



Z32 SLIM SYSTEM

Designed for medium and small machine

Integrated digital solution entirely designed by D.Electron: perfect match of hardware and software

High technology - Powerful - Easy to Install



Master Link: MLKSD Module

The MLKSD module is the master module that manages all the digital communication buses between the Z32 CNC and the peripherals (I/O's and digital drives).

MLKSD connects to:

- Any Z32 CNC central unit through an Ethernet Real Time connection
- Up to 8 Slim Drive power modules (mounted on its side) through a local copper loop

MLKSD on-board I/O's:

- 24Vdc 32 Digital In + 32 Digital Out (expandable to 64In + 64Out)
- 4 Analog Input 0-10Vdc
- Input connector for RIK machine console I/O board
- Input connector for RCT touch-screen handwheel
- 1 Analog Output $\pm 10Vdc$ + 1 TTL encoder Input

MLKSD expansions:

- Z-Link optical fiber fieldbus for I/O's
- Up to 8 additional Z-Star2 SPSEvo power modules connected with an optical fiber connection

400VAC Slim Drives

Ideal for high performance small-medium size machines

- **Compact Dimensions**
- **Easy wiring**
- **Suitable for axes** (brushless, linear, torque motors) **and spindles** (induction, synchronous motors)

D.Electron Slim Drives are composed of a single power supply unit and up to 8 power modules, mounted on the MLKSD side.

The digital communication bus together with the 24Vdc power supply are done through a local copper connection.

Available slim power supplies: 11kW or 22kW

Available slim power modules: from 3A to 20A

Expandable through Z-Star2 connection up to 120kW (power supply) / 200A (power module)





400Vac SDA Power Supply

The SDA power supply module is mounted directly on the side of the MLKSD master link module and generates a 560Vdc bus for the power modules.

It comes with an integrated braking resistor suitable for dissipation of standard axes braking energy. An external, additional, braking resistor can be added in case of spindles or heavy duty working cycles.

SDA Power supply	SDA20	SDA40
Nom/pk Power	11/22 kW	22/44 kW
Nom/pk Current	20/40 A	40/80 A
Supply Voltage	3-Phase 400 Vac $\pm 10\%$ 50 / 60 Hz	
DC Bus Voltage	560 Vdc	
AUX Supply Voltage	24 Vdc	
Dimensions mm (H x W x D)	355 x 35 x 255	355 x 70 x 255



400Vac SDP Power Module

SDP power modules convert the DC bus continuous voltage in the proper 3-phase U-V-W voltages needed to control the motors.

Main characteristics:

- Autotuning and no requirement for hardware settings
- PWM frequency up to 8kHz; max out frequency 2kHz
- Double transducer input (motor + position): Resolver, TTL, SinCos, EnDat, BiSS, Hiperface
- STO safety function
- Integrated brake management

SDP Power Module	SDP3	SDP5	SDP11	SDP21
Nominal Current (S1)	2.5 A	4.5 A	10 A	20 A
Peak Current	7.5 A	13.5 A	30 A	60 A
S1 Power	1,3 kW	2,5 kW	5,5 kW	11 kW
DC bus voltage	500-650 Vdc			
Output Voltage	400Vac 3-phase			
Dimensions mm (H x W x D)	355 x 35 x 255	355 x 35 x 255	355 x 70 x 255	355 x 70 x 255

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