Factory Sealed, Corrosion-Resistant 600VAC Heavy Duty

CI. I, Div. 2, Groups B, C, D NEMA 3, 4X, 7BCD (Div. 2), 12 Watertight Weatherproof Dust-tight

Applications:

N2S and N2SC pushbutton stations, selector switches and pilot lights are suitable for use:

- In Class I, Groups B, C, D; Division 2 hazardous areas where flammable vapors or gases may be present due to accidental or abnormal operation
- In damp, wet, or corrosive locations
- Indoors or outdoors in Division 2 areas of petroleum refineries, chemical plants and other process industry facilities where similar hazards exist

N2S and N2SC pushbutton stations and selector switches are used:

 In conjunction with magnetic starters or contactors for remote control of motors

N2S and N2SC pilot lights are used:

• To visually indicate at a remote location

 To visually indicate at a remote location that the desired function is being performed

Optional maintained stop pushbutton(s) are used: As emergency or normal stop button(s) in motor control circuits for positive shutdown.

Features:

- Pushbutton stations, pilot lights, and selector switch devices are factory sealed. External seals are not required.
- Enclosures are made of Krydon® fiberglass-reinforced polyester material having excellent corrosion resistance and stability to heat and sunlight.
- Optional maintained stop feature operates by depressing the mushroom head pushbutton. Pushbutton must be manually pulled before start button can be actuated.
- Lockout is standard on selector switch devices.
- Factory installed dead end (N2S) or through feed (N2SC) hubs – ½", ¾", and 1" sizes.
- Indicating plates are available with a choice of 40 standard markings.
- Grounding plate included with each hub.

Certifications and Compliances:

- NEC:
 - Class I, Division 2, Groups B, C & D
- NEMA: 3, 4X, 7BCD (Division 2) and 12
- UL Standard: 1203
- CSA Standard: C22.2 Nos. 14 & 30

Electrical Rating Ranges:

- Pushbutton stations and selector switches – heavy duty 600 VAC maximum
- Pilot lights 120 to 600 VAC

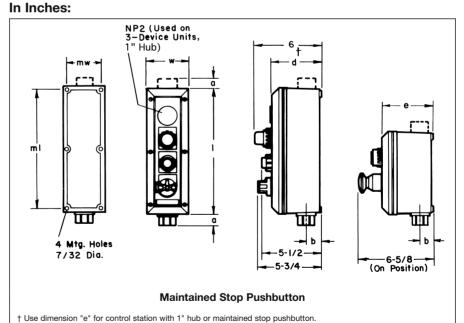




Options:

The following special options are available from factory by adding suffix to Cat. #:	
Description	Suffix
Padlock attachments for all pushbuttons. For "START-STOP" stations, only "STOP" button provided with lockout (lockout standard with STOP)	S708
Three position selector switches with modified operation:	0700
Momentary contact clockwise operation, spring return to center, maintained contact	
counterclockwise operation	S634
contact clockwise operation	S635
Control station with maintained stop pushbutton (requires NCD type enclosure):	
One maintained stop pushbutton	
Two maintained stop pushbuttons	MSR2
Maintained stop pushbuttons are installed at bottom position(s) of control station unless otherwise specified. LED pilot lights in place of standard incandescent pilot lamps	LED

Dimensions



Dimensions are approximate, not for construction purposes.

N2S(C) Body Style	Outside Dims. I	e w	(NCS)*	(NCD)*	Mount Dims. ml	ting mw	½" 8 Hub a	& ¾" os b	1" Hub: a	s b
1 or 2 devices	71/4	313/16	43/8	53/8	63/8	215/16	11/8	11/16	11/4	1 ⁵ / ₁₆
3 or 4	113/4	313/16	43/8	53/8	107/8	215/16	11/8	11/16	11/4	1 5/ ₁₆

*NCS box is supplied with units using ½" and ¾" hubs. NCD box is supplied with units using 1" hubs or MSR option. ‡ NCD 4 device box used with 1" hubs or MSR option.

N2S and N2SC Series Control Stations

Factory Sealed, Corrosion-Resistant 600VAC Heavy Duty

Cl. I, Div. 2, Groups B, C, D NEMA 3, 4X, 7BCD (Div. 2), 12 Watertight Weatherproof Dust-tight

Ordering	Information -	With	Pilot Lig	hts‡*
			En alassura	and the Diller I had at

						Enclosure w	ith Pilot Lights	³/₄" Hubs		1" Hubs	
No. Units	Diagr	am			Volts	Dead End Cat. #	Through Feed Cat. #	Dead End Cat. #	Through Feed Cat. #	Dead End Cat. #	Through Feed Cat. #
1	*				120 240 480 600	N2S1131 ① N2S1132 ① N2S1134 ① N2S1135 ①	N2SC1131 ① N2SC1132 ① N2SC1134 ① N2SC1135 ①	N2S2131 ① N2S2132 ① N2S2134 ① N2S2135 ①	N2SC2131 ① N2SC2132 ① N2SC2134 ① N2SC2135 ①	N2S3131 ① N2S3132 ① N2S3134 ① N2S3135 ①	N2SC3131 ① N2SC3132 ① N2SC3134 ① N2SC3135 ①
2					120 240 480 600	N2S1231 ① N2S1232 ① N2S1234 ① N2S1235 ①	N2SC1231 ① N2SC1232 ① N2SC1234 ① N2SC1235 ①	N2S2231 ① N2S2232 ① N2S2234 ① N2S2235 ①	N2SC2231 ① N2SC2232 ① N2SC2234 ① N2SC2235 ①	N2S3231 ① N2S3232 ① N2S3234 ① N2S3235 ①	N2SC3231 ① N2SC3232 ① N2SC3234 ① N2SC3235 ①
3	*	**	***		120 240 480 600	N2S1331 ① N2S1332 ① N2S1334 ① N2S1335 ①	N2SC1331 ① N2SC1332 ① N2SC1334 ① N2SC1335 ①	N2S2331 ① N2S2332 ① N2S2334 ① N2S2335 ①	N2SC2331 ① N2SC2332 ① N2SC2334 ① N2SC2335 ①	N2S3331 ① N2S3332 ① N2S3334 ① N2S3335 ①	N2SC3331 ① N2SC3332 ① N2SC3334 ① N2SC3335 ①
4			***	•	120 240 480 600	N2S1431 ① N2S1432 ① N2S1434 ① N2S1435 ①	N2SC1431 ① N2SC1432 ① N2SC1434 ① N2SC1435 ①	N2S2431 ① N2S2432 ① N2S2434 ① N2S2435 ①	N2SC2431 ① N2SC2432 ① N2SC2434 ① N2SC2435 ①	N2S3431 ① N2S3432 ① N2S3434 ① N2S3435 ①	N2SC3431 ① N2SC3432 ① N2SC3434 ① N2SC3435 ①

Ordering Information - With Selector Switches

	Switch Po	sition		Marking — Unless	Enclos	Enclosure With Selector Switch				
Style	1	2	3	Otherwise Specified	Hub Size	Dead End Cat. #	Through Feed Cat. #			
Two-Position, Two-Circuit	A1 <u>eie</u> A2 ● ●	• •		START-STOP (or Specify)	1/ ₂ 3/ ₄ 1	N2S1121 ② N2S2121 ② N2S3121 ②	N2SC1121 ② N2SC2121 ② N2SC3121 ②			
Two-Position, Four-Circuit	A1 212 A2 • • B1 212 B2 • •	0 0 0 0		START-STOP (or Specify)	1/ ₂ 3/ ₄ 1	N2S1122 ② N2S2122 ② N2S3122 ②	N2SC1122 ② N2SC2122 ② N2SC3122 ②			
Three-Position, Two-Circuit †	A1 <u>eie</u> A2 ● ●	• •	• · •	Specify	1/ ₂ 3/ ₄ 1	N2S1123 ② N2S2123 ② N2S3123 ②	N2SC1123 ② N2SC2123 ② N2SC3123 ②			
Three-Position, Four-Circuit †	A1 212 A2 • • B1 212 B2 • •	• • • • • •	• • • • • •	Specify	1/ ₂ 3/ ₄ 1	N2S1124 ② N2S2124 ② N2S3124 ②	N2SC1124 ② N2SC2124 ② N2SC3124 ②			
Three-Position, Four-Circuit †	A1 • • • • A2 • • • B1 • • • • • • • • • • • • • • •	ere • •	9 9 9 9 9 10	Specify	1/ ₂ 3/ ₄ 1	N2S1125 ② N2S2125 ② N2S3125 ②	N2SC1125 @ N2SC2125 @ N2SC3125 @			

① Specify lens color for each pilot light. As an example, N2S1231 with one red and one green would be ordered as N2S1231-J1-J3. Color Symbol Symbol Color

J1 J3 Red Clear J10 Green Blue J11 Amber J6

② If desired, markings on indicating plates may be added to catalog number. Select from the list of standard markings below: Marking

Pushbuttons: START	REVERSE OPEN	Selector Switches – Two-Position:	Selector Switches - Three-Position:
	CLOSE	RUN-JOG	RUN-OFF-JOG
STOP			
ON	UP	HAND-AUTO	HAND-OFF-AUTO
OFF	DOWN	FOR-REV	FOR-OFF-REV
RUN	IN	FAST-SLOW	FAST-OFF-SLOW
JOG	OUT	OPEN-CLOSE	1-OFF-2
TRIP	RAISE	UP-DOWN	OPEN-OFF-CLOSE
RESET	LOWER	ON-OFF	UP-OFF-DOWN
TEST		IN-OUT	
LIGHT ON		RAISE-LOWER	
HAND		START-STOP	
AUTOMATIC			
EMERGENCY			
FORWARD			

Crouse-Hinds

[†] Pilot lights are transformer type except those rated 120 volts. Lamp type is 120MB, 120 volts, 3 watts.

† LED pilot lights are available. Add suffix LED after last color symbol. See Options Sections for more information.

† Suffixes S634 or S635 may be used on these catalog numbers. See explanation in Options section.

N2S and N2SC Series 4C Control Stations

Factory Sealed, Corrosion-Resistant 600VAC Heavy Duty

Cl. I, Div. 2, Groups B, C, D NEMA 3, 4X, 7BCD (Div. 2), 12 Watertight Weatherproof Dust-tight

Ordering Information - With Pushbuttons - Momentary Contact

					Marking Unless	Enclosur	Enclosure with Pushbuttons				
No. Units			Otherwise Specified	Hub Size	Dead End Cat. #	Through Feed Cat. #					
1	ele • •				START (or Specify)	1/ ₂ 3/ ₄ 1	N2S1110 ② N2S2110 ② N2S3110 ②	N2SC1110 ② N2SC2110 ② N2SC3110 ②			
2	<u>eie</u> • •	ele • •			START-STOP (or Specify)	1/ ₂ 3/ ₄ 1	N2S1210 ② N2S2210 ② N2S3210 ②	N2SC1210 ② N2SC2210 ② N2SC3210 ②			
3	ele • •	ele.	• •		Specify	1/ ₂ 3/ ₄ 1	N2S1310 ② N2S2310 ② N2S3310 ②	N2SC1310 ② N2SC2310 ② N2SC3310 ②			
4	ele • •	<u>eie</u>	<u>ele</u>	<u>ele</u>	Specify	1/ ₂ 3/ ₄ 1	N2S1410 ② N2S2410 ② N2S3410 ②	N2SC1410 ② N2SC2410 ② N2SC3410 ②			

Ordering Information - Combination Control Stations

Enclosure With Pushbuttons and Pilot Lights

Pilot Lights*	Pushbuttons	Diagram	Markings	Hub Size	Volts	Dead End Cat. #	Through Feed Cat. #	Volts	Dead End Cat. #	Through Feed Cat. #
4	-	***	On a sife	1/ ₂ 3/ ₄ 1	120	N2S12411 ①2 N2S22411 ①2 N2S32411 ①2	N2SC12411 ①② N2SC22411 ①② N2SC32411 ①②	480	N2S12414 ①② N2S22414 ①② N2S32414 ①②	N2SC12414 ①② N2SC22414 ①② N2SC32414 ①②
1	1	ele.	Specify	1/ ₂ 3/ ₄ 1	240	N2S12412 ①2 N2S22412 ①2 N2S32412 ①2	N2SC12412 ①2 N2SC22412 ①2 N2SC32412 ①2	600	N2S12415 ①2 N2S22415 ①2 N2S32415 ①2	N2SC12415 ①2 N2SC22415 ①2 N2SC32415 ①2
		<u></u>		1/2		N2S13421 ①②	N2SC13421 ①②		N2S13424 ①②	N2SC13424 ①②
				3/4	120	N2S23421 ①②	N2SC23421 112	480	N2S23424 1)2	N2SC23424 1)2
1	2	علم	Specify	1		N2S33421 ①②	N2SC33421 ①②		N2S33424 ①②	N2SC33424 ①②
		• • • •	, ,	1/ ₂ 3/ ₄ 1	240	N2S13422 ①② N2S23422 ①② N2S33422 ①②	N2SC13422 ①2 N2SC23422 ①2 N2SC33422 ①2	600	N2S13425 ①② N2S23425 ①② N2S33425 ①②	N2SC13425 ①2 N2SC23425 ①2 N2SC33425 ①2
		#		1/ ₂ 3/ ₄ 1	120	N2S13411 ①② N2S23411 ①② N2S33411 ①②	N2SC13411 ①2 N2SC23411 ①2 N2SC33411 ①2	480	N2S13414 ①② N2S23414 ①② N2S33414 ①②	N2SC13414 ①2 N2SC23414 ①2 N2SC33414 ①2
2	1	• •	Specify	1/ ₂ 3/ ₄ 1	240	N2S13412 ①② N2S23412 ①② N2S33412 ①②	N2SC13412 ①② N2SC23412 ①② N2SC33412 ①②	600	N2S13415 ①② N2S23415 ①② N2S33415 ①②	N2SC13415 ①2 N2SC23415 ①2 N2SC33415 ①2
		(A) (A)		1/2		N2S14421 ①②	N2SC14421 ①②		N2S14424 ①②	N2SC14424 ①②
				3/4	120	N2S24421 ①②	N2SC24421 ①2	480	N2S24424 ①②	N2SC24424 ①2
2	2	علم	Specify	1		N2S34421 ①②	N2SC34421 ①②		N2S34424 ①②	N2SC34424 ①②
		ele.	- 1, - 227	1/ ₂ 3/ ₄ 1	240	N2S14422 ①② N2S24422 ①② N2S34422 ①②	N2SC14422 ①② N2SC24422 ①② N2SC34422 ①②	600	N2S14425 ①2 N2S24425 ①2 N2S34425 ①2	N2SC14425 ①2 N2SC24425 ①2 N2SC34425 ①2

① See pages 545–547 ② See pages 545–547 ‡ Pilot lights are transformer type except those rated 120 volts. Lamp type is 120MB, 120 volts, 3 watts.

N2S and N2SC Series Control Stations

Factory Sealed, Corrosion-Resistant 600VAC Heavy Duty

Cl. I, Div. 2, Groups B, C, D NEMA 3, 4X, 7BCD (Div. 2), 12 Watertight Weatherproof Dust-tight

Ordering Information - Combination Control Stations

			Select Switch Position	nes	ı. +		Enclosure With Pilot Light, Pushbuttons and Selector Switch							
Pilot Lights*:	Push butto	-	1	2	3	Markings	Hub Size	Volts	Dead End Cat. #	Through Feed Cat. #	Volts	Dead End Cat. #	Through Feed Cat. #	
1	2		2-Pos	, 2-Co	ct		1/ ₂ 3/ ₄	120	N2S145211 ①② N2S245211 ①②	N2SC145211 ①② N2SC245211 ①②		N2S145214 ①② N2S245214 ①②	N2SC145214 ①② N2SC245214 ①②	
	علم	علع	A1 eie A2 • •	•,•		Specify	1		N2S345211 ①②			N2S345214 ①②	N2SC345214 ①②	
<u>888</u>	• •	• •	A2 ● ●	***			1/ ₂ 3/ ₄ 1	240	N2S145212 ①② N2S245212 ①② N2S345212 ①②	N2SC145212 ①② N2SC245212 ①② N2SC345212 ①②	600	N2S145215 ①② N2S245215 ①② N2S345215 ①②	N2SC145215 ①② N2SC245215 ①② N2SC345215 ①②	
1	2		3-Pos	, 2-Co	ct		1/ ₂ 3/ ₄	120	N2S145231 ①② N2S245231 ①②	N2SC145231 ①② N2SC245231 ①②		N2S145234 ①② N2S245234 ①②	N2SC145234 ①② N2SC245234 ①②	
(<u>هاه</u>	<u>هاه</u>	A1 eie	• <u>•</u> •	•••	Specify	1/		N2S345231 ①② N2S145232 ①②	N2SC345231 ①② N2SC145232 ①②		N2S345234 ①② N2S145235 ①②	N2SC345234 ①② N2SC145235 ①②	
800	••	••	A2 ● ●	••	••		1/ ₂ 3/ ₄ 1	240	N2S145232 ①② N2S245232 ①② N2S345232 ①②	N2SC245232 ①②		N2S145235 ①② N2S245235 ①② N2S345235 ①②	N2SC245235 ①② N2SC345235 ①② N2SC345235 ①②	

① Specify lens color for each pilot light. As an example, N2S1231 with one red and one green would be ordered as N2S1231-J1-J3.

Color	Symbol	Color	Symbol
Red	J1	Clear	J10
Green	J3	Blue	J11
Amber	J6		

② If desired, markings on indicating plates may be added to catalog number. Select from the list of standard markings below:

Pushbuttons:	REVERSE	Selector Switches – Two-Position:	Selector Switches - Three-Position:
		Selector Switches - Two-Position.	Selector Switches - Three-Position.
START	OPEN		
STOP	CLOSE	RUN-JOG	RUN-OFF-JOG
ON	UP	HAND-AUTO	HAND-OFF-AUTO
OFF	DOWN	FOR-REV	FOR-OFF-REV
RUN	IN	FAST-SLOW	FAST-OFF-SLOW
JOG	OUT	OPEN-CLOSE	1-OFF-2
TRIP	RAISE	UP-DOWN	OPEN-OFF-CLOSE
RESET	LOWER	ON-OFF	UP-OFF-DOWN
TEST		IN-OUT	
LIGHT ON		RAISE-LOWER	
HAND		START-STOP	
		31A111-3101	
AUTOMATIC			
EMERGENCY			
FORWARD			

[‡] Pilot lights are transformer type except those rated 120 volts. Lamp type is 120MB, 120 volts, 3 watts.

* LED pilot lights are available. Add suffix LED after last color symbol. See Options Sections for more information.

† Suffixes S634 or S635 may be used on these catalog numbers. See explanation in Options section.

Factory Sealed, Corrosion-Resistant 600VAC Heavy Duty

Cl. I, Div. 2, Groups B, C, D NEMA 3, 4X, 7BCD (Div. 2), 12 Watertight Weatherproof **Dust-tight**

Ordering Information - Custom-Built, Factory Assembled Control Stations

To order your custom-built factory assembled control station, select the enclosure required and add the desired devices from listings below. Custom-built factory assembled control stations may thus be ordered as follows:

Requirements:

3-device control station on Krydon® material enclosure with ¾" through feed hubs, with 1 pilot light with green jewel, rated at 120V; 1 three position, two circuit selector switch marked HAND-OFF-AUTO; and 1 green single circuit pushbutton marked START.

ORDER:

NCDC23FA N2P310-J3 N2SW11311-HAND-OFF-AUTO N2PS1111G-START

Pilot light jewel symbol, pushbutton and selector switch plate markings are selected from footnote tables. Suffix FA indicates factory

Note that order of assembly of control stations should be listed in desired mounting order, reading from top to bottom of enclosure.

Enclosures (NCD or NCDC enclosures must be used with MSR1 or MSR2)

No. of Devices	Without Hubs Cat. #	With One Hub ½" Cat. #	With Two Hub ½" Cat. #	With One Hub ¾" Cat. #	With Two Hub ¾" Cat. #	With One Hub 1" Cat. #	With Two Hub 1" Cat. #
Devices							
1	NCD01	NCD11	NCDC11	NCD21	NCDC21	NCD31	NCDC31
2	NCD02	NCD12	NCDC12	NCD22	NCDC22	NCD32	NCDC32
3	NCD03	NCD13	NCDC13	NCD23	NCDC23	NCD33	NCDC33
4	NCD04	NCD14	NCDC14	NCD24	NCDC24	NCD34	NCDC34
No. of Devices	Without Hubs	With One Hub (¾")	With Two Hub (¾")	With One Hub (½")	With Two Hub (½")		
	Cat. #	Cat. #	Cat. #	Cat. #	Cat. #		
1	NCS01	NCS21	NCSC21	Cat. # NCS11	Cat. # NCSC11		
1 2						_	
1 2 3	NCS01	NCS21	NCSC21	NCS11	NCSC11		

Pilot Lights ** **Transformer Type**

Volts	Cat. #
120	N2PL10 ①
240	N2PL20 ①
480	N2PL40 ①
600	N2PL50 ①



Pilot lights to be used in N2SU Series:

Red	N2PLU10 J1 LED
Green	N2PLU10 J3 LED
Amber	N2PLU10 J6 LED
Clear	N2PLU10 J10 LED
Blue	N2PLU10 J11 LED

① Specify lens color for each pilot light using symbols below.

Color	Symbol	Color	Symbol		
Red	J1	Clear	J10	_	
Green	J3	Blue	J11		
Amber	J6				

[‡] Pilot lights are transformer type except those rated 120 volts. Lamp type is 120MB, 120 volts, 3 watts.

* LED pilot lights are available. Add suffix LED after last color symbol. See Options Sections for more information.

N2S and N2SC Series Control Stations

Factory Sealed, Corrosion-Resistant 600VAC Heavy Duty

Cl. I, Div. 2, Groups B, C, D NEMA 3, 4X, 7BCD (Div. 2), 12 Watertight Weatherproof Dust-tight

Pushbutton Stations - Momentary Contact

	1 Circuit		2 Circuit	
Color of Operator	Contact Symbol	Universal Cat. #	Contact Symbol	Universal Cat. #
Natural	<u>ele</u>	N2PS1111 ②	eie eie	N2PS1211 ②
Red	<u>ele</u>	N2PS1111R ②	eie eie	N2PS1211R ②
Green	ele • •	N2PS1111G ②		N2PS1211G ②



Closure Plug



Description Cat. #
Closure Plug NP2

Pushbutton Stations - Maintained Contact

	1 Circuit		
Color of Operator	Contact Symbol	Universal Cat. #	
Red Mushroom Head	ele • •	N2PM1111 S111 ②	

Selector Switches

Style	Position	Position 2	Position 3	Cat. #
Two Position Two Circuit	A1 ala A2 • •	• •		N2SW11211 ②
Two Position Four Circuit	A1 e1e A2 • • B1 e1e B2 • •	0 0 0 0		N2SW12221 ②
Three Position Two Circuit †	A1 <u>aia</u> A2 • •	• • •1•	•1•	N2SW11311 ②
Three Position Four Circuit †	A1 eie A2 • • B1 eie B2 • •	• • • • • •	0 0 0 0	N2SW12321 ②
Three Position Four Circuit †	A1 • • • • • • • • • • • • • • • • • • •	eie • •	eie • •	N2SW12322 ②



② If desired, markings on indicating plates may be added to catalog number. Select from the list of standard markings below:

Marking

warking			
Pushbuttons:	REVERSE	Selector Switches -	Selector Switches -
START	OPEN	Two-Positions:	Three-Position:
STOP	CLOSE	RUN-JOG	RUN-OFF-JOG
ON	UP	HAND-AUTO	HAND-OFF-AUTO
OFF	DOWN	FOR-REV	FOR-OFF-REV
RUN	IN	FAST-SLOW	FAST-OFF-SLOW
JOG	OUT	OPEN-CLOSE	1-OFF-2
TRIP	RAISE	UP-DOWN	OPEN-OFF-CLOSE
RESET	LOWER	ON-OFF	UP-OFF-DOWN
TEST		IN-OUT	
LIGHT ON		RAISE-LOWER	
HAND		START-STOP	
AUTOMATIC			
EMERGENCY			
FORWARD			

[†] Suffixes S634 or S635 may be used on these catalog numbers. See explanation in Options section.

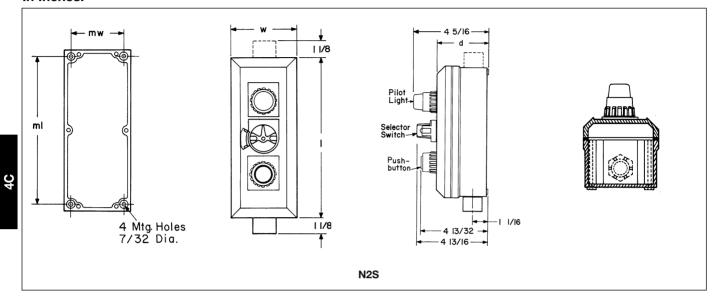
N2S and N2SC Series 4C Control Stations

Factory Sealed, Corrosion-Resistant 600VAC Heavy Duty

Cl. I, Div. 2, Groups B, C, D NEMA 3, 4X, 7BCD (Div. 2), 12 Watertight Weatherproof Dust-tight

Dimensions

In Inches:



For 1/2" and 3/4" hub sizes (for 1" hub and/or MSR option, see page 544).

	Outside Dimensions			Mounting Dimensions	
NCS(C) Body Style	I	w	d	ml	mw
1 device	71/4	313/16	43/8	6³/ ₈	215/16
2 devices	71/4	313/16	43/8	63/8	215/16
3 devices	91/2	313/16	43/8	85/8	215/16
4 devices	11³/₄	313/16	43/8	10 ⁷ / ₈	215/16