# **Characteristics / Ordering Code**

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).

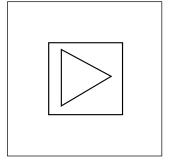
The most important features are:

- · 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 USB interface
- Connection by disconnectable terminals
- Compatible to the relevant European EMC standards
- · Comfortable PC user software, free of charge: www.parker.com/isde - see "Support", or directly at www.parker.com/propxd.



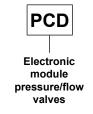




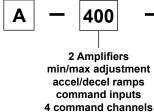


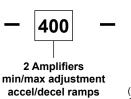


#### **Ordering code**











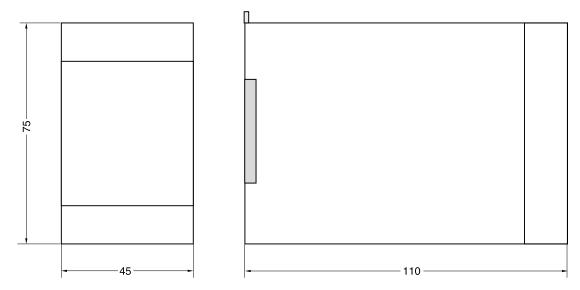
series (not required for ordering)

# Technical Data / Block Diagram

## **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 <sup>1)</sup>
Current consumption max.		[A]	5.0
Pre-fusing		[A]	6.3, medium lag
Command signal		[V]	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)
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 Max Ramp Current	[%] [s]	050 50100 032.5 0.8 / 1.3 / 1.8 / 2.7 / 3.5
Interface			USB type B
EMC			EN IEC 61000-6-2, EN IEC 61000-6-4
Connection			Screw terminals 0.22.5 mm², disconnectable
Cable specification		[mm²] [mm²]	<ul><li>1.5 overall braid shield for supply voltage and solenoids (AWG16)</li><li>0.5 overall braid shield for sensor and signal (AWG20)</li></ul>
Cable length		[m]	50

## **Dimensions**



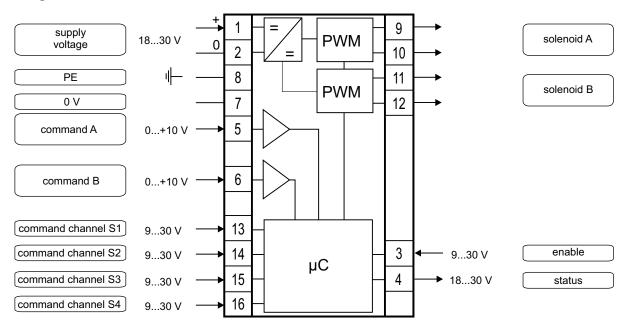
<sup>1)</sup> If solenoids with a nominal voltage of 24 V are connected, the supply voltage has to be raised to 29 V.

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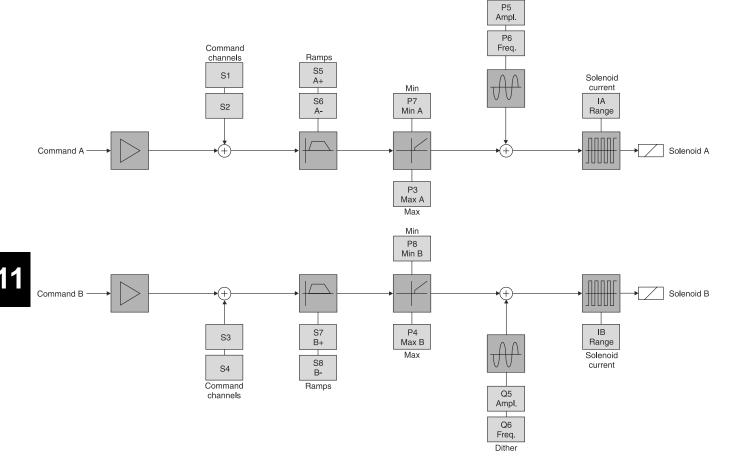


Dither

## **Block diagram**



## Signal flow diagram



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## **Interface Program**

#### 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/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 USB interface

