

Type Approval Certificate Extension

This is to certify that Certificate No. 02/20026 (E1) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER

WAGO Kontakttechnik GmbH & Co. KG

PLACE OF

Hansastrasse 27

PRODUCTION

32423 Minden Germany

DESCRIPTION

WAGO I/O-SYSTEM

TYPE

750

Comprising of the following modules:

Power Supply Unit

787-913

Power Supply Unit 230V AC/ 24V DC

IPC - Industrial Compact PC

758-870

WAGO-I/O-IPC

758-870/000-001

WAGO-I/O-IPC (with Profibus Master)

758-870/000-004

WAGO-I/O-IPC (with Profibus Slave)

Certificate No.

02/20026 (E2)

Issue Date

19 July 2007

Expiry Date

10 July 2012

Sheet

1 of 10

Thorsten Wolff Hamburg Design Support Centre Lloyd's Register EMEA

[&]quot;Lloyd's Register, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register Group'. The Lloyd's Register Group assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register Group entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract."



Fieldbus	Coupler	/Controll	er

750-303	Fieldbus Cou	pler PROFIBUS DP/	FMS 12

MBd.

750-306 Fieldbus Coupler DeviceNet

Fieldbus Coupler DeviceNet (without 750-306/000-001

statusbyte)

Fieldbus Coupler DeviceNet (digital without 750-306/000-005

status)

750-306/000-006 Fieldbus Coupler DeviceNet

(analogue/digital without status)

750-306/000-007 Fieldbus Coupler DeviceNet (bitstrobe)

750-312 Fieldbus Coupler ModBus RS485 (150-19200

750-314 Fieldbus Coupler ModBus RS232 (150-19200

Fieldbus Coupler ModBus RS485 (1.2-115.2 750-315

KBd.)

750-316 Fieldbus Coupler ModBus RS232 (1.2-115.2

KBd.)

750-323 Fieldbus Coupler PROFIBUS DP 12 MBd.

(digital)

750-327 Fieldbus Coupler CANopen (digital)

750-333 Fieldbus Coupler PROFIBUS DP/V1 12 MBd.

Fieldbus Coupler CANopen 750-337

750-341 Fieldbus Coupler Ethernet 100Mbit/s 750-342 Fieldbus Coupler ETHERNET TCP/IP 10

MBd.

750-806 Contr. DeviceNet

750-812 Programmable Fieldbus Controller ModBus

RS485 (150-19200 Bd.)

750-814 Programmable Fieldbus Controller ModBus

RS232 (150-19200 Bd.)

750-815 Programmable Fieldbus Controller ModBus

RS485 (1.2-115.2 KBd.)

750-816 Programmable Fieldbus Controller ModBus

RS232 (1.2-115.2 KBd.)

Certificate No. 02/20026 (E2)

Issue Date 19 July 2007

Expiry Date 10 July 2012

Sheet 2 of 10

Thorsten Wolff Hamburg Design Support Centre Lloyd's Register EMEA

[&]quot;Lloyd's Register, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register Group'. The Lloyd's Register Group assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register Group entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.



	_				
Field	hire	Coun	Or /6	Control	lor

riciabas Coupie	1/Controller
750-833	Programmable Fieldbus Controller
	PROFIBUS DP/V1 12 MBd.
750-837	Programmable Fieldbus Controller CANopen
750-841	Programmable Fieldbus Controller
	ETHERNET 100Mbit/s
750-842	Programmable Fieldbus Controller
	ETHERNET TCP/IP 10 MBd

Digital Input Modules

2 10 11 11 11 11 11 11 11 11 11 11 11 11	
750-400	2DI 24V DC 3.0 ms
750-401	2DI 24V DC 0.2 ms
750-402	4DI 24V DC 3.0 ms
750-403	4DI 24V DC 0.2 ms
750-405	2DI 230V AC
750-406	2DI 120V AC
750-410	2DI 24V DC 3.0ms proximity switch
750-411	2DI 24V DC 0.2ms proximity switch
750-415	4DI 24V AC/DC 20 ms
750-418	2DI 24V DC 3.0ms Diagnosis/
	Acknowledgement
750-419	2DI 24V DC 0.2ms Diagnosis
750-421	2DI 24V DC 3.0ms Diagnosis
750-424	2DI 24V DC Wire Break Detection
750-430	8DI 24V DC 3.0ms
750-431	8DI 24V DC 0.2ms
750-432	4DI 24V DC 3.0ms 2-Wire
750-433	4DI 24V DC 0.2ms 2-Wire
750-435	1DI NAMUR EEx i
750-436	8DI 24V DC 3.0ms LS switch
750-437	8DI 24V DC 0.2ms LS switch

Certificate No. 02/20026 (E2)

Issue Date 19 July 2007

Expiry Date 10 July 2012

Sheet 3 of 10

l * Thorsten Wolff Hamburg Design Support Centre Lloyd's Register EMEA



Digital Output Modules	i .
750-501	2DO 24V DC 0.5 A
750-502	2DO 24V DC 2.0 A
750-504	4DO 24V DC 0.5 A
750-507	2DO 24V DC 2.0A Diagnosis
750-508	2DO 24V DC 2.0A Diagnosis
750-509	2DO 230V AC/DC 0.3 A Solid State Relay
750-512	2DO 230V AC 2 A Relay 2NO
750-513	2DO 230V AC 2 A Relay 2NO (potential free)
750-516	4DO 24V DC 0.5A Negative
750-517	2DO 230V AC 1A Relay 2CO (potential free)
750-530	8DO 24V DC 0.5A
750-531	4DO 24V DC 0.5A 2-Wire
750-535	2DO 24V DC EEx i
750-536	8DO 24V DC 0.5A LS switch

8DO 24V DC 0.5A Diagnosis

Analogue Input Modules

750-537

Tillalogue Iliput Mouule	
750-452	2AI 0-20 mA Differential
750-452/000-200	2AI 0-20 mA Differential (status bits)
750-453	4AI 0-20mA Single Ended
750-454	2AI 4-20 mA Differential
750-454/000-200	2AI 4-20 mA Differential (status bits)
750-455	4AI 4-20mA Single Ended
750-456	2AI +/-10V DC
750-456/000-200	2AI +/-10V DC (status bits)
750-457	4AI +/-10V DC Single Ended
750-459	4AI 0-10V DC Single Ended
750-461	2AI PT100 RTD
750-461/000-002	2AI Ohmmeter 10R-1K2
750-461/000-003	2AI PT1000 RTD
750-461/000-004	2AI NI100 RTD
750-461/000-005	2AI NI1000 RTD
750-461/000-006	2AI PT100 RTD (temperature drift optimised)
750-461/000-007	2AI Ohmmeter 10R-5K0

Certificate No.

02/20026 (E2)

Issue Date

19 July 2007

Expiry Date

10 July 2012

Sheet

4 of 10

/ Thorsten Wolff Hamburg Design Support Centre Lloyd's Register EMEA

[&]quot;Lloyd's Register, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register Group'. The Lloyd's Register Group assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register Group entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract."



Analogus Innut Module	
Analogue Input Module 750-461/000-200	2AI PT100 RTD (status bits)
The second of the second secon	
750-461/003-000	2AI RTD (adjustable)
750-462	2AI Thermocouple K
750-462/000-001	2AI Thermocouple S
750-462/000-002	2AI Thermocouple T
750-462/000-003	2AI +/-120 mV
750-462/000-006	2AI Thermocouple J
750-462/000-007	2AI Thermocouple B
750-462/000-008	2AI Thermocouple E
750-462/000-009	2AI Thermocouple N
750-462/000-010	2AI Thermocouple R
750-462/000-011	2AI Thermocouple U
750-462/000-012	2AI Thermocouple L
750-462/000-050	2AI Thermocouple K (without cold junction
	compensation)
750-462/000-061	2AI Thermocouple U (without cold junction
	compensation)
750-468	4AI 0-10V DC Single Ended
750-468/000-200	4AI 0-10V DC Single Ended (status bits)
750-469	2AI Thermocouple K with Diagnostic
750-469/000-001	2AI Thermocouple S with Diagnostic
750-469/000-002	2AI Thermocouple T with Diagnostic
750-469/000-003	2AI +/-120 mV with Diagnostic
750-469/000-006	2AI Thermocouple J with Diagnostic
750-469/000-007	2AI Thermocouple B with Diagnostic
750-469/000-008	2AI Thermocouple E with Diagnostic
750-469/000-009	2AI Thermocouple N with Diagnostic
750-469/000-010	2AI Thermocouple R with Diagnostic
750-469/000-011	2AI Thermocouple U with Diagnostic
750-469/000-012	2AI Thermocouple L with Diagnostic
750-469/000-050	2AI Thermocouple K with Diagnostic
207/ 000	(without cold junction compensation)
750-469/000-051	2AI Thermocouple S with Diagnostic
. 55 157/ 555 551	(without cold junction compensation)
	(William Cold Junetion Compensation)

Certificate No.

02/20026 (E2)

Issue Date

19 July 2007

Expiry Date

10 July 2012

Sheet

5 of 10

Hamburg Design Support Centre Lloyd's Register EMEA



2 1		100	and the same of	-
Ana	logue	Input	Modu	les

Analogue input Module	28
750-469/000-062	2AI Thermocouple L with Diagnostic (without
	cold junction compensation)
750-469/000-200	2AI Thermocouple K with Diagnostic (status bits
750-469/000-202	2AI Thermocouple T with Diagnostic (status bits)
750-469/000-206	2AI Thermocouple J with Diagnostic (status bits)
750-469/003-000	2AI Thermocouple (adjustable)
750-470	2AI 0-20mA Single Ended 50Hz
750-470/005-000	2AI 0-20mA Single Ended 60Hz
750-472	2AI 0-20 mA 16 Bit Single Ended
750-472/000-200	2AI 0-20 mA 16 Bit Single Ended (status bits)
750-472/005-000	2AI 0-20mA 16Bit Single Ended 60Hz
750-473	2AI 4-20mA Single Ended 50Hz
750-473/005-000	2AI 4-20mA Single Ended 60Hz
750-474	2AI 4-20 mA 16 Bit Single Ended
750-474/000-002	2AI 4-30mA 16 Bit Single Ended
750-474/000-200	2AI 4-20 mA 16 Bit Single Ended (status bits)
750-474/005-000	2AI 4-20mA 16 Bit Single Ended 60Hz
750-476	2AI ±10V DC 16 Bit Single Ended
750-476/000-200	2AI ±10V DC 16 Bit Single Ended (status bits)
750-476/005-000	2AI +/-10V DC 16 Bit Single Ended 60Hz
750-478	2AI 0-10V DC 16 Bit Single Ended
750-478/000-200	2AI 0-10V DC 16 Bit Single Ended (status
	bits)
750-478/005-000	2AI 0-10V DC 16 Bit Single Ended 60Hz
750-479	2AI +/-10V DC Differential Measurement
750-479/000-001	2AI +/-10V DC Differential Measurement
	(synchronous)
750-479/005-000	2AI +/-10V DC Differential Measurement
	60Hz
750-483	2AI 0-30V DC Differential Measurement
750-485	2AI 4-20mA EEx i

Certificate No.

02/20026 (E2)

Issue Date

19 July 2007

Expiry Date

10 July 2012

Sheet

6 of 10

Thorsten Wolff Hamburg Design Support Centre Lloyd's Register EMEA



A 1		o		
Anal	ogue	Output	Modul	es

750-550	2AO 0-10V DC
750-550/000-200	2AO 0-10V DC (status bits)
750-552	2AO 0-20 mA
750-552/000-200	2AO 0-20 mA (status bits)
750-553	4AO 0-20mA
750-554	2AO 4-20 mA
750-554/000-200	2AO 4-20 mA (status bits)
750-555	4AO 4-20mA
750-556	2AO ±10V DC
750-556/000-200	2AO ±10V DC (status bits)
750-557	4AO +/-10V DC
750-559	4AO 0-10V DC
750-585	2AO 0-20mA EEx i

Power Supply Modules

750-601	24V DC Power Supply with Fuse
750-602	24V DC Power Supply
750-609	230V AC Power Supply with Fuse
750-610	24V DC Power Supply with Fuse and
	Diagnostic
750-611	230V AC Power Supply with Fuse and
	Diagnostic
750-612	0-230V AC/DC Power Supply
750-613	24V DC Internal System Power Supply
750-614	Field Side Connection Module AC/DC 0-230 V
750-624	24V DC Field Supply Filter (surge)
750-625	24V DC Power Supply EEx i
750-626	24V DC Power Supply Filter (surge)

Special Modules

750-404	Up/Down Counter
750-404/000-001	Up Counter (enable input)
750-404/000-002	Peak Time Counter
750-404/000-003	Frequency Counter (0.1Hz-100kHz

Certificate No.

02/20026 (E2)

Issue Date

19 July 2007

Expiry Date

10 July 2012

Sheet

7 of 10

Thorsten Wolff Hamburg Design Support Centre Lloyd's Register EMEA



Special Modules	
750-404/000-004	Up/Down Counter (switch output)
750-404/000-005	2 Up Counter (16Bit)
750-404/020-003	Frequency Counter (0.1Hz-100kHz without
	outputs)
750-600	End module
750-608	Trimmer Module 1kOhm/+/-12V DC
750-616	Separation Module
750-650	Serial Interface RS232 9600, n, 8, 1
750-650/000-001	Serial Interface RS232 9600, n, 8, 1, 5 Byte
750-650/000-002	Serial Interface RS232 9600, e, 7, 2
750-650/000-004	Serial Interface RS232 4800, e, 7, 1
750-650/000-006	Serial Interface RS232 9600, e, 8, 1
750-650/000-007	Serial Interface RS232 4800, n, 8, 1
750-650/000-008	Serial Interface RS232 9600, o, 7, 1
750-650/000-009	Serial Interface RS232 2400, e, 8, 1
750-650/000-010	Serial Interface RS232 19200, n, 8, 1
750-650/000-011	Serial Interface RS232 19200, e, 8, 1
750-650/000-012	Serial Interface RS232 2400, n, 8, 1
750-650/000-013	Serial Interface RS232 4800, e, 7, 2
750-650/000-014	Serial Interface RS232 2400, e, 7, 2
750-650/000-015	Serial Interface RS232 4800, e, 8, 1, 5 Byte
750-650/000-016	Serial Interface RS232 9600, o, 7, 2, 5 Byte
750-650/000-017	Serial Interface RS232 9600, e, 7, 1
750-650/000-018	Serial Interface RS232 9600, n, 8, 1, 5 Byte
	(continuous)
750-650/000-019	Serial Interface RS232 9600, n, 8, 2, 5 Byte
750-650/000-020	Serial Interface RS232 9600, n, 8, 2
750-650/000-021	Serial Interface RS232 1200, n, 8, 1
750-650/000-022	Serial Interface RS232 19200, n, 8, 1, 5 Byte
750-650/000-023	Serial Interface RS232 19200, e, 7, 1
750-650/000-024	Serial Interface RS232 19200, o, 8, 1
750-650/003-000	Serial Interface RS232 (adjustable)
750-651	TTY Interface 9600, n, 8, 1
750-651/000-001	TTY Interface 9600, n, 8, 1, 5 Byte

Certificate No.

02/20026 (E2)

Issue Date

19 July 2007

Expiry Date

10 July 2012

Sheet

8 of 10

Thorsten Wolff Hamburg Design Support Centre Lloyd's Register EMEA



Special Modules	
750-651/000-002	TTY Interface 9600, e, 8, 1
750-651/000-003	TTY Interface 1200, n, 8, 1
750-651/000-004	TTY Interface 9600, o, 8, 1
750-651/000-005	TTY Interface 2400, e, 8, 1
750-651/000-006	TTY Interface 2400, o, 8, 1
750-651/000-007	TTY Interface 2400, e, 7, 1, 5 Byte
750-651/003-000	TTY Interface (adjustable)
750-653	Serial Interface RS485 9600, n, 8, 1
750-653/000-001	Serial Interface RS485 9600, e, 7, 2
750-653/000-002	Serial Interface RS485 9600, e, 8, 1
750-653/000-003	Serial Interface RS485 9600, e, 8, 2
750-653/000-005	Serial Interface RS485 9600, e, 8, 1, half-duplex
750-653/000-006	Serial Interface RS485 19200, n, 8, 1, 5 Byte
750-653/000-007	Serial Interface RS485 2400, n, 8, 1
750-653/000-008	Serial Interface RS485 19200, o, 8, 1
750-653/000-009	Serial Interface RS485 9600, n, 8, 1, 5 Byte
750-653/000-010	Serial Interface RS485 4800, n, 8, 1
750-653/000-011	Serial Interface RS485 19200, 8, e, 1, 5 Byte
750-653/000-012	Serial Interface RS485 19200, n, 8, 1, 5 Byte
	(continuous)
750-653/000-013	Serial Interface RS485 9600, e, 7, 1
750-653/000-014	Serial Interface RS485 9600, e, 8, 1, half-duplex
	(standard format)
750-653/000-018	Serial Interface RS485 9600, n, 8, 1, 5 Byte
	(continuous)
750-653/000-021	Serial Interface RS485 9600, e, 8, 1, 5 Byte, half-
	duplex (continuous)
750-653/003-000	Serial Interface RS485 (adjustable)
750-654	Data Exchange Module
750-654/000-001	Data Exchange Module (125kHz)

Fieldbus Connectors

750-960 750-970 Profibus D-Sub Male Connector (9 pole) Profibus D-Sub Male/Female Connector

(9 pole)

Certificate No.

02/20026 (E2)

Issue Date

19 July 2007

Expiry Date

10 July 2012

Sheet

9 of 10

Thorsten Wolff Hamburg Design Support Centre Lloyd's Register EMEA



APPLICATION

Marine, offshore and industrial applications for use in environmental categories ENV1, ENV2, ENV3 and ENV4 (for Power Supply Unit type 787-913 categories ENV1, ENV2 and ENV3 only) as defined in Lloyd's Register's Type Approval System, Test Specification Number 1 – 1996.

ADDITIONAL TEST

Low temperature (0°C/2 hours)

DESIGN CODE

Manufacturer's specification

"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 17404-07 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 02/20026 (E1) to which this extension should be attached.

Certificate No.

02/20026 (E2)

Issue Date

19 July 2007

Expiry Date

10 July 2012

Sheet

10 of 10

Thorsten Wolff Hamburg Design Support Centre Lloyd's Register EMEA