

CN055 Numeric Control

The Numeric Control CN055 has been designed to equip machines that must be easy to use and provide complete programming data with guided input. For the operator, this means being able to set the optimal working cycle in the shortest possible time with the help of intuitive menus, like the PUI.

The high protection makes CN055 ideal for the "toughest" workshop environments. The keys have been designed so that they are touch-sensitive even when the operator is wearing working gloves.

Particular care was taken in the selection of the components to ensure brightness and contrast of the display. The CN055 is realized with UR055. The product can be used in integrated mode (the control is mounted behind the panel) or in remotated mode, with a maximum distance of 3 mt.

The UR055 include serial communications (RS232 and RS422/485), CAN bus field, control of up to 5 axes, 4 analog inputs and 2 analog outputs auxiliary and I/O modularity on BLT (Tecno Local Bus) or CAN. The CPU used is a Motorola 40 MHz ColdFire.



Cod. H3CN055XXXX

CHARACTERISTICS	DESCRIPTION GENERALI	NOTES
Dimensions (LxHxD)	257mm x 227mm x 90mm	Without connector
Installation	Panel	
Weight (plus DIN bar hook)	approx. 1000gr	
Operating environment	Industrial	
Protection class	IP54	
Operating temperature	From 0° to 50°C	
Operating humidity (without condensate)	≤75%	
Max operating altitude	2000mt	
Monitor	- Display B/W graphic 128x240	
Keyboard	Industrial impermeable	34 keys 5 fuctions keys

CHARACTERISTICS	DESCRIPTION	NOTES
ELECTRICAL		
Supply voltage	DC 18-30V AC 15-24V	-
Absorption	To be defined	-
Buffer battery	VL2320 - 3 V	-
Encoder power supply	+5V / +12V (Line driver / Open collector)	- Internal power supply
Analog outputs	±10V 12-bit	-
INTERFACES		
Serial	1 RS232 line and 1 RS422/485 line	- Su DB9
Field bus	1 CANOpen line	- DSP-DS301/401 communication protocol - on 5-pin connector - Rotoswitch to the address selection
Local bus	1 line for local control of 80 inputs/outputs	-
Encoder inputs	5 encoder inputs +5/+12V Line driver - Open collector	-
In-flight position connection inputs	5 inputs for PNP position connection	-
Limit switch inputs	5 digital inputs as limit switches	-
Analog Outputs	2 analog outputs ±10V 16 bit	- on one DB9 connector
Analog Inputs	4 Analog Inputs 1 potentiometer power supply +10V	- su DB9
Terminal connection	1 connector to remoted connection for CN050 until maximum 3mt	With panel display 128x240 and keyboard with 39keys
CPU		
Microprocessor	Motorola MCF5206E with 40MHz clock	-
Working memory	Flash EPROM 1MB, parallel. 16-bit RAM 1MB 16-bit buffered	- - Buffered
AXES		
MAX number of axes controllable	5	-
Encoder interface	Line driver, Open collector 5/12V	- Configurable with jumpers
Encoder count	500 KHz with multiplication by 4	-
Real Time	6 msec with PLC scanning time programmable from the application	-
Analog reference	±10 Volt	- 12-bit resolution with mark
Limit switch inputs	1 per axis	-
In-flight position connection inputs	1 per axis	-
Axis Monitoring	- Axis disable in case of error - Software limit control - Tracking error control	-
Drive Control	- Motion control on individual axis - Possibility of in-flight position connection for high-precision mode	- Based on fully-developed PID
Axis performance	- Automatic axis offset connection - Positioning with trajectory control - Linear and circular interpolation - Automatic interpolation speed adjustment on the connectors and direction change - S-ramp - Interpolation with 2 C-axes for tangent cutting - Electrical axis (Gantry)	- Possibility to define the working plane in the space
SOFTWARE		
- PUI	- For the creation of automation applications	-
EXPANSIONS		
Tencos Module on BLT	Digital inputs, Digital outputs, Relay outputs, D/A converter module, A/D converter module,	Maximum number of I/O: 48IN+48OUT
CAN-BUS coupler module	- 18 VAC / +24VDC power supply - Absorption: 60 mA - Output voltage: +24 VDC 300 mA	- The maximum number of inputs/outputs controllable by the CANOpen Node are 64 inputs plus 64 outputs mixable over 8 x 8 modules. - Remote connection via CANOpen