Data Sheet

CYBELEC

INFRANOR GROUP COMPANY

Numerical Control DNC 402P

The DNC 402P numerical control is specifically designed for conventional up- and down-stroking press-brakes.

The DNC 402P numerical control manages 2 axes: one Y axis controlling a mechanical stop for the beam depth and one X axis controlling the backgauge. The large monochrome screen and a simplified keyboard with large keys make the DNC easy to program.

Machine manufacturers may configure axes, inputs/outputs, and auxiliary functions according to their needs.

Versions

DNC 402P   Numerical control for conventional press-brake

2 motor axes Y and X

Pressure and crowning control as standard

Axes and Auxiliary Functions for Press-brakes

All features listed here are supported and can be configured in the standard software supplied with all numerical controls.

Y	Depth stop management
X	Backgauge axis
Pressure	Voltage output (0-10VDC) for pressure valve control
Crowning	Mechanical crowning with potentiometer feedback
F1 and F2	Configurable auxiliary functions (possibly, the number of AFs may be limited, depending on the type of function and management). 24VDC digital outputs, with or without position control by means of a potentiometrical position transducer.
Languages	Choice of 4 languages for the operator

Languages — The machine manufacturer may install a combination of up to 4 languages picked from the list below:

> French, German, English, Chinese, Italian, Danish, Swedish, Finnish, Norwegian, Portuguese, Dutch, Spanish, Czech, Polish, Slovenian, Serbian, Turkish.

Accessories

MVP 100	Voltage / current conversion module (0-10V ➔ 0-0.5 / 0-2 A) for pressure valves, to be fitted in the electric cabinet.
Housing	External housing for mounting with pendant arm, including handle

Standard Characteristics

Keyboard	Keyboard with large keys
Screen	Monochrome graphic LCD screen
Processor	Processor design using ASIC and SMD components. This allows high integration and ensures great reliability.
Memory	Internal SRAM memory.
	FLASH memory with possibility to update the software via RS232
Backup	CYBACK program for external backup via RS 232
	Internal backup capability
Axes	2 axes with high speed counting (250 Khz) with programmable resolution $\pm$ 10 VDC recommended load impedance $Zl \geq 10$ kΩ
Units	Conversion Inch/mm, TON/TONS, etc.
Power supplies	DNC: + 24 VDC (min. 18 VDC to max. 35 VDC) max. 1 A, 20 W. Electrical cabinet: + 24 VDC $\pm$ 10% for the digital inputs/outputs
Encoder inputs	Line driver, 5 VDC supplied by the DNC
	ⓘ On this DNC, inverted signals are compulsory.
8 digital inputs	Optocoupled inputs 24 VDC stabilized $\pm$ 3 %.
8 digital outputs	Optocoupled short circuit proof outputs. Source 24 VDC max. 2.5 A / output.
3 analog inputs (aux. func.)	0-10 VDC, load $Zl \geq 10$ kΩ as standard or 0-5 VDC or 0-24 VDC, load $Zl \geq 10$ kΩ, depending on hardware configuration
Analog output voltage (auxiliary functions)	0-10 VDC recommended load impedance $Zl \geq 10$ kΩ
Serial port	1 RS232-port (J5)
Temperature, pollution level, relative humidity, and height during work	Min. 5° Celsius, max. 40° Celsius. Pollution level 2. Relative humidity (10 to 85% non condensing). Max. height 2000 m.

Order Information

DNC 402P	**S-DNC-402-P/P**
Housing	**S-COQ-60**
MVP 100	**S-MVP-100/A**

EC Directives

Directives	Our numerical controls comply with the EC Directives EN 61000-6-4 EN 61000-6-2

234.0
226.0

J9   J13   J12

Pin N°

1

20

J10

290.0
282.0

J19

J5

J7 J8

1   2
3   4
5   6

Sub 9 pins
Female

5 4 3 2 1
9 8 7 6

Sub 9 pins
Male

1 2 3 4 5
6 7 8 9

117.5 *
102.5
63.0   39.5
78.0 *