# Power Unit type iPU-DC / iPU-EC

Multi-axis controller



The **Power Units iPU** are powerful drive controls for up to four linear or rotary axes equipped with brushed or brushless motors. The compact controller integrates all the required control components needed to execute different tasks relating to automation. These range from the power output stages of the types iMD10 or iMD20 through the I/O module to the safety control and power electronics.

As an interface for NC control, the **Power Unit iPU** has an interface of the type CANopen positioned on the rear side of the housing and working according to the bus protocol DS301 and DS402. By using the optional CAN PCI card iCC 10 or a control computer of the iPC series, the controller allows the (linear, circular, as well as helical) interpolation of all four axes as well as web processing.

In addition, the power output stages used (the type iMD10 or the type iMD20) have an automatic jerk limitation and standstill monitoring. The control elements integrated into the front part of the housing, such as the EMERGENCY STOP and the START or STOP, enable convenient operation.

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## • Drive control for up to four brushed or brushless DC servomotors

- NC control carried out by the fieldbus CANopen
- Power output stages iMD10 / iMD20- 4-quadrant drive
  - controller- evaluation for incremental
  - encoder-standstill monitoring-over-
  - and under-voltage as well as
  - over-temperature protection, short-circuit-proof
- Door and/or hood control
- Connection for the external control signals such as for example the EMERGENCY STOP, START, STOP to permit the integration into higher-level safety circuits
- Connection for the milling spindle (between 100 and 230VAC)
- Control elements positioned inside the front part of the housing (optional on the rear)
- Programming and/or remote operation (optional: ProNC)

#### **Technical data**

- 0 .. 10V output for the external frequency converter used for the main spindle equipped with a speed control
- Wide-range mains input
  - 115VAC/230VAC, 50..60 Hz
- Switching power supply of 1000W/48V
- Power output stages iMD10/iMD20

   Supply voltage: 24- 80VDC
  - Peak and/or rated current: 25A / 12A
- Inputs/Outputs
  - 4 digital inputs (24VDC /8mA)
  - 8 digital outputs (24VDC / 350mA)
  - 1 relay output (230VAC, max. 6A)
  - 1 analog output (between 0 and 10V)
- Safety control
  - up to the safety category number
  - 3-Door circuit
  - control- Spindle control
- Interface type RJ 45 CANopen
- Variants:
  - Desktop housing: W 475 x D 410 x H 232 mm
  - 19" housing: W 482.5 x D 410 x H 221 mm

Order key		
353001 XX1X		
Version	Drive module	Number of axes
1 = housing of 19"	$1 = iMD \ 10$ (brushed DC servomotors)	2 = 2 axes
2 = Table housing	$2 = iMD \ 20$ (brushless EC servo motors)	3 = 3 axes
		4 = 4 axes

# Scope of delivery

Controller, mating connector (I/O, impulse, remote), can bus line (type RJ45, patch cable), power cable of 230 VAC, operating instructions

## Accessories

Motor cable M23 plug - M23 socket Part No.: 392759 0300 (3m) Part No.: 392759 0500 (5 m) Encoder cable equipped with the plug SubD15 and the socket SubD15 Part No.: 392740 0300 (3 m) Part No.: 392740 0500 (5 m) CAN-PCI card type iCC 10 (1 channel) Part No.: 320320 CAN-PCI card type iCC 20 (2 channels) Part No.: 320311 Remote control software Part No.: Z12-334500 Control software ProNC Part No.: Z11-333500

