

Type Approval Certificate Extension

This is to certify that Certificate No. 06/20013 (E2) for the undernoted products is amended and renumbered as shown.

This certificate is issued to:

PRODUCER	ABB Stotz-Kontakt GmbH Eppelheimer Strasse 82 69123 Heidelberg Germany
PLACE OF PRODUCTION	Hauptstrasse 12-16 78132 Hornberg Germany
DESCRIPTION	Programmable Logic Controller
TYPES	AC500/S500, AC700F/S700F Comprising the following modules: CPUs: PM571, PM571-ETH, PM571-ARCNET, PM581, PM581-ETH, PM581-ARCNET, EC581-ARCNET PM582, PM582-ETH, PM582-ARCNET, PM590, PM590-ETH, PM590-ARCNET PM591, PM591-ETH, PM591-ARCNET PM572, PM573-ETH, PM583-ETH, PM592-ETH, PM783F-ETH Terminal Bases: TB511, TB511-ETH, TB511-ARCNET, TB521, TB521-ETH, TB521-ARCNET, TB541, TB541-ETH, TB541-ARCNET TB711

Certificate No.	06/20013 (E3)
Issue Date	08 November 2010
Expiry Date	26 June 2011
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TYPES CONTINUED

I/O-Modules:

DC505-FBP/DC 705F-FBP
 AX522/ AX 722F
 AX521/ AX 721F
 AO523/ AO 723F
 AI523/ AI 723F
 AC522/ AC 722F
 DI524/ DI 724F
 DC532/ DC 732F
 DC522/ DC 722F
 DC523/ DC 723F
 DX522/ DX 722F
 DC551-CS31
 DX531/ DX 731F
 DC541
 DA501/ DA 701
 CD522/ CD 722F
 PD501

AI531/ AI 731F
 CI501-PNIO
 CI502-PNIO
 CI511-ETHCAT
 CI512-ETNCAT
 CI590
 CI592
 TA524/ TA 724F

Terminal Units:

Decentralised I/O - Station with fieldbus interface
 Analogue I/O with 8 channels
 Analogue I/O with 4 channels
 Analogue output
 Analogue input
 Analogue I/O with 8 channels
 Digital inputs
 Digital I/O
 Digital I/O 16 channels
 Digital I/O 24 channels
 Digital inputs/relay outputs
 Decentralised I/O - Station with CS 31- interface
 Digital inputs/230V relay outputs
 Digital inputs/ digital in-outputs
 Digital I/O module
 Encoder and PWM expansion module
 Positioning module/analogue inputs,
 24VDC-motor outputs
 Analogue input module
 Ethernet bus module
 Ethernet bus module
 Ethernet-bus module
 Ethernet-bus module
 High availability CS31 bus module
 CS31 bus module with digital and analogue I/O's
 Housing

TU515, TU516, TU531, TU532, TU541, TU542,
 TU505-FBP, TU506-FBP, TU551-CS31, TU552-CS31,
 TU507-ETH, TU508-ETH, TU 705F, TU 706F,
 TU 715F, TU 716F, TU 731F, TU 732F

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Sheet 2 of 3



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TYPES CONTINUED

Communication Couplers:
 CM572-DP/CM 572F-DP Profibus coupler
 CM575-DN Device net coupler
 CM577-ETH Ethernet coupler
 CM578-CN CanOpen coupler
 CM574-RCOM Communication module RCOM/RCOM+
 CM574-RS Communication module serial
 CM579-PNIO Communication module
 CM579-ETHCAT Communication module EtherCAT®

Accessories: MC502 memory card

APPLICATION

Marine, offshore and industrial applications for use in environmental categories ENV1, ENV2 and ENV3 as defined in Lloyd's Register's Type Approval System, Test Specification Number 1 - 2002 for general power distribution zones.

OTHER CONDITIONS

The programmable logic controller is to be installed in a metal enclosure whose openings have conductive contacts every 0.4 m and with power supply filter type Schaffner FN610/03-06 and snap ferrite type WE 74270012 for compliance with electromagnetic emission requirements of Test Specification Number 1 - 2002, Sections 29 and 30.

ADDITIONAL TEST

Low Temperature Test 0°C/16 hours

SPECIFIED STANDARD

EN 61131-2 (2003)

"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid certificate."

The attached Design Appraisal Document No. ETS 23810-10 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 06/20013 (E2) to which this extension should be attached.

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 Sheet 3 of 3



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Part 3
Control Units

Producer / Licence No.	Item Description	Technical Details	Category / Additional Tests	Remarks	Cert. No.
ABB Stotz-Kontakt GmbH Eppelheimer Strasse 82 69123 Heidelberg Germany	<p>Programmable Logic Controller AC500/5500, AC700F/5700F</p> <p>Comprising the following modules:</p> <p>PM571, PM 571-ETH, PM571-ARCNET PM581, PM581-ETH, PM581-ARCNET, EC581-ARCNET PM582, PM582-ETH, PM582-ARCNET PM590, PM590-ETH, PM590-ARCNET PM591, PM591-ETH, PM591-ARCNET PM572, PM573-ETH, PM583-ETH, PM592-ETH, PM783F-ETH TB511, TB511-ETH, TB511-ARCNET TB521, TB521-ETH, TB521-ARCNET TB541, TB541-ETH, TB541-ARCNET TB711 DC505-FBP / DC 705F-FBP</p> <p>AX522 / AX 722F AX521 / AX 721F AO523 / AO 723F AI523 / AI 723F AC522 / AC 722F DI524 / DI 724F DC532 / DC 732F DC522 / DC 722F DC523 / DC 723F DX522 / DX 722F DC551-CS31</p> <p>DX531 / DX 731 F DC541 DA501 / DA 701 CD522 / CD 722F PD501</p> <p>AI531 / AI 731F</p>	<p>CPUs</p> <p>Terminal Bases</p> <p>Decentralised I/O - Station with Fieldbus Interface</p> <p>Analogue I/O with 8 channels Analogue I/O with 4 channels Analogue Output Analogue Input Analogue I/O with 8 channels Digital Inputs Digital I/O Digital I/O 16 channels Digital I/O 24 channels Digital Inputs/Relay Outputs Decentralised I/O - Station with CS 31-interface Digital inputs / digital in-outputs Digital inputs/ digital in-outputs Digital I/O module Encoder & PWM expansion module Positioning module/ analogue inputs, 24VDC-Motor outputs Analogue input module</p>	<p>ENV1, ENV2, ENV3, (2002) For installation in general power distribution zones</p> <p>Low temperature test (0°C/16 hrs)</p>	<p>Expiry date: 26 June 2011</p> <p>The programmable logic controller is to be installed in a metal enclosure whose openings have conductive contacts every 0.4 m and with power supply filter type Schaffner FN610/03-06 and snap ferrite type WE 74270012 for compliance with electromagnetic emission requirements of Test Specification Number 1 - 2002, Sections 29 and 30.</p>	06/20013 (E3)

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Part 3
Control Units

Producer/Licence No.	Item Description	Technical Details	Category/Additional Tests	Remarks	Cert. No.
CI501-PNIO CI502-PNIO CI511-ETHCAT CI512-ETNCAT CI590 CI592 TA524/TA 724F TU515, TU516, TU531, TU532, TU541, TU542, TU505-FBP, TU506-FBP, TU551-CS31, TU552-CS31, TU507-ETH, TU508-ETH, TU705F, TU706F, TU715F, TU 716F, TU731F, TU732F CM572-DP / CM 572F-DP CM575-DN CM577-ETH CM578-CN CM574-RCOM CM574-RS CM579-PNIO CM579-ETHCAT MC502	Ethernet bus module Ethernet bus module Ethernet bus module Ethernet bus module High availability CS31 bus module CS31 bus module with digital and analogue I/O's Housing Terminal Units Communications Couplers Profibus Coupler Device Net Coupler Ethernet Coupler CanOpen Coupler Communication module RCOM/RCOM+ Communication module serial Communication module Communication module EtherCAT® Memory Card				

TW 10.11.10



Marine Design Appraisal Document

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Date
08 November 2010

Quote this reference on all future communications
HPC 0920326/23810-10/TW/hu

**THE LLOYD'S REGISTER'S TYPE APPROVAL SYSTEM, 2002
ISSUED TO: ABB STOTZ-KONTAKT GMBH
FOR: PROGRAMMABLE LOGIC CONTROLLER
TYPE APPROVAL CERTIFICATE NO. 06/20013 (E3)**

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System, 2002 and this Design Appraisal Document forms part of the certificate.

ADDITIONAL APPROVAL DOCUMENTATION

LR6606	Approval Services - Request for Quotation	12.05.2009
STU0901674	Works Inspection Report	26.08.2009
Unnumbered	Table of contents: AC500/S500 incl. documentation listed therein	22.10.2009
3893-395a	EMV test report, 42 pages	06.11.2009
3893-399	EMV test report, 32 pages	21.07.2010
1SAP-140160F0001	Schaltplan Flashdisk-Platine PMxAC500, pages 1 - 5	01.04.2010

FINAL ACCEPTANCE OF ACTUAL ITEM(S) DEPEND(S) ON SATISFACTORY SURVEY AND TESTING

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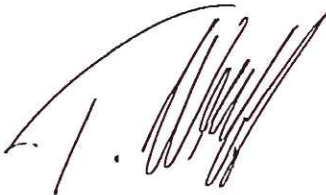
Supplementary Type Approval Terms and Conditions

Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.

Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the LR Type Approval System Procedure.



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