# CROUSE-HINDS SERIES **B-LINE** SERIES Products & solutions for food & beverage



# Productive. Safe. Compliant.

From fast moving production lines to controlled batching rooms and cold storage, we know you face a myriad of challenges in the food and beverage industry.

You are challenged with increasing efficiency and flexibility, reducing downtime and ensuring workplace safety, all while maintaining compliance with new and existing regulatory requirements.

Eaton offers solutions specifically designed for harsh environments where oils, chemicals, detergents and wash downs are commonplace.

Our field-proven products offer inventive designs for reducing downtime, delivering labor savings and ensuring personnel and equipment safety in the workplace.



# Focused on output

Product solutions for processing and storage facilities



#### LED lighting

Maintenance-free and energy-efficient

The broadest portfolio of LED luminaires for any industrial or hazardous application.



### Motor control & power distribution

Flexible and modular solutions

Innovative, intelligent NEC and IEC solutions safely and efficiently control power and protect circuits in explosive, wet and corrosive environments worldwide.



#### Fluorescent & HID lighting

Durable and energy-efficient

Proven technology, technical support and UL/CSA certifications with an unmatched selection of luminaires.



#### Conduit & cable fittings

Rugged connectors for extreme conditions

Time-tested, innovative conduit fittings, cord connectors and cable glands move power where you need it simply and safely in any electrical installation.



#### **Enclosures**

Performance and reliability

Available in a comprehensive range of sizes, each with various configurations for a multitude of applications.



#### Plugs & receptacles

Simple and secure powering solutions

Extensive configurations, custom capabilities and numerous interlocked designs provide safe and reliable solutions for fixed and portable power applications in industrial and hazardous environments.



#### Safety and security solutions

Command consoles and server cabinets

Eaton offers command consoles for 24-7-365, shared monitoring stations as well as server cabinets with cages for added network equipment safety.



#### Support systems

Reliable, safe supports

Multiple B-Line series safety grating solutions along with pipe hangers and strut to help support non-structural systems.



#### Cable management

Robust, corrosion resistant cable tray

Stainless steel and fiberglass tray to manage, support and organize cables





# **LED** lighting solutions

### Offering the broadest portfolio of LED luminaires for industrial or hazardous applications

We utilize more than 100 years of lighting expertise to optimize the benefits of LED technology to offer the safest and most reliable LED luminaires on the market.

Whether you need to light a batching room or bottling line, we have a solution that will exceed your needs. Featuring high performance LEDs and a solid state electronic driver, our LED luminaires improve energy consumption and reduce maintenance for relamping.

#### **Pauluhn Apex LED luminaires**

#### Overview

Pauluhn™ Apex linear LED luminaires are designed to replace fluorescent T12, T8 and T5HO luminaires in hose down, food processing and corrosive environments.

Three models of the Apex are available, from 13,000 to 25,000 lumens.

#### Certifications

- Type 4X; IP66
- UL Standards: UL1598, UL8750
- CSA 22.2 No. 250
- NSF Splash Zone

#### **Benefits**

Innovative design for demanding applications:

- Angled light fixture mitigates debris build-up
- Robust design withstands high pressure wash down, and food rated paint maintains safety

# Easily customized for application-specific performance:

- Versatile mounting options with a through feed design for simplified multiple fixture wiring
- Dimmable and occupancy sensor configurations available to reduce energy consumption

### Improved performance and reduced costs:

- 100+ lumens per watt provides highly efficient lighting
- Rated life is up to 60,000 hours of maintenance-free and safe operation

Model	Typical lumens	Wattage	Efficacy	fluorescent luminaire*
APX13L	13,000	122	106	3-lamp T5H0
APX17L	17,000	144	118	4-lamp T5H0
APX25L	25,000	217	115	6-lamp T5H0

<sup>\*</sup> All T5HO lamps used in comparison are 4 foot length.





#### **Champ Pro PFM LED floodlights**



#### Overview

Champ® Pro PFM floodlights are designed to provide full-spectrum, crisp, white light.

Eleven versions of the Champ PFM LED are available for pole and wall mounting, providing ideal solutions for a wide range of applications.

Also available in Class I, Division 2 model (Champ FMV).

#### Benefits and certifications

- Rugged heat sink Designed to perform in high ambient temperatures up to +65°C and as low as -40°C
- High lumen output Up to 117 lumens per watt
- Multiple lens options
- Smaller and lighter 25% smaller and 10 lbs. (4.5 kg) lighter than previous model (3L-15L models)
- DesignLights Consortium<sup>®</sup> approved for select models\*
- Certifications: UL1598;
  UL1598A; UL875; cUL; Type
  4X; IP66; UL approved up to
  65°C ambient (3L-15L); cUL
  Listed to CSA Standard CSA
  C22.2 No. 250; IEC
  Standards: IEC 60598; CE

#### **Champ PLLA linear LED luminaires**



#### Overview

Champ PLLA linear LED luminaires are specifically designed to replace fluorescent T12, T8 and T5HO lighting. The rugged and durable design features the industry's most versatile and flexible mounting options. The PLLA is the ideal solution for high vibration, impact and hose down areas and applications.

Also available in Class I, Division 2 model (Champ MLLA).

#### Benefits and certifications

- Industry-leading efficacy: up to 130 LPW
- -40°C to +65°C ambient operating temperature
- Low profile (<3" height)</li>
- Versatile ceiling/swivel, wall, flush, pole and pendant mounting options
- Wide and narrow optics for uniform illumination
- 2,000 psi high pressure hose rated; high vibration resistance (up to 5Gs)

- Surge protection options (up to 10kV)
- Emergency battery back-up (90 minutes) and surge protection options (up to 10kV)‡
- DesignLights Consortium<sup>®</sup>
  Qualified (some models are not DLC qualified)\*
- Certifications: Type 4X; IP66; Wet Locations; UL1598; UL1598A; C22.2 No. 250; ABS design assessed

#### Industrial high bay LED luminaires



#### Overview

IHB LED luminaires are the perfect replacement for 250W-1,500W HID and 4-10 lamp T5HO fluorescent high bay fixtures. Designed for locations requiring continuous and consistent light levels, requiring frequent on-and-off of lights and that are difficult to relamp or that cause production to be stopped during the lamp maintenance process.

#### Benefits and certifications

- Increased efficiency -Up to 117 lumens per watt
- Multiple mounting options -Available with pendant, aircraft cable or jack chain mounting
- Aluminum heat sinks for superior thermal management
- Optional occupancy sensor kit available
- Multiple lens options -Tempered and clear glass standard, diffused glass and clear or diffused polycarbonate options available
- DesignLights Consortium<sup>®</sup> approved for select models\*
- Certifications: UL1598; UL8750; cULus; Damp Locations

#### **Champ Pro PVML LED luminaires**



#### Overview

Champ Pro PVM luminaires are designed to provide full-spectrum, crisp, white light with custom Type I, III and V distribution.

Nine versions of the PVM are available, providing ideal solutions for a wide range of applications.

Also available in Class I, Division 2 (Champ VMVL).

#### Benefits and certifications

- Modular design This contractor-friendly design is ideal for both retrofit and new construction applications
- High efficiency drivers -Designed to provide reliable operation in even the harshest environments
- Type 4X rated The LED housing is constructed of durable die cast aluminum, providing an efficient thermal path to the heat sink assembly
- Custom optics Type I, III and V optics designed to maximize light distribution and intensity
- Lever-lock connectors and 3-pole terminal block
- Certifications: UL1598; UL1598A; cUL; Type 4X; IP66; DesignLights Consortium® approved for select models\*; cUL Listed to CSA Standard CSA C22.2 No. 250; CE; UL approved up to 65°C ambient (3L11L UNV1; all other models 55°C)
- \* Refer to www.designlights.org Qualified Products List under Family Models for full listing details. Not all models are approved for all application categories
- ‡ One year warranty



# Fluorescent lighting solutions

### Delivering installation savings, energy conservation and improved performance

As a leading supplier of area and emergency lighting solutions for installation in harsh, hazardous, wet and corrosive environments, our Pauluhn<sup>TM</sup> products are specifically designed for food and beverage and other high abuse applications. Wherever reliable, cost-effective lighting is critical to the safe, secure and productive functioning of your operation, you can count on us.

#### Pauluhn Apex linear fluorescent luminaires

#### Overview

Ideal luminaire for use in high, mid and low bay applications.

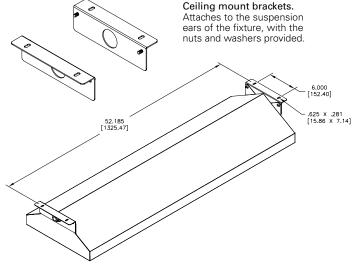
Designed for use in:

- High pressure hose down areas
- Food and beverage processing facilities
- Freezer and refrigeration
- Grain and sugar milling, processing and storage
- Warehouse and storage facilities

#### Certifications

- Class I, Division 2, Groups A, B, C, D
- Class II, Divisions 1 & 2, Groups F, G
- Class III
- NSF/ANSI 2-2010 Splash Zone
- Canadian Processed Products Regulations C.R.C., c.291

- High output luminaire, up to 30,000 raw lumens
- Available in aluminum and stainless steel
- Available with T5HO lamps
- Debris shedding design: peaked housing prevents particulates from collecting
- Optional high efficiency reflector for up to 95% total reflectivity
- Optional self-contained emergency battery back-up hallast
- USDA compliant materials





#### Pauluhn WashPro linear fluorescent luminaires



#### Overview

Ideal luminaire for use in high, mid and low bay applications.

Designed for use in:

- High pressure hose down areas
- Food and beverage processing facilities
- Grain and sugar milling, processing and storage

#### Benefits and certifications

- High output luminaire, up to 30,000 raw lumens
- Hose tested at 1500 PSI for 60 minute duration, at 5 and 10 ft. distances, nozzle dispersion 0 degree
- Optional self-contained emergency battery back-up ballasts
- Options include: stainless steel end caps and disconnect straps, quick disconnect receptacle and center stud mount end caps

- Available in hazardous and non-hazardous versions
- Available in 2', 4' and 8' lengths
- · Enclosed and gasketed
- Certifications: Type 4;
  Conforms to IP66; NSF;
  UL924; UL1598; CSA Class 3425 03; Class 3425 83;
  Canadian Processed Products Regulations C.R.C., c.291;
  NSF/ANSI 2-2010 Food Contact (WPS version); NSF/ANSI 2-2010 Splash Zone

#### Pauluhn Summit linear fluorescent luminaires



#### Overview

Ideal luminaire for use in high, mid and low bay applications.

Designed for use in:

- High pressure hose down areas
- Grain and sugar milling, processing and storage
- Food and beverage processing facilities
- Freezer and refrigeration

#### Benefits and certifications

- High output luminaire, up to 30,000 raw lumens
- Available in aluminum or stainless steel, USDA compliant materials
- Optional self-contained emergency battery back-up ballast
- Optional high efficiency reflector for up to 95% total reflectivity
- Pendant, feed-through or combination mounting styles

- Available in hazardous and non-hazardous versions
- Certifications: Type 4;
  Conforms to IP66; ABS; NSF;
  UL924; UL1598; Canadian
  Processed Products
  Regulations C.R.C., c.291;
  CSA C22.2 250 04; C22.2
  141; NSF/ANSI 2-2010 Splash
  Zone

#### Pauluhn Intrepid linear fluorescent luminaires



#### Overview

Ideal luminaire for use in mid and low bay applications.

Designed for use in:

- Watertight requirements
- Food and beverage processing facilities
- Dusttight requirements
- · Corrosive environments

#### Benefits and certifications

- Available in stainless steel, aluminum or non-metallic
- Stainless steel latches, mounting feet and lens retainers
- Impact-resistant UV stabilized polycarbonate lens
- Third party certified for operation in high ambient temperatures, up to 65°C (149°F)
- Shoc♦Loc™ bi-pin spring lampholders for T5, T8 and T12 lamp types provide superior resistance to shock and vibration

- Optional self-contained emergency battery back-up ballast
- Available in hazardous and non-hazardous versions
- Certifications: Type 4; IP66; Marine Outside Type Saltwater; ABS; NSF; UL924; UL1598A; EN 60529 - Ingress Protection; Canadian Processed Products Regulations C.R.C. c.291; CSA - C22.2 250-04; C22.2 141; NSF/ANSI 2-2010 Splash Zone



#### **NEMA 4X enclosures**

#### Overview

Broad offering of JIC, wall mount, ground mount and freestanding enclosures with superior ingress protection. Protect against corrosion, circulating and windblown dust, falling dirt, dripping noncorrosive liquids, rain, splashing water and hose-directed water.

#### Certifications

- UL508 Listed, Type 4, 4X, 12, 13
- CSA C22.2 No. 94 certified, Type 4, 4X, 12, 13
- Conforms to NEMA standard for Type 4, 4X, 12, 13

**Enclosures** 

#### High performance and reliability for global applications

Eaton's Crouse-Hinds series NEMA industrial enclosures are manufactured to meet the most demanding industrial environmental applications.

They are available in a comprehensive range of sizes, each with various configurations for a multitude of applications. Enclosures are certified, engineered and manufactured to perform through the most demanding conditions needed by food and beverage, chemical plants, refineries, OEMs, MRO and wastewater treatment facilities.

These exceptionally durable, corrosion-resistant enclosures can withstand extreme abuse and exposure to chemicals, water and severe conditions. They have unique design features, precision manufacturing and the highest quality materials, making them the premier choice for the food and beverage industry.



Seamless, poured in place gasket





- Type 4X enclosures have seamless poured in place gasket for superior ingress protection
- 316L stainless steel, 304 stainless steel or 5052-H32 aluminum enclosures with brushed finish for superior corrosion resistance
- All continuous welded seams are finished smooth

#### Ex-CELL stainless steel or sheet steel enclosures



#### Overview

A globally certified enclosure and termination solution for Type 3S and 4X applications. Over 100 standard sizes in stainless steel and painted steel, featuring unique design features, precision manufacturing and the highest quality materials.

The premier choice for instrumentation and electrical applications across the globe.

#### **Benefits**

- 316L stainless steel standard
- 304 stainless steel or painted steel optional
- High integrity one-piece foamin-place polyurethane gasket

#### Certifications

- cULus to UL50 / C22.2 No. 94-M91, Types 3S, 4, 4X
- ATEX II 2 GD Ex e II T6 IP66 (PTB02ATEX1014) for Zone 1, 2 and 21
- IECEx Ex e (IECEx BKI 08.0001U)
- · GOST-R and GOST-K certified
- Ex e ia IIC, T6, T5

#### **NEMA Type 7 enclosures**



#### Overview

Explosionproof enclosures are used as a junction or pull box, enclosure for splices and branch circuit taps, terminal blocks, relays and other electrical devices.

Enclosures are certified for use in areas which are hazardous due to the presence of hydrogen or gases and vapors of equivalent hazard such as those found in process industries.

#### **Benefits**

- Walls of bodies may be drilled and tapped for conduit entries as shown in listings
- External flange design wide unobstructed cover opening provides a completely accessible interior for wiring and electrical equipment
- Special neoprene cover gasket provides a watertight seal to meet NEMA 4 requirements

#### Certifications

- NEC/CEC: Class I, Divisions 1 & 2; Class II, Divisions 1 & 2; Class III
- UL1203
- cUL to CSA Standard C22.2 No. 30
- ATEX: Ex d IIB + H<sub>2</sub>T6, IP66 ATEX certificate: PTB 01 ATEX 1020 U
- NEMA Type 3, 3R, 4, 4X, 7BCD, 9EFG
- IEC Standards: EN:60079-0 and EN:60079-1

#### **Breathers and drains**



#### Overview

Breathers and drains are installed in enclosures or conduit systems to provide ventilation, minimize condensation and drain accumulated condensate.

#### **Benefits**

- Available in standard, Type 4X, combination and universal configurations
- Available in a variety of materials

#### Certifications

 Hazardous and ordinary location models available for applications around the world



# Industrial fittings & cable glands

### Products to satisfy any requirement regardless of application, style or material

Quality, breadth of offering and innovative products that deliver real value for the commercial, light industrial and residential markets. Products that deliver long, dependable service, labor savings and lower installed cost, all from a single, dependable source.



Outlet bodies, device boxes, covers and gaskets



Locknuts



Hex head reducing bushings



Hex head plugs

#### Stainless steel fittings

#### Overview

Stainless steel fittings deliver unbeatable corrosion protection where you need it, saving you time and money throughout the life of your facility.

Superior resistance to corrosion and heat, combined with unmatched strength, make stainless steel fittings a long-term solution for even the most extreme environments.

#### Certifications

- UL Listed
- cUL Listed

- Self-healing properties of stainless steel fittings help reduce the penetration of rust/corrosion and eliminate damage to the fitting
- Stainless steel fittings retain their strength in extreme heat and extreme cold conditions
- Fitting surface is easy to maintain and keep clean
- Easy cleaning capabilities make these fittings perfect for food processing and other hygienic areas where wash downs are common
- Superior strength and durability greatly reduce replacement of fittings. This will lower your total cost of ownership and increase your return on investment
- Stainless steel fittings do not require harsh environmentdamaging cleaners to keep them looking like new
- Stainless steel fittings are ideal for industrial MRO and OEM applications in food and beverage, pharmaceutical, petrochemical, wastewater, salt water and other corrosive environments



Beam clamps



Straps



U-bolts



Right angle clamps



Parallel clamps



Conduit hangers



Couplings



Conduit nipples



Three-piece couplings





Standard radius elbows

#### V-Spring telescoping safety light pole



#### Overview

The V-Spring® telescoping safety light pole increases safety and decreases labor costs associated with lighting installation and routine maintenance. Its innovative design allows for all work to safely take place on the platform or walkway, eliminating the need for portable ladders and fall protection equipment.

Applications include:

- Luminaires installed on industrial walkways, platforms, stairways and conveyors where OSHA/HSE regulations require fall prevention equipment
- Hard to reach or dangerous areas where safety is a big concern
- · Hazardous and harsh environments subject to corrosive agents, vibration and extreme temperatures

#### Cable glands



#### Overview

Our global offering provides a termination solution for virtually every type on the market. These cable glands are designed for strict adherence to global specifications. Available in a wide range of materials, including nickel-plated brass, stainless steel, aluminum and impact-resistant nylon.

#### **Benefits**

- Wide range of cable types including: Unarmoured; Tray and Type P; Steel Wire Braided (SWB); Steel Wire Armour (SWA); Steel Tape Armour (STA); Metal Clad MC); TECK; Lead Sheath
- Full range of adapters, reducers, plugs, drains and other accessories available.
- Liquid and putty style barrier seals available for glands requiring a barrier compound.

#### Certifications

 cULus Marine; cUL; IECEx; ATEX; American Bureau of Shipping; Det Norske Veritas; Lloyds Registar; CEPEL; NEPSI; GOST

#### **Liquidtight fittings – stainless steel**



#### Overview

Liquidtight fittings are used to terminate and seal liquidtight flexible metal conduit to an oiltight, raintight or liquidstight box or enclosure, where superior corrosion resistance and/or strength is required.

#### **Benefits**

- Made of strong, corrosionresistant 304 stainless steel for long, dependable service
- Available in straight and 90 degree configurations, and ½" through 2" trade sizes
- Tapered threaded male hub -NPT
- Liquidtight, raintight, oiltight
- Suitable for wet locations
- Long ferrule prevents pull-out and tight bend conduit pop-out

#### Certifications

 Class I, Division 2; Class II, Divisions 1 & 2; Class III, Divisions 1 & 2; suitable for grounding in sizes 3/8" through 1-1/4" under NEC; cULus certified; UL File No. E-19189

#### Myers<sup>™</sup> stainless steel ground hubs



#### Overview

Myers stainless steel ground hubs are used in the termination of electrical circuits through the wall of the enclosure.

#### **Benefits**

- Vibration-proof
- Grounding screw for added safety
- · Captive o-ring gasket
- No welding

- Posi-Lok insulated throat
- Fits standard knockout
- · Controlled thread lengths
- NPSL on male thread
- Male thread (NPT)

#### Certifications

- Class I, Division 2; Class II, Divisions 1 & 2; Class III, Divisions 1 & 2
- · UL Listed and CSA certified
- NEMA Type 2, 3, 3R, 4, 4X, 12



# Plugs & receptacles

### Simple and secure solutions for providing portable and fixed power

Eaton's Crouse-Hinds series plugs, receptacles and connectors feature rugged construction, extensive configurations, custom capabilities and numerous interlocked designs. Engineered to provide safe and reliable powering solutions for rigging up and rigging down equipment, portable power solutions and for powering lighting systems.

#### Arktite interlocked receptacles with enclosed disconnect switches

#### Overview

Arktite® interlocked receptacles prevent engagement and disengagement of the plug under load, providing safe, portable connections and extended product life.

Used as a service outlet for portable or fixed electrical equipment, such as generators, compressors, welders, portable tools, conveyors, lighting systems and similar equipment.

Fusible or non-fusible versions available in 30, 60 and 100 amp configurations.

#### Certifications

- Stainless steel model: Enclosure Type 4, 4X
- Sheet steel model: Enclosure Type 3R, 12
- UL98, UL1682
- cUL Listed Certified by UL to CSA Standards C22.2 Nos. 4, 182.1

- The switch enclosure and receptacle are interlocked with the body and operating mechanism. The enclosure cannot be opened when the plug is engaged and switch is in "ON" position
- Switch cannot be turned on with enclosure door open
- Interlock mechanism on the receptacle prevents plug from being disengaged under load
- Designed for use in nonhazardous areas where dust, moisture and corrosion may be a problem
- Designed for flush or surface mounting
- A fusible switch, when used, provides short circuit protection



#### Arktite NBR non-metallic interlocked receptacles with enclosed circuit breakers



#### Overview

Arktite NBR interlocked receptacles with enclosed circuit breakers are used to supply power and provide short circuit protection, thermal overload protection and a disconnect means for portable electrical equipment such as motor generator sets, compressors and conveyors.

#### **Benefits**

- Enclosures are made of Krydon<sup>®</sup>, exhibiting excellent resistance to corrosion and heat
- Enclosure access door is mechanically interlocked with operating handle and cannot be opened unless operating handle operator is in "OFF" position
- Operating handle can be padlocked in "OFF" position; breaker is trip-free of handle and will open under short circuit or overload when handle is in the "ON" position

#### Certifications

- NEMA 3, 3R, 4\*, 4X\*, 12
- ANSI/UL Standard: 489
- UL1682
- CSA

\*30 and 60A Style 2 only.

#### Arktite 30A-100A non-metallic plugs, receptacles and connectors

#### Overview



Arktite circuit breaking plugs, receptacles, cord connectors and motor plugs are used to supply power to portable electrical devices such as welders, motors, pumps, conveyors and other similar equipment, where electrical loads must be quickly disconnected from power sources.

#### **Benefits**

- Molded of Krydon fiberglassreinforced polyester material which is highly resistant to corrosion, heat, weathering and physical abuse
- Split-pin contact design provides 360° of electrical contact
- Spring door provides environmental protection of receptacle (NEMA 4)

#### Certifications

- UL1682
- UL1010 hazardous locations (NPJ plug only)
- Wet and damp locations, watertight
- CSA C22.2 No. 182.1

#### LynxPOWER industrial connectivity solutions

#### Overview



Eaton's Crouse-Hinds series extensive offering of industrial connectivity products simplify installations and change-outs for power, signal and data applications. LynxPOWER™ connectivity is designed for food processing equipment, conveyors and assembly lines, packaging equipment, pick-n-place machines, robotic equipment and industrial sensors.

#### **Benefits**

- Designed specifically to withstand industrial manufacturing environments
- Lowers maintenance and facility costs due to quick and easy change-out modular design

#### Certifications

- NEMA 1, 3, 4, 6P, 13
- IEC IP68

#### IEC 60309 plugs, connectors, receptacles and inlets

#### Overview



IEC 60309 pin and sleeve devices are the industry's first to offer IP69K rated protection. Each device has been carefully engineered to offer reliability, efficiency and added safety protection in demanding wet locations, particularly where harsh wash downs are a must.

#### **Benefits**

- Watertight, impact- and corrosion-resistant
- Receptacles mount to Eaton's Crouse-Hinds series back boxes

#### Certifications

- Classified to IEC Standards 60309-1 and 60309-2
- cULus Listed to UL1682, UL1686 and CSA C22.2 No. 182.1 (North American amperages only)
- Watertight to IP67 per IEC 60529 and IP69K to DIN 40050 Part 9
- NEMA 4X
- 12 rated enclosure watertight to IP66 per IEC 529 (interlocks)



## **Control & apparatus**

#### Flexible, modular solutions engineered to your specifications

Eaton's Crouse-Hinds series is continuously developing innovative, intelligent and engineered to order NEC and IEC solutions to control power and protect circuits in food and beverage applications.

Crouse-Hinds series controls are specifically designed for safe and efficient use in explosive, wet and corrosive environments worldwide.

#### EMN 25 and 26 pushbutton motor starters

#### Overview

Explosionproof, compact, across-the-line manual NEMA starter for single and polyphase VAC or VDC motors.

 Used for fans and blowers, pumps, compressors and conveyors

#### Certifications

- Class I, Divisions 1 & 2, Groups C, D
- Class II, Divisions 1 & 2, Groups E, F, G
- Class III
- UL1203
- cUL Standard: C22.2 No. 30

#### **Benefits**

- Built to protect from hosedirected water - NEMA 4
- Robust protection for startstop buttons
- Option for no top entry for further protection from water ingress
- Pushbutton can be locked in "OFF" position
- Versatile mounting footprint accommodates field retrofit



#### SynergEX EZFlex panelboards

#### Overview

One of the biggest challenges with enclosures located in hazardous areas is accessibility. or missing bolts. The SynergEX EZFlex panelboard utilizes individually encapsulated circuit breakers to reduce downtime, increase safety, and lower maintenance costs in hazardous locations.

#### Certifications

- cULus Listed
- Class I, Division 2, Groups A, B, C, D
- Class II, Division 2, Groups F, G
- Zone 2 Ex ec IIC GcT4
- Zone 22
- UL67
- CSA C22.2 No. 29
- UL60079-7
- CSA-C22.2 No. 60079-15:2012
- IP66circuit breakers

- 6 to 66 circuits within one enclosure
- Removable gland plates for easy addition of entries standard on all sizes
- Easy to open and access with only 1/4 turn
- Lower maintenance costs
- Lightweight design and reduced footprint
- Lightweight and compact main breaker is encapsulated and internally mounted
- Proven reliability from Eaton's Crouse-Hinds series tamperproof encapsulated breakers
- The new EZFlex bus bar's patented design allows for breaker swap out in the field



#### **Control stations**



#### Overview

N2S and GHG43 control stations and selector switches are used for motor control, visual indication, on-off control of circuits and circuit selection.

#### **Benefits**

- Designed for use in hazardous and corrosive environments
- Available in non-metallic, 316L stainless steel or Krydon fiberglass-reinforced polyester
- Component options include: pushbuttons, signal lamps, terminal blocks, ammeters, potentiometers and rotary switches

#### Certifications

- · Class I and II rated
- UL Listed and CSA certified
- IEC rated
- NEMA 3, 4, 4X
- IP66
- \*Certifications vary by model or configuration.

#### STE main breakers



#### Overview

Class I, Division 2 STE main breakers utilize an encapsulated breaker in a NEMA 4X stainless steel enclosure for easy access, increased safety and decreased maintenance costs. The STE simplifies maintenance efforts thanks to a lightweight design and reduced footprint.

#### **Benefits**

- · Factory sealed
- Easy to open and access with a single handle
- Lightweight design and reduced footprint
- Interlocked design secures the enclosure from being opened when the breaker is in ON position
- Proven reliability from Eaton's Crouse-Hinds series tamperproof encapsulated breakers

#### Certifications

- Class I, Divisions 2, Groups A, B, C, D
- · Class I, Zones 2
- Class II, Groups F, G
- Class III
- UL Listed and CSA certified
- NEMA 4X

#### **XDT** hazardous area transformers



#### Overview

XDT hazardous location dry-type transformers are designed to operate where volatile flammable liquids or gases are handled, processed or used, and where ignitable concentrations of gases or vapors are normally prevented by positive mechanical ventilation.

#### Benefits

- Resin-encapsulated core-coil assembly for reliable performance in extreme environments
- Ratings: single phase 0.5 kVA through 37.5 kVA; three phase - 3 kVA through 150 kVA
- Custom configurations available to meet customer specifications

#### Certifications

 Class I, Division 2, Groups A, B, C, D; cUL to C22.2 No. 66 and C22.2 No. 213-M1987; NEMA 3R, 4X; UL1604

#### **Disconnect switches**



#### Overview

Hazardous area and ordinary location disconnect switches are used in manual "ON" and "OFF" control of single phase or three-phase AC motors where overload protection is not required or is provided separately.

#### **Features**

- Enclosure options: VALOX® thermoplastic and Krydon fiberglass-reinforced polyester
- Lockable handle meets OSHA lockout/tagout requirements
- Handles can be locked in the "OFF" position
- Suitable for wash down and corrosive areas (model specific)
- Hazardous and industrial versions available

#### Certifications

- Ordinary location and globallycertified hazardous location models available
- NEMA 4X
- IP66
- UL and cUL Listed
- \*Certifications vary by model or configuration.

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# Cable management and support systems

Eaton's B-Line series support systems effectively support, protect, and connect engineered facility subsystems, while providing a lower total installed cost

From cable management to safe walking surfaces, Eaton provides support solutions you can rely on to keep your facility up and running and help keep your employees safe.

#### Cable tray and accessories



#### Overview

As the industry leader in cable tray, Eaton offers one of the widest ranges of B-Line series cable management solutions available in the market today. We offer a variety of tray styles, fittings and accessories available to manage and organize cable pathways. Stainless steel and fiberglass tray options provide increased corrosion resistance. Plus, the stainless steel cable tray features patented I-beam side rails that carries up to 2.3 times more load than c-channel.

#### Strut systems



#### Overview

Eaton's B-Line series strut system is designed to support non-structural systems, such as cable tray, HVAC systems, pipe and conduit. It is also ideal for racking system, panel stands, machine guards and ceiling grids.

- Channel available in in solid, slotted hole, and long slotted hole
- Features full line of fittings, clamps, hardware and accessories
- Available in various finishes and materials for a variety of environments
- · Many items

#### Safety grating solutions



#### Overview

Contractor and industry surveys reveal accidents caused by falls are high on the list of disabling and lost-time injuries and even death. In fact, statistics from many states rate this type of accident are second as the cause for industry's loss of man-hours and lower productivity. Eaton's B-Line series safety grating product offering provides superior structural walkways with increased safety and slip-resistance for rugged outdoor and indoor environments.

#### Pipe hangers



#### Overview

Eaton offers a full line of B-Line series pipe hangers, clevis hangers, beam clamps and other mechanical supports in a variety of materials and finishes.

#### **Applications**

Pipe hangers are designed to support insulated or non-insulated pipe allowing for vertical adjustment and limited movement in the piping system. Beam clamps are designed to provide attachment of hanger rods to structural members without drilling or welding.

# B3100 Slide-Rite Clevis Hanger

#### Overview

- Slide-Rite<sup>™</sup> hanger features 15° swing in either direction allows pipe to easily feed through
- Engineered design aligns bolt holes for quicker overhead installation



# CoSPEC

# **Online specification tools**







**DOWNLOAD**—Output

CoSPEC specification tool makes it simple to view, select and download drawings and specifications in over 100 formats.

The tool includes both Crouse-Hinds series and B-Line series solutions to simplify your design and specification process.

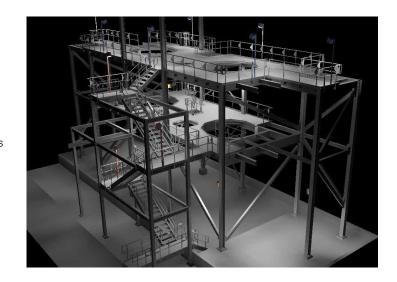


specification data and key family specs. The sheets also include a custom text area for unique data such as project name or fixture type, as well as an embedded 3D drawing.

#### **Lighting layouts**

From simple layouts to complex drawings, our lighting design engineers deliver precise, efficient, applicationand environment-appropriate lighting designs. Our experts can save you time and money by creating a virtual model of a proposed design, revealing luminaire characteristics and effects within the installation.

- 3D fixture placement with access to alternate fixtures and mounting heights
- Point-by-point footcandle diagram calculations
- AutoCAD®-generated floor plan overlays
- Complete bill of material





#### **ROI** calculators

Multiple interactive online calculators to determine your potential savings. These handy, intuitive calculators allow you to enter design parameters unique to a project and view the specific savings and payback period realized.

PRODUCT SPECIFICATION GUIDE - LED LUMINAIRES - CHAMP VMV LED SERIES SECTION 26 54 00 - CLASSIFIED LOCATION LIGHTING Product Specification Guide - Champ® LED VMV Luminaires Hi-Lumen SECTION 26 54 00 - Classified Location Lighting

PART 1 GENERAL

1.01 SCOPE

A. Furnishing, installation, and assembly of lighting fixtures for areas classified as hazardous.

A. National Fire Protection Association (NFPA): 1. NFPA 70 National Electrical Code (NEC)

#### **Specification guide forms**

Written to CSI guidelines, our specification guide forms are ideal for designers whose customers have out-of-date or incomplete spec libraries. They're a quick and easy way to optimize the safety, reliability and efficiency of your design requirements.



#### U.S. (global headquarters): **Eaton's Crouse-Hinds, B-Line** and Oil and Gas business

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