



Enclosures Type 1, 3R/12 Type 7/9



Description

Type 1

- General purpose indoor enclosure intended for use in normal environments to provide a degree of protection against contact with enclosed equipment.
- Sheet steel, surface mount.
- Breaker is front-operable and can be padlocked via front hasp.
- Available through 2500A, 600VAC
- UL Listed for use as service entrance equipment (SUSE), per UL file E116374.

Type 3R/12

- Type 3R is intended for outdoor use providing protection against rain, sleet or snow.
- Type 12 is for use in indoor atmospheres to provide a degree of protection against circulating dust, lint, sawdust, falling dirt and dripping non-corrosive liquids.
- Surface-mounted, sheet steel enclosure.
- Breaker can be operated via **separately ordered** handle mechanism; door is interlocked with mechanism.
- Available through 2500A, 600VAC.
- UL Listed for use as service entrance equipment (SUSE), per UL file E116374.

Type 7/9

- Cast from copper-free aluminum (max. 0.025 copper content)
- Stainless steel shotblasted or sandblasted natural finish
- Standard conduit openings in top and bottom
- Breaker is operated from front handle and can be padlocked
- NEC Class I Groups D, Div. 1 & 2
NEC Class II Groups E, F & G, Div 1 & 2
NEC Class III
- External machined flange joint design
- Integral cast mounting feet
- Machined flange for ease of hinge installation
- Ground lug
- Cast mounting pan bosses
- All enclosures suitable for drilling & tapping
- UL panel listed per UL File # E183868



Enclosures Type 1 & 3R/12



Enclosures (Price does not include circuit breaker; order as a separate item.) ^④

NEMA designation	Breaker type	Enclosure maximum rating		Approximate dimensions ^① H x W x D (inches)	Catalog number	List price
		AL cables	CU cables			
Type 1	S1	100A	100A	14 x 10 x 3.1	S1E-1	\$ 200
	S2 ^②	125A	125A	16 x 11 x 3.1	S2E-1	200
	S3	150A	225A	22 x 12 x 4.5	S3E-1	235
	S4	225A	250A	30 x 17.5 x 4.5	S4E-1	305
	S5	400A	400A	30 x 17.5 x 4.5	S5E-1	305
	S6	800A	800A	44 x 22 x 6	S6E-1	685
	S7	1000A	1200A	44 x 22 x 6	S7E-1	685
	S8	2500A	2500A	88 x 36 x 24	S8ES250-1	5285
Type 3R/12 ^③	S1	100A	100A	14 x 10 x 8.8	S1E-3R12	305
	S2 ^②	125A	125A	16 x 11 x 8	S2E-3R12	305
	S3	150A	225A	22 x 12 x 9	S3E-3R12	395
	S4	225A	250A	30 x 17.5 x 9	S4E-3R12	575
	S5	400A	400A	30 x 17.5 x 9	S5E-3R12	575
	S6	800A	800A	44 x 22 x 11	S6E-3R12	905
	S7	1000A	1200A	44 x 22 x 11	S7E-3R12	905
	S8	2500A	2500A	88 x 36 x 24	S8ES250-3R12	5285

Neutral kits

Breaker type	Neutral cable capacity and wire range	Neutral kit catalog number	List price
S1 – S2	Neutral #14-1/0 Bonding Lug #14-1/0	S2NK125	\$ 100
S3	Neutral #6-250 kcmil Bonding Lug #14-1/0	S3NK225	135
S4	Neutral #6-250 kcmil Bonding Lug #14-1/0 kcmil	S4NK250	155
S5	Neutral (2) #6-250 kcmil Bonding Lug #14-1/0 kcmil	S5NK400	260
S6	Neutral (2) #2-600 kcmil Bonding Lug #6-250 kcmil	S6NK800	350
S7	Neutral (4) #2-600 kcmil Bonding Lug #6-250 kcmil	S7NK1200	535
S8	Neutral (6) #1/0-750 kcmil Bonding Lug (2) #2-600 kcmil	—	included

NOTE: The list price adder for factory installation of an enclosed circuit breaker is 50% of the enclosure list price.

^① Enclosures may not meet size requirement for UL 100% rated breakers.

^② Not UL approved.

^③ Variable depth rotary handle must be ordered separately (S1 - S7).

^④ Consult ABB for breakers installed in enclosures.

Enclosures Type 7/9

Isomax
MCCBs



Explosion-proof enclosures

(Price does not include circuit breaker; order as a separate item for factory assembly.)

NEMA designation	Breaker type	Enclosure max. rating	Approximate dimensions H x W x D (inches)	Catalog number suffix	List price adder
Type 7/9	S3	Cu only 100A	17 x 10 x 8.65	7	\$ 2100
	S3	Cu only 225A	22.5 x 11.5 x 8.77	7	2850
	S4	Cu only 250A	25 x 18 x 9.92	7	4700
	S5	Cu only 400A	30 x 17 x 9.25	7	6600
	S6	Cu only 600A	35 x 17 x 11	7	8600
	S6	Cu only 800A	41 x 17 x 11	7	10,450
	S7	Cu only 1200A	51 x 17 x 13	7	22,450

To order a breaker in an explosion-proof enclosure, add the suffix "7" to the end of the catalog number and add the list price adder to the list price of the breaker.

Example: **S5N400BW7**
 S5N400BW breaker..... \$ 2151
 Explosion proof enclosure 6600
 Total \$ 8751

Additional options

NEMA 4X Stainless steel bolts Captive bolts Drain

NEMA designation	Breaker type	Enclosure max. rating	Cat. no. adder	List price adder	Cat. no. adder	List price adder	Cat. no. adder	List price adder	Cat. no. adder	List price adder
Type 7/9	S3	Cu only 100A	-X	\$ 130	-S	\$ 20	-B	\$ 145	-D	\$ 110
	S3	Cu only 225A	-X	145	-S	25	-B	170	-D	
	S4	Cu only 250A	-X	145	-S	45	-B	355	-D	
	S5	Cu only 400A	-X	175	-S	60	-B	415	-D	
	S6	Cu only 600A	-X	250	-S	60	-B	465	-D	
	S6	Cu only 800A	-X	315	-S	60	-B	535	-D	
	S7	Cu only 1200A	-X	430	-S	80	-B	600	-D	

To add additional options, simply add the suffix to the end of the catalog number.

Example: **S5N400BW7XSD**
 S5N400BW breaker..... \$ 2151
 Explosion proof enclosure 6600
 NEMA 4X 175
 Stainless steel bolts 60
 Drain 110
 Total \$ 9096

Catalog number information — Type 7/9

S4 N 250 B W 7 - 2 xxx

Frame size

- S3 = 150 / 225A
- S4 = 250A
- S5 = 400A
- S6 = 600 / 800A
- S7 = 1200A

Interrupting rating class

- B = Basic (240VAC)
- N = Normal
- H = High
- L = Extra high
- D = Special molded case switch

Current rating

- 015 = 15A
- 250 = 250A
- 400 = 400A
- 600 = 600A
- 800 = 800A
- 1200 = 1200A

Trip unit function

- B = LI
- C = LSI
- D = Molded case switch (MCS)
- E = LSI
- T = Thermal-magnetic
- F = LSI/K
- H = LSI/D
- J = LSI/DT
- K = LSI/DTK
- M = Magnetic only (MCP)

Accessories (added in alpha-numeric order)

- A = Auxiliary switch
- B = Captive bolts
- BA = Bell alarm
- BA3 = Bell alarm (S6/S7 only)
- D = Breather/drain
- H = Fixed rotary handle mounted on CB
- S_ = Shunt trip with voltage code
- S = Stainless steel bolts
- U_ = Undervoltage release with voltage code
- X = NEMA 7/9/4X

Number of poles

- 2 = 2 pole
- 4 = 4 pole
- None = 3 pole

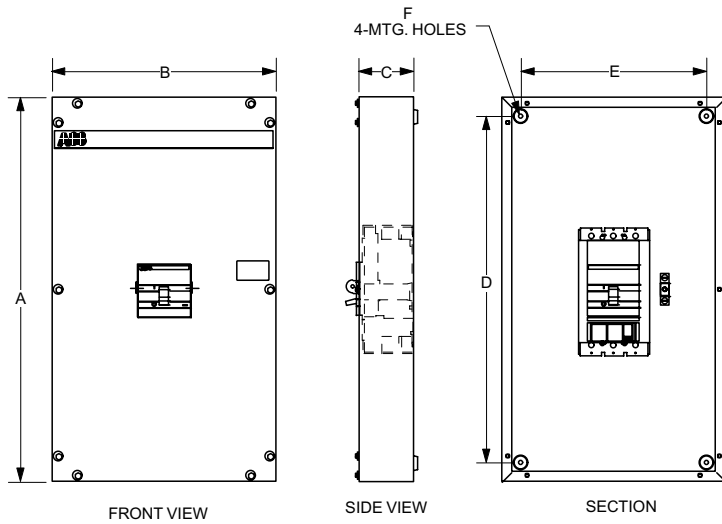
NEMA enclosure 7/9

Type connectors

- W = None
- L = Lugs

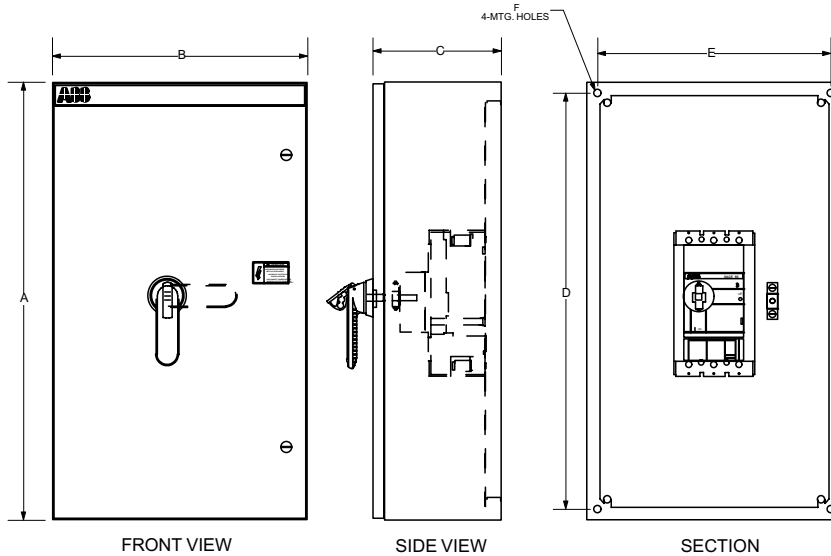
Approximate dimensions
S1 – S7 enclosures
NEMA 1, 3R & 12

NEMA 1



CAT.#	A	B	C	D	E	F
S1E-1	14.0 355.6	10.0 254.0	2.85 72.39	11.0 279.4	7.0 177.8	.312 7.93
S2E-1	16.0 406.5	11.0 280.0	2.85 72.5	13.0 330.0	8.0 203.0	.312 7.93
S3E-1	22.0 559.0	12.0 305.0	4.25 108.0	19.0 482.0	9.0 229.0	.312 7.93
S4E-1	30.0 762.0	17.5 444.5	4.25 108.0	27.0 686.0	14.5 368.5	.312 7.93
S5E-1	30.0 762.0	17.5 444.5	4.25 108.0	27.0 686.0	14.5 368.5	.312 7.93
S6E-1	44.0 1118.0	22.0 559.0	5.75 146.0	41.0 1041.5	19.0 483.0	.312 7.93
S7E-1	44.0 1118.0	22.0 559.0	5.75 146.0	41.0 1041.5	19.0 483.0	.312 7.93

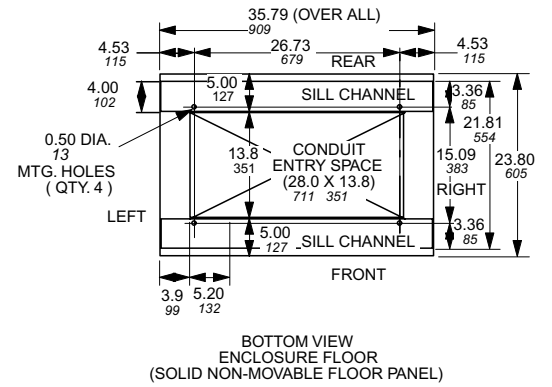
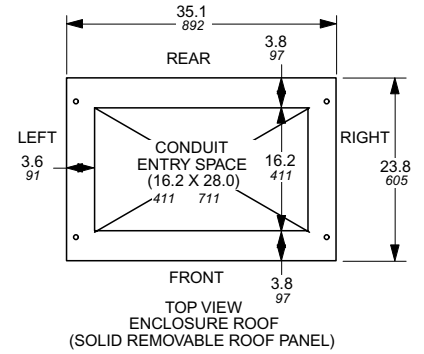
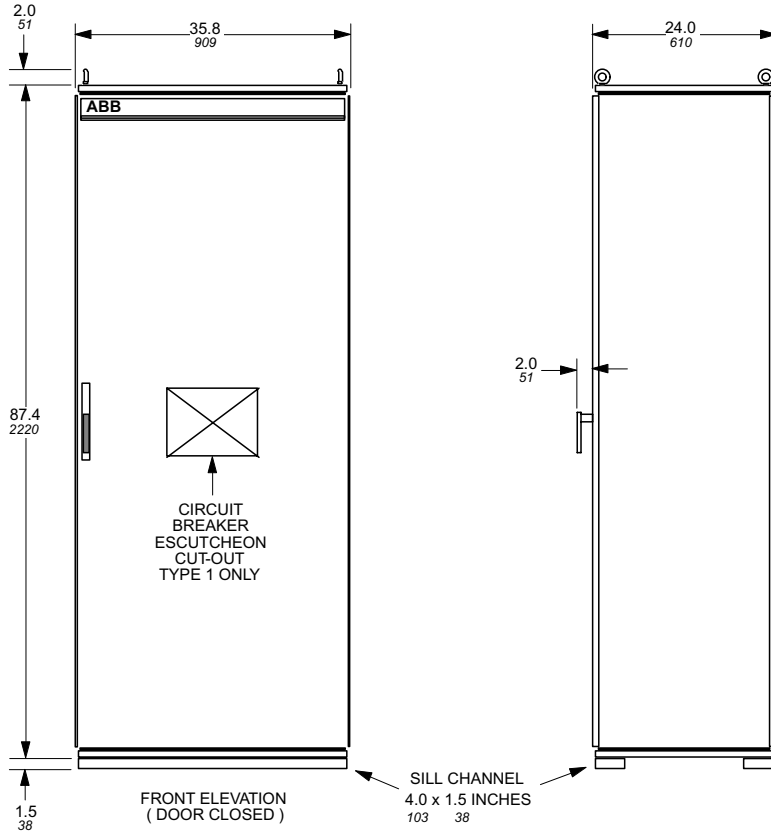
NEMA 3R, 12



CAT.#	A	B	C	D	E	F
S2E-3R12	16.0 406.5	11.0 280.0	8.8 224.0	14.5 368.5	9.5 242.0	0.50 13.7
S3E-3R12	22.0 559.0	12.0 305.0	8.8 224.0	20.5 520.5	10.5 267.0	0.50 13.7
S4E-3R12	30.0 762.0	17.5 444.5	8.8 224.0	28.5 724.0	16.0 406.5	0.50 13.7
S5E-3R12	30.0 762.0	17.5 444.5	8.8 224.0	28.5 724.0	16.0 406.5	0.50 13.7
S6E-3R12	44.0 1118.0	22.0 559.0	10.8 274.5	42.5 1080.0	20.5 521.0	0.50 13.7
S7E-3R12	44.0 1118.0	22.0 559.0	10.8 274.5	42.5 1080.0	20.5 521.0	0.50 13.7

Approximate dimensions
S8 enclosures
NEMA 1, 3R & 12

Isomax
MCCBs



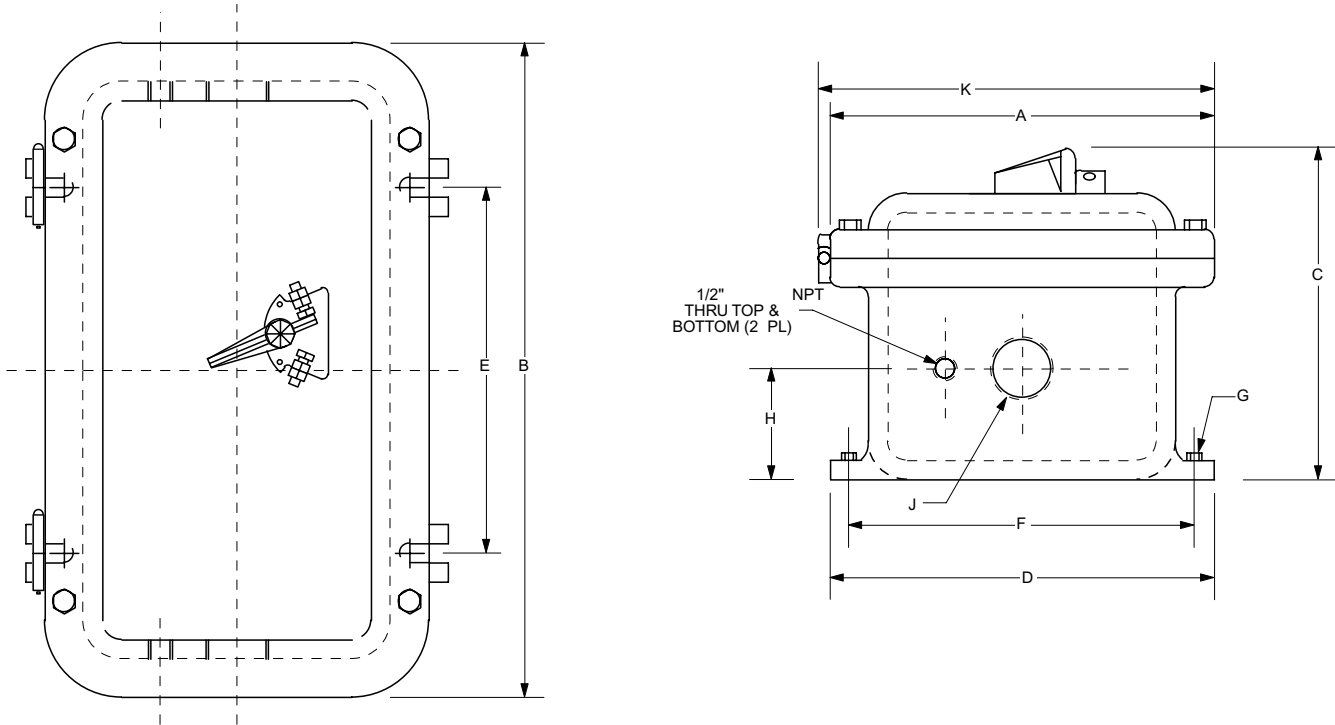


Approximate dimensions

S1 – S7 enclosures

NEMA 7 & 9

NEMA 7 & 9



Breaker type	A	B	C	D	E	F	G	H	J	K	Wgt.(lbs)
S3 ≤ 60A	9.25 235.0	14.25 362.0	9.00 228.6	10.00 254.0	7.5 190.5	9.13 231.9	3/8 9.5	2.50 63.5	1.50 38.1	10.25 260.4	32
S3 ≤ 100A	9.25 235.0	16.25 412.8	9.00 228.6	10.00 254.0	9.50 241.3	9.13 231.9	3/8 9.5	2.50 63.5	2.00 50.8	10.25 260.4	37
S3 ≤ 225A	10.38 263.7	21.63 549.4	9.00 228.6	11.00 279.4	14.50 368.3	9.75 247.7	3/8 9.5	2.75 69.9	2.50 50.8	11.25 285.8	70
S4 ≤ 250A	16.25 412.75	24.25 616.0	10.00 254.0	18.00 457.2	14.38 365.3	15.75 400.0	1/2 12.7	3.25 82.6	2.50 50.8	17.25 438.2	122
S5 ≤ 400A	16.25 412.75	28.25 717.6	11.00 279.4	18.00 457.2	18.38 466.9	15.75 400.0	1/2 12.7	3.63 92.2	3.00 76.2	17.25 438.2	145
S6 ≤ 600A	16.25 412.75	34.25 889.0	11.00 279.4	18.00 457.2	23.00 584.2	15.75 400.0	1/2 12.7	4.50 114.3	4.00 101.6	17.25 438.2	210
S6 ≤ 800A	16.25 412.75	40.25 1041.4	13.50 244.6	18.00 457.2	29.00 736.6	15.75 400.0	1/2 12.7	4.50 114.3	4.00 101.6	17.25 438.2	240
S7 ≤ 1200A	16.25 412.75	50.25 1298.7	13.50 295.4	18.00 457.2	39.00 990.6	15.75 400.0	5/8 13	4.50 114.3	4.00 101.6	17.25 438.2	350