INDRIVETEC Innovative Drive Technologies AG



Indrivetec AG is located in Zürich Oerlikon, Switzerland. Production is carried out in Zürich and with external production partners in Switzerland and in Bulgaria.

The activities of Indrivetec Germany GmbH based in Hamburg are concentrated to business development of energy storage systems.

The whole team of Indrivetec is working since many years, some for more than 25 years, in the business and technology of power electronics.





Your expert for linear motor drives and electrical energy storage

About Indrivetec:

25 Years experience in power electronics

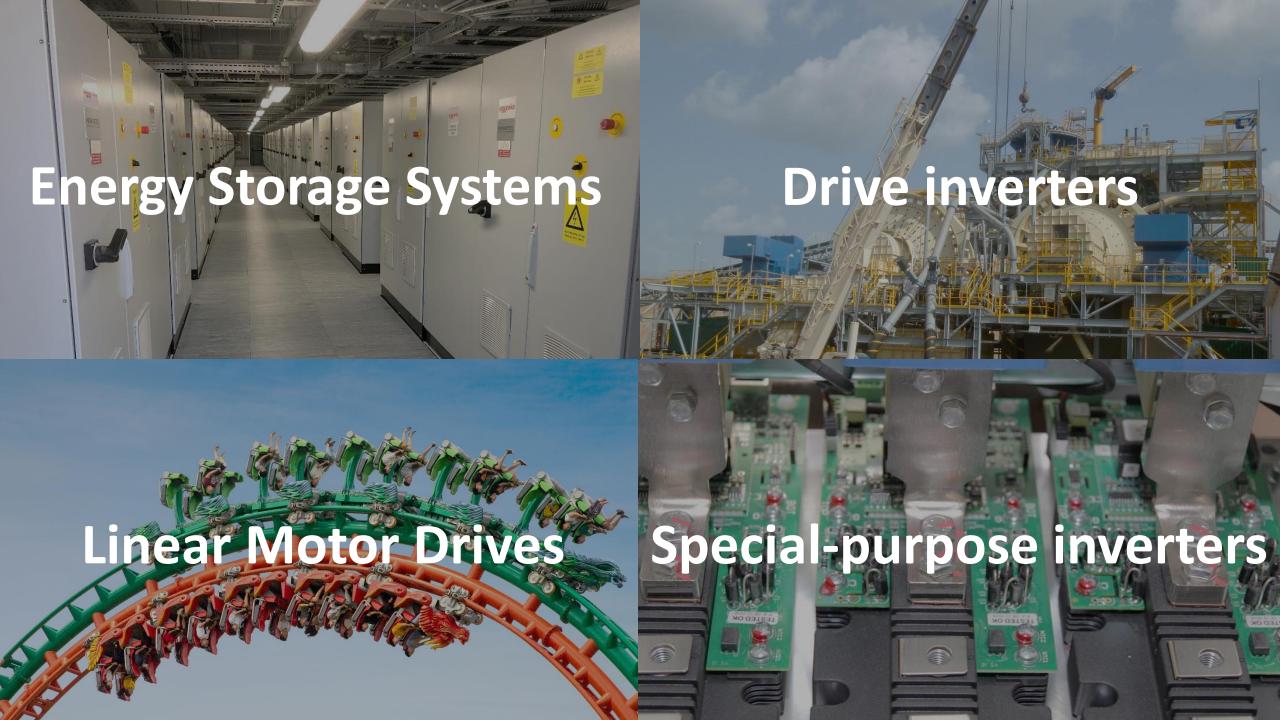
502 Megawatt worldwide experience and installations

95 Members in Switzerland, Bulgaria and Germany

204 Projects confirms the international standards for quality









Modular and flexible electrical energy storage systems for a reliable power supply

Optimized asset performance by stabilizing frequency and voltage

Large range of applications

Increase of Self-Consumption

Back-up power for commercial and industrial application







Multiple uses in the industrial, commercial and utility sector

Operation in highly developed and weak grids

Balancing of various energy various sources

Islanding and black start capability

Scalable up to the multi-MW-range







Fully integrated unit including interface to BMS

Integrated On-grid and Off-grid operation modes

Compatible for various energy storage systems

Innovative cooling concept (compact and energy-efficient)

BDEW and ARN 4110 certification







Power capability table

			hateu active power at tos pin. 0,3						
Nom. AC voltage VAC	Min. DC voltage VDC	Max. DC voltage VDC	FC250	FC320	FC500	FC750	FC1000	FC1500	FC2000
180	300	1100	100	120	200	300	400	600	800
330	540	1100	175	220	350	525	700	1050	1400
400	650	1100	200	270	450	675	900	1350	1800
480	780	1100	250	320	500	750	1000	1500	2000
600	980	1100	300	400	650	950	1300	1950	2600
690	1100	1100	350	460	750	1075	1500	2250	3000





Rated active nower at cos phi: 0.9



No power derating with high DC-voltages up to 1100 VDC

Smallest unit volume and lowest weight per kW

Optional cooling systems for operation without derating up to 55° C

Optional heating systems for operation down to – 40° C

Outdoor solutions IP55 – IP65







Inverters to optimize the start-up and speed behavior of AC motors

Inverters to optimize the start-up and speed behavior of DC motors

Inverters for speed and torque control

Inverters for pumping and ventilation systems and traction applications







Safe Torque Off Interface

Parameters:

Lifetime: 10 years

Power supply: $24 \text{ VDC} \pm 5 \%$, 2 A

Operation temp: -25°C to + 70°C

CERTIFICATE

No. Z10 18 06 99402 001

Holder of Certificate: INDRIVETEC AG

Hagenholzstrasse 71 8050 Zürich SWITZERLAND

Factory(ies): 99398

Certification Mark:



Product: Safety components

Model(s): STO PCB Control Interface







Low voltage frequency inverters 0.5 MVA - 7.0 MVA to feed power to the motors via a central or decentral drive topology

Linear Synchronous PM Motors (Magnet-Runners and Stators)

Speed and position sensor system

Energy-storage based on SuperCaps







Powerful, maintenance free launch system

High system productivity

High forces

High dynamic response

Wide variety of use







Mining Converters

DC-DC converters

Water Treatment Converters

H-bridge circuits

Compensation units







Customized solution

Prototyping

Multi functional converters

Power quality solution

Specially designs







More than 25 years of experience

In house developed DSP control unit and power electronics

Prototype design assembling

Hardware in the loop design and testing

Manufacture-independent supply chain resources







ISO 9001 certified production in Bulgaria and Switzerland

Serial production for high volume orders

Prototype assembling

Functional and type testing

Costumer acceptance / FAT







1.2 MW and 3.0 MW test bay for active power testing

6 MVA test bay for reactive power testing

High voltage testing

Heat chamber up to 60° C

Customized testing







Servicelevel	Basic Legal warranty	Basic + Extended warranty	Comfort	Premium
Inspection	-	inclusive	inclusive	inclusive
Maintenance	-	-	inclusive	inclusive
Spare parts	-	-	-	inclusive
Transport cost	-	-	-	inclusive
Availibility on site	in consultation	in consultation	< 168 hours	< 72 hours
24 / 7 Hotline	-	-	inclusive	inclusive
Yearly status report	-	-	inclusive	inclusive
Life-Cycle Management	-	-	-	inclusive







Level 1 – "basic knowledge"

Safety functions of PCS

Coolant system

Visual checks

Maintenance







Level 2 - "Commissioning"

Cold commissioning (IDT protocol)

Hot commissioning (IDT protocol)

Maintenance (IDT protocol)

Troubleshooting with IDT support hotline

























References













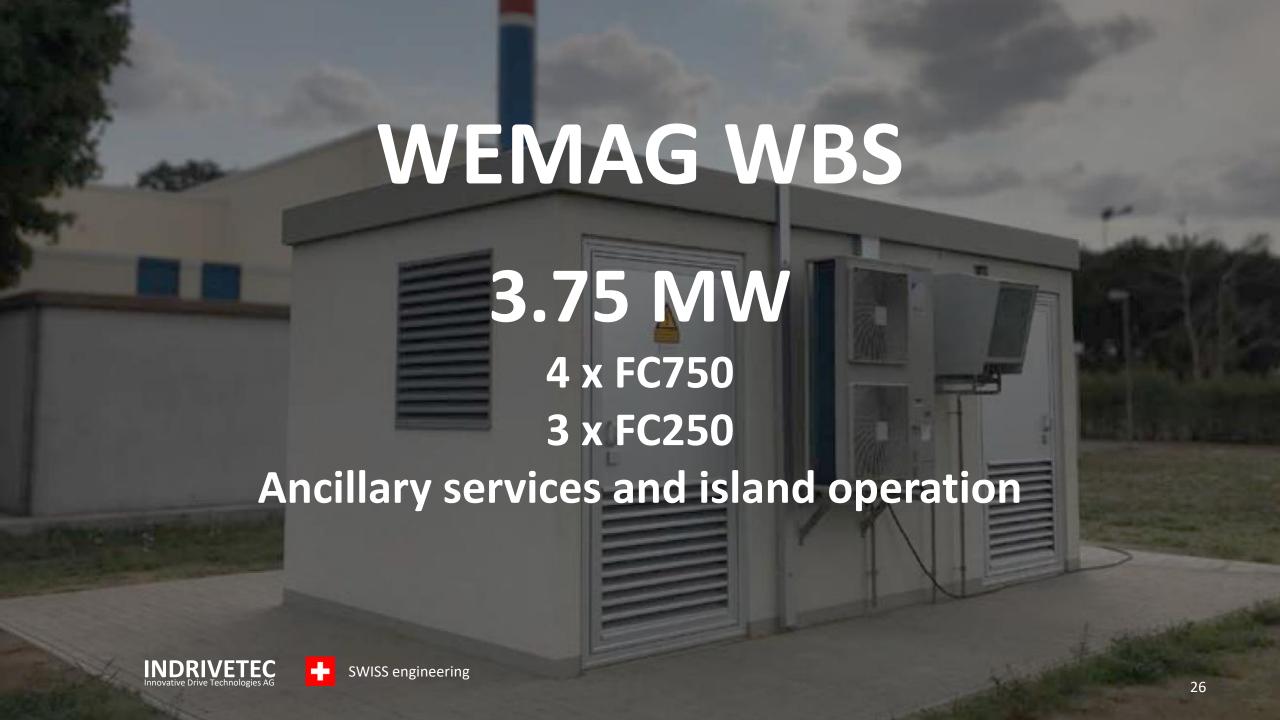
References









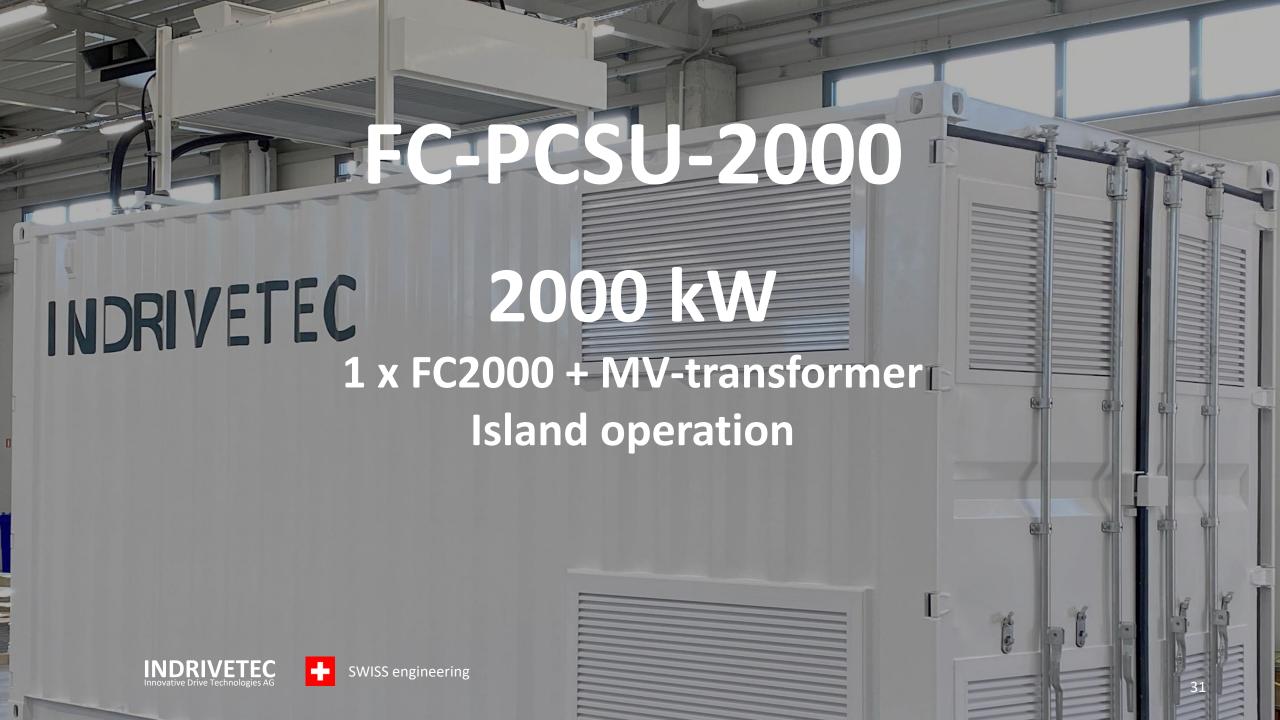


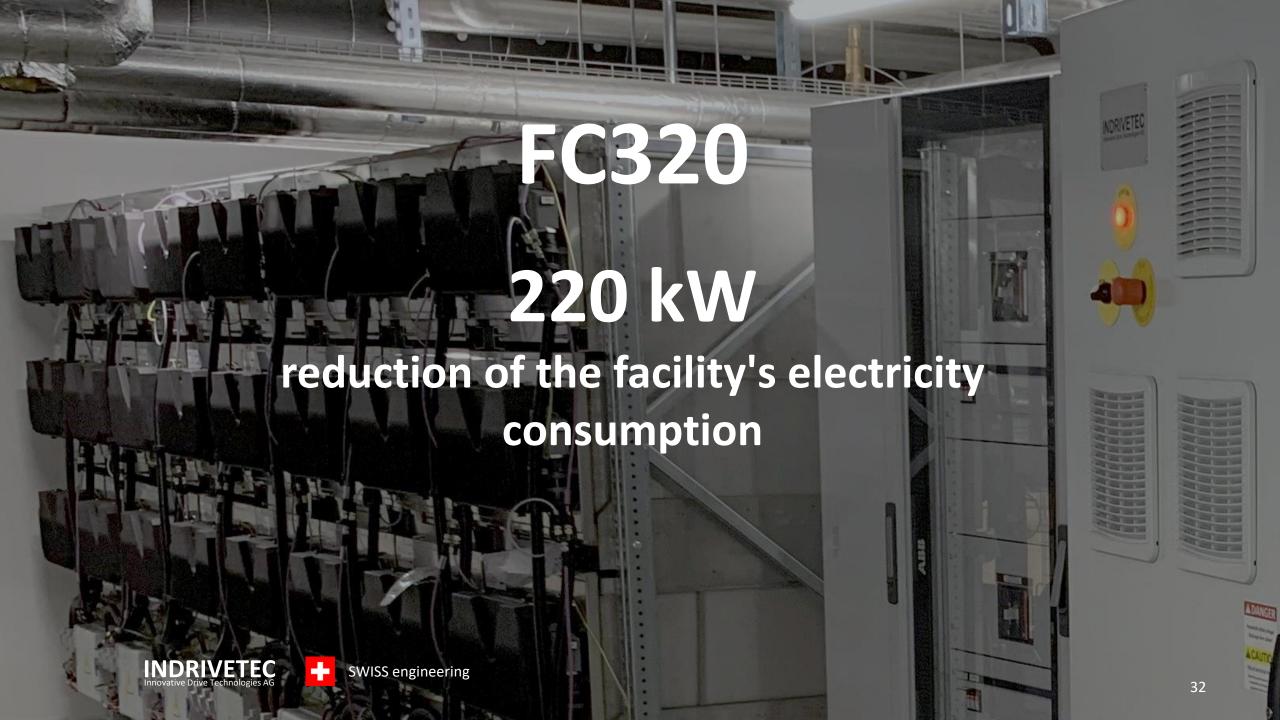












Phantasialand **TARON** LSM Multi Launch Coaster, breaking 4 records worldwide **SWISS** engineering

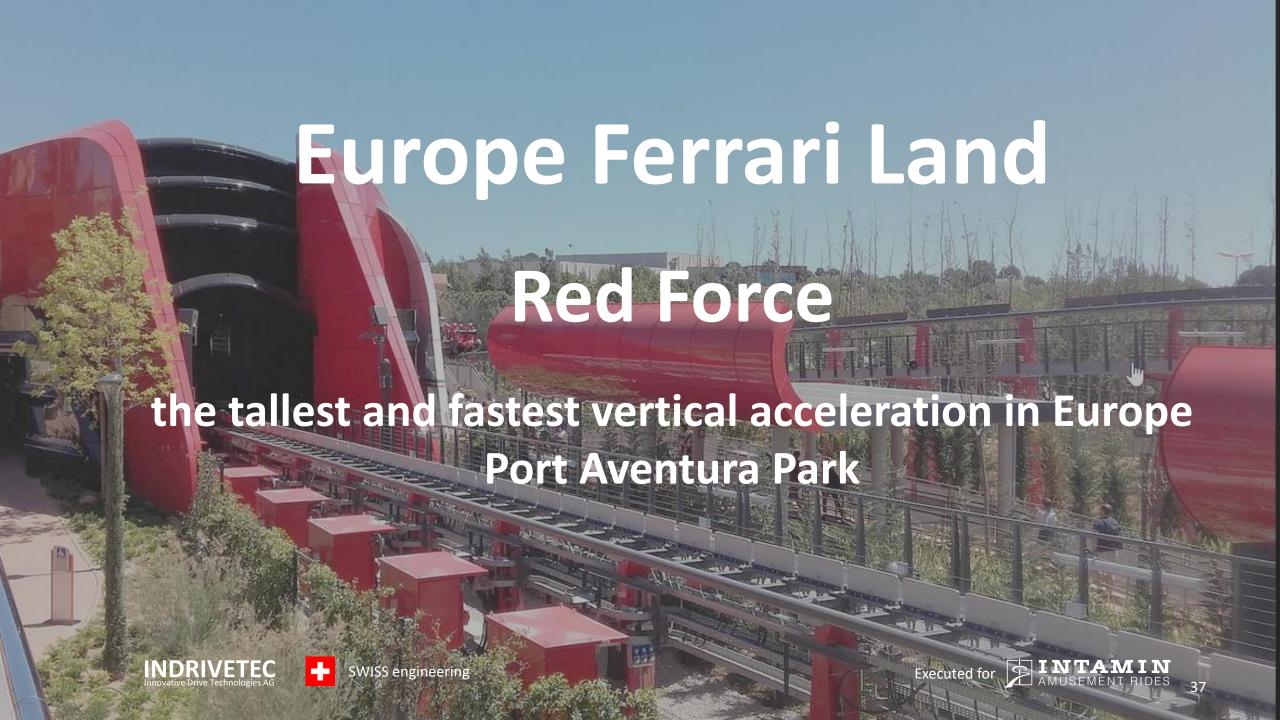
















Indrivetec is proud member of following organisations:

BVES

iBAT Association

electro suisse











Thank you for your attention!

Indrivetec AG

Hagenholzstrasse 71

CH-8050 Zurich

Switzerland

Phone +41 44 515 37 00

Email info@indrivetec.com

www.indrivetec.com



