

General Description

Series PWD00A-400 electronic module for driving open loop proportional valves is compact and easy to install with DIN rail mounting and plug-in terminals. The digital design allows for programmable parameters such as solenoid drive current, mins and maxs, and ramps. Profiles controlled by on-off logic signals can be configured through internal velocity setpoints and ramps. The module provides flexibility for different applications and repeatability from unit to unit. The module parameters are programmed with an RS-232 interface and user friendly software (ProPxD) with default values for the standard valves.

The PWD00A-400 module contains the functions required by typical open loop proportional valve applications (series D*FB, D*FW, D*1FW, WLL, RLL valves).

Features

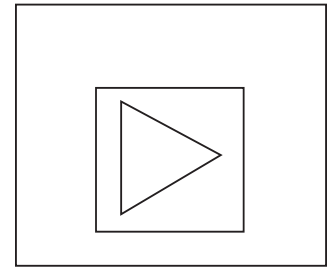
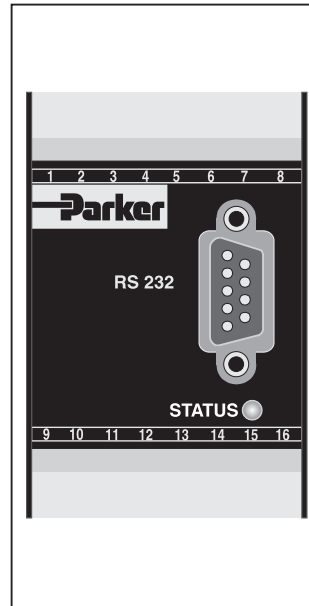
- Programmable parameters.
- Analog or Profile Capability.
- RS-232 Interface.
- User friendly programming software.
- Plug-in terminals.

Specifications

General			
Model	Module package for snap-on mounting on EN 50022 rail	Mounting Position	Any
Package Material	Polycarbonate	Ambient Temperature Range	-20°C to +60°C (-4°F to +140°F)
Inflammability Class	V2 to V0 acc. UL 94	Protection Class	IP 20 acc. DIN 40050
Electrical			
Duty Ratio	100%	Channel Recall Signal	Off – 0 to 5.0 VDC; On – 8.5 to 30 VDC; Ri = 30K ohm
Supply Voltage	18 VDC to 30 VDC, ripple < 5% eff., surge free (29 VDC to 30 VDC for 24V coils)	Status Signal	Off – 0 to 0.5 VDC; On – Supply Voltage; rated max. 15 mA
Switch-on Current Typ.	22A for 0.2 mS	Adjustment Ranges	preset
Current Consumption Max.	2.0A	Minimum	0 to 50% 0 to 1000
Pre-fusing	2.5A medium lag	Maximum	50 to 100% 0 to 1000
Command Signal	+10 to 0 to -10 VDC, ripple < 0.01 % eff., surge free, Ri = 150K ohm Do not input a command greater than ±10 VDC.	Ramp Time	0 to 32.5 s 0 to 32.5
Input Signal Resolution	0.025%	Zero Offset	+75 to -75% +1000 to -1000
Differential Input Voltage Maximum	30V for terminals 5 and 6 against PE (terminal 8)	Current	0.8/3.5/2.7/1.8/1.3 A 0/1/2/3/4/5
Enable Signal	Off – 0 to 5.0 VDC On – 8.5 to 30 VDC; Ri = 30K ohm	Interface	RS 232C, DSub 9p. male for null modem cable
		EMC	EN 50081-2, EN 50082-2
		Connection	Screw terminals 0.2 to 2.5 mm ² , plug-in
		Cable Specification	16 AWG overall braid shield for supply voltage and solenoids 20 AWG overall braid shield for sensor and signal
		Cable Length	50m (164 ft.)

WARNING: This product can expose you to chemicals including Lead, Nickel (Metallic), or 1,3-Butadiene which are known to the State of California to cause cancer, and Lead or 1,3-Butadiene which is known to the State of California to cause birth defects and other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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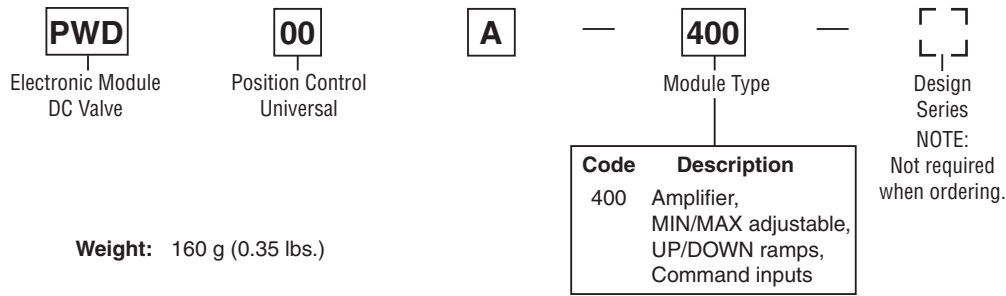


- Four independent ramps.
- Input Enable with Status indicator.
- Differential input on analog command.
- Compliant with European EMC Standards.

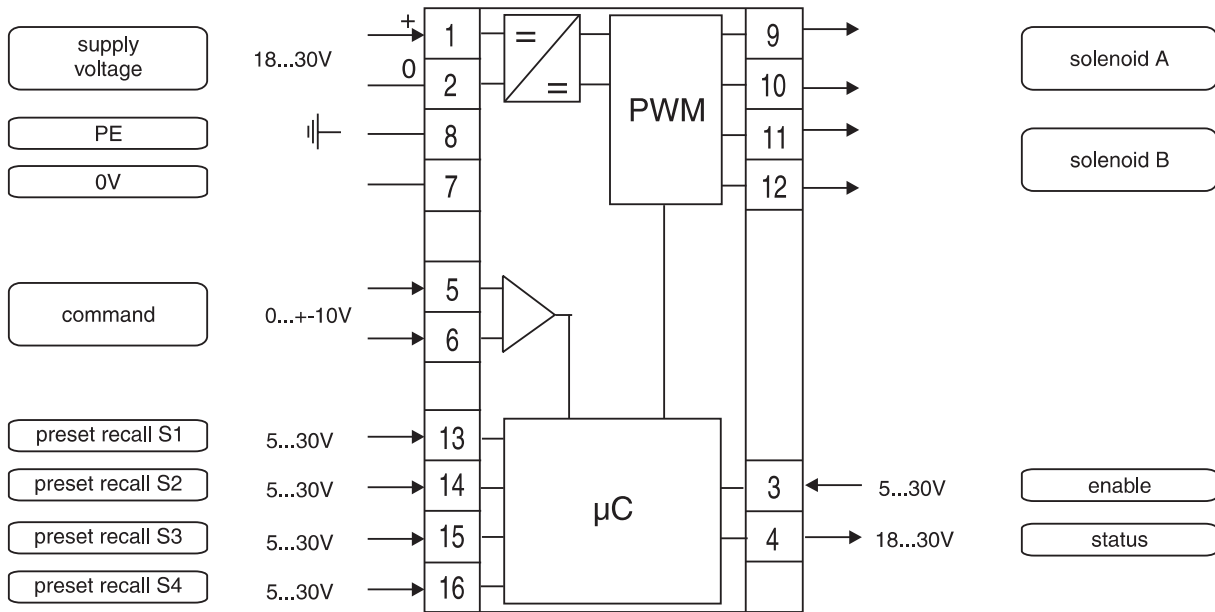


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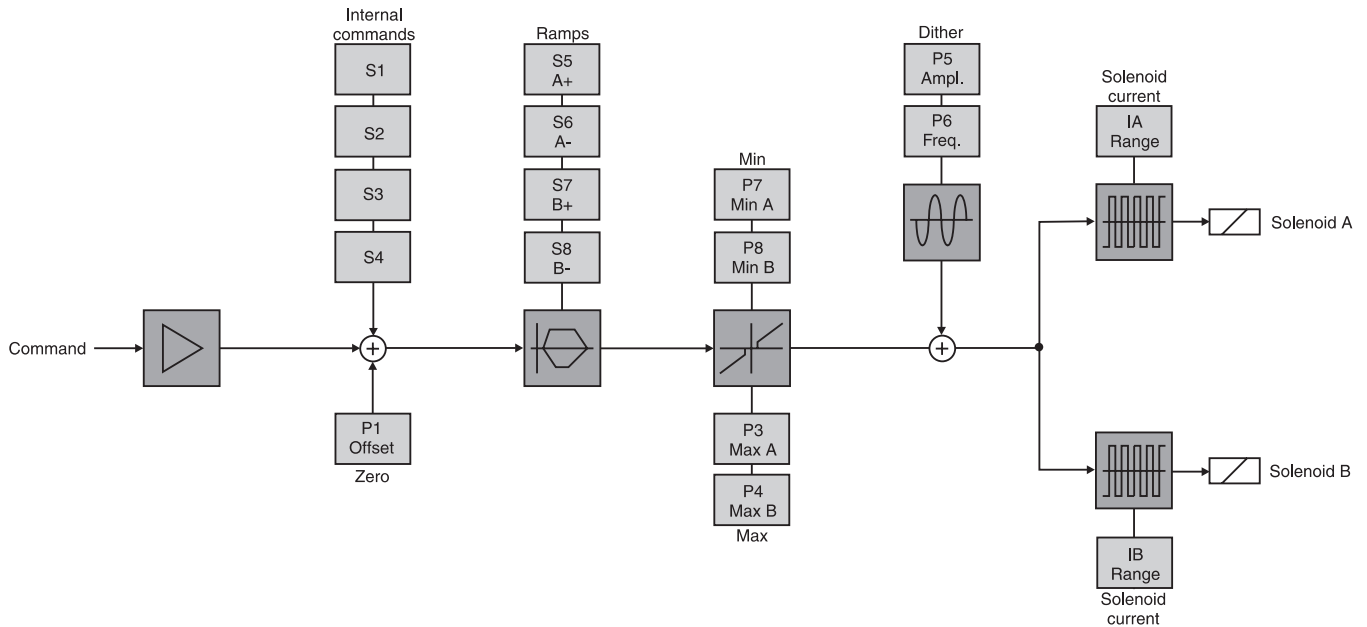
Ordering Information



Block Diagram — Wiring

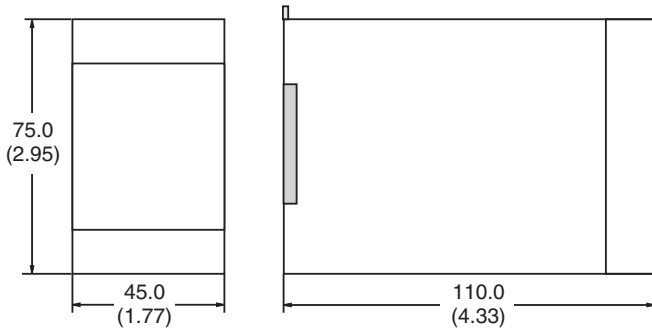


Signal Flow Diagram



Dimensions

Inch equivalents for millimeter dimensions are shown in (**)



ProPxD Interface Program

The new ProPxD software permits comfortable parameter setting for the electronic module series PCD, PWD, PZD and PID.

Via the clearly arranged entry mask the parameters can be noticed and modified. Storage of complete parameter sets to floppy or hard disk is possible as well as printout or record as a text file for further documentation. Stored parameter sets may be loaded anytime and transmitted to the electronic module in the same manner as the basic parameters which are available for all usable valve series. Inside the electronic a nonvolatile memory stores the data with the option for recalling or modification.

Features

- User-friendly editing of all parameters.
- Storage and loading of optimized parameter adjustments.
- Executable with all Windows® operating systems from Windows® 95 upwards.
- Communication between PC and electronic via serial interface RS-232 and null modem cable.
- Simple to use interface program. Download free of charge www.parker.com/euro_hcd → **Services** → **downloads**

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