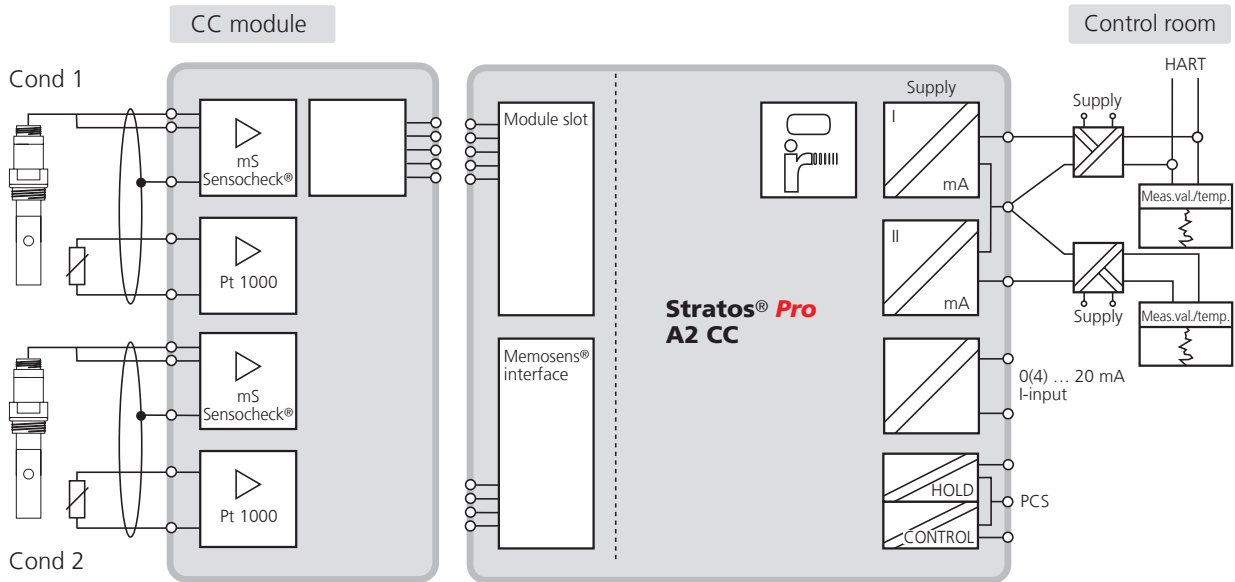


Process Analysis Systems

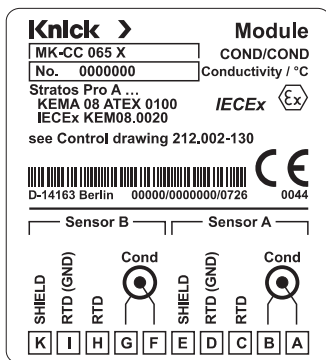
Stratos® Pro A2 CC

Connection

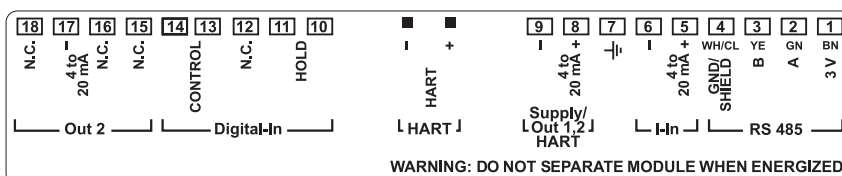
Connection of CC module with two 2-electrode sensors
 Model used: Stratos® Pro A201N-CC-1



Terminal Assignments of Stratos® Pro CC Module



Terminal Assignments of Stratos® Pro 2-Wire Devices



Specifications

Inputs

Conductivity	2 inputs for 2-electrode sensors		
Effective ranges	0 ... 30000 $\mu\text{S} \cdot \text{cm}$		
Measuring ranges*)	conductivity	0.000 $\mu\text{S}/\text{cm}$... 9999 $\mu\text{S}/\text{cm}$	
	resistivity	00.00 ... 99.99 Mohms $\cdot \text{cm}$	
Temperature compensation*) (reference temperature 25 °C)	linear 00.00 ... 19.99 %/K (user-defined reference temperature) natural waters to EN 27888 NaCl from 0 (ultrapure water) to 26 % by wt (0 ... 120 °C) ultrapure water with traces of NaCl, HCl, or NH_3		
Calculations (CALC)	[C1]	Difference	A – B 0.000 ... 9999 $\mu\text{S}/\text{cm}$
	[C2]	Ratio	A / B 00.00 ... 19.99
	[C3]	Passage	B / A · 100 000.0 ... 199.9 %
	[C4]	Rejection	(A – B) / A · 100 –199.9 ... 199.9 %
	[C5]	Deviation	(B – A) / A · 100 –199.9 ... 199.9 %
	[C6]	pH value	acc. to VBG 450, NaOH alkalization [pH]
	[C7]	pH value	other alkalizing agents, specifiable factors [pH]
Temperature	Pt 1000 2-wire connection, adjustable		
Measuring range	–50.0 ... +200.0 °C (–58.0 ... +392.0 °F)		
Current input (TAN)	analog, 0/4 ... 20 mA, e.g. for flow monitoring		
HOLD input, digital	0 ... 2 V (AC/DC)	HOLD inactive	
	10 ... 30 V (AC/DC)	HOLD active	
CONTROL input, digital e.g. flow monitoring	level	relay input for external monitoring equipment	
	flow	pulse amplitude 10 ... 30 V DC pulse input for flow measurement 0 ... 100 pulses/s display: 00.00 ... 99.99 l/h message via 22 mA	

Outputs

Output 1, Output 2	4 ... 20 mA current loops, 22 mA for error message, HART communication (TAN) at output 1, supply voltage 14 ... 30 V		
Process variable*)	conductivity, resistivity, concentration, temperature, or CALC		
Characteristic	linear		
Output filter*)	PT ₁ filter, filter time constant: 0 ... 120 s		

Sensor standardization

Channel A/B	input of cell constant with simultaneous display of selected process variable and temperature		
Permissible cell constant	0.0050 ... 1.9999 cm^{-1}		

Process Analysis Systems

Stratos® Pro A2 CC

Specifications – continued

Communication

HART communication (TAN)	HART version 6 digital communication by FSK modulation of output current 1 device identification, measured values, status and messages, parameter setting, calibration, records
--------------------------	---

Diagnostics/Service

Diagnostics functions	calibration data, device self-test, display test
Sensocheck®	polarization detection and monitoring of cable capacitance delay approx. 30 s
Sensoface®	provides information on the sensor condition, Sensocheck®, flow monitoring
Logbook (TAN)	100 events with date and time
Extended logbook (TAN)	Audit Trail: 200 events with date and time
FDA CFR 21 Part 11	– access control by editable passcodes – logbook entry and flag via HART in the case of configuration changes – message and logbook entry when enclosure is opened
Service functions	current source for output 1 and 2 (3.80 ... 22.00 mA)
Sensor monitor	direct display of measured values from sensor for validation: resistance/temperature
IrDA interface	infrared service interface for firmware updates

Device data

Display	LC display with colored backlighting, main display, secondary display, plain-text ticker line, icons, Sensoface®, status indication, alarm indication
Keypad	keys: meas, info, 4 cursor keys, enter
Power supply	see Outputs 1/2
Real-time clock	different time and date formats selectable power reserve > 5 days
EMC	EN 61326-1 (general requirements) emitted interference: class B (residential area) immunity to interference: industry EN 61326-2-3

Specifications – *continued*

Nominal operating conditions

Ambient temperature	-20 ... +65 °C
Transport/Storage temperature	-20 ... +70 °C
Relative humidity	10 ... 95 %, not condensing
Enclosure	molded enclosure, PBT/PC, glass-reinforced
Assembly	- wall mounting - pipe mounting: Ø 40 ... 60 mm, □ 30 ... 45 mm - panel mounting
Dimensions (mm)	H x W x D: 148 x 148 x 117
Cable glands	3 knockouts for cable glands M20 x 1.5 2 knockouts for 1/2" NPT or rigid metallic conduit
Control panel cutout	138 mm x 138 mm to DIN 43700
Ingress protection	IP 67/NEMA 4X outdoor
Weight	approx. 1.2 kg (1.6 kg incl. accessories and packaging)
Connections	terminals, conductor cross section max. 2.5 mm ²

*) user-defined