 step/rev.
- Dipswitch change of modes gives more safe set-up and fewer errors.
- LED indication for power and error
- Lower price by use of latest technology. Among other things there are no heat sink and other components that increase costs.
- Automatic reduction of the standby current
- Secured against overload/ short circuit between phases and between phases and P+
- 24 VDC output for sensors/ potmeters etc.

Multi-function Step Motor Driver PA0076

Connection Diagram



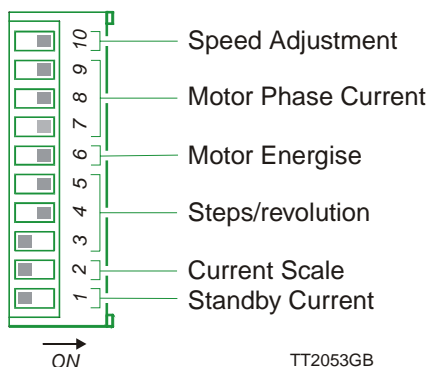
Connections

Pin	Row a	Row c
2	Motor Phase B-	Motor Phase B-
4	Motor Phase B+	Motor Phase B+
6	Motor Phase A-	Motor Phase A-
8	Motor Phase A+	Motor Phase A+
10	+24VDC Output	+24VDC Output
12	Not Connected	Power Supply AC1
14	Not Connected	Power Supply AC2
16	0V, GND	0V, GND
18	0V, GND	0V, GND
20	Fast, Start Input	FLT, fault
22	Slow, Start Input	Zero Phase
24	Rate Adjust Com.	Slow Rate Adjust
26	Fast Rate Adjust	Direction In
28	Internal Clock Out	Clock In
30	Not Connected	Energise
32	Current adj.	Signal 0V

Specifications

Power motor supply volt.:	AC, 12 to 54 V. DC, 17 to 75 V
Auxilliary DC output volt.:	U = 24 V, I max = 300 mA
Max phase current:	PA0076: 3.5 A (5A peak.), PA0076A: 2.1A (3A peak.)
Logic input:	Low level: 0 - 2 V or short circuit. High level: 10 - 12V or open circuit
Logic output (FLT, Zero):	Open Collector NPN, 30 Vmax, I max = 15mA
Max clock frequency:	40 kHz in half-step mode, minimum pulse width 10 ms
Int. oscillator - slow range:	30Hz to 1 kHz not ramped
- fast range:	600 Hz to 20 kHz ramped (ramp accel. 60 ms - decel. 30 ms)
Current level adjustment:	With dipswitch, 8 current levels or with external resistor (pin32a)
Current reduction:	Standby function 50% reduction by dipswitch
Temperature:	Operating 0° C to 45° C - Storage -40° C to 85° C
Protection:	Overload - shortcircuit phase to phase and across phase
Fuses:	Power Supply: 6.3A (PA0076), 4A (PA0076A)
Size/Connector:	160 x 111.4 x 25 mm / DIN 41612 D32
	Version -01 160x100x25mm
Step Resolution.	200, 400, 1000, 2000, 4000 step/rev.

Dipswitch settings



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