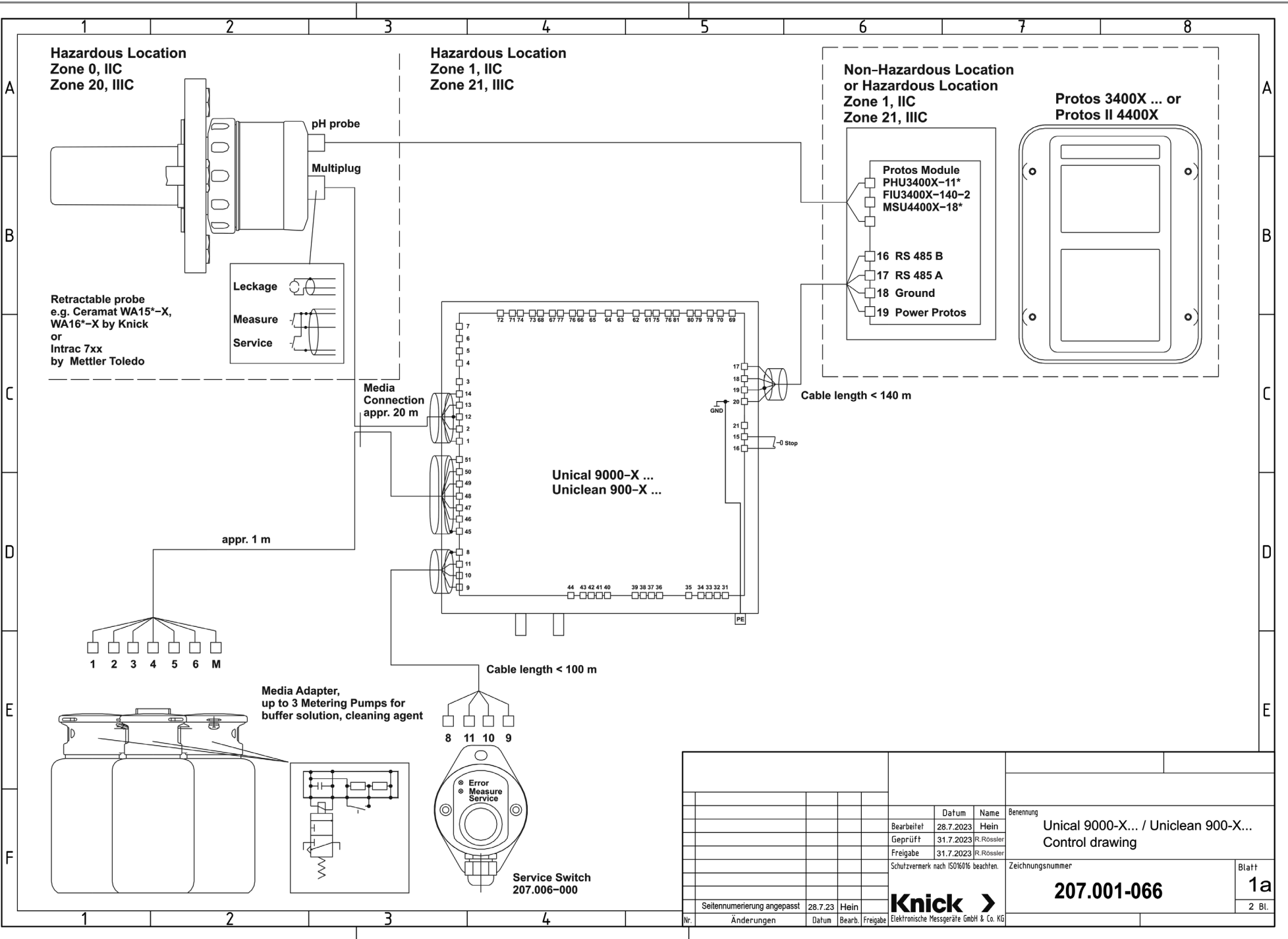


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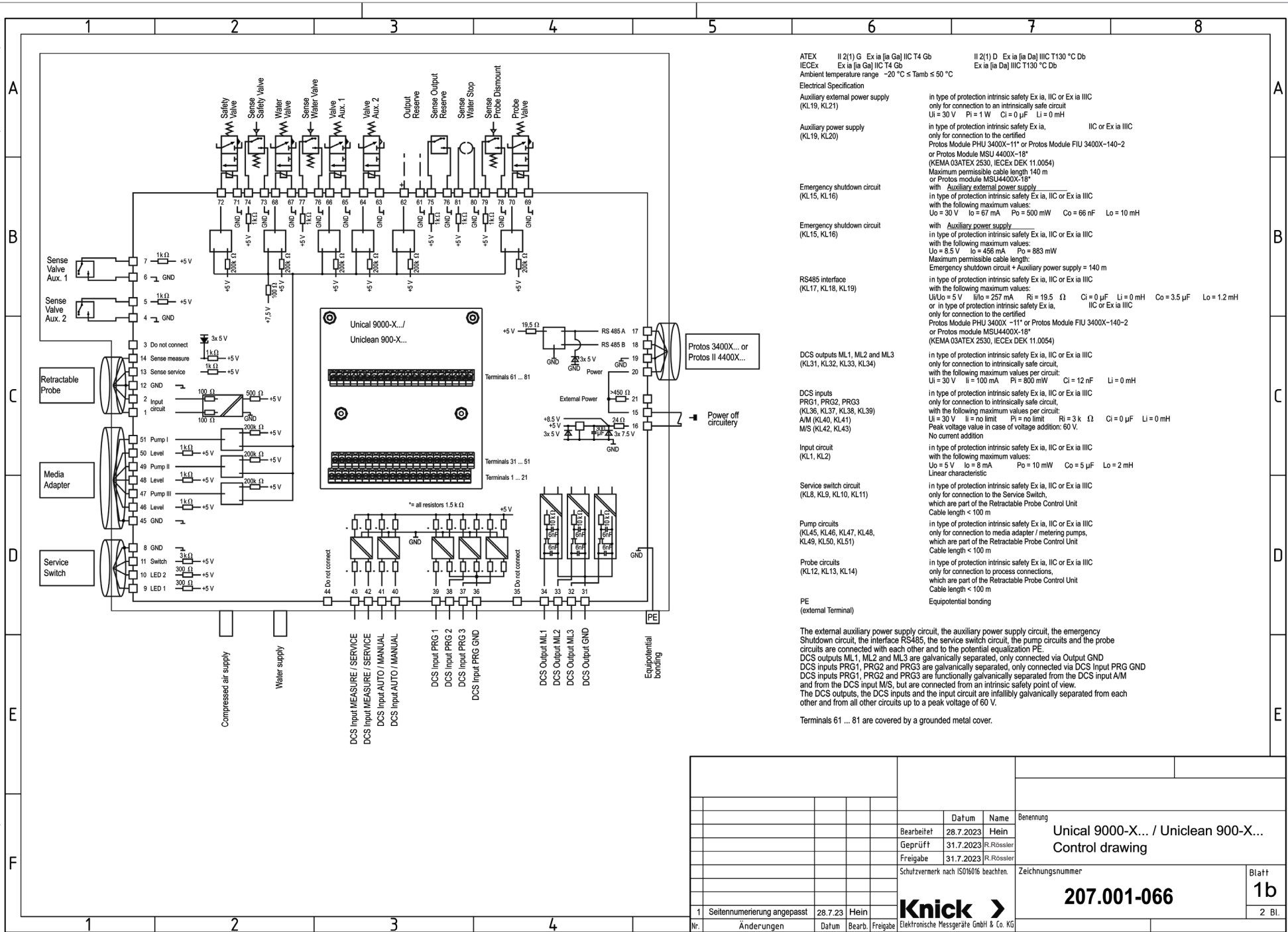


		Datum		Name		Benennung	
	Bearbeitet	28.7.2023	Hein	Unical 9000-X... / Uniclean 900-X...			
	Geprüft	31.7.2023	R. Rössler	Control drawing			
	Freigabe	31.7.2023	R. Rössler	Zeichnungsnummer			
Schutzvermerk nach ISO16016 beachten.				207.001-066		Blatt	
Seitennumerierung angepasst				28.7.23	Hein	1a	
Nr.	Änderungen	Datum	Bearb.	Freigabe	2 Bl.		

Knick >
Elektronische Messgeräte GmbH & Co. KG

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ATEX II 2(1) G Ex ia [ja Ga] IIC T4 Gb II 2(1) D Ex ia [ja Da] IIC T130 °C Db
 IECEx Ex ia [ja Ga] IIC T4 Gb Ex ia [ja Da] IIC T130 °C Db
 Ambient temperature range -20 °C ≤ Tamb ≤ 50 °C

Electrical Specification

Auxiliary external power supply (KL19, KL21) in type of protection intrinsic safety Ex ia, IIC or Ex ia IIC only for connection to an intrinsically safe circuit
 $U_i = 30\text{ V}$ $P_i = 1\text{ W}$ $C_i = 0\text{ }\mu\text{F}$ $L_i = 0\text{ mH}$

Auxiliary power supply (KL19, KL20) in type of protection intrinsic safety Ex ia, only for connection to the certified Protos Module PHU 3400X-11* or Protos Module FIU 3400X-140-2 or Protos module MSU4400X-18* (KEMA 03ATEX 2530, IECEx DEK 11.0054)
 Maximum permissible cable length 140 m or Protos module MSU4400X-18* with Auxiliary external power supply

Emergency shutdown circuit (KL15, KL16) in type of protection intrinsic safety Ex ia, IIC or Ex ia IIC with the following maximum values:
 $U_o = 30\text{ V}$ $I_o = 67\text{ mA}$ $P_o = 500\text{ mW}$ $C_o = 66\text{ nF}$ $L_o = 10\text{ mH}$
 with Auxiliary power supply

Emergency shutdown circuit (KL15, KL16) in type of protection intrinsic safety Ex ia, IIC or Ex ia IIC with the following maximum values:
 $U_o = 8.5\text{ V}$ $I_o = 456\text{ mA}$ $P_o = 883\text{ mW}$
 Maximum permissible cable length:
 Emergency shutdown circuit + Auxiliary power supply = 140 m

RS485 interface (KL17, KL18, KL19) in type of protection intrinsic safety Ex ia, IIC or Ex ia IIC with the following maximum values:
 $U_i/U_o = 5\text{ V}$ $I_i/I_o = 257\text{ mA}$ $R_i = 19.5\text{ }\Omega$ $C_i = 0\text{ }\mu\text{F}$ $L_i = 0\text{ mH}$ $C_o = 3.5\text{ }\mu\text{F}$ $L_o = 1.2\text{ mH}$
 or in type of protection intrinsic safety Ex ia, IIC or Ex ia IIC only for connection to the certified Protos Module PHU 3400X-11* or Protos Module FIU 3400X-140-2 or Protos module MSU4400X-18* (KEMA 03ATEX 2530, IECEx DEK 11.0054)

DCS outputs ML1, ML2 and ML3 (KL31, KL32, KL33, KL34) in type of protection intrinsic safety Ex ia, IIC or Ex ia IIC only for connection to intrinsically safe circuit, with the following maximum values per circuit:
 $U_i = 30\text{ V}$ $I_i = 100\text{ mA}$ $P_i = 800\text{ mW}$ $C_i = 12\text{ nF}$ $L_i = 0\text{ mH}$

DCS inputs PRG1, PRG2, PRG3 (KL36, KL37, KL38, KL39) in type of protection intrinsic safety Ex ia, IIC or Ex ia IIC only for connection to intrinsically safe circuit, with the following maximum values per circuit:
 $U_i = 30\text{ V}$ $I_i = \text{no limit}$ $P_i = \text{no limit}$ $R_i = 3\text{ k }\Omega$ $C_i = 0\text{ }\mu\text{F}$ $L_i = 0\text{ mH}$
 AM (KL40, KL41) Peak voltage value in case of voltage addition: 60 V.
 MIS (KL42, KL43) No current addition

Input circuit (KL1, KL2) in type of protection intrinsic safety Ex ia, IIC or Ex ia IIC with the following maximum values:
 $U_o = 5\text{ V}$ $I_o = 8\text{ mA}$ $P_o = 10\text{ mW}$ $C_o = 5\text{ }\mu\text{F}$ $L_o = 2\text{ mH}$
 Linear characteristic

Service switch circuit (KL8, KL9, KL10, KL11) in type of protection intrinsic safety Ex ia, IIC or Ex ia IIC only for connection to the Service Switch, which are part of the Retractable Probe Control Unit
 Cable length < 100 m

Pump circuits (KL45, KL46, KL47, KL48, KL49, KL50, KL51) in type of protection intrinsic safety Ex ia, IIC or Ex ia IIC only for connection to media adapter / metering pumps, which are part of the Retractable Probe Control Unit
 Cable length < 100 m

Probe circuits (KL12, KL13, KL14) in type of protection intrinsic safety Ex ia, IIC or Ex ia IIC only for connection to process connections, which are part of the Retractable Probe Control Unit
 Cable length < 100 m

PE (external Terminal) Equipotential bonding

The external auxiliary power supply circuit, the auxiliary power supply circuit, the emergency Shutdown circuit, the interface RS485, the service switch circuit, the pump circuits and the probe circuits are connected with each other and to the potential equalization PE.
 DCS outputs ML1, ML2 and ML3 are galvanically separated, only connected via Output GND
 DCS inputs PRG1, PRG2 and PRG3 are galvanically separated, only connected via DCS Input PRG GND
 DCS inputs PRG1, PRG2 and PRG3 are functionally galvanically separated from the DCS input A/M and from the DCS input M/S, but are connected from an intrinsic safety point of view.
 The DCS outputs, the DCS inputs and the input circuit are infallibly galvanically separated from each other and from all other circuits up to a peak voltage of 60 V.

Terminals 61 ... 81 are covered by a grounded metal cover.

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