

The reproduction, distribution and utilization of this document as well as the communication of its contents to others without explicit authorization is prohibited.

Weitergabe sowie Vervielfältigung dieses Dokuments, Verwertung und Mitteilung seines Inhalts sind verboten, soweit nicht ausdrücklich erlaubt.

Measuring Module Type MK-COND025X for:

Stratos Pro Type A2..X... Stratos Multi Type E401X...
IECEX, ATEX Control drawing 212.002-100 page 1 IECEX, ATEX Control drawing 212.502-100 page 1
cFMus Control drawing 212.002-300 cFMus Control drawing 212.502-100 page 2

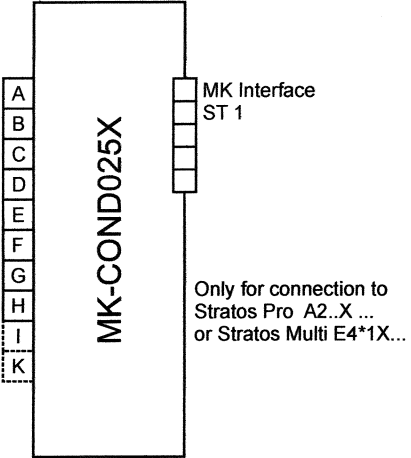
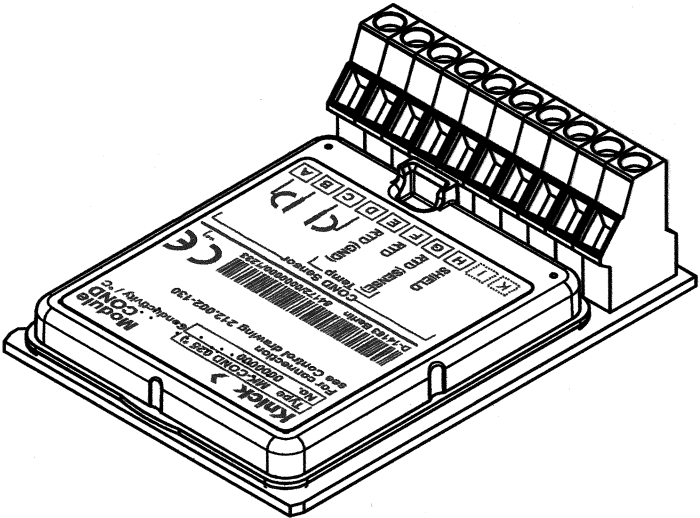
MK Interface	In type of protection intrinsic safety, only for connection to Stratos® A2..X..., E401X...									
Explosive gas atmosphere	Ex ia IIC, IIB and IIA Cl I Zone 0, Grp IIC, IIB and IIA Cl I Div 1, Grp ABCD			Ex ia IIC Cl I Zone 0, Grp IIC Cl I Div 1, Grp AB		Ex ia IIB Cl I Zone 0, Grp IIB Cl I, Div 1, Grp C		Ex ia IIA Cl I Zone 0, Grp IIA Cl I, Div 1, Grp D		
Explosive dust atmosphere	Ex ia IIIC Zone 20 Grp IIIC Cl II, III Div 1, Grp EFG					Ex ia IIIC Zone 20 Grp IIIC Cl II, III Div 1, Grp EFG				
	Uo, Voc (V)	Io, Isc (mA)	Po (mW)	Co, Ca (µF)	Lo, La (mH)	Co, Ca (µF)	Lo, La (mH)	Co, Ca (µF)	Lo, La (mH)	
Conductivity Measuring Loop (Terminals A, B, C, D, H)	5	36	45	100	25	1000	100	1000	210	Linear characteristic
Temperature Measuring Loop (Terminals E, F, G)	5	27	34	100	50	1000	200	1000	400	Linear characteristic
Conductivity/Temperature Measuring Loop (Terminals A, B, C, D, E, F, G, H)	5	63	79	100	8	1000	30	1000	70	Linear characteristic
Conductivity/Temperature Measuring Loop (Terminals A, B, C, D, E, F, G, H)				Ex ic IIC, IIIC		Ex ic IIB, IIIB		Ex ic IIA, IIIA		
				Cl I, Div 2, Grp A, B, C & D Cl II, III, Div 2, Grp F & G Cl I, Zone 2, Grp IIC						
	3	6	18	1000	1000	1000	1000	1000	1000	Linear characteristic

The measuring circuits are galvanically connected
Do not mix different Types of Protection

Módulo de Medição Tipo MK-COND025X para Stratos® Tipo A2..X...
Desenho de controle INMETRO 212.002-100 page 3

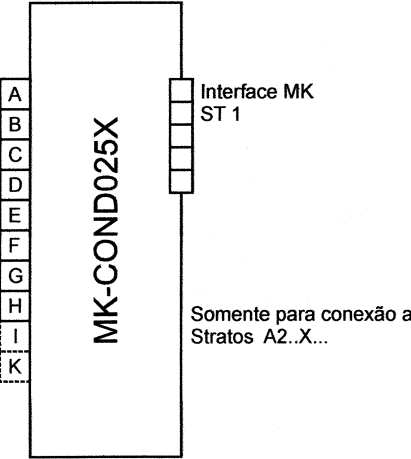
Interface MK	Em tipo de proteção: „segurança intrínseca“, somente para conexão a Stratos® A2..X...									
Atmosfera explosiva de gás	Ex ia IIC, IIB and IIA			Ex ia IIC		Ex ia IIB		Ex ia IIA		
Atmosfera explosiva de poeira	Ex ia IIIC					Ex ia IIIC				
	Uo, Voc (V)	Io, Isc (mA)	Po (mW)	Co, Ca (µF)	Lo, La (mH)	Co, Ca (µF)	Lo, La (mH)	Co, Ca (µF)	Lo, La (mH)	
Malha de Medição de Condutividade (Terminais A,B,C,D,H)	5	36	45	100	25	1000	100	1000	210	Característica linear
Malha de Medição de Temperatura (Terminais E, F, G)	5	27	34	100	50	1000	200	1000	400	Característica linear
Malha de Medição de Condutividade/Temperatura (Terminais A, B, C, D, E, F, G, H)	5	63	79	100	8	1000	30	1000	70	Característica linear
Malha de Medição de Condutividade/Temperatura (Terminais A, B, C, D, E, F, G, H)				Ex ic IIC, IIIC		Ex ic IIB, IIIB		Ex ic IIA, IIIA		
	3	6	18	1000	1000	1000	1000	1000	1000	Característica linear

Os circuitos de medição são conectados galvanicamente
Não misture diferentes tipos de proteção.



WARNING - SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY
WARNING - SUBSTITUTION OF COMPONENTS MAY IMPAIR THE SUITABILITY FOR DIV 2 / ZONE 2
WARNING - DO NOT SEPARATE MODULE WHEN ENERGIZED

- Notes:
- IECEX, ATEX, cFMus
- When installed in Stratos the Intrinsically Safe Equipment connecting to A, B, C, D, E, F, G, H must be IECEX or ATEX or NRTL Approved or be a simple Apparatus.
 - Simple Apparatus is defined as a device that does not generates more than 1.5 V, 0.1 A, or 25 mW.
- cFMus
- The Intrinsic Safety Entity concept allows the interconnection of FM Approved intrinsically safe devices with entity parameters not specifically examined in combination as a systems when:
Uo or Voc or Vt ≤ Vmax, Io or Isc or It ≤ Imax, Po ≤ Pi, Ca or Co ≥ ∑ Ci + ∑ Ccable
For inductance use either La or Lo ≥ ∑ Li + ∑ Lcable or Le/Re ≤ (La/Ra or Lo/Ro) and Li/Ri ≤ (La/Ra or Lo/Ro)
 - Installation should be in accordance with ANSI/ISA RP12.06.01, "Installation of Intrinsically Safe Systems for Hazardous (Classified) Locations" and the National Electrical Code® (ANSI/NFPA 70), or with the Canadian Electrical Code for Hazardous Location as applicable.
 - No revisions to drawing without prior FM Approvals authorisation.



AVISO A SUBSTITUIÇÃO DE COMPONENTES PODE PREJUDICAR A SEGURANÇA INTRÍNSECA
AVISO A SUBSTITUIÇÃO DE COMPONENTES PODE PREJUDICAR A EFICIÊNCIA EM ZONE 2
AVISO NÃO SEPARAR O MÓDULO QUANDO ENERGIZADO

- Notas:
- INMETRO
- Quando instalado em Stratos® Tipo A2..X...: O equipamento intrinsecamente seguro conectado a A, B, C, D, E, F, G, H precisa ter aprovação IECEX ou ATEX ou FM ou CSA ou INMETRO ou ser um Aparelho simples.
 - Definição de Aparelho Simples: instrumento que não gera mais que 1,5 V, 0,1 A ou 25 mW.

					Zul. Abweichungen für Maße ohne Toleranzangabe			Maßstab			
								Halbzeug			
						Datum	Name	Benennung MK-COND025X Control drawing			
7	Texts	15.10.21	kmn	<i>22</i>	Bearbeitet	13.02.2009	dam				
6	Texts	16.03.21	dam		Geprüft	<i>15.10.21</i>	<i>22</i>	Zeichnungsnummer 212.002-130			
5	page1 „X“, page2 „B“	13.01.16	dam		Freigabe	<i>15.10.21</i>	<i>22</i>				
4	Texts	21.09.15	dam		Schutzvermerk nach ISO16016 beachten.			Blatt		1	
3	Texts	05.09.12	dam								
2	INMETRO Texte	06.04.11	dam		Knick ➤			Elektronische Messgeräte GmbH & Co. KG		Bl. 1	
1	Texts	25.08.09	dam								
Nr.	Änderungen	Datum	Bearb.	Freigabe							

Knick