

Marpower Bow/stern thruster- application



How do you moor a ship accurately?
And how do you keep your ship
in the correct positioning, even
in challenging circumstances?
Marpower variable drives are
specifically prepared for this. The
Marpower Bow/stern thruster
application serves such a remote
drive for very precise mooring.

The Marpower Bow/stern thruster application operates a bow or stern thrust propeller powered by a variable frequency drive from Marpower. We provide the drives with customized application software. This allows to control the drive with remote hardwired signals.

Manual control of the motors is done via a Bow thruster Control Panel (BTC). Are different control positions available in your wheelhouse? The system is prepared to connect multiple units, such as a main steering position and wing desk positions. Transfer between the control locations is done by advanced software. This determines whether a takeover is allowed and regulates release.

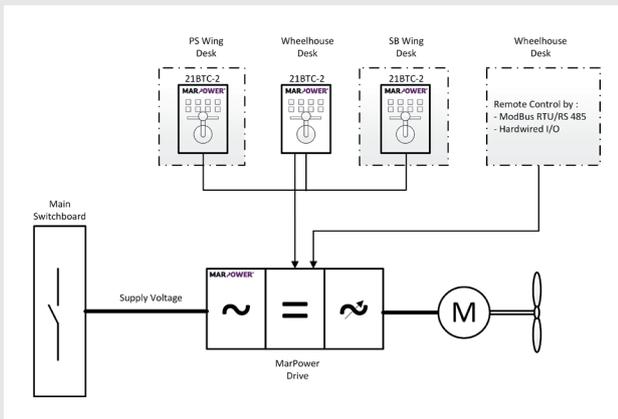
External control is done in case of a Dynamic Positioning Class notation. Full control then takes place from the DP system.



Advantages of the Marpower Bow/stern thruster application

- ✓ Approved by all major classification societies
- ✓ Power up till 5 MW
- ✓ DC-brake
- ✓ Simultaneous bow and stern thruster operation
- ✓ Handy operation
- ✓ Interface for Power Management System (PMS)
- ✓ Interface for Voyage Data Recording (VDR)
- ✓ BTC-control panel in master/slave configuration
- ✓ Minimum cabling due to two-wire system
- ✓ Exact torque- and speed control without feedback devices

Drive systems can be used for various applications such as industry, offshore, shipbuilding and special applications. For detailed information we refer you to our *Project Leaflets*, also available on our website www.marpower.com.



MARPOWER DRIVE FOR BOW/STERN THRUSTER APPLICATION

Marpower Drive	(Refer to standard documentation)		
Max. Motor power	5 MW		
Supply voltage range	400-690V - 6 or 12 pulse / AFE		
overload (60s)	110% - 150%		
Standard E-motor			
Protection class	IP 23 or IP 54		
Thermal protection	PTC's / PT100		
Anti condensation heating	Yes		
Control Panels options	BTC-2	Remote control	Hardware control
Power supply consumption	24 Vdc -25%..+30% / 500mA	24Vdc -25%..+30% 500mA	24Vdc-25%..+30% 24mA
IP class	Front IP65 / Rear IP00	n.a.	n.a.
Serial connection	RS-485 – Modbus	Rs-485 – Modbus	Hardware control - I/O
Standard output (digital) (optional)	2x digital out (24V / 250mA)	n.a.	n.a.
Inputs / outputs PMS (digital) (optional)	4x digital in 24V/10mA 1x digital out 24V/250mA	n.a.	n.a.
Output analog VDR command	-10 V to +10 V	n.a.	n.a.
Output serial VDR command (optional)	NMEA0183	n.a.	n.a.
Size (h x w x d)	216 x 144 x 80 mm	n.a.	n.a.