## Catalogue HY11-3500/UK Characteristics / Ordering Code

# E-Module for Proportional Valves Series PWD00A-400

Parker electronic modules PWD00A-400 for rail mounting are compact, easy to install and provide time-saving wiring by disconnectable terminals. The digital design of the circuit results in good accuracy and optimal adaption for proportional directional control valves by a comfortable interface program.

## Features

The described electronic unit combines all necessary functions for the optimal operation of proportional directional control valves without position sensor (series D\*FB, D\*1FB). The most important features are:

- Digital circuit design
- · Four parameterizable command channels
- Constant current control
- Differential input stage
- · Status output
- · Four-quadrant ramp function
- · Enable input for solenoid driver
- Status indicator
- Parametering by serial interface RS232C
- Connection by disconnectable terminals
- · Compatible to the relevant European EMC standards
- Comfortable PC user software, free of charge: www.parker.com/euro\_hcd - see "Support", or directly at www.parker.com/propxd.

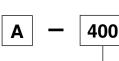
# Ordering code



Electronic module directional control valves



Universal

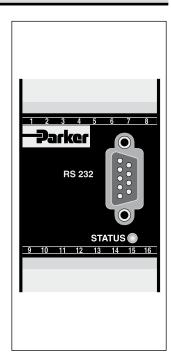


Amplifier min/max adjustment accel/decel ramps command input 4 command channels



for ordering)





CE

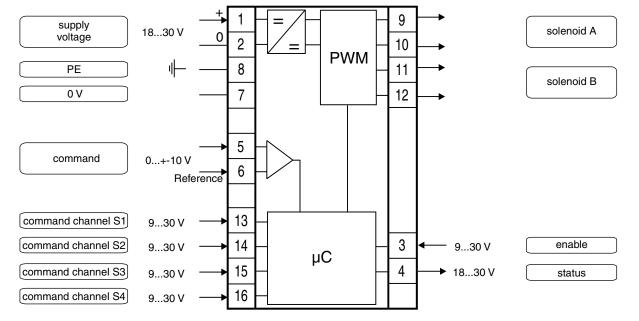
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### **Technical data**

General				
Model		Module package for snap-on mounting on EN 50022 rail		
Package material		Polycarbonate		
Inflammability class		V0 acc. UL 94		
Installation position		unrestricted		
Ambient temperature range [°C]		-20+60		
Protection class		IP 20 acc. EN 60529		
MTTF <sub>D</sub> value	[years]	150		
Weight	[g]	160		
Electrical				
Duty ratio	[%]	100		
Supply voltage	[VDC]	1830, ripple < 5 % eff., surge free $^{1)}$		
Current consumption max.	[A]	2.2		
Pre-fusing	[A]	2.5, medium lag		
Command signal	[V]	+10010, ripple < 0.01 % eff., surge free, Ri = 150 kOhm		
Input signal resolution	[%]	0.025		
Differential input voltage max.	[V]	30 for terminals 5 und 6 against PE (terminal 8)		
Enable signal	[V]	04.0: Off / 9.030: On / Ri = 30 kOhm		
Command channel signal	[V]	04.0: Off / 9.030: On / Ri = 30 kOhm		
Status signal	[V]	00.5: Off / Us: On / rated max. 15 mA		
Adjustment ranges				
Min		050		
Max Ramp		50100 032.5		
Zero offset		+100100		
Current		0.8/1.3/1.8/2.7/3.5		
Interface		RS 232C, DSub 9p. male for null modem cable		
EMC		EN 50081-2, EN 50082-2		
Connection		Screw terminals 0.22.5 mm <sup>2</sup> , disconnectable		
		1.5 overall braid shield for supply voltage and solenoids (AWG16) 0.5 overall braid shield for sensor and signal (AWG20)		
Cable length	[m]	50		

#### **Block diagram**

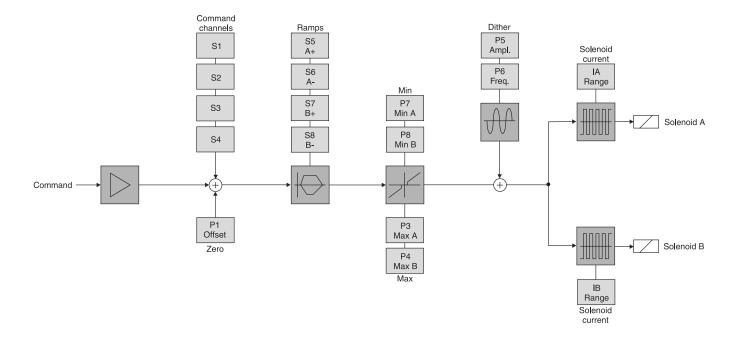


<sup>1)</sup> If solenoids with a nominal voltage of 24 V are connected, the supply voltage has to be raised to 29 V.

PWD00A UK.indd RH 27.10.2015

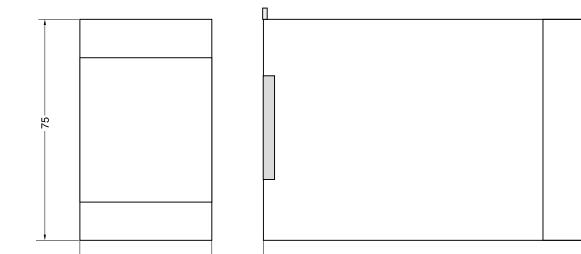


# Signal flow diagram



#### Dimensions

1



— 110 -

PWD00A UK.indd RH 27.10.2015

45



#### ProPxD interface program

The ProPxD software permits comfortable parameter setting for the module electronics. Via the clearly arranged entry mask the parameters can be monitored and modified. Storage of complete parameter sets 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 other valves. Inside the electronics a nonvolatile memory stores the data with the option for recalling or modification.

The PC software can be downloaded free of charge at www.parker.com/euro\_hcd – see page "Support" or directly at www.parker.com/propxd.

#### Features

- Comfortable editing of all parameters
- · Depiction and documentation of parameter sets
- Storage and loading of optimized parameter adjustments
- Executable with all actual Windows<sup>®</sup> operating systems from Windows<sup>®</sup> XP upwards
- Plain communication between PC and electronics via serial interface RS232C

	PWD	Parameter ]				200
PC settings	(him	PC	Property and		Modul	module settings
ype	No.	Value 2	Description	- 2 5 4 2 - 2 7 4 2 - 4 0 4 4 - 4		Туре
PWD00A-400- 💆	la Ib		1	=3.5A 2=2.7A 3=1.8A 4=1.		no modu
Design series		2		1=3.5A 2=2.7A 3=1.8A 4=1	3AJ	Design series
10 und höher 🐣	P1	-	Zero Adjust [%]			??
Valve	P3 P4	100.0	Max [%] A-channel			Version
	and the second second	100.0	Max (%) B-channel Dither-Amplitude (%) A-channel			777
	P5 P6	2.0		Contraction where the second state of the second state		
D1FB***** <b>MW</b> 0 Pi Si Si Si Si Si Si Si Si Si Si Si Si Si	and the second second	110	Dither-Frequency			Valve
		0.0	Min Current [%] A-c			0
		0.0	Min Current [%] B-o			Channel "A"
	_	-	internal command 1 [%] internal command 2 [%]			
	and the second s	0.0		Channel "B"		
		0.0	internal command internal command		???	
	- Contractor	-	ramp up (ms) A	elect Valve		
		0				Parke
	and the second second	0	ramp down [ms]			Park.
		-	ramp up (ms) B	Choose a stand		
	58	0	ramp down [ms]	D1FB*****MW0		
nput			1	D*1FW**C*NXW*25	23.07.03	receive all
Range				D1FB****JW3	23.07.03	modul >> PC
C 0.8A = 0		_		D1FB****MW0	23.07.03	
C 3.5A = 1				D1FB****MW3	23.07.03	send all
• 2.7 A=2						PC >> modul
C 1.8A=3				Exit	ок	
C 1.3A=4				Link	<u>D</u> r	send parameter

