

CN Series



85 Enclosure Sizes

Available in eighty-five (85) sizes, ranging from 16"x12"x6" (model 161206) to 60"x36"x12" (model 603612).

Construction

- Available in (3) Materials: SS304, SS316L, Powder Coated (ASA61 Grey) Steel
- Folded Lip around the Door Opening to provide complete and maximum gasket seal
- Continuously Welded and Ground Smooth Seams
- Silicone Strip Gasket
- Welded on External Mounting Feet with 5/16" Clearance Holes/Slot
- External Door Clamps
- Continuous Piano Type Hinge with Removable SS Hinge Pin
- Ground Studs on Box and Cover
- Internal/External Earthing Stud
- Padlock Hasp & Staple for Padlocking

Options

Gland Plates:

These removable plates offer great flexibility for the end user to drill holes without having to remove the entire enclosure from the installation site.

Add the following Suffixes:

- A**: Gland Plate installed on top of box.
- B**: Gland Plate installed on bottom of box.
- C**: Gland Plate installed on left of box.
- D**: Gland Plate installed on right of box.

For multiple gland plates omit dashes (*i.e.* CN4X-201407-**ABCD**)

Auxiliary Devices:



Pushbuttons - Rated 250V, 16A (T6) - 11A (T5)

- Single Button
- Dual
- Mushroom Head & Keyed Mushroom Head

Selector Switches - Rated 250V, 16A (T6) - 11A (T5)

- Two or Three Position
- Keyed
- Momentary or Maintained

Pilot Lights - Rated 12-240VAC, 12-110VDC, W 1W

- Lens Colors: Blue, Green, Red, Yellow, White

Potentiometers - Rated 250V

- 1W @ 1K, 4700, or 10K Ohms

Measuring Instruments:

Ammeters, Voltmeters - Rated 420V or 750V

- Direct Measurement
- Indirect Measurement
- Interchangeable Scales

CN Series

General Information

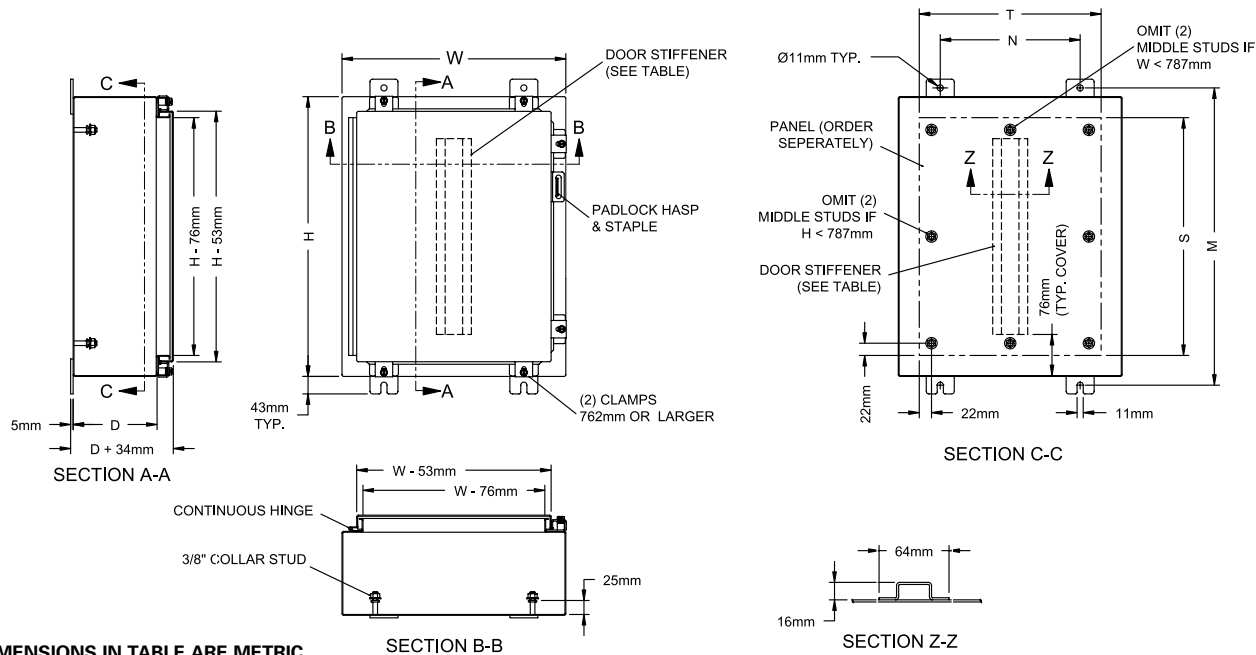
Adalet's Single Door Clamped Control Enclosures are available in Stainless Steel 316L & 304 and Carbon Steel. Adalet can also supply custom size enclosures, operators, and wiring of devices to rail mounted terminal blocks to suit your Increased Safety Application. Silicone gaskets, removable hinge pin, box & cover ground studs including an internal/external earthing stud, along with internal standoffs for mounting pans are included as standard.



3D-2

Enclosure Certifications		C _E 0539 II 2GD EEx e II T6 Tamb +40°C (T5 Tamb +55°C) IP66	ATEX Directive 94/9/EC EN50014/EN50019 IEC 60529	
Working Voltage			Up to 1100 Volts Maximum	
Terminal Blocks		Various Manufacturers	EEx e type with wire sizes 1.5mm up to 240mm	
Material		CN4 Series CN4X Series CN4X6 Series CN4 Series Gland Plates CN4X Series Gland Plates CN4X6 Series Gland Plates Mounting Pan	#14ga Cold Rolled Steel, Polyester Powder Coated ANSI 61 Gray #14ga Stainless Steel 304, Brushed Finish #14ga Stainless Steel 316, Brushed Finish #10ga Cold Rolled Steel, Polyester Powder Coated ANSI 61 Gray #10ga Stainless Steel 304, Brushed Finish #10ga Stainless Steel 316, Brushed Finish #14ga Cold Rolled Steel, Polyester Powder Coated White	
Gasket			Silicone Sponge	
Lid Fixing		Hinge CN4 Series CN4X Series CN4X6 Series Door Clamps CN4 Series CN4X Series CN4X6 Series	Continuous piano type - Steel with removable SS304 pin Continuous piano type - SS304 with removable pin Continuous piano type - SS316 with removable pin Plated Steel Clear Stainless Steel 304 Stainless Steel 316	
Enclosure Mounting		All Types	Four (4) external lugs with .44" clearance holes/slots	
Gland Plate Hardware		All Types	300 Series stainless steel	
Grounding		Box & Cover All Types Earthing Stud All Types	1/4-20 Stud with 300 series stainless steel hardware 1/4-20 Stud - All components brass	
Impact Resistant		All Types	7 Nm to EN50014/EN50019	
Ambient Temperature Range		All Types	-20°C to +55°C to EN50014	

CN Series – Catalog Numbers & Enclosure Sizes



DIMENSIONS IN TABLE ARE METRIC

ENCLOSURE SIZE	H	W	D							M	N	S	T	# OF CLAMPS	STIFFENER	
			06	08	10	12	16	20	24						BOX	COVER
-1224xx	305	610	152	203	--	--	--	--	--	359	458	229	534	4	---	---
-1612xx	406	305	152	203	254	--	--	--	--	460	241	330	229	4	---	---
-1616xx	406	406	152	203	--	--	--	--	--	460	254	330	330	4	---	---
-1620xx	406	508	152	203	--	--	--	--	--	460	356	330	432	4	---	---
-2012xx	508	305	152	203	--	--	--	--	--	562	241	432	229	4	---	---
-2016xx	508	406	152	203	254	305	--	--	--	562	254	432	330	4	---	---
-2020xx	508	508	152	203	254	--	--	--	--	562	356	432	432	4	---	---
-2024xx	508	610	152	203	--	--	--	--	--	562	458	432	534	4	---	---
-2412xx	610	305	152	203	254	--	--	--	--	664	241	534	229	5	---	---
-2416xx	610	406	152	203	--	--	--	--	--	664	254	534	330	5	---	---
-2420xx	610	508	152	203	254	305	406	--	--	664	356	534	432	5	---	---
-2424xx	610	610	152	203	254	305	406	--	--	664	458	534	534	5	---	---
-301606	762	406	152	--	--	--	--	--	--	816	254	686	330	5	---	---
-3020xx	762	508	152	203	254	--	--	--	--	816	356	686	432	5	---	---
-3024xx	762	610	152	203	254	305	406	508	588	816	458	686	534	5	---	---
-3624xx	914	610	152	203	254	305	--	--	--	968	458	838	534	5	---	---
-3630xx	914	762	152	203	254	305	406	508	--	968	610	838	686	7	REQ'D	REQ'D
-2430xx	610	762	--	203	--	--	--	--	--	664	610	534	686	7	---	---
-3030xx	762	762	--	203	--	305	--	--	--	816	610	686	686	7	REQ'D	REQ'D
-303608	762	914	--	203	--	--	--	--	--	816	762	686	838	7	REQ'D	REQ'D
-3636xx	914	914	--	203	--	305	--	--	--	968	762	838	838	7	REQ'D	REQ'D
-422408	1067	610	--	203	--	--	--	--	--	1121	458	991	534	6	---	REQ'D
-4230xx	1067	762	--	203	254	305	--	--	--	1121	610	991	686	8	REQ'D	REQ'D
-4236xx	1067	914	--	203	254	305	406	--	--	1121	762	991	838	8	REQ'D	REQ'D
-482408	1219	610	--	203	--	--	--	--	--	1273	458	1143	534	6	---	REQ'D
-4830xx	1219	762	--	203	254	--	--	--	--	1273	610	1143	686	8	REQ'D	REQ'D
-4836xx	1219	914	--	203	254	305	406	508	--	1273	762	1143	838	8	REQ'D	REQ'D
-6036xx	1524	914	--	203	254	305	406	508	588	1578	762	1448	838	9	REQ'D	REQ'D

To build catalog number:

1. For enclosure sizes ending in xx, select enclosure depth for your application from column D. (i.e. -243008)
2. For Stainless Steel 316L enclosures add prefix CN4X6. (i.e. CN4X6-243008)
3. For Stainless Steel 304 enclosures add prefix CN4X. (i.e. CN4X-243008)
4. For Steel Powder Coated enclosures add prefix CN4. (i.e. CN4-243008)

3D-3

CN Series – Auxiliary Devices



Pilot Lights

II 2 G EEx de IIC

IEC 60529: IP66

Rated Operating Voltage: AC 24V, 48V, 110V, 230V; DC 24V, 48V

Lamp: Multi-LED

Electrical Life: 10⁵ Hours Illuminated

Catalog Numbers

Red: **07-3353-1110/1000**

Green: **07-3353-1120/2000**

Yellow: **07-3353-1130/3000**

White: **07-3353-1140/4000**

Blue: **07-3353-1150/5000**



Pushbuttons

II 2 G EEx de IIC

IEC60529: IP66

Rated Insulation Voltage: 300V

Nominal Currents: 16A/+40°C, 11A/ +60°C

Catalog Numbers

Pushbuttons

Pushbutton, 1NO/1NC: **07-3323-1400/1000**

Pushbutton, 2NO: **07-3323-1200/1000**

Pushbutton, 2NC: **07-3323-1100/1000**

* Pushbuttons are supplied with (4) loose colored discs: Red, Green, Yellow, White

Mushroom Head Pushbuttons

Mushroom, Black, 1NO/1NC: **07-3323-1400/5000**

Mushroom, Black, 2NO: **07-3323-1200/5000**

Mushroom, Black, 2NC: **07-3323-1100/5000**

Mushroom, Black, Lockable, 1NO/1NC: **07-3323-1400/6300**

Mushroom, Black, Lockable, 2NO: **07-3323-1200/6300**

Mushroom, Black, Lockable, 2NC: **07-3323-1100/6300**



Emergency Stop Pushbuttons

II 2 G EEx de IIC

IEC 60529: IP66

Rated Insulation Voltage: 300V

Nominal Currents: 16A/+40°C, 11A/ +60°C

Catalog Numbers

1NO/1NC: **07-3323-1400/2000**

2NO: **07-3323-1200/2000**

2NC: **07-3323-1100/2000**

3D-4

CN Series – Auxiliary Devices



Selector Switches

II 2 G EEx de IIC

IEC 60529: IP66

Rated Insulation Voltage: 300V

Nominal Currents: 16A/+40°C, 11A/ +60°C

Catalog Numbers

Maintained Selector Switches

2-Position, 1NO/1NC:	07-3323-1400/3000
2-Position, 2NO:	07-3323-1200/3000
2-Position, 2NC:	07-3323-1100/3000
3-Position, 1NO/1NC:	07-3323-1400/4000
3-Position, 2NO:	07-3323-1200/4000
3-Position, 2NC:	07-3323-1100/4000

Momentary (Left-Right) Selector Switches

3-Position, 1NO/1NC:	07-3323-1400/4100
3-Position, 2NO:	07-3323-1200/4100
3-Position, 2NC:	07-3323-1100/4100

Latching (Left) - Momentary (Right) Selector Switches

3-Position, 1NO/1NC:	07-3323-1400/4200
3-Position, 2NO:	07-3323-1200/4200
3-Position, 2NC:	07-3323-1100/4200

Momentary (Left) - Latching (Right) Selector Switches

3-Position, 1NO/1NC:	07-3323-1400/4300
3-Position, 2NO:	07-3323-1200/4300
3-Position, 2NC:	07-3323-1100/4300

Keyed Selector Switches (2 Position)

Lockable Both Positions, Key Removable Both Positions, 1NO/1NC:	07-3323-1400/6000
Lockable Both Positions, Key Removable Both Positions, 2NO:	07-3323-1200/6000
Lockable Both Positions, Key Removable Both Positions, 2NC:	07-3323-1100/6000
Lockable Depressed Position, Key Removable Depressed Position, 1NO/1NC:	07-3323-1400/6100
Lockable Depressed Position, Key Removable Depressed Position, 2NO:	07-3323-1200/6100
Lockable Depressed Position, Key Removable Depressed Position, 2NC:	07-3323-1100/6100
Lockable Initial Position, Key Removable Initial Position, 1NO/1NC:	07-3323-1400/6200
Lockable Initial Position, Key Removable Initial Position, 2NO:	07-3323-1200/6200
Lockable Initial Position, Key Removable Initial Position, 2NC:	07-3323-1100/6200

CN Series – Auxiliary Devices

Potentiometers

EEx de IIC

IEC 60529: IP66

Rated Voltage/Power: 250V / 1 Watt

1 Turn

Scale: 0 - 100%

Catalog Numbers

1 Watt, 1000 Ohm: **GHG 418 8131 R0014**

1 Watt, 4700 Ohm: **GHG 418 8131 R0015**

1 Watt, 10000 Ohm: **GHG 418 8131 R0016**

Measuring Instruments

EEx e IIC

IEC 60529: IP66

Current Type: AC or DC

Movement: Moving Iron

Exactitude of Measurement: Class 2.5

Rated Current: Red Indicator

Zero Adjustment: Adjustment Screw on Instrument

Overload Range: 1 : 1.5 (indicated)

3D-6

CATALOG NUMBERS

<u>Movement</u>	<u>Scale</u>	<u>Catalog Number</u>
n / 1A	0 - 100 / 150 %	GHG 412 8282 R0031
0 - 20 mA (Ri = 320 Ohm)	0 - 100 / 120 %	GHG 412 8285 R0033
4 - 20 mA (Ri = 320 Ohm)	0 - 100 / 120 %	GHG 412 8286 R0035
Other	-	GHG 412 828_ R00

Code for Movement:

1 = Direct Measurement **2** = Instrument Transformer Connection, n / 1A

Code for Interchangeable Scales:

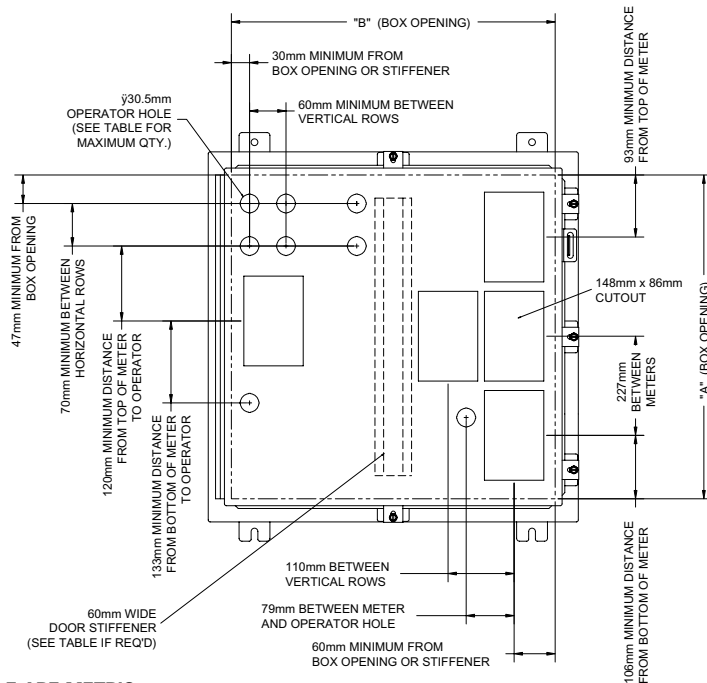
Direct Measurement:

<u>Code</u>	<u>Scale</u>
02	0 - 1 / 1.5 A
03	0 - 2.5 / 3.75 A
04	0 - 5 / 7.5 A
05	0 - 10 / 15 A
07	0 - 16 / 24 A
08	0 - 20 / 30 A

Interchangeable Scale:

<u>Code</u>	<u>Scale</u>	<u>Code</u>	<u>Scale</u>	<u>Code</u>	<u>Scale</u>
02	0 - 1 / 1.5 A	09	0 - 30 / 45 A	16	0 - 200 / 300 A
03	0 - 2.5 / 3.75 A	10	0 - 40 / 60 A	17	0 - 250 / 375 A
04	0 - 5 / 7.5 A	11	0 - 50 / 75 A	18	0 - 300 / 450 A
05	0 - 10 / 15 A	12	0 - 60 / 90 A	19	0 - 400 / 600 A
07	0 - 16 / 24 A	13	0 - 75 / 112.5 A	20	0 - 500 / 750 A
08	0 - 20 / 30 A	14	0 - 100 / 150 A	21	0 - 600 / 900 A
		15	0 - 150 / 225 A		

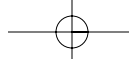
CN Series – Cover Matrix



DIMENSIONS IN TABLE ARE METRIC

Cover Size	Box Opening		Door Stiffener	Max No. Of Operator Rows		Max No. Of Operators	Max No. Of GHG Type Meter Rows		Max No. Of GHG Type Meters
	A	B		Horiz	Vert		Horiz	Vert	
-1224	229	533	--	2	8	16	1	4	4
-1612	330	229	--	4	3	12	1	1	1
-1616	330	330	--	4	5	20	1	2	2
-1620	330	432	--	4	7	28	1	3	3
-2012	432	229	--	5	3	18	2	1	2
-2016	432	330	--	5	5	25	2	2	4
-2020	432	432	--	5	7	35	2	3	6
-2024	432	533	--	5	8	40	2	4	8
-2412	533	229	--	7	3	21	2	1	2
-2416	533	330	--	7	5	35	2	2	4
-2420	533	432	--	7	7	49	2	3	6
-2424	533	533	--	7	8	56	2	4	8
-2430	533	686	--	7	11	77	2	6	12
-3016	686	330	--	9	5	45	3	2	6
-3020	686	432	--	9	7	63	3	3	9
-3024	686	533	--	9	8	72	3	4	12
-3030	686	686	--	9	11	99	3	6	18
-3036	686	838	--	9	13	117	3	7	21
-3624	838	533	--	11	8	88	3	4	12
-3630	838	686	--	11	11	121	3	6	18
-3636	838	838	--	11	13	143	3	7	21
-4224	991	533	YES	13	6	78	4	4	16
-4230	991	686	YES	13	10	130	4	4	16
-4236	991	838	YES	13	12	156	4	6	24
-4824	1143	533	YES	15	6	90	5	4	20
-4830	1143	686	YES	15	10	150	5	4	20
-4836	1143	838	YES	15	12	180	5	6	30
-6036	1448	838	YES	20	12	240	6	6	36

3D-7



Conduit/Cable & Wire Bending Guidelines

Table A - Minimum Spacing Between Centers of Conduit or Cable Entries

SIZE	NPT	5	4	3-1/2	3	2-1/2	2	1-1/2	1-1/4	1	3/4	1/2	1/16 ~ 3/8
NPT	METRIC	--	--	--	M75	M63	M50	M40	M32	M25	M20	M16	--
1/16 ~ 3/8	--	4-3/8 [112mm]	3-5/8 [92mm]	3-3/8 [86mm]	3 [77mm]	2-5/8 [68mm]	2-3/8 [61mm]	2 [51mm]	1-7/8 [48mm]	1-5/8 [42mm]	1-3/8 [35mm]	1-1/4 [32mm]	1-1/8 [29mm]
1/2	M16	4-3/8 [112mm]	3-5/8 [92mm]	3-3/8 [86mm]	3 [77mm]	2-5/8 [68mm]	2-3/8 [61mm]	2 [51mm]	1-7/8 [48mm]	1-5/8 [42mm]	1-3/8 [35mm]	1-1/4 [32mm]	
3/4	M20	4-1/2 [115mm]	3-3/4 [96mm]	3-1/2 [89mm]	3-1/8 [80mm]	2-3/4 [70mm]	2-1/2 [64mm]	2-1/8 [54mm]	2 [51mm]	1-3/4 [45mm]	1-1/2 [38mm]		
1	M25	4-5/8 [118mm]	3-7/8 [99mm]	3-5/8 [92mm]	3-1/4 [83mm]	2-7/8 [74mm]	2-3/4 [70mm]	2-1/4 [58mm]	2-1/8 [54mm]	1-7/8 [48mm]			
1-1/4	M32	4-7/8 [124mm]	4-1/8 [105mm]	3-7/8 [99mm]	3-1/2 [89mm]	3-1/8 [80mm]	2-7/8 [74mm]	2-1/2 [64mm]	2-3/8 [61mm]				
1-1/2	M40	5 [127mm]	4-1/4 [108mm]	4 [102mm]	3-5/8 [92mm]	3-1/4 [83mm]	3 [77mm]	2-5/8 [68mm]					
2	M50	5-3/8 [137mm]	4-3/4 [121mm]	4-1/2 [115mm]	4 [102mm]	3-5/8 [92mm]	3-3/8 [86mm]						
2-1/2	M63	5-1/2 [140mm]	4-7/8 [124mm]	4-5/8 [118mm]	4-1/4 [108mm]	3-7/8 [99mm]							
3	M75	5-7/8 [150mm]	5-1/4 [134mm]	5 [127mm]	4-5/8 [118mm]								
3-1/2	--	6-1/4 [159mm]	5-3/4 [147mm]	5-1/2 [140mm]									
4	--	6-7/8 [175mm]	6 [153mm]										
5	--	7-3/8 [188mm]											

This information is compiled from data which we believe is reliable and is given in good faith. Since the methods of application and condition under which our products are used are beyond our control, we are not able to guarantee the application and/or use of same. The user assumes all risks and liability in connection with the application and use of our products.

Table B - Minimum Distance from Conduit/Cable Center to Edge of Opening or Edge of Box

NPT	5	4	3-1/2	3	2-1/2	2	1-1/2	1-1/4	1	3/4	1/2	1/16 ~ 3/8
METRIC	--	--	--	M75	M63	M50	M40	M32	M25	M20	M16	--
	2-13/16 [72mm]	2-1/4 [58mm]	2 [51mm]	1-3/4 [45mm]	1-7/16 [37mm]	1-3/16 [31mm]	1 [26mm]	7/8 [23mm]	11/16 [18mm]	9/16 [14mm]	1/2 [13mm]	1/2 [13mm]

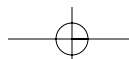
Table C - Minimum Wire Bending Space Between Terminals, Partitions, or Inside Walls

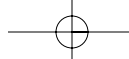
AWG	16	14	12	10	8	6	4	2	1/0	2/0	3/0	4/0	250	350	400	500
mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300
	1-1/2 [38mm]	1-1/2 [38mm]	1-1/2 [38mm]	1-1/2 [38mm]	2 [51mm]	3 [77mm]	3-1/2 [89mm]	5-1/2 [140mm]	6 [153mm]	6-1/2 [165mm]	7 [178mm]	8-1/2 [216mm]	10 [254mm]	12 [305mm]	13 [330mm]	14 [356mm]

Notes:

- The distances in Table A are recommended minimum distances between centers of conduit and cable gland entries. Consult manufacturer of conduit fitting or cable glands for their recommended minimum spacing.
- The distances in Table B are recommended minimum distances between center of conduit and cable gland entries to the edge of an opening or inside wall of box. Consult manufacturer of conduit fitting or cable glands for their recommended minimum spacing.
- The distances in Table C are the minimum wire bending space requirements between terminals, partitions, or inside walls.

3D-8





CN Series – Enclosure Specification Sheet

Name: _____ Company: _____

Street/PO Box: _____ Phone: _____

City/State/Country/Zip: _____ Fax: _____

Enclosure Catalog Number: _____

- Gland Plate(s):** Top (-A) Bottom (-B) Left (-C) Right (-D)
- Mounting Pan:** Steel, Powder Coated Stainless Steel Aluminum
- Breather/Drain:** Breather Drain Brass Stainless Steel

Nominal Working Voltage: AC _____ V DC _____ V

Auxiliary Devices	Qty.	Tag
1:		
2:		
3:		
4:		
5:		
6:		
7:		
8:		
9:		
10:		

Use Second Sheet For Additional Devices

2.5mm Terminal Blocks	Qty.	Tag

Conduit/Cable Entries:

	Top Side	Qty.	Bottom Side	Qty.	Left Side	Qty.	Right Side	Qty.
1:								
2:								
3:								
4:								
5:								

Use Second Sheet For Additional Devices

Enclosure Labeling:

3D-9

