

n Grundaussführung v Option x Funktion abhängig von Bedien-Software X Voraussetzung: Bedien-Software HMI-Advanced – nicht möglich	Hinweise	Bestell-Nr.	Kurz- angabe
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n Control structure and configuration (Fortsetzung)

SINUMERIK 840Di sl hardware with Windows OS:			
• 840Di sl (PCU 50.3-C 1.5 GHz/512 MB + MCI2 board, Windows XP ProEmbSys)		6FC5220-0AA31-2AA0	
• 840Di sl (PCU 50.3-P 2.0 GHz/1024 MB + MCI2 board, Windows XP ProEmbSys)		6FC5220-0AA33-2AA0	
MCI board extension slot version with cable distributor		6FC5222-0AA00-0AA1 6FX2006-1BA02	
Software for SINUMERIK 840Di sl:			
• 6/20 axes and ShopMill HMI, ShopTurn HMI, export version, on DVD, without license		6FC5820-3YC...-YA8	
• 6 axes, export version, license		6FC5820-1YP00-0YB0	
• 20 axes, export version, license		6FC5820-3YP00-0YB0	
• 6/20 axes and ShopMill HMI, ShopTurn HMI, on DVD, without license		6FC5820-3XC...-YA8	
• 6 axes, license		6FC5820-1XP00-0YB0	
• 20 axes, license		6FC5820-3XP00-0YB0	
SINUMERIK 802D sl:			
• Version T/M value, export version		6FC5370-0AA00-1AA0	
• Version T/M plus, export version		6FC5370-0AA00-2AA0	
• Version T/M pro, export version		6FC5370-0AA00-3AA0	
• Version G/N plus, export version		6FC5370-0AA00-2BA0	
• Version G/N pro, export version		6FC5370-0AA00-3BA0	
Channels/mode groups (MG):			
• Maximum configuration			
6-axis software			
20/31-axis software			
NCU 710.1			
NCU 720.1/NCU 730.1/NCU 730.2 PN			
• Each additional mode group (MG)		6FC5800-0AC00-0YB0	C01 ... C09
• Each additional machining channel		6FC5800-0AC10-0YB0	C11 ... C19

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SINUMERIK 802D sl Operating Instructions

Operating Instructions

Valid for Software version SINUMERIK 802D sl G/N 1.1
SINUMERIK 802D sl T/M 1.2

12/2006
6FC5397-0CP10-2BA0

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Description

1.1 System overview

Overview

The CNC operator panel of the **SINUMERIK 802D sl** control systems combines all CNC, PLC, HMI and communication tasks in one component. The maintenance-free hardware integrates the DRIVE-CLiQ interface for the drives and PROFIBUS interface for the I/O modules with the slimline operator panel into a ready-to-install unit (Panel Control Unit).

The **SINUMERIK 802D sl** can control up to 6 axes digitally. At the most, up to 5 NC axes of these 6 axes and one PLC axis can be configured. Up to 2 of these 5 NC axes can be configured as a spindle.

Table 1-1 PCU interfaces

interfaces	Function
Compact flash card (CF card) slot	50-pin slot for CF cards, and 4 LEDs
Power supply connection X40	3-pin screw-type terminal connection for connecting the 24 V load power supply
Ethernet interface X5	8-pin RJ45 socket connector for connection to an Industrial Ethernet
USB interface X10	4-pin USB port for connecting USB accessories (available soon)
NC full keyboard connection X9	6-pin PS/2 socket for connecting the NC full keyboard
RS232 COM interface X8	9-pin DSub connector for connecting a PG/PC
PROFIBUS DP interface X6	9-pin DSub socket for connection to PROFIBUS DP
DRIVE-CLiQ interface X1 and X2	8-pin RJ45 socket for connecting the SINAMICS S120 drive
Handwheel connection X30	12-pin screw-type male connector for connecting a max. of 2 handwheels
Digital inputs/digital outputs X20 and X21	12-pin screw-type male connector for connecting the digital inputs and outputs
Option interface X110	48-pin female connector for connecting the MCPA module

Technical data

User data memory

Compact Flash Card, type 1 (CF Card)

Connected loads of the PCU

Table 13-1 Connected loads

Supply voltage	24 V DC (permissible range: 20.4...28.8 V)
Ripple	3.6 Vpp
Current consumption from 24 V	Basic configuration typically 1.5 A (inputs/outputs open)
Power loss	max. 50 W
• CNC operator panel (PCU) with NC full keyboard • Machine control panel • PP72/48 I/O module	≤ 5 W max. 11 W
Starting current, total	5 A

Dimensions and weight

Table 13-2 Dimensions and weight

CNC operator panel (PCU)	
Dimensions W × H × D (mm)	310 x 330 x 85 310 x 330 x 101 with MCPA module
Weight [g]	approx. 4,900
NC full keyboard (upright design)	
Dimensions W × H × D (mm)	310 175 32
Weight [g]	approx. 1,700
NC full keyboard (vertical design)	
Dimensions W × H × D (mm)	172 x 330 x 32
Weight [g]	approx. 1,700
Machine control panel	
Dimensions W × H × D (mm)	170 x 330 x 128
Weight [g]	approx. 1,500
PP72/48 I/O module	
Dimensions W × H × D (mm)	194 x 325 x 35

13.4 Specifications for Protection Class and Degree of Protection

Protection class

Safety class I as per DIN EN 61140, i.e. protective conductor connection required!

Protection against ingress of solid foreign bodies and water

Degree of protection per DIN EN 60529:

- CNC operator panel (PCU) IP65 (front)
IP00 (rear)
- Machine control panel (MCP) IP54 (front)
IP00 (rear)
- PP 72/48 I/O module IP00