



TYPE APPROVAL CERTIFICATE

Certificate No:
TAE000018K
Revision No:
2

This is to certify:

That the Contactor

with type designation(s)
ESB...

Issued to

ABB Stotz-Kontakt GmbH
Heidelberg, Baden-Württemberg, Germany

is found to comply with

DNV rules for classification – Ships, offshore units, and high speed and light craft

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Rated voltage (V) 400
Rated current (A) 9 - 30 (400 V/ AC3)
Frequency (Hz) DC, 50 - 60

Issued at **Hamburg** on **2022-07-27**

This Certificate is valid until **2027-07-26**.

DNV local station: **Augsburg**

Approval Engineer: **Thomas Hartmann**

for **DNV**

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Arne Schaarmann
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

Contacteur type: ESB16...N, ESB20...N, ESB25...N, ESB40...N, ESB63...N, ESB100...N
 ESB24..., ESB40..., ESB63

Ratings main contacts ESB...N:

Contacteur type		ESB16...N	ESB20...N	ESB25...N	ESB40...N	ESB63...N	ESB100...N
Insulation voltage U_i		400 V		500 V			
Operational voltage U_e		220 V DC 250 V AC		220 V DC 400 V AC			
Frequency		DC, 50/60 HZ					
Operational current I_e AC-1/AC-7a		16 A	20 A	25 A	40 A	63 A	100 A
Operational power AC-1	230 V – 1 ph	3,7 kW	4,6 kW	5,8 kW	9,2 kW	14,5 kW	23 kW
	400 V – 3 ph	--	--	17,3 kW	27,7 kW	43,6 kW	69,3 kW
Opera. current I_e AC-3/AC-7b	230 V – 1 ph	6 A	9 A	9 A	22 A	30 A	--
	400 V – 3 ph	--	--	9 A	22 A	30 A	--
Operational power AC-3	230 V – 1 ph	0,9 kW	1,3 kW	1,3 kW	3,7 kW	5 kW	--
	400 V – 3 ph	--	--	4 kW	11 kW	15 kW	--

Ratings main contacts ESB...:

Contacteur type		ESB24...	ESB40...	ESB63...
Insulation voltage U_i		500 V		
Operational voltage U_e		220 V DC 400 V AC		
Frequency		DC, 50/60 HZ		
Operational current I_e AC-1/AC-7a		24 A	40 A	63 A
Operational power AC-1	230 V – 1 ph	5,3 kW	8,8 kW	13,8 kW
	400 V – 3 ph	16 kW	26 kW	41 kW
Opera. current I_e AC-3/AC-7b	230 V – 1 ph	9 A	22 A	30 A
	400 V – 3 ph	9 A	22 A	30 A
Operational power AC-3	230 V – 1 ph	2,2 kW	5,5 kW	8 kW
	400 V – 3 ph	4 kW	11 kW	15 kW

Auxiliary contacts (type EH 04N + EH04):

- Conventional free air current I_{th} : 6 A
- rated operational voltage U_e : up to 500 V AC

Coil systems:

- Rated control voltage U_c : 8 V AC/DC up to 415 V AC/DC
- Type of coil: DC, with a built-in rectifier.

Further ratings acc. manufacturer documentation. The contactor can be used in conjunction with programmable logic controller. Operating instruction of the manufacturer to be observed.

Application/Limitation

Temperature class: D (-25 to 70°C)
Humidity class: A (up to 96% humidity)
Vibration class: A (5-100 Hz)

If several contactors are mounted adjacently in a switchboard, a distance piece EBS DIS must be attached to every third contactor in the row.

Type Approval documentation

Tests carried out

Type tests according to IEC 60947-4-1 Sequence I, II, III, IV and V. Power supply variations, Inclination test, Vibration test, Insulation resistance test, Damp heat test, Dry heat test, Low temperature test and high voltage test.

Marking of product

ABB Stotz-Kontakt GmbH – Type designation – Rated voltage – Breaking capacity.

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE