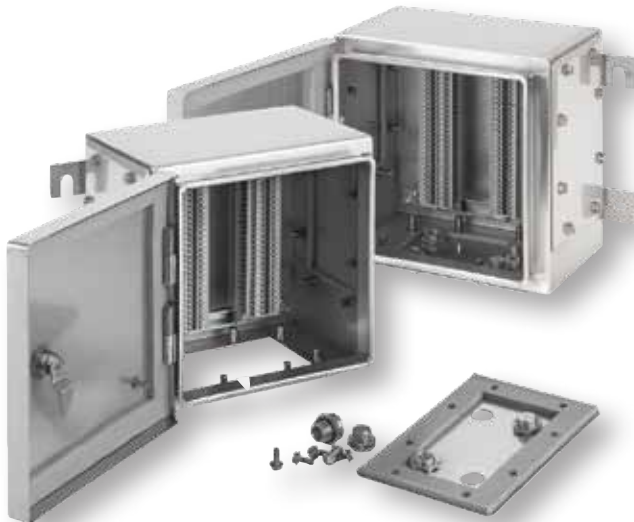


CHAPTER 13

Hazardous Location

Featured Products in this Chapter



- ▶ ZONEX® ATEX-Certified, Type 4X P. 1272
- ▶ Purge Systems P. 1278
- ▶ NEMA Type 9 P. 1276



CHAPTER CONTENTS

Hazardous Location Enclosures

Hazardous Location Enclosures

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Small- and Large-Volume Purging/Pressurization Systems

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Hazardous Location Thermal Management

Thermal Management

- Hazardous Location Thermostat 1284
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ZONEX® ATEX-Certified, Type 4X



Industry Standards

ATEX Directive 94/9/EC ATEX

Sira 09ATEX3224U
Ex e IIC Gb
Ex tb IIIC Db IP 66

IECEX

IECEX SIR 09.0099U
Ex e IIC Gb
Ex tb IIIC Db IP 66

EN 60079-0:2006
EN 60079-7:2007
EN 60079-11:2007
EN 61241-0:2006
EN 61241-1:2004

UL 508A Listed; Type 4, 4X, 12; File No. E61997
cUL C22.2 No. 94 Listed; Type 4, 4X, 12; File No. E61997

NEMA/EEMAC Type 4, 4X, 12
IEC 60529, IP66

Application

ZONEX® Enclosures are designed and certified to meet ATEX Directive 94/9/EC for hazardous locations and safely house electrical and electronic devices in EEx e Zone 1- and Zone 2-rated increased safety applications.

Hoffman's ATEX EEx e enclosures are not intended for use in explosion-proof or flame-proof applications.

Features

- Easy-to-use Type 316 stainless steel quarter-turn door latching
- 3-mm double-bit insert for security
- Slot and through-hole side-mount hanging brackets
- Lift-off door hinges
- Removable gland plates; one or three gland plates standard

Specifications

- Fabricated from Type 316 stainless steel
- Type 316 stainless steel external fasteners
- Gray silicone high-temperature gasket on doors and gland plates
- Internal/external brass earth/ground provision

Finish

#3 brushed finish

Accessories

Panels
Hazardous Location Thermostat
Hazardous Location Heater

Modification and Customization

Hoffman excels at modifying and customizing products to your specifications. Contact your local Hoffman sales office or distributor for complete information.

Hoffman offers a ZONEX-specific modification program with ATEX certification.

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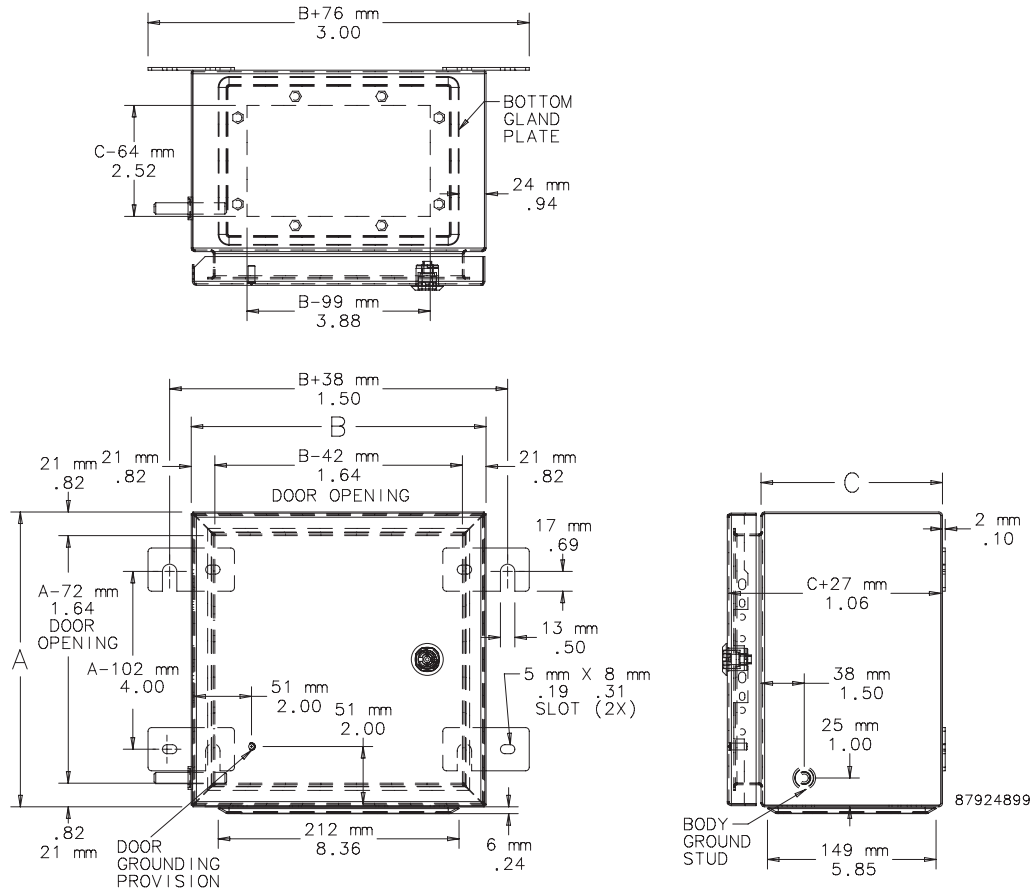


Hazardous Location Enclosures

Standard Product ZONEX Enclosures with One Gland Plate

Catalog Number	AxBxC mm/in.	Number of Gland Plates	White Panel	Conductive Panel	Panel Size D x E mm/in.
ATEX262616SS61	260 x 260 x 160 10.24 x 10.24 x 6.30	1	ATEX26P26	ATEX26P26G	214 x 214 8.44 x 8.44
ATEX262620SS61	260 x 260 x 205 10.24 x 10.24 x 8.07	1	ATEX26P26	ATEX26P26G	214 x 214 8.44 x 8.44
ATEX303016SS61	306 x 306 x 160 12.05 x 12.05 x 6.30	1	ATEX30P30	ATEX30P30G	260 x 260 10.25 x 10.25
ATEX303020SS61	306 x 306 x 205 12.05 x 12.05 x 8.07	1	ATEX30P30	ATEX30P30G	260 x 260 10.25 x 10.25
ATEX382616SS61	380 x 260 x 160 14.96 x 10.24 x 6.30	1	ATEX38P26	ATEX38P26G	334 x 214 13.16 x 8.44
ATEX382620SS61	380 x 260 x 205 14.96 x 10.24 x 8.07	1	ATEX38P26	ATEX38P26G	334 x 214 13.16 x 8.44
ATEX453816SS61	458 x 382 x 160 18.03 x 15.04 x 6.30	1	ATEX45P38	ATEX45P38G	412 x 336 16.23 x 13.24
ATEX484820SS61	480 x 480 x 205 18.90 x 18.90 x 8.07	1	ATEX48P48	ATEX48P48G	434 x 434 17.10 x 17.10
ATEX503516SS61	500 x 350 x 160 19.69 x 13.78 x 6.30	1	ATEX50P35	ATEX50P35G	454 x 304 17.89 x 11.98
ATEX503520SS61	500 x 350 x 205 19.69 x 13.78 x 8.07	1	ATEX50P35	ATEX50P35G	454 x 304 17.89 x 11.98
ATEX624520SS61	620 x 450 x 205 24.41 x 17.72 x 8.07	1	ATEX62P45	ATEX62P45G	574 x 404 22.61 x 15.92
ATEX745520SS61	740 x 550 x 205 29.13 x 21.65 x 8.07	1	ATEX74P55	ATEX74P55G	694 x 504 27.33 x 19.85
ATEX765020SS61	762 x 508 x 205 30.00 x 20.00 x 8.07	1	ATEX76P50	ATEX76P50G	716 x 462 28.20 x 18.20

Purchase panels separately.

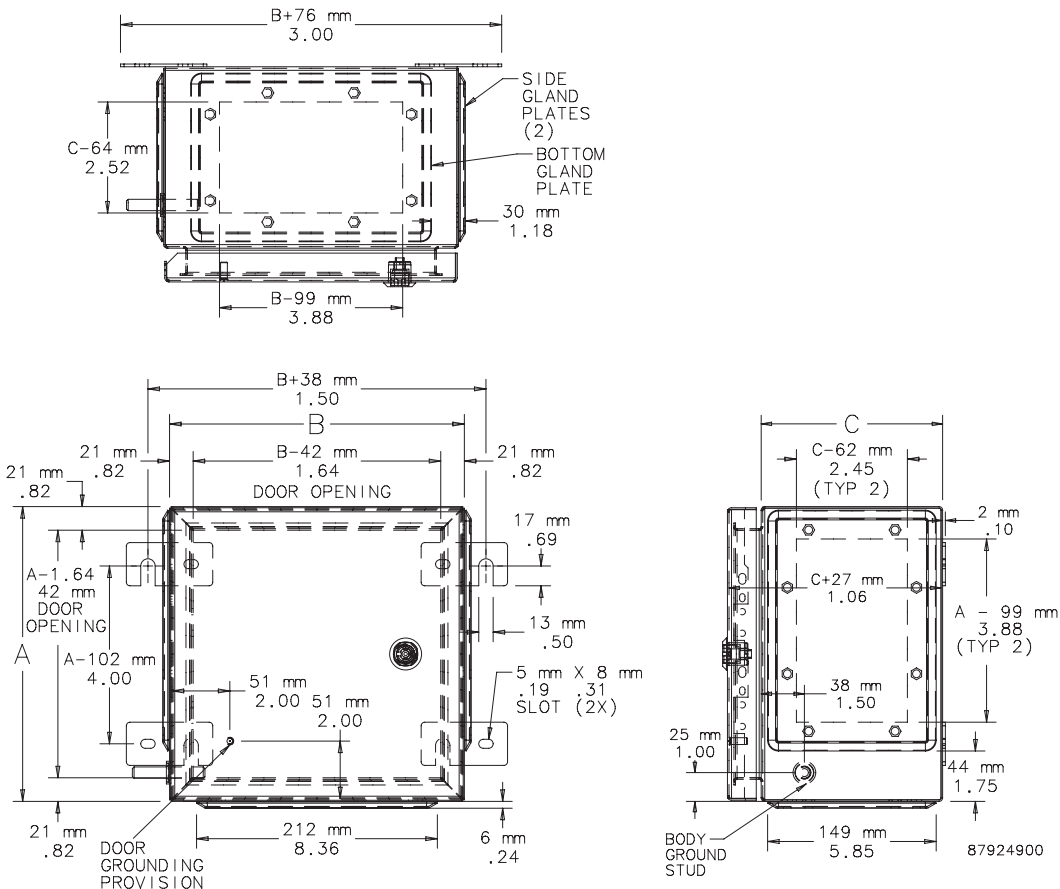


Hazardous Location Enclosures

Standard Product ZONEX Enclosures with Three Gland Plates

Catalog Number	AxBxC mm/in.	Number of Gland Plates	White Panel	Conductive Panel	Panel Size D x E mm/in.
ATEX262616SS63	260 x 260 x 160 10.24 x 10.24 x 6.30	3	ATEX26P26	ATEX26P26G	214 x 214 8.44 x 8.44
ATEX262620SS63	260 x 260 x 205 10.24 x 10.24 x 8.07	3	ATEX26P26	ATEX26P26G	214 x 214 8.44 x 8.44
ATEX303016SS63	306 x 306 x 160 12.05 x 12.05 x 6.30	3	ATEX30P30	ATEX30P30G	260 x 260 10.25 x 10.25
ATEX303020SS63	306 x 306 x 205 12.05 x 12.05 x 8.07	3	ATEX30P30	ATEX30P30G	260 x 260 10.25 x 10.25
ATEX382616SS63	380 x 260 x 160 14.96 x 10.24 x 6.30	3	ATEX38P26	ATEX38P26G	334 x 214 13.16 x 8.44
ATEX382620SS63	380 x 260 x 205 14.96 x 10.24 x 8.07	3	ATEX38P26	ATEX38P26G	334 x 214 13.16 x 8.44
ATEX453816SS63	458 x 382 x 160 18.03 x 15.04 x 6.30	3	ATEX45P38	ATEX45P38G	412 x 336 16.23 x 13.24
ATEX484820SS63	480 x 480 x 205 18.90 x 18.90 x 8.07	3	ATEX48P48	ATEX48P48G	434 x 434 17.10 x 17.10
ATEX503516SS63	500 x 350 x 160 19.69 x 13.78 x 6.30	3	ATEX50P35	ATEX50P35G	454 x 304 17.89 x 11.98
ATEX503520SS63	500 x 350 x 205 19.69 x 13.78 x 8.07	3	ATEX50P35	ATEX50P35G	454 x 304 17.89 x 11.98
ATEX624520SS63	620 x 450 x 205 24.41 x 17.72 x 8.07	3	ATEX62P45	ATEX62P45G	574 x 404 22.61 x 15.92
ATEX745520SS63	740 x 550 x 205 29.13 x 21.65 x 8.07	3	ATEX74P55	ATEX74P55G	694 x 504 27.33 x 19.85
ATEX765020SS63	762 x 508 x 205 30.00 x 20.00 x 8.07	3	ATEX76P50	ATEX76P50G	716 x 462 28.20 x 18.20

Purchase panels separately.



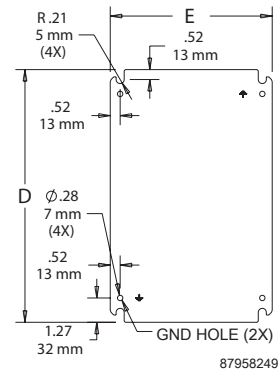
Hazardous Location Enclosures

ZONEX® Accessory Panels

Steel panels are 12 gauge finished with white polyester powder paint or with a conductive, corrosion-resistant coating. Panel mounting hardware is furnished with all ZONEX enclosures.

Bulletin: HL

Catalog Number	AxB mm	AxB in.	Panel Type	Panel Size D x E (mm)	Panel Size D x E (in.)
ATEX26P26	215 x 215	8.46 x 8.46	White	214 x 214	8.44 x 8.44
ATEX26P26G	215 x 215	8.46 x 8.46	Conductive	214 x 214	8.44 x 8.44
ATEX30P30	261 x 261	10.28 x 10.28	White	260 x 260	10.25 x 10.25
ATEX30P30G	261 x 261	10.28 x 10.28	Conductive	260 x 260	10.25 x 10.25
ATEX38P26	335 x 215	13.19 x 8.46	White	334 x 214	13.16 x 8.44
ATEX38P26G	335 x 215	13.19 x 8.46	Conductive	334 x 214	13.16 x 8.44
ATEX45P38	413 x 337	16.26 x 13.27	White	412 x 336	16.23 x 13.24
ATEX45P38G	413 x 337	16.26 x 13.27	Conductive	412 x 336	16.23 x 13.24
ATEX48P48	435 x 435	17.13 x 17.13	White	434 x 434	17.10 x 17.10
ATEX48P48G	435 x 435	17.13 x 17.13	Conductive	434 x 434	17.10 x 17.10
ATEX50P35	455 x 305	17.91 x 12.01	White	454 x 304	17.89 x 11.98
ATEX50P35G	455 x 305	17.91 x 12.01	Conductive	454 x 304	17.89 x 11.98
ATEX62P45	574 x 405	22.60 x 15.94	White	574 x 404	22.61 x 15.92
ATEX62P45G	574 x 405	22.60 x 15.94	Conductive	574 x 404	22.61 x 15.92
ATEX74P55	695 x 505	27.36 x 19.88	White	694 x 504	27.33 x 19.85
ATEX74P55G	695 x 505	27.36 x 19.88	Conductive	694 x 504	27.33 x 19.85
ATEX76P50	717 x 463	28.23 x 18.23	White	716 x 462	28.20 x 18.20
ATEX76P50G	717 x 463	28.23 x 18.23	Conductive	716 x 462	28.20 x 18.20



ATEX Directive and Classification System

Since 2003, manufacturers across the European Union (EU) have been obliged to comply with strict new EU directives governing safety in explosive atmospheres. Called ATEX (from the French ATmosphères EXplosives), ATEX Directive 94/9/EC has an impact not only on European manufacturers, but also on non-European makers of industrial equipment wishing to sell in Europe. Two of the most common classification systems for hazardous locations are the NEC Division Classification system and the Zone Classification system used by the European Union (EU) and the International Electrotechnical Commission (IEC).

Article 500 of the NEC also classifies hazardous locations according to the properties of the flammable vapors, liquids or gases, or according to the combustible dusts or fibers that may be present and the likelihood that a flammable or combustible concentration or quantity is present. Articles 505 and 506 of the NEC refer to zone classifications. Refer to the Technical Information section of the Specifier's Guide for specific definitions and additional information.

Hoffman's ATEX enclosures are not intended for use in explosion-proof or flame-proof (Ex d) applications.

NEC Divisions and IEC Zones

Frequency of Hazard Occurrence	NEC Division Classification System	EU and IEC Zone Classification System
Continuous Hazard	Division 1	Zone 0
Intermittent, Periodic Hazards	Division 1	Zone 1
Abnormal Condition Hazard	Division 2	Zone 2

Hazardous Location Enclosures

NEMA Type 9



Industry Standards

UL Class II Division 1 and 2 Group E, F and G locations
UL File No. E67456

NEMA/EEMAC Type 9
CSA certified for Class II Division 1 and 2 Group E, F and G locations
IEC 60529, IP60
CSA File No. 42186

Application

For use in Class II Division 1 and 2 locations as defined in Article 500 of the National Electrical Code as having the presence of combustible dusts.

Specifications

- 0.19-in. (5-mm), .25-in. (6-mm) and .38-in. (10-mm) steel plate
- Ends are .38-in. (10-mm) steel plate to provide a minimum of 3.50 full threads for conduit sizes through 2.00 in. (51 mm). (Class II enclosures must have minimum of 3.50 full threads at all conduit entrances. NEMA requires conduit entrances to be in top and/or bottom of enclosure. Tapped holes for conduit should have tapered pipe threads.)

- Covers are .25-in. (6-mm) thick to allow mounting of NEMA 9 pushbuttons and pilot lights, which require threaded holes (3/4-14 NPSM thread)
- Heavy duty cover hinges on enclosures when "A" is 20.00 in. (508 mm) or more
- Fiber gasket, mechanically attached to cover, assures dust-tight enclosure
- Weldnuts or collar studs provided for mounting optional panel

Finish

ANSI 61 gray polyester powder finish inside and out over pretreated surfaces.

Accessories

See also Accessories.

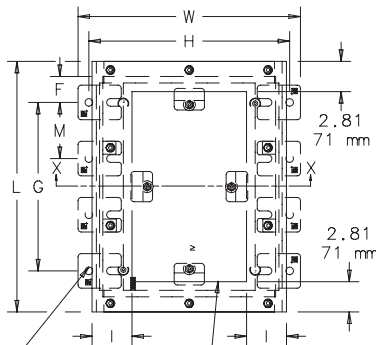
Panels for Type 1 Enclosures and Small Type 3R Enclosures
Panels for Type 3R, 4, 4X, 12 and 13 Enclosures
Terminal Block Kit Assembly for Junction Boxes Overview
Terminal Block Kit Assembly for Type 4, 12 and 13 Enclosures Overview

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Hazardous Location Enclosures

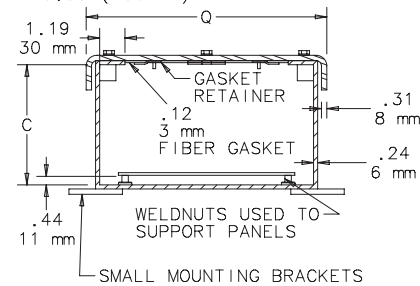
Standard Product

Catalog Number	AxBxC in./mm	Panel	Panel Size D x E in./mm	Mounting G x H in./mm	Number of Mounting Holes	Overall L x W in./mm	I in./mm	F in./mm	M in./mm	Q in./mm
A8D64	8.00 x 6.00 x 4.00	A8N6P	6.25 x 4.25	5.75 x 7.62	4	10.50 x 8.88	2.69	1.50	—	7.25
	203 x 152 x 102		159 x 108	146 x 194		267 x 226	68	38	—	184
A10D84	10.00 x 8.00 x 4.00	A10N8P	8.25 x 6.25	7.75 x 9.62	4	12.50 x 10.88	2.69	1.50	—	9.25
	254 x 203 x 102		210 x 159	197 x 244		318 x 276	68	38	—	235
A12D106	12.00 x 10.00 x 6.00	A12N10P	10.25 x 8.25	9.75 x 11.62	4	14.50 x 12.88	3.50	1.50	—	11.25
	305 x 254 x 152		260 x 210	248 x 295		368 x 327	89	38	—	286
A12D128	12.00 x 12.00 x 8.00	A12N12P	10.25 x 10.25	9.75 x 13.62	4	14.50 x 14.88	3.50	1.50	—	13.25
	305 x 305 x 203		260 x 260	248 x 346		368 x 378	89	38	—	337
A16D128	16.00 x 12.00 x 8.00	A16P12	13.00 x 9.00	13.75 x 13.62	4	18.50 x 14.88	3.50	1.50	—	13.25
	406 x 305 x 203		330 x 229	349 x 346		470 x 378	89	38	—	337
A16D168	16.00 x 16.00 x 8.00	A16P16	13.00 x 13.00	13.75 x 17.62	4	18.50 x 18.88	3.50	1.50	—	17.25
	406 x 406 x 203		330 x 330	349 x 448		470 x 480	89	38	—	438
A20D168	20.00 x 16.00 x 8.00	A20P16	17.00 x 13.00	14.75 x 17.62	4	22.50 x 18.88	3.50	3.00	—	17.25
	508 x 406 x 203		432 x 330	375 x 448		572 x 480	89	76	—	438
A20D208	20.00 x 20.00 x 8.00	A20P20	17.00 x 17.00	14.75 x 21.62	4	22.50 x 22.88	3.50	3.00	—	21.25
	508 x 508 x 203		432 x 432	375 x 549		572 x 581	89	76	—	540
A24D208	24.00 x 20.00 x 8.00	A24P20	21.00 x 17.00	18.75 x 21.62	4	26.50 x 22.88	3.50	3.00	—	21.25
	610 x 508 x 203		533 x 432	476 x 549		673 x 581	89	76	—	540
A24D2410	24.00 x 24.00 x 10.00	A24P24	21.00 x 21.00	18.75 x 25.62	4	26.50 x 26.88	3.50	3.00	—	25.25
	610 x 610 x 254		533 x 533	476 x 651		673 x 683	89	76	—	641
A30D2410	30.00 x 24.00 x 10.00	A30P24	27.00 x 21.00	24.75 x 25.62	6	32.50 x 26.88	3.50	3.00	12.38	25.25
	762 x 610 x 254		686 x 533	629 x 651		826 x 683	89	76	314	641
A36D2410	36.00 x 24.00 x 10.00	A36P24	33.00 x 21.00	30.75 x 25.62	6	38.50 x 26.88	3.50	3.00	15.38	25.25
	914 x 610 x 254		838 x 533	781 x 651		978 x 683	89	76	391	641
A36D3012	36.00 x 30.00 x 12.00	A36P30	33.00 x 27.00	30.75 x 31.62	6	38.50 x 32.88	3.50	3.00	15.38	31.25
	914 x 762 x 305		838 x 686	781 x 803		978 x 835	89	76	391	794
A48D3612	48.00 x 36.00 x 12.00	A48P36	45.00 x 33.00	42.75 x 37.62	8	50.50 x 38.88	3.50	3.00	14.25	37.25
	1219 x 914 x 305		1143 x 838	1086 x 956		1283 x 988	89	76	362	946

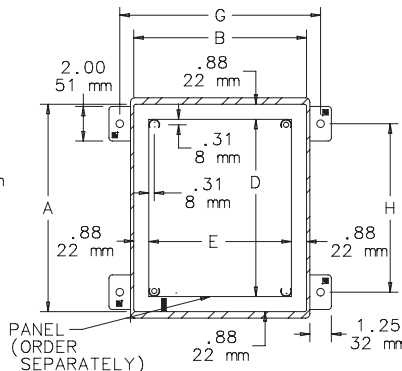
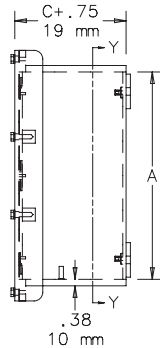


MOUNTING HOLE
 $\phi .44$ (11 mm)
 WHEN A < 16.00 (406 mm)
 $\phi .56$ (14 mm)
 WHEN A = 16.00 (406 mm)

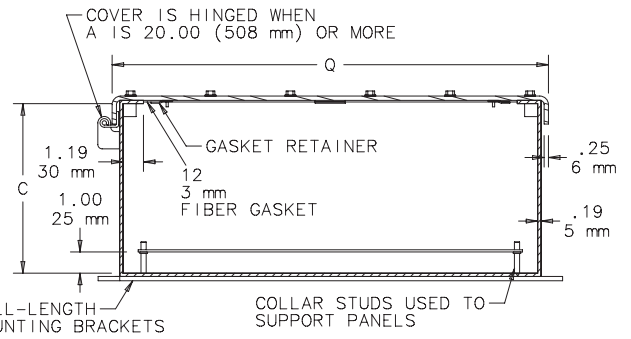
CLEAR SPACE AVAILABLE ON DOORS



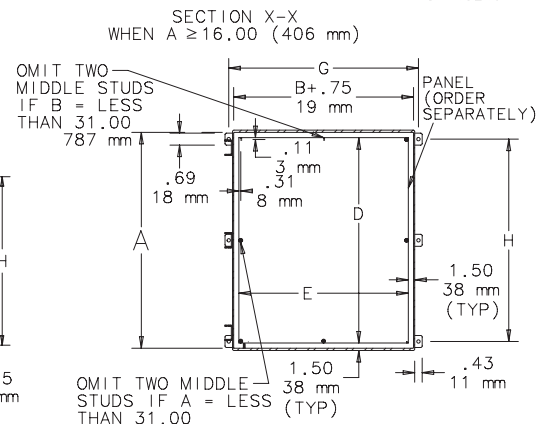
SECTION X-X
 WHEN A < 16.00 (406 mm)



SECTION Y-Y
 WHEN A < 16.00 (406 mm)



87745249



SECTION Y-Y
 WHEN A ≥ 16.00 (406 mm)

Small- and Large-Volume Purging/Pressurization Systems

Small-Volume Type Y and Z Purging/Pressurization System



Industry Standards

For A1001YZUMC1 (Volume up to 2 cubic feet)

NEC **Type Y** Class I, Division 1, Groups A, B, C and D to Division 2
 NEC **Type Z** Class I, Division 2, Groups A, B, C and D to Unclassified

Classified by Underwriters Laboratories, cUL and Factory Mutual

For A1001YZUMC2 (Volume up to 10 cubic feet)

NEC **Type Y** Class II, Division 1, Groups F and G to Division 2
 NEC **Type Z** Class II, Division 2, Groups F and G to Unclassified

Classified by Underwriters Laboratories, cUL and Factory Mutual

Application

Small-Volume Purging/Pressurization Systems are an alternative to NEMA Type 7 or 9 enclosures. The C1 model allows general-purpose enclosures, up to two cubic feet, to be used in certain Class 1 hazardous locations. The C2 model allows general purpose enclosures, up to 10 cubic feet, to be used in certain Class 2 hazardous locations.

Specifications

- Universal mount
- Available in two models for enclosures with a maximum enclosure volume of up to 2 or 10 cubic feet
- Mounting plate: Type 316 brushed stainless steel
- Regulator body: zinc with enamel finish
- Enclosure pressure gauge: aluminum with enamel finish
- Polycarbonate regulator handle
- Fastener hardware available in aluminum and stainless steel
- Includes tamper-proof regulator with gauge (TR-10G) to comply with NFPA standard requiring protection against overpressurization

Protected Enclosures

Enclosures should be constructed from materials such as metal, fiberglass or polycarbonate material to meet or exceed NEMA Type 4, Type 4X or Type 12 performance requirements.

Class Ratings

Classes define the explosive or ignitable substances that are present in the atmosphere.

Class I Flammable gases or liquid vapors

Class II Ignitable metal, carbon or organic dusts

Class III Ignitable fibrous materials

Group Ratings

Groups define substances by rating their explosive or ignitable nature in relation to other known substances.

Division Ratings

Divisions define the degree of hazard by determining an explosive or ignitable substance's expected concentration in the atmosphere.

Division 1 Contains substances under normal conditions

Division 2 Contains substances under abnormal conditions

Typical Class I Substances

Group A Acetylene

Group B Hydrogen or >30% hydrogen by volume

Group C Ethyl, ether and ethylene

Group D Propane

Typical Class II Substances

Group E Aluminum, magnesium and alloys

Group F Carbon, coke and coal

Group G Flour, grain, wood, plastic and chemicals

Notes

Division 1 areas must be surrounded by Division 2 areas.

Class II, Group E areas must be rated as Division 1 areas.

Modification and Customization

Hoffman excels at modifying and customizing products to your specifications. Contact your local Hoffman sales office or distributor for complete information.

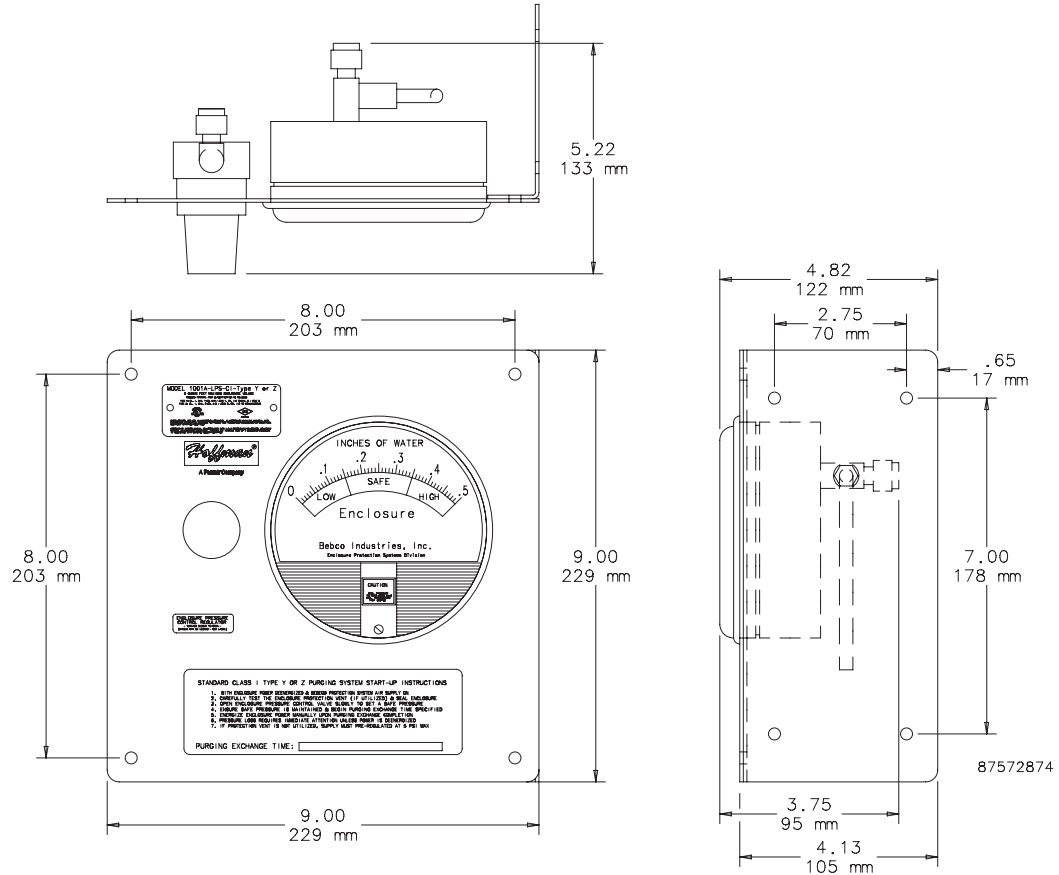
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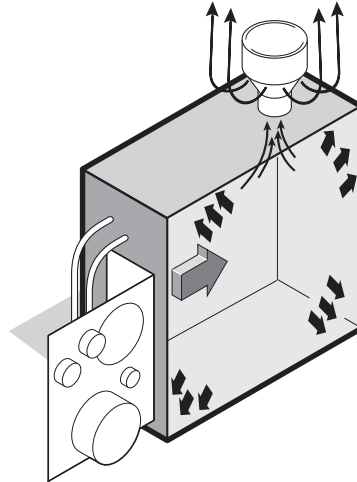
Small- and Large-Volume Purging/Pressurization Systems

Standard Product

Catalog Number	Model	Height in./mm	Width in./mm	Depth in./mm	Volume (ft. ³)	Volume (m ³)	Weight (lb.)	Weight (kg)
A1001YZUMC1	1001, Class 1	9.00 229	9.00 229	5.00 127	2	.06	8.25	3.74
A1001YZUMC2	1001, Class 2	9.00 229	9.00 229	5.00 127	10	.28	8.50	3.86

Model 1001 Configuration System and Flange Dimensions



Small- and Large-Volume Purging/Pressurization Systems
Large-Volume Type Y and Z Purging/Pressurization System

Industry Standards

(Volume up to 90 cubic feet)

3003 LPS

NEC **Type Y** Class 1, Division 1, Groups A, B, C and D / Zone 1 Groups IIA, IIB and IIC to Division 2 / Zone 2

NEC **Type Z** Class I, Division 2, Groups A, B, C and D / Zone 2 Groups IIA, IIB and IIC to Nonhazardous

Classified by Underwriters Laboratories, NFPA 496-1993

Application

Large-Volume Purging/Pressurization System supplies one or more enclosures, up to 90 cubic feet total volume, with a protective gas supply, thus allowing the use of general-purpose enclosures in certain Class 1, Division 1 and 2 hazardous locations.

Specifications

- Vertical mount (VM) or horizontal mount (HM)
- 90 cubic feet maximum enclosure volume
- System face plate and mounting plate: Type 316 stainless steel with tumble finish
- Regulator body: zinc with enamel finish
- Manifold body: anodized aluminum with Type 316 stainless steel valves
- Enclosure pressure gauge: aluminum with enamel finish
- Gas supply gauge: poly case and nickel-plated tube
- Enclosure protection vent—90 degree
- Rapid exchange control valve
- Enclosure supply and enclosure reference bulkhead fittings: Type 316 stainless steel
- Fastener hardware

Protected Enclosures

Enclosures should be constructed from materials such as metal, fiberglass or polycarbonate material. Enclosure seal should meet or exceed NEMA Type 4 or Type 12 performance requirements.

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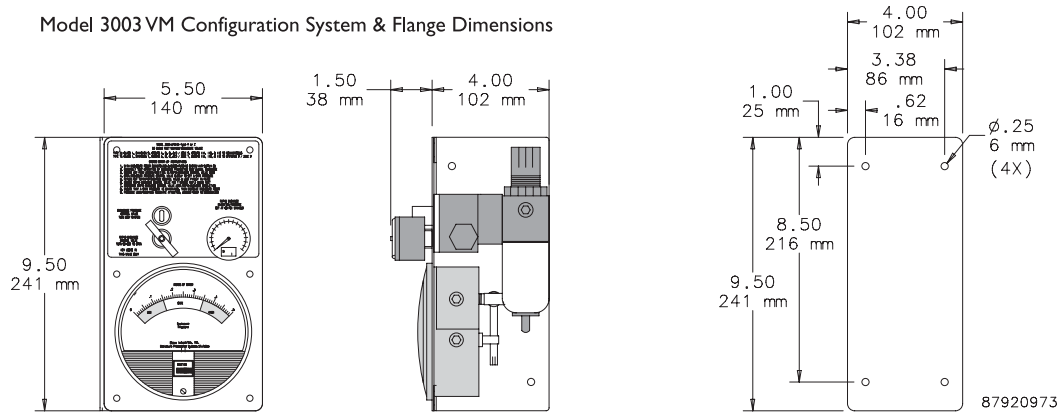


Small- and Large-Volume Purging/Pressurization Systems

Standard Product

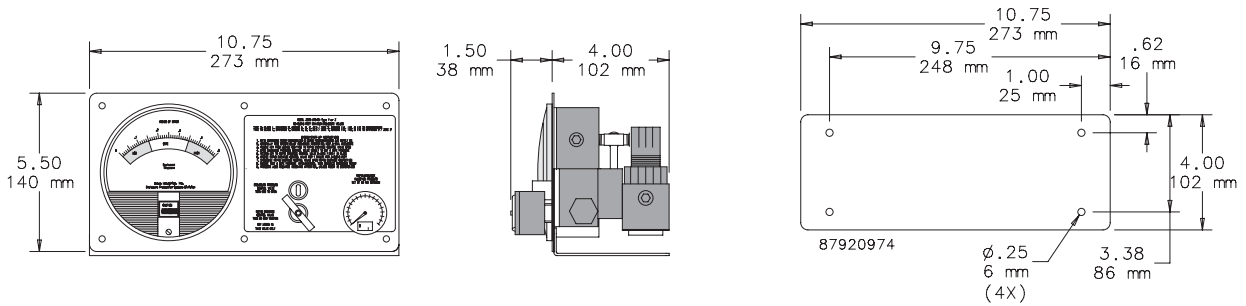
Catalog Number	Height in./mm	Width in./mm	Depth in./mm	Volume (ft. ³)	Volume (m ³)	Weight (lb.)	Weight (kg)
A3003YZVM	9.50 241	5.50 140	5.50 140	90	2.55	10	4.54
A3003YZHM	5.50 140	10.75 273	5.50 140	90	2.55	10	4.54

Model 3003 VM Configuration System & Flange Dimensions

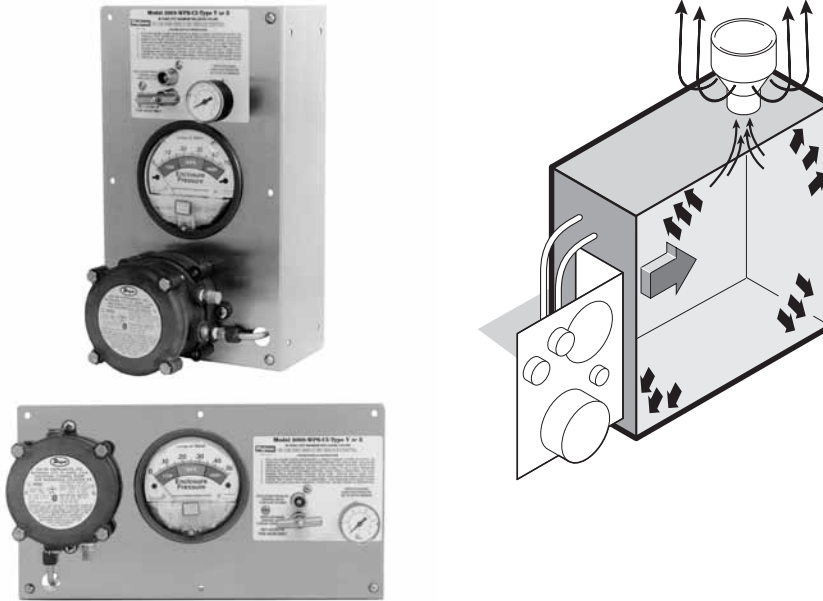


Vertical Mount Flange

Model 3003 HM Configuration System & Flange Dimensions



Horizontal Mount Flange

Small- and Large-Volume Purging/Pressurization Systems
Large-Volume ATEX Purge System Type Y, Z and Ex [pz]

Industry Standards

(Volume up to 90 cubic feet)

3003 WPSA

Type Y System, UL and FM Certified: Class I, Division I Group A,B,C, and D/Zone 1, Groups IIB and H₂ to Division 2/Zone 2

Type Z system, UL and FM Certified: Class 1, Division 2 Group A,B,C, and D/Zone 2, Groups IIB and H₂ to Non-hazardous

ATEX Certified

II 3 (3) G Ex [pz] II, $-29\text{ C} \leq T_{\text{amb.}} \leq 49\text{ C}$

Application

Hoffman's **Ex [pz]** purge system is designed and certified according to European requirements of **ATEX Directive 94/9/EC** and **EN60079-2** for **Type Ex [pz] applications**. ATEX certified **Ex [pz]** purge systems reduce the classification in the protected enclosure from Zone 2 to non-hazardous, thereby allowing the use and operation of general purpose equipment in the protected enclosure. Used as a Type Y purge reduces classification from Div. 1 to Div. 2. Type Z purge reduces classification from Div. 2 to Non-Hazardous.

These products are designed to supply one or more enclosures with a protective gas supply. Purge/pressurization systems can be used for electronics, electrical equipment, motors and switch gear in wall-mount to large enclosures. Purge/pressurization systems also meet the demands of rack-mounted instrumentation, video displays, programmable controllers, computers, printers, recorders and measurement and calibration equipment.

Protected Enclosures

Enclosures should be constructed from materials such as metal or polycarbonate material to meet or exceed NEMA Type 4 or Type 12 performance requirements.

Specifications

- Vertical mount (VM) or horizontal mount (HM)
- Available in 90 cubic feet maximum enclosure volume model
- System face plate and mounting plate: Type 316 stainless steel tumble finish
- Regulator body: zinc with enamel finish
- Manifold body: anodized aluminum with Type 316 stainless steel valves
- Enclosure pressure gauge: aluminum with enamel finish
- Gas supply gauge: poly case and nickel-plated tube
- Enclosure protection vent (90 degree)
- Enclosure supply and enclosure reference bulkhead fittings: Type 316 stainless steel
- Fastener hardware available in aluminum and stainless steel
- Rapid-exchange control valve
- Explosion-proof differential pressure switch with "C" contacts for alarm

Modification and Customization

Hoffman excels at modifying and customizing products to your specifications. Contact your local Hoffman sales office or distributor for complete information.

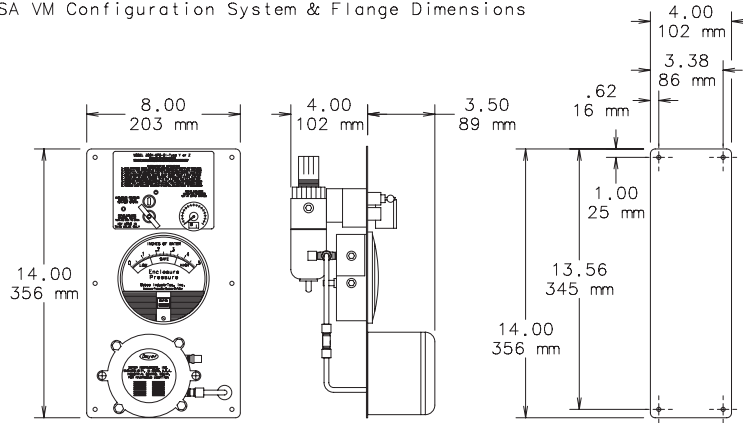
Bulletin: HL

Small- and Large-Volume Purging/Pressurization Systems

Standard Product

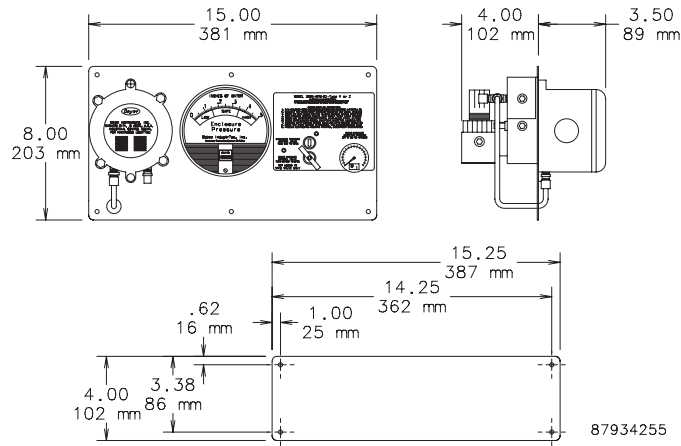
Catalog Number	Height in./mm	Width in./mm	Depth in./mm	Volume (ft. ³)	Volume (m ³)	Weight (lb.)	Weight (kg)
ATEX3003YZVM	14.00 356	8.00 203	7.50 189	90	2.55	18	8.2
ATEX3003YZHM	8.00 203	15 361	7.50 189	90	2.55	18	8.2

WPSA VM Configuration System & Flange Dimensions



WPSA Vertical Mount Flange

WPSA HM Configuration System & Flange Dimensions



WPSA Horizontal Mount Flange

Hazardous Location Thermostat



Industry Standards

CE
 Conformity Certificate LCIE (Laboratoire Central des Industries
 Electriques) LCIE 01 ATEX 6074
 EEx d IIC T6/II 2 GD, IP6x T85 °C
 IEC 60529, IP65/1 (grounded)

Application

Compact mechanical thermostat for temperature control of heaters or low-temperature alarms in enclosures that are used in explosion-hazardous areas.

Features

- Compact design
- Set temperature
- High switching capacity
- Small hysteresis (switching difference)
- Long service life (greater than 100,000 cycles)
- Can usually be connected directly and switched without the need for additional relays
- Thermostatic bimetallic sensor element
- One-pole contact opens with rising temperature
- Mounting bracket and DIN clip for mounting
- Connection cable: Si HF - JZ 3 x AWG 18 x 3.3 ft. (0.75 mm² x 1 m)

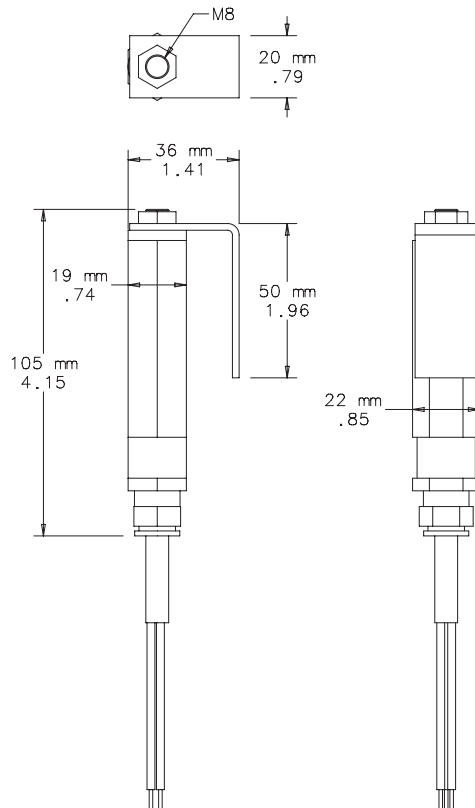
Finish

Black anodized aluminum

Bulletin: HL

Standard Product

Catalog Number	Maximum Operating Voltage (AC)	Maximum Operating Voltage (DC)	Switching Capacity @ 250 VAC	Switch Off (Open) Temperature (°F)	Switch Off (Open) Temperature (°C)	Switch On (Closed) Temperature below Switch Off (°F)	Switch On (Closed) Temperature below Switch Off (°C)
HLTHERMNC	250 V	100 V	4A resistive; 1A ind. (cos f = 0.6)	77 +/- 6	25 +/- 3K	7.2 +/- 2	4 +/- 1K



87921425



Hazardous Location Heater



Industry Standards

CE
Conformity Certificate LCIE (Laboratoire Central des Industries
Electriques) LCIE 01 ATEX 6073
EEx d IIC T4/II 2 GD, IP6x T135°C
IEC 60529, IP65/1 (grounded)

Application

Designed for use in hazardous locations where electronic
components require protection from condensation and corrosion,
sudden temperature drops and low temperatures.

Features

- Maintenance-free
- High-performance heating cartridge (element)
- Large convection surface
- Extruded aluminum heat sink
- DIN clip for mounting
- Connection cable: Si HF-JZ 3 x AWG 18 x 3.3 ft. (0.75 mm² x 1 m)
- Operating voltage 110-120 VAC

Finish

Black anodized

Bulletin: HL

Standard Product

Catalog Number	AxBxC in./mm	Heating Power	Surface Temperature T4 (°F) ^a	Surface Temperature T4 (°C) ^a
HLHEAT100	7.10 x 4.65 x 2.70 180 x 118 x 69	100 W	275	135

^a Surface temperature when mounted vertically.

