



Type Approval Certificate

Germanischer Lloyd

This is to certify that the undernoted product(s) has/have been tested in accordance with the relevant requirements of the GL Type Approval System.

Certificate No.	9126889 HH
Company	Böning Automationstechnologie GmbH & Co. KG Am Steenöver 4 27777 Ganderkesee, GERMANY
Product Description	Stand - By - Device
Type	AHD 408A, AHD 408E, AHD 408E-K
Environmental Category	C, EMC2
Technical Data / Range of Application	Power supply: 24 V DC or AC Current consumption: max. 0.3 A AHD 408A: control of 2 sets of engine driven main pumps and electrical drive stand - by - pumps AHD 408E: control of 2 sets of electrical driven pump pairs AHD 408E-K: control of 1 set air compressor pair and 1 set of electrical driven pump pair Inputs: 1 n/c - contact for each pump set, 3 n/c - contacts provided for compressor sets, 1 input for restart after a black-out Outputs: 1 c/o common alarm contact 1 c/o repeat alarm contact Pump contactor: 250 V AC, 3 A Contact rating: 48 V DC/AC 1 A Filter type FN 682-4/06 (Schaffner) or equivalent to be used.
Test Standard	Guidelines for the Performance of Type Approvals, 2003.
Documents	Operating instruction handbook AHD 408 Circuit diagram: L36/ 184.405, 255.408, 256.408, 257.408 Test report : MAZ 97/7038-1-2, 97/7038-1-1-A, Böning 97/00003, 97/00004-
Remarks	None.
Valid until	2013-02-16
Page	1 of 1
File No.	I.B.03
Hamburg,	2008-02-20

Type Approval Symbol



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Jürgen Wittburg

Jens Dietrich

This certificate is issued on the basis of "Regulations for the Performance of Type Tests, Part 0, Procedure".