

P6

COMBIVERT P6

MADE
IN
GERMANY

Pitch and Yaw Drives



Pitch and Yaw drives with KEB COMBIVERT P6

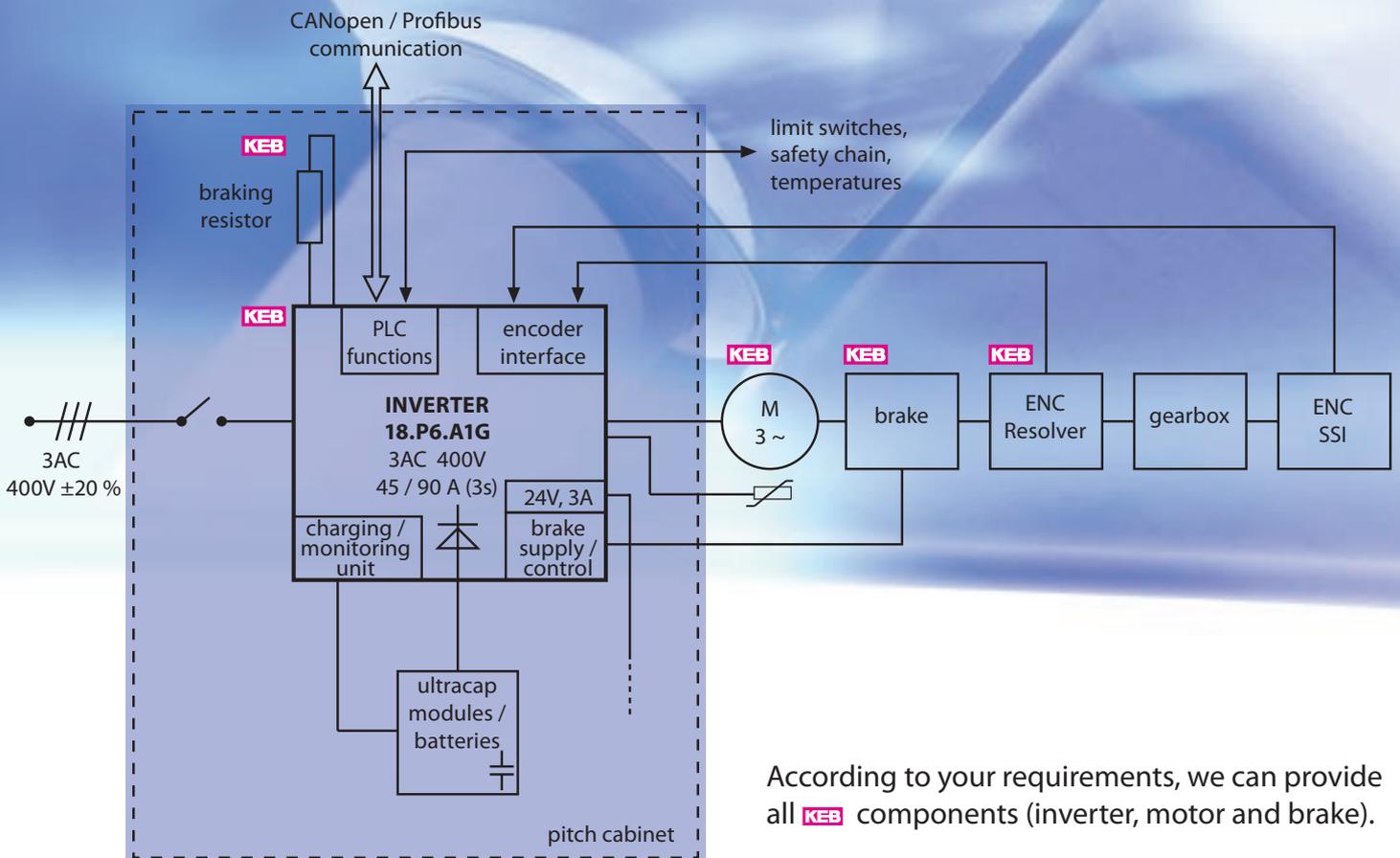
Based on our experience with 150,000 specialized industrial drives annually, **KEB** has designed application specific pitch and yaw drive solutions for wind turbines. Today, more than 20,000 of these pitch drive systems with **KEB COMBIVERT F5** are in operation worldwide.

Now we go a step ahead and integrate all electronic functions of a pitch drive system into one single unit: **KEB COMBIVERT P6**

Building your own Pitch Drive System is so easy!
Simply choose just a few highly integrated KEB components.

P6

COMBIVERT P6



According to your requirements, we can provide all **KEB** components (inverter, motor and brake).

Unit size		18.P6.A1G-0000
Output rated current	[A]	45
Max. short time current (3 s)	[A]	90
Mains voltage	[V]	207 ... 480 ±0 (400V rated voltage)
Mains frequency	[Hz]	50 / 60
DC supply	[V]	150 ... 650
Ambient temperature	[°C]	-30 ... +60 (heatsink side) / -30 ... +70 (in cabinet)
Protection degree		IP20 on cabinet side / IP54 on heatsink side

Pitch Application Features integrated

I/Os	
Standard	Digital inputs
	Digital outputs
	Relay output (volts free, e.g. for safety chain)
	Brake supply and control
	KTY or PTC inputs
	Pt100 inputs
	2 encoder interfaces
	Fieldbus interface (CANopen or Profibus)

Pitch application functions	
Standard	Push-through heatsink
	Charging and monitoring of ultracapacitors
	RFI Filter included
	Temperature-controlled fans, easy to replace
	Control of induction motors and synchronous motors
	Adjustable torque limit (to protect gearbox)
	Position control
	Pitch control functions, mains failure detection, emergency operation
Pitch reaction to meet e-on grid code	
Automatic switchover to encoderless emergency operation in case of encoder loss	

Optional	Output 24 V/3 A for customer components
	Braking resistor integrated on heatsink
	Other fieldbus protocols on request

Optional	Charging and monitoring of Lead-Gel-batteries
	Charging and monitoring of Li-Ion-batteries
	Orientation of rotational axis of fans in x-, y- or z-axis (according to mounting orientation)

Add your own expertise by implementing your proprietary software functions. The freely programmable area is easily programmed using PLC tools according to IEC 61131.

If you need more options or frame sizes, just let us know.

High dynamic servo motors with encoder system and IP65-protected fail safe brakes turn the blades or the nacelle in a powerful, efficient and safe way.



Headquarters

Karl E. Brinkmann GmbH
Försterweg 36 - 38
D-32683 Barntrup
Internet: www.keb.de

Tel.: + 49 (0) 5263 401-0
Fax: + 49 (0) 5263 401-116
E-mail: info@keb.de

SUBSIDIARIES

AUSTRIA

KEB Antriebstechnik
Austria GmbH
Ritzstraße 8
A - 4614 Marchtrenk
Tel.: +43 (0)7243 53586-0
Fax: +43 (0)7243 53586-21
E-mail: info@keb.at
Internet: www.keb.at

CHINA

KEB Power Transmission
Technology (Shanghai) Co. Ltd.
No. 435 QuianPu Road
Songjiang East Industrial Zone
CN-201611 Shanghai, PR. China
Tel.: +86 (0)21 37746688
Fax: +86 (0)21 37746600
E-mail: info@keb.cn
Internet: www.keb.cn

GERMANY

KEB Antriebstechnik GmbH
Wildbacher Straße 5
D-08289 Schneeberg
Tel.: +49 (0)3772 67-0
Fax: +49 (0)3772 67-281
E-mail: info@keb-combidrive.de

FRANCE

Société Française KEB
Z.I. de la Croix St. Nicolas
14, rue Gustave Eiffel
F - 94510 LA QUEUE EN BRIE
Tel.: +33 (0)149620101
Fax: +33 (0)145767495
E-mail: info@keb.fr
Internet: www.keb.fr

GREAT BRITAIN

KEB (UK) Ltd.
6 Chieftain Business Park,
Morris Close
Park Farm, Wellingborough
GB - Northants, NN8 6 XF
Tel.: +44 (0)1933 402220
Fax: +44 (0)1933 400724
E-mail: info@keb-uk.co.uk
Internet: www.keb-uk.co.uk

ITALY

KEB Italia S.r.l.
Via Newton, 2
I - 20019 Settimo Milanese (Milano)
Tel.: +39 02 33535311
Fax: +39 02 33500790
E-mail: info@keb.it
Internet: www.keb.it

JAPAN

KEB - Japan Ltd.
15 - 16, 2 - Chome
Takanawa Minato-ku
J - Tokyo 108 - 0074
Tel.: +81 (0)33 445-8515
Fax: +81 (0)33 445-8215
E-mail: info@keb.jp
Internet: www.keb.jp

RUSSIA

KEB RUS Ltd.
Lesnaya Str. 30
Dzerzhinsky (MO)
RUS - 140091 Moskau
Tel.: +7 (0)495 6320217
Fax: +7 (0)495 6320217
E-mail: info@keb.ru
Internet: www.keb.ru

USA

KEB America, Inc
5100 Valley Industrial
Blvd. South
USA - Shakopee, MN 55379
Tel.: +1 952 2241400
Fax: +1 952 2241499
E-mail: info@kebamericacom
Internet: www.kebamericacom

Representative offices in Belgium • Korea • Spain • Sweden

Further partners in ...

Australia • Belgium • Bolivia • Brazil • Chile • Czech Republic • Denmark • Egypt • Greece • Hungary • India • Indonesia • Iran • Israel • Kazakhstan • Malaysia • Morocco • Netherlands • New Zealand • Pakistan • Poland • Portugal • Romania • Singapore • Slovakia • South Africa • Spain • Sweden • Switzerland • Thailand • Tunisia • Turkey • Ukraine • Uzbekistan

... www.keb.de/en/contact/keb-worldwide.html



© KEB 00.00.000-51P6 / 06-2009 • Subject to technical changes!

