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. 14**
- [4] Product: Interface Modules, Open Type Programmable Controllers Series UR20 u-remote
- [5] Manufacturer: Weidmüller Interface GmbH & Co. KG

[1]

- [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/ExTR15.0014/14.

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

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

EN IEC 60079-7:2015/A1:2018

Where additional criteria beyond those given here have been used, they are listed at item 18 in 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" listed under item 17 of 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 (marking is provided in the Schedule as a part of item 15, if applicable):

II 3 G Ex ec nC IIC T4 Gc (model UR20-4RO-CO-255 only)

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

Certification Manager

Thomas Wilson

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: 2025-04-16

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

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Schedule TYPE EXAMINATION CERTIFICATE No. DEMKO 15 ATEX 1525X Rev. 14

[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, UR20-2PWM-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, UR20-4 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, UR20-1COM-232-485-422-V2, UR20-1SSI, UR20-4DI-2W-230V-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-4DO-N-2A, UR20-8DI-N-3W, UR20-8DO-N, UR20-4DI-4DO-PN-FSPS, UR20-4DI-4DO-PN-FSOE, UR20-8DI-PN-FSPS, UR2 PN-FSOE, UR20-FBC-CAN, UR20-FBC-DN, UR20-4AO-UI-16-DIAG-HD, UR20-4AO-UI-16-HD, UR20-1COM-SAI-PRO, UR20-4AI-R-HS-16-DIAG, UR20-16DO-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-FSPS-V2, UR20-4DI-4DO-PN-FSOE-V2, UR20-8DI-PN-FSPS-V2, UR20-8DI-PN-FSOE-V2, UR20-8DI-PN-F 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-CAN, UR20-1COM-CANOPEN, UR20-FBC-CC-TSN, UR20-2AO-UI-16-DIAG, UR20-2AO-UI-16, UR20-2AO-UI-1SO-16-DIAG, UR20-4DO-ISO-4A, UR20-2AI-UI-16, UR20-2AI-UI-16-DIAG, UR20-2PWM-I-2.5A-2DI-P, UR20-AUX-VSYS, UR20-8DI-PN-FSCC, UR20-4DI-4DO-PN-FSCC, UR20-4AI-I-HART-ISO-16 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 UR20-FBC-PN-IRT-V2	Bus Coupler ProfiNet IRT	Input voltage I port: DC 24V	Output voltage system bus: 5Vdc +/-2%
UR2U-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: 24Vdc, 10A at 55°C, 8A at 60°C
		Input current at O port at full load: <=10A	
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	



	LTuno	Main Input	Auxilian/Innut / Outrest
Model UR20-FBC-PB-DP	Type Bus Coupler	Main Input Input voltage I port:	Auxiliary Input / Output Output voltage system bus:
טועטיו טטירטיטר	Profibus DP	DC 24V	5Vdc +/-2%
		Input current at I port at full load: <=10A	Output current at system bus at full load: 2.56A
			Output / input current at O / I Port at full
		Input voltage O port: DC 24V	load: 24Vdc, 10A at 55°C, 8A 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%
		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-CAN	Bus Coupler CANopen	Input voltage I port: DC 24V	Output voltage system bus: 5Vdc +/-2%
UR20-FBC-DN		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	10A at 60°C
UR20-FBC-PL	Bus Coupler Powerlink	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 Input current at O port at full	Output / input current at O / I Port at full load:
		load: <=10A	8A at 60°C, horizontal mounting, 6A at 55°C, vertical mounting
UR20-FBC-MOD-TCP-V2	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 outrage O port: DC 24V	Output / input current at O / I Port at full
		Input current at O port at full load: <=10A	load: 8A at 60°C, horizontal mounting, 6A at 55°C, vertical mounting
UR20-4DI-P	2 or 4 Digital	rated voltage: 24V DC from	rated voltage:
UR20-2DI-P-TS	Inputs	internal I bus	24V DC
UR20-4DI-P-TS			sensor supply: 24Vdc, 2A resistive maximum per
UR20-4DI-N			sensor, unfused
UR20-16DI-P	16 Digital Inputs	rated voltage: 24V DC from internal I bus	rated voltage:
UR20-16DI-N	10.51		24V DC
UR20-16DI-N-PLC-INT	16 Digital Inputs	rated voltage: 24V DC from the 4 pole terminal block of the module	rated voltage: 24V DC



Model	Туре	Main Input	Auxiliary Input / Output
UR20-16DI-P-PLC-INT	16 Digital Inputs	rated voltage: 24V DC from	rated voltage: 24V DC
		the 4 pole terminal block of the module	sensor supply:
UR20-4DO-P	4 Digital Outputs	rated voltage: 24V DC from	24V dc, 1A maximum per pole, unfused rated voltage:
	4 Digital Outputs	internal O bus	24V DC
UR20-4DO-N			output current (DO): 0.5A resistive maximum per output
			sensor supply (auxiliary 24VDC):
UR20-4DO-P-2A	4 Digital Outputs	rated voltage: 24V DC from	2A maximum per sensor, unfused rated voltage:
	4 Digital Outputs	internal O bus	24V DC
UR20-4DO-N-2A			output current (DO): 2A resistive or tungsten maximum per
			output
			sensor supply (auxiliary 24VDC):
			2A maximum per sensor, unfused Total current:
			10A per module
UR20-8DO-P	8 Digital Outputs	rated voltage: 24V DC from internal O bus	rated voltage: 24V DC
UR20-8DO-P-2W-HD		internal O bus	output current:
LIDOO ODO N			24Vdc, 0.5A resistive, pilot duty or
UR20-8DO-N UR20-16DO-P	16 Digital	rated voltage: 24V DC from	tungsten maximum per output rated voltage:
LID00 40DO N	Outputs	internal bus	24V DC
UR20-16DO-N			output current: 24Vdc, 0.5A resistive, pilot duty or
LIDOO AODO NI DI O INT	40 Divital		tungsten maximum per output
UR20-16DO-N-PLC-INT	16 Digital Outputs	rated voltage: 24V DC from the 4 pole terminal block of	24V DC 0.5 A General Purpose (per output channel)
	'	the module	, , ,
UR20-16DO-P-PLC-INT	16 Digital Outputs	rated voltage: 24V DC from the 4 pole terminal block of	rated voltage: 24V DC
		the module	output current (auxiliary supply):
UR20-4RO-CO-255	4 Relay Outputs	rated voltage: 24V DC from	24Vdc, 1A maximum per pole, unfused rated voltage:
0.12010 00 200	Tribia, Calputo	internal O bus	250Vac
			rated current:
			2.4A per channel at 60°C and
UR20-4AI-UI-16	4 or 8 Analog	rated voltage: 24V DC from	3A per channel at 55°C type of input:
	Inputs	internal I bus	analog +/-10V, +/-5V, 010V, 05V,
UR20-4AI-UI-12			210V, 15V, 020mA or 420mA
UR20-4AI-UI-16-HD			sensor supply: 24Vdc, 2A maximum per sensor,
UR20-8AI-I-16-DIAG-HD			unfused, 0.5A for HD version, fused
UR20-8AI-I-16-HD UR20-8AI-I-PLC-INT	8 Analog Inputs	roted voltage: 04\/ DO fr	·
UKZU-ÖAI-I-PLU-INI	8 Analog Inputs	rated voltage: 24V DC from the 4 pole terminal block of	type of input: analog 020mA or 420mA
		the module	
			sensor supply: 24Vdc, 1A maximum, fused
UR20-4AO-UI-16	4 Analog Outputs	rated voltage: 24V DC from internal O bus	type of output: analog +/-10V, +/-5V, 010V, 05V,
UR20-4AO-UI-16-DIAG	σαιραίο	247 DO HOM INCENSE O DUS	210V, 15V, 020mA or 420mA
UR20-4AO-UI-16-DIAG-HD			
UR20-4AO-UI-16-HD			
UR20-2AO-UI-16	2 Analog Outputs	rated voltage: 24V DC from internal O bus	type of output: analog +/-10V, +/-5V, 010V, 05V, 210V, 15V, 020mA or
UR20-2AO-UI-16-DIAG	Cuipuis	internal O bus	420mA



Model	Туре	Main Input	Auxiliary Input / Output
UR20-4AI-UI-16-DIAG	4 Analog Inputs	rated voltage:	type of input:
UR20-4AI-UI-16-DIAG-HD		24V DC from internal I bus	analog +/-10V, +/-5V, 010V, 05V, 210V, 15V, 020mA or 420mA
			sensor supply: 24Vdc, 0.5A fused
UR20-2AI-UI-16	2 Analog Inputs	rated voltage: 24V DC from internal I bus	type of input: analog +/-10V, +/-5V,
UR20-2AI-UI-16-DIAG		internal i bus	010V, 05V, 210V, 15V, 020mA or 420mA
			sensor supply: 2A maximum per sensor, unfused.
UR20-4AI-RTD-DIAG	4 or 8 Analog	rated voltage: 24V DC from internal I bus	type of input:
UR20-4AI-RTD-HP-DIAG UR20-8AI-RTD-DIAG-2W	Inputs Resistive Temperature	24V DC from Internal I bus	analog Pt100, Pt200, Pt500, Pt1000, Ni100,
	Detection		Ni120, Ni 200, Ni500, Ni1000, Cu10, 40
			Ω , 80 Ω , 150 Ω , 300 Ω , 500 Ω , 1 k Ω , 2 k Ω , 4 k Ω
UR20-4AI-TC-DIAG	4 Analog Inputs Thermocouple	rated voltage: 24V DC from internal I bus	type of input: analog
	Петпосоцые	internal i bus	TC type J, K, T, B, N, E, R, S, L, U, C,
			mV +/-15.625mV, +/-31.25mV, +/-62.5mV,
			+/-125mV +/-250mV, 500mV, +/- 1000mV, +/-2000mV
UR20-PF-I	Power Feed	rated voltage:	rated voltage:
	Input	24V DC from 4 pole terminal block	24V DC
			rated current: 10A
UR20-PF-O	Power Feed	rated voltage:	rated voltage:
	Output	24V DC from the 4 pole terminal block	24V DC
		tomma proon	rated current:
UR20-16AUX-GND-I	Potential	rated voltage:	10A 0V / GND
UR20-16AUX-I	Distribution Module for Input	24V DC from internal I bus	rated current: 10A
	Current Path		104
UR20-ES UR20-16AUX-GND-O	Potential	rated voltage:	OV / GND
	Distribution	24V DC from internal O bus	rated current:
UR20-16AUX-O	Module for Output Current		10A
UR20-16AUX-FE	Path		
UR20-8DI-P-3W	8 Digital Inputs	rated voltage: 24V DC from internal I bus	rated voltage: 24V DC
UR20-8DI-P-2W			sensor supply:
UR20-8DI-P-3W-HD			24Vdc, 2A maximum per sensor
UR20-8DI-N-3W			unfused, HD version FWT 1 to 4: 0.5A maximum
			total current, FWT 5 to 8: 0.5A maximum total current
UR20-2FCNT-100	Counter with or without digital	rated voltage: 24V DC from internal I bus	rated voltage: 24V DC
UR20-1CNT100-1DO	output	internar i bus	
UR20-2CNT-100			output current 1CNT-1DO: 0.5A resistive maximum per output
			sensor supply:
			24Vdc , 2A maximum per sensor unfused
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Model	Type	Main Input	Auxiliary Input / Output
UR20-2PWM-PN-0.5A	Pulse Width	rated voltage: 24V DC from	rated voltage:
UR20-2PWM-PN-2A	Controller with 0.5A or 2A	internal O bus	24V DC
	output		output current: 0.5(forPN-0.5A models)
			2A (forPN-2A models) resistive maximum per output
			sensor supply: 24Vdc, 2A maximum per sensor unfused
UR20-4DO-PN-2A	4 Digital Outputs	rated voltage: 24V DC from internal O bus	rated voltage: 24V DC
			output current: 2A resistive or tungsten maximum per output
			sensor supply: 24Vdc , 2A maximum per sensor, unfused
11000 1000 0000 000	4.0.11.10		total current per module: 10A maximum
UR20-4RO-SSR-255	4 Solid State Relay Outputs		rated voltage: 24V DC
			SSR rated voltage: 250Vac
			SSR rated current: 1A resistive maximum per channel, unfused
UR20-PF-O-1DI-SIL	Power Feed Output	rated voltage: 24V DC from the 4 pole	rated voltage: 24V DC
UR20-PF-O-2DI-SIL		terminal block of the module	
UR20-PF-O-2DI-DELAY-SIL			rated current: OSSD: 8A resistive SSI: 0.5A resistive
UR20-1COM-232-485-422 UR20-1COM-232-485-422-V2 UR20-1SSI-BTL	1 Port Digital Interface	rated voltage: 24 V DC from internal I bus	Data interface signal: 232, 485 or 422
			Load sensor supply: 0.4A (5V) or 0.5A (24V) / 0.4A (5V) or 0.4A (24V)
UR20-1SSI	1 Port Synchron	rated voltage: 24V DC from	1 RS422 Output
325 100.	Serial Input Card	internal I bus	2 RS422 Input Load sensor supply:
			0.4A (5V) or 0.5A (24V)
UR20-1CNT-500	1 Port Counter	rated voltage: 24V DC from	3 RS422 Inputs
	Inout Card for Incremental Encoder	internal I bus	Load sensor supply: 0.4A (5V) or 0.5A (24V)
UR20-4DI-4DO-PN-FSPS	4 digital inputs and 4 digital	rated voltage: 24V DC from internal bus	Load output rail: 6.4A
UR20-4DI-4DO-PN-FSPS-V2	outputs	internal bus	Load input rail: 10A
UR20-4DI-4DO-PN-FSOE			Load bus rail: 2.56A
UR20-4DI-4DO-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



	Гуре В digital inputs	Main Input rated voltage: 24V DC from	Auxiliary Input / Output Load output rail: 6.4A
	0 1		Luau uulpul iail. 0.4A
UR20-8DI-PN-FSPS-V2		internal I bus	Load input rail: 10A
			Load bus rail: 2.56A
UR20-8DI-PN-FSOE			Input Signal P-Mode:
UR20-8DI-PN-FSOE-V2			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 Inputs	rated voltage: 24 V	Rated input voltage: 230V AC
	Port	rated voltage: 24V DC from	Input signal: SAI-PRO-Module
C	Communication Extension	internal I bus	Load sensor supply: 3A
	Al Module	Rated voltage: 24V DC from	Type of input: analog 300Ohm50kOhm
		internal I bus	Potentiometer supply (internal 10V DC):
4	analog inputs		50mA maximum per potentiometer, unfused
	Strain Gauge nodule	5Vdc system bus 24V DC from internal I bus	rated voltage: 24V DC
	2 Analog		
	nputs AO Module	F\/da ayatam bya	Voltage:
UR20-4AO-UI-16-M UR20-4AO-UI-16-M-DIAG	AO Module	5Vdc system bus 24V DC from internal O bus	Voltage:
	analog outputs	24V DC Irom Internal O bus	05V, ±5V, 010V, ±10V, 15V, 210V
	r analog outputs		Current:
			020mA, 420mA
UR20-4AI-UI-DIF-16-DIAG A	Al Module	5Vdc system bus	Voltage:
UR20-4AI-UI-DIF-32-DIAG		24V DC from internal I bus	05V, ±5V, 010V,
4	analog inputs		±10V, 15V, 210V
			Current:
11700 1001110 111111		-144	020mA, 420mA
	Comm. Module	5Vdc system bus 24V DC from internal I bus	0,5 A per channel, total max. 2 A
	Digital I/O Module	5Vdc system bus: 8mA 24Vdc output rail: 34mA + 4*0.3 A sensor supply	8 output channels ≤ 0.5 A each
	Stepper Motor Module	5Vdc system bus: 8mA 24Vdc input current path: 27	2 output channels ≤ 0.5 A each 6 input channels max. 0.5 A each
l Iv	vioduio	mA	For 40°C ambient:
		24Vdc output current path:	Stepper motor supply 50 V, 2 A;
		10 mA	For 60°C ambient:
			Stepper motor supply 30 V, 1 A
	Bus Coupler Profibus DP	Input voltage I port: DC 24V +20%/-15%	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 +20%/-15%	Output / input current at O / I Port at full load:
		. 20/0/ 10/0	10A at 60°C, horizontal mounting.
		Input current at O port at full load: ≤10A	
UR20-FBC-CC B	Bus Coupler	Input voltage I port: DC 24V	Output voltage system bus:
	CC-Link	+20%/-15%	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
		+20%/-15%	load: 10A at 60°C, horizontal mounting.
		Input current at O port at full load: ≤10A	



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Model Туре Main Input Auxiliary Input / Output UR20-8DI-ISO-2W DI module 5 V DC 8 mA from system 24 Vdc and 48 Vdc input types 8 digital inputs UR20-4AI-I-HART-16-DIAG Al Module Rated voltage: 24V DC from Type of input: analog HART 0..20mA or internal I bus 4..20mA: 4 analog inputs Sensor supply (auxiliary 24V DC):0.5A maximum per sensor, fused UR20-4AI-UI-ISO-16-DIAG Al Module Rated voltage: 24V DC from Type of input: analog +/-10V, +/-5V, 0..10V, 0..5V, 2..10V, 1..5V, 0..20mA or internal I bus 4 analog inputs 4..20mA UR20-1COM-CAN, UR20-Rated voltage: 24V DC from Data interface signal: 1 port 1COM-CANOPEN Communication internal I bus CANopen bus module UR20-FBC-CC-TSN CC-Link IE TSN System supply: System bus: Fieldbus SELV 24Vdc +20%/-15% 5Vdc +/-2%, 2.56A full load Coupler Supply for I/O rails: SELV 24Vdc +20%/-15% Rail current in/out: 10A max. (horizontal mounting, 60°C surrounding air temperature) Rated voltage: 24V DC from UR20-2AO-UI-ISO-16-DIAG **AO Module** type of output: analog +/-10V, +/-5V, internal O bus 0..10V, 0..5V, 2..10V, 1..5V, 0..20mA or 2 isolated 4..20mA analog outputs Rated voltage: 48V DC / 24V AC (from UR20-4DO-ISO-4A DO Module Rated voltage: 24V DC from internal O bus external supply; not from O bus) 4 isolated digital output current: 4A DC / 2A AC outputs maximum per output; Total current per module: 16A DC / 8A AC maximum UR20-2PWM-I-2.5A-2DI-P PWM Module 2 Inputs, -30... +30Vdc Rated voltage: 24V DC from with 2 PWM internal O bus Sensor supply (auxiliary 24V outputs; DC): 0.3 A maximum per sensor, 2 digital inputs fused 2 PWM outputs: 24V DC, max 3A, 1-channel operation; 24Vdc DC, max 2.5A, 2-channel <u>opera</u>tion UR20-AUX-VSYS Auxiliary module Rated voltage: 5V DC from N/A internal system bus; rated current 820 mA UR20-8DI-PN-FSCC Digital input Rated voltage: 24V DC from Input Signal P-Mode: 24V / N-Mode: 0V UR20-8DI-PN-FSPS-V2 (alt. module with 8 Load Sensor Supply: 0.8A, each internal bus construction) digital inputs channel (4) UR20-8DI-PN-FSOE-V2(alt. construction) UR20-4DI-4DO-PN-FSCC Rated voltage: 24V DC from Input Signal P-Mode: 24V / N-Mode: 0V Digital input and UR20-4DI-4DO-PN-FSPS-V2 output module Load Output signal: 0.5A, each channel internal bus (alt. construction) with 4 digital (4) UR20-4DI-4DO-PN-FSOE-V2 inputs and 4 Load Sensor Supply: 0.8A, each digital outputs channel (2) (alt. construction) UR20-4AI-I-HART-ISO-16 Type of input: 0..20mA, 4..20mA, Analogue input Rated voltage: 24V DC from module with 4 internal bus 4..20mA HART analogue inputs

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.

Electrical data

 $\overline{\text{Input}} = 24 \text{Vdc}$. Other ratings as per the above table.



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Routine tests:

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] Specific Conditions of Use:

- The equipment shall be installed in an enclosure that provides a minimum ingress protection of IP 54 in accordance with EN IEC 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.



