

**PR**  
electronics



**7 9 0 8 / 7 9 1 6**

**System 9000 Backplane**

**Honeywell wiring manual  
and I/O card reference  
list**

No. 7900HW100-UK

- DK** ▶ PR electronics A/S tilbyder et bredt program af analoge og digitale signalbehandlingsmoduler til industriel automation. Programmet består af Isolatorer, Displays, Ex-barrierer, Temperaturtransmittere, Universaltransmittere mfl. Vi har modulerne, du kan stole på i selv barske miljøer med elektrisk støj, vibrationer og temperaturudsving, og alle produkter opfylder de strengeste internationale standarder. Vores motto »Signals the Best« er indbegrebet af denne filosofi - og din garanti for kvalitet.
- UK** ▶ PR electronics A/S offers a wide range of analogue and digital signal conditioning modules for industrial automation. The product range includes Isolators, Displays, Ex Interfaces, Temperature Transmitters, and Universal Modules. You can trust our products in the most extreme environments with electrical noise, vibrations and temperature fluctuations, and all products comply with the most exacting international standards. »Signals the Best« is the epitome of our philosophy - and your guarantee for quality.
- FR** ▶ PR electronics A/S offre une large gamme de produits pour le traitement des signaux analogiques et numériques dans tous les domaines industriels. La gamme de produits s'étend des transmetteurs de température aux afficheurs, des isolateurs aux interfaces SI, jusqu'aux modules universels. Vous pouvez compter sur nos produits même dans les conditions d'utilisation sévères, p.ex. bruit électrique, vibrations et fluctuations de température. Tous nos produits sont conformes aux normes internationales les plus strictes. Notre devise »SIGNALS the BEST« c'est notre ligne de conduite - et pour vous l'assurance de la meilleure qualité.
- DE** ▶ PR electronics A/S verfügt über ein breites Produktprogramm an analogen und digitalen Signalverarbeitungsmodulen für die industrielle Automatisierung. Dieses Programm umfasst Displays, Temperaturtransmitter, Ex- und galvanische Signaltrenner, und Universalgeräte. Sie können unsere Geräte auch unter extremen Einsatzbedingungen wie elektrisches Rauschen, Erschütterungen und Temperaturschwingungen vertrauen, und alle Produkte von PR electronics werden in Übereinstimmung mit den strengsten internationalen Normen produziert. »Signals the Best« ist Ihre Garantie für Qualität!

# SYSTEM 9000 BACKPLANE HONEYWELL WIRING MANUAL AND I/O CARD REFERENCE LIST

## CONTENTS

Supported Honeywell DCS systems & I/O cards .....	2
Supply and status relay connections and Honeywell system cable connectors .....	3
CC-TAIX01/11 card, 16 modules - 16 x AI, PR 9106 1 channel .....	5
CC-TAIX01/11 card, 8 modules - 16 x AI, PR 9106 2 channels.....	8
CC-TAIX01/11 card, 16 modules - 16 x AI, PR 9113 1 channel .....	10
CC-TAIX01/11 card, 8 modules - 16 x AI, PR 9113 2 channels.....	13
CC-TAIX01/11 card, 16 modules - 16 x AO, PR 9107 1 channel .....	15
CC-TAOX01/11 card, 8 modules - 16 x AO, PR 9107 2 channels.....	18
Cx-TDIL01/11 card, 2 x16 modules - 32 x DI, PR 9202 1 channel..	20
Cx-TDIL01/11 card, 16 modules - 32 x DI, PR 9202 2 channels.....	25
Cx-TDOB01/11 card, 2 x16 modules - 32 x DO, PR 9203 1 channel .....	28
Cx-TDOB01/11 card wiring, 32 x DO, PR 9203 2 channels .....	33
Backplane to Honeywell SM-Rusio I/O CARD wiring.....	36
FC-IATO-R24 card wiring, 32 x uni. I/O, 1 channel .....	38
FC-IATO-R24 card wiring, 32 x uni. I/O, 2 channels .....	43
System cables for Honeywell Backplanes.....	47
9106B HART® transparent repeater .....	49
9107B HART® transparent driver.....	50
9113B temperature / mA converter .....	51
9202B Pulse isolator .....	52
9203B Solenoid / alarm driver .....	53

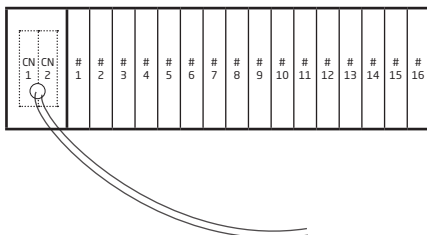
## SUPPORTED HONEYWELL DCS SYSTEMS & I/O CARDS

DCS system	I/O card reference	I/O type	PR system 9000 device	# Slot	PR ordering references
Experion C300	CC-TAIX01/11	16 x AI	8 x 9106B_B	1...8	7908-HoExp-A1B
			16 x 9106B_A	1...16	7916-HoExp-A1A
			8 x 9113B_B	1...8	7908-HoExp-A1B
			16 x 9113B_A	1...16	7916-HoExp-A1A
	Cx-TAOX01/11	16 x AO	8 x 9107B_B	1...8	7908-HoExp-B1B
			16 x 9107B_A	1...16	7916-HoExp-B1A
	Cx-TDIL01/11	32 x DI	16 x 9202B_B	1...16	7916-HoExp-C1B
			32 x 9202B_A	1...16	2 x 7916-HoExp-C1A*
	Cx-TDOB01/11	32 x DO	16 x 9203B_B	1...16	7916-HoExp-D1B
			32 x 9203B_A	1...16	2 x 7916-HoExp-D1A*
Rusio	FC-IATO-R24	32 x universal I/O	9106B_B	1...8	2 x 7908-HoRus-A1B
			9113B_B		
			9107B_B		
			9202B_B		
			9203B_B	1...16	2 x 7916-HoRus-A1A
			9106B_A		
			9113B_A		
			9107B_A		
			9202B_A		
			9203B_A		

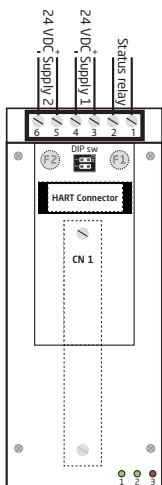
**Please note:**

(\*) Two backplanes must be used for giving a total of 32 x DI or 32 x DO for the I/O cards.

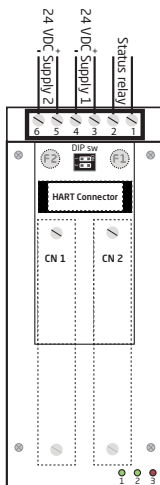
# SUPPLY AND STATUS RELAY CONNECTIONS AND HONEYWELL SYSTEM CABLE CONNECTORS



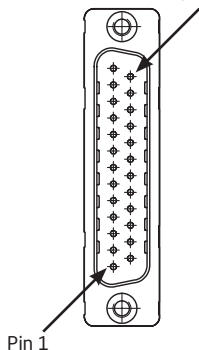
**BACKPLANE  
SINGLE CONNECTOR**



**BACKPLANE  
DUAL CONNECTORS**

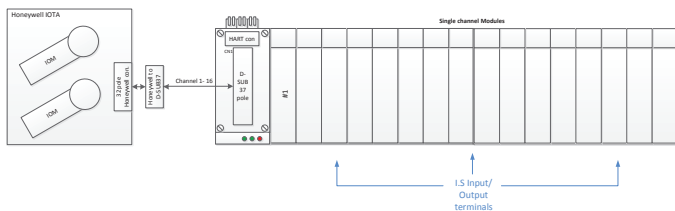


**SUB D  
37 pole**  
Pin 37

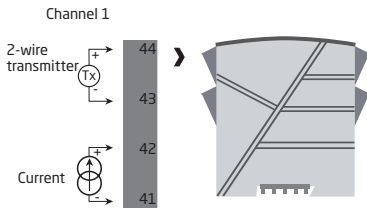


# **BACKPLANE TO HONEYWELL EXPERION I/O CARD WIRING**

## Block diagram for CC-TAIX01/11 card, 16 modules - 16 x AI, PR 9106 1 channel



## 9106B HART® TRANSPARENT REPEATER



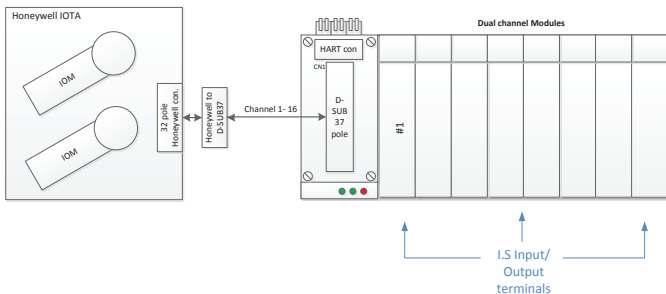
CC-TAIX01/11 card wiring, 16 x AI,  
PR 9106 1 channel

9106BxA I.S. input terminals				SUB-D37 adaptor CN1
Unit	Ch.	2-wire Tx mA signal	Active mA signal	
#1	1	44 (+)	41 (-)	Pin 1 (+)
		43 (-)	42 (+)	Pin 20 (-)
	2	-	-	-
		-	-	-
#2	1	44 (+)	41 (-)	Pin 2 (+)
		43 (-)	42 (+)	Pin 21 (-)
	2	-	-	-
		-	-	-
#3	1	44 (+)	41 (-)	Pin 3 (+)
		43 (-)	42 (+)	Pin 22 (-)
	2	-	-	-
		-	-	-
#4	1	44 (+)	41 (-)	Pin 4 (+)
		43 (-)	42 (+)	Pin 23 (-)
	2	-	-	-
		-	-	-
#5	1	44 (+)	41 (-)	Pin 5 (+)
		43 (-)	42 (+)	Pin 24 (-)
	2	-	-	-
		-	-	-
#6	1	44 (+)	41 (-)	Pin 6 (+)
		43 (-)	42 (+)	Pin 25 (-)
	2	-	-	-
		-	-	-
#7	1	44 (+)	41 (-)	Pin 7 (+)
		43 (-)	42 (+)	Pin 26 (-)
	2	-	-	-
		-	-	-
#8	1	44 (+)	41 (-)	Pin 8 (+)
		43 (-)	42 (+)	Pin 27 (-)
	2	-	-	-
		-	-	-

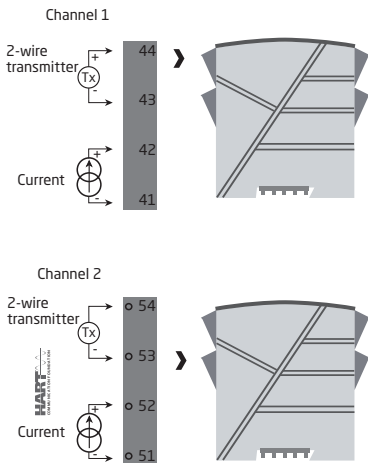


9106BxA I.S. input terminals				SUB-D37 adaptor CN1
Unit	Ch.	2-wire Tx mA signal	Active mA signal	
#9	1	44 (+)	41 (-)	Pin 9 (+)
		43 (-)	42 (+)	Pin 28 (-)
	2	-	-	-
		-	-	-
#10	1	44 (+)	41 (-)	Pin 10 (+)
		43 (-)	42 (+)	Pin 29 (-)
	2	-	-	-
		-	-	-
#11	1	44 (+)	41 (-)	Pin 11 (+)
		43 (-)	42 (+)	Pin 30 (-)
	2	-	-	-
		-	-	-
#12	1	44 (+)	41 (-)	Pin 12 (+)
		43 (-)	42 (+)	Pin 31 (-)
	2	-	-	-
		-	-	-
#13	1	44 (+)	41 (-)	Pin 13 (+)
		43 (-)	42 (+)	Pin 32 (-)
	2	-	-	-
		-	-	-
#14	1	44 (+)	41 (-)	Pin 14 (+)
		43 (-)	42 (+)	Pin 33 (-)
	2	-	-	-
		-	-	-
#15	1	44 (+)	41 (-)	Pin 15 (+)
		43 (-)	42 (+)	Pin 34 (-)
	2	-	-	-
		-	-	-
#16	1	44 (+)	41 (-)	Pin 16 (+)
		43 (-)	42 (+)	Pin 35 (-)
	2	-	-	-
		-	-	-

## Block diagram for CC-TAIX01/11 card, 8 modules - 16 x AI, PR 9106 2 channels



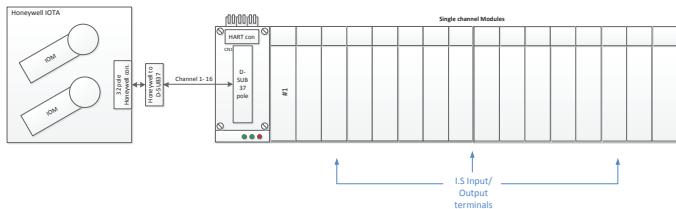
## 9106B HART® TRANSPARENT REPEATER



CC-TAIX01/11 card wiring, 16 x AI,  
PR 9106 2 channels

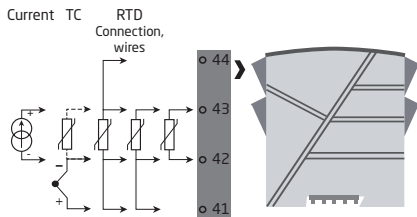
9106xB I.S. input terminals				SUB-D37 adaptor CN1
Unit	Ch.	2-wire Tx mA signal	Active mA signal	
#1	1	44 (+)	41 (-)	Pin 1 (+)
		43 (-)	42 (+)	Pin 20 (-)
	2	54 (+)	51 (-)	Pin 2 (+)
		53 (-)	52 (+)	Pin 21 (-)
#2	1	44 (+)	41 (-)	Pin 3 (+)
		43 (-)	42 (+)	Pin 22 (-)
	2	54 (+)	51 (-)	Pin 4 (+)
		53 (-)	52 (+)	Pin 23 (-)
#3	1	44 (+)	41 (-)	Pin 5 (+)
		43 (-)	42 (+)	Pin 24 (-)
	2	54 (+)	51 (-)	Pin 6 (+)
		53 (-)	52 (+)	Pin 25 (-)
#4	1	44 (+)	41 (-)	Pin 7 (+)
		43 (-)	42 (+)	Pin 26 (-)
	2	54 (+)	51 (-)	Pin 8 (+)
		53 (-)	52 (+)	Pin 27 (-)
#5	1	44 (+)	41 (-)	Pin 9 (+)
		43 (-)	42 (+)	Pin 28 (-)
	2	54 (+)	51 (-)	Pin 10 (+)
		53 (-)	52 (+)	Pin 29 (-)
#6	1	44 (+)	41 (-)	Pin 11 (+)
		43 (-)	42 (+)	Pin 30 (-)
	2	54 (+)	51 (-)	Pin 12 (+)
		53 (-)	52 (+)	Pin 31 (-)
#7	1	44 (+)	41 (-)	Pin 13 (+)
		43 (-)	42 (+)	Pin 32 (-)
	2	54 (+)	51 (-)	Pin 14 (+)
		53 (-)	52 (+)	Pin 33 (-)
#8	1	44 (+)	41 (-)	Pin 15 (+)
		43 (-)	42 (+)	Pin 34 (-)
	2	54 (+)	51 (-)	Pin 16 (+)
		53 (-)	52 (+)	Pin 35 (-)

## Block diagram for CC-TAIX01/11 card, 16 modules - 16 x AI, PR 9113 1 channel



## 9113B TEMPERATURE / mA CONVERTER

Channel 1:



CC-TAIX01/11 card wiring, 16 X AI,  
PR 9113 1 channel

9113BxA I.S. input terminals					SUB-D37 adaptor CN1
Unit	Ch.	RTD, 2- / 3- / 4-wire	TC	Current	
#1	1	43 or 43/41 or 43/41/44 (*)	41 (+)	43 (+)	Pin 1
		42	42 (-)	42 (-)	Pin 20
	2	-	-	-	-
		-	-	-	-
#2	1	43 or 43/41 or 43/41/44 (*)	41 (+)	43 (+)	Pin 2
		42	42 (-)	42 (-)	Pin 21
	2	-	-	-	-
		-	-	-	-
#3	1	43 or 43/41 or 43/41/44 (*)	41 (+)	43 (+)	Pin 3
		42	42 (-)	42 (-)	Pin 22
	2	-	-	-	-
		-	-	-	-
#4	1	43 or 43/41 or 43/41/44 (*)	41 (+)	43 (+)	Pin 4
		42	42 (-)	42 (-)	Pin 23
	2	-	-	-	-
		-	-	-	-
#5	1	43 or 43/41 or 43/41/44 (*)	41 (+)	43 (+)	Pin 5
		42	42 (-)	42 (-)	Pin 24
	2	-	-	-	-
		-	-	-	-
#6	1	43 or 43/41 or 43/41/44 (*)	41 (+)	43 (+)	Pin 6
		42	42 (-)	42 (-)	Pin 25
	2	-	-	-	-
		-	-	-	-
#7	1	43 or 43/41 or 43/41/44 (*)	41 (+)	43 (+)	Pin 7
		42	42 (-)	42 (-)	Pin 26
	2	-	-	-	-
		-	-	-	-
#8	1	43 or 43/41 or 43/41/44 (*)	41 (+)	43 (+)	Pin 8
		42	42 (-)	42 (-)	Pin 27
	2	-	-	-	-
		-	-	-	-

**Please note:**

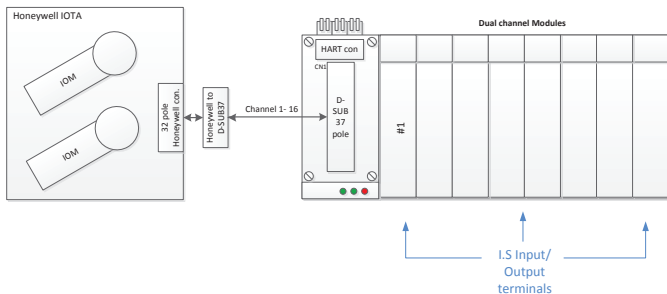
(\*) Check 9113 manual for correct contact input wiring.

9113BxA I.S. input terminals					SUB-D37 adaptor CN1
Unit	Ch.	RTD, 2- / 3- / 4-wire	TC	Current	
#9	1	43 or 43/41 or 43/41/44 (*)	41 (+)	43 (+)	Pin 9
		42	42 (-)	42 (-)	Pin 28
	2	-	-	-	-
		-	-	-	-
#10	1	43 or 43/41 or 43/41/44 (*)	41 (+)	43 (+)	Pin 10
		42	42 (-)	42 (-)	Pin 29
	2	-	-	-	-
		-	-	-	-
#11	1	43 or 43/41 or 43/41/44 (*)	41 (+)	43 (+)	Pin 11
		42	42 (-)	42 (-)	Pin 30
	2	-	-	-	-
		-	-	-	-
#12	1	43 or 43/41 or 43/41/44 (*)	41 (+)	43 (+)	Pin 12
		42	42 (-)	42 (-)	Pin 31
	2	-	-	-	-
		-	-	-	-
#13	1	43 or 43/41 or 43/41/44 (*)	41 (+)	43 (+)	Pin 13
		42	42 (-)	42 (-)	Pin 32
	2	-	-	-	-
		-	-	-	-
#14	1	43 or 43/41 or 43/41/44 (*)	41 (+)	43 (+)	Pin 14
		42	42 (-)	42 (-)	Pin 33
	2	-	-	-	-
		-	-	-	-
#15	1	43 or 43/41 or 43/41/44 (*)	41 (+)	43 (+)	Pin 15
		42	42 (-)	42 (-)	Pin 34
	2	-	-	-	-
		-	-	-	-
#16	1	43 or 43/41 or 43/41/44 (*)	41 (+)	43 (+)	Pin 16
		42	42 (-)	42 (-)	Pin 35
	2	-	-	-	-
		-	-	-	-

**Please note:**

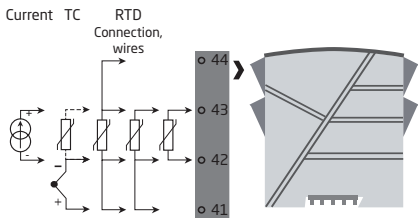
(\*) Check 9113 manual for correct contact input wiring.

## Block diagram for CC-TAIX01/11 card, 8 modules - 16 x AI, PR 9113 2 channels

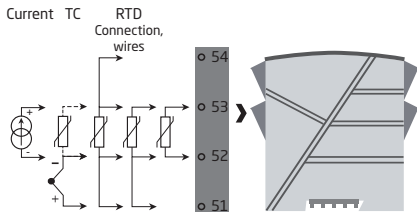


## 9113B TEMPERATURE / mA CONVERTER

Channel 1:



Channel 2:



CC-TAIX01/11 card wiring, 16 x AI,  
PR 9113 2 channels

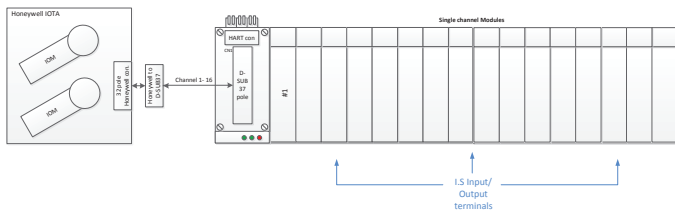
9113BxB I.S. input terminals					SUB-D37 adaptor CN1
Unit	Ch.	RTD, 2- / 3- / 4-wire	TC	Current	
#1	1	43 or 43/41 or 43/41/44 (*)	41 (+)	43 (+)	Pin 1
		42	42 (-)	42 (-)	Pin 20
	2	53 or 53/51 or 53/51/54 (*)	51 (+)	53 (+)	Pin 2
		52	52 (-)	52 (-)	Pin 21
#2	1	43 or 43/41 or 43/41/44 (*)	41 (+)	43 (+)	Pin 3
		42	42 (-)	42 (-)	Pin 22
	2	53 or 53/51 or 53/51/54 (*)	51 (+)	53 (+)	Pin 4
		52	52 (-)	52 (-)	Pin 23
#3	1	43 or 43/41 or 43/41/44 (*)	41 (+)	43 (+)	Pin 5
		42	42 (-)	42 (-)	Pin 24
	2	53 or 53/51 or 53/51/54 (*)	51 (+)	53 (+)	Pin 6
		52	52 (-)	52 (-)	Pin 25
#4	1	43 or 43/41 or 43/41/44 (*)	41 (+)	43 (+)	Pin 7
		42	42 (-)	42 (-)	Pin 26
	2	53 or 53/51 or 53/51/54 (*)	51 (+)	53 (+)	Pin 8
		52	52 (-)	52 (-)	Pin 27
#5	1	43 or 43/41 or 43/41/44 (*)	41 (+)	43 (+)	Pin 9
		42	42 (-)	42 (-)	Pin 28
	2	53 or 53/51 or 53/51/54 (*)	51 (+)	53 (+)	Pin 10
		52	52 (-)	52 (-)	Pin 29
#6	1	43 or 43/41 or 43/41/44 (*)	41 (+)	43 (+)	Pin 11
		42	42 (-)	42 (-)	Pin 30
	2	53 or 53/51 or 53/51/54 (*)	51 (+)	53 (+)	Pin 12
		52	52 (-)	52 (-)	Pin 31
#7	1	43 or 43/41 or 43/41/44 (*)	41 (+)	43 (+)	Pin 13
		42	42 (-)	42 (-)	Pin 32
	2	53 or 53/51 or 53/51/54 (*)	51 (+)	53 (+)	Pin 14
		52	52 (-)	52 (-)	Pin 33
#8	1	43 or 43/41 or 43/41/44 (*)	41 (+)	43 (+)	Pin 15
		42	42 (-)	42 (-)	Pin 34
	2	53 or 53/51 or 53/51/54 (*)	51 (+)	53 (+)	Pin 16
		52	52 (-)	52 (-)	Pin 35

**Please note:**

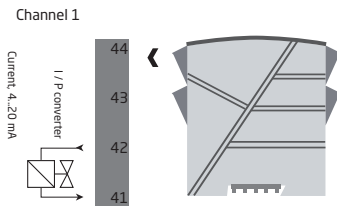
(\*) Check 9113 manual for correct contact input wiring.



## Block diagram for CC-TAOX01/11 card, 16 modules - 16 x AO, PR 9107 1 channel



## 9107B HART® TRANSPARENT DRIVER

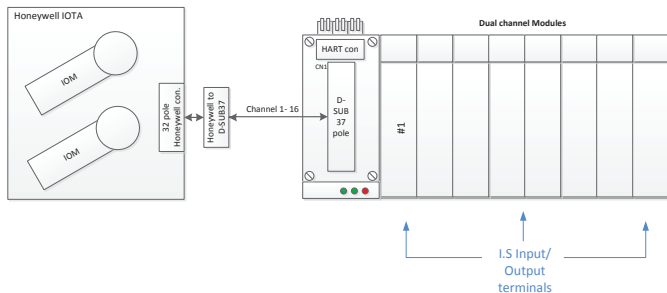


Cx-TAOX01/11 card wiring, 16 x AO,  
PR 9107 1 channel

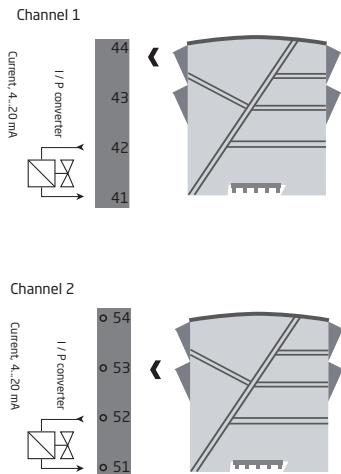
9107BxA I.S. output terminals			SUB-D37 adaptor CN1
Unit	Ch.	Active mA signal	
#1	1	42 (+)	Pin 1
		41 (-)	Pin 20
	2	-	-
		-	-
#2	1	42 (+)	Pin 2
		41 (-)	Pin 21
	2	-	-
		-	-
#3	1	42 (+)	Pin 3
		41 (-)	Pin 22
	2	-	-
		-	-
#4	1	42 (+)	Pin 4
		41 (-)	Pin 23
	2	-	-
		-	-
#5	1	42 (+)	Pin 5
		41 (-)	Pin 24
	2	-	-
		-	-
#6	1	42 (+)	Pin 6
		41 (-)	Pin 25
	2	-	-
		-	-
#7	1	42 (+)	Pin 7
		41 (-)	Pin 26
	2	-	-
		-	-
#8	1	42 (+)	Pin 8
		41 (-)	Pin 27
	2	-	-
		-	-

9107BxA I.S. output terminals			SUB-D37 adaptor CN1
Unit	Ch.	Active mA signal	
#9	1	42 (+)	Pin 9
		41 (-)	Pin 28
	2	-	-
		-	-
#10	1	42 (+)	Pin 10
		41 (-)	Pin 29
	2	-	-
		-	-
#11	1	42 (+)	Pin 11
		41 (-)	Pin 30
	2	-	-
		-	-
#12	1	42 (+)	Pin 12
		41 (-)	Pin 31
	2	-	-
		-	-
#13	1	42 (+)	Pin 13
		41 (-)	Pin 32
	2	-	-
		-	-
#14	1	42 (+)	Pin 14
		41 (-)	Pin 33
	2	-	-
		-	-
#15	1	42 (+)	Pin 15
		41 (-)	Pin 34
	2	-	-
		-	-
#16	1	42 (+)	Pin 16
		41 (-)	Pin 35
	2	-	-
		-	-

## Block diagram for CC-TA0X01/11 card, 8 modules - 16 x AO, PR 9107 2 channels



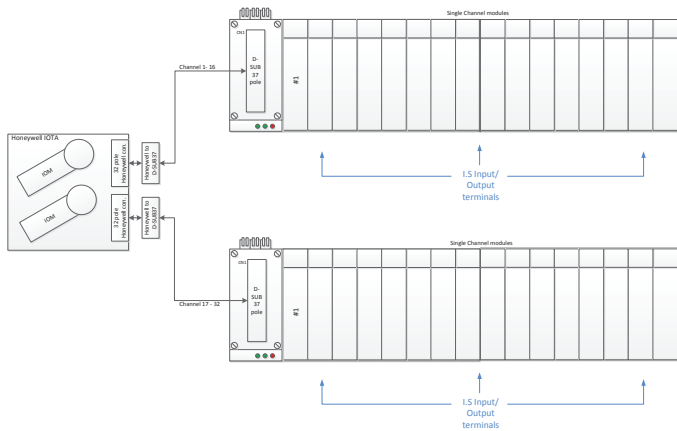
## 9107B HART® TRANSPARENT DRIVER



**Cx-TAOX01/11 card wiring, 16 x A0,  
PR 9107 2 channels**

9107BxB I.S. output terminals			SUB-D37 adaptor CN1
Unit	Ch.	Active mA signal	
#1	1	42 (+)	Pin 1
		41 (-)	Pin 20
	2	52 (+)	Pin 2
		51 (-)	Pin 21
#2	1	42 (+)	Pin 3
		41 (-)	Pin 22
	2	52 (+)	Pin 4
		51 (-)	Pin 23
#3	1	42 (+)	Pin 5
		41 (-)	Pin 24
	2	52 (+)	Pin 6
		51 (-)	Pin 25
#4	1	42 (+)	Pin 7
		41 (-)	Pin 26
	2	52 (+)	Pin 8
		51 (-)	Pin 27
#5	1	42 (+)	Pin 9
		41 (-)	Pin 28
	2	52 (+)	Pin 10
		51 (-)	Pin 29
#6	1	42 (+)	Pin 11
		41 (-)	Pin 30
	2	52 (+)	Pin 12
		51 (-)	Pin 31
#7	1	42 (+)	Pin 13
		41 (-)	Pin 32
	2	52 (+)	Pin 14
		51 (-)	Pin 33
#8	1	42 (+)	Pin 15
		41 (-)	Pin 34
	2	52 (+)	Pin 16
		51 (-)	Pin 35

# Block diagram for Cx-TDIL01/11 card, 2 x16 modules - 32 x DI, PR 9202 1 channel

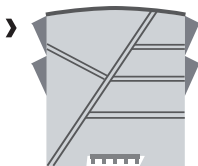
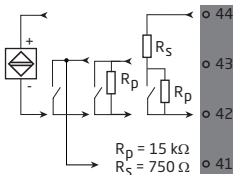


## 9202B PULSE ISOLATOR

Channel 1:

NAMUR

Mechanical switch



Cx-TDIL01/11 card wiring, 32 x DI,  
PR 9202 1 channel, Backplane #1

9202BxA I.S. input terminals				SUB-D37 adaptor CN1
Unit	Ch.	NAMUR sensor	Contact signal	
#1	1	44 (+)	44 or 43 or 43/41 (*)	Pin 1
		42 (-)	42	Pin 20
	2	-	-	-
		-	-	-
#2	1	44 (+)	44 or 43 or 43/41 (*)	Pin 2
		42 (-)	42	Pin 21
	2	-	-	-
		-	-	-
#3	1	44 (+)	44 or 43 or 43/41 (*)	Pin 3
		42 (-)	42	Pin 22
	2	-	-	-
		-	-	-
#4	1	44 (+)	44 or 43 or 43/41 (*)	Pin 4
		42 (-)	42	Pin 23
	2	-	-	-
		-	-	-
#5	1	44 (+)	44 or 43 or 43/41 (*)	Pin 5
		42 (-)	42	Pin 24
	2	-	-	-
		-	-	-
#6	1	44 (+)	44 or 43 or 43/41 (*)	Pin 6
		42 (-)	42	Pin 25
	2	-	-	-
		-	-	-
#7	1	44 (+)	44 or 43 or 43/41 (*)	Pin 7
		42 (-)	42	Pin 26
	2	-	-	-
		-	-	-
#8	1	44 (+)	44 or 43 or 43/41 (*)	Pin 8
		42 (-)	42	Pin 27
	2	-	-	-
		-	-	-

9202BxA I.S. Input terminals				SUB-D37 adaptor CN1
Unit	Ch.	NAMUR sensor	Contact signal	
#9	1	44 (+)	44 or 43 or 43/41 (*)	Pin 9
		42 (-)	42	Pin 28
	2	-	-	-
		-	-	-
#10	1	44 (+)	44 or 43 or 43/41 (*)	Pin 10
		42 (-)	42	Pin 29
	2	-	-	-
		-	-	-
#11	1	44 (+)	44 or 43 or 43/41 (*)	Pin 11
		42 (-)	42	Pin 30
	2	-	-	-
		-	-	-
#12	1	44 (+)	44 or 43 or 43/41 (*)	Pin 12
		42 (-)	42	Pin 31
	2	-	-	-
		-	-	-
#13	1	44 (+)	44 or 43 or 43/41 (*)	Pin 13
		42 (-)	42	Pin 32
	2	-	-	-
		-	-	-
#14	1	44 (+)	44 or 43 or 43/41 (*)	Pin 14
		42 (-)	42	Pin 33
	2	-	-	-
		-	-	-
#15	1	44 (+)	44 or 43 or 43/41 (*)	Pin 15
		42 (-)	42	Pin 34
	2	-	-	-
		-	-	-
#16	1	44 (+)	44 or 43 or 43/41 (*)	Pin 16
		42 (-)	42	Pin 35
	2	-	-	-
		-	-	-

**Please note:**

(\*) Check 9203 manual for correct output signal wiring.

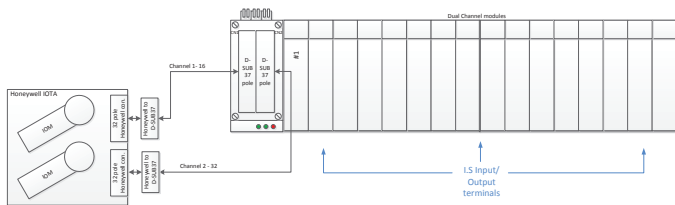


Cx-TDIL01/11 card wiring, 32 x DI,  
PR 9202 1 channel, Backplane #2

9202BxA I.S. input terminals				SUB-D37 adaptor CN1
Unit	Ch.	NAMUR sensor	Contact signal	
#1	1	44 (+)	44 or 43 or 43/41 (*)	Pin 1
		42 (-)	42	Pin 20
	2	-	-	-
		-	-	-
#2	1	44 (+)	44 or 43 or 43/41 (*)	Pin 2
		42 (-)	42	Pin 21
	2	-	-	-
		-	-	-
#3	1	44 (+)	44 or 43 or 43/41 (*)	Pin 3
		42 (-)	42	Pin 22
	2	-	-	-
		-	-	-
#4	1	44 (+)	44 or 43 or 43/41 (*)	Pin 4
		42 (-)	42	Pin 23
	2	-	-	-
		-	-	-
#5	1	44 (+)	44 or 43 or 43/41 (*)	Pin 5
		42 (-)	42	Pin 24
	2	-	-	-
		-	-	-
#6	1	44 (+)	44 or 43 or 43/41 (*)	Pin 6
		42 (-)	42	Pin 25
	2	-	-	-
		-	-	-
#7	1	44 (+)	44 or 43 or 43/41 (*)	Pin 7
		42 (-)	42	Pin 26
	2	-	-	-
		-	-	-
#8	1	44 (+)	44 or 43 or 43/41 (*)	Pin 8
		42 (-)	42	Pin 27
	2	-	-	-
		-	-	-

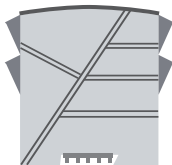
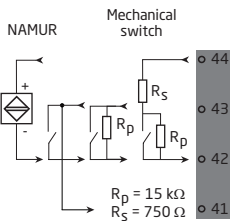
9202BxA I.S. input terminals				SUB-D37 adaptor CN1
Unit	Ch.	NAMUR sensor	Contact signal	
#9	1	44 (+)	44 or 43 or 43/41 (*)	Pin 9
		42 (-)	42	Pin 28
	2	-	-	-
		-	-	-
#10	1	44 (+)	44 or 43 or 43/41 (*)	Pin 10
		42 (-)	42	Pin 29
	2	-	-	-
		-	-	-
#11	1	44 (+)	44 or 43 or 43/41 (*)	Pin 11
		42 (-)	42	Pin 30
	2	-	-	-
		-	-	-
#12	1	44 (+)	44 or 43 or 43/41 (*)	Pin 12
		42 (-)	42	Pin 31
	2	-	-	-
		-	-	-
#13	1	44 (+)	44 or 43 or 43/41 (*)	Pin 13
		42 (-)	42	Pin 32
	2	-	-	-
		-	-	-
#14	1	44 (+)	44 or 43 or 43/41 (*)	Pin 14
		42 (-)	42	Pin 33
	2	-	-	-
		-	-	-
#15	1	44 (+)	44 or 43 or 43/41 (*)	Pin 15
		42 (-)	42	Pin 34
	2	-	-	-
		-	-	-
#16	1	44 (+)	44 or 43 or 43/41 (*)	Pin 16
		42 (-)	42	Pin 35
	2	-	-	-
		-	-	-

## Block diagram for Cx-TDIL01/11 card, 16 modules - 32 x DI, PR 9202 2 channels

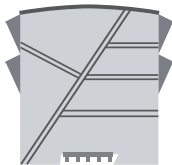
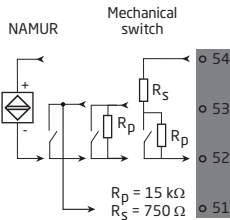


## 9202B PULSE ISOLATOR

Channel 1:



Channel 2:



Cx-TDIL01/11 card wiring, 32 x DI,  
PR 9202 2 channels

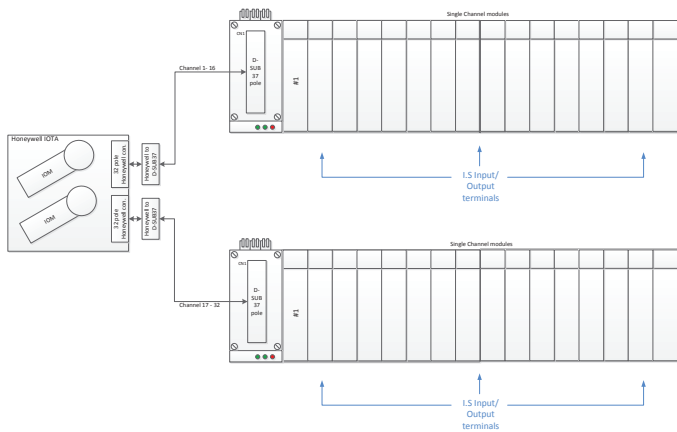
9202BxB I.S. input terminals				SUB-D37 adaptor CN1
Unit	Ch.	NAMUR sensor	Contact signal	
#1	1	44 (+)	44 or 43 or 43/41 (*)	Pin 1
		42 (-)	42	Pin 20
	2	54 (+)	54 or 53 or 53/51 (*)	Pin 2
		52 (-)	52	Pin 21
#2	1	44 (+)	44 or 43 or 43/41 (*)	Pin 3
		42 (-)	42	Pin 22
	2	54 (+)	54 or 53 or 53/51 (*)	Pin 4
		52 (-)	52	Pin 23
#3	1	44 (+)	44 or 43 or 43/41 (*)	Pin 5
		42 (-)	42	Pin 24
	2	54 (+)	54 or 53 or 53/51 (*)	Pin 6
		52 (-)	52	Pin 25
#4	1	44 (+)	44 or 43 or 43/41 (*)	Pin 7
		42 (-)	42	Pin 26
	2	54 (+)	54 or 53 or 53/51 (*)	Pin 8
		52 (-)	52	Pin 27
#5	1	44 (+)	44 or 43 or 43/41 (*)	Pin 9
		42 (-)	42	Pin 28
	2	54 (+)	54 or 53 or 53/51 (*)	Pin 10
		52 (-)	52	Pin 29
#6	1	44 (+)	44 or 43 or 43/41 (*)	Pin 11
		42 (-)	42	Pin 30
	2	54 (+)	54 or 53 or 53/51 (*)	Pin 12
		52 (-)	52	Pin 31
#7	1	44 (+)	44 or 43 or 43/41 (*)	Pin 13
		42 (-)	42	Pin 32
	2	54 (+)	54 or 53 or 53/51 (*)	Pin 14
		52 (-)	52	Pin 33
#8	1	44 (+)	44 or 43 or 43/41 (*)	Pin 15
		42 (-)	42	Pin 34
	2	54 (+)	54 or 53 or 53/51 (*)	Pin 16
		52 (-)	52	Pin 35

9202BxB I.S. input terminals				SUB-D37 adaptor CN2
Unit	Ch.	NAMUR sensor	Contact signal	
#9	1	44 (+)	44 or 43 or 43/41 (*)	Pin 1
		42 (-)	42	Pin 20
	2	54 (+)	54 or 53 or 53/51 (*)	Pin 2
		52 (-)	52	Pin 21
#10	1	44 (+)	44 or 43 or 43/41 (*)	Pin 3
		42 (-)	42	Pin 22
	2	54 (+)	54 or 53 or 53/51 (*)	Pin 4
		52 (-)	52	Pin 23
#11	1	44 (+)	44 or 43 or 43/41 (*)	Pin 5
		42 (-)	42	Pin 24
	2	54 (+)	54 or 53 or 53/51 (*)	Pin 6
		52 (-)	52	Pin 25
#12	1	44 (+)	44 or 43 or 43/41 (*)	Pin 7
		42 (-)	42	Pin 26
	2	54 (+)	54 or 53 or 53/51 (*)	Pin 8
		52 (-)	52	Pin 27
#13	1	44 (+)	44 or 43 or 43/41 (*)	Pin 9
		42 (-)	42	Pin 28
	2	54 (+)	54 or 53 or 53/51 (*)	Pin 10
		52 (-)	52	Pin 29
#14	1	44 (+)	44 or 43 or 43/41 (*)	Pin 11
		42 (-)	42	Pin 30
	2	54 (+)	54 or 53 or 53/51 (*)	Pin 12
		52 (-)	52	Pin 31
#15	1	44 (+)	44 or 43 or 43/41 (*)	Pin 13
		42 (-)	42	Pin 32
	2	54 (+)	54 or 53 or 53/51 (*)	Pin 14
		52 (-)	52	Pin 33
#16	1	44 (+)	44 or 43 or 43/41 (*)	Pin 15
		42 (-)	42	Pin 34
	2	54 (+)	54 or 53 or 53/51 (*)	Pin 16
		52 (-)	52	Pin 35

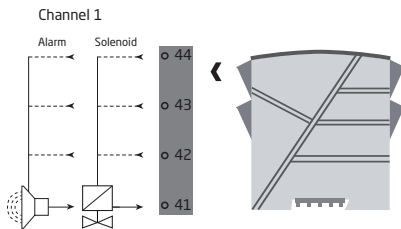
**Please note:**

(\*) Check 9202 manual for correct Contact input wiring.

## Block diagram for Cx-TDOB01/11 card wiring, 32 X DO, PR 9203 1 channel,



## 9203B SOLENOID / ALARM DRIVER



Cx-TDOB01/11 card wiring, 32 X DO,  
PR 9203 1 channel, Backplane #1

9203BxA I.S. output terminals				SUB-D37 adaptor CN1
Unit	Ch.	Output (+) signal	Return (-) signal	
#1	1	42, 43, 44 (*)	41	Pin 1
	2	-	-	Pin 20
#2	1	42, 43, 44 (*)	41	-
	2	-	-	-
#3	1	42, 43, 44 (*)	41	Pin 2
	2	-	-	Pin 21
#4	1	42, 43, 44 (*)	41	-
	2	-	-	-
#5	1	42, 43, 44 (*)	41	Pin 3
	2	-	-	Pin 22
#6	1	42, 43, 44 (*)	41	-
	2	-	-	-
#7	1	42, 43, 44 (*)	41	Pin 4
	2	-	-	Pin 23
#8	1	42, 43, 44 (*)	41	-
	2	-	-	-

9203BxA I.S. output terminals				SUB-D37 adaptor CN1
Unit	Ch.	Output (+) signal	Return (-) signal	
#9	1	42, 43, 44 (*)	41	Pin 9
	2	-	-	Pin 28
#10	1	42, 43, 44 (*)	41	-
	2	-	-	-
#11	1	42, 43, 44 (*)	41	Pin 10
	2	-	-	Pin 29
#12	1	42, 43, 44 (*)	41	-
	2	-	-	-
#13	1	42, 43, 44 (*)	41	Pin 11
	2	-	-	Pin 30
#14	1	42, 43, 44 (*)	41	-
	2	-	-	-
#15	1	42, 43, 44 (*)	41	Pin 12
	2	-	-	Pin 31
#16	1	42, 43, 44 (*)	41	-
	2	-	-	-
#17	1	42, 43, 44 (*)	41	Pin 13
	2	-	-	Pin 32
#18	1	42, 43, 44 (*)	41	-
	2	-	-	-
#19	1	42, 43, 44 (*)	41	Pin 14
	2	-	-	Pin 33
#20	1	42, 43, 44 (*)	41	-
	2	-	-	-
#21	1	42, 43, 44 (*)	41	Pin 15
	2	-	-	Pin 34
#22	1	42, 43, 44 (*)	41	-
	2	-	-	-
#23	1	42, 43, 44 (*)	41	Pin 16
	2	-	-	Pin 35
#24	1	42, 43, 44 (*)	41	-
	2	-	-	-

**Please note:**

(\*) Check 9203 manual for correct output signal wiring.



Cx-TDOB01/11 card wiring, 32 X DO,  
PR 9203 1 channel, Backplane #2

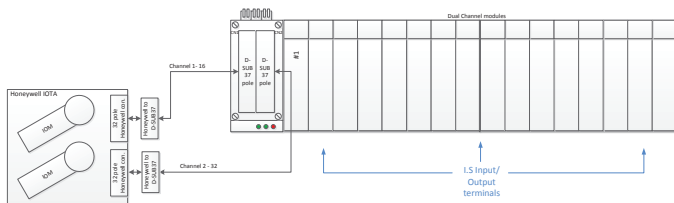
9203BxA I.S. output terminals				SUB-D37 adaptor CN1
Unit	Ch.	Output (+) signal	Return (-) signal	
#1	1	42, 43, 44 (*)	41	Pin 1
	2	-	-	Pin 20
#2	1	42, 43, 44 (*)	41	-
	2	-	-	-
#3	1	42, 43, 44 (*)	41	Pin 2
	2	-	-	Pin 21
#4	1	42, 43, 44 (*)	41	-
	2	-	-	-
#5	1	42, 43, 44 (*)	41	Pin 3
	2	-	-	Pin 22
#6	1	42, 43, 44 (*)	41	-
	2	-	-	-
#7	1	42, 43, 44 (*)	41	Pin 4
	2	-	-	Pin 23
#8	1	42, 43, 44 (*)	41	-
	2	-	-	-
#9	1	42, 43, 44 (*)	41	Pin 5
	2	-	-	Pin 24
#10	1	42, 43, 44 (*)	41	-
	2	-	-	-
#11	1	42, 43, 44 (*)	41	Pin 6
	2	-	-	Pin 25
#12	1	42, 43, 44 (*)	41	-
	2	-	-	-
#13	1	42, 43, 44 (*)	41	Pin 7
	2	-	-	Pin 26
#14	1	42, 43, 44 (*)	41	-
	2	-	-	-
#15	1	42, 43, 44 (*)	41	Pin 8
	2	-	-	Pin 27
#16	1	42, 43, 44 (*)	41	-
	2	-	-	-

9203BxA I.S. output terminals				SUB-D37 adaptor CN1
Unit	Ch.	Output (+) signal	Return (-) signal	
#9	1	42, 43, 44 (*)	41	Pin 9
	2	-	-	Pin 28
#10	1	42, 43, 44 (*)	41	-
	2	-	-	-
#11	1	42, 43, 44 (*)	41	Pin 10
	2	-	-	Pin 29
#12	1	42, 43, 44 (*)	41	-
	2	-	-	-
#13	1	42, 43, 44 (*)	41	Pin 11
	2	-	-	Pin 30
#14	1	42, 43, 44 (*)	41	-
	2	-	-	-
#15	1	42, 43, 44 (*)	41	Pin 12
	2	-	-	Pin 31
#16	1	42, 43, 44 (*)	41	-
	2	-	-	-
#17	1	42, 43, 44 (*)	41	Pin 13
	2	-	-	Pin 32
#18	1	42, 43, 44 (*)	41	-
	2	-	-	-
#19	1	42, 43, 44 (*)	41	Pin 14
	2	-	-	Pin 33
#20	1	42, 43, 44 (*)	41	-
	2	-	-	-
#21	1	42, 43, 44 (*)	41	Pin 15
	2	-	-	Pin 34
#22	1	42, 43, 44 (*)	41	-
	2	-	-	-
#23	1	42, 43, 44 (*)	41	Pin 16
	2	-	-	Pin 35
#24	1	42, 43, 44 (*)	41	-
	2	-	-	-

**Please note:**

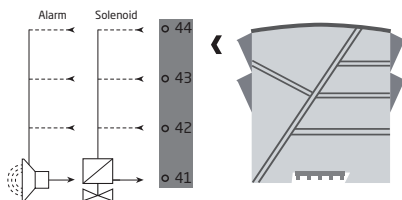
(\*) Check 9203 manual for correct output signal wiring.

## Block diagram for Cx-TDOB01/11 card wiring, 32 x DO, PR 9203 2 channels

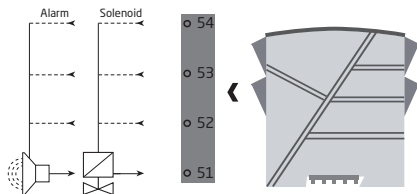


## 9203B SOLENOID / ALARM DRIVER

### Channel 1



### Channel 2



**Cx-TDOB01/11 card wiring, 32 x DO,  
PR 9203 2 channels**

9203BxB I.S. output terminals				SUB-D37 adaptor CN1
Unit	Ch.	Output (+) signal	Return (-) signal	
#1	1	42, 43, 44 (*)	41	Pin 1
	2	52, 53, 54 (*)	51	Pin 20
#2	1	42, 43, 44 (*)	41	Pin 2
	2	52, 53, 54 (*)	51	Pin 21
#3	1	42, 43, 44 (*)	41	Pin 3
	2	52, 53, 54 (*)	51	Pin 22
#4	1	42, 43, 44 (*)	41	Pin 4
	2	52, 53, 54 (*)	51	Pin 23
#5	1	42, 43, 44 (*)	41	Pin 5
	2	52, 53, 54 (*)	51	Pin 24
#6	1	42, 43, 44 (*)	41	Pin 6
	2	52, 53, 54 (*)	51	Pin 25
#7	1	42, 43, 44 (*)	41	Pin 7
	2	52, 53, 54 (*)	51	Pin 26
#8	1	42, 43, 44 (*)	41	Pin 8
	2	52, 53, 54 (*)	51	Pin 27
#9	1	42, 43, 44 (*)	41	Pin 9
	2	52, 53, 54 (*)	51	Pin 28
#10	1	42, 43, 44 (*)	41	Pin 10
	2	52, 53, 54 (*)	51	Pin 29
#11	1	42, 43, 44 (*)	41	Pin 11
	2	52, 53, 54 (*)	51	Pin 30
#12	1	42, 43, 44 (*)	41	Pin 12
	2	52, 53, 54 (*)	51	Pin 31
#13	1	42, 43, 44 (*)	41	Pin 13
	2	52, 53, 54 (*)	51	Pin 32
#14	1	42, 43, 44 (*)	41	Pin 14
	2	52, 53, 54 (*)	51	Pin 33
#15	1	42, 43, 44 (*)	41	Pin 15
	2	52, 53, 54 (*)	51	Pin 34
#16	1	42, 43, 44 (*)	41	Pin 16
	2	52, 53, 54 (*)	51	Pin 35

9203BxB I.S. output terminals				SUB-D37 adaptor CN2
Unit	Ch.	Output (+) signal	Return (-) signal	
#9	1	42, 43, 44 (*)	41	Pin 1
	2	52, 53, 54 (*)	51	Pin 20
#10	1	42, 43, 44 (*)	41	Pin 2
	2	52, 53, 54 (*)	51	Pin 21
#11	1	42, 43, 44 (*)	41	Pin 3
	2	52, 53, 54 (*)	51	Pin 22
#12	1	42, 43, 44 (*)	41	Pin 4
	2	52, 53, 54 (*)	51	Pin 23
#13	1	42, 43, 44 (*)	41	Pin 5
	2	52, 53, 54 (*)	51	Pin 24
#14	1	42, 43, 44 (*)	41	Pin 6
	2	52, 53, 54 (*)	51	Pin 25
#15	1	42, 43, 44 (*)	41	Pin 7
	2	52, 53, 54 (*)	51	Pin 26
#16	1	42, 43, 44 (*)	41	Pin 8
	2	52, 53, 54 (*)	51	Pin 27
#17	1	42, 43, 44 (*)	41	Pin 9
	2	52, 53, 54 (*)	51	Pin 28
#18	1	42, 43, 44 (*)	41	Pin 10
	2	52, 53, 54 (*)	51	Pin 29
#19	1	42, 43, 44 (*)	41	Pin 11
	2	52, 53, 54 (*)	51	Pin 30
#20	1	42, 43, 44 (*)	41	Pin 12
	2	52, 53, 54 (*)	51	Pin 31
#21	1	42, 43, 44 (*)	41	Pin 13
	2	52, 53, 54 (*)	51	Pin 32
#22	1	42, 43, 44 (*)	41	Pin 14
	2	52, 53, 54 (*)	51	Pin 33
#23	1	42, 43, 44 (*)	41	Pin 15
	2	52, 53, 54 (*)	51	Pin 34
#24	1	42, 43, 44 (*)	41	Pin 16
	2	52, 53, 54 (*)	51	Pin 35

# BACKPLANE TO HONEYWELL SM-RUSIO I/O CARD WIRING

## **Honeywell RUSIO**

The Backplane can operate with the Honeywell Remote Universal Safe IO device type SM-RUSIO DCS system via the Redundant IOTA board (FC-IOTA-R24).

The SM-RUSIO module has 32 universal safe IO channels with configurable channel function; configuration is done via the Honeywell software configuration tool Safety Builder.

Each channel on the SM-RUSIO DCS system can be configured as: Digital Input (DI), Digital Output (DO), Analog Input (AI) or Analog Output (AO).

## **PR Programmable Adaptor Board**

PR's Backplane universal solution is based on 16 configurable channels for RUSIO DCS system. This solution will provide possibilities for the customer to select any type of signal (AI, AO, DI and DO) for each channel individually. The configuration has been implemented as a single DIP-switch for each IO channel in the backplane, as shown in the following figure:

## Table 1: 9000 Backplane Universal Channel Configuration:

Each Backplane channel is individually configurable by the corresponding DIP-switch (CH1-CH16) as follows:

Channel configuration according to SM-RUSIO DCS system operation mode	1	2	3	4	5	6
Analog Input (9106BxB/9113BxB/9116B_CH1)			●	●	●	
Analog Output (9107BxB)	●	●			●	
Digital Input (Non-Line-Monitored) (9202BxB/9116B_CH2)	●	●			●	
Digital Input (Line-Monitored) (9202BxB/9116B_CH2)	●	●				●
Digital Output (9203BxB)	●	●				●

● Switch On

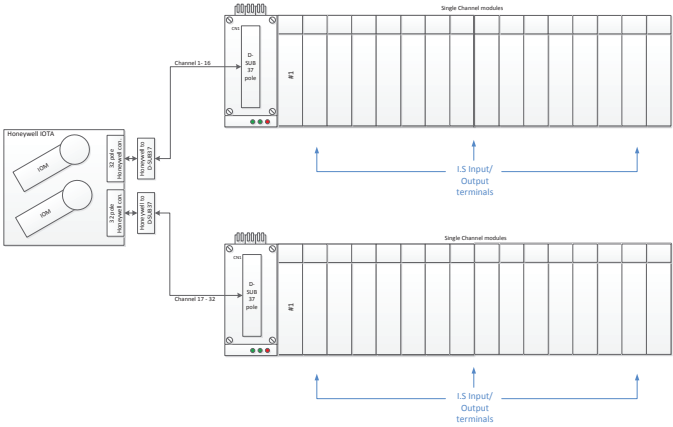
### Please note:

\*) DIP SETUP MUST BE REPEATED FOR ALL IO CHANNELS.



POWER TO THE BACKPLANE MUST BE TURNED OFF WHEN CHANGING THE DIP CONFIGURATION.

# Block diagram for FC-IATO-R24 card wiring, 32 x uni. I/O, 1 channel modules





**FC-IAT0-R24 card wiring, 32 x uni. I/O,  
1 channel modules, Backplane #1**

9XXXBxA I.S. input/output terminals			SUB-D37 adaptor CN1
Unit	Ch.	Supported I/O modules	
#1	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 37
	2	-	(-) Pin 19
#2	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 36
	2	-	(-) Pin 18
#3	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 35
	2	-	(-) Pin 17
#4	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 34
	2	-	(-) Pin 16
#5	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 33
	2	-	(-) Pin 15
#6	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 32
	2	-	(-) Pin 14
#7	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 31
	2	-	(-) Pin 13
#8	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 30
	2	-	(-) Pin 12

9XXXBxA I.S. input/output terminals			SUB-D37 adaptor CN1
Unit	Ch.	Supported I/O modules	
#9	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 29 (-) Pin 11
	2		- -
#10	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 28 (-) Pin 10
	2		- -
#11	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 27 (-) Pin 9
	2		- -
#12	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 26 (-) Pin 8
	2		- -
#13	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 25 (-) Pin 7
	2		- -
#14	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 24 (-) Pin 6
	2		- -
#15	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 23 (-) Pin 5
	2		- -
#16	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 22 (-) Pin 4
	2		- -

**Please note:**

(\*) Check the module manual for correct input/output signal wiring.

(\*\*) Check table 1 for the correct channel configuration.

FC-IAT0-R24 card wiring, 32 x uni. I/O,  
1 channel modules, Backplane #2

9XXXBxA I.S. input/output terminals			SUB-D37 adaptor CN1
Unit	Ch.	Supported I/O modules	
#1	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 37 (-) Pin 19
	2	-	- -
#2	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 36 (-) Pin 18
	2	-	- -
#3	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 35 (-) Pin 17
	2	-	- -
#4	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 34 (-) Pin 16
	2	-	- -
#5	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 33 (-) Pin 15
	2	-	- -
#6	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 32 (-) Pin 14
	2	-	- -
#7	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 31 (-) Pin 13
	2	-	- -
#8	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 30 (-) Pin 12
	2	-	- -

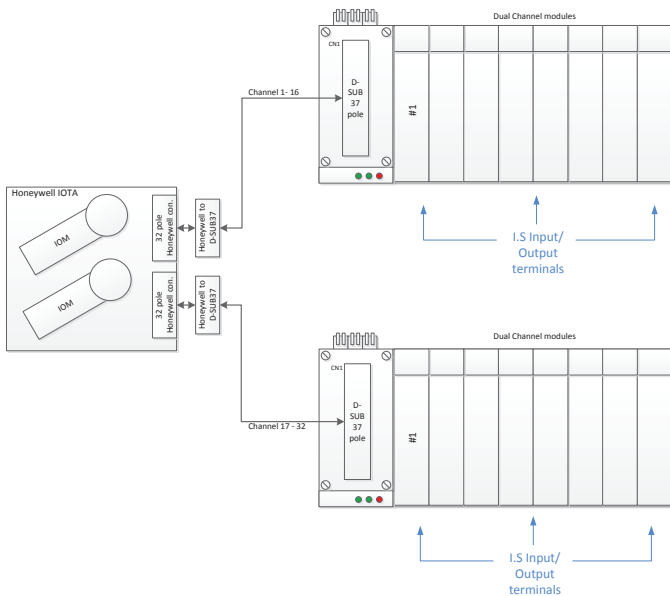
9XXXBxA I.S. input/output terminals			SUB-D37 adaptor CN1
Unit	Ch.	Supported I/O Modules	
#9	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 29 (-) Pin 11
	2	-	-
#10	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 28 (-) Pin 10
	2	-	-
#11	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 27 (-) Pin 9
	2	-	-
#12	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 26 (-) Pin 8
	2	-	-
#13	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 25 (-) Pin 7
	2	-	-
#14	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 24 (-) Pin 6
	2	-	-
#15	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 23 (-) Pin 5
	2	-	-
#16	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 22 (-) Pin 4
	2	-	-

**Please note:**

(\*) Check the module manual for correct input/output signal wiring.

(\*\*) Check table 1 for the correct channel configuration.

## Block diagram for FC-IATO-R24 card wiring, 32 x uni. I/O, 2 channel modules



**FC-IATO-R24 card wiring, 32 x uni. I/O,  
2 channel modules, Backplane #1**

9XXXBxB I.S. input/output terminals			SUB-D37 adaptor CN1
Unit	Ch.	Supported I/O modules	
#1	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 37
	2		(-) Pin 19
#2	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 36
	2		(-) Pin 18
#3	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 35
	2		(-) Pin 17
#4	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 34
	2		(-) Pin 16
#5	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 33
	2		(-) Pin 15
#6	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 32
	2		(-) Pin 14
#7	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 31
	2		(-) Pin 13
#8	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 30
	2		(-) Pin 12
#9	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 29
	2		(-) Pin 11
#10	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 28
	2		(-) Pin 10
#11	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 27
	2		(-) Pin 9
#12	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 26
	2		(-) Pin 8
#13	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 25
	2		(-) Pin 7
#14	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 24
	2		(-) Pin 6
#15	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 23
	2		(-) Pin 5
#16	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 22
	2		(-) Pin 4

**FC-IAT0-R24 card wiring, 32 x uni. I/O,  
2 channel modules, Backplane #2**

9XXXBxB I.S. input/output terminals			SUB-D37 adaptor CN1
Unit	Ch.	Supported I/O modules	
#1	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 37
	2		(-) Pin 19
#2	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 36
	2		(-) Pin 18
#3	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 35
	2		(-) Pin 17
#4	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 34
	2		(-) Pin 16
#5	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 33
	2		(-) Pin 15
#6	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 32
	2		(-) Pin 14
#7	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 31
	2		(-) Pin 13
#8	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 30
	2		(-) Pin 12
#9	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 29
	2		(-) Pin 11
#10	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 28
	2		(-) Pin 10
#11	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 27
	2		(-) Pin 9
#12	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 26
	2		(-) Pin 8
#13	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 25
	2		(-) Pin 7
#14	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 24
	2		(-) Pin 6
#15	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 23
	2		(-) Pin 5
#16	1	9106BxA (*); 9107BxA (*); 9202BxA (*) 9203BxA (*); 9113BxA (*); 9116B (*, **)	(+) Pin 22
	2		(-) Pin 4

# **APPENDIX**

**BACKPLANE TO I/O CARD  
CABLE REFERENCES  
&  
9106B, 9107B, 9202B, 9203B  
WIRING CONNECTION**



# SYSTEM CABLES FOR HONEYWELL BACKPLANES MADE BY PHOENIX CONTACT

## FLKM-PA-D37/HW/DIO/C300

### Description

- Shielded round cable, assembled with two 37 pos.
- DSUB female connectors.
- Cable length: Variable.
- The following I/O cards can be connected:  
TDIL01, TDIL11, TDOB01, TDOB11  
TAOX01, TAOX11, TAIX01, TAIX11



### Order data

Description	Length	Order no.
CABLE-D37/SUB/B/B/100/KONFEK/S	1,0 m	2305509
CABLE-D37/SUB/B/B/200/KONFEK/S	2,0 m	2305512
CABLE-D37/SUB/B/B/300/KONFEK/S	3,0 m	2305525
CABLE-D37/SUB/B/B/400/KONFEK/S	4,0 m	2900759
CABLE-D37/SUB/B/B/600/KONFEK/S	6,0 m	2900760
CABLE-D37/SUB/B/B/800/KONFEK/S	8,0 m	2900761
CABLE-D37/SUB/B/B/1000/KONFEK/S	10,0 m	2900762
CABLE-D37/SUB/B/B/1500/KONFEK/S	15,0 m	2900763
CABLE-D37/SUB/B/B/2000/KONFEK/S	20,0 m	2900764
CABLE-D37/SUB/B/B/2500/KONFEK/S	25,0 m	2902074
CABLE-D37/SUB/B/B/3000/KONFEK/S	30,0 m	2902075
CABLE-D37/SUB/B/B/3500/KONFEK/S	35,0 m	2902076
CABLE-D37/SUB/B/B/4000/KONFEK/S	40,0 m	2902077
CABLE D-SUB-B-B-S/37S/C44/...	Variable	2302421

## Honeywell to SUB D adaptor for C300

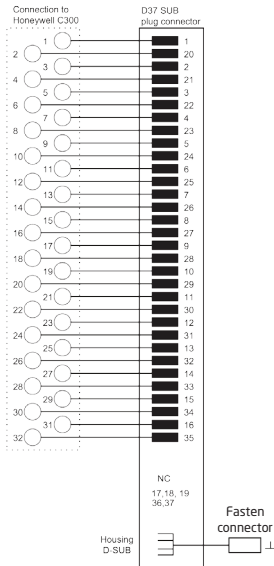
### FLKM-PA-D37/HW/DIO/C300

#### Description

VARIOFACE plug adapter for Honeywell C300 digital I/O cards

The following features characterize this adapter:

- Plug adapter with 37 pos. D-SUB male connectors (as shown)
- Transmission of 16 digital I/O channels
- The following I/O cards can be connected: TDIL11, TDOB11



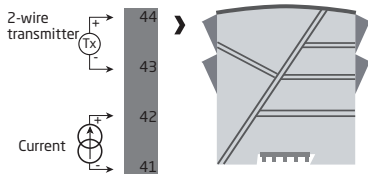
## Honeywell to SUB D adaptor for RUSIO

### Front adaptor - FLKM-PA-D37/HW/C300/SO-HICTB - 2902090

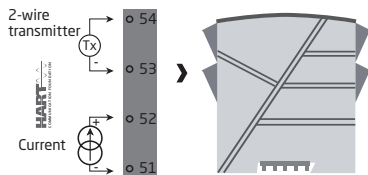
# 9106B HART® TRANSPARENT REPEATER



Channel 1



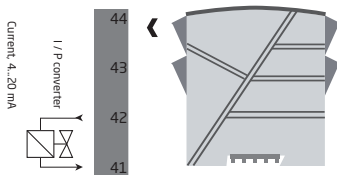
Channel 2



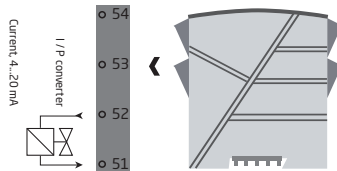
# 9107B HART® TRANSPARENT DRIVER



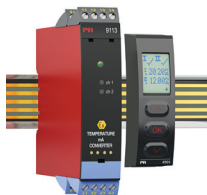
Channel 1



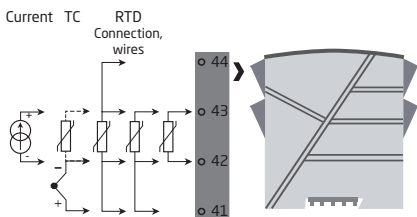
Channel 2



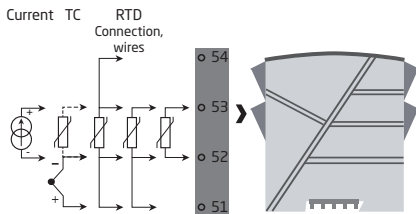
# 9113B TEMPERATURE / mA CONVERTER



Channel 1:



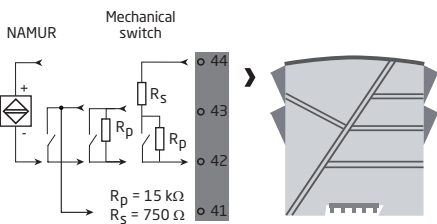
Channel 2:



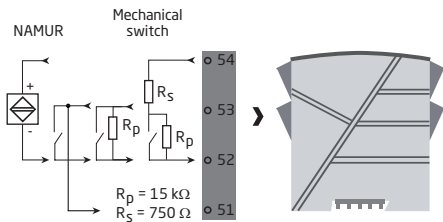
# 9202B PULSE ISOLATOR



Channel 1:



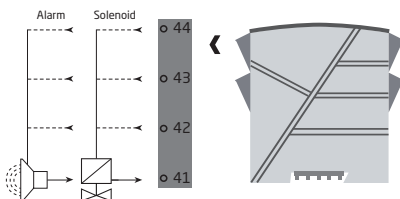
Channel 2:



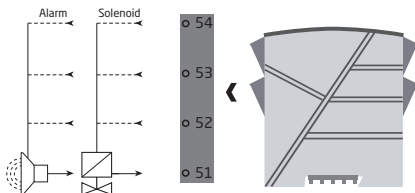
# 9203B SOLENOID / ALARM DRIVER



Channel 1



Channel 2





**Displays** Programmable displays with a wide selection of inputs and outputs for display of temperature, volume and weight, etc. Feature linearisation, scaling, and difference measurement functions for programming via PReset software.



**I.S. interfaces** Interfaces for analogue and digital signals as well as HART® signals between sensors / I/P converters / frequency signals and control systems in Ex zone 0, 1 & 2 and for some devices in zone 20, 21 & 22.



**Isolation** Galvanic isolators for analogue and digital signals as well as HART® signals. A wide product range with both loop-powered and universal isolators featuring linearisation, inversion, and scaling of output signals.






**Temperature** A wide selection of transmitters for DIN form B mounting and DIN rail devices with analogue and digital bus communication ranging from application-specific to universal transmitters.






**Multifunctional** PC or front programmable devices with universal options for input, output and supply. This range offers a number of advanced features such as process calibration, linearisation and auto-diagnosis.











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