TYPE EXAMINATION CERTIFICATE



[2] Equipment or Protective System intended for use in Potentially Explosive Atmospheres
Directive 2014/34/EU

- [3] Type Examination Certificate Number: **DEMKO 15 ATEX 1525X Rev. 9**
- [4] Product: Interface Modules, Open Type Programmable Controllers Series UR20 u-remote
- [5] Manufacturer: Weidmüller Interface GmbH & Co. KG
- [6] Address: Klingenbergstrasse 26, 32758 Detmold, Germany
- [7] This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] UL International Demko A/S certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014.

The examination and test results are recorded in confidential report no. DK/ULD/ExTR15.0014/09.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018 EN IEC 60079-7: 2015 +A1:2018 EN IEC 60079-15: 2019

except in respect of those requirements listed at item 18 of the Schedule.

- [10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.
- [11] This Type examination certificate relates only to the design of the specified product, and not to specific items of product subsequently manufactured.
- [12] The marking of the product shall include the following:



Ex II 3 G Ex ec IIC T4 Gc (all other models)

Certification Manager

Jan-Erik Storgaard

This is to certify that the sample(s) of the Product described herein ("Certified Product") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Product Certification Program Requirements. This certificate and test results obtained apply only to the product sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured product. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all product to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

Date of issue: 2016-04-13 Re-issued: 2021-11-22

Certification Body

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark

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[13] [14]

Schedule TYPE EXAMINATION CERTIFICATE No. DEMKO 15 ATEX 1525X Rev. 9

[15] <u>Description of Product:</u>

The Interface modules, Open Type Programmable Controllers – Series UR20 u-remote modules are intended to be used in combination with programmable controllers and intended to be used for communication and input / output purposes. The system consists of Bus Coupler Modules and Input / Output Modules with different functions.

The Input and Output Modules are consisting of a base module with connections to the communication bus and power sources, different electronic modules and a modular terminal block module.

Models: UR20-FBC-PN-IRT, UR20-FBC-EC, UR20-FBC-MOD-TCP, UR20-FBC-PB-DP, UR20-4DI-P, UR20-16DI-P, UR20-16DI-P-PLC-INT, UR20-4DO-P, UR20-4DO-P-2A, UR20-8DO-P, UR20-16DO-P, UR20-16DO-P-PLC-INT, UR20-4RO-CO-255, UR20-4AI-UI-16, UR20-8AI-I-PLC-INT, UR20-4AO-UI-16, UR20-4AO-UI-16-DIAG, UR20-4AI-UI-16-DIAG, UR20-4AI-RTD-DIAG, UR20-4AI-TC-DIAG, UR20-PF-I, UR20-PF-O, UR20-16AUX-GND-I, UR20-16AUX-I, UR20-16AUX-GND-O, UR20-16AUX-O, UR20-16AUX-FE, UR20-8DI-P-3W, UR20-ES, UR20-FBC-EIP, UR20-1CNT-100-1DO, UR20-2CNT-100, UR20-2DI-P-TS, UR20-2FCNT-100, UR20-2DI-P-TS, UR20-2 2PWM-PN-0.5A, UR20-2PWM-PN-2A, UR20-4AI-UI-12, UR20-4AI-UI-16-DIAG-HD, UR20-4AI-UI-16-HD, UR20-4DI-P-TS, UR20-4DO-PN-2A, UR20-4RO-SSR-255, UR20-8DI-P-2W, UR20-8DI-P-3W-HD, UR20-PF-O-1DI-SIL, UR20-PF-O-2DI-DELAY-SIL, UR20-PF-O-2DI-SIL, UR20-1COM-232-485-422,UR20-1SSI, UR20-4DI-2W-230-AC, UR20-8AI-I-16-DIAG-HD, UR20-8AI-I-16-HD, UR20-16DO-N, UR20-4DI-N, UR20-8DO-P-2W-HD, UR20-16DI-N, UR20-1CNT-500, UR20-4DO-N, UR20-4DO-N-2A, UR20-8DI-N-3W, UR20-8DO-N, UR20-4DI-4DO-PN-FSPS, UR20-4DI-4DO-PN-FSOE, UR20-8DI-PN-FSPS, UR20-8DI-PN-FSOE, UR20-FBC-CAN, UR20-FBC-DN, UR20-4AO-UI-16-DIAG-HD, UR20-4AO-UI-16-HD, UR20-1COM-SAI-PRÓ, UR20-4AI-R-HS-16-DIAG, UR20-16DÓ-N-PLC-INT, UR20-16DI-N-PLC-INT, UR20-FBC-PL, UR20-FBC-MOD-TCP-V2 , UR20-4AO-UI-16-M, UR20-4AO-UI-16-M-DIAG, UR20-4AI-UI-DIF-16-DIAG, UR20-4AI-UI-DIF-32-DIAG, UR20-4COM-IO-LINK, UR20-4AI-RTD-HP-DIAG, UR20-4DI-4DO-PN-F\$P\$-V2, UR20-4DI-4DO-PN-FSOE-V2, UR20-8DI-PN-FSPS-V2, UR20-8DI-PN-FSOE-V2, UR20-2AI-SG-24-DIAG, UR20-FBC-PN-IRT-V2, UR20-1SSI-BTL, UR20-8AI-RTD-DIAG-2W, UR20-8DIO-P-3W-DIAG, UR20-1SM-50W-6DI2DO-P, UR20-FBC-CC, UR20-FBC-PB-DP-V2, UR20-8DI-ISO-2W, UR20-4AI-I-HART-16-DIAG, UR20-4AI-UI-ISO-16-DIAG, UR20-1COM-CANOPEN, UR20-FBC-CC-TSN, UR20-2AO-UI-16-DIAG, UR20-2AO-UI-16, UR20-2AO-UI-ISO-16-DIAG, UR20-4DO-ISO-4A, UR20-2AI-UI-16, UR20-2AI-UI-16-DIAG, may be followed by additional characters.

Model UR20-4RO-CO-255 is protected by "ec nC" concept, all other models are "ec" concept.

Ratings

Model	Туре	Main Input	Auxiliary Input / Output
UR20-FBC-PN-IRT	Bus Coupler ProfiNet IRT	Input voltage I port: DC 24V	Output voltage system bus: 5Vdc +/-2%
UR20-FBC-PN-IRT-V2		Input current at I port at full load: <=10A	Output current at system bus at full load:2.56A
		Input voltage O port: DC 24V	Output / input current at O / I Port at full load:
		Input current at O port at full load: <=10A	24Vdc, 10A at 55°C, 8A at 60°C
UR20-FBC-EC	Bus Coupler EtherCat	Input voltage I port: DC 24V	Output voltage system bus: 5Vdc +/-2%
		Input current at I port at full load: <=10A	Output current at system bus at full load: 2.56A
		Input voltage O port: DC 24V	Output / input current at O / I Port at full load: 24Vdc, 10A at 55°C, 8A at 60°C
		Input current at O port at full load: <=10A	
UR20-FBC-MOD-TCP	Bus Coupler ModBus TCP	Input voltage I port: DC 24V	Output voltage system bus: 5Vdc +/-2%
		Input current at I port at full load: <=10A	Output current at system bus at full load: 2.56A
		Input voltage O port: DC 24V	Output / input current at O / I Port at full load: 24Vdc, 10A at 55°C, 8A at 60°C
		Input current at O port at full load: <=10A	



[14]

Model	Туре	Main Input	Auxiliary Input / Output
UR20-FBC-PB-DP	Bus Coupler	Input voltage I port:	Output voltage system bus:
	Profibus DP	DC 24V	5Vdc +/-2%
		Input current at I port at full load:	Output current at system bus at full load:
		<=10A	2.56A
		Input voltage O port: DC 24V	Output / input current at O / I Port at full load: 24Vdc, 10A at 55°C, 8A at 60°C
		DG 24V	24 vdc, 10A at 33 C, 6A at 60 C
		Input current at O port at full load:	
		<=10A	
UR20-FBC-EIP	Bus Coupler Ethernet IP	Input voltage I port: DC 24V	Output voltage system bus: 5Vdc +/-2%
	Linemetii	DO 24V	3 V dC +7-2 /0
		Input current at I port at full load:	Output current at system bus at full load:
		<=10A	2.56A
		Input voltage O port:	Output / input current at O / I Port at full load:
		DC 24V	24Vdc, 10A at 55°C, 8A at 60°C
		Input current at O port at full load:	
	<u> </u>	<=10A	
UR20-FBC-CAN	Bus Coupler	Input voltage I port:	Output voltage system bus:
UR20-FBC-DN	CANopen	DC 24V	5Vdc +/-2%
01120120211		Input current at I port at full load:	Output current at system bus at full load:
		<=10A	2.56A
		Input voltage O port:	Output / input current at O / I Port at full load
		DC 24V	
		Input current at O port at full load:	10A at 60°C
		<=10A	
UR20-FBC-PL	Bus Coupler	Input voltage I port: DC 24V	Output voltage system bus:
	Powerlink	Input current at I port at full load:	5Vdc +/-2%
		<=10A	Output current at system bus at full load:
		Input voltage O port: DC 24V	2.56A
		Input voltage O port. DC 24V	Output / input current at O / I Port at full load:
		Input current at O port at full load:	·
		<=10A	8A at 60°C, horizontal mounting, 6A at 55°C, vertical mounting
UR20-FBC-MOD-TCP-	Bus Coupler	Input voltage I port: DC 24V	Output voltage system bus:
V2	Modbus/TC		5Vdc +/-2%
	P	Input current at I port at full load: <=10A	Output current at system bus at full load:
		X-10A	2.56A
		Input voltage O port: DC 24V	0.45.4/55.4
		Input current at O port at full load:	Output / input current at O / I Port at full load:
		<=10A	8A at 60°C, horizontal mounting, 6A at 55°C,
LID20 4DLD	2 or 4 Digital	rated voltage: 24V DC from internal	vertical mounting rated voltage:
UR20-4DI-P	2 or 4 Digital Inputs	I bus	
UR20-2DI-P-TS	1		24V DC
UR20-4DI-P-TS			sensor supply:
3.120 1511 10			24Vdc, 2A resistive maximum per sensor,
UR20-4DI-N	10 5: :: !	00/20/	unfused
UR20-16DI-P	16 Digital Inputs	rated voltage: 24V DC from internal I bus	rated voltage:
UR20-16DI-N	Прис	internal i bus	24V DC
UR20-16DI-N-PLC-INT	16 Digital	rated voltage: 24V DC from the 4	rated voltage: 24V DC
UR20-16DI-P-PLC-INT	Inputs 16 Digital	pole terminal block of the module rated voltage: 24V DC from the 4	rated voltage: 24V DC
ONZO-TODI-F-FLO-IIVI	Inputs	pole terminal block of the module	rated voltage. 24v DO
	1		sensor supply:
	1		24V dc, 1A maximum per pole, unfused



Model	Туре	Main Input	Auxiliary Input / Output
UR20-4DO-P	4 Digital	rated voltage: 24V DC from	rated voltage:
	Outputs	internal O bus	24V DC
UR20-4DO-N	'		output current (DO):
			0.5A resistive maximum per output
			sensor supply (auxiliary 24VDC):
			2A maximum per sensor, unfused
UR20-4DO-P-2A	4 Digital	rated voltage: 24V DC from	rated voltage:
CREG IBO I ER	Outputs	internal O bus	24V DC
UR20-4DO-N-2A	Outputs	internal o bas	output current (DO):
UN20-4DO-14-2A			2A resistive or tungsten maximum per output
			2A resistive of tungsterr maximum per output
			sensor supply (auxiliary 24VDC):
			2A maximum per sensor, unfused
			Total current:
			10A per module
LIDOS SDO D	0.0:-:4-1		
UR20-8DO-P	8 Digital	rated voltage: 24V DC from	rated voltage:
LIDOS ODO D OM/LID	Outputs	internal O bus	24V DC
UR20-8DO-P-2W-HD			output current:
			24Vdc, 0.5A resistive or tungsten maximum
UR20-8DO-N			per output
UR20-16DO-P	16 Digital	rated voltage: 24V DC from	rated voltage:
	Outputs	internal bus	24V DC
UR20-16DO-N			output current:
			24Vdc, 0.5A resistive or tungsten maximum
			per output
UR20-16DO-N-PLC-INT	16 Digital	rated voltage: 24V DC from the 4	24V DC 0.5 A General Purpose (per output
	Outputs	pole terminal block of the module	channel)
UR20-16DO-P-PLC-INT	16 Digital	rated voltage: 24V DC from the 4	rated voltage:
0.120 .020 20	Outputs	pole terminal block of the module	24V DC
	Carpato	pole terminal block of the medale	output current (auxiliary supply):
			24Vdc, 1A maximum per pole, unfused
UR20-4RO-CO-255	4 Relay	rated voltage: 24V DC from	rated voltage:
01/20-41/0-00-255	Outputs	internal O bus	250Vac
	Outputs	internal O bus	250 V aC
			rated current:
			2.4A per channel at 60°C and 3A per channel at 55°C
LID20 4ALLII 46	1 or 0	rated valtage: 24\/ DC frame	type of input:
UR20-4AI-UI-16	4 or 8	rated voltage: 24V DC from	
LIDOO AALLII 40	Analog	internal I bus	analog +/-10V, +/-5V, 010V, 05V, 210V,
UR20-4AI-UI-12	Inputs		15V, 020mA or 420mA
LIDOO AALLII 10 LID			sensor supply:
UR20-4AI-UI-16-HD			
			24Vdc, 2A maximum per sensor, unfused,
UR20-8AI-I-16-DIAG-			24Vdc, 2A maximum per sensor, unfused, 0.5A for HD version, fused
UR20-8AI-I-16-DIAG- HD			
UR20-8AI-I-16-DIAG- HD UR20-8AI-I-16-HD			0.5A for HD version, fused
UR20-8AI-I-16-DIAG- HD	8 Analog	rated voltage: 24V DC from the 4	0.5A for HD version, fused type of input:
UR20-8AI-I-16-DIAG- HD UR20-8AI-I-16-HD	8 Analog Inputs	rated voltage: 24V DC from the 4 pole terminal block of the module	0.5A for HD version, fused
UR20-8AI-I-16-DIAG- HD UR20-8AI-I-16-HD		9	0.5A for HD version, fused type of input:
UR20-8AI-I-16-DIAG- HD UR20-8AI-I-16-HD		9	0.5A for HD version, fused type of input:
UR20-8AI-I-16-DIAG- HD UR20-8AI-I-16-HD		9	0.5A for HD version, fused type of input: analog 020mA or 420mA
UR20-8AI-I-16-DIAG- HD UR20-8AI-I-16-HD	Inputs	pole terminal block of the module	type of input: analog 020mA or 420mA sensor supply: 24Vdc, 1A maximum, fused
UR20-8AI-I-16-DIAG- HD UR20-8AI-I-16-HD UR20-8AI-I-PLC-INT	Inputs 4 Analog	pole terminal block of the module rated voltage:	type of input: analog 020mA or 420mA sensor supply: 24Vdc, 1A maximum, fused type of output:
UR20-8AI-I-16-DIAG- HD UR20-8AI-I-16-HD UR20-8AI-I-PLC-INT	Inputs	pole terminal block of the module	type of input: analog 020mA or 420mA sensor supply: 24Vdc, 1A maximum, fused type of output: analog +/-10V, +/-5V, 010V, 05V, 210V,
UR20-8AI-I-16-DIAG- HD UR20-8AI-I-16-HD UR20-8AI-I-PLC-INT	Inputs 4 Analog	pole terminal block of the module rated voltage:	type of input: analog 020mA or 420mA sensor supply: 24Vdc, 1A maximum, fused type of output:
UR20-8AI-I-16-DIAG- HD UR20-8AI-I-16-HD UR20-8AI-I-PLC-INT UR20-4AO-UI-16 UR20-4AO-UI-16-DIAG	Inputs 4 Analog	pole terminal block of the module rated voltage:	type of input: analog 020mA or 420mA sensor supply: 24Vdc, 1A maximum, fused type of output: analog +/-10V, +/-5V, 010V, 05V, 210V,
UR20-8AI-I-16-DIAG- HD UR20-8AI-I-16-HD UR20-8AI-I-PLC-INT UR20-4AO-UI-16 UR20-4AO-UI-16-DIAG UR20-4AO-UI-16-DIAG-	Inputs 4 Analog	pole terminal block of the module rated voltage:	type of input: analog 020mA or 420mA sensor supply: 24Vdc, 1A maximum, fused type of output: analog +/-10V, +/-5V, 010V, 05V, 210V,
UR20-8AI-I-16-DIAG- HD UR20-8AI-I-16-HD UR20-8AI-I-PLC-INT UR20-4AO-UI-16 UR20-4AO-UI-16-DIAG	Inputs 4 Analog	pole terminal block of the module rated voltage:	type of input: analog 020mA or 420mA sensor supply: 24Vdc, 1A maximum, fused type of output: analog +/-10V, +/-5V, 010V, 05V, 210V,
UR20-8AI-I-16-DIAG- HD UR20-8AI-I-16-HD UR20-8AI-I-PLC-INT UR20-4AO-UI-16 UR20-4AO-UI-16-DIAG UR20-4AO-UI-16-DIAG-HD	Inputs 4 Analog	pole terminal block of the module rated voltage:	type of input: analog 020mA or 420mA sensor supply: 24Vdc, 1A maximum, fused type of output: analog +/-10V, +/-5V, 010V, 05V, 210V,
UR20-8AI-I-16-DIAG- HD UR20-8AI-I-16-HD UR20-8AI-I-PLC-INT UR20-4AO-UI-16 UR20-4AO-UI-16-DIAG UR20-4AO-UI-16-DIAG-HD UR20-4AO-UI-16-HD	4 Analog Outputs	pole terminal block of the module rated voltage: 24V DC from internal O bus	type of input: analog 020mA or 420mA sensor supply: 24Vdc, 1A maximum, fused type of output: analog +/-10V, +/-5V, 010V, 05V, 210V, 15V, 020mA or 420mA
UR20-8AI-I-16-DIAG- HD UR20-8AI-I-16-HD UR20-8AI-I-PLC-INT UR20-4AO-UI-16 UR20-4AO-UI-16-DIAG UR20-4AO-UI-16-DIAG-HD	4 Analog Outputs	rated voltage: 24V DC from	type of input: analog 020mA or 420mA sensor supply: 24Vdc, 1A maximum, fused type of output: analog +/-10V, +/-5V, 010V, 05V, 210V, 15V, 020mA or 420mA
UR20-8AI-I-16-DIAG- HD UR20-8AI-I-16-HD UR20-8AI-I-PLC-INT UR20-4AO-UI-16 UR20-4AO-UI-16-DIAG UR20-4AO-UI-16-DIAG-HD UR20-4AO-UI-16-HD UR20-2AO-UI-16	4 Analog Outputs	pole terminal block of the module rated voltage: 24V DC from internal O bus	type of input: analog 020mA or 420mA sensor supply: 24Vdc, 1A maximum, fused type of output: analog +/-10V, +/-5V, 010V, 05V, 210V, 15V, 020mA or 420mA
UR20-8AI-I-16-DIAG-HD UR20-8AI-I-16-HD UR20-8AI-I-16-HD UR20-8AI-I-PLC-INT UR20-4AO-UI-16 UR20-4AO-UI-16-DIAG-HD UR20-4AO-UI-16-HD UR20-2AO-UI-16	4 Analog Outputs 2 Analog Outputs	rated voltage: 24V DC from internal O bus	type of input: analog 020mA or 420mA sensor supply: 24Vdc, 1A maximum, fused type of output: analog +/-10V, +/-5V, 010V, 05V, 210V, 15V, 020mA or 420mA type of output: analog +/-10V, +/-5V, 010V, 05V, 210V, 15V, 020mA or 420mA
UR20-8AI-I-16-DIAG- HD UR20-8AI-I-16-HD UR20-8AI-I-PLC-INT UR20-4AO-UI-16 UR20-4AO-UI-16-DIAG UR20-4AO-UI-16-DIAG-HD UR20-4AO-UI-16-HD UR20-2AO-UI-16	4 Analog Outputs 2 Analog Outputs 4 Analog	rated voltage: 24V DC from internal O bus rated voltage: 24V DC from internal O bus	type of input: analog 020mA or 420mA sensor supply: 24Vdc, 1A maximum, fused type of output: analog +/-10V, +/-5V, 010V, 05V, 210V, 15V, 020mA or 420mA type of output: analog +/-10V, +/-5V, 010V, 05V, 210V, 15V, 020mA or 420mA type of input:
UR20-8AI-I-16-DIAG-HD UR20-8AI-I-16-HD UR20-8AI-I-16-HD UR20-8AI-I-PLC-INT UR20-4AO-UI-16 UR20-4AO-UI-16-DIAG-HD UR20-4AO-UI-16-HD UR20-2AO-UI-16 UR20-2AO-UI-16 UR20-4AI-UI-16-DIAG	4 Analog Outputs 2 Analog Outputs	rated voltage: 24V DC from internal O bus	type of input: analog 020mA or 420mA sensor supply: 24Vdc, 1A maximum, fused type of output: analog +/-10V, +/-5V, 010V, 05V, 210V, 15V, 020mA or 420mA type of output: analog +/-10V, +/-5V, 010V, 05V, 210V, 15V, 020mA or 420mA type of input: analog +/-10V, +/-5V, 010V, 05V, 210V, analog +/-10V, +/-5V, 010V, 05V, 210V,
UR20-8AI-I-16-DIAG-HD UR20-8AI-I-16-HD UR20-8AI-I-16-HD UR20-8AI-I-PLC-INT UR20-4AO-UI-16 UR20-4AO-UI-16-DIAG-HD UR20-4AO-UI-16-HD UR20-2AO-UI-16	4 Analog Outputs 2 Analog Outputs 4 Analog	rated voltage: 24V DC from internal O bus rated voltage: 24V DC from internal O bus	type of input: analog 020mA or 420mA sensor supply: 24Vdc, 1A maximum, fused type of output: analog +/-10V, +/-5V, 010V, 05V, 210V, 15V, 020mA or 420mA type of output: analog +/-10V, +/-5V, 010V, 05V, 210V, 15V, 020mA or 420mA type of input:
UR20-8AI-I-16-DIAG-HD UR20-8AI-I-16-HD UR20-8AI-I-16-HD UR20-8AI-I-PLC-INT UR20-4AO-UI-16 UR20-4AO-UI-16-DIAG-HD UR20-4AO-UI-16-HD UR20-2AO-UI-16 UR20-2AO-UI-16 UR20-4AI-UI-16-DIAG	4 Analog Outputs 2 Analog Outputs 4 Analog	rated voltage: 24V DC from internal O bus rated voltage: 24V DC from internal O bus	type of input: analog 020mA or 420mA sensor supply: 24Vdc, 1A maximum, fused type of output: analog +/-10V, +/-5V, 010V, 05V, 210V, 15V, 020mA or 420mA type of output: analog +/-10V, +/-5V, 010V, 05V, 210V, 15V, 020mA or 420mA type of input: analog +/-10V, +/-5V, 010V, 05V, 210V, analog +/-10V, +/-5V, 010V, 05V, 210V,
UR20-8AI-I-16-DIAG-HD UR20-8AI-I-16-HD UR20-8AI-I-16-HD UR20-8AI-I-PLC-INT UR20-4AO-UI-16 UR20-4AO-UI-16-DIAG-HD UR20-4AO-UI-16-HD UR20-2AO-UI-16 UR20-2AO-UI-16-DIAG UR20-4AI-UI-16-DIAG UR20-4AI-UI-16-DIAG	4 Analog Outputs 2 Analog Outputs 4 Analog	rated voltage: 24V DC from internal O bus rated voltage: 24V DC from internal O bus	type of input: analog 020mA or 420mA sensor supply: 24Vdc, 1A maximum, fused type of output: analog +/-10V, +/-5V, 010V, 05V, 210V, 15V, 020mA or 420mA type of output: analog +/-10V, +/-5V, 010V, 05V, 210V, 15V, 020mA or 420mA type of input: analog +/-10V, +/-5V, 010V, 05V, 210V, analog +/-10V, +/-5V, 010V, 05V, 210V,
UR20-8AI-I-16-DIAG-HD UR20-8AI-I-16-HD UR20-8AI-I-16-HD UR20-8AI-I-PLC-INT UR20-4AO-UI-16 UR20-4AO-UI-16-DIAG-HD UR20-4AO-UI-16-HD UR20-2AO-UI-16 UR20-2AO-UI-16-DIAG UR20-4AI-UI-16-DIAG UR20-4AI-UI-16-DIAG	4 Analog Outputs 2 Analog Outputs 4 Analog	rated voltage: 24V DC from internal O bus rated voltage: 24V DC from internal O bus	type of input: analog 020mA or 420mA sensor supply: 24Vdc, 1A maximum, fused type of output: analog +/-10V, +/-5V, 010V, 05V, 210V, 15V, 020mA or 420mA type of output: analog +/-10V, +/-5V, 010V, 05V, 210V, 15V, 020mA or 420mA type of input: analog +/-10V, +/-5V, 010V, 05V, 210V, 15V, 020mA or 420mA
UR20-8AI-I-16-DIAG-HD UR20-8AI-I-16-HD UR20-8AI-I-16-HD UR20-8AI-I-PLC-INT UR20-4AO-UI-16 UR20-4AO-UI-16-DIAG-HD UR20-4AO-UI-16-HD UR20-2AO-UI-16 UR20-2AO-UI-16-DIAG UR20-4AI-UI-16-DIAG UR20-4AI-UI-16-DIAG	4 Analog Outputs 2 Analog Outputs 4 Analog	rated voltage: 24V DC from internal O bus rated voltage: 24V DC from internal O bus	type of input: analog 020mA or 420mA sensor supply: 24Vdc, 1A maximum, fused type of output: analog +/-10V, +/-5V, 010V, 05V, 210V, 15V, 020mA or 420mA type of output: analog +/-10V, +/-5V, 010V, 05V, 210V, 15V, 020mA or 420mA type of input: analog +/-10V, +/-5V, 010V, 05V, 210V, 15V, 020mA or 420mA sensor supply:
UR20-8AI-I-16-DIAG-HD UR20-8AI-I-16-HD UR20-8AI-I-16-HD UR20-8AI-I-PLC-INT UR20-4AO-UI-16 UR20-4AO-UI-16-DIAG-HD UR20-4AO-UI-16-HD UR20-2AO-UI-16-DIAG UR20-2AO-UI-16-DIAG UR20-4AI-UI-16-DIAG UR20-4AI-UI-16-DIAG	4 Analog Outputs 2 Analog Outputs 4 Analog Inputs	rated voltage: 24V DC from internal O bus rated voltage: 24V DC from internal O bus rated voltage: 24V DC from internal O bus	type of input: analog 020mA or 420mA sensor supply: 24Vdc, 1A maximum, fused type of output: analog +/-10V, +/-5V, 010V, 05V, 210V, 15V, 020mA or 420mA type of output: analog +/-10V, +/-5V, 010V, 05V, 210V, 15V, 020mA or 420mA type of input: analog +/-10V, +/-5V, 010V, 05V, 210V, 15V, 020mA or 420mA sensor supply: 24Vdc, 0.5A fused
UR20-8AI-I-16-DIAG-HD UR20-8AI-I-16-HD UR20-8AI-I-16-HD UR20-8AI-I-PLC-INT UR20-4AO-UI-16 UR20-4AO-UI-16-DIAG-HD UR20-4AO-UI-16-HD UR20-2AO-UI-16-DIAG UR20-2AO-UI-16-DIAG UR20-4AI-UI-16-DIAG UR20-4AI-UI-16-DIAG	1 Analog Outputs 2 Analog Outputs 4 Analog Inputs 2 Analog Inputs	rated voltage: 24V DC from internal O bus rated voltage: 24V DC from internal O bus rated voltage: 24V DC from internal I bus	type of input: analog 020mA or 420mA sensor supply: 24Vdc, 1A maximum, fused type of output: analog +/-10V, +/-5V, 010V, 05V, 210V, 15V, 020mA or 420mA type of output: analog +/-10V, +/-5V, 010V, 05V, 210V, 15V, 020mA or 420mA type of input: analog +/-10V, +/-5V, 010V, 05V, 210V, 15V, 020mA or 420mA sensor supply: 24Vdc, 0.5A fused type of input: analog +/-10V, +/-5V, 010V,



[14]

Model	Type	Main Input	Auxilian/Input / Output
Model	Type	Main Input	Auxiliary Input / Output
UR20-4AI-RTD-DIAG	4 or 8	rated voltage:	type of input:
UR20-4AI-RTD-HP-	Analog	24V DC from internal I bus	analog
DIAG	Inputs		Pt100, Pt200, Pt500, Pt1000, Ni100, Ni120,
UR20-8AI-RTD-DIAG-	Resistive		Ni 200, Ni500, Ni1000, Cu10, 40 Ω, 80 Ω, 150
2W	Temperature		Ω, 300 $Ω$, 500 $Ω$, 1 k $Ω$, 2 k $Ω$, 4 k $Ω$
	Detection		
UR20-4AI-TC-DIAG	4 Analog	rated voltage: 24V DC from internal	type of input:
	Inputs	I bus	analog
	Thermocoup		TC type J, K, T, B, N, E, R, S, L, U, C, mV
	le		+/-15.625mV, +/-31.25mV, +/-62.5mV, +/-
			125mV +/-250mV, 500mV, +/-1000mV, +/-
LIDOS DE I	Danier Farad	nata di calta da	2000mV
UR20-PF-I	Power Feed	rated voltage:	rated voltage:
	Input	24V DC from 4 pole terminal block	24V DC
			note de composito
			rated current:
LID20 DE O	Dawer Food	roted voltore.	10A
UR20-PF-O	Power Feed	rated voltage:	rated voltage: 24V DC
	Output	24V DC from the 4 pole terminal block	24V DC
		DIOCK	roted currents
			rated current: 10A
UR20-16AUX-GND-I	Potential	rated voltage:	0V / GND
UKZU-10AUX-GND-I	Potential Distribution	rated voltage: 24V DC from internal I bus	rated current:
UR20-16AUX-I	Module for	24V DO HOM INTERNATIONS	10A
UNZU-10AUA-1			IVA
UR20-ES	Input Current Path		
UR20-16AUX-GND-O	Potential	rated voltage:	0V / GND
SAZO-TOAGA-GIND-O	Distribution	24V DC from internal O bus	rated current:
UR20-16AUX-O	Module for	24V DO HOM Internal O bus	10A
01120-10A0X-0	Output		10/4
UR20-16AUX-FE	Current Path		
UR20-8DI-P-3W	8 Digital	rated voltage:	rated voltage:
CREO OBIT OW	Inputs	24V DC from internal I bus	24V DC
UR20-8DI-P-2W	Inputs	24V BO HOM Memai 1 Bas	247 00
ONZO-ODI-1 -ZVV			sensor supply:
UR20-8DI-P-3W-HD			24Vdc, 2A maximum per sensor unfused,
0.120 02.1. 011 1.2			HD version FWT 1 to 4: 0.5A maximum total
UR20-8DI-N-3W			current, FWT 5 to 8: 0.5A maximum total
			current
UR20-2FCNT-100	Counter with	rated voltage: 24V DC from internal	rated voltage:
	or without	I bus	24V DC
UR20-1CNT100-1DO	digital output		
			output current 1CNT-1DO:
UR20-2CNT-100			0.5A resistive maximum per output
			F F
			sensor supply:
			24Vdc , 2A maximum per sensor unfused
UR20-2PWM-PN-0.5A	Pulse Width	rated voltage: 24V DC from internal	rated voltage:
	Controller	O bus	24V DC
UR20-2PWM-PN-2A	with 0.5A or		
	2A output		output current:
			0.5(forPN-0.5A models)
			2A (forPN-2A models) resistive maximum
			per output
			sensor supply:
11000 100 511 51	15: 11:		24Vdc, 2A maximum per sensor unfused
UR20-4DO-PN-2A	4 Digital	rated voltage: 24V DC from	rated voltage:
	Outputs	internal O bus	24V DC
			l
			output current:
			2A resistive or tungsten maximum per output
			sensor supply:
			24Vdc , 2A maximum per sensor, unfused
			1-1-1
			total current per module: 10A maximum



Model	Typo	Main Input	Auxiliary Input / Output
UR20-4RO-SSR-255	Type 4 Solid State	Iviairi iriput	rated voltage:
01120 4110 COIN 200	Relay Outputs		24V DC
	Calpaio		SSR rated voltage: 250Vac
			SSR rated current: 1A resistive maximum per channel, unfused
UR20-PF-O-1DI-SIL	Power Feed	rated voltage:	rated voltage:
UR20-PF-O-2DI-SIL	Output	24V DC from the 4 pole terminal block of the module	24V DC
UR20-PF-O-2DI-			rated current: OSSD: 8A resistive
DELAY-SIL UR20-1COM-232-485-	1 Port Digital	rated voltage: 24 V DC from	SSI: 0.5A resistive Data interface signal:
422 UR20-1SSI-BTL	Interface	internal I bus	232, 485 or 422
			Load sensor supply: 0.4A (5V) or 0.5A (24V)
UR20-1SSI	1 Port	rated voltage: 24V DC from	1 RS422 Output
	Synchron Serial Input Card	internal I bus	2 RS422 Input
UR20-1CNT-500	1 Port Counter Inout Card for	rated voltage: 24V DC from internal I bus	3 RS422 Inputs
UR20-4DI-4DO-PN-	Incremental Encoder 4 digital	rated voltage: 24V DC from internal	Load output rail: 6.4A
FSPS	inputs and 4	bus	Load input rail: 10A
UR20-4DI-4DO-PN- FSPS-V2	outputs		Load bus rail: 2.56A
			Input Signal P-Mode:
UR20-4DI-4DO-PN- FSOE			24V / N-Mode: 0V
UR20-4DI-4DO-PN- FSOE-V2			Load Sensor Supply: 0.8A, each channel
1302-72			Load Output signal: 0.5A, each channel
UR20-8DI-PN-FSPS	8 digital	rated voltage: 24V DC from internal	Load output rail: 6.4A
UR20-8DI-PN-FSPS-V2	inputs	I bus	Load input rail: 10A
UR20-8DI-PN-FSOE			Load bus rail: 2.56A
UR20-8DI-PN-FSOE-V2			Input Signal P-Mode: 24V / N-Mode: 0V
			Load Sensor Supply: 0.8A, each channel
			Load Output signal: 0.5A, each channel
UR20-4DI-2W-230V-AC	4 Digital	rated voltage: 24 V	Rated input voltage: 230V AC
UR20-1COM-SAI-PRO	1 Port Communicat	rated voltage: 24V DC from internal I bus	Input signal: SAI-PRO-Module
	ion Extension		Load sensor supply: 3A
UR20-4AI-R-HS-16-	Al Module	Rated voltage: 24V DC from	Type of input: analog 3000hm50k0hm
DIAG	4 analog inputs	internal I bus	Potentiometer supply (internal 10V DC): 50mA maximum per potentiometer, unfused
UR20-2AI-SG-24-DIAG	Strain	5Vdc system bus	rated voltage: 24V DC
	Gauge module	24V DC from internal I bus	
	2 Analog Inputs		



[14]

Model	Typo	Main Input	Auxiliary Input / Output
Model UR20-4AO-UI-16-M	Type AO Module		, , ,
	AO Module	5Vdc system bus 24V DC from internal O bus	Voltage: 05V, ±5V, 010V,
UR20-4AO-UI-16-M- DIAG	4 analog	24V DC Hom Internal O bus	
DIAG	4 analog		±10V, 15V, 210V
	outputs		Current:
11000 (1111) 015 (0			020mA, 420mA
UR20-4AI-UI-DIF-16-	Al Module	5Vdc system bus	Voltage:
DIAG		24V DC from internal I bus	05V, ±5V, 010V,
UR20-4AI-UI-DIF-32-	4 analog		±10V, 15V, 210V
DIAG	inputs		Current:
			020mA, 420mA
UR20-4COM-IO-LINK	Comm.	5Vdc system bus	0,5 A per channel,
	Module	24V DC from internal I bus	total max. 2 A
UR20-8DIO-P-3W-DIAG	Digital I/O	5Vdc system bus: 8mA 24Vdc	8 output channels ≤ 0.5 A each
	Module	output rail: 34mA + 4*0.3 A sensor	
		supply	
UR20-1SM-50W-	Stepper	5Vdc system bus: 8mA	2 output channels ≤ 0.5 A each
6DI2DO-P	Motor	24Vdc input current path: 27 mA	6 input channels max. 0.5 A each
	Module	24Vdc output current path: 10 mA	For 40°C ambient:
			Stepper motor supply 50 V, 2 A;
			For 60°C ambient:
			Stepper motor supply 30 V, 1 A
UR20-FBC-PB-DP-V2	Bus Coupler	Input voltage I port: DC 24V +20%/-	Output voltage system bus:
	Profibus DP	15%	5Vdc +/-2%
	1	Input current at I port at full load:	Output current at system bus at full load:
		≤10A	2.56A
		=10/1	2.0071
		Input voltage O port: DC 24V	Output / input current at O / I Port at full load:
		+20%/-15%	10A at 60°C, horizontal mounting.
		12070/ 1070	107 tat 00 0, nonzontar mounting.
		Input current at O port at full load:	
		≤10A	
UR20-FBC-CC	Bus Coupler	Input voltage I port: DC 24V +20%/-	Output voltage system bus:
UNZU-FBC-CC	CC-Link		
	CC-LINK	15%	5Vdc +/-2%
		Innut aument at I new at full leads	Output surrent at surten bus at full leads
		Input current at I port at full load:	Output current at system bus at full load:
		≤10A	2.56A
		land with a O and DO OAV	Outside / install assessment at O / I Dark at fall I and
		Input voltage O port: DC 24V	Output / input current at O / I Port at full load:
		+20%/-15%	10A at 60°C, horizontal mounting.
		land to summer at O a art at full land.	
		Input current at O port at full load:	
11000 001 100 014	<u> </u>	≤10A	04374
UR20-8DI-ISO-2W	DI module	5 V DC 8 mA from system bus	24 Vdc and 48 Vdc input types
	8 digital		
	inputs		
UR20-4AI-I-HART-16-	Al Module	Rated voltage: 24V DC from	Type of input: analog HART 020mA or
DIAG	1	internal I bus	420mA;
	4 analog		Sensor supply (auxiliary 24V DC):0.5A
	inputs		maximum per sensor, fused
UR20-4AI-UI-ISO-16-	Al Module	Rated voltage: 24V DC from	Type of input: analog +/-10V, +/-5V, 010V,
DIAG	1	internal I bus	05V, 210V, 15V, 020mA or 420mA
	4 analog		
	inputs		
UR20-1COM-	1 port	Rated voltage: 24V DC from	Data interface signal:
CANOPEN	Communicat	internal I bus	CANopen bus
	ion module		
UR20-FBC-CC-TSN	CC-Link IE	System supply:	System bus:
	TSN	SELV 24Vdc +20%/-15%	5Vdc +/-2%, 2.56A full load
	Fieldbus		·
	Coupler	Supply for I/O rails:	
	1	SELV 24Vdc +20%/-15%	
	1		
	1	Rail current in/out:	
	1	10A max. (horizontal mounting,	
]	60°C surrounding air temperature)	
UR20-2AO-UI-ISO-16-	AO Module	Rated voltage: 24V DC from	type of output: analog +/-10V, +/-5V, 010V,
DIAG	, to Module	internal O bus	05V, 210V, 15V, 020mA or 420mA
5.7.0	2 isolated	internal orbital	0 7 1
	analog		
	outputs		



[13]

[14]

Schedule TYPE EXAMINATION CERTIFICATE No. **DEMKO 15 ATEX 1525X Rev. 9**

Model	Туре	Main Input	Auxiliary Input / Output
UR20-4DO-ISO-4A	DO Module	Rated voltage: 24V DC from	Rated voltage: 48V DC / 24V AC (from
		internal O bus	external supply; not from O bus)
	4 isolated		output current: 4A DC / 2A AC maximum per
	digital		output;
	outputs		Total current per module: 16A DC / 8A AC
	·		maximum

The optical radiation output of the products with respect to explosion protection, according to Annex II clause 1.3.1 of the Directive 2014/34/EU is covered in this certificate based on Exception 1) to the scope of EN 60079-28:2015.

Temperature range:

The ambient temperature range is -20 °C to +60 °C unless otherwise specified in the table above.

Input = 24Vdc. Other ratings as per the above table.

According to EN IEC 60079-7, clause 7.1 in combination with clause 6.1, a dielectric strength test has to be carried out at 100% of the products. Alternatively, routine tests may be performed on a statistical basis according to ISO 2859-1 with an acceptance quality limit (AQL) of 0,04. Routine test is to be carried out according to the applicable industry standard.

[16] **Descriptive Documents**

The scheduled drawings are listed in the report no. provided under item no. [8] on page 1 of this Type Examination Certificate.

[17] Special Conditions of Use:

- The equipment shall be installed in an enclosure that provides a minimum ingress protection of IP 54 in accordance with EN 60079-0, accessible only by the use of a tool.
- The equipment shall only be used in an area of at least pollution degree 2, as defined in EN 60664-1.
- When using relay modules (UR20-4RO-CO-255; UR20-4RO-SSR-255) in explosive atmosphere: Transient protection shall be provided that is set at a level not exceeding 140 % of the peak rated voltage value at the supply terminals to the equipment.

[18]

Essential Health and Safety Requirements
The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.



