ECD drains and breathers

Cl. I, Div. 1 & 2, Groups B, C, D
Cl. II, Div. 1, Groups E, F, G
Cl. II, Div. 2, Groups F, G
Cl. III

II 2 G Ex d IIB + Hydrogen
(ECD Type 4X Series)
Explosionproof
Dust-ignitionproof

Applications:

ECD drains and breathers are installed in enclosures or conduit systems to:

- Provide ventilation to minimize condensation
- Drain accumulated condensate
- At least one breather should be used with each drain
- A breather is installed in top of enclosure or upper section of conduit system
- Standard drain is installed in bottom of enclosure or in lower section of conduit system
- Universal breather or drain functions as a breather when mounted at the top of an enclosure, or as a drain when mounted in the bottom of an enclosure
- Combination breather and drain is used in those applications where the use of a top mounted breather is not practical due to limited space; or in offshore and marine installations where moisture may enter the enclosure through the breather located on top of enclosure
- Drains and breathers are installed in hubs or drilled and tapped openings

Features:

ECD284, ECD384, ECD385 and ECD15 universal drains and breathers have:

- Patented labyrinth design, suitable for use in Class I, Divisions 1 & 2, Groups C, D and Class II, Divisions 1 & 2, Groups F, G areas
- Capability to pass 50 cc of water per minute and 0.2 cubic feet or air per minute at atmospheric pressure
- ECD15 and ECD385 each have a well inside the inner, threaded end to provide for accumulation of sediment without clogging when used as a drain

Standard ECD drains and breathers have:

- Thread-in-thread design, suitable for use in Class I, Divisions 1 & 2, Groups C, D; Class II, Division 1, Groups E, F, G; Class II, Division 2, Groups F, G; and Class III areas
- ECD11 and ECD13 have capability to pass 25 cc of water per minute and .05 cubic feet of air per minute at atmospheric pressure
- ECD387 and ECD16 are a unique thread-in-shaft design for use in Class I, Divisions 1 & 2, Groups B, C, D; Class II, Division 1, Groups E, F, G; Class II, Division 2, Groups F, G; and Class III areas; ECD387 and ECD16 can pass 15 cc of water per minute; ECD16 can pass .01 cubic feet of air per minute
- ECD1 N4D average drain rate is 13.5 cc per minute

Features (continued):

Combination ECD breather and drain:

- Provides ventilation to minimize condensation and drains accumulated condensate – two functions performed by a single device installed in the bottom of an enclosure or conduit system
- Has the capability to pass 25 cc of water per minute and .10 cubic feet of air per minute at atmospheric pressure
- Thread-in-thread and labyrinth design, suitable for use in Class I, Divisions 1 & 2, Groups C, D; Class II, Divisions 1 & 2, Groups F, G; and Class III areas

Certifications and compliances:

NEC/CEC:

ECD16, ECD387, ECD-N4D, ECD-N4B

- Class I, Divisions 1 & 2, Groups B, C, D
- Class II, Division 1, Groups E, F, G
- Class II, Division 2, Groups F, G
- Class III
- IP46 (ECD-N4D and ECD-N4B only)
- IIB + Hydrogen (ECD-N4D and ECD-N4B only)

ECD11, ECD13

- Class I, Divisions 1 & 2, Groups C, D
- Class II, Division 1, Groups E, F, G
- Class II, Division 2, Groups F, G
- Class III

ECD18, ECD384, ECD15, ECD385

- Class I, Divisions 1 & 2, Groups C, D
- Class II, Divisions 1 & 2, Groups F, G
- Class III

ECD284

- Class I, Divisions 1 & 2, Group C, D
- Class II, Divisions 1 & 2, Groups F, G

UL standard:

- UL1203

CSA standard:

- C22.2 No. 30

Type 4X:

- ECD-N4D and ECD-N4B only

ATEX:

- ATEX certificate #ITS07ATEX15639U

Standard materials:

- ECD11, ECD15, ECD284, ECD384, ECD385, ECD16, ECD-N4D, ECD-N4B, ECD387 – stainless steel
- ECD13 – stainless steel with aluminum cap
- ECD18 – stainless steel with neoprene tube

ECD18

ECD13

ECD15

ECD16

ECD11

ECD1 N4D

Ordering information:

Type 4X drains and breathers

Size	Cat. # Drain	Cat. # Breather
3/8"	ECD38 N4D	ECD38 N4B
1/2"	ECD1 N4D	ECD1 N4B

Standard drains and breathers

Size	Cat. # Drain	Cat. # Breather
3/8"	ECD387	
1/2"	ECD11	ECD13

Universal drains or breathers

Size	Cat. #
1/4"	ECD284[A]
3/8"	ECD384[A]
3/8"	ECD385
1/2"	ECD15
1/2"	ECD16

Combination drain & breather

Size	Cat. #
1/2"	ECD18

Typical installation

1. At least five full threads of drain or breather must be engaged in matching female thread, taper tapped in accordance with NEMA/EEMAC Standard FB-1, Type NTC or National Bureau of Standards Handbook H28, Part II, Table 7.6.
2. Breathers and drains can be factory installed on various explosionproof equipment. See Options section on applicable equipment pages for suffixes.

[A] Shorter overall length than ECD15 and ECD385. For use in confined spaces, such as panelboard assemblies.