



More intelligence for your automation processes: **MOVIDRIVE® B**

Drive inverter

MOVIDRIVE[®] B: The new generation of inverters

Innovation and performance were the top priorities for SEW-EURODRIVE during the development of the new inverter technology that is implemented in MOVIDRIVE[®] B. With its variety of basic functions, wide power range, high overload capacity and a modular unit concept, MOVIDRIVE[®] B increases profitability and flexibility of systems worldwide.



From asynchronous AC drives to synchronous servo drives – the MOVIDRIVE® B inverters control all types of drive systems. The extended, intelligent IPOS^{plus®} controller is integrated as standard in all MOVIDRIVE® B variants.

All sizes of the MOVIDRIVE[®] B inverter are very compact and take up less room in the control cabinet. The sophisticated connection technology makes it easier to install cables and options.

Driving the world – with innovative drive solutions for all industries and applications. Products and systems from SEW-EURODRIVE are used all over the world. Be it in the automotive, building materials, food and beverage or metal-processing industry – the decision to use drive technology "made by SEW-EURODRIVE" stands for reliability for both functionality and investment.



Overview of functions

One inverter – universal application:

- From asynchronous AC drives to synchronous servo drives, from simple speed control to positioning tasks to dynamic applications
- A wide power range from 0.55 to 315 kW
- Large range of basic functions thanks to a large number of inverter inputs and outputs
- Integrated positioning and sequence control IPOS^{plus®}

Modular unit concept:

- Optional communication and technology components extend the basic functions
- Integrated safety function "Safe Torque Off" (STO) according to DIN EN 954-1 category 3 and according to EN ISO 13849-1 PL d
- Pluggable service module to transfer unit data simply and quickly when service is required
- Simplified startup procedure using the "electronic nameplate" in conjunction with HIPERFACE[®] encoder
- Keypad with full matrix display and 15 languages to choose from
- Jerk-limited acceleration to protect systems subject to vibration

Options:

- Broad range of options (bus interfaces, encoder connection, controllers and safety monitors)
- Integrated control functionality MOVI-PLC®, programming to IEC 61131



Contents:

MOVIDRIVE® B	2
effiDRIVE [®] energy saving concepts	4
Integrated safety technology	5
Control modes, startup and service	6
Application solutions	8
Integrated positioning and sequence control: IPOS ^{plus®}	10
Integrated motion control: MOVI-PLC®	12
Options and accessories	14
Technical data	16



effiDRIVE[®] energy saving concepts with MOVIDRIVE[®] B

The most important modules of the effiDRIVE® energy saving concept are consulting offered by SEW-EURODRIVE and the components of the modular energy efficiency system: The MOVIDRIVE® B inverter offers technological functions to realize energy-efficient machine or system solutions:

effiDRIVE® energy saving concepts

Process adaptation	 Almost every process can be adapted to the actual demand thanks to infinitely variable speed and torque control, which makes the process more energy-efficient. Depending on the appli- cation, this saves between 50% and 70% of energy. More energy saving potential can be tapped in applications with periodic acceleration and deceleration through energy-efficient motion sequences.
Energy-saving function	 Maximum acceleration, speed and braking deceleration are not necessary for every application: The energy-saving function offers advantages when the application has to be operated in the part-load range and dynamic properties are not a main requirement when load changes occur. The dynamic adjustment of the magnetization current enables the motor to be operated with optimum efficiency in every operating point. The energy consumption is reduced by up to 30% depending on the application.
DC link connection	 By connecting the DC links of several inverters, regenerative energy of one drive can be used directly as motive energy in another drive. This measure can reduce energy consumption from the supply system if the drive sequences are segmented and suitable travel profiles have been selected.
Regenerative power supply unit	 A regenerative power unit feeds back the regenerative energy of a drive into the supply system. The released braking energy is not dissipated via braking resistors but fed back into the supply system, which saves energy. This is especially effective in hoists and storage and retrieval units (vertical applications).
Thermally controlled fans	The fans are only activated if sufficient waste heat is generated. This not only lowers the energy consumption, but also the noise level.



5

Integrated safety technology

The MOVIDRIVE[®] B inverter meets the challenge of avoiding industrial accidents while maintaining trouble-free and economical system operation. To ensure employee safety during machine and system operation, deviations from prescribed velocity profiles or positions must be detected quickly and result in a safety shutdown in case of error.

MOVIDRIVE® B inverters are equipped with integrated safety technology with the following functions:

Safety options

MOVIDRIVE® B	Safety class/standard	Safety functions	Necessary options
for "Safe disconnection"	 Cat. 3 acc. to EN 954-1 PL d acc. to EN ISO 13849-1 	ST0	Integrated in basic unit
for "Safe communication"	 SIL 3 acc. to IEC 61508 Cat. 4 acc. to EN 954-1 PL e acc. to EN ISO 13849-1 	Safe digital outputs	 DFS11B (PROFIsafe/PROFIBUS) DFS21B (PROFIsafe/PROFINET)
for "Safe motion/position monitoring"	 SIL 3 acc. to IEC 61508 Cat. 4 acc. to EN 954-1 PL e acc. to EN ISO 13849-1 	STO, SS1, SS2, SOS, SLA, SAR, SLS, SSR, SLP, SLI, SDI, SCA, SSM According to IEC 61800-5-2 – Safe digital outputs – Safe logic processing	DCS31B (safety monitor)
for "Safe motion/position monitoring and communication"	 SIL 3 acc. to IEC 61508 Cat. 4 acc. to EN 954-1 PL e acc. to EN ISO 13849-1 	STO, SS1, SS2, SOS, SLA, SAR, SLS, SSR, SLP, SLI, SDI, SCA, SSM According to IEC 61800-5-2 – Safe digital outputs – PROFIsafe communication	 DCS21B + DFS12B (PROFIsafe/PROFIBUS) DCS21B + DFS22B (PROFIsafe/PROFINET)

Optimized control for every application

Controlling different motor types with just one unit variant? No problem for MOVIDRIVE® B,

as the inverter offers a suitable control mode for every motor system:



For asynchronous AC motors:

- Standard control mode V/f (no speed feedback)
- Flux control mode VFC for dynamic and precisely controlled AC drives with very consistent speed (with and without speed feedback)
- Flux control mode CFC for operation of asyn-_ chronous motors with genuine servo properties (with speed feedback)
- Speed feedback provided by the following encoders:
 - Sin/cos encoder (incremental encoder)
 - TTL encoder (incremental encoder)
 - RS422 encoder (incremental encoder)
 - HIPERFACE® encoder
 - (absolute or incremental encoder)
- Resolver
 - SSI encoder

For synchronous servomotors:

- SERVO operating mode for permanent-field servomotors, i.e. for highly dynamic servomotor control with particularly short torque rise times.
- Speed feedback provided by the following encoders:
 - HIPERFACE[®] encoder (absolute encoder)
 - Resolver
 - SSI encoder





Speed is controlled in 0.5 ms cycles; the cycle time for current control in CFC mode

Fast startup and easy maintenance

The usability of the MOVIDRIVE® B inverters ensures that parameters can be set quickly and easily using the optional keypad or a PC. The user is guided step-by-step through startup and parameter setting. It is sufficient to enter the unit designation of the SEW-EURODRIVE gearmotor. All properties of the SEW-EURODRIVE motors are stored in the inverter at the factory. The standard parameters can be adapted to the application quickly and easily. During startup of the motor and inverter, the project planning software MOVITOOLS® Motion-Studio automatically reads out all motor data from drives with **"electronic nameplate"** and loads it into the inverter. On the basis of this data, the software calculates the optimum parameters for the control loops. Thanks to the "electronic nameplate" function, the user only has to enter very few plant-specific values – data transparency all the way to the motor. The only prerequisite for the system is a HIPERFACE® encoder on the motor.



You can easily download or order MOVITOOLS® MotionStudio updates via the Internet



The integrated memory card of the **"pluggable service module"** can be easily removed in case of service and plugged into the new MOVIDRIVE[®] B inverter. All unit settings are transferred to the new inverter quickly and safely.

MOVIDRIVE® B will always help you find the perfect solution

Application solutions from SEW-EURODRIVE are both standardized and universal. The user-friendly and ready-made application modules make it easy to solve many tasks by simply setting parameters without any special programming knowledge. They have been developed specifically for the application areas positioning, winding and motion control. The functionality has been tested, and it can be loaded into the inverter and operated by simply pressing a button.

Startup is just as easy: All the important machine data is easily accessible. There are almost no sources for errors, since only those parameters required for the application have to be entered.

All relevant data, e.g. terminal states or position values, can be observed with a monitoring function during the ongoing operating process for easy servicing.



MOVIDRIVE® B is implemented in a winder with diameter calculator to ensure constant tension. Application module: Central winder



In the gantry crane application, MOVIDRIVE® B is used to control the two travel axes and the hoist axis. The maximum speed is determined according to the load (load recognition). Application module: I-SYNC

Application module in application versi	es for MOVIDRIVE® B
Positioning applications	Linear movement; the travel blocks are administered in the inverter: Table positioning Table positioning with bus control Bus positioning Extended bus positioning Absolute value positioning Sensor-based positioning via bus Crane control Cam positioning Rotary movement: Modulo positioning
Winding applications	Central winder Winder with jockey roll control on request
Motion control applications	Flying sawI-SYNC



The "Flying saw" application is used to cut endless material to length. MOVIDRIVE® B makes sure that the motion sequence is correct before, during and after the cut. Application module: Flying saw MOVIDRIVE® B makes rotary indexing tables flexible and offers a high level of planning safety. Application modules: Module positioning, table positioning, fieldbus positioning, absolute value positioning, rotary axis



Standardized and universal application solutions at the same time: With the right software from SEW-EURODRIVE, the MOVIDRIVE® B inverters improve the efficiency and flexibility of any application, ensuring profitability and safety.

Positioning and sequence control as standard

The IPOS^{plus®} positioning and sequence control system is integrated in all MOVIDRIVE[®] B units as standard. So far, installation and startup of inverter-motor combinations were often time-consuming and complex. MOVIDRIVE[®] B with integrated IPOS^{plus®} controller is set up quickly and easily.

For all applications, IPOS^{plus®} makes no compromises when it comes to precision because it uses the exact and highly dynamic control properties of the MOVIDRIVE® inverter. The user can choose between mask programming and high level language. It is also possible to use the preconfigured control programs called application modules. Thanks to direct access to all the internal inverter parameters, IPOS^{plus®} is fast and flexible. This flexibility allows for quick and economic batch changes during production.



IPOS ^{plus®} at a gland	e		
User programs	 Assembler or high level language programming Three independent sub-programs: task 1, task 2, and task 3 Comprehensive test functions, e.g. individual step or breakpoint functions 		
PLC functions	 With a comprehensive command set to solve all the necessary digital or analog control and information tasks for MOVIDRIVE[®] B with all options Interrupt response, e.g. in case of interference or terminal signal 		
Positioning functions	 Comprehensive command set Freely adjustable travel speed Positioning ramp: linear, sine or square Jerk-limited acceleration 128 non-volatile variables 8 reference travel types for incremental encoder installation Absolute encoder possible Endless positioning 		
Monitoring functions	 Hardware limit switches Software limit switches Continuous lag error monitoring Speed monitoring to detect mechanical blockage and for machine protection 		

Integrated motion control

The control cards MOVI-PLC[®] basic and advanced for MOVIDRIVE[®] B inverters combine motion control and PLC functions close to the drive and enable convenient and power-ful automation solutions. Standardized programming languages to IEC 61131 (KOP, FUP, AWL, ST, AS) along with configurable function blocks certified to PLCopen make for easy programming and motion control in plug & play mode. The integrated standard blocks of a PLC additionally provide full logic control.



MOVIDRIVE[®] B inverters with integrated MOVI-PLC[®] cover a wide range of tasks, from simple, singleaxis functions to application solutions for several axes. The MOVI-PLC[®] basic DHP11B control card is particularly suited for automation of machine modules, in which it coordinates complex motion sequences.

MOVI-PLC® basic control card

- In unit variants T0, T1, T2
- PROFIBUS slave DP-V1

MOVI-PLC® advanced control cards

- DHE41B with Ethernet interface
- DHF41B also with PROFIBUS and DeviceNet interface
- DHR31B also with PROFINET/EtherNet/IP/ Modbus TCP/IP slave interface

MOVI-PLC® I/O system

The MOVI-PLC[®] I/O system extends the digital and analog interfaces of MOVI-PLC[®]. Up to 32 modules per bus coupler can be connected via the system bus in IP20 enclosure. Accordingly, MOVI-PLC[®] can automatically access a large range of inputs and outputs:

- MOVI-PLC® I/O system
- I/Os directly integrated with MOVI-PLC®
- I/Os of the controlled inverters





Unlimited application in machines and systems – MOVIDRIVE® B with integrated motion control. The corresponding options make for efficient implementation of even the most sophisticated applications.

Compose your individual solution

Communication

All commercial fieldbus systems are available for MOVIDRIVE[®] B. MOVILINK[®] is the standardized communication protocol from the SEW-EURODRIVE modular fieldbus concept and offers a high degree of flexibility. It enables uniform communication between the inverters, independent of the transmission system. Vertical integration of MOVIDRIVE® B in a communication system is just as straightforward. The MOVIDRIVE® B inverters can communicate with higher automation levels via all standard bus systems.

The MOVIDRIVE[®] B standard variant is excellently equipped for basic applications. With its modular option system and the comprehensive range of accessories, MOVIDRIVE[®] B becomes a flexible inverter that can be tailored to meet any requirement. Dynamic, precise and reliable. Depending on the power rating, two or three option slots are available per inverter for extension purposes.



Options for MOVIDRIVE® B

- MOVI-PLC® control cards basic and advanced
- PROFIBUS DPV1 fieldbus interface
- PROFIsafe fieldbus interface
- INTERBUS fieldbus interface
- INTERBUS FO fieldbus interface
- DeviceNet fieldbus interface
- CAN fieldbus interface
- CANopen fieldbus interface
- Ethernet fieldbus interfaces: Modbus TCP, PROFINET IO with PROFIsafe, EtherNet/IP, and EtherCAT
- I/O card
- Fieldbus interface for gateway operation
- Encoder interface (sin/cos, TTL, HTL or HIPERFACE[®])
- Resolver interface
- SSI encoder interface
- Phase-synchronous operation
- Keypad



Easy-to-use keypad:

The optional keypad is attached directly to the inverter for simple and time-saving control. It impresses with easy handling and a clear structure:

- 10-key numeric keypad for fast input
- Backlit matrix display
- 15 selectable languages (language key)
- Constant status display



Comprehensive operator panels:

DOP operator terminal functionality ranges from 160 x 32 pixels of builtin units (e.g. for 2 lines with 20 characters each) up to a 1024 x 768 pixel touchscreen (8 types: DOP11B-10/15/20/25/30/40/50 or 60). The series includes a handheld unit (DOP M70) with additional safety functions such as "Emergency stop" and "Confirm" button for safe and easy control directly at the machine.

Accessories for MOVIDRIVE® B

- USB operator interface for PC connection
- Braking resistor
- Line filter
- Line choke
- Output filter
- Output choke
- Operator terminals



The revelation of intelligence: Technical data of MOVIDRIVE® B

MOVIDRIVE® B

Supply voltage V _{AC} : Line frequency Hz: Output frequency Hz: Motor control mode:	3 x 380 - 500 ± 10% 50 - 60 ± 5% 0 - 400 V/f, VFC, CFC, Servo			
MOVIDRIVE® B type	Power range kW – With overload reserve 1.5 x I _N – Without overload reserve	Nominal output current A – With overload reserve – Without overload reserve	Size	Dimensions in mm W x H x D
MDX60/61B 0005-5A3-4-0_	0.55 0.75	2.0 2.5	OS	45/72.5 x 317 x 260
MDX60/61B 0008-5A3-4-0_	0.75 1.1	2.4 3.0		
MDX60/61B 0011-5A3-4-0_	1.1 1.5	3.1 3.8	OM	67.5/95 x 317 x 260
MDX60/61B 0014-5A3-4-0_	1.5 2.2	4.0 5.0		
MDX61B 0015-5A3-4-0_	1.5 2.2	4.0 5.0	1	105 x 314 x 234
MDX61B 0022-5A3-4-0_	2.2 3.0	5.5 6.9		
MDX61B 0030-5A3-4-0_	3.0 4.0	7.0 8.8		
MDX61B 0040-5A3-4-0_	4.0 5.5	9.5 11.9		
MDX61B 0055-5A3-4-0_	5.5 7.5	12.5 15.6	2S	105 x 335 x 294
MDX61B 0075-5A3-4-0_	7.5 11.0	16.0 20.0		
MDX61B 0110-5A3-4-0_	11.0 15.0	24.0 30.0	2	135 x 315 x 285

MOVIDRIVE® B

Supply voltage V _{AC} : Line frequency Hz: Output frequency Hz: Motor control mode:	3 x 380 - 500 ± 10% 50 - 60 ± 5% 0 - 400 V/f, VFC, CFC, Servo			
MOVIDRIVE® B type	 Power range kW With overload reserve 1.5 x I_N Without overload reserve 	Nominal output current A – With overload reserve – Without overload reserve	Size	Dimensions in mm W x H x D
MDX61B 0150-503-4-0_	15.0 22.0	32.0 40.0	3	200 x 465 x 308
MDX61B 0220-503-4-0_	22.0 30.0	46.0 57.5		
MDX61B 0300-503-4-0_	30.0 37.0	60.0 75.0		
MDX61B 0370-503-4-0 _	37.0 45.0	73.0 91.0	4	280 x 522 x 307
MDX61B 0450-503-4-0_	45.0 55.0	89.0 111.0		
MDX61B 0550-503-4-0 _	55.0 75.0	105.0 131.0	5	280 x 610 x 330
MDX61B 0750-503-4-0_	75.0 90.0	130.0 162.0		
MDX61B 0900-503-4-0_	90.0 110.0	170.0 212.0	6	280 x 1000 x 382
MDX61B 1100-503-4-0_	110.0 132.0	200.0 250.0		
MDX61B 1320-503-4-0_	132.0 160.0	250.0 312.0		
MDX61B 1600-503-4-0_	160.0 200.0	300.0 380.0	7*	700 x 1490 x 470
MDX61B 2000-503-4-0_	200.0 250.0	380.0 475.0		
MDX61B 2500-503-4-0 _	250.0 315.0	475.0 590.0		

MOVIDRIVE® B

Supply voltage V _{AC} : Line frequency Hz: Output frequency Hz: Motor control mode:	3 x 200 - 240 ± 10% 50 - 60 ± 5% 0 - 400 V/f, VFC, CFC, Servo			
MOVIDRIVE [®] B type	 Power range kW With overload reserve 1.5 x I_N Without overload reserve 	Nominal output current A – With overload reserve – Without overload reserve	Size	Dimensions in mm W x H x D
MDX61B 0015-2A3-4-0_	1.5 2.2	7.3 9.1	1	105 x 314 x 234
MDX61B 0022-2A3-4-0_	2.2 3.7	8.6 10.8		
MDX61B 0037-2A3-4-0_	3.7 5.0	5.8 18.1		
MDX61B 0055-2A3-4-0_	5.5 7.5	22.0 27.5	2	135 x 315 x 285
MDX61B 0075-2A3-4-0_	7.5 11.0	29.0 36.3		
MDX61B 0110-203-4-0_	11.0 15.0	42.0 52.5	3	200 x 465 x 308
MDX61B 0150-203-4-0_	15.0 22.0	54.0 67.5		
MDX61B 0220-203-4-0_	22.0 30.0	80.0 100.0	4	280 x 522 x 307
MDX61B 0300-203-4-0_	30.0 37.0	95.0 118.0		



SEW-EURODRIVE is right there for you

Argentina Tel. +54 3327 4572-84 Fax +54 3327 4572-21 sewar@sew-eurodrive.com.ar

Australia Tel. +61 3 9933-1000 Fax +61 3 9933-1003 enquires@sew-eurodrive.com.au

Austria Tel. +43 1 617 55 00-0 Fax +43 1 617 55 00-30 sew@sew-eurodrive.at

Belarus Tel. +375 17 298 47 56 Fax +375 17 298 47 54 sales@sew.by

Belgium Tel. +32 16 386-311 Fax +32 16 386-336 info@sew-eurodrive.be

Brazil Tel. +55 19 3835-8000 sew@sew.com.br

Cameroon Tel. +237 233 39 12 35 Fax +237 233 39 02 10 sew@sew-eurodrive.cm

Canada Tel. +1 905 791-1553 Fax +1 905 791-2999 marketing@sew-eurodrive.ca

Chile Tel. +56 2 2757 7000 Fax +56 2 2757 7001 ventas@sew-eurodrive.cl

China Tel. +86 22 25322612 Fax +86 22 25323273 info@sew-eurodrive.cn

Colombia Tel. +57 1 54750-50 Fax +57 1 54750-44 sew@sew-eurodrive.com.co Czech Republic Tel. +420 255 709 601 Fax +420 235 350 613 sew@sew-eurodrive.cz

Denmark Tel. +45 4395 8500 Fax +45 4395 8509 sew@sew-eurodrive.dk

Finland Tel. +358 201 589-300 Fax +358 3 780-6211 sew@sew.fi

France Tel. +33 3 88 73 67 00 Fax +33 3 88 73 66 00 sew@usocome.com

Ghana Tel. +233 303 963 772 info@sew-eurodrive.com.gh

Great Britain Tel. +44 1924 893-855 Fax +44 1924 893-702 info@sew-eurodrive.co.uk

Hungary Tel. +36 1 437 06-58 Fax +36 1 437 06-50 office@sew-eurodrive.hu

India Tel. +91 265 3045200 Fax +91 265 3045300 marketing@seweurodriveindia.com

Italy Tel. +39 02 96 9801 Fax +39 02 96 980 999 sewit@sew-eurodrive.it

Ivory Coast Tel. +225 21 21 81 05 Fax +225 21 25 30 47 info@sew-eurodrive.ci

Japan Tel. +81 538 373811 Fax +81 538 373814 sewjapan@sew-eurodrive.co.jp

How we're driving the world

Kazakhstan Tel. +7 727 350 5156 Fax +7 727 350 5156 sew@sew-eurodrive.kz

Malaysia Tel. +60 7 8590288 Fax +60 7 8590629 sales@sew-eurodrive.com.my

Mexico Tel. +52 442 1030-300 Fax +52 442 1030-301 scmexico@seweurodrive.com.mx

Morocco Tel. +212 522 88 85 00 Fax +212 522 88 84 50 sew@sew-eurodrive.ma

Netherlands Tel. +31 10 4463-700 Fax +31 10 4155-552 info@sew-eurodrive.nl

New Zealand Tel. +64 9 2745627 Fax +64 9 2740165 sales@sew-eurodrive.co.nz

Norway Tel. +47 69 24 10 20 Fax +47 69 24 10 40 sew@sew-eurodrive.no

Paraguay Tel. +595 991 519695 Fax +595 21 3285539 sewpy@sew-eurodrive.com.py

Peru Tel. +51 1 3495280 Fax +51 1 3493002 sewperu@sew-eurodrive.com.pe

Poland Tel. +48 42 293 00 00 Fax +48 42 293 00 49 sew@sew-eurodrive.pl

Portugal Tel. +351 231 20 9670 Fax +351 231 20 3685 infosew@sew-eurodrive.pt **Russia** Tel. +7 812 3332522 Fax +7 812 3332523 sew@sew-eurodrive.ru

Singapore Tel. +65 68621701 Fax +65 68612827 sewsingapore@sew-eurodrive.com

Slovakia Tel. +421 2 33595 202 Fax +421 2 33595 200 sew@sew-eurodrive.sk

South Africa Tel. +27 11 248 7000 Fax +27 11 248 7289 info@sew.co.za

South Korea Tel. +82 31 492-8051 Fax +82 31 492-8056 master.korea@sew-eurodrive.com

Spain Tel. +34 94 4318470 sew.spain@sew-eurodrive.es

Sweden Tel. +46 36 34 42 00 Fax +46 36 34 42 80 sew@sew-eurodrive.se

Switzerland Tel. +41 61 41717-17 Fax +41 61 41717-00 info@imhof-sew ch

Tanzania Tel. +255 22 277 5780 Fax +255 22 277 5788 info@sew.co.tz

Thailand Tel. +66 38 454281 Fax +66 38 454288 sewthailand@sew-eurodrive.com

Turkey Tel. +90 262 999 1000-04 Fax +90 262 999 1009 sew@sew-eurodrive.com.tr

.

Ukraine Tel. +380 56 370 3211

Fax +380 56 372 2078 sew@sew-eurodrive.ua **United Arab Emirates**

Tel. +971 4 8086 500 Fax +971 4 8086 464 info@sew-eurodrive.ae

Uruguay Tel. +598 2 2118189 Fax +598 2 2118190 sewuy@sew-eurodrive.com.uv

USA Tel. +1 864 439-7537 Fax +1 864 439-7830 cslyman@seweurodrive.com

Venezuela Tel. +58 241 832-9804 Fax +58 241 838-6275 ventas@sew-eurodrive.com.ve



SEW-EURODRIVE GmbH & Co KG Ernst-Blickle-Str. 42 76646 Bruchsal/Germany Tel. +49 7251 75-0 Fax +49 7251 75-1970 sew@sew-eurodrive.com

SEW-EURODRIVE Driving the world

Climate Partner • climate neutral print product

- www.sew-eurodrive.com