

General Characteristics

CONFIGURATION		8055	8055-ε
Axes and spindles			
Maximum axis configuration for lathe		2 ▲ 4 ▲ 7	2 ▲ 4 ▲ 7 (with digital interface)
Maximum axis configuration for milling		4 ▲ 7	4 ▲ 7 (con interfaz digital)
Maximum configuration of spindles		2	2
C axis		▲ (on 4 and 7-axis lathe)	▲ (on 4 and 7-axis lathe)
Maximum axis + spindle configuration (analog + spindle)		8	8
Gantry axes		●	●
Tandem axes		●	●
Axis coupling via PLC		●	●
Axis coupling via program		●	●
User memory (RAM)			
User memory (RAM)		256 K ▲ 1 MB	256 K ▲ 1 MB
Compact flash (KEYCF)		512 MB ▲ 2 GB	512 MB ▲ 2 GB
Integrated PLC			
Cycle time of the PLC		3 ms / 1,000 instruc. ▲ 1 ms / 1,000 instruc.	3 ms / 1,000 instruc. ▲ 1 ms / 1,000 instruc.
Direct programming in mnemonics		●	●
Logic analyzer		●	●
Communication			
RS 232 (up to 115,200 Bd)		●	●
RS 422		●	-
DNC (through RS232)		▲	▲
USB		-	●
Ethernet		▲	▲
Telediagnosis via modem		▲	▲
Axis adjustment			
Look-ahead		75 blocks	75 blocks
Jerk control		●	●
Feed forward / AC forward		●	●
Oscilloscope function (setup assistance)		●	●
Circularity test (setup assistance)		●	●
System architecture			
Hardware configuration		Modular central unit	Central unit integrated into the monitor
Monitor		10.4" Color VGA TFT LCD	▲ LCD TFT 10.4" Color VGA ▲ 10.4" monochrome STN LCD
Feedback inputs		8 feedback inputs for axes, spindles and handwheels	1 specific for spindle 2 specific for electronic handwheels ▲ 4 for axes, spindles or handwheels
Feedback inputs at the drives		Requires SERCOS option	Requires SERCOS option
Analog inputs (±10 V)		8 analog outputs for axes and spindles	1 specific for spindle ▲ 4 for axes, spindles
Analog inputs (±5 V)		4	-
Probe inputs, 5V (0.25mA) or 24V (0.30 mA)		2	2
Local digital inputs and outputs (150 mA)		40 I / 24 O ▲ 232 I / 120 O	16 I / 8 O ▲ 56 I / 32 O
CPU turbo		▲	-
CAN for connection to remote modules		▲	▲
CAN for digital connection with the drives		▲	▲
SERCOS for digital connection with the drives		▲	▲
Remote I/O modules (option)			
Possible nodes (CAN Open)		4	4
Possible inputs / outputs in each node (500 mA)		72 I / 48 O	72 I / 48 O
System voltage supply			
Central unit		Universal AC	24 V dc
Digital inputs and outputs		24 V dc	24 V dc
Remote I/O modules		24 V dc	24 V dc
Servo drive systems			
Analog		▲	▲
Digital SERCOS (for AXD / SPD drives)		▲	▲
Digital CAN (for ACSD / SPD drives)		▲	▲
Models			
Milling		M	M
Lathe		T	T
Conversational	milling	MC	MC
	lathe	TC	TC
Conversational open	milling	MCO	MCO
	lathe	TCO	TCO
General purpose		GP	GP

For Lathes and Turning Centers

FEATURES	T	TC	TCO
Spindle related			
Spindle orientation M19	●	●	●
Spindle synchronization	●	●	●
Interpolation			
Linear, circular, helical	●	●	●
Tangential control	▲	▲	▲
Retrace function	▲	▲	▲
C axis	▲	▲	▲
Y axis for lathe	▲	▲	▲
Compensations			
Tool length and radius	●	●	●
Tool geometry	●	●	●
Tool life monitoring	▲	▲	▲
Graphics			
Tool path	●	●	●
Solid graphics	●	●	●
Operation related			
Simulation with execution time estimate	●	●	●
Look-ahead of N blocks to avoid tool collision	●	●	●
Programming related functions			
Feedrate as an inverted function of time	●	●	●
Profile editor	●	●	●
Communications related functions			
Ethernet	▲	▲	▲
DNC (DNC communications)	●	●	●
Telediagnosis	▲	▲	▲
Setup assistance	●	●	●
Canned cycles			
Machining canned cycles	●	●	-
Probing canned cycles	▲	▲	▲
Rigid tapping	●	●	●

● Standard ▲ Option - Not Available