

Auxiliary Contact Rating**AC Pilot Duty Ratings**

Catalog Number	Description	Volts	Break (Amperes)	Make (Amperes)
DS200EK1	1NO-1NC	110	15.0	40.0
DS200EK1	1NO-1NC	220	10.0	20.0
DS200EK1	1NO-1NC	440	6.0	10.0
DS200EK1	1NO-1NC	600	5.0	8.0
DS200EK2	2NO/2NC	110	3.0	30.0
DS200EK2	2NO/2NC	220	1.5	15.0
DS200EK2	2NO/2NC	440	1.0	8.0
DS200EK2	2NO/2NC	600	0.8	6.0

DC Pilot Duty Ratings

Catalog Number	Description	Volts	Single Throw (Amperes)	Double Throw (Amperes)
DS200EK1	1NO-1NC	115	2.0	0.5
DS200EK1	1NO-1NC	230	0.5	0.2
DS200EK1	1NO-1NC	600	0.1	0.02
DS200EK2	2NO/2NC	115	1.0	0.2
DS200EK2	2NO/2NC	230	0.3	0.1
DS200EK2	2NO/2NC	600	0.1	—

Approximate Dimensions in Inches (mm)

DS050MH**Myers Type Hubs**

NEMA 3R (400A and above)

NEMA 4, 4X (stainless steel), 12

Catalog Number	Conduit Size
DS050MH	0.50 (12.7)
DS075MH	0.75 (19.1)
DS100MH	1.00 (25.4)
DS125MH	1.25 (31.8)
DS150MH	1.50 (38.1)
DS200MH	2.00 (50.8)
DS250MH	2.50 (63.5)
DS300MH	3.00 (76.2)
DS350MH	3.50 (88.9)
DS400MH	4.00 (101.6)
DS500MH	5.00 (127.0)

DS075H1**Plate Type Hubs**

For NEMA 3R enclosures (up to 200A)

Group 1
General-Duty, Heavy-Duty,
Double-Throw Through 100A

Catalog Number	Conduit Size
DS075H1	0.75 (19.1)
DS100H1	1.00 (25.4)
DS125H1	1.25 (31.8)
DS150H1	1.50 (38.1)
DS200H1	2.00 (50.8)

Group 2
General-Duty, Heavy-Duty,
Double-Throw—200A

Catalog Number	Conduit Size
DS200H2	2.00 (50.8)
DS250H2	2.50 (63.5)
DS300H2	3.00 (76.2)
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Catalog number **DS900AP** adapter kit permits installation of Group 1 hubs on 200A type general-duty, heavy-duty and double-throw switches.

Enclosed Circuit Breakers



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Enclosed Circuit Breakers

Product Description

- 15–1200A
- Enclosed device used to open and close a circuit

Application Description

NEMA 1 General Purpose

**Surface or Flush Mounting
15–1200A, 600 Vac, 500 Vdc**

NEMA 1 enclosed breakers are designed for indoor use in commercial buildings, apartment buildings and other areas where a general purpose enclosure is applicable. The breaker is front operable and is capable of being padlocked in the OFF position. Ratings through 1200A are listed with Underwriters Laboratories as suitable for service entrance application. Both surface and flush mounted enclosures are available.



NEMA 1 General Purpose

NEMA 3R Rainproof
Surface Mounting ^①**Interchangeable Hubs (through
400A) 15–1200A, 600 Vac, 500 Vdc**

This general purpose outdoor service center employs a circuit breaker inside a weatherproof sheet steel enclosure to serve as a main disconnect and protective device for feeder circuits. The breaker is front operable and is capable of being padlocked in the OFF position. Ratings through 1200A are listed by Underwriters Laboratories as suitable for service entrance application.



NEMA 3R Rainproof Surface Mounting

Note

- ^① SFDN enclosed breakers do not have a door interlock to prevent door from being opened when breaker is "ON."

NEMA 4/4X, 5 Water
and Dustproof**Stainless Steel—Type 304
Surface Mounting 15–1200A,
600 Vac, 500 Vdc**

This enclosure meets NEMA 4/4X and 5 requirements for water and dustproof applications and has no knockouts or other openings. It is particularly well suited for use in dairies, borax mines, breweries, paper mills and other process industries. The operating handle can be padlocked in the OFF position, and is interlocked to prevent the door from opening when the breaker is ON. Ratings through 1200A are Underwriters Laboratories listed as suitable for service entrance application.



NEMA 4/4X Water and Dustproof

NEMA 12 Dustproof Surface Mounting

**No Knockouts or Other Openings
15–1200A, 600 Vac,
500 Vdc**

The Type 12 enclosure is designed in line with specifications for special industry application where unusually severe conditions involving oil, coolant, dust and other foreign materials exist in the operating atmosphere. The handle padlocks in the OFF position and the cover is interlocked with the handle mechanism to prevent opening the cover with the circuit breaker in the ON position. Ratings through 1200A are UL listed as suitable for service entrance application. A NEMA 12 semi-dust-tight design that includes knockouts is available. These units are rated 15–400A, 600 Vac, 500 Vdc.



NEMA 12 Dustproof Surface Mounting

NEMA 7/9 Hazardous Location

**Cast Aluminum, Explosion-proof
Surface Mounting 15–1200A,
600 Vac, 250 Vdc**

Hazardous location, Type 7: Class I, Groups B, C, D; Type 9: Class II, Groups E, F, G. This special service cast aluminum enclosure is supplied with a wide, machined flanged cover to prevent igniting outside atmospheres by arcing from inside the enclosure. Front operable, the handle padlocks in the OFF position. Enclosures rated 600A and above have lift-off hinges for ease of assembly.

Note: XFDN050B is not Group B compliant.



NEMA 7/9 Hazardous Location

Features, Benefits and Functions

- Side-opening door on NEMA 3R enclosures
- Padlockable in the OFF position
- Surface or flush mounted enclosures available through 400A on NEMA 1 enclosures
- Interlocked handle on NEMA 3R, 4/4X, 5 and 12 enclosures to prevent opening when the breaker is in the ON position
- Interchangeable hubs
- Numerous factory options

Standards and Certifications

- UL 489
- CSA 22.2
- NEMA 250

NEMA 1 General Purpose

- UL File No. E7819
- CSA File No. LR84319

NEMA 3R Rainproof Surface Mounting

- UL File No. E7819
- CSA File No. LR84319

NEMA 4/4X, 5 Water and Dustproof

- UL File No. E7819
- CSA File No. LR84319

NEMA 12 Dustproof Surface Mounting

- UL File No. E7819
- CSA File No. LR84319

NEMA 7/9 Hazardous Location

- UL File No. E84577
- CSA File No. LR42131-6

**Seismic Qualifications**

- Enclosed circuit breakers exceed the requirements of Uniform Building Code (UBC) and California Code Title 24 OSP-0338-10



Raintight Hubs

All rainproof enclosures 30–400A are shipped with plate over cutout. Hubs are not supplied with screws on 30–400A enclosures. Use screws from plate.

Raintight Hubs**Raintight Tubs**

Hubs	Hub Diameter		Catalog Number
	Inches	mm	
Small			
For use with RGDN and RFDN	0.75	19.1	DS075H1
	1.00	25.4	DS100H1
	1.25	31.8	DS125H1
	1.50	38.1	DS150H1
	2.00	50.8	DS200H1
Large			
For use with RJDN. RKDN has two cutouts	2.00	50.8	DS200H2
	2.50	63.5	DS250H2
	3.00	76.2	DS300H2
Required if using small DS hubs on RJDN and RKDN enclosures.			DS900AP

Breather and Drain, Hazardous Enclosures

A Universal Breather/Drain Fitting is installed in the top of an enclosure to provide ventilation to minimize condensation and in the bottom to allow drainage of accumulated condensation while maintaining explosion-proof integrity.

Type	Compliance		Conduit Opening	Catalog Number
	NEMA 7	NEMA 9		
BD	Class I, Groups C, D; Class I, Zone 1, Group IIB	Class II, Groups F, G	1/2	XPBD2
DBB	Class I, Groups B, C, D; Class I, Zone 1, Group IIB + Hydrogen	Class II, Groups E, F, G	1/2	XPDBB50

Neutral Kits, Insulated and Groundable

Maximum Enclosure Rating (A)	Main Lug Size Cu/Al	Catalog Number
100 SFDN100 RFDN100	(1) 14–1/0	DH100NK
100 (all others)	(1) 14–1/0	INK100
250	(1) 4–350 kcmil	INK250
400	(1) 4–600 kcmil or (2) 1/0–250 kcmil	INK400
600	(2) 250–500 kcmil	INK600
1200	(4) 3/0–750 kcmil	DS800NK ①

Note

① For use with 800 A and 1200 A M and N frame, and 100% rated.

Modifications

Allowable accessory combinations can be reviewed in Eaton's Circuit Breaker Product Guide: PG.74.A.01.T.E. Verify final application with the Customer Support Center.