



Company:

Address:

Phone:

Name:

Department:

E-mail:

Date:

**1. Important Project Information:**

Project title:

Ship Type:

( Marine, Civil, etc.)

Classification Society and Class:

- DNV (Standard)
- Bureau Veritas
- Other

**2. SBT Part Types**

Braking System:

- Electromechanical active
- Hydraulic active
- Manual
- Electromechanical passive
- Hydraulic passive
- Not required

Locking System:

- Electromechanical
- Manual
- Hydraulic
- Not required

Turning System:

- Electromechanical
- Manual
- Hydraulic
- Not required

**3. Environmental Conditions:**

Ambient temp. in operation, max.:

T<sub>max</sub> \_\_\_\_\_ °C

Ambient temp. in operation, min.:

T<sub>min</sub> \_\_\_\_\_ °C

Control Cabinet Material

- Standard Steel powder coated
- Stainless steel

Control Cabinet Colour

- Standard RAL 7035
- other: \_\_\_\_\_

IP Protection Rate

- Standard IP 65
- others IP \_\_\_\_\_

Additional information:

(shock, vibration, corrosive environments etc)

**4. Electrical Supply:**

Power supply for SBT Control Unit and components:

- Standard 400VAC / 50Hz
- Special voltage: U<sub>DC</sub> \_\_\_\_\_ V
- U<sub>AC</sub> \_\_\_\_\_ V \_\_\_\_\_ Hz

Control signals/voltage:

- Standard 24VDC
- Other \_\_\_\_\_ V

Output signals/voltage:

- Potential free (Standard)
- Other \_\_\_\_\_ V

UPS for control signals an SBT PLC?

- Yes
- No (Standard)

Please observe protection ISO 16016	Drawn: 20.02.2023 Wie/Jfe	Replacement for:
	Verified: 18.04.2023 Jfe	Replaced by:



5. Remote Control /Input Signals

Release Brake:	<input type="checkbox"/>	Priority	<input type="checkbox"/>	Yes / Quantity: _____	<input type="checkbox"/>	No
Apply Brake:	<input type="checkbox"/>	Priority	<input type="checkbox"/>	Yes / Quantity: _____	<input type="checkbox"/>	No
Turn CW:	<input type="checkbox"/>	Priority	<input type="checkbox"/>	Yes / Quantity: _____	<input type="checkbox"/>	No
Turn CCW:	<input type="checkbox"/>	Priority	<input type="checkbox"/>	Yes / Quantity: _____	<input type="checkbox"/>	No
Engage Lock:	<input type="checkbox"/>	Priority	<input type="checkbox"/>	Yes / Quantity: _____	<input type="checkbox"/>	No
Disengage Lock:	<input type="checkbox"/>	Priority	<input type="checkbox"/>	Yes / Quantity: _____	<input type="checkbox"/>	No
Interlock Brake:			<input type="checkbox"/>	Yes / Quantity: _____	<input type="checkbox"/>	No
Interlock Turn:			<input type="checkbox"/>	Yes / Quantity: _____	<input type="checkbox"/>	No
Interlock Lock:			<input type="checkbox"/>	Yes / Quantity: _____	<input type="checkbox"/>	No
ACK:			<input type="checkbox"/>	Yes / Quantity: _____	<input type="checkbox"/>	No

6. Remote Feedback /Output Signals

	Ship Control System	Alarm and Monitoring System (AMS)
Brake released:	<input type="checkbox"/> Yes / Quantity: _____ <input type="checkbox"/> No	<input type="checkbox"/> Yes / Quantity: _____ <input type="checkbox"/> No
Brake applied:	<input type="checkbox"/> Yes / Quantity: _____ <input type="checkbox"/> No	<input type="checkbox"/> Yes / Quantity: _____ <input type="checkbox"/> No
Lock pin disengaged:	<input type="checkbox"/> Yes / Quantity: _____ <input type="checkbox"/> No	<input type="checkbox"/> Yes / Quantity: _____ <input type="checkbox"/> No
Lock pin engaged:	<input type="checkbox"/> Yes / Quantity: _____ <input type="checkbox"/> No	<input type="checkbox"/> Yes / Quantity: _____ <input type="checkbox"/> No
Turn pinion disengaged:	<input type="checkbox"/> Yes / Quantity: _____ <input type="checkbox"/> No	<input type="checkbox"/> Yes / Quantity: _____ <input type="checkbox"/> No
Turn pinion engaged:	<input type="checkbox"/> Yes / Quantity: _____ <input type="checkbox"/> No	<input type="checkbox"/> Yes / Quantity: _____ <input type="checkbox"/> No
System fault:	<input type="checkbox"/> Yes / Quantity: _____ <input type="checkbox"/> No	<input type="checkbox"/> Yes / Quantity: _____ <input type="checkbox"/> No
Local Mode active:	<input type="checkbox"/> Yes / Quantity: _____ <input type="checkbox"/> No	<input type="checkbox"/> Yes / Quantity: _____ <input type="checkbox"/> No
Remote Mode active:	<input type="checkbox"/> Yes / Quantity: _____ <input type="checkbox"/> No	<input type="checkbox"/> Yes / Quantity: _____ <input type="checkbox"/> No

Special customer signals

	Ship Control System	Alarm and Monitoring System (AMS)
_____	<input type="checkbox"/> Yes / Quantity: _____ <input type="checkbox"/> No	<input type="checkbox"/> Yes / Quantity: _____ <input type="checkbox"/> No
_____	<input type="checkbox"/> Yes / Quantity: _____ <input type="checkbox"/> No	<input type="checkbox"/> Yes / Quantity: _____ <input type="checkbox"/> No
_____	<input type="checkbox"/> Yes / Quantity: _____ <input type="checkbox"/> No	<input type="checkbox"/> Yes / Quantity: _____ <input type="checkbox"/> No



7. Local Control Interface

**Control Cabinet Front Panel**

**Control (Push Button)**

**Status (Signal Lamp)**

- Release Brake:  Yes  No
- Apply Brake:  Yes  No
- Turn CW:  Yes  No
- Turn CCW:  Yes  No
- Disengage lock pin:  Yes  No
- Engage lock pin:  Yes  No
- Operation Mode Switch:  Yes  No
  
- Acknowledge:  Yes  No

- Brake released:  Yes  No
- Brake applied:  Yes  No
- Turn pinion disengaged:  Yes  No
- Turn pinion engaged:  Yes  No
- Lock pin disengaged:  Yes  No
- Lock pin engaged:  Yes  No
- Operation Mode Local:  Yes  No
- Operation Mode Remote:  Yes  No
- Operation Mode HOP:  Yes  No
- Brake Interlock:  Yes  No
- Turn Interlock:  Yes  No
- Lock Interlock:  Yes  No
- System fault / Error:  Yes  No

**HOP Hand Operation Panel**

*Please select a maximum of six control and six status options*

**Control (Push Button)**

**Status (Signal Lamp)**

- Release Brake:  Yes  No
- Apply Brake:  Yes  No
- Turn CW:  Yes  No
- Turn CCW:  Yes  No
- Disengage lock pin:  Yes  No
- Engage lock pin:  Yes  No
  
- Acknowledge:  Yes  No

- Brake released:  Yes  No
- Brake applied:  Yes  No
- Turn pinion disengaged:  Yes  No
- Turn pinion engaged:  Yes  No
- Lock pin disengaged:  Yes  No
- Lock pin engaged:  Yes  No
- Operation Mode Local:  Yes  No
- Operation Mode Remote:  Yes  No
- Operation Mode HOP:  Yes  No
- Brake Interlock:  Yes  No
- Turn Interlock:  Yes  No
- Lock Interlock:  Yes  No
- System fault/Error:  Yes  No



**8. Performance / Safety Level**

- Performance Level DIN EN ISO 13849:  Level a  
 Level b  
 Level c  
 Level d  
 Level e

**9. Special System functions**

- Brake System:  Quick apply (only for hydraulic brake system)
- Lock System:  Sensitive Locking
- Turn System:  Softstart (only for electromechanical turn system)

**10. Electrical Wiring, Marking etc**

- Single wire types:  Yes (Standard)  Other  
H07Z-K 90°C/H05Z-K 90°C
- Single wire marking:  Yes  No
- Connection cable with shielding:  Yes  No
- Others (e.g. language, etc.): \_\_\_\_\_

**11. Documentation and QM-requirements**

- PLC Program:  Yes  No \_\_\_\_\_
- PLC Programming Software:  Yes  No \_\_\_\_\_
- initial sample test report:  Yes  No \_\_\_\_\_
- Circuit diagram:  Yes  No \_\_\_\_\_
- Electrical test report:  Yes  No \_\_\_\_\_
- Others: \_\_\_\_\_

**12. Miscellaneous**

- Special features of the application known: \_\_\_\_\_
- Special customer requests: \_\_\_\_\_
- Competitive products known: \_\_\_\_\_
- Installation Space requested/available:  
*Preferable CAD model* \_\_\_\_\_
- Special standards to meet: \_\_\_\_\_
- Further information: \_\_\_\_\_

Please observe protection ISO 16016	Drawn: 20.02.2023 Wie/Jfe	Replacement for:
	Verified: 18.04.2023 Jfe	Replaced by:



**13. Sketches / Photos of the Application**