Catalogue HY11-3500/UK Characteristics / Ordering Code

E-Module for Prop. Pressure/Flow Control Valves Series PCD00A-400

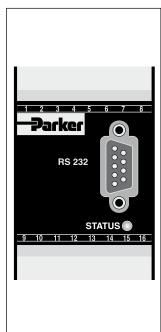
Parker electronic modules series PCD00A-400 for rail mounting are compact, easy to install and provide timesaving wiring by disconnectable terminals. The digital design of the circuit results in good accuracy and optimal adaption for proportional pressure/flow control valves by a comfortable interface program.

Features

The described electronic unit combines all necessary functions for the optimal operation of two proportional pressure/flow control valves (series R*R, R*V, RE*E*W, RE06M*W, DUR, PRPM, VBY, VMY, TDA, TEA).

The most important features are:

- · Digital circuit design
- Two independent operable amplifiers
- · Four parameterizable command channels
- Constant current control
- Two input stages 0...10 V
- Status output
- Two up/down ramp functions
- 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.



CE



Electronic module pressure/flow valves



Without position control universal



2 Amplifiers min/max adjustment accel/decel ramps command inputs 4 command channels



Design series (not required for ordering)

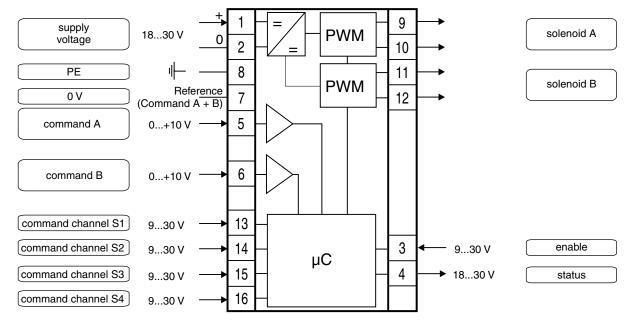
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Technical data

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 _D value		[years]	150	
Weight		[g]	160	
Electrical				
Duty ratio		[%]	100	
Supply voltage [VDC]		[VDC]	1830, ripple < 5 % eff., surge free $^{1)}$	
Current consumption max.		[A]	5.0	
Pre-fusing		[A]	6.3, medium lag	
Command signal			0+10, 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)	
5		[V]	04.0: Off / 9.030: On / Ri = 30 kOhm	
5 1 1		[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 Max Ramp Current	[%] [s]	050 50100 032.5 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 ² , disconnectable	
Cable specification			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	

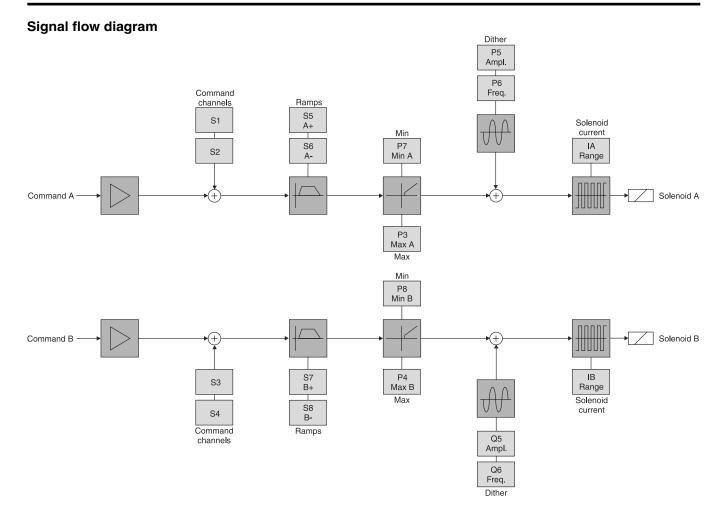
Block diagram



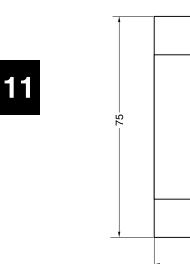
¹⁾ If solenoids with a nominal voltage of 24 V are connected, the supply voltage has to be raised to 29 V.

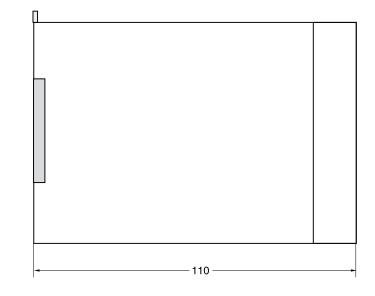
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Dimensions





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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[®] operating systems from Windows[®] XP upwards
- Plain communication between PC and electronics via serial interface RS232C

	PCD A	+B Param.	PCD A Param. PCD B Param.	
PC settings		PC	Modu	
уре	No.	Value	Description Modul	IE Type
PCD00A-400- 🙅	la		Current A [0=0.8A 1=3.5A 2=2.7A 3=1.8A 4=1.3A]	no mode
Design series 10 and higher 🖑	lb	4	Current B [0=0.8A 1=3.5A 2=2.7A 3=1.8A 4=1.3A]	Design series
	n P3	2	Number of solenoids	- ???
/alve	P3 P4	100.0	Max (%) A-channel Max (%) B-channel	Version
	P5	0.5	Dither-Amplitude [%] A-channel	- 272
Channel "A" 🛛 🖶	P6	70	Dither-Frequency [Hz] A-channel	
*TDA**10*7E80M*	P7	0.0	N select valve	Valve
Channel "B"	P8	0.0		Channel "A"
	95	1.0	Choose a standard valve.	277
	06	250	E Choose a standard valve.	Channel "B"
	S1	0.0	Channel A Lot 10 L	277
	S2	0.0	Ir Channel A Channel B	
	S3	0.0	it Province Contraction	
	S4	0.0	TDA**10*7E80M*	-Parke
	S5	0	r: DSAE1007P07*LA* 11.03.02	
	S6	0	T *DSAE1017E**LA* 11.03.02	
	S7	0	" "DW*E*527**LA 23.07.03	
put	S8	0	r: *TDA**10*7E100L* 23.07.03	receive all
Range			*TDA**10*7E100M* 23.07.03	modul >> PC
C 0.8A = 0	-			
C 3.5 A = 1				send all PC >> modul
• 2.7 A=2	-			
C 1.8A=3	-		Exit OK	send parameter

