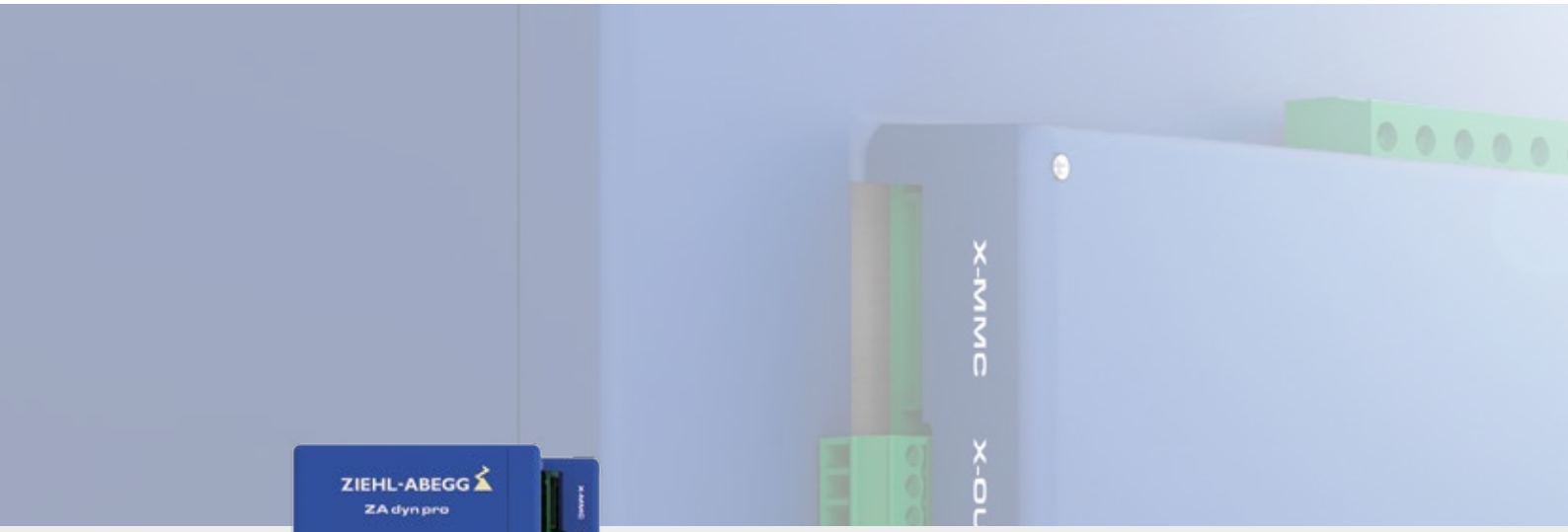
EN

Movement by Perfection



The Royal League in ventilation, **control** and drive technology

ZA dyn pro

The compact frequency inverter

ZIEHL-ABEGG

Welcome to the world of ZIEHL-ABEGG

Top technology made by ZIEHL-ABEGG

The elevator in the world-famous basilica ‘La Sagrada Família’ in Barcelona, cable-driven underwater vehicles and even computer tomographs – drive technology from ZIEHL-ABEGG is used around the world, handling all manner of applications and providing reliability under extreme conditions.

The Künzelsau-based company ZIEHL-ABEGG SE has developed and built truly efficient, durable and robust electric motors for over 100 years. However, the company is also a trendsetter in terms of fan technology and in the application of the principles of bionics. The electric in-wheel hub motor developed by ZIEHL-ABEGG for city buses provides the highest efficiency in the world.

More than half of the company’s 3,700 employees work in southern Germany. This is also home to the world’s largest combined measuring and test bench for fans, which is able to simultaneously measure sound and efficiency. Annual research and development expenditure amounts to some seven per cent of turnover. These framework conditions have enabled ZIEHL-ABEGG to set global standards in the efficiency and sound characteristics of motors and fans over a number of decades.

The high-tech company was founded by Emil Ziehl in 1910 as a manufacturer of electric motors. ZIEHL-ABEGG SE is not listed on the stock market and is entirely family-owned.

Global sales network and production group

ZIEHL-ABEGG has 28 subsidiaries worldwide. With over 100 dedicated sales offices, the company is able to operate in close proximity to customers across the globe. This makes it possible to tap into trends and developments around the world that can be incorporated into product development. 18 international production sites deliver consistent product quality on a global level.

ZA dyn pro – compact and powerful

The frequency inverter for operating your elevator machine without motor contactors. Featuring small dimensions perfect for use in a control cabinet.

Commence operation quickly and easily with the software developed especially for elevator technology.

ZAdynpro – the compact frequency inverter

New elevator concepts mean that there is less and less space in the elevator shaft. Components are relocated to the control cabinet, but even this provides only little room.

The smart new ZAdynpro from ZIEHL-ABEGG is the compact solution, delivering maximum functionality in a small space.

The benefits for you:

Quick and flexible installation in a small space
- Various installation positions
- Removable connection terminals
- Easier connection
- Use of prefabricated cables
- Integrated EMC filter
- Space saving
- Noise-free thanks to contactor-less motor operation
- Control cabinet can be installed directly adjacent to the elevator entrance

Functions

Certified and tested functions
- Operation without motor contactors using the function Safe Torque Off (STO) according to IEC 61800-5-2 (SIL 3)
- Travel direction change counter for elevator with plastic covered ropes or belts
- Self-monitoring of the motor brake

Emergency operation
If the power supply should fail, the ZAdynpro can be operated via an uninterruptible power supply (UPS) or a battery

Standby
With its various standby functions, the ZAdynpro helps ensure that your elevator is sustainable

Interfaces
Encoder
- Incremental: TTL, Sine
- Absolute: EnDat, BiSS-C, SinCos

Control
- CANopen-Lift (CiA-417)
- Digital inputs (24 VDC) and outputs (relays)

Space-saving and compact integration into the control cabinet

Technical details

ZAdynpro		011	013	017	023	032
Article no.		352250	352251	352252	352253	352254
Input	Nominal voltage [VAC]	3~ 180...440				
	Mains frequency [Hz]	50/60				
	UPS mode [VAC]	230				
	Battery mode [VDC]	96...216				
	Standby mode [W]	≤ 3.0			≤ 6.0	
Output	Motor power [kW]	4.6	5.5	7.5	11.0	14.0
	Nominal current [A]	11.0	13.0	17.0	23.0	32.0
	Max. operating current (10 s)	20.0	24.0	31.0	42.0	58.0
	Duty cycle [%]	40				
	Switching frequency [kHz]	4.0...16.0				
Housing	Protection class	IP20				
	Dimensions H x W x D [mm]	308 x 151 x 195			370 x 152 x 195	

Standards and directives

Machinery Directive 2006/42/EC
- EN 61800-5-1
- IEC 61800-5-2
- EN 62061
- EN ISO 13849-1
- EN ISO 13849-2

Lift Directive 2014/33/EU
- Reliable travel direction change counter for elevator with plastic covered ropes or belts
- Self-monitoring of the motor brake as an element of the ascending car overspeed protection means and as part of the protection against unintended car movement

EMC Directive 2014/30/EU
- EN 12015
- EN 12016
- EN 61800-3
- When using a type ND line reactor

Low-Voltage Directive 2014/35/EU
Compliance with the Machinery Directive means that the protective goals of the Low-Voltage Directive 2014/35/EU are also met

System components

ZApadpro operating terminal
- Connection via standard network line
- USB interface for ZAmon software
- Remote control up to a length of 50 m

Article no. 357300

Type	Article no.	Nominal current [A]	Frequency inverter
ND011	357180	11.0	ZAdynpro 011
ND013	357181	13.0	ZAdynpro 013
ND017	357182	17.0	ZAdynpro 017
ND023	357183	23.0	ZAdynpro 023
ND032	357184	32.0	ZAdynpro 032

Line reactor ND
- Ensures compliance with the limit values required by EN 12015 and EN 12016
- Reduction of the harmonics
- Damping of commutation notches and mains feedback

Type	Article no.	Frequency inverter
BR11-A	357171	ZAdynpro 011
BR17-3	357216	ZAdynpro 011 ZAdynpro 013 ZAdynpro 017
BR25-3	357217	ZAdynpro 023 ZAdynpro 032
BR50-3	357218	ZAdynpro 032

Brake resistor BR
- Prepared for wall installation
- Compact design
- Integrated temperature monitoring (only BR...-3)

Type	Line length [m]	Frequency inverter	Article no.
L-BR-03-HX-2.5-ZAp	3.0	ZAdynpro 011 ZAdynpro 013 ZAdynpro 017 ZAdynpro 023	00166112-03M
L-BR-03-HX-6-ZAp	3.0	ZAdynpro 032	00166113-03M

Brake resistor lines
- For brake resistor BR...-3
- Prefabricated
- Integrated wires for temperature monitoring
- Halogen-free

Type	Article no.
ZAsbc4B110	357290
ZAsbc4B 230	357291

Electronic brake control ZAsbc4B
- For brakes with and without overexcitation
- Operating voltage brake: 207 VDC / 103 VDC
- Evaluation of safety circuit (110 VAC and 230 VAC) and enabling contactor-less operation
- Suitable for retrofitting

Adapted to your needs

ZAdynpro is THE solution for installing a frequency inverter in your control cabinet. Its small size enables optimum adjustments to be made to the control cabinet according to the local conditions. The interfaces and functions that are integrated ex works ensure perfect travelling behaviour of the elevator machine.

The Royal League

ZIEHL-ABEGG

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