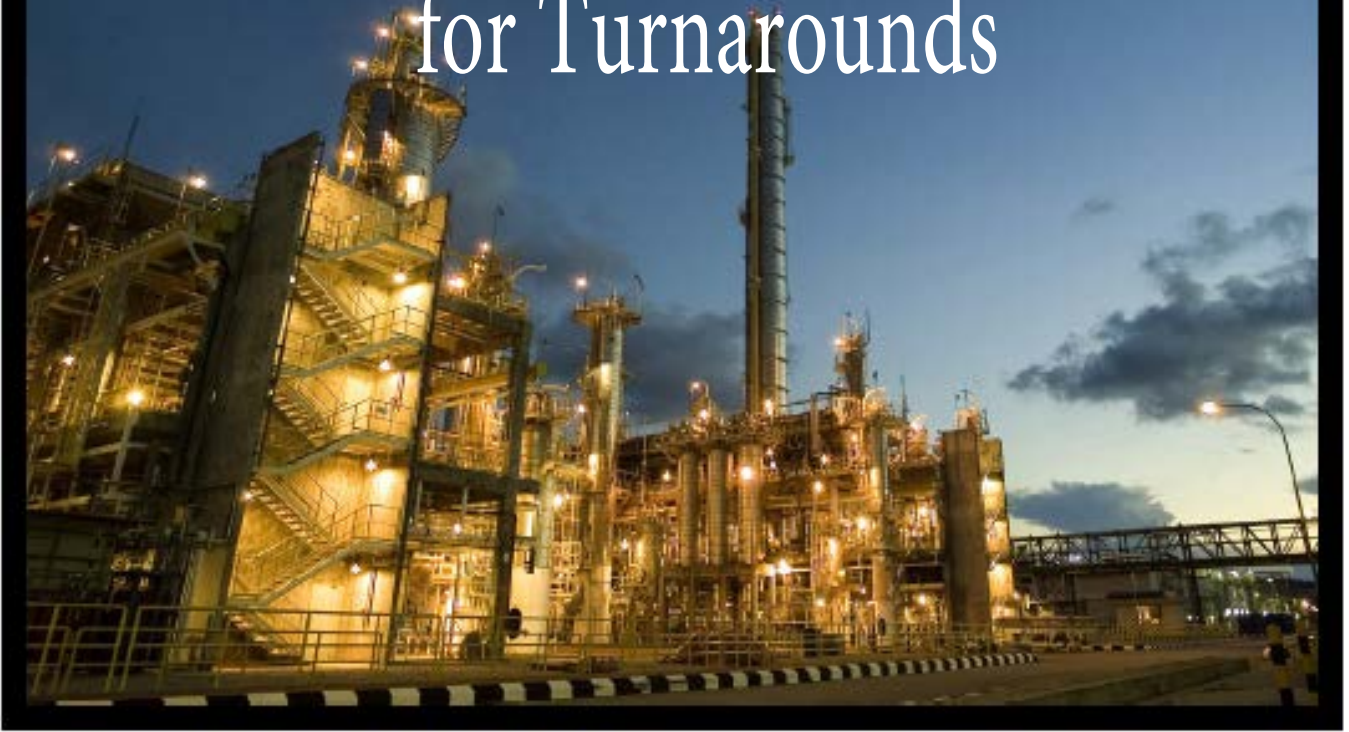# Hazardous Location Products for Turnarounds

Electrical Panels and Lighting

Hazardous Location Products Catalog

New Construction, Turnarounds, Outages, and Emergency Backup

DASH

POWER PRODUCTS

The latest technology for a safer more reliable connection

What We Are Able To Provide

Dash Power Products equipment is used on new construction sites for temporary power and lighting along with the latest technology for existing sites during shut-downs, turnarounds and unplanned outages.

The key to our offering is combining the latest technologies with a total solution to bring a safer, more durable, incredibly versatile, and more reliable means through a series of dual voltage panels. The whole system is grounded throughout and tethered with a Plug and Use connector system that makes it easy and safe to use and ready for hazardous (Class 1 Div 2) locations or non-hazardous environments.

The efficiencies built in to the system of panels ensures your project will decrease man hours, cut down safety hazards, and ensure the power is clean and safe.

Additionally, we offer a series of portable lighting products and light towers that may be used in hazardous (Class 1 Div 2) locations or non-hazardous environments.

Safer, Reliable, Efficient

Turnarounds and other Outages are a major part of company expenditures so getting the plant up and running as quickly and safely as possible is always top priority. Dash Power Products rated products will allow your workers to get the job done safely and on time. Properly rated electrical equipment is a must in areas where explosive gases or dusts are present. Dash Power Products Hazardous Locations rated equipment is designed with Plug & Use connections (Arc Flash protection as per NFPA 70E), light weight sub panels for work on elevated platforms, patent protected devices to attach panels and lighting to platforms with ease, eliminate tripping hazards with a minimal amount of cords, Hazardous Location rated breakers with GFCI technology that can be reset directly on the working platform in close proximity to the worker. Ground faults are a common occurrence on working platforms since they are often wet and subject to the process conditions.

Dash Power Products equipment can allow pre-shutdown work to start early and likewise allow work to continue after the plant start-up sequence has begun. Our staff will help you evaluate the plot and work needed to come up with product solutions to fit the project needs.

We can offer expert advice when planning your turnaround so that contractors and employees are kept safe and budgets are maintained.

Dash Power Products
Part #PDP-HL

Bd_ Sdk Distribution Panel Hazardous Location

Features:

The Primary Distribution Panel distributes power from 480VAC to 34.5kV using a ring bus distribution design for increased reliability in a Hazardous Location Area. Additionally, the panel will feed up to 8 Dash PDC's

Multiple connections for welding machines, diesel generators, utility trailers, or other types of trailers that use 208/240 or 480 or 600 VAC 3 phase power

Specifications:

- Transformer sizing up to 1.5MVA, 34.5 kV-480/347 VAC, oil filled or dry type, 3R
- 480 or 600 VAC fused disconnects c/w 200 Amp fuses
- 3 phase, 4 watt, 480/600V, 400Amp Splitter with Amp ratings up to 2000 Amps
- Main 480 VAC breaker up to 1200 amps with electronic trip plug that could dial down to 50% of rating
- 400Amp, 480/600AC Molded Case Switch
- Main 480/600 VAC fused switch comes with fast acting arc flash fusing, Nema-3R enclosure
- Feeder switches are 3R rated comes with HRC fuses
- 6 Female Plug & Use Receptacles and T-Slot receptacles for quick connection(fuse options available up to 400 amps)
- 2 x 60A 208/120V receptacles, 2 x 20A 208/120V receptacles
- Painted Carbon Steel stand with lifting lugs and fork lift points
- Outdoor rated and UL approved
- The PDP, PDC, FP, and DP panels in this package are completely grounded through the entire system

NEC/CEC Certifications

- Class 1 Division 2 Groups A, B, C, D
- Type 3R, 4, 4X
- IP66/67
- Suitable for Use in Wet Locations

ATEX/IECEx Certifications (ATX models only)

- Ambient Temperature: -40°C up to +65°C (-40°F up to +149°F)
- Index of Protection: IP66, IK08
- Ex Standards: EN/IEC 60079-0; 60079-15; 60079-31
- Product Standards: EN/IEC 61347-1; 61347-2; 61598-1
- EMC Standards: EN/IEC 61000.4.2; 61000.4.3; 61000.4.4; 61000.4.5; 61000.4.6; 61000.4.8; 61000.4.11

Weight and Sizing

Total Weight: 1200-2000 lbs. depending upon configuration
Dimensions: 6' H x 5' D x 10'L
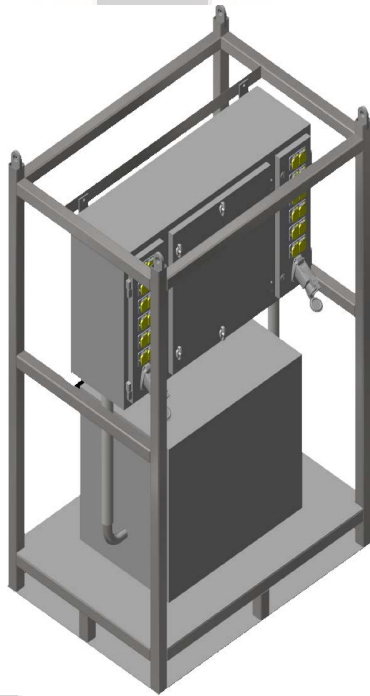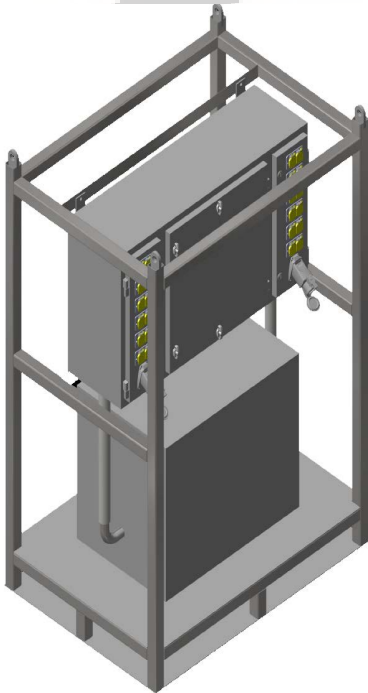
Dash Power Products
Part # PDC-HL Model A

Distribution Panel Hazardous Location

Features:

Various options available for two 100 Amp fused disconnects on the primary side of the 480 or 600 VAC transformer or additional 480 VAC 3 phase loads.

• Dash utilizes labyrinth flameproof technology where standard industrial style breakers are secured inside individual housings
• Ground Fault Circuit Interrupting (GFCI) breakers used to supply power to all receptacles
• 6 x 20 Amp panel mount twist-lock style receptacles all powered through the protection breakers in the adjacent panel
• 6 x 30 Amp Plug & Use Receptacle used for FP Secondary Panel powered through the protection breaker in the adjacent panel
• Plug & Use connectors that can be energized or de-energized under load in hazardous areas (no need for isolation practices)

Specifications:

• 75 kVA transformer, optional voltages available
• Aluminum enclosure with pad lockable doors, powder coated finish and stainless steel hardware
• Engineered steel stand with lifting lugs and fork lift friendly
• Outdoor rated and CSA approved for Class I, Zone II (Div II), Groups B, C and D
• The PDC, FP panels in this package are completely grounded through the entire system

NEC/CEC Certifications

•Class 1 Division 2 Groups B, C, D

•Type 3R, 4, 4X

•IP66/67

•Suitable for Use in Wet Locations

ATEX/IECEx Certifications
(ATX models only)

• Ambient Temperature: -40°C up to +65°C

  (-40°F up to +149°F)

• Index of Protection: IP66, IK08

• Ex Standards: EN/IEC 60079-0; 60079-15; 60079-31

• Product Standards: EN/IEC 61347-1; 61347-2; 61598-1

• EMC Standards: EN/IEC 61000.4.2; 61000.4.3; 61000.4.4; 61000.4.5; 61000.4.6; 61000.4.8; 61000.4.11

Weight and Sizing

Total Weight: 820-1080 lbs. depending upon configuration
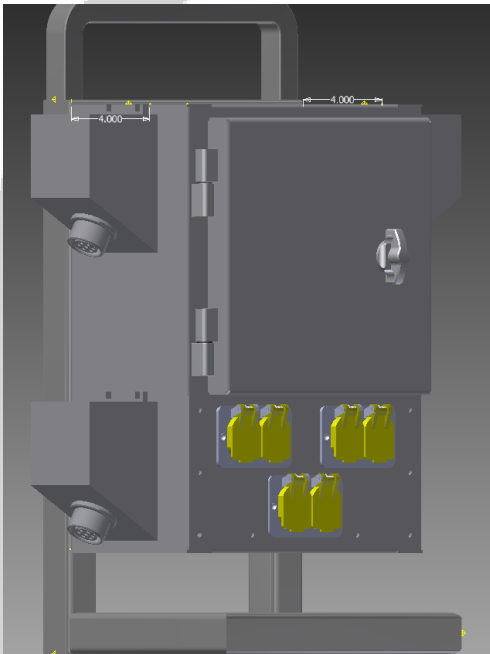Dimensions: 6' H x 3' D x 4' L

Dash Power Products
Part # PDC-HL Model B

Distribution Panel Hazardous Location

DASH

POWER PRODUCTS

Features:

One (1 or 2) 60 Amp fused disconnect on the primary side of the 480 VAC transformer or additional 480 VAC loads

- Dash uses labyrinth flameproof technology where standard industrial breakers are secured inside individual housings
- 2-4 x 20 Amp panel mount twist-lock receptacles all powered through the protection breakers in the adjacent panel
- 6 x 30 Amp Plug & Use connector used for FP Secondary Panel powered through the protection breaker in the adjacent panel.
- Plug & Use connections for FP Secondary Panels powered through the protection breaker in the adjacent panel.
- Plug & Use connectors that can be energized or de-energized under load in hazardous areas.
- 75 kVA transformer, optional voltages available
- Aluminum enclosure with pad lockable doors, powder coated finish and stainless steel hardware
- Engineered steel stand with lifting lugs and fork lift friendly
- Outdoor rated and CSA approved for Class I, Zone II (Div II), Groups B, C and D
- The PDC, FP panels in this package are completely grounded through the entire system

Specifications:

NEC/CEC Certifications

•Class 1 Division 2 Groups B, C, D

•Type 3R, 4, 4X

•IP66/67

•Suitable for Use in Wet Locations

ATEX/IECEx Certifications
(ATX models only)

- Ambient Temperature: -40°C up to +65°C
  (-40°F up to +149°F)
- Index of Protection: IP66, IK08
- Ex Standards: EN/IEC 60079-0; 60079-15; 60079-31
- Product Standards: EN/IEC 61347-1; 61347-2; 61598-1
- EMC Standards: EN/IEC 61000.4.2; 61000.4.3; 61000.4.4; 61000.4.5; 61000.4.6; 61000.4.8; 61000.4.11

Weight and Sizing

Total Weight: 820-1080 lbs. depending upon configuration
Dimensions: 5.5-6' H x 3' D x 4' L

Dash Power Products
Part # FP-HL

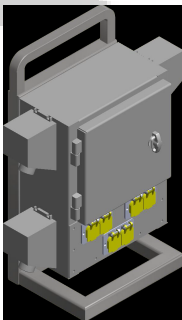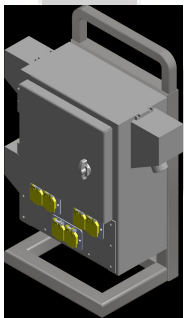Secondary Feeder Panel Hazardous Location

Features:

As part of the Dash system The FP Secondary Feeder Panels are an extension of the PDC Distribution Panel and will connect to the PDC Panel for use in hazardous areas

- Bringing Safe, Reliable, and Efficient power to major shutdowns and turnarounds
- The FP Secondary Feeder Panel work on elevated platforms to start the process of bringing power in the air where additional panels are required giving the "WEB" affect to bring power to your tools.
- Grounded throughout the system.

Specifications:

- 1 x 3 phase, 120/208 VAC, 30 Amp breaker
- 6 x 3 phase, 120/208 VAC, 20 Amp feeder / outgoing Plug & Use Receptacle to provide power to DP Tertiary Panels
- Locking Scaffold Clamps and secondary lanyard for safety
- Lightweight aluminum enclosure with lockable doors, powder coated and stainless steel hardware
- Floor/Ground stand for use on any decks
- Outdoor rated and CSA approved for Class I, Zone II (Div II), Groups B, C and D

9

NEC/CEC Certifications

• Class 1 Division 2 Groups B, C, D
• Type 3R, 4, 4X
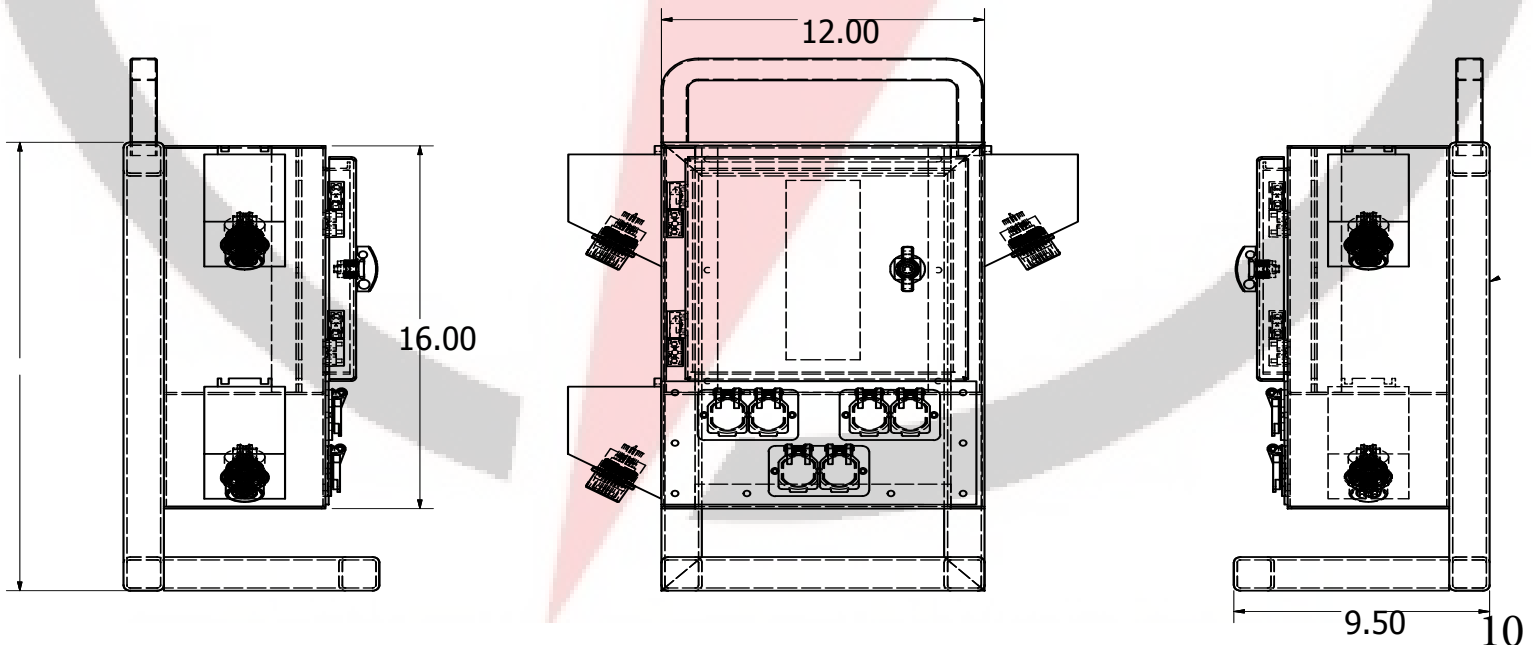• IP66/67
• Suitable for Use in Wet Locations

ATEX/IECEx
Certifications (ATX models only)

• Ambient Temperature: -40°C up to +65°C
  (-40°F up to +149°F)
• Index of Protection: IP66, IK08
• Ex Standards: EN/IEC 60079-0; 60079-15; 60079-31
• Product Standards: EN/IEC 61347-1; 61347-2; 61598-1

Weight and Sizing

Total Weight: 32 lbs. depending upon configuration
Dimensions: 20" H x 9.5" D x 12" L

10

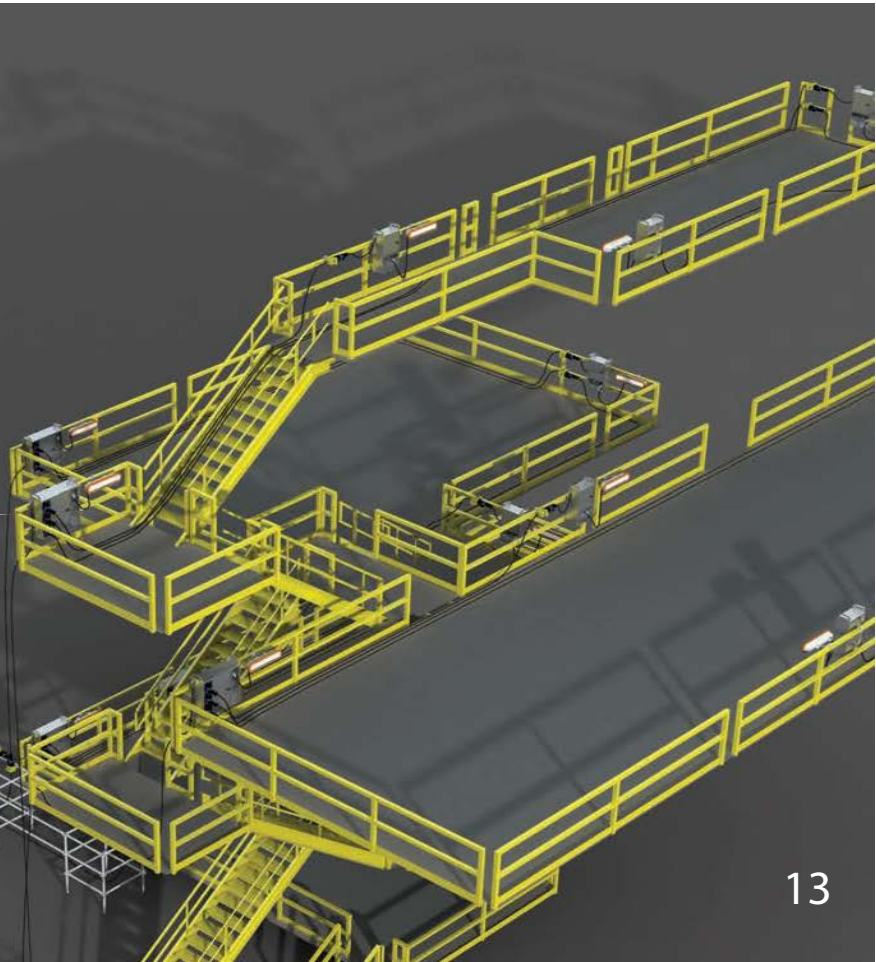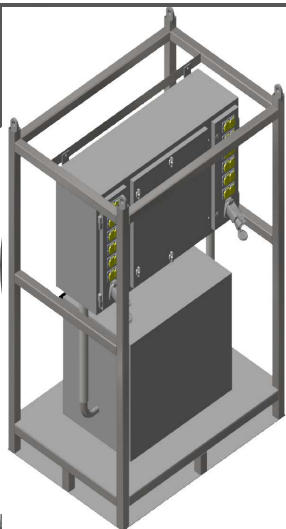# Plug and Use System

Distribution Panel

Secondary Panel

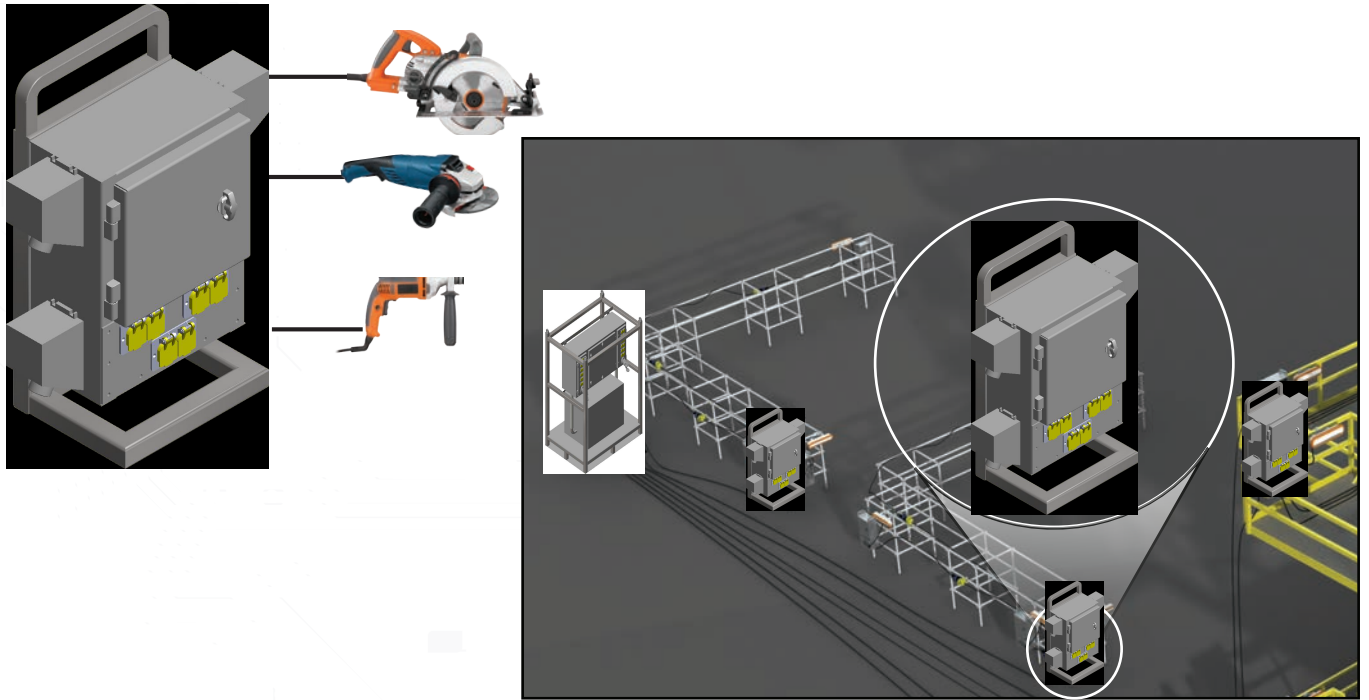**Up to 6 ea. twist -Locks receptacles for tools**

The model depicts a Hazardous Location Class 1 Div 2 configuration using the Distribution Panel, Secondary Panels that conform to NFPA -70E standards in a fully grounded system.
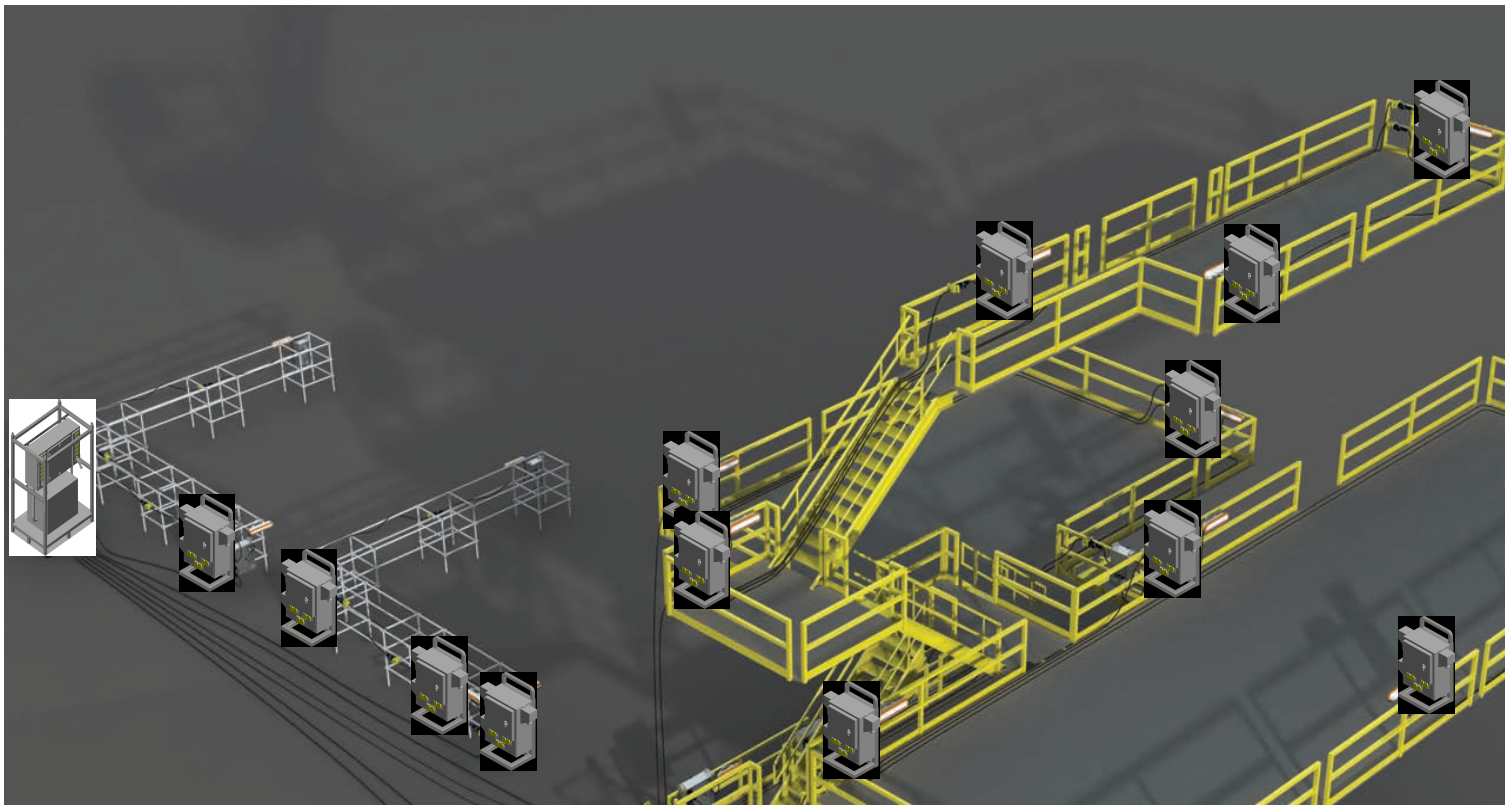
Distribution Panel

FP Secondary Panel

Floor Stands and Scaffold Mounts with secondary cabling for safe mounting.

Floor Stands and Scaffold Mounts with secondary cabling for safe mounting.
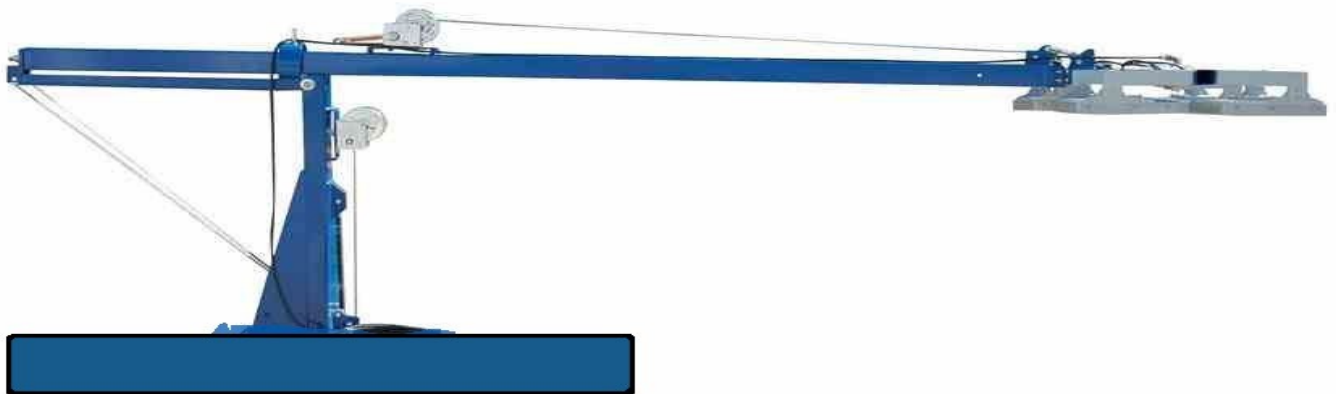
Dash Power Products
LED Light Tower
Part # TL1XHL

DASH
POWER PRODUCTS

Industrial strength LED lighting for the refining, chemical, and other industries during outages in hazardous location areas.

- 3 or 4, 750, 1000 or 1500 watt equivalent LED floodlights, 120 VAC
- Engineered steel base rated for wind speeds exceeding 50 m.p.h. when tower is in fully extended position, forklift accessible base
- Extends up to 9m (29'6")
- Photo Cell operation for ease of use. Bypass switch included.
- Plug & Use quick connect for easy connection to incoming power
- Class 1 Div 2 Rated
- Connect in series up to 4 Light Towers on a 20 Amp circuit
- Winch covers and manual locks for safe use during operation and transport

Class 1 Div 2 Hazardous Location Rated

15

LED Light Tower

Part # TL1XHL

Specifications:

- High impact aluminum housing on LED Flood Lights
- Two Stage Light Mast painted carbon steel
- Aluminum junction box with plug and receptacle for daisy chaining
- 1 x 30' retractable light pole rated for 52mph wind load in fully extended position
- Skid base is 4' x 4' with forklift pockets.
- 3 x LED Area Master Flood lights (equivalent to 750 watt Metal Halide), 120/277 VAC
- In-line photocell for automatic switching from daylight to dark hours, with bypass option standard
- Approx. 4.1 amps of current draw / light tower at 120 VAC (i.e 4.1 amps total for all 3 lights)

Return on investment proposal:

Diesel Power Light Plant vs DASH LED Light Tower (Turnaround Pricing)
(This is for estimating purposes only in $USD)

Diesel Light Plant (Average Size 50 Hour per fuel tank) rental per month	$600.00		DASH LED Light Tower per month	$795.00
~Cost of Diesel Fuel per Gallon	$2.00		~Cost of Diesel Fuel per Gallon	$2.00
Hours of Operation per Night	10		Hours of Operation per Night	10
Days of Operation per Week	7		Days of Operation per Week	7
Number of Months in Use	1		Number of Months in Use	1
Monthly Operating Costs:			Monthly Operating Costs:	
Electrical utility cost for one LED light pole	$0.00		Electrical utility cost for (1) LED light pole	$32.00
Diesel Fueling costs (includes fuel cost plus re-fueling labor)	$1,948.50		Fueling costs (includes fuel cost plus re-fueling labor)	$0.00
Oil change every 200hrs (assumes $40 parts/labor)	$259.80		Oil change not needed (assumes $40 parts/labor)	$0.00
Air filter change every 300hrs (assumes $40 parts/labor)	$173.20		Air filter change not needed(assumes $40 parts/labor)	$0.00
3 ea. - Light Bulb Changes every 3,000hrs (assumes $400 parts/labor)	$207.84		3 ea. - Light Bulb Changes not needed(assumes $400 parts/labor)	$0.00
Operating Costs of Diesel Light Tower/ 1 month	$2,589.34		Operating Costs of LED Light Tower/ 1 Month	$32.00
Total operating cost as per number of months selected	$2,589.34		Total operating cost as per number of months selected	$32.00
~Base Rental Cost of Diesel Light Plant/($ Rental Price/X months Selected)	$600.00		~Total Rental Cost of LED Light Tower/X months selected	$795.00
~Net Cost of (1) Diesel Light Plant/ X Months(Rent and Operating Cost)	**$3,189.34**		~Net Cost of (1) LED Light Tower/X months (Rent and Operating Cost)	**$859.00**
~Net Cost of (1) LED Light Tower/ X Months (Rent and Operating Cost)	$859.00			
Cost savings of (1) LED Light Pole vs. Diesel Light Tower/ X Months Selected	$2,330.34			
	x100			
Cost savings of (100) LED Light Tower vs. 100 Diesel Light Towers/ X Months Selected	$233,034.00			

*Note: The pricing for Diesel Power Light Plants dosen't include overage charges for usage.

16
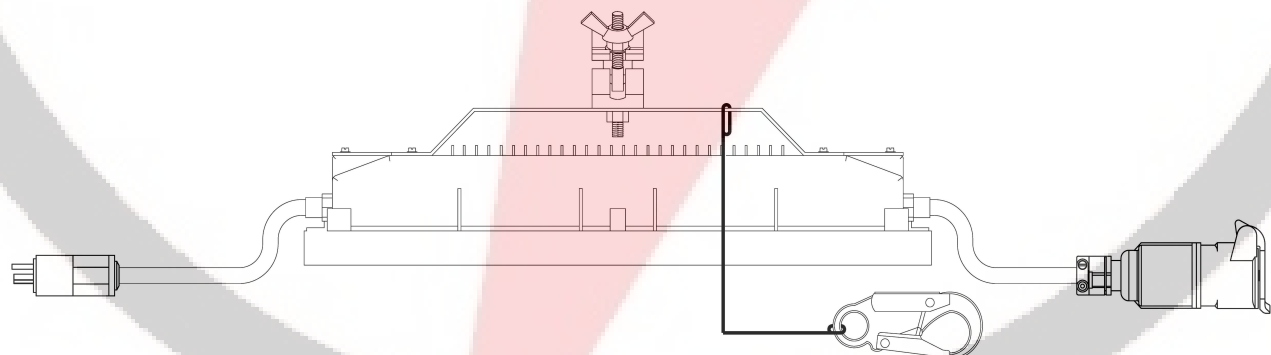
Dash Power Products

Work Light LED
Part # AWL1H
Area/Task Lighting

Work Light LED features a contemporary, low profile design that is suitable for tight spaces. It is lightweight for easy handling and is designed to simplify installation and maintenance. Its industry leading thermal management ensures safe, reliable operation over a wide temperature range. Field replaceable components can be accessed by swinging away the hinged cover, secured with captive screws. Work Light LED is available in a full range of lumen outputs, with light distribution equivalent to fluorescent luminaires.
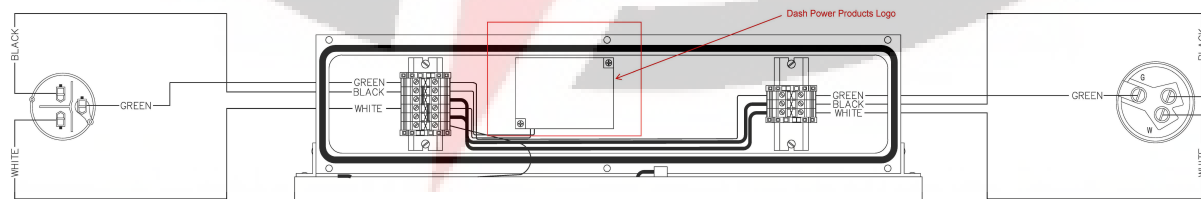
The Work Light LED is ideal for use in NEC and CEC Governed harsh and hazardous locations. The Work Light LED is ideal for use in ATEX and IECEx Governed hazardous locations and is rated for Class 1 Division 2 Groups A,B,C,and D.

AWL1H

FRONT VIEW

17

Work Light LED

Area/Task Lighting

Features

- Class 1, Zone 2, Nema 3R rated
- Class I, Division 2, Groups B,C,D. T3A
- 2 x CFL 55W fluorescent lamps (110W)
- Produces 48000 lumens
- Durable aluminum construction
- Robust polymer lens
- Scaffold mount with secondary cord

NEC/CEC Certifications

- Class 1 Division 2 Groups A, B, C, D
- Type 3R, 4, 4X
- IP66/67
- Suitable for Use in Wet Locations

Specifications

Features	Specifications
Voltage:	120-277 Vac; 50/60 Hz
Retrofit Equivalents:	1x18W up to 3x58 W Fluorescent
Lumens:	1,800 – 7,800
Efficacy:	Up to 100 lm/w
Color Temperatures:	5650K
CRI:	70+
Ambient Temperature:	-40°C to +65°C (-40°F to +149°F)
LED Lumen Depreciation (L70):	60,000+ hours
Replaceable Components:	LED Driver, Lens Cover

– T Rating: *See website for more information [+63°C to +84°C (+145°F to +183°F)]*
– EC Declaration of Conformity

ATEX/IECEx Certifications

- Certification Type:
  — Gas: Zone 2
    – Conforming to ATEX 94/9/EC:⟨Ex⟩ II 3 G
    – Protection Level: EPL Gc
    – Ex Protection: Ex nA IIC
    – T Rating: *See website for more information (T6 to T3)*
    – EC Declaration of Conformity
    – ATEX Certificate: LCIE 15 ATEX 1003X
    – IECEx Certificate: IECEx LCIE 15.0010X

    – Conforming to ATEX 94/9/EC:⟨Ex⟩ II 2 D and⟨Ex⟩ II 3 D
    – Protection Level: EPL Db and Dc
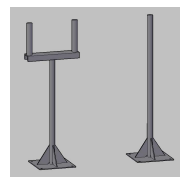   – Ex Protection: Ex tb IIIC and Ex tc IIIC

- Ambient Temperature: -40°C up to +65°C (-40°F up to +149°F)
- Index of Protection: IP66, IK08
- Ex Standards: EN/IEC 60079-0; 60079-15; 60079-31
- Product Standards: EN/IEC 61347-1; 61347-2; 61598-1
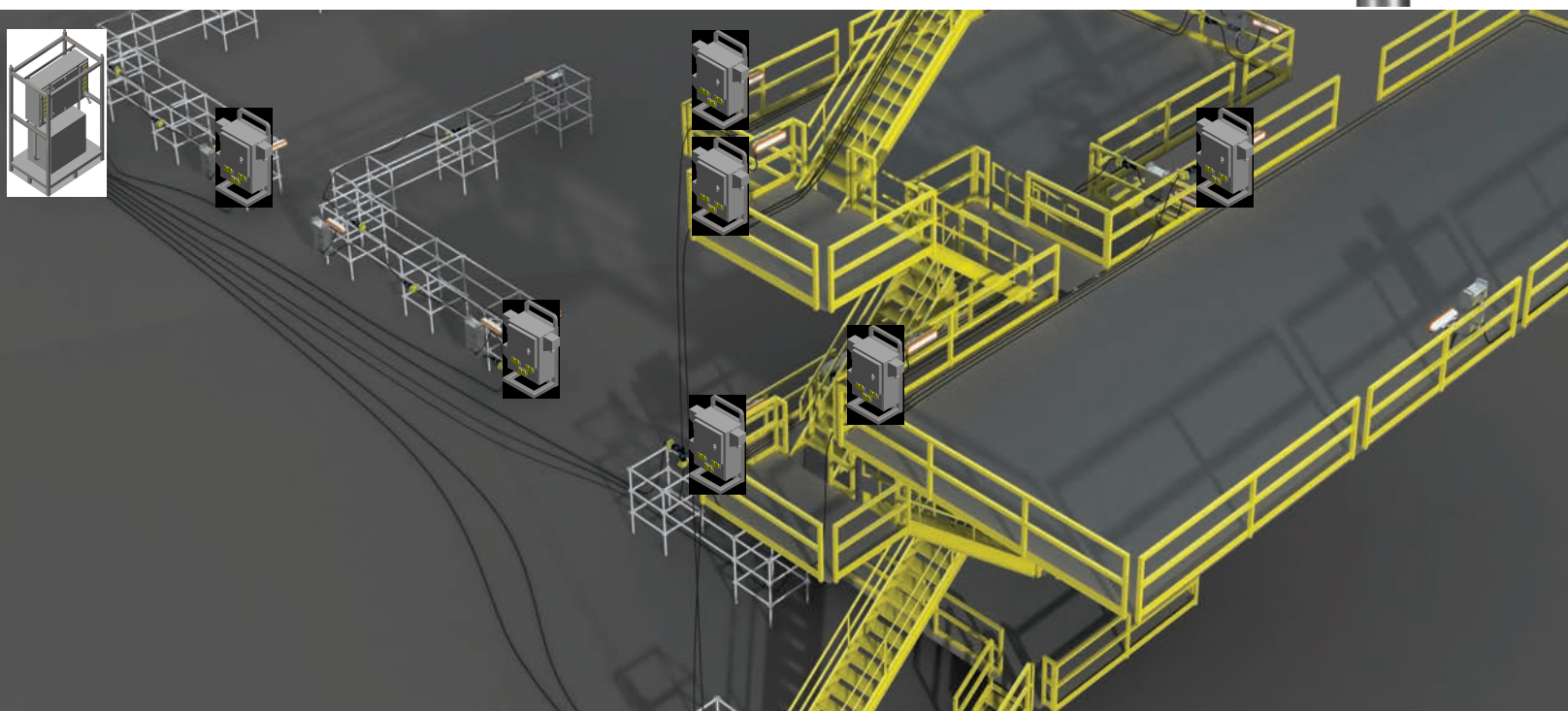- EMC Standards: EN/IEC 61000.4.2; 61000.4.3; 61000.4.4; 61000.4.5; 61000.4.6; 61000.4.8; 61000.4.11

Accessories:

3 ft. Light Stand

18

Dash Power Products, LLC / 13702 Force Street Houston, Texas 77015/ dashpowerproducts.com / 346-204-4563 / info@dashpowerproducts.com

Hazardous Location Light
12-24 VAC LED Work Light

- UL-8750 for LED lighting
- ANSI/UL 1598 (A)
- UL-844 Standard for lighting fixtures for hazardous locations, Class I, Division 2
- CSA C22.2 no. 137-M1981 electric luminairies for use in hazardous locations
- Enclosed and gasketed• Type 3, 4X, IP66
- Body and lens frame corrosion resistant aluminum alloy with baked powder coated finish

Spyder Box

- Class 1, Zone 2, Class I, Division 2
- Heavy-duty, impact & flame-resistant enclosure
- GFCI Protection includes open neutral, reverse phasing, & 240V shut-off
- GFCI meets UL 943 requirements with 4-6 milliamp trip level
- 30-Amp and 50-Amp 125/250V 3 Pole 4 Wire
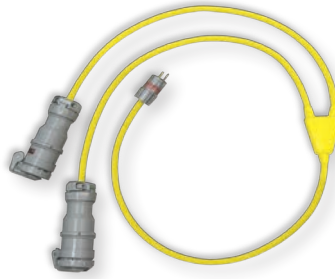- Outlet configurations, 6 x 125V 20-Amp GFCI Protected

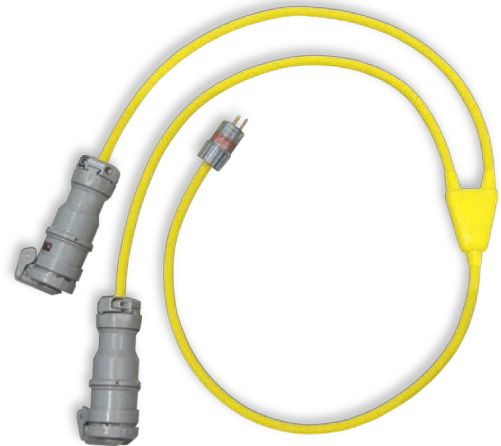**Hazardous Location Rated**

19

Y-Cords

- 20A/30A/120V Female cord end
- 15A/125V plug (2P3W)
- Available in different ratings and lengths

Hazardous Location Rated

Extension Cords

- Extension Cord for tool connections
- 12/13 SOOW Cable
- 120V/20A approved plug & receptacle
- Nema 4 Configuration
- Available in different ratings and lengths
- Several materials of construction to choose from

All components: UL or CSA listed and stocked in Houston, Texas

Around the globe, anywhere you need power panels and lighting

Hazardous Location & General Purpose Products

**13702 Force Street
Houston, Texas 77015
346-204-4563
dashpowerproducts.com**

DASH
POWER PRODUCTS

info@dashpowerproducts.com

Made in the USA

21