

# SIGMATEK

## DIAS Drive 100



## Modular, Compact and Economic

# DIAS Drive 100

DIAS Drive 100 is a modular servo drive system, which was designed especially for multiaxial applications in the low to mid performance range. It impresses with its exceptionally compact form and optimized power loss. Per module group, up to eight servo axes are possible and that with a space requirement of only 300 mm x 155 mm x 152 mm (width x height x depth).

Two different power modules are available as well as axis modules in various power classes for one or two servo drives. Depending on the power module used and the motor type, the system is operated as one-phase 230 VAC or three-phase 400-480 VAC. Thanks to the minimal cycle times of the controller, the DIAS Drive 100 provides excellent servo performance. The modules are mounted to a module carrier using



simple snap technology. This reduces the assembly and installation labor significantly. The integration of brake resistance and a line filter contributes to the small space requirement.

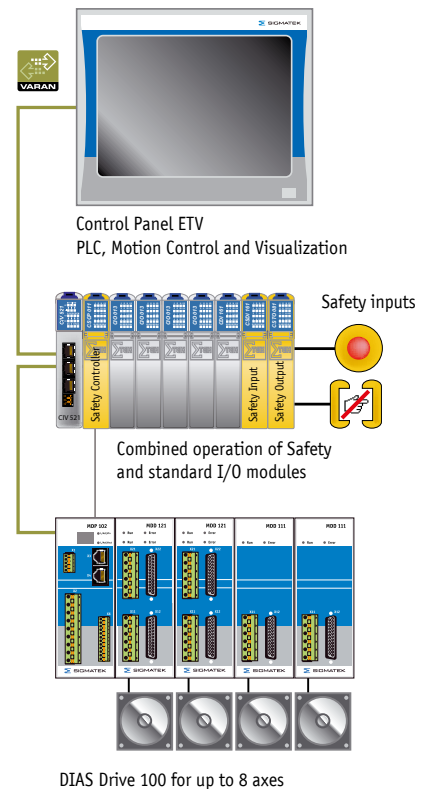
### Technical Data

	Power Supply MDP 101	Power Supply MDP 102	Axis module MDD 111	Axis module MDD 121
Number of axes	Maximum of 8		1	2
Power input voltage	3x 230 V - 480 V	1x or 3x 115 V - 230 V	-	-
Auxiliary power supply voltage	24 V		-	-
Input power	3 kVA	2 kVA	-	-
Rated /peak current axis 1 (230 V)	-	-	6 A/15 A	3 A/9 A, max. 5 A/15 A*
Rated /peak current axis 2 (230 V)	-	-	-	3 A/9 A
Rated /peak current axis 1 (400 V)	-	-	4 A/9 A	2 A/6 A, max. 3 A/9 A*
Rated /peak current axis 2 (400 V)	-	-	-	2 A/6 A
				* With power reduction of axis 2, axis 1 can have a higher power output
Power Supply	Power supply, integrated line filter, charging circuit, brake resistor, fast capture inputs			
Axis module	Excellent servo performance through shortest controller cycle times, control of servo, linear, torque and asynchronous motors			
Interfaces	VARAN bus, optional CANopen® and others			
Feedback	Resolver, EnDAT® encoder, Hiperface® encoder, high resolution Sin/Cos encoder			
Safety	Integrated Safety functions SS1 and STO according to EN 61508 and PL e according to ISO 13849			
Dimensions (W x H x D)	Power and axis module: 60 mm x 155 mm x 152 mm			

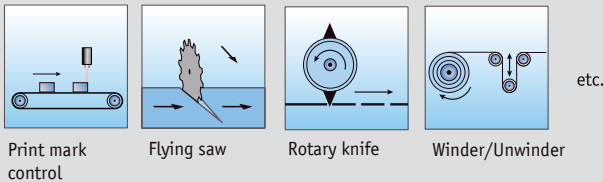
## Integrated Control Architecture

The servo drive system DIAS Drive 100 is completely integrated into the SIGMATEK automation system. Motion control, PLC, Safety and visualization are unified in a central control system. This enables simple programming and clear organization of the application software. The control provides extensive motion control functions. Because the drive tasks are reduced, the handling is simplified for the user. All drive parameters and configuration data are stored centrally in the control and are automatically reloaded when a servo drive is exchanged.

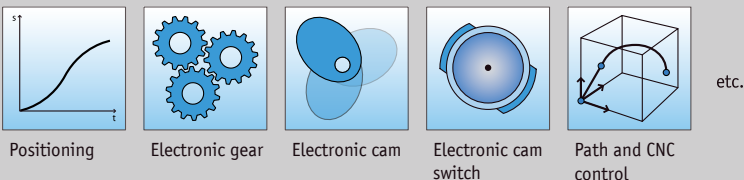
This modern control structure is made possible by the hard real-time Ethernet system VARAN, with the shortest cycle times for communication between the drive and the control. With this type of system architecture, cross traffic between the axes is not needed.



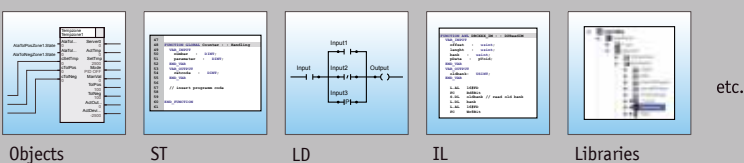
### LASAL Technology modules



### LASAL Motion



### LASAL Control Programming



Programming is done with the LASAL engineering tool. LASAL MOTION offers all the functions required for production machines, from simple single-axis to complex multiaxial applications. The spectrum ranges from electronic cam over positioning and synchronous speed to path and CNC control with transformations for various robot kinematics and CNC applications.

In addition to extensive basic function, machine-oriented technology modules are available, such as "flying saw", "rotary knife" or "winder/unwinder". For the user, implementing the most common motion control tasks is therefore simplified.



## Austria – Corporate Headquarters

SIGMATEK GmbH & Co KG  
5112 Lamprechtshausen · Sigmatekstrasse 1  
Tel. +43/62 74/43 21-0 · Fax +43/62 74/43 21-18  
www.sigmatek-automation.com · office@sigmatek.at

## Germany

SIGMATEK GMBH  
76829 Landau · Marie-Curie-Strasse 9  
Tel. +49/63 41/94 21-0 · Fax +49/63 41/94 21-21  
www.sigmatek-automation.com · office@sigmatek.de

## Switzerland

SIGMATEK Schweiz AG  
8307 Effretikon · Poststrasse 2  
Tel. +41/52/354 50 50 · Fax +41/52/354 50 51  
www.sigmatek-automation.ch · office@sigmatek.ch

## Great Britain

SIGMATEK Automation UK Limited  
Bramcote, Nottingham NG9 3DH · 33 Bridle Road  
Tel. +44/77505 66 5 961 · Fax +43/62 74/43 21-18  
www.sigmatek-automation.co.uk · office@sigmatek-automation.co.uk

## USA

Sigmatek U.S. Automation, Inc.  
44133 North Royalton, Ohio · 10147 Royalton Rd. · Suite N.  
Tel. +1/440/582 12 66 · Fax +1/440/582 14 76  
www.sigmatek-automation.us · office@sigmatek.us

## China

SIGMATEK Automation CO., Ltd  
315040 Ningbo · Room 504 Building A No.555 Jingjia Road  
Tel. +86/574/87 75 30 85 · Fax +86/574/87 75 30 65  
www.sigmatek-automation.cn · office@sigmatek-automation.cn

## Belgium

Sigma Control B.V.  
2994 LB Barendrecht · Zwolseweg 43 a/b  
Tel. +32/329/770 07 · Fax +31/180/69 57 76  
www.sigmacontrol.eu · office@sigmacontrol.eu

## China

Shanghai Dimension Automatic Control System Solution Co., Ltd  
200032 Shanghai · Room 806, Building 1, No.3000, Long Dong Road  
Tel. +86/21/68 79 46 80 · Fax +86/21/68 79 47 10  
www.dmxtech.com · buyer@dmxtech.com

## Denmark

Wexøe A/S  
3500 Værløse · Lejrvej 31  
Tel. +45/45 46 58 00 · Fax +45/45 46 58 01  
www.wexoe.dk · wexoe@wexoe.dk

## Finland

SARLIN Oy Ab  
01610 Vantaa · Kaivokselantie 3-5  
Tel. +35/8105/50 42 33 · Fax +35/8105/50 42 01  
www.sarlin.com · info@sarlin.com

## France

JS Automation  
38507 Voiron Cedex · BP 245  
Tel. +33/476/67 48 48 · Fax +33/476/67 48 49  
www.jsautomation.fr · jsaut@jsautomation.fr

## Greece

2 kappa Ltd  
54628 Menemeni Thessaloniki · Sofokli Venizelou 13  
Tel. +30/2310/77 55 10 · Fax +30/2310/77 55 14  
www.2kappa.gr · info@2kappa.gr

## India

LTM Business Unit  
Chennai - 600 089 · Mount Poonamallee Road, Manapakkam  
Tel. +91/44/22 49 19 32 · Fax +91/44/22 49 40 75  
el@ltmltd.com

## Netherlands

Sigma Control B.V.  
2994 LB Barendrecht · Zwolseweg 43 a/b  
Tel. +31/180/69 57 77 · Fax +31/180/69 57 76  
www.sigmacontrol.eu · office@sigmacontrol.eu

## Portugal

Plasdan Lda  
Máquinas para plásticos  
2430-520 Marinha Grande · Rua 52, No. 44  
Tel. +351/244/572 110 · Fax +351/244/572 112  
info@plasdan.pt

## Serbia

Rovex Inzenjering d.o.o.  
11070 Belgrad · Bulevar Mihaila Pupina 10d/VP62  
Tel. +381/11/13 79 34 · Fax +381/11/13 79 34  
romeov@ptt.rs

## Spain

Brotomatic S.L.  
01010 Vitoria-Gasteiz (Álava)  
c/ San Miguel de Acha 2 – pabellon 3  
Tel. +34/945/24 94 11 · Fax +34/945/22 78 32  
www.brotomatic.es · broto@brotomatic.es

## Sweden

SIGBI Automation AB  
254 64 Helsingborg · Pinnmogatan 1  
Tel. +46/42/654 00 · Fax +46/42/654 70  
www.sigmatek.se · info@sigmatek.se

## Turkey

DEDEM Elektrik Taah. Otomasyon San. Tic. Ltd. Şti.  
35477 Tekeli-Menderes · 10023 Sokak No: 5  
Tel. +90/232/472 18 48 · Fax +90/232/472 17 03  
www.dedemotomasyon.com · sigmatek@dedemotomasyon.com