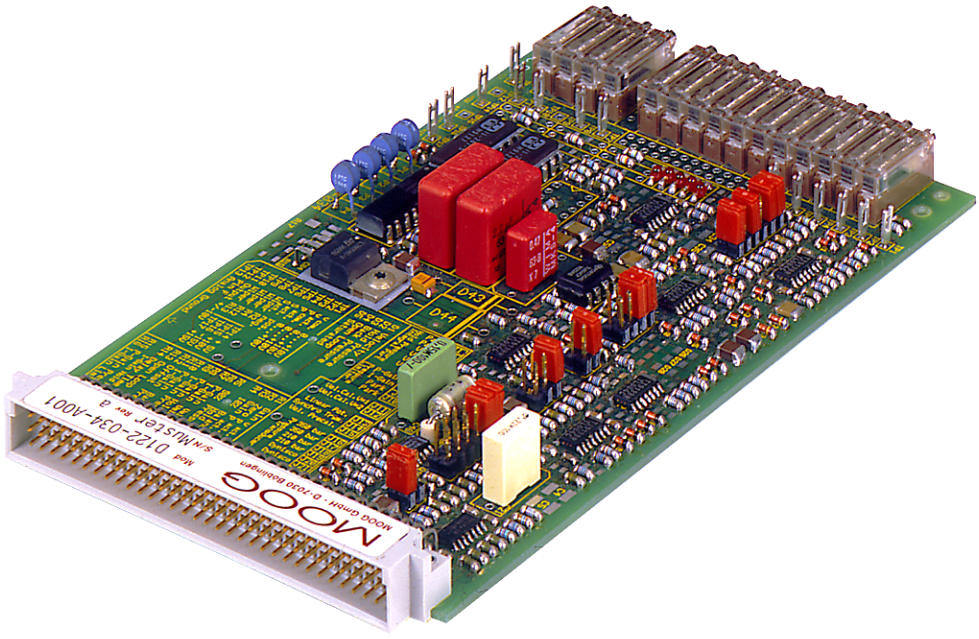
v/P-Controller
D122-034-A001

Features:

- Velocity and pressure controls for injection molding machines
- Smooth switching of control mode
- Logic function for different modes of operation
- Outputs for actual signals
- Alarm and control error outputs
- Internal power supply option



D122-034-001 / en / Rev a / 49.00

v/P-Controller Card
D122-034-A001

Application:

The v/P-controller card D122-034-A001 can be used together with a MOOG servo valve to control the injection cylinder of the plastics injection molding machines.

It controls:

- ❒ injection speed
- ❒ injection pressure limiter
- ❒ holding pressure
- ❒ back pressure during plasticizing

The setpoints for speeds and pressures, and the process data are entered via the machine control, making the v/P-controller card an integral component within the complete machine control and operation system.

If the machine control system does not include the required supply voltage (± 15V) for the card, this can be provided by the optional „DC/DC converter" at U = 18...36V DC.

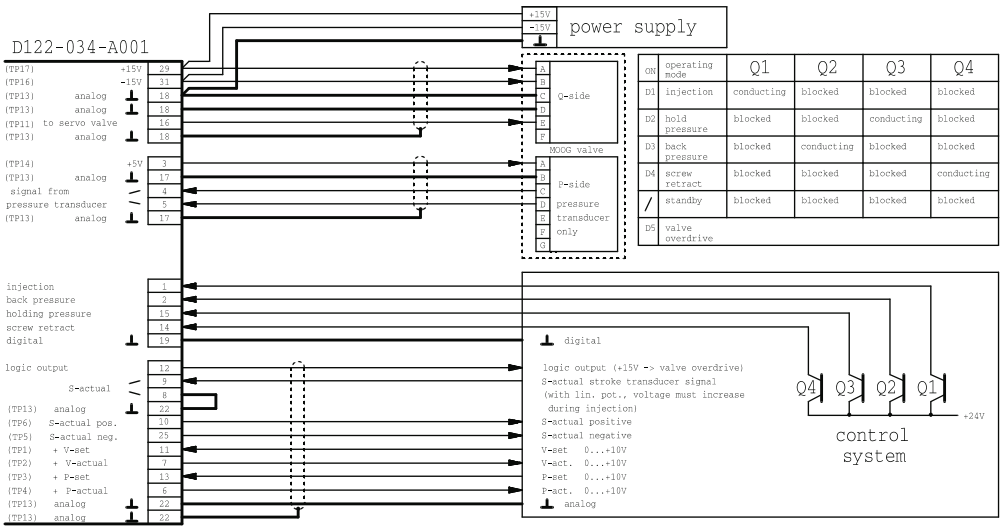
This cards needs adaptation to each application. Consult local Moog office.

Technical data:

Board dimensions:		Eurocard format 160 x 100mm	
Connection:		64-pin male connector, DIN41612 type C	
Power supply:		±15VDC, regulated (DC/DC converter available as option) Ripple ±100mVDC	
Current consumption:	Idle: Max nominal operation:	±100mA ±150mA	
Logic:		optocoupler	
	velocity:	Pin 1	+15V ... +50V
	hold pressure:	Pin 15	+15V ... +50V
	back pressure:	Pin 2	+15V ... +50V
	screw retract:	Pin 14	+15V ... +50V
	digital ground	Pin 24	0V (DGND)
Input resistance:	P-actual:	Pin 4	15kΩ
	V-actual:	Pin 8	100kΩ
	V-actual:	Pin 9	100kΩ
	P-set:	Pin 13	100kΩ
	V-set:	Pin 11	10kΩ
Output amplifier:		capable of withstanding short circuits	
	supply pressure transducer:	Pin 3	+5V / +30mA
	P-actual:	Pin 6	0 ... +10V min. input R = 5kΩ
	V-actual:	Pin 7	0 ... ±10V min. input R = 5kΩ
	position value positive:	Pin 10	0 ... ±10V min. input R = 5kΩ
	Moog valve saturated:	Pin 12	0 ... ±10V min. input R = 5kΩ
	Output Amplifier:	Pin 16	0 ... ±10V min. input R = 5kΩ
	position value negative:	Pin 25	0 ... ±10V min. input R = 5kΩ
Permissible ambient temperature:		0 ... 60°C	
The in- and outputs are related to analogue ground (pin22)			

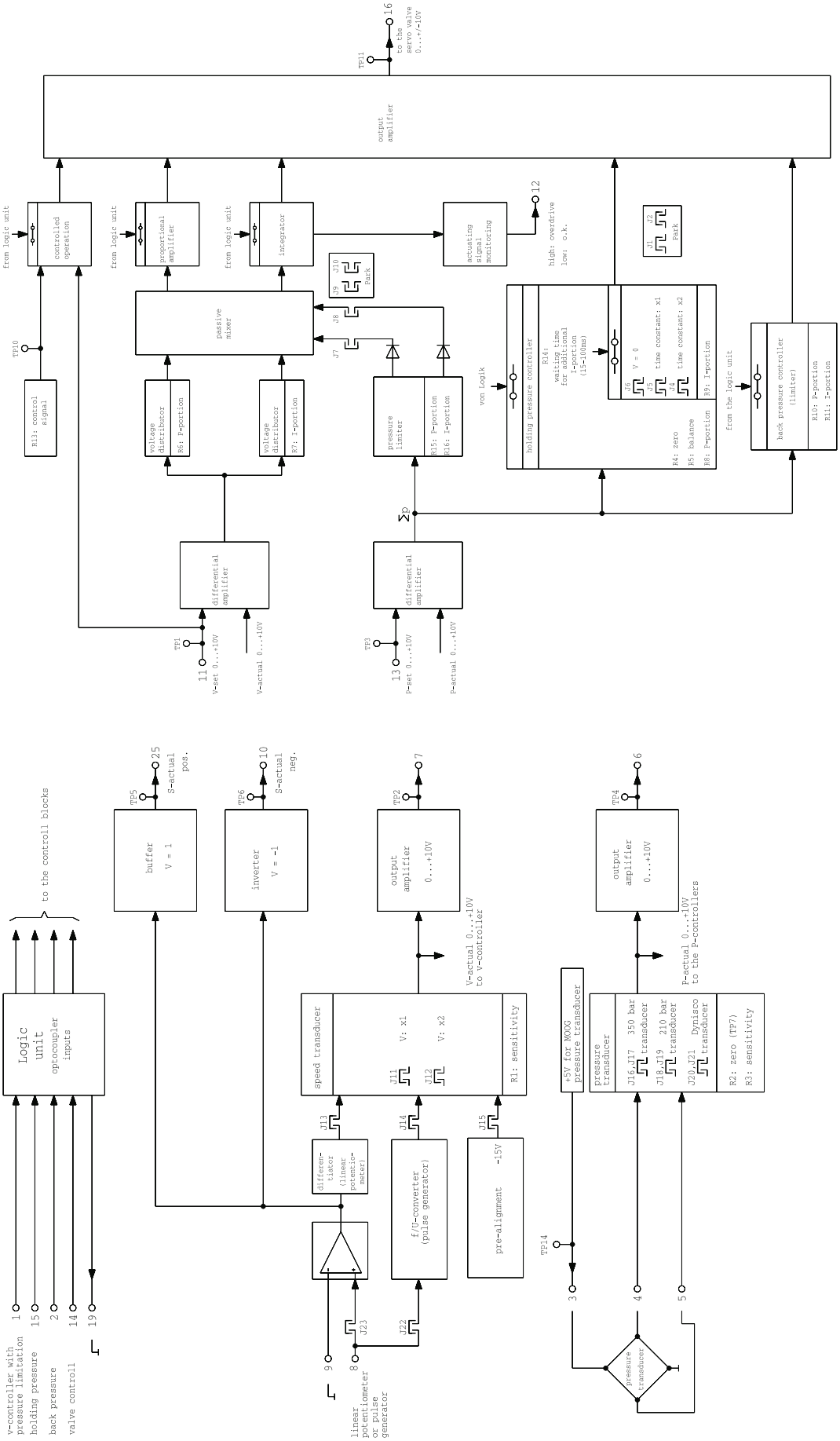
Terminal diagram:

Example: Version with Valve internal P-trx



DIN	operating mode	Q1	Q2	Q3	Q4
D1	injection	conducting	blocked	blocked	blocked
D2	hold pressure	blocked	blocked	conducting	blocked
D3	back pressure	blocked	conducting	blocked	blocked
D4	screw retract	blocked	blocked	blocked	conducting
/	standby	blocked	blocked	blocked	blocked
D5	valve overdrive				

Block diagram:



MOOG

Australia	Melbourne
Austria	Vienna
Brazil	São Paulo
China	Hong Kong
China	Shanghai
Denmark	Birkerød
England	Tewkesbury
Finland	Espoo
France	Rungis

Germany	Böblingen
India	Bangalore
Ireland	Ringaskiddy
Italy	Malnate
Japan	Hiratsuka
Korea	Kwangju
Philippines	Baguio
Russia	Pavlovo
Singapore	Singapore
Spain	Orio
Sweden	Gotenborg
USA	East Aurora (NY)

MOOG GmbH
Hanns-Klemm-Straße 28
D - 71034 Böblingen
Postfach 1670
D - 71006 Böblingen
Telefon (07031) 622-0
Telefax (07031) 622-100
Internet www.moog.com
e-mail sales@moog.de