



CHAPTER 11

HAZARDOUS LOCATION



ZONEX ATEX- AND IECEx-CERTIFIED, TYPE 4X

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.



EJBX SERIES JUNCTION BOXES

EJBX series junction boxes are enclosures applicable for Zone 1, 2, 21 or 22 with ATEX and IECEx certifications. They are suitable for chemically corrosive and extreme environments. They can be used as junction boxes with or without terminals or for installation of electrical equipment such as circuit breakers, signals, disconnectors, remote control switches or transformers. Body and cover can be drilled and threaded according to customers' specifications.



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HAZARDOUS LOCATION ENCLOSURES AND ACCESSORIES

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HAZARDOUS LOCATION THERMAL MANAGEMENT

THERMAL MANAGEMENT

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SPECTRACOOL HAZARDOUS LOCATION INDOOR/OUTDOOR

These hazardous location certified air conditioners are rated for Class 1 Div 2 environments. They have a broad range of capacities from 4K through 11K and utilize a non-incendive design for lighter weight and easier installations.

Applications:

- Onshore and offshore oil and gas
- Chemical and petrochemical
- Mining
- Pharmaceutical
- Any location with potentially hazardous atmospheres created by vapor

ZONEX ATEX- AND IECEX-CERTIFIED, TYPE 4X

INDUSTRY STANDARDS
ATEX Directive 94/9/EC
ATEX

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

EN 60079-0:2009
EN 60079-7:2007
EN 61241-0:2006
EN 61241-1:2004

IECEX

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

IEC 60079-0:2007-2010
IEC 60079-7:2006-2007
IEC 61241-0:2004
IEC 61241-1:2004

AEx/Ex

UL File E67456 Class I, Zone I
AEx e IIC Tamb -20C to +60C
Ex e IIC U Tamb -20C to +60C

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 as well as IECEX and AEx standards for increased safety in housing electrical components in Zone 1 and Zone 2 applications.

Hoffman's ATEX Ex 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; operating temperature range -55 C to +180 C
- Internal/external brass earth/ground provision

FINISH

#3 brushed finish

ACCESSORIES

Panels
Hazardous Location Thermostat
Hazardous Location Heater
Hazardous Location Hole Seals
Hazardous Location Breather Drains
Hazardous Location Window Kits

MODIFICATION AND CUSTOMIZATION

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

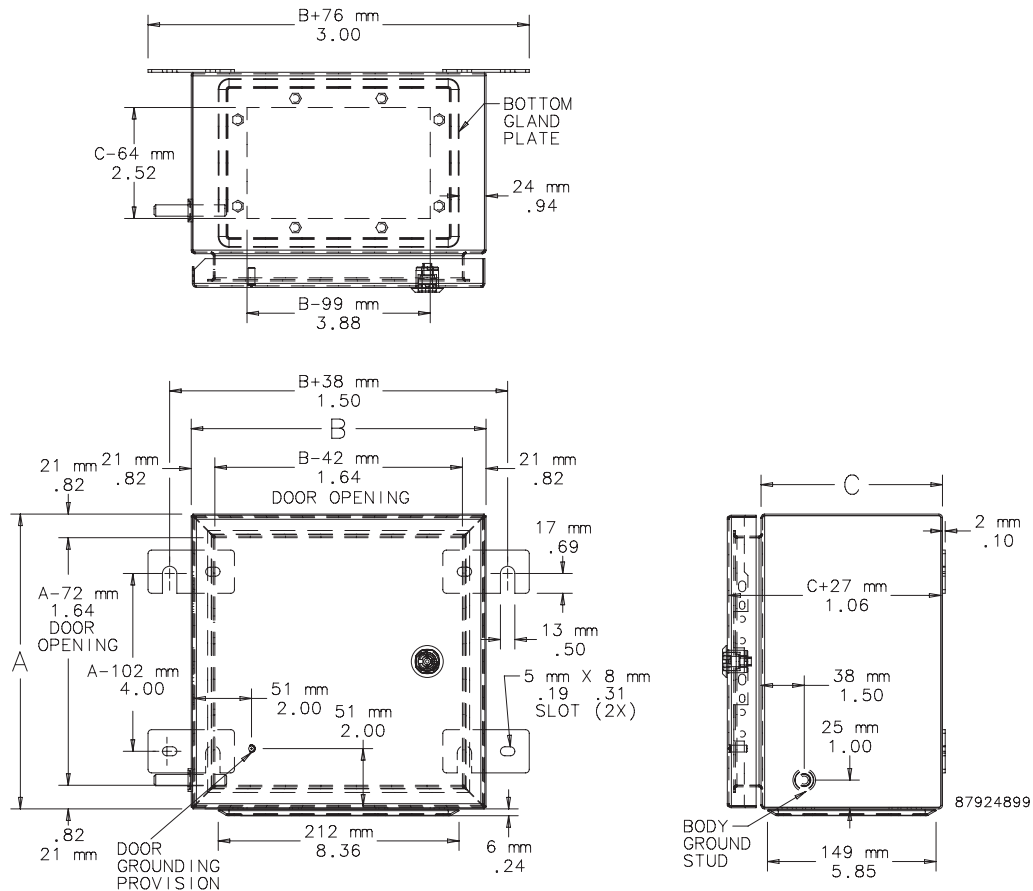
Hoffman offers a ZONEX-specific modification program with ATEX certification.

BULLETIN: HL

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

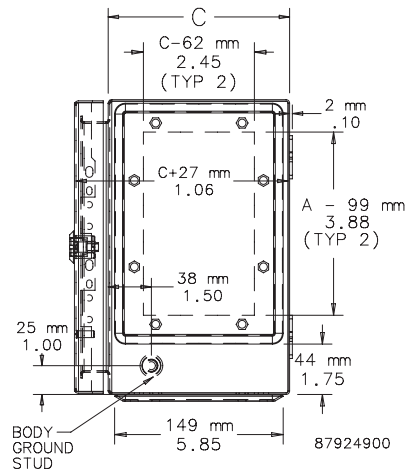
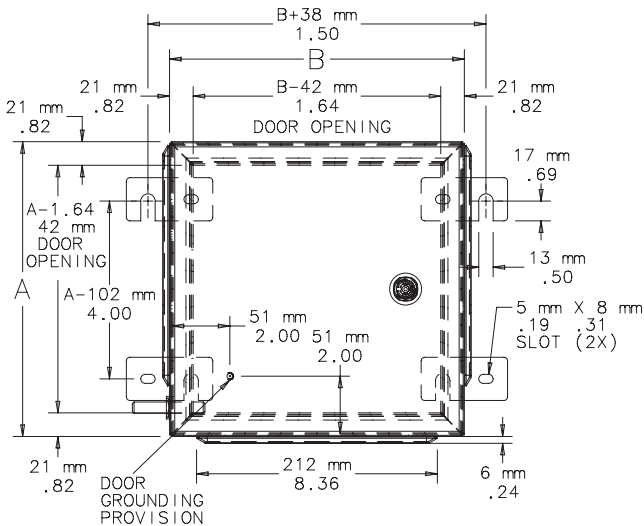
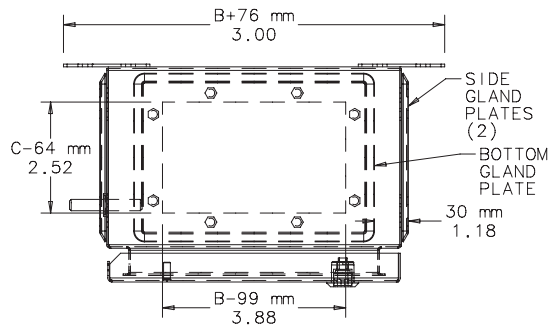
Purchase panels separately.



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.

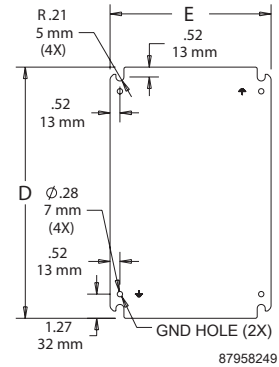


ZONEX ACCESSORY PANELS

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



ZONEX ATEX- AND IECEX-CERTIFIED, TYPE 4X, SCREW COVER



INDUSTRY STANDARDS

ATEX Directive 94/9/EC

ATEX

Sira 09ATEX3224U
 Ex e IIC Gb
 Ex tb IIIC Db IP 66
 EN60079-0:2009
 EN60079-7:2007
 EN61241-0:2006
 EN61241-1:2004

IECEX

IECEX SIR 09.0099U
 Ex e IIC Gb
 Ex tb IIIC Db IP 66
 IEC 60079-0:2007-2010
 IEC 60079-7:2006-2007
 IEC 61241-0:2004
 IEC 61241-1:2004

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 and IECEx standard for increased safety in housing electrical components in Zone 1 and Zone 2 applications.

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

FEATURES

- 6-mm brass internal/external bonding provision
- 1-piece continuous gasket on door; Type 316 stainless steel cover screws
- Internal weldnuts for panel or DIN rail mounting
- Hardware for panel and bonding provisions included
- Operating temperature range: -40 C to +70 C standard polyurethane gasket; -55 C to +180 C optional silicone gasket

SPECIFICATIONS

- Fabricated from Type 316 stainless steel
- Full-width welded-on top and bottom wall-mounting brackets
- Increased safety: Ex e. ATEX and IECEx certified

FINISH

#4 brushed finish on external surfaces

ACCESSORIES

Panels
 Hazardous Location Hole Seals
 Hazardous Location Breather Drains

NOTES

Intrinsically safe terminal blocks can be installed in populated non-standard enclosures.

IECEX populated enclosures require IECEX-certified components specifically listed in Certification (See IECEX SIR 09.0100 for more detail).

MODIFICATION AND CUSTOMIZATION

Hoffman excels at modifying and customizing products to your specifications. Hoffman offers a ZONEX-specific modification program with certification. Contact your local Hoffman sales office or distributor for complete information.

Material changes: Type 304 stainless steel, painted mild steel or aluminum

Gasket changes: High-temperature silicone gasket

Holes and cutouts

Paint

DIN rails

Ground bars

Terminal block installation and marking

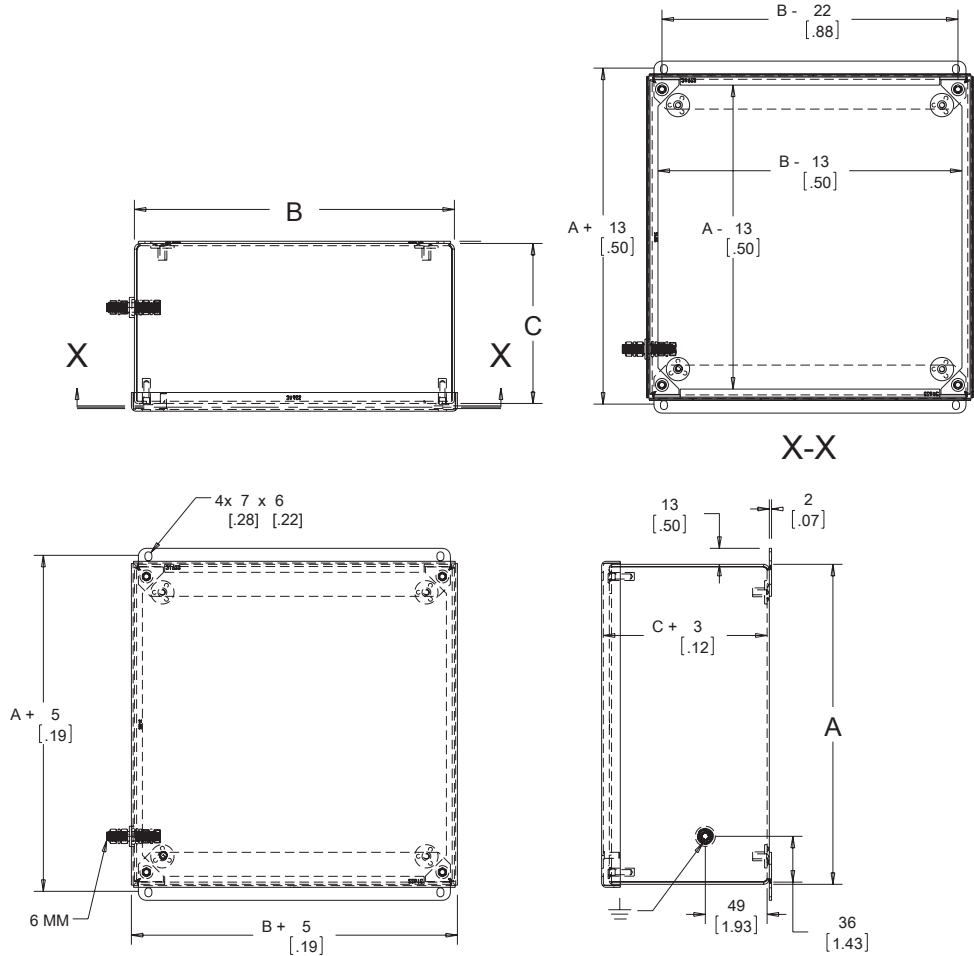
Tagging

BULLETIN: HL

Standard Product

Catalog Number	AxBxC mm	AxBxC in.	Optional Panel	Panel Dimensions (mm)	Panel Dimensions (in.)
EXE443SS6	102 x 102 x 76	4.00 x 4.00 x 3.00	A4P4G	73 x 73	2.88 x 2.88
EXE664SS6	152 x 152 x 102	6.00 x 6.00 x 4.00	A6P6G	124 x 124	4.88 x 4.88
EXE774SS6	178 x 178 x 102	7.00 x 7.00 x 4.00	A7P7G	149 x 149	5.88 x 5.88
EXE965SS6	216 x 146 x 127	8.50 x 5.75 x 5.00	A9P6G	187 x 118	7.38 x 4.63
EXE10105SS6	254 x 254 x 127	10.00 x 10.00 x 5.00	A10P10G	222 x 226	8.75 x 8.88

AxBxC dimensions for EXE965SS6 are nominal.



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ZONEX ATEX- AND IECEX-CERTIFIED, TYPE 4X, HINGED COVER



FEATURES

- 10-mm brass internal/external bonding provision
- Type 316 stainless steel quarter-turn latch with slotted insert
- Large 3-mm-thick, flat gasketed gland plate(s)
- Continuous seal gasket on door and gland plate(s)
- Hardware for panel and bonding provisions included
- Operating temperature range: -40 C to +70 C standard polyurethane gasket

SPECIFICATIONS

- Fabricated from Type 316 stainless steel
- 3-mm thick individual welded-on top and bottom wall-mounting brackets
- Increased safety: Ex e. IECEx e certified

FINISH

#4 brushed finish

ACCESSORIES

Panels
 Security inserts and handles
 Gland Plates
 Hazardous Location Thermostat
 Hazardous Location Heater
 Hazardous Location Window Kits
 Hazardous Location Hole Seals
 Hazardous Location Breather Drains

NOTES

Intrinsically safe terminal blocks can be installed in populated non-standard enclosures.

IECEx populated enclosures require IECEx-certified components specifically listed in Certification (See IECEx SIR 09.0100 for more detail).

MODIFICATION AND CUSTOMIZATION

Hoffman excels at modifying and customizing products to your specifications. Hoffman offers a ZONEX-specific modification program with ATEX certification. Contact your local Hoffman sales office or distributor for complete information.

Material changes: Type 304 stainless steel, painted mild steel or aluminum

Gasket changes: High-temperature silicone gasket

Side-mount brackets available

Holes and cutouts

Paint

DIN rails

Ground bars

Terminal block installation and marking

Tagging

Accessory installations: drain/breathers and stopping plugs

BULLETIN: HL

INDUSTRY STANDARDS

ATEX Directive 94/9/EC ATEX

Sira 09ATEX3224U
 Ex e IIC Gb
 Ex tb IIIC Db IP 66
 EN60079-0:2009
 EN60079-7:2007
 EN61241-0:2006
 EN61241-1:2004

IECEX

IECEx SIR 09.0099U
 Ex e IIC Gb
 Ex tb IIIC Db IP 66
 IEC 60079-0:2007-2010
 IEC 60079-7:2006-2007
 IEC 61241-0:2004
 IEC 61241-1:2004

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

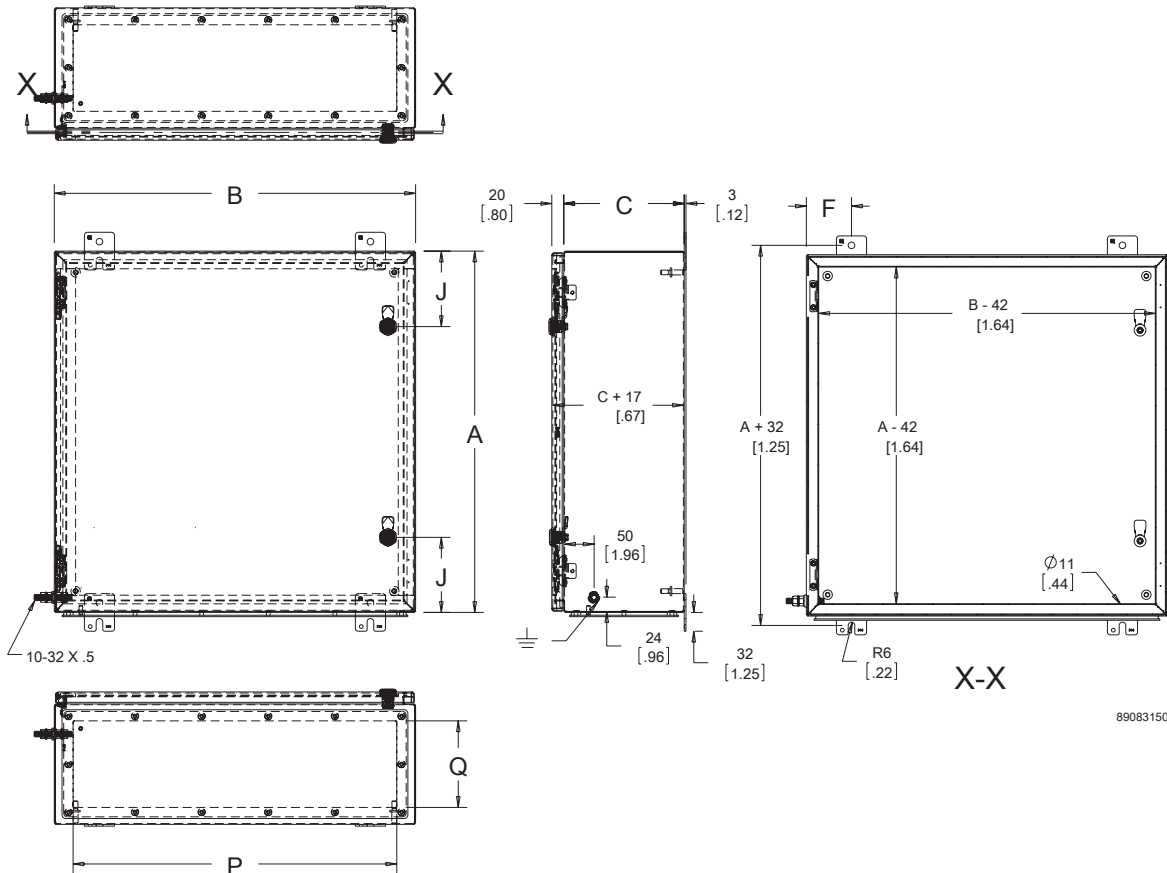
APPLICATION

ZONEX Enclosures are designed and certified to meet ATEX Directive 94/9/EC as well as IECEx standards for increased safety in housing electrical components in Zone 1 and Zone 2 applications.

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

Standard Product

Catalog Number	AxBxC mm/in.	F mm/in.	J mm/in.	P mm/in.	Q mm/in.	No. of latches	Optional Panel
EXE12126SS61	305 x 305 x 152 12.00 x 12.00 x 6.00	32 1.25	152 6.00	241 9.50	95 3.75	1	CP1212G
EXE12128SS61	305 x 305 x 203 12.00 x 12.00 x 8.00	32 1.25	152 6.00	241 9.50	146 5.75	1	CP1212G
EXE16126SS61	406 x 305 x 152 16.00 x 12.00 x 6.00	32 1.25	203 8.00	241 9.50	95 3.75	1	CP1612G
EXE16128SS61	406 x 305 x 203 16.00 x 12.00 x 8.00	76 3.00	203 8.00	241 9.50	146 5.75	1	CP1612G
EXE16166SS61	406 x 406 x 152 16.00 x 16.00 x 6.00	76 3.00	203 8.00	343 13.50	95 3.75	1	CP1616G
EXE16168SS61	406 x 406 x 203 16.00 x 16.00 x 8.00	76 3.00	203 8.00	343 13.50	146 5.75	1	CP1616G
EXE20166SS61	508 x 406 x 152 20.00 x 16.00 x 6.00	76 3.00	254 10.00	343 13.50	95 3.75	1	CP2016G
EXE20168SS61	508 x 406 x 203 20.00 x 16.00 x 8.00	76 3.00	254 10.00	343 13.50	146 5.75	1	CP2016G
EXE20208SS61	508 x 508 x 203 20.00 x 20.00 x 8.00	76 3.00	254 10.00	445 17.50	146 5.75	1	CP2020G
EXE24208SS61	610 x 508 x 203 24.00 x 20.00 x 8.00	76 3.00	305 12.00	445 17.50	146 5.75	1	CP2420G
EXE24248SS61	610 x 610 x 203 24.00 x 24.00 x 8.00	76 3.00	127 5.00	546 21.50	146 5.75	2	CP2424G
EXE242412SS61	610 x 610 x 305 24.00 x 24.00 x 12.00	76 3.00	127 5.00	546 21.50	178 7.00	2	CP2424G
EXE30208SS61	762 x 508 x 203 30.00 x 20.00 x 8.00	76 3.00	127 5.00	445 17.50	146 5.75	2	CP3020G
EXE30248SS61	762 x 610 x 203 30.00 x 24.00 x 8.00	76 3.00	127 5.00	546 21.50	146 5.75	2	CP3024G
EXE303012SS61	762 x 762 x 305 30.00 x 30.00 x 12.00	76 3.00	127 5.00	546 21.50	178 7.00	2	CP3030G
EXE36248SS61	914 x 610 x 203 36.00 x 24.00 x 8.00	76 3.00	127 5.00	546 21.50	146 5.75	2	CP3624G



89083150



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).

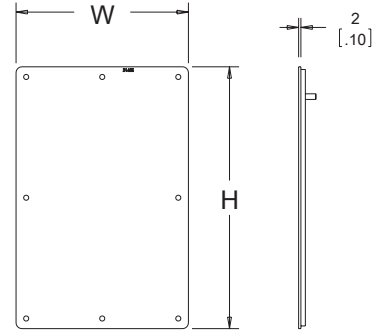
Article 500 of the NEC also classifies hazardous locations according to the properties of the flammable vapors, liquids or gases, or according to the combustible dusts or fibers that may be present and the likelihood that a flammable or combustible concentration or quantity is present. Articles 505 and 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 (Not Interchangeable)

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

GLAND PLATE



89083184

BULLETIN: HL

Standard Product **Gland Plate**

Catalog Number	Description	Cutout Size mm/in.	W x H mm/in.
GPS126SS6	Gland plate for 12-in. x 6-in. surface with ground	191 x 95 7.50 x 3.75	228 x 133 8.98 x 5.23
GPS128SS6	Gland plate for 12-in. x 8-in. surface with ground	191 x 146 7.50 x 5.75	228 x 184 8.98 x 7.23
GP126SS6	Gland plate for 12-in. x 6-in. surface without ground	241 x 95 9.50 x 3.75	279 x 133 10.98 x 5.23
GP128SS6	Gland plate for 12-in. x 8-in. surface without ground	241 x 146 9.50 x 5.75	279 x 184 10.98 x 7.23
GP166SS6	Gland plate for 16-in. x 6-in. surface without ground	343 x 95 13.50 x 3.75	380 x 133 14.98 x 5.23
GP168SS6	Gland plate for 16-in. x 8-in. surface without ground	343 x 146 13.50 x 5.75	380 x 184 14.98 x 7.23
GP206SS6	Gland plate for 20-in. x 6-in. surface without ground	445 x 95 17.50 x 3.75	482 x 133 18.98 x 5.23
GP208SS6	Gland plate for 20-in. x 8-in. surface without ground	446 x 146 17.50 x 5.75	482 x 184 18.98 x 5.23
GP248SS6	Gland plate for 24-in. x 8-in. surface without ground	546 x 146 21.50 x 5.75	584 x 184 22.98 x 7.23
GP2412SS6	Gland plate for 24-in. x 12-in. surface without ground	246 x 178 21.50 x 7.00	584 x 215 22.98 x 8.48

GP2412SS6 is also used on 30-in. wide, 12-in. deep standard enclosure bottom.



ZONEX NON-METALLIC TERMINAL ENCLOSURE



INDUSTRY STANDARDS

ATEX Directive 94/9/EC

ATEX

TUV 13 ATEX120808U

Ex e IIC Gb

Ex ta IIIC Da IP66

EN60079-0

EN60079-7

EN60079-31

Service temperature -50C to +100C

IECEX

IECEX TUV 13.0001U

Ex e IIC Gb

Ex ta IIIC Da IP66

IEC 60079-0

IEC 60079-7

IEC 60079-31

Service temperature -50C to +100C

Type 4, 4X, 12; File No. E61997

UL508A Listed

cUL Listed per CSA C22.2 No. 94; Type 4, 4X, 12; File No. E61997

NEMA / EEMAC Type 4, 4X, 12

IEC 60529, IP66

APPLICATION

ZONEX Non-Metallic Terminal Enclosure is ideal for field terminations in hazardous locations. The enclosure meets national and international standards and certifications. It can be used to protect equipment and terminations from corrosive contaminants while meeting rigorous demands. The cabinet is ideal for either panel- or din-mounted components. The enclosure meets ATEX Directives 94/9/EC and IECEx standards for increased safety in housing electrical components in Zone 1 and Zone 2 applications.

FEATURES

- Compression-molded, high-impact strength, fiberglass body and cover
- Cover includes recessed, retained, combination head (Straight blade, Phillips and Torx drive) M4 or M6 stainless steel Type 316 screws
- Retained, continuous, high-temperature silicon gasket within a labyrinth seal between cover and body
- Durable and reusable, internal M4 or M6 stainless steel inserts for DIN- and Panel-mounting
- Covered mounting screw provisions outside of gasketed area, sized M4 (#8) or M6 (1/4-in.)
- Mounting location dimensions are molded into the back side of the enclosure
- Panel mounting screws included, M4 or M6

SPECIFICATIONS

- Compression-molded fiberglass with added agents to address static charge build-up
- High-impact strength as well as high temperature-rated
- Increased Safety: Ex e applications
- Optional panels are pre-plated steel, 1.5mm (16 ga.) thick; or 2mm composite

FINISH

- Molded material has a smooth, low-gloss, black finish
- Cover screws are matte stainless steel finish

ACCESSORIES

Panels

Din Rail

Terminals

NOTES

Intrinsically safe terminal blocks can be installed through modification program to provide a populated enclosure. IECEx populated enclosures require IECEx certified components specifically listed in the approving Certification (see IECEx SIR 09.0100 for more detail).

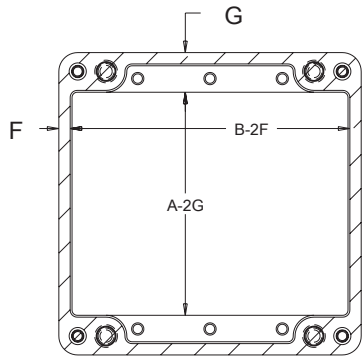
MODIFICATION AND CUSTOMIZATION

Hoffman excels at modifying and customizing products to your specifications. Hoffman offers a ZONEX-specific modification program. Contact your local Hoffman Representative or Distributor for more information.

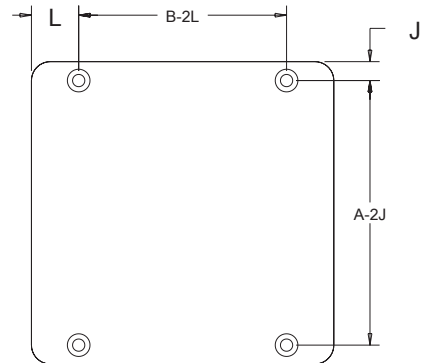
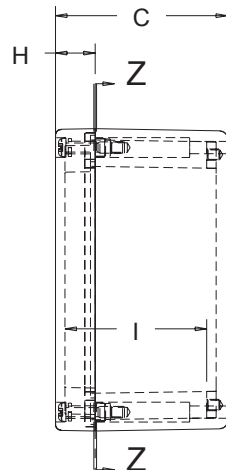
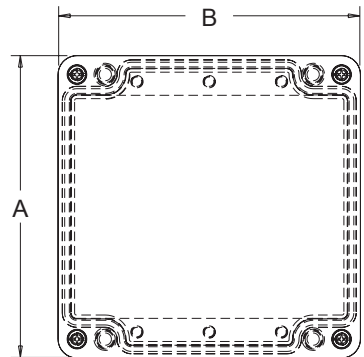
BULLETIN: HL3

Standard Product

Catalog Number	AxBxC in./mm	F in./mm	G in./mm	H in./mm	I in./mm	J in./mm	Mounting Screw Size in./mm	Panel	Panel Material	Panel Size in./mm
EXE807555	3.15 x 2.95 x 2.17 80 x 75 x 55	.17 4	.57 15	.59 15	1.65 42	.23 6	#8 4	A8075P	Composite	2.72 x 2.52 x .08 69 x 64 x 2
EXE1107555	4.33 x 2.95 x 2.17 110 x 75 x 55	.17 4	.57 15	.59 15	1.65 42	.24 6	#8 4	A11075P	Composite	3.90 x 2.52 x .08 99 x 64 x 2
EXE1607555	6.30 x 2.95 x 2.17 160 x 75 x 55	.17 4	.57 15	.59 15	1.65 42	.24 6	#8 4	A16075P	Composite	5.87 x 2.52 x .08 149 x 64 x 2
EXE1907555	7.48 x 2.95 x 2.17 190 x 75 x 55	.17 4	.57 15	.59 15	1.65 42	.23 6	#8 4	A19075P	Composite	7.05 x 2.52 x .08 179 x 64 x 2
EXE807575	3.15 x 2.95 x 2.95 80 x 75 x 75	.16 4	.56 14	.59 15	2.44 62	.23 6	#8 4	A8075P	Composite	2.72 x 2.52 x .08 69 x 64 x 2
EXE1107575	4.33 x 2.95 x 2.95 110 x 75 x 75	.16 4	.56 14	.59 15	2.44 62	.24 6	#8 4	A11075P	Composite	3.90 x 2.52 x .08 99 x 64 x 2
EXE1607575	6.30 x 2.95 x 2.95 160 x 75 x 75	.16 4	.56 14	.59 15	2.44 62	.24 6	#8 4	A16075P	Composite	5.87 x 2.52 x .08 149 x 64 x 2
EXE1907575	7.48 x 2.95 x 2.95 190 x 75 x 75	.16 4	.56 14	.59 15	2.44 62	.24 6	#8 4	A19075P	Composite	7.05 x 2.52 x .08 179 x 64 x 2
EXE12212090	4.80 x 4.72 x 3.54 122 x 120 x 90	.17 4	.75 19	.98 25	2.91 74	.32 8	1/4 6	A122120P	Plated Steel	4.25 x 4.21 x .06 108 x 107 x 1.5
EXE22012090	8.66 x 4.72 x 3.54 220 x 120 x 90	.17 4	.75 19	.98 25	2.95 75	.32 8	1/4 6	A220120P	Plated Steel	8.11 x 4.21 x .06 206 x 107 x 1.5
EXE16016090	6.30 x 6.30 x 3.54 160 x 160 x 90	.23 5.9	.79 20	.83 21	2.95 75	.39 10	1/4 6	A160160P	Plated Steel	5.63 x 5.70 x .06 143 x 144 x 1.5
EXE26016090	10.24 x 6.30 x 3.54 260 x 160 x 90	.23 5.9	.79 20	.83 21	2.95 75	.39 10	1/4 6	A260160P	Plated Steel	9.61 x 5.70 x .06 244 x 144 x 1.5
EXE36016090	14.17 x 6.30 x 3.54 360 x 160 x 90	.23 5.9	.79 20	.83 21	2.95 75	.39 10	1/4 6	A360160P	Plated Steel	13.54 x 5.70 x .06 344 x 144 x 1.5
EXE56016090	22.05 x 6.30 x 3.54 560 x 160 x 90	.21 5	.77 20	.83 21	2.95 75	.39 10	1/4 6	A560160P	Plated Steel	21.38 x 5.70 x .06 543 x 144 x 2.5
EXE255250120	10.04 x 9.84 x 4.72 255 x 250 x 120	.22 6	.79 20	.98 25	4.09 104	.39 10	1/4 6	A255250P	Plated Steel	9.45 x 9.17 x .06 240 x 233 x 1.5
EXE400250120	15.75 x 9.84 x 4.72 400 x 250 x 120	.22 6	.79 20	.98 25	4.09 104	.39 10	1/4 6	A400250P	Plated Steel	15.12 x 9.17 x .06 384 x 233 x 1.5
EXE400405120	15.75 x 15.94 x 4.72 400 x 405 x 120	.23 6	.79 20	.98 25	4.09 104	.39 10	1/4 6	A400405P	Plated Steel	15.16 x 15.35 x .06 385 x 390 x 1.5
EXE400405165	15.75 x 15.94 x 6.50 400 x 405 x 165	.20 5	.76 19	.98 25	5.87 149	.39 10	1/4 6	A400405P	Plated Steel	15.16 x 15.35 x .06 385 x 390 x 1.5



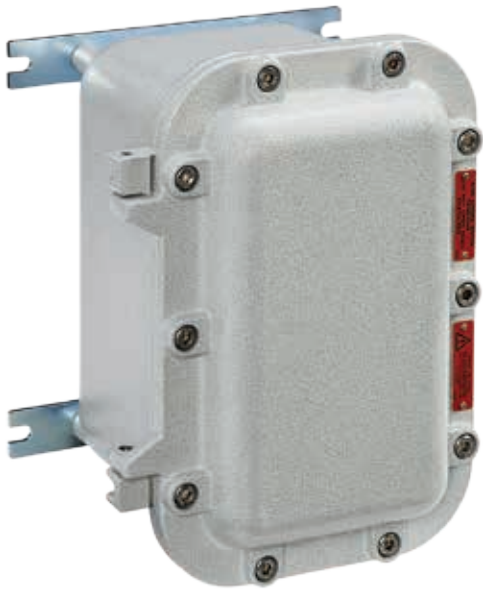
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89103188



EJB SERIES JUNCTION BOXES



INDUSTRY STANDARDS

ATEX Directive 94/9/EC
 EN 60079-0
 EN 60079-1
 EN 60079-31
 EN 60079-11
 EN 60079-26
 EN60529
 EN 60439-1

Certifications

II 2(1) GD Ex d [ia] IIB Ex tD A21 T5/T6 IP 65/66/67
 II 2GD Ex d IIB+H2 T6,T5, T4 Gb Ex tb IIIC T85°C, T100°C, T135°C Db IP66/67
 II 2(1) GD Ex d [ia Ga] IIB+H2 T6, T5 Gb Ex tb [ia Da] IIIC T85°C, T100°C Db IP66/67

CESI 00 ATEX 036U (Component)
 CESI 01 ATEX 026 (terminal box)
 CESI 01 ATEX 027 (Control, command and signaling units)
 CESI 02 ATEX 073 (Interface units)
 CESI 03 ATEX 015 (Unit with dischargers)
 IECEx TSA 06.0011 - GOST R – BRAZILIAN

GOST-R, INMETRO, Australia certifications available

Ambient Temperature: -50 C to +60C

APPLICATION

EJB series junction boxes are enclosures applicable for Zone 1, 2, 21 or 22 with ATEX and IECEx certifications. They can be used as junction boxes with or without terminals or for installation of electrical equipment such as circuit breakers, signals, disconnectors, remote control switches or transformers.

Body and cover can be drilled and threaded according to customers' specification. In accordance with rules, Hoffman must perform the drilling.

FEATURES

- Low copper aluminum alloy enclosure with stainless steel bolts and screws for corrosion resistance
- Cast hinges for robust construction (except for EJB-55)
- High temperature-resistant silicone gasket provides IP66 / 67 rating
- Stainless steel bolts and screws
- Electrogalvanized steel mounting bracket
- Epoxy coating RAL 7035 (Light grey) coating
- Aluminum alloy passes the tests required by standards EN 60068-2-30 (hot/humid cycles) and EN 60068-2-11 (salt mist tests)
- Internal mounting panel
- Body and cover can be drilled and threaded according to customers' specifications

ACCESSORIES

- Internal anti-condensation coating RAL 2004 (pure orange)
- External epoxy coating in different color (specify the RAL number)
- Hazardous Location Breather Drains
- Hazardous Location Window Kits

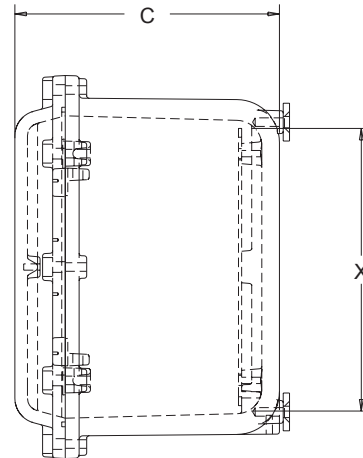
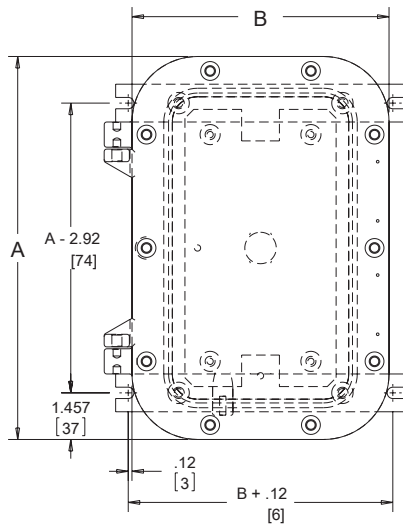
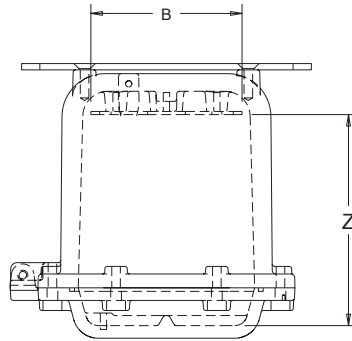
MODIFICATION AND CUSTOMIZATION

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

BULLETIN: HL5AA

Standard Product

Catalog Number	AxBxC in./mm	X in./mm	Y in./mm	Z in./mm	Material	Weight (lbs.)	Weight (kgs)
EJB1	11.97 x 8.03 x 8.58 304 x 204 x 218	8.66 220	4.72 120	6.59 167	Aluminum	22.70	10.30
EJB3A	14.33 x 11.18 x 10.94 364 x 284 x 278	11.02 280	7.87 200	8.41 214	Aluminum	45.4	17.60
EJB4A	17.01 x 13.07 x 11.77 432 x 332 x 299	13.39 340	9.45 240	9.19 233	Aluminum	58.63	26.60
EJB45A	22.32 x 15.24 x 11.73 567 x 387 x 298	18.11 460	11.02 280	9.00 229	Aluminum	88.38	40.10
EJB5A	24.88 x 17.01 x 10.67 632 x 432 x 271	21.26 540	13.39 340	10.85 276	Aluminum	115.05	52.20
EJB6	34.25 x 22.05 x 18.90 870 x 560 x 480	28.35 720	19.69 500	14.67 373	Aluminum	351.76	159.6
EJB3BA	14.33 x 11.18 x 8.58 364 x 284 x 218	11.02 280	7.87 200	6.04 153	Aluminum	38.79	17.60
EJB4BA	17.01 x 13.07 x 9.02 432 x 332 x 229	13.55 344	9.45 240	6.44 164	Aluminum	49.81	22.60
EJB45BA	22.32 x 15.24 x 9.96 567 x 387 x 253	18.11 460	11.02 280	7.03 479	Aluminum	80.45	36.50
EJB5BA	24.88 x 17.01 x 9.02 632 x 432 x 229	21.26 540	13.39 340	7.97 202	Aluminum	98.30	44.60
EJB6B	34.25 x 25.59 x 14.96 870 x 650 x 380	28.35 720	19.69 500	10.73 272	Aluminum	307.90	139.70



89115226



EJBX SERIES JUNCTION BOXES



INDUSTRY STANDARDS

ATEX Directive 94/9/EC
 EN 60079-0
 EN 60079-1
 EN 60079-11
 EN 60079-26
 EN 61241-0
 EN 61241-1
 EN 61241-11

Certifications

II 2(1) GD Ex d [ia] IIB Ex tD A21 T5/T6 IP 65/66/67
 I M2 - Ex d I Mb
 II 2GD Ex d IIB+H2 T6,T5, T4 Gb Ex tb IIIC T85°C, T100°C, T135°C Db IP66/67
 II 2(1)GD Ex d [ia Ga] IIB+H2 T6, T5 Gb Ex tb [ia Da] IIIC T85°C, T100°C Db IP66/67

CESI 00 ATEX 036U (Component)
 CESI 01 ATEX 026 (Terminal box)
 CESI 01 ATEX 027 (Control, command and signaling units)
 CESI 02 ATEX 073 (Interface units)
 CESI 03 ATEX 015 (Unit with dischargers)
 IECEx TSA 06.0011 - GOST R - BRAZILIAN

GOST-R, INMETRO, Australia certifications available

APPLICATION

EJBX series junction boxes are enclosures applicable for Zone 1, 2, 21 or 22 with ATEX and IECEx certifications. They are suitable for chemically corrosive and extreme environments. They can be used as junction boxes with or without terminals or for installation of electrical equipment such as circuit breakers, signals, disconnectors, remote control switches or transformers.

Body and cover can be drilled and threaded according to customers' specification. In accordance with rules, Hoffman must perform the drilling.

FEATURES

- AISI 316L stainless steel enclosure with stainless steel bolts and screws for superior corrosion resistance
- High temperature-resistant silicone gasket provides IP66 / 67 rating
- Welded mounting brackets for easy installation
- Internal mounting panel
- Body and cover can be drilled and threaded according to customers' specifications
- Internal and external earth screws

ACCESSORIES

- Hazardous Location Breather Drain
- Hazardous Location Window Kits

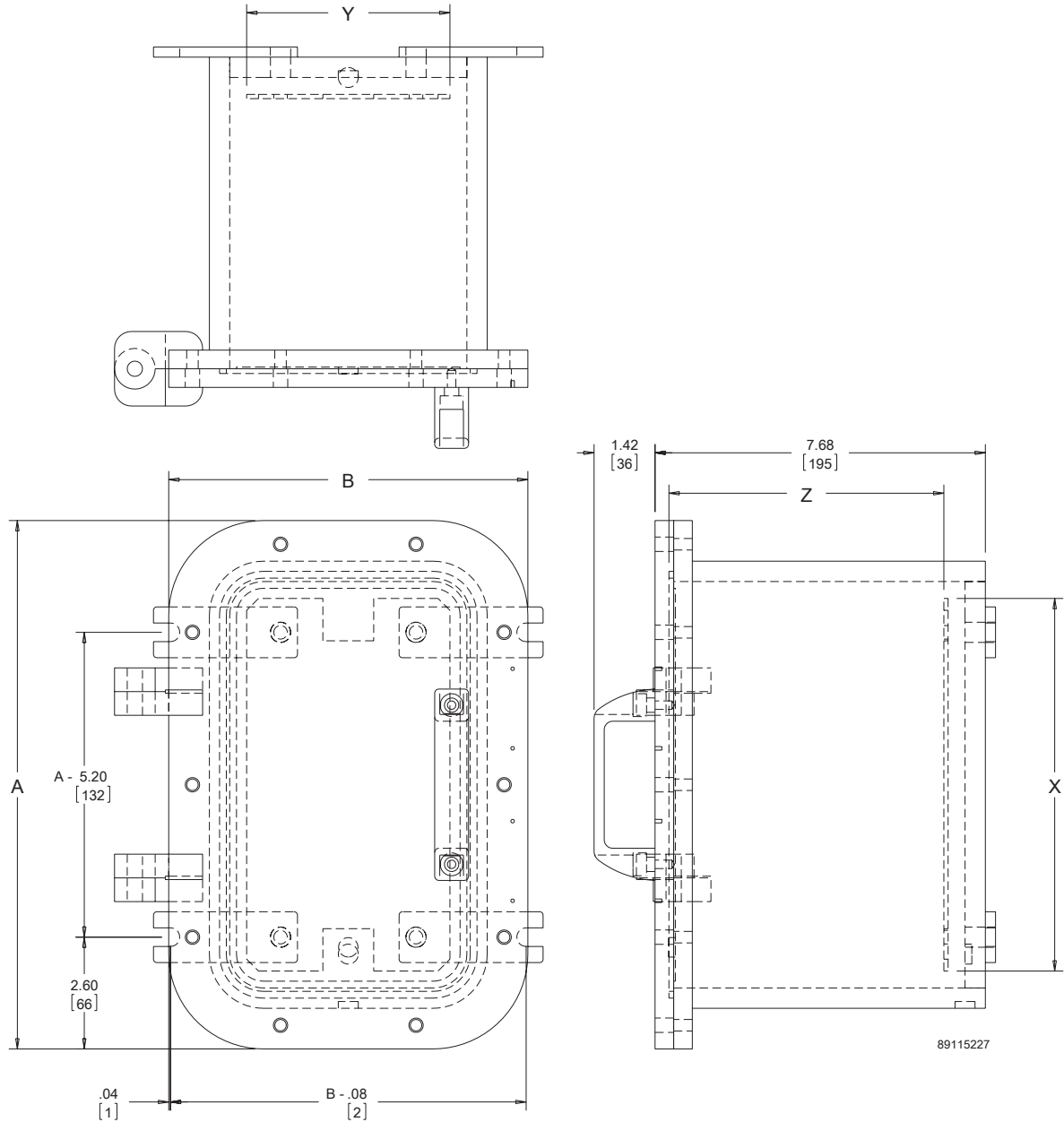
MODIFICATION AND CUSTOMIZATION

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

BULLETIN: HL5AS

Standard Product

Catalog Number	AxBxC in./mm	X in./mm	Y in./mm	Z in./mm	Material	Weight (lbs.)	Weight (kgs)
EJBX1	12.28 x 8.35 x 7.91 312 x 212 x 201	8.66 220	4.72 120	6.39 162	316L Stainless Steel	75.38	34.20
EJBX3B	14.65 x 11.50 x 7.91 372 x 292 x 201	11.02 280	7.87 200	6.39 162	316L Stainless Steel	112.84	51.20
EJBX4	17.01 x 13.07 x 11.18 432 x 332 x 284	13.39 340	9.45 240	9.42 239	316L Stainless Steel	163.54	74.20
EJBX45B	22.13 x 15.04 x 9.21 562 x 382 x 234	18.11 460	11.02 280	7.45 189	316L Stainless Steel	212.02	96.20
EJBX5B	24.88 x 17.01 x 10.00 632 x 432 x 254	21.26 540	13.39 340	8.24 209	316L Stainless Steel	260.51	118.20



89115227



GUB SERIES JUNCTION BOXES



INDUSTRY STANDARDS

ATEX Directive 94/9/EC
 EN 60079-0
 EN 60079-1
 EN 60079-31
 EN 60439-1
 EN 60079-11
 EN 60079-26
 EN 60529

Certifications

II 2 GD Ex d IIC Gb Ex tb IIIC Db IP66
 II 2 GD Ex d IIC T6, T5 Gb Ex tb IIIC T85°C, T100°C Db IP66
 II (1) GD Ex d [ia Ga] IIC T6, T5 Gb Ex tb [ia Da] IIIC T85°C, T100°C Db IP66

CESI 01 ATEX 034U (Component)
 CESI 01 ATEX 035 (Terminal box)
 CESI 01 ATEX 036 (Control, command and signalling units)
 CESI 03 ATEX 174 (Interface units)
 IECEx TSA 06.0012 - GOST R - BRAZILIAN

GOST-R, INMETRO, Australia certifications available

APPLICATION

GUB series junction boxes are enclosures applicable for Zone 1, 2, 21 or 22 with ATEX and IECEx certifications. They have a screw cover and are used as junction boxes with or without terminals or for installation of electrical equipment such as fuses, relays, disconnectors, transformers, or remote control switches.

Body can be drilled and threaded according to customers' specifications. In accordance with rules, Hoffman must perform the drilling.

FEATURES

- Low copper aluminum alloy for corrosion resistance
- Neoprene gasket provides IP66 rating
- Mounting lugs for easy installation
- Epoxy coating RAL 7035 (Light grey) coating
- Internal mounting panel

ACCESSORIES

- Internal anti-condensation coating RAL 2004 (pure orange)
- External epoxy coating in different color (specify the RAL number)
- Hazardous Location Breather Drains

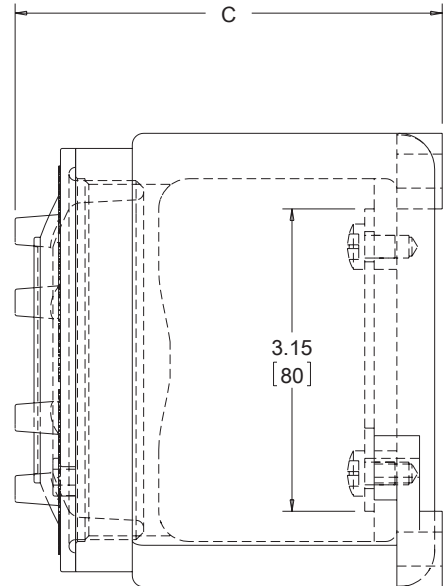
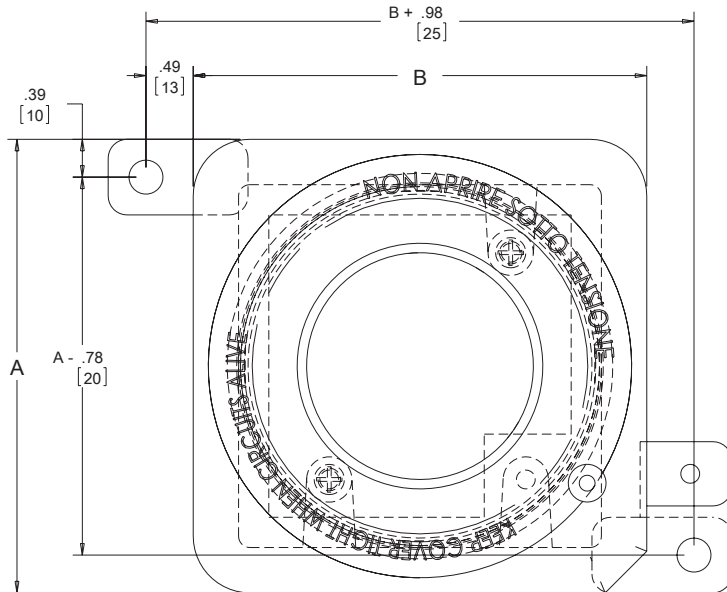
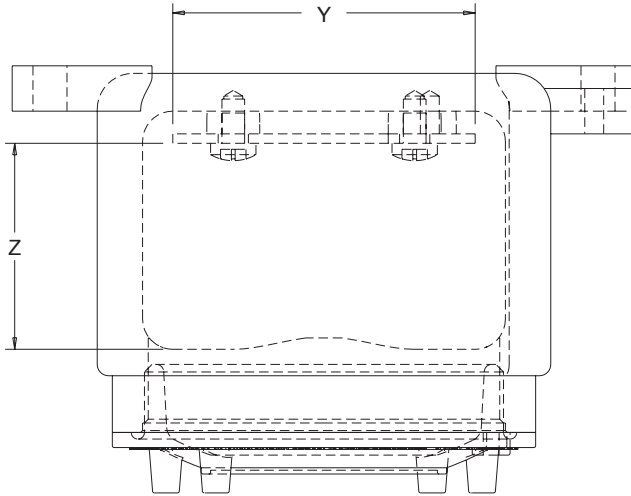
MODIFICATION AND CUSTOMIZATION

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BULLETIN: HL5AA

Standard Product

Catalog Number	AxBxC in./mm	X in./mm	Y in./mm	Z in./mm	Material	Weight (lbs.)	Weight (kgs)
GUB	4.72 x 4.72 x 4.57 120 x 120 x 116	3.15 80	3.15 80	2.15 55	Aluminum	6.85	3.11
GUB01	6.85 x 6.85 x 5.51 174 x 174 x 140	4.45 113	4.45 113	2.85 72	Aluminum	11.24	5.10
GUB02	9.06 x 9.06 x 6.50 230 x 230 x 165	5.91 150	5.91 150	3.17 81	Aluminum	17.70	8.03



89115228



ZONEX SA SERIES JUNCTION BOXES



INDUSTRY STANDARDS

ATEX Directive 94/9/EC
 EN 60079-0
 EN 60079-1
 EN 60079-7
 EN 60079-11
 EN 60079-31

Certifications

II 2 GD Ex e II T5/T6 Ex tD A21 IP 66
 II 2(1) GD Ex e(ia) IIC T5/T6 Ex tD A21 IP 66
 II 1 GD Ex ia IIC T5/T6 Ex tD A21 IP 66
 II 2 GD Ex de IIC T5/T6 Gb Ex tb IIIC T100°C÷T85°C Db IP66

CESI 03 ATEX 333 (Terminal box)
 CESI 03 ATEX 115 (Control, command and signaling units)
 IECEx TSA 13.0001 - GOST R

APPLICATION

Zonex SA series junction boxes are suitable for increased safety or intrinsically safe enclosures applicable for Zone 1, 2, 21 or 22 with ATEX and IECEx certifications. They can be supplied with multipolar terminal blocks or modular terminal blocks. They can also be equipped with pilot lights, push buttons and measuring instruments.

Body and cover can be drilled and threaded according to customers' specifications. In accordance with rules, Hoffman must perform the drilling.

FEATURES

- Low copper aluminum alloy enclosure with stainless steel bolts and screws for corrosion resistance
- Screw cover configuration for easy access
- High temperature-resistant silicone gasket provides IP66 rating
- Fixed mounting holes for easy installation
- Epoxy coating RAL 7035
- Internal mounting panel
- Body and cover can be drilled according to customers' specifications

ACCESSORIES

- Internal anti-condensation coating RAL 2004 (pure orange)
- External epoxy coating in different color (specify the RAL number)
- Hazardous Location Breather Drain

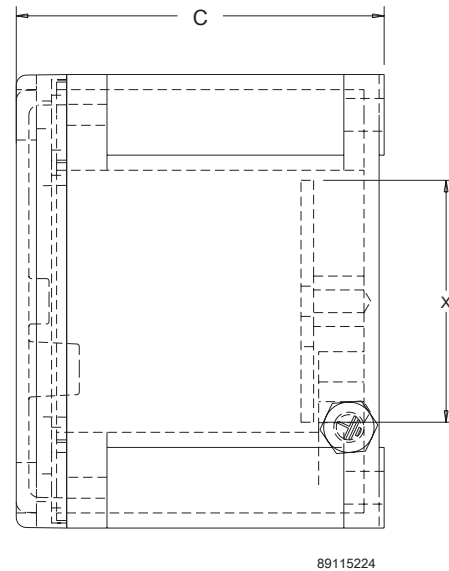
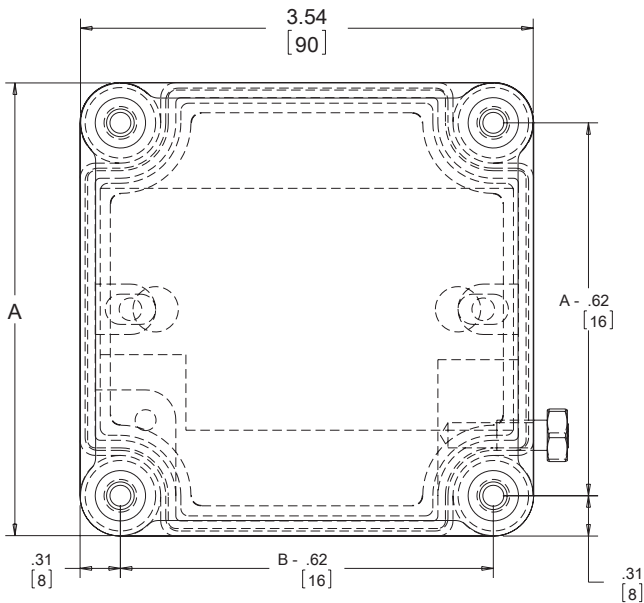
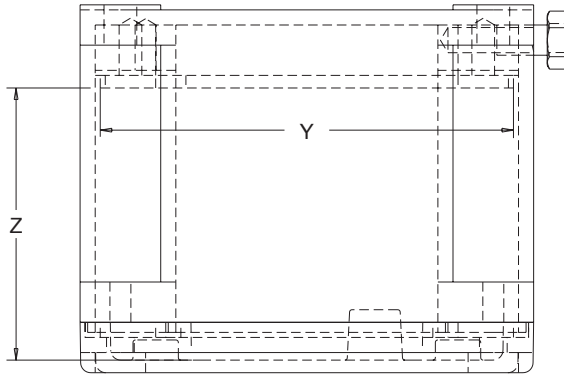
MODIFICATION AND CUSTOMIZATION

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

BULLETIN: HL4

Standard Product

Catalog Number	AxBxC in./mm	X in./mm	Y in./mm	Z in./mm	Material	Weight (lbs.)	Weight (kgs)
SA090907	3.54 x 3.54 x 2.95 90 x 90 x 75	3.23 82	1.89 48	2.13 54	Aluminum	3.53	1.60
SA111108	4.33 x 4.33 x 3.35 110 x 110 x 85	3.94 100	2.68 68	2.52 64	Aluminum	3.75	1.70
SA141410	5.79 x 5.79 x 3.94 147 x 147 x 100	5.39 137	4.13 105	3.15 80	Aluminum	4.41	4.41
SA171108	6.69 x 4.33 x 3.35 170 x 110 x 85	6.26 159	2.64 67	2.52 64	Aluminum	4.41	4.41
SA202012	7.87 x 7.87 x 4.72 200 x 200 x 120	7.32 186	5.75 146	3.88 99	Aluminum	6.39	2.90
SA301410	12.01 x 5.79 x 4.33 305 x 147 x 110	11.22 285	3.82 97	3.52 89	Aluminum	7.05	3.20
SA302310	12.01 x 9.06 x 4.33 305 x 230 x 110	11.22 285	7.09 180	3.52 89	Aluminum	8.82	4.00
SA302318	12.01 x 9.06 x 7.48 305 x 230 x 190	11.22 285	7.09 180	6.67 169	Aluminum	10.36	4.70
SA473018	18.50 x 12.01 x 7.68 470 x 305 x 195	17.83 453	10.00 254	6.83 173	Aluminum	16.97	7.70



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.

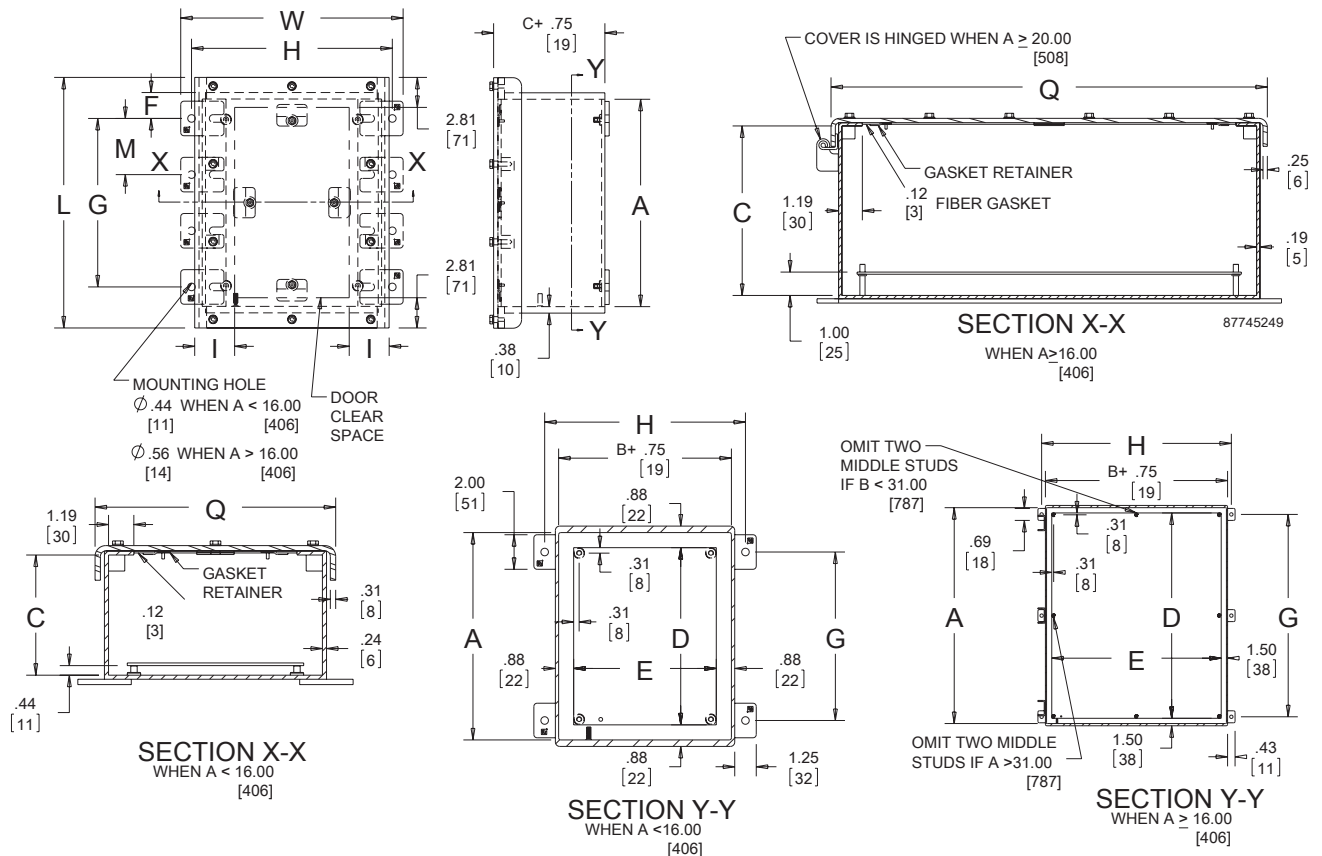
Panels for Type 1 Enclosures and Small Type 3R Enclosures
Panels for Type 3R, 4, 4X, 12 and 13 Enclosures
Terminal Block Kit Assembly for Junction Boxes Overview
Terminal Block Kit Assembly for Type 4, 12, 13 Enclosures Overview
Hazardous Location Light Kits

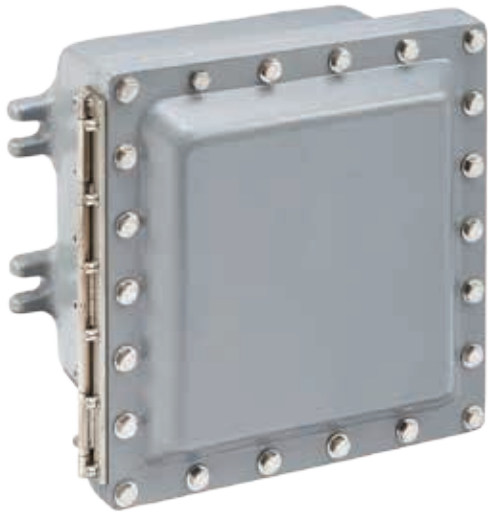
BULLETIN: A9

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

Purchase panels separately.



SX7 SERIES JUNCTION BOXES

INDUSTRY STANDARDS

UL1203
 NEC 500 – 503
 UL 886
 NEMA 7, 9, 4X, 3

Certifications

Class I, Division 1 Group C, D
 Class II Group E, F, G
 Class III
 Type 7, 9, 4X, 3

APPLICATION

SX7 series junction boxes are enclosures applicable for hazardous locations. They can be used as junction, pull and splice boxes as well as to enclosure electrical devices and instruments. Applications can include components such as motor starters, circuit breakers, control stations, terminal blocks, pilot lights, switch racks and panelboards.

FEATURES

- Low copper aluminum alloy enclosure with stainless steel bolts and screws for corrosion resistance
- Gasket o-ring provides Type 4X rating
- Internal mounting panel
- Grey electrostatic polyester paint
- External earth screw
- NPT threads for rigid conduit
- Body and cover can be drilled and threaded according to customers' specification

ACCESSORIES

- Glass windows of different diameters
- Breather drain
- Epoxy paint

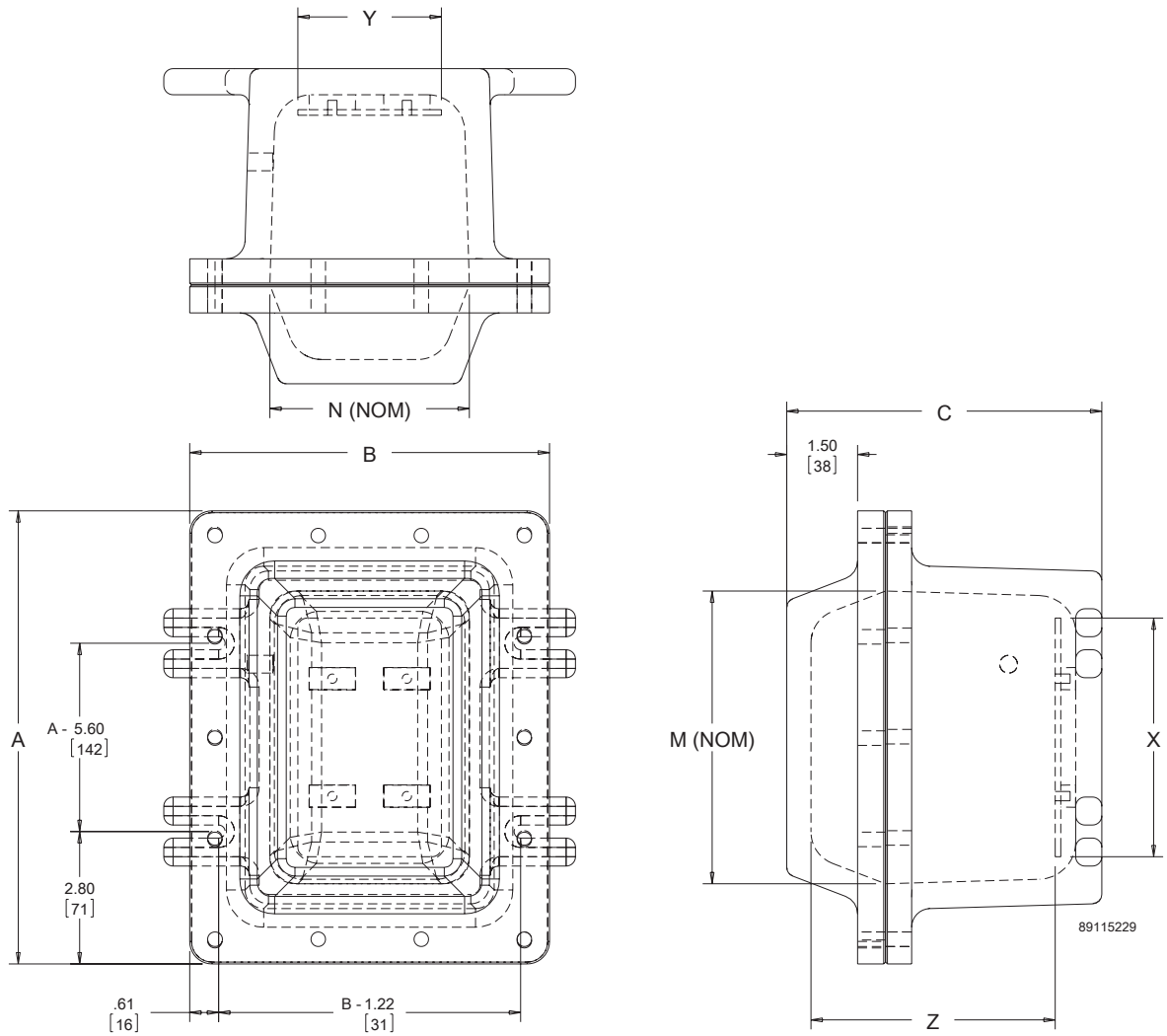
MODIFICATION AND CUSTOMIZATION

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

BULLETIN: HL5U

Standard Product

Catalog Number	AxBxC in.	AxBxC mm	M (in.)	M (mm)	N (in.)	N (mm)	X (in.)	X (mm)	Y (in.)	Y (mm)	Z (in.)	Z (mm)	Material	Weight (lbs.)	Weight (kgs)
SX7E644	9.57 x 7.60 x 7.09	243 x 193 x 180	6.00	152	4.00	102	5.04	128	3.03	77	5.16	131	Aluminum	16.09	7.30
SX7E664	9.57 x 9.57 x 7.09	243 x 243 x 180	6.00	152	6.00	152	5.04	128	5.04	128	5.16	131	Aluminum	21.60	9.80
SX7E666	10.51 x 10.51 x 5.91	267 x 267 x 150	6.00	152	6.00	152	5.51	140	5.51	140	7.45	189	Aluminum	22.48	10.20
SX7E864	9.76 x 11.89 x 6.18	248 x 302 x 157	8.00	203	6.00	152	6.77	172	4.80	122	4.87	124	Aluminum	26.89	12.20
SX7E866	11.34 x 9.41 x 8.54	288 x 239 x 217	8.00	203	6.00	152	7.00	178	4.96	126	6.75	171	Aluminum	27.55	12.50
SX7E883	12.09 x 12.09 x 6.18	307 x 307 x 157	8.00	203	8.00	203	7.48	190	7.48	190	4.49	114	Aluminum	23.36	10.60
SX7E884	11.50 x 11.50 x 6.50	292 x 292 x 165	8.00	203	8.00	203	6.65	169	6.65	169	5.00	127	Aluminum	26.89	12.20
SX7EAA6	13.82 x 14.02 x 9.06	351 x 356 x 230	10.00	254	10.00	254	9.37	238	9.37	238	6.69	170	Aluminum	47.83	21.70
SX7EA66	10.00 x 13.98 x 8.66	254 x 355 x 220	11.18	284	7.21	183	8.74	222	15.75	400	7.22	183	Aluminum	32.40	14.70
SX7EC56	9.33 x 15.83 x 9.49	237 x 402 x 241	12.00	305	5.00	127	10.80	274	4.33	110	7.52	191	Aluminum	40.11	18.20
SX7EFC6	15.87 x 18.66 x 9.49	403 x 474 x 241	15.00	381	12.00	305	13.15	334	10.32	262	7.80	198	Aluminum	99.62	45.20
SX7EGC6	19.80 x 15.75 x 9.37	503 x 400 x 238	16.00	406	12.00	305	14.33	364	10.32	262	7.56	192	Aluminum	99.18	45.00
SX7EGC8	15.75 x 19.80 x 9.37	400 x 503 x 238	16.00	406	12.00	305	14.13	359	10.08	256	7.64	194	Aluminum	101.82	46.20
SX7EGE9	18.35 x 19.84 x 12.13	466 x 504 x 308	16.00	406	14.00	356	13.78	350	12.28	312	10.08	256	Aluminum	131.80	59.80
SX7EGF6	18.70 x 19.80 x 9.06	475 x 503 x 230	16.00	406	15.00	356	14.41	366	13.31	338	7.24	184	Aluminum	101.38	46.00
SX7EGG6	19.68 x 19.68 x 8.58	500 x 500 x 218	16.00	406	16.00	406	21.65	550	21.65	550	10.55	268	Aluminum	105.79	48.00
SX7EIC8	22.44 x 16.50 x 10.98	570 x 419 x 279	18.00	457	12.00	305	16.46	418	8.98	228	7.29	185	Aluminum	124.31	56.40
SX7EII C	22.44 x 22.28 x 15.35	570 x 566 x 390	18.00	457	18.00	457	15.63	397	13.66	347	11.35	288	Aluminum	207.40	94.10
SX7EKK8	24.09 x 24.13 x 11.14	612 x 613 x 283	20.00	508	20.00	508	18.11	460	16.14	410	7.13	181	Aluminum	208.06	94.40
SX7EOCC	15.98 x 27.80 x 15.83	406 x 706 x 402	24.00	610	12.00	305	21.10	536	7.40	188	11.42	290	Aluminum	192.63	87.40
SX7EOLF6	19.21 x 28.03 x 9.53	488 x 712 x 242	24.00	610	15.00	356	22.36	268	11.65	296	5.16	131	Aluminum	175.44	79.60
SX7ESG8	20.08 x 32.13 x 11.54	510 x 816 x 293	28.00	711	16.00	406	26.06	662	12.52	318	7.53	191	Aluminum	217.53	98.70
SX7ESGD	20.39 x 32.44 x 18.03	518 x 824 x 458	28.00	711	16.00	406	25.00	635	11.50	292	14.02	356	Aluminum	279.91	127.00
SX7EXCD	16.69 x 37.28 x 17.28	424 x 947 x 439	33.00	838	12.00	305	31.50	800	8.66	220	13.87	352	Aluminum	335.45	152.20



SX9 SERIES SCREW COVER JUNCTION BOXES



INDUSTRY STANDARDS

UL 1203 listed; File No. E468486
 cUL File No. E468486
 Class I, Group C, D
 Class II, Group E, F, G

NEMA Type 3, 4X, 7, 9
 NEC Art 500-503

APPLICATION

SX9 Series Junction Boxes are UL certified. They have a screw cover and are used either as junction boxes with/without terminals or for installation of electrical equipment such as fuses, relays, disconnectors, remote control switches, transformers, ballast, etc. Body and cover can be drilled and threaded according to customers' specification.

SPECIFICATIONS

- Body and cover constructed of low copper content aluminum alloy
- Internal/external stainless steel earth screws
- Mounting panel and mounting screws included
- Gasket between body and cover

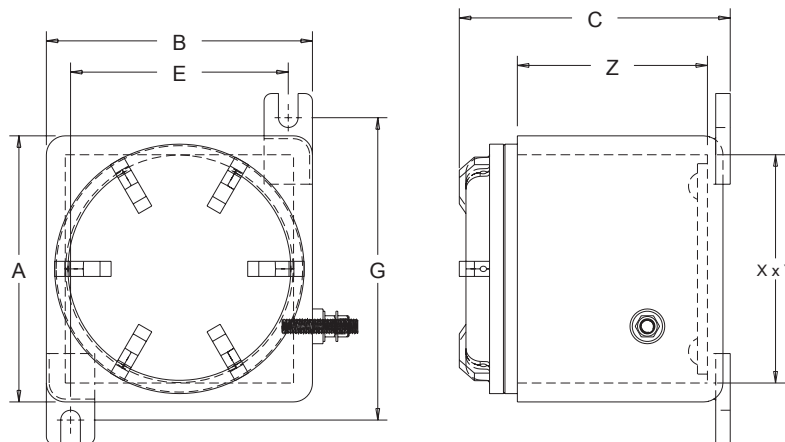
FINISH

RAL 7031 electrostatic polyester paint

BULLETIN: HL5U

Standard Product

Catalog Number	AxBxC in./mm	E in./mm	G in./mm	X in./mm	Y in./mm	Z in./mm	Weight (lbs.)	Weight (Kgs)	Panel Dims. in./mm
SX9GUB1A	6.93 x 6.93 x 7.09	5.67	7.87	6.30	6.30	3.94	14.55	7	5.12 x 5.12
	176 x 176 x 180	144	200	160	160	100			130 x 130
SX9GUB2A	9.68 x 8.74 x 7.87	10.00	8.23	8.11	8.11	4.13	21.16	10	7.09 x 5.91
	246 x 222 x 200	254	209	206	206	105			180 x 150
SX9GUB3A	11.81 x 10.63 x 9.45	11.54	10.67	10.75	9.57	4.53	39.01	18	9.25 x 8.66
	300 x 270 x 240	293	271	273	243	115			235 x 220



89119670

Notes

HAZARDOUS LOCATION WINDOW KITS



INDUSTRY STANDARDS

IECEX and ATEX Approvals
 Suitable for use on increased safety enclosures for ZONE 1 or ZONE 2 assemblies
 ATEX Directive 94/9/EC
 ATEX
 Sira 13ATEX3315U
 Ex e IIC Gb
 Ex tb IIIC Db IP 66
 IECEX
 IECEX SIR 13.0123U
 Ex e IIC Gb
 Ex tb IIIC Db IP 66

UL 508A Component Recognized; Type 4, 4X, 12, 3R; File No. E61997

cUR Component Recognized per CSA C22.2 No. 94; Type 4, 4X, 12, 3R; File No. E61997
 NEMA/EEMAC 4, 4X, 12, 13
 IEC 60529, IP66

APPLICATION

Hazardous Location Window Kits are designed to be used on Increased Safety (Ex e) enclosures in ATEX or IECEX Zone 1 or 2 hazardous areas. These window kits are made with a robust heavy-gauge Type 316 stainless steel frame and a silicone gasket to ensure a dust-, oil-, and water-tight seal. Designed for use as viewing windows, these window kits are ideal for visibility of internal enclosure components. The windows are easily installed by making a cutout in the enclosure and attaching the window and frame with included mounting hardware.

FEATURES

- Robust window frames are made from heavy-gauge Type 316 stainless steel with a brushed finish
- Secure sealing with silicon gasket to protect against water and dust ingress in extreme-temperature applications ranging from -55 C (-67 F) to 180 C (356 F)
- Maintain visual on components through .25-in. (6-mm) tempered safety glass
- Easy installation in enclosure cutouts with window frame hardware

MODIFICATION AND CUSTOMIZATION

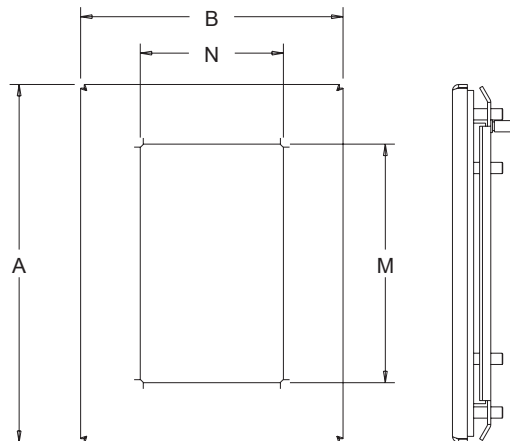
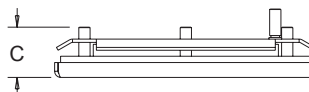
Hoffman excels at modifying and customizing products to your specifications. Contact your local Hoffman sales office or distributor for complete information.

BULLETIN: HLY

Standard Product

Catalog Number	AxBxC in./mm	M in./mm	N in./mm	Required Cutout size in./mm
EXWK53SS6	7.50 x 5.50 x 1.43 191 x 140 x 36	5.00 127	3.00 76	6.69 x 4.69 170 x 119
EXWK95SS6	11.50 x 8.00 x 1.43 292 x 203 x 36	9.00 229	5.50 140	10.69 x 7.19 272 x 183
EXWK711SS6	9.50 x 13.05 x 1.43 241 x 343 x 36	7.00 178	11.00 279	8.69 x 12.69 211 x 392
EXWK138SS6	15.50 x 10.50 x 1.43 394 x 267 x 36	13.00 330	8.00 203	14.69 x 9.69 373 x 246
EXWK715SS6	9.50 x 17.50 x 1.43 241 x 445 x 36	7.00 178	15.00 381	8.69 x 16.69 211 x 424
EXWK1711SS6	19.50 x 13.50 x 1.43 495 x 343 x 36	17.00 432	11.00 279	18.69 x 12.69 475 x 322
EXWK720SS6	9.50 x 22.50 x 1.43 241 x 572 x 36	7.00 178	20.00 508	8.69 x 21.69 221 x 551
EXWK2315SS6	25.50 x 17.50 x 1.43 648 x 445 x 36	23.00 584	15.00 381	24.69 x 16.69 627 x 424
EXWK724SS6	9.50 x 26.50 x 1.43 241 x 673 x 36	7.00 178	24.00 610	8.69 x 25.69 653 x 221
EXWK729SS6	9.50 x 31.50 x 1.43 241 x 800 x 36	7.00 178	29.00 737	8.69 x 30.69 221 x 780
EXWK2919SS6	31.50 x 21.50 x 1.43 800 x 546 x 36	29.00 737	19.00 483	30.69 x 20.69 780 x 526

M x N = Window size



89106854

HAZARDOUS LOCATION LED LIGHTS



INDUSTRY STANDARDS

ETL Listed
 Class I Division 2, Groups A, B, C and D, T3
 Conforms To CSA.22.2 No. 137, 213, 250 Standards
 Conforms To UL 844 & 1598 Standards
 Conforms to ISA-12.12-01
 Maintains enclosure Type 4, 4X rating when properly installed

APPLICATION

Hazardous Location LED Lights provide enclosure illumination in hazardous environments. These lights are ideal for remote and darkened enclosure applications in Class 1, Division 2 hazardous areas. With a robust design, these lights have a lifespan of 100,000 hours and superior lighting performance with minimal power consumption. These versatile, slim-profile LED lights provide mounting flexibility and are easy to install in an enclosure.

FEATURES

- LED technology provides a life span of up to 100,000 operating hours
- Operating temperature of -40 F (-40 C) to 185 F (85 C)
- Provide superior cool white lighting with color temperature range of 6500K
- Easy installation with included mechanical assembly kit while maintaining enclosure rating up to UL Type 4X
- Includes 6-ft connect cable with flying leads
- Provide superior cool white lighting with color temperature range of 6500K

Standard LED Light

- Maximum lighting for control panels with 558 to 2,256 lumens light output and ingress protection of IP54
- Minimum power consumption and superior lighting with 24 VDC power input
- Versatile mounting allows the light to be positioned horizontally or vertically with 160 degree rotation
- 100 degree angle of illumination
- Available in 12, 24, 36, and 48-inch lengths

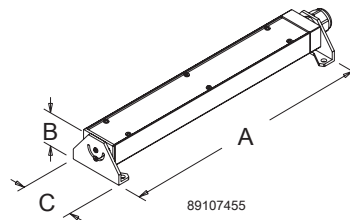
Indoor/Outdoor LED Light

- Robust construction design for suitable outdoor applications; IP66
- Minimum power consumption and superior lighting with 12-24 VDC power input
- Maximum lighting with 459 lumens output
- 360 degree rotation allows flexible and versatile mounting
- 100 degree angle of illumination

BULLETIN: HLY

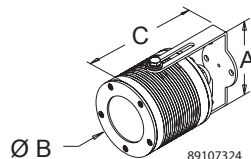
Standard Product Standard LED Light

Catalog Number	AxBxC in./mm	Description	Weight (lbs.)	Weight (kg)	VDC	Amps	Estimated light output LMS
LEDHL24V12	13.56 x 1.69 x 2.69 344 x 43 x 68	LED Light, 12-in.	0.7	0.3	24	0.33	558
LEDHL24V24	25.06 x 1.69 x 2.69 636 x 43 x 68	LED Light, 24-in.	1.4	0.6	24	0.66	1116
LEDHL24V36	36.04 x 1.69 x 2.69 916 x 43 x 68	LED Light, 36-in.	2.1	0.9	24	0.99	1674
LEDHL24V48	47.06 x 1.69 x 2.69 1195 x 43 x 68	LED Light, 48-in.	2.8	1.2	24	1.32	2256



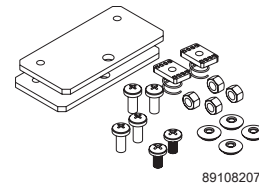
Standard Product Indoor/Outdoor LED Light

Catalog Number	AxBxC in./mm	Description	Weight (lbs.)	Weight (kg)	VDC	Amps
LEDHL24VCAN	3.74 x 3.48 x 5.62 95 x 88 x 143	LED Light, Indoor/Outdoor	2.3	1.0	12-24	0.66 - 0.35



REPLACEMENT HARDWARE KIT FOR HAZARDOUS LOCATION LED LIGHTS

Replacement Hardware Kit is available for the replacement of lost or damaged hardware supplied with Hazardous Location LED lights. Kit includes bracket adapter plate, all mounting hardware and complete instructions.



89108207

BULLETIN: HLY

Catalog Number	Description
AHKC1D2LED	Replacement Hardware Kit

HAZARDOUS LOCATION DOOR SWITCH



APPLICATION

The Hazardous Location Door Switch is designed to be used with Hoffman Hazardous Location LED Lights in Class 1, Division 2 hazardous areas. The included hardware kit allows the door switch to easily be mounted and maintain the enclosure rating up to UL Type 4X. This versatile switch activates the LED light when the enclosure door is opened and can be mounted on any flange of the enclosure. The included five-foot connect cable allows ease of wiring to the enclosure back panel.

BULLETIN: HLY

INDUSTRY STANDARDS

Switch Rating

Explosion-proof for Class 1, Division 2, Groups A, B, C, and D
FM Approved to Standard Class 3600, 3615-1989

Catalog Number	Description	Max. Voltage	Operating Temperature	Max. load
LEDHLSWITCH	Door Switch, C1D2	30 VDC / 5 Amps	-40 F (40 C) to 194 F (90 C)	5 Amps at 30 VDC

HAZARDOUS LOCATION BREATHER DRAINS



INDUSTRY STANDARDS

Ex e Breather Drains

Certified for Zone 1 or 2 areas

ATEX

Sira 13ATEX3354U

Ex e IIC Gb

Ex tb IIIC Db IP66

IECEX

IECEX SIR 13.0138U

Ex e IIC Gb

Ex tb IIIC Db IP66

cSAus Certified Class 1 Zone 1, Ex e II, IP66, Type 4X

NEMA/EEMAC Type 4, 4X

IEC 60529, IP66

Maintain enclosure Type 4, 4X rating when properly installed

Ex d Breather Drains

Certified for Zone 1 or 2 areas

ATEX

ITS13ATEX17900X

Ex d IIC Gb

Ex e IIC Gb

Ex tb IIIC Db IP66

IECEX

IECEX ITS 13.0049X

Ex d IIC Gb

Ex e IIC Gb

Ex tb IIIC Db IP66

NEMA/EEMAC Type 4, 4X

IEC 60529, IP66

Maintain enclosure Type 4, 4X rating when properly installed

APPLICATION

Hazardous Location Breather Drains prevent moisture build-up within hazardous approved enclosures while maintaining enclosure UL Type rating. Drains are to be used when an enclosure is subject to fluctuations in temperature which can lead to the formation of condensation and a subsequent moisture build-up. These drains allow air within an enclosure to breathe with the surrounding atmosphere, preventing condensation and any potential damage to electrical equipment.

FEATURES

- Reduce corrosion that can limit the life of internal electrical and electronic components
- Prevent condensation when installations are subject to fluctuations in temperature in hazardous locations
- Effectively drain any water present within the enclosure
- Minimize moisture build-up within the enclosure by allowing air in the enclosure to breathe with surrounding atmosphere
- Position at the lowest point of an enclosure to ensure optimal draining of any moisture
- Maintain enclosure's UL Type rating when properly installed
- Available for Increased Safety (Ex e) and Flameproof (Ex d) applications

SPECIFICATIONS

Ex e Breather Drains:

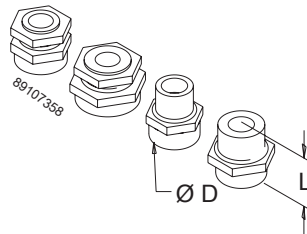
- Type 316 stainless steel with castellated nut and nitrile O-ring
- 10mm thread length
- Install in a clearance hole 0.5 to 1.0mm larger than major diameter, or in a tapped hole
- Operating temperature of -58 F (-50 C) to 185 F (85 C)

Ex d Breather Drains:

- Type 316 stainless steel with silicone O-ring
- 16mm thread length
- Install in a tapped hole
- Operating temperature of -22 F (-30 C) to 302 F (150 C)

BULLETIN: HLY

Catalog Number	AxBxC in./mm	Description	Thread Type	D in./mm	L in./mm	Weight (lbs.)	Weight (kg)
EXEBDM20SS6	1.57 x 1.57 x 0.98 40 x 40 x 25	Ex e M20 Breather Drain	M20	1.13 28.7	.99 25.1	0.16	0.1
EXEBDM25SS6	1.57 x 1.57 x 0.98 40 x 40 x 25	Ex e M25 Breather Drain	M25	1.41 35.8	1.30 33.0	0.27	0.1
EXDBDM20SS6	1.57 x 1.57 x 0.98 40 x 40 x 25	Ex d M20 Breather Drain	M20	1.06 26.9	.99 25.1	0.18	0.1
EXDBDM25SS6	1.57 x 1.57 x 0.98 40 x 40 x 25	Ex d M25 Breather Drain	M25	1.2 31.8	1.30 33.0	0.25	0.1



HAZARDOUS LOCATION HOLE SEALS



INDUSTRY STANDARDS

IECEX and ATEX Approvals
 Suitable for use on increased safety enclosures for ZONE 1 or ZONE 2 assemblies
 ATEX Directive 94/9/EC

ATEX

Ex e IIC Gb
 Ex tb IIIC Db IP 66
 Sira 14ATEX3233U

IECEX

Ex e IIC Gb
 Ex tb IIIC Db IP 66
 IECEX SIR 14.0073U

UL 508A Component Recognized; Type 4, 4X, 12, 3R; File No. E61997
 cUR Component Recognized per CSA C22.2 No. 94; Type 4, 4X, 12, 3R; File No. 42186

NEMA/EEMAC Type 3R, 4, 4X, 12
 IEC 60529, IP66

APPLICATION

Hazardous Location Hole Seals are designed to be used on Increased Safety (Ex e) enclosures in ATEX or IECEX Zone 1 or 2 hazardous areas. Certified to be used on metallic, non-painted enclosures, these hole seals are made with a robust Type 316 stainless steel formed outer plate and a silicone rubber gasket to ensure a dust-, oil- and water-tight seal. Designed to seal extra pushbutton holes, conduit openings and knockout openings, these self-centering hole seals are easy to install.

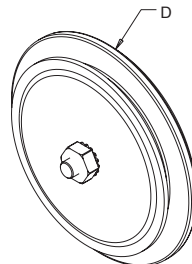
FEATURES

- Robust formed outer plates are made from Type 316 stainless steel with a brushed finish
- Secure sealing with silicon rubber gasket to protect against water and dust ingress in extreme temperature applications ranging from -55 C (-67 F) to 180 C (356 F)
- Seal pushbutton holes, conduit openings and knockout openings against dust, dirt, oil and water
- Easy installation in enclosure cutouts with self-centering hole seals
- Hole seals are available in metric and english standard hole sizes

BULLETIN: HLY

Standard Product

Catalog Number	Fits	Hole Dia. (in.)	Hole Dia. +.25/-.00 (mm)	Assembly Dia. D (in.)	Assembly Dia. D (mm)
EXAS050SS6	1/2-in. Conduit or M20	.787 - .885	20	1.36	35
EXAS075SS6	3/4-in. Conduit or M25	.984 - 1.082	25	1.71	43
EXAS100SS6	1-in. Conduit or M32	1.259 - 1.358	32	1.89	48
EXAS125SS6	1 1/4-in. Conduit or M40	1.574 - 1.673	40	2.33	59
EXAS150SS6	1 1/2-in. Conduit or M50	1.968 - 2.066	50	2.64	67
EXAS200SS6	2-in. Conduit or M63	2.480 - 2.578	63	3.14	80
EXAS250SS6	2 1/2-in. Conduit or M75	2.952 - 3.051	75	3.64	93



89119425

Notes

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

Note: Pressure Vent not required when inlet pressure limited to 5PSI using standard TR-10G. For inlet pressure over 5PSI order EPV-1-SA-00 or EPV-1-SA-90 separately. Contact Hoffman for pricing.

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

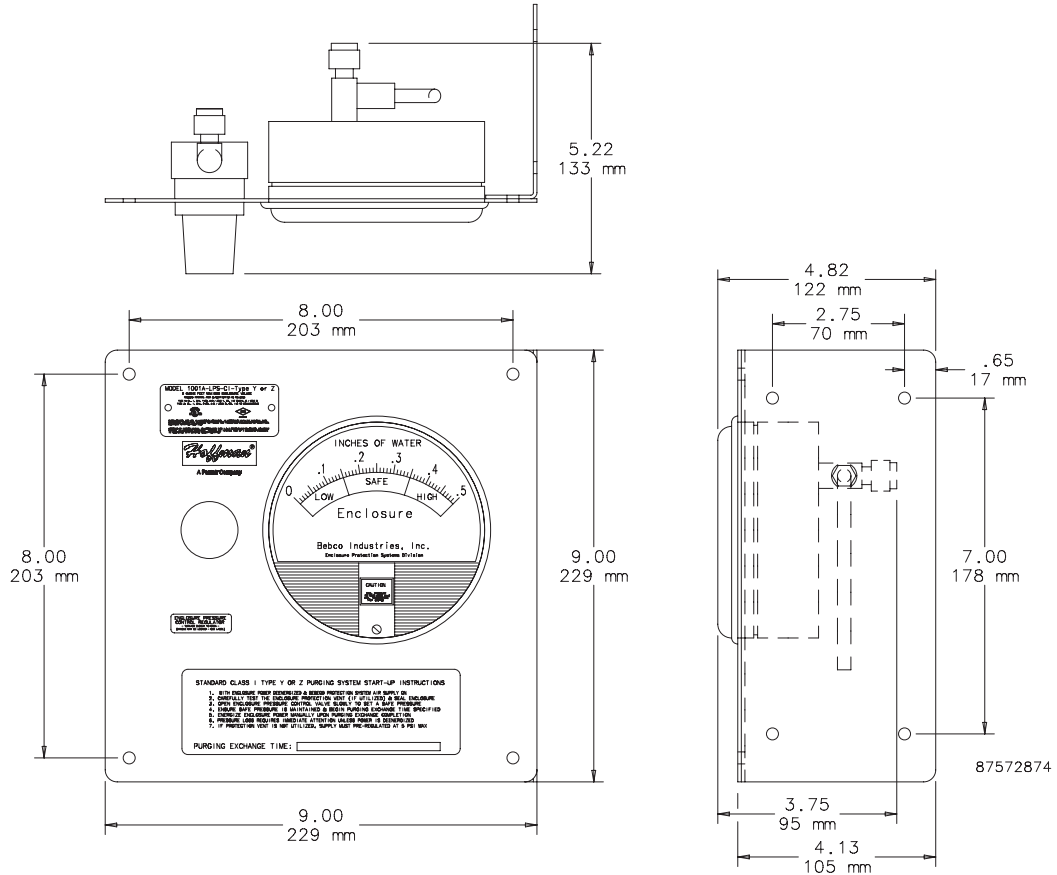
Hoffman excels at modifying and customizing products to your specifications. Contact your local Hoffman sales office or distributor for complete information.

BULLETIN: HL

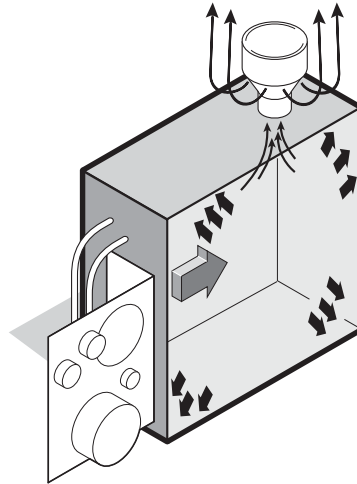
Standard Product

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



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

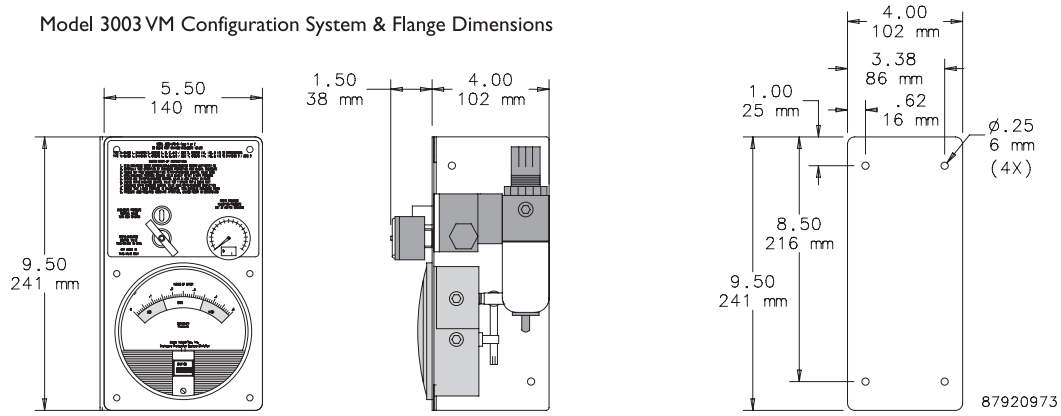
Enclosures should be constructed from materials such as metal, fiberglass or polycarbonate material. Enclosure seal should meet or exceed NEMA Type 4 or Type 12 performance requirements.

BULLETIN: HL

Standard Product

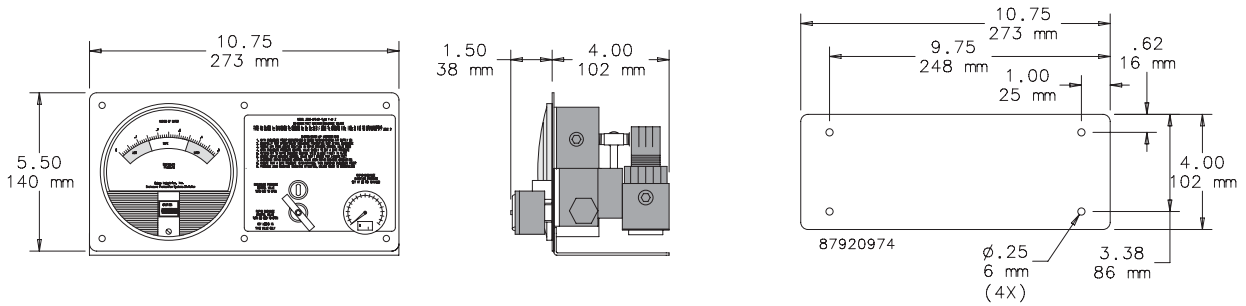
Catalog Number	Height in./mm	Width in./mm	Depth in./mm	Volume (ft. ³)	Volume (m ³)	Weight (lb.)	Weight (kg)
A3003YZVM	9.50 241	5.50 140	5.50 140	90	2.55	10	4.54
A3003YZHM	5.50 140	10.75 273	5.50 140	90	2.55	10	4.54

Model 3003 VM Configuration System & Flange Dimensions



Vertical Mount Flange

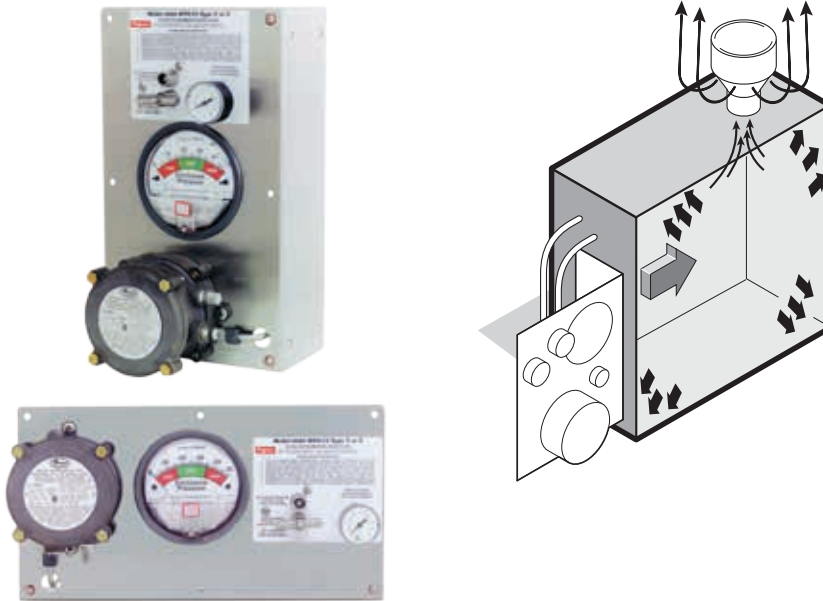
Model 3003 HM Configuration System & Flange Dimensions



Horizontal Mount Flange



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

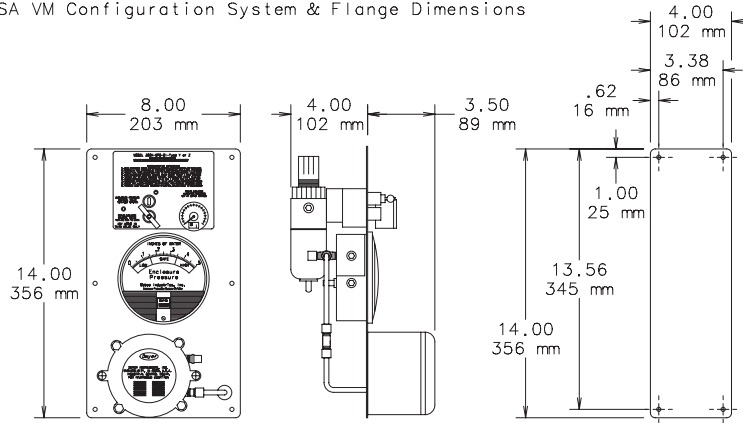
Hoffman excels at modifying and customizing products to your specifications. Contact your local Hoffman sales office or distributor for complete information.

BULLETIN: HL

Standard Product

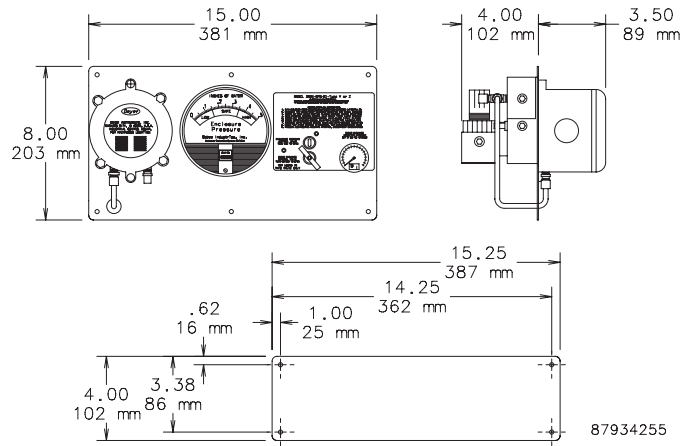
Catalog Number	Height in./mm	Width in./mm	Depth in./mm	Volume (ft. ³)	Volume (m ³)	Weight (lb.)	Weight (kg)
ATEX3003YZVM	14.00 356	8.00 203	7.50 189	90	2.55	18	8.2
ATEX3003YZHM	8.00 203	15 361	7.50 189	90	2.55	18	8.2

WPSA VM Configuration System & Flange Dimensions



WPSA Vertical Mount Flange

WPSA HM Configuration System & Flange Dimensions



WPSA Horizontal Mount Flange



PURGE AND PRESSURIZATION SYSTEMS



INDUSTRY STANDARDS

Type X

Ex [px] Ex [p]
 IECEx SIR.0019X [Gb, Db]
 Europe, ATEX Category 2 GD
 Cert no Sira 14ATEX1045X
 USA/Canada NFPA496 Cl I Div 1 Groups A, B, C & D
 UL E466718

Type Y

Ex [py] Ex [p]
 IECEx SIR.0019X [Gb, Db]
 Europe, ATEX Category 2 GD
 Cert no Sira 14ATEX1045X
 North America Cl I Div 1 Groups A, B, C & D
 For protecting Cl I Div 2 equipment
 UL E466718

Type Z

Ex [pz] Ex [p]
 IECEx SIR.0019X [Gc, Dc]
 Europe, ATEX Category 3 GD
 Cert no Sira 14ATEX1045X
 North America Cl I Div 2 Groups A, B, C & D
 UL E466718

APPLICATION

Purge and Pressurization is a protection method used with Type 4, 4X and 12 (IP54 recommended minimum) enclosures. The enclosure is initially purged to remove any internal explosive gases or dust. Once this is accomplished, the enclosure is pressurized with a protective air or inert gas supply. This provides a positive internal enclosure pressure which keeps any external explosive gases or dust from entering the enclosure.

The two methods of purge and pressurization offered are Leak Compensation and Continuous Flow.

Leak Compensation

Maintains positive pressure by compensating for losses. System consists of Control Unit and Relief Valve.

Certification Type Y and Z models

- Flush (internal) or external mount models

- Local visual alarm indicator and dry contact output for remote alarm
- Typically recommended for enclosures with volume of 60 Ft³ or less

Certification Type X Model

- Provides power disconnect when pressurization is lost or not attained
- Provides automatic purge process
- External mount
- Local visual alarm indicator and dry contact output for remote alarm
- Typically recommended for enclosures with volume of 60 Ft³ or less

Continuous Flow

Provides positive pressure via continuous protective air flow through the enclosure. System consists of Control Unit, Calibrated Outlet Orifice and Relief Valve.

Certification Type Y and Z Models

- Flush (internal) or external mount models
- Local visual alarm indicator and dry contact output for remote alarm
- Typically recommended for enclosures with volume of 17 Ft³ or less. Larger enclosures can use Continuous Flow models but will require longer purging times.

FEATURES

- All exterior components are 316 stainless steel or corrosion-resistant composite
- Space-saving flush or exterior mounted models available
- Local visual indicators provide system status
- Leak compensation models are equipped with rapid purge valve and visual purge status indicator
- All models utilize dry, clean inert gas supply of 60 PSI (4 bar) to 115 PSI (8 bar)
- Ambient operating temperature -4F (-20C) to 131F (55C)
- Type X models provide automatic purge cycle and 4PNO/20A/440VAC power contactor with 115 VAC or 230 VAC coil

FINISH

Brushed 316 Stainless Steel

ACCESSORIES

Service Parts Kit for both Leak Compensation and Continuous Flow models

MODIFICATION AND CUSTOMIZATION

Hoffman excels at modifying and customizing products to your specifications. Cut-outs for mounting purge and pressurization devices can be easily added to your enclosure. Contact your local Hoffman Representative or Distributor for more information.

Note:

For all IEC and ATEX applications, the final or complete integrated assembly must be submitted to a notified body for certification.

BULLETIN: HLP

Purge and Pressurization Systems and Certifications

Protection Type	Division (North American, NFPA 496)	Zones (IEC / ATEX)
Y	Enclosures placed in Division 1 classification area may contain Division 2 internal components	Enclosures placed in Zone 1 classification area may have Zone 2 internal components
Z	Enclosures placed in Division 2 classification area may contain general purpose internal components	Enclosures placed in Zone 2 classification area may have general purpose internal components
X	Enclosures placed in Division 1 classification area may contain general purpose internal components	Enclosures placed in Zone 1 classification area may have general purpose internal components

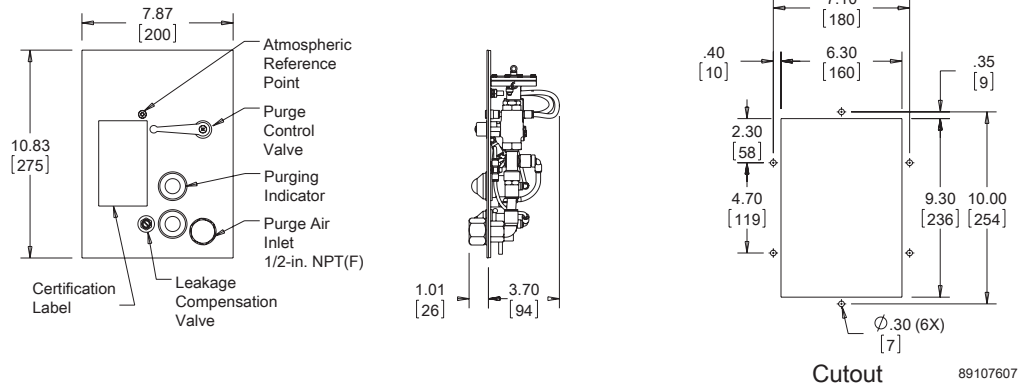
Standard Product Purge and Pressurization

Catalog Number	Operation Type	Mounting Type	Certification
PLCF1YZ	Leak Compensation	Flush Mount	Y and Z
PLCB1YZ	Leak Compensation	Exterior Mount	Y and Z
PCFF1YZ	Continuous Flow	Flush Mount	Y and Z
PCFB1YZ	Continuous Flow	Exterior Mount	Y and Z
PLCS1X1	Leak Compensation	Exterior Mount	X (120 VAC)
PLCS1X2	Leak Compensation	Exterior Mount	X (230 VAC)

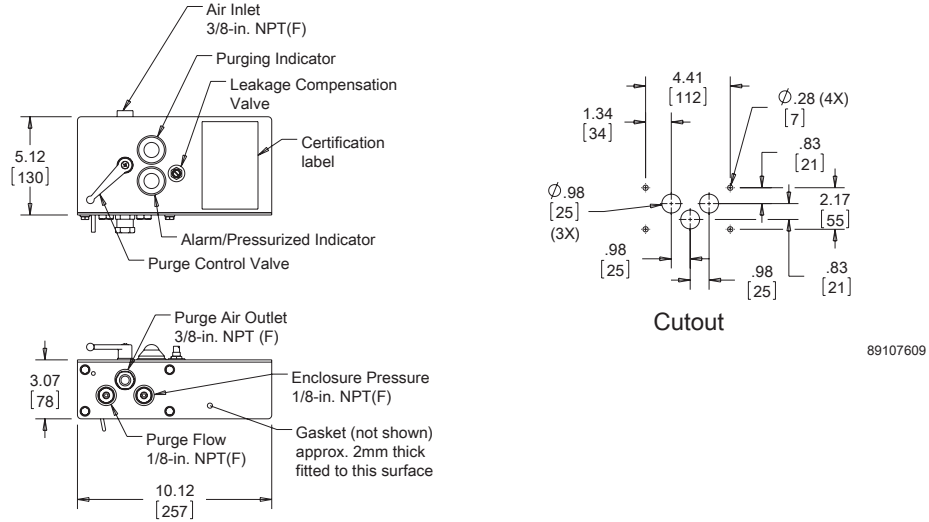
Service Kits

Catalog Number	Description
PLCSKIT	Purge and Pressurization Leakage Compensation Service Kit
PCFSKIT	Purge and Pressurization Continuous Flow Service Kit

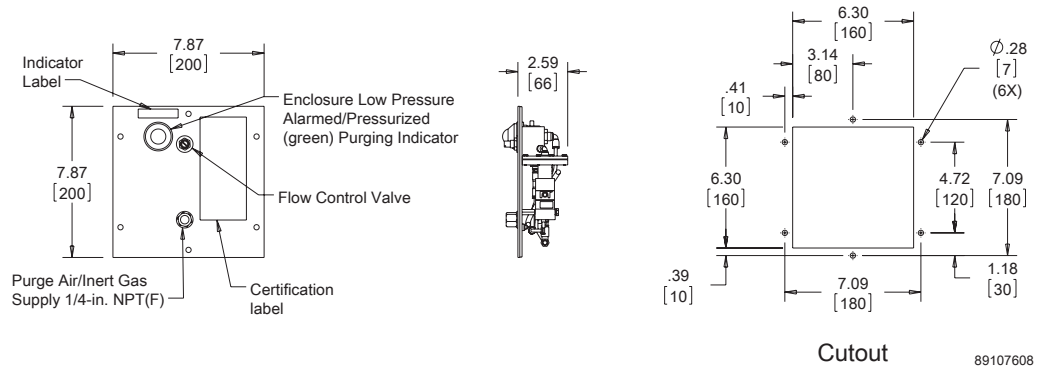
PLCF1YZ



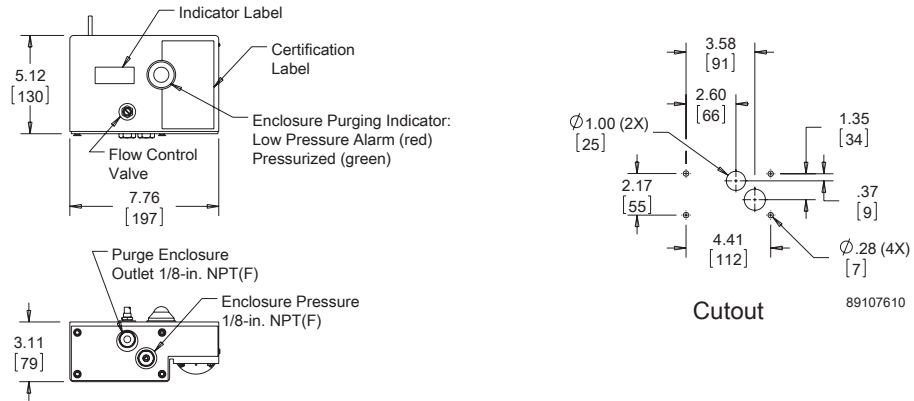
PLCB1YZ



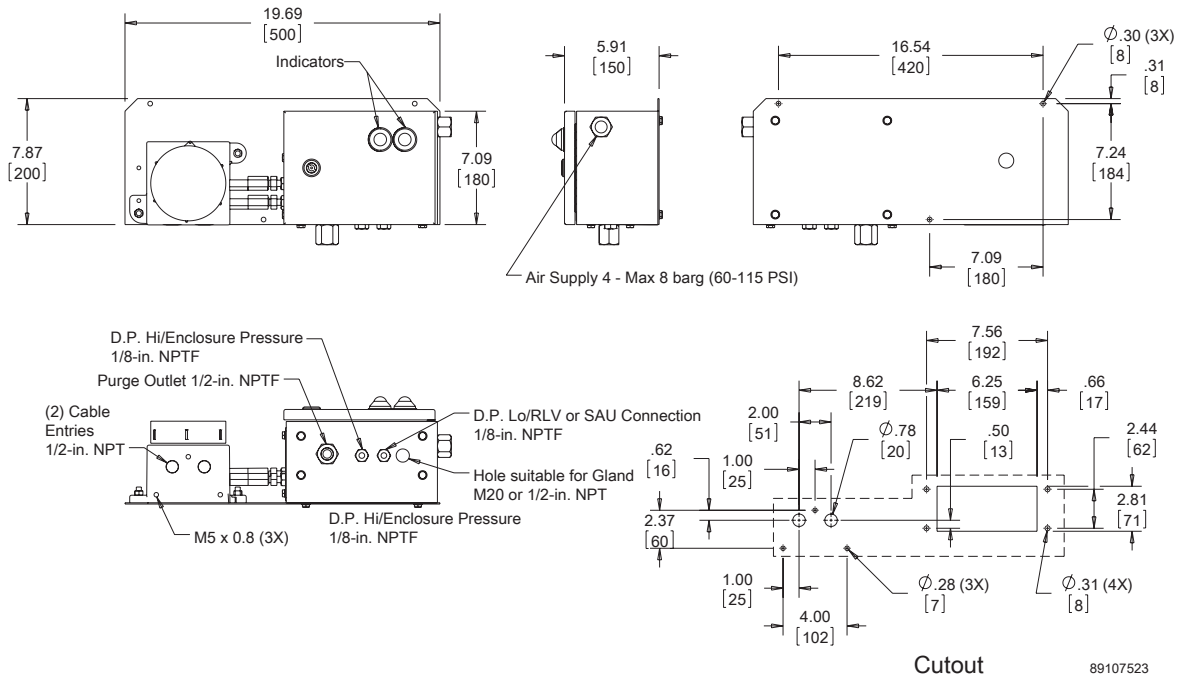
PCFF1YZ

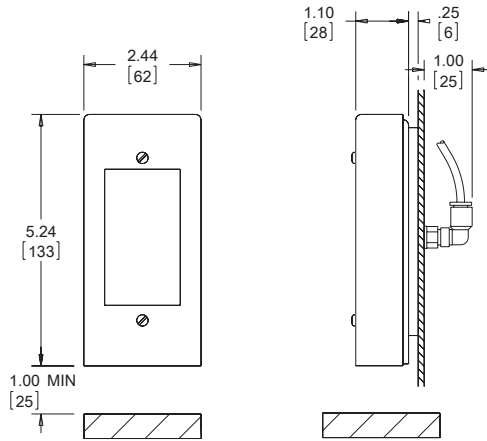


PCFB1YZ

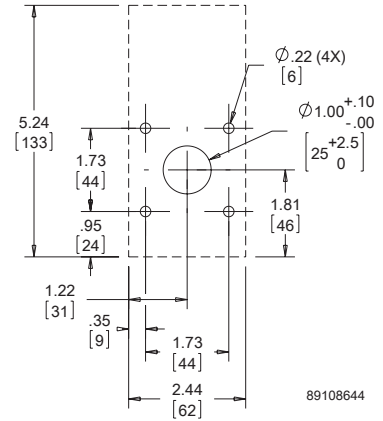


PLCS1X1, PLCS1X2



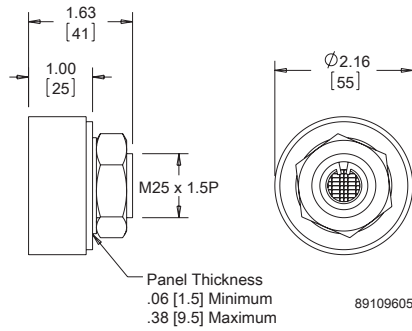


Relief Valve



Cutout

89108644



Panel Thickness
 .06 [1.5] Minimum
 .38 [9.5] Maximum

89109605

Outlet Orifice for Continuous Flow Models

SPECTRACOOL HAZARDOUS LOCATION INDOOR/OUTDOOR


NHZ43

 11000 BTU/Hr.
3223 Watt

NHZ36

 6000/8000 BTU/Hr.
1758/2344 Watt

NHZ28

 4000 BTU/Hr.
1172 Watt

INDUSTRY STANDARDS

UL/cUL Listed; Type 4; 4X; File No. E469720

CE
Class 1 Div 2 Groups A, B, C, D T4A

APPLICATION

- Onshore and Offshore Oil and Gas
- Chemical and petrochemical
- Mining
- Pharmaceutical
- Any location with potentially hazardous atmospheres created by vapor

FEATURES

- Engineered specifically for hazardous location cooling. Not rebuilt from light industrial air conditioners
- Attractive design with no heavy cast enclosure and minimal use of visible fasteners
- Does not require purge and pressurized system
- Corrosion resistant coating on ambient side components for Type 4X models
- Corrosion resistant coating on ambient and enclosure side components for Type 4X Offshore models
- Dust resistant coils for filterless operation in most environments
- Cleanable, reusable aluminum mesh filter protects coils for extremely dusty and dirty atmospheres
- Digital temperature control
- Narrow design to accommodate 12-in (300-mm) deep cabinets
- R134a earth-friendly refrigerants
- Models for 115, 230 and 400/460 3-phase VAC power input
- UL Listed to save customers time and money with agency approvals
- Easy-Mount flanges for simple installation
- Mounting hardware, gaskets and user manual furnished with the unit
- Every unit functionally tested before shipping
- Standard Type 4/4X models include:
 - Active condensate management with heater strip
 - Compressor Heater
 - Head Pressure Control
 - Power-off relay for door switch and other system requirements
 - Malfunction switch

SPECIFICATIONS

- Nominal cooling capacities:
 - NHZ28 4000 BTU/hr. (1172 W)
 - NHZ36 6000 & 8000 BTU/hr. (1758 and 2344 W)
 - NHZ43 11000 BTU/hr. (3223 W)
- Outdoor model operating temperature range from -40 F/ -40 C to 131 F/ 55 C (125 F/52 C on NHZ28 Series and NHZ43 Series 115V)

FINISH

- Type 4 models RAL 7035 light-gray, semi-textured powder-coat paint
- Type 4X and Offshore models Stainless Steel 316L

NOTES

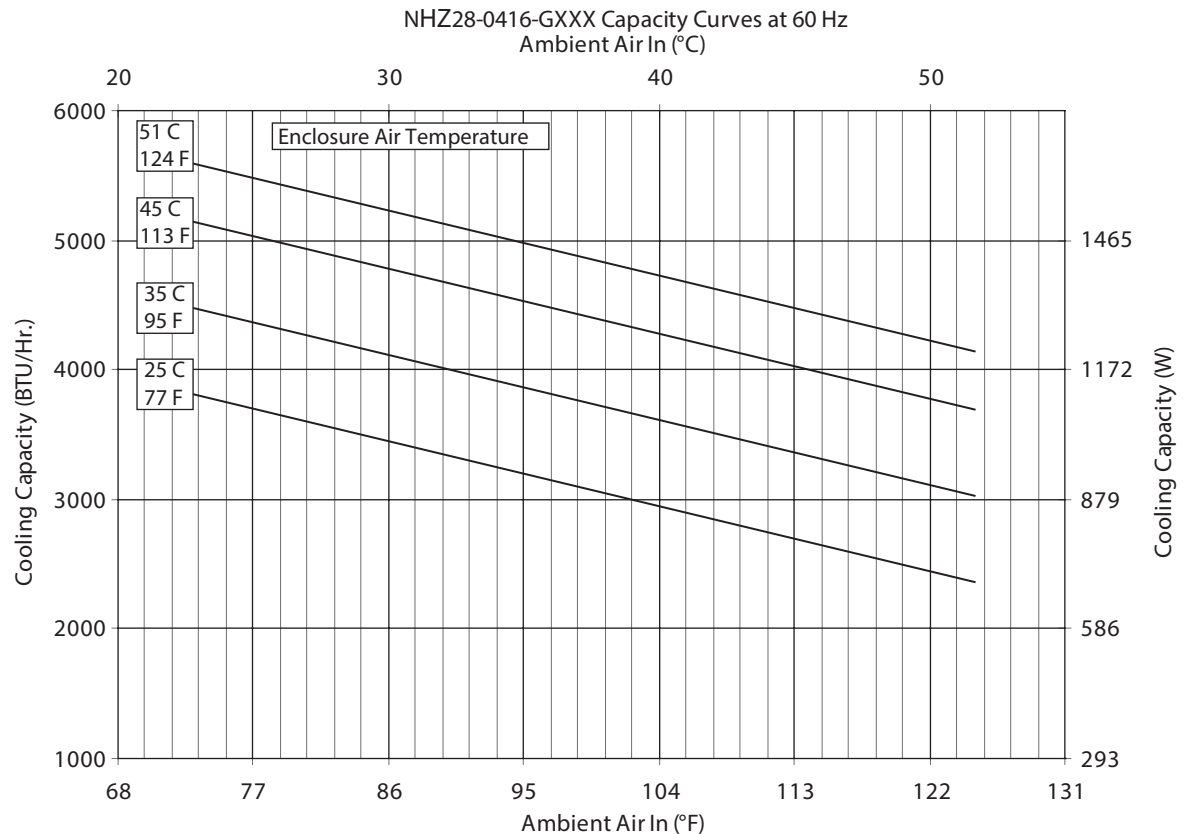
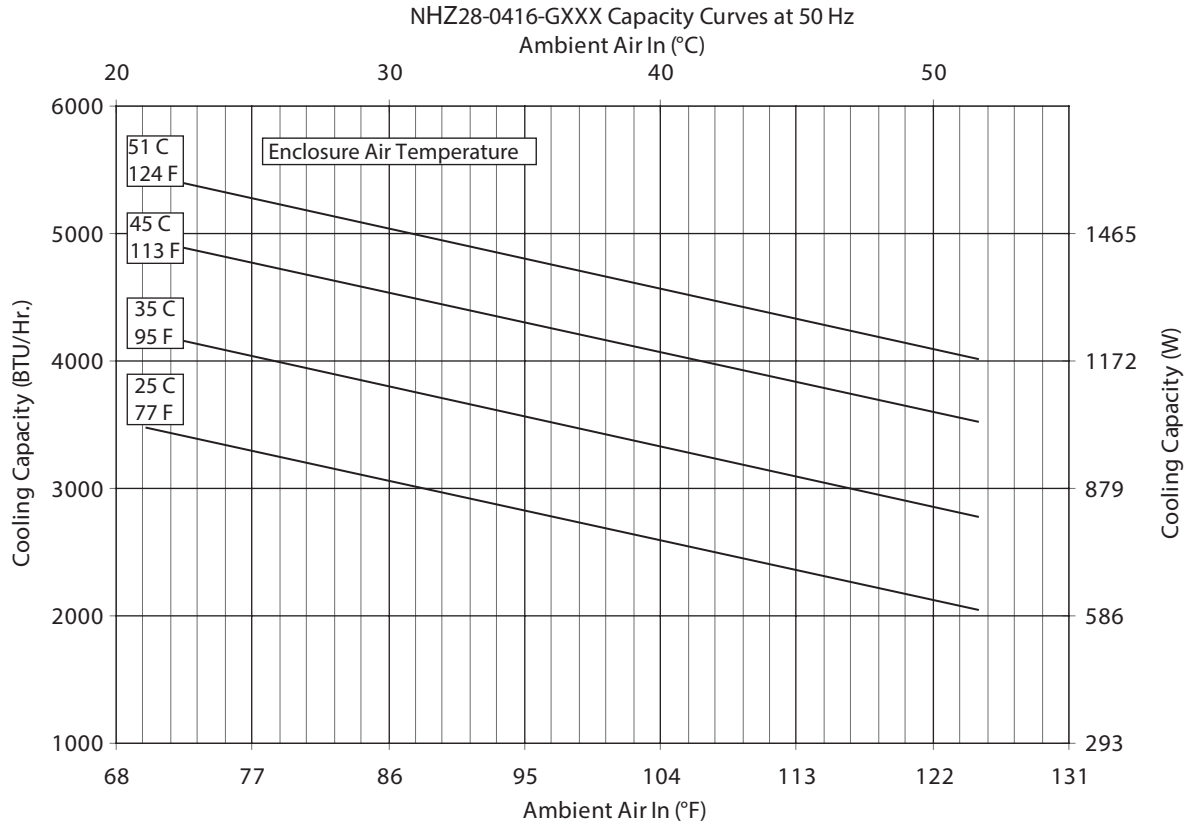
Visit www.PentairProtect.com to download 2D and 3D CAD drawings into the overall design of your electronic system.

Performance Data **NHZ28 4000 BTU/Hr. (1172 Watt)**

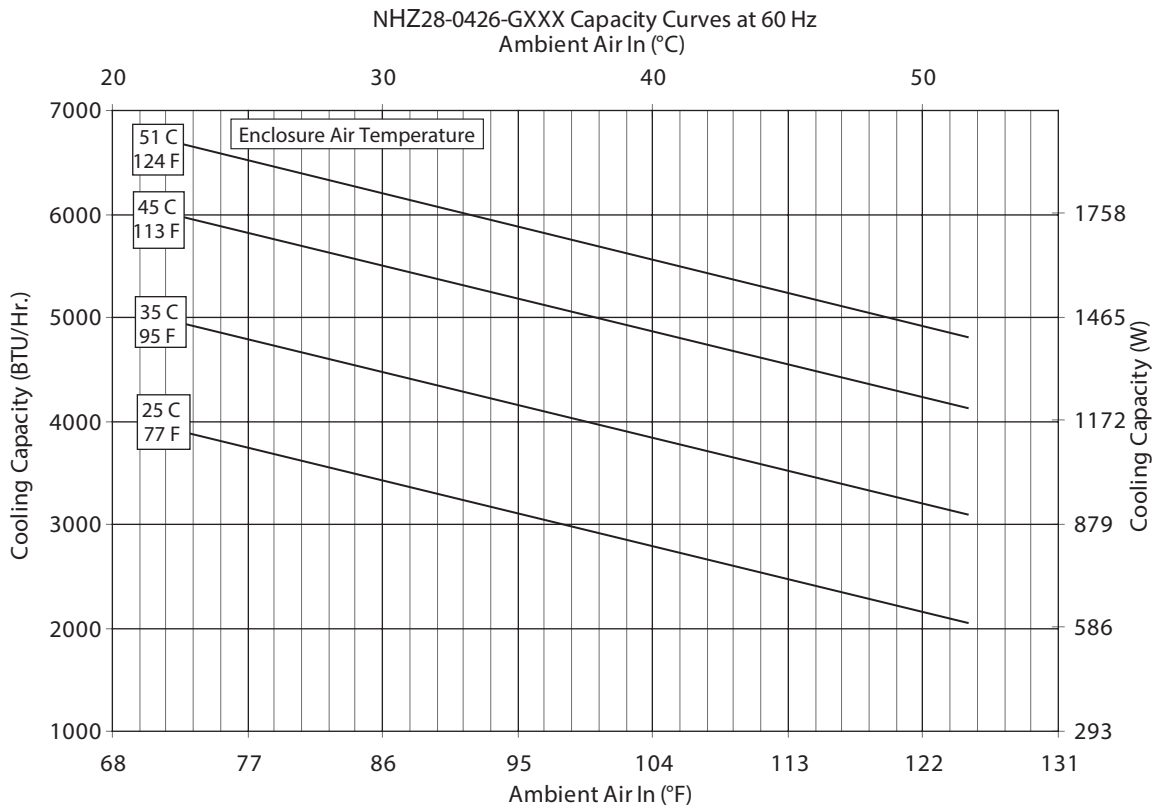
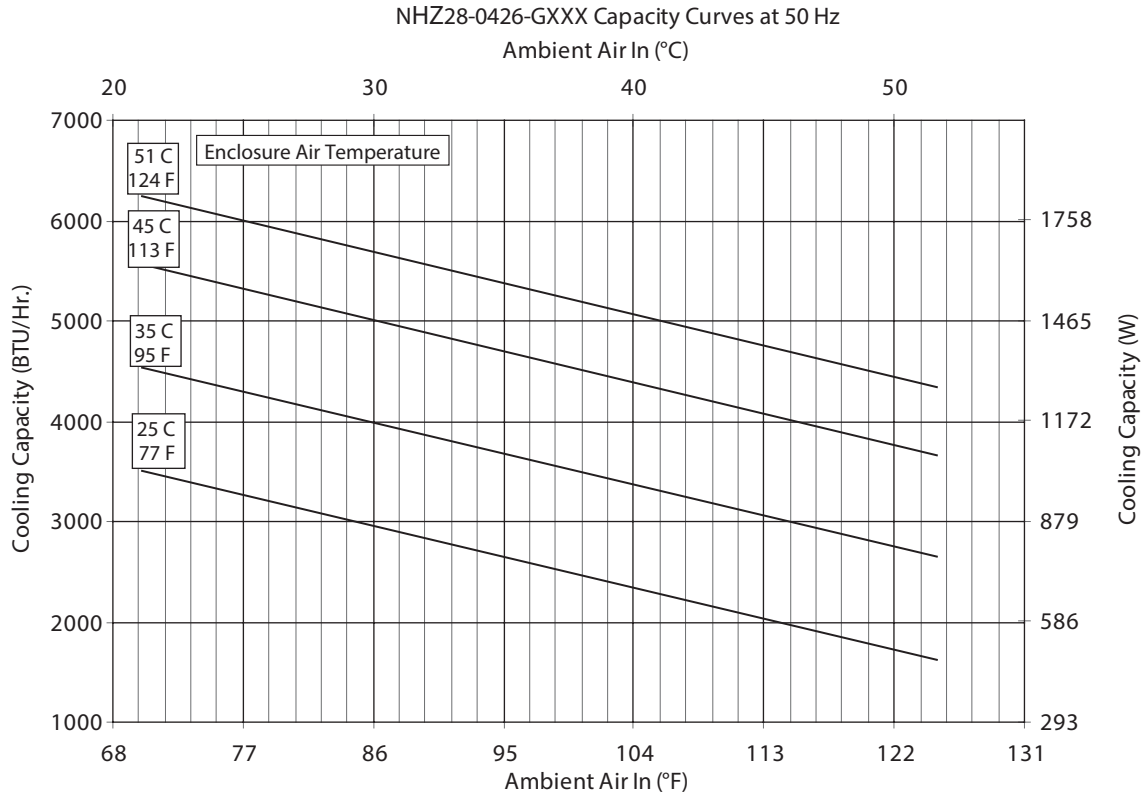
CATALOG NUMBER			
Painted Galvanized Steel Type 4	NHZ280416G300	NHZ280426G300	NHZ280446G300
Painted Galvanized Steel Type 4 with Remote Access Control*	NHZ280416G360	NHZ280426G360	NHZ280446G360
Stainless Steel Type 4X	NHZ280416G400	NHZ280426G400	NHZ280446G400
Stainless Steel Type 4X with Remote Access Control*	NHZ280416G460	NHZ280426G460	NHZ280446G460
Stainless Steel Type 4X Offshore	NHZ280416G500	NHZ280426G500	NHZ280446G500
COOLING PERFORMANCE			
Nominal:			
BTUs/Hr.	3800 / 4000	3800 / 4000	4000
Watts	1114 / 1172	1114 / 1172	1172
At 125 F / 125 F (52 C / 52 C):			
BTU/Hr. (50 / 60 Hz)	3940 / 4104	4269 / 4703	4703
Watts (50 / 60 Hz)	1150 / 1000	1250 / 1378	1378
At 95 F / 95 F (35 C / 35 C):			
BTU/Hr. (50 / 60 Hz)	3754 / 4011	3700 / 4291	4291
Watts (50 / 60 Hz)	1100 / 1175	1086 / 1257	1257
Refrigerant	R134a	R134a	R134a
Refrigerant Charge (ounces/grams)	10 / 283	11 / 312	11 / 312
Operating Temperature Range:			
Maximum (°F / °C)	125/52	125/52	125/52
Minimum (°F / °C)	-40 / -40	-40 / -40	-40 / -40
Air Flow at 0 Static Pressure:			
Internal loop 50 Hz (CFM / M ³ /Hr)	138 / 234	N/A	N/A
External loop 50 Hz (CFM / M ³ /Hr)	268 / 455	N/A	N/A
Internal loop 60 Hz (CFM / M ³ /Hr)	143 / 362	143 / 243	143 / 243
External loop 60 Hz (CFM / M ³ /Hr)	288 / 728	288 / 489	288 / 489
ELECTRICAL DATA			
Rated Voltage	110 / 115	230	460
Frequency (Hz)	50 / 60	50 / 60	50 / 60
Operating Range	+/-10%	+/-10%	+/-10%
Max. Power Consumption (Watts at 50 / 60 Hz)	930 / 1001	972 / 1106	972 / 1106
Max. Nominal Current (Amps at 50 / 60 Hz)	10.2 / 9.4	4.9 / 5.0	2.4 / 2.5
Starting Current (Amps)	40	24.5	12.5
Agency Approvals		cUL Listed CE	
		Others available upon request	
Power Input Description		Terminal Block	
ENCLOSURE PROTECTION			
UL Type		Type 4, 4X Standard	
CONTROLLER			
Description		Digital Controller	
Controller Location		Enclosure Side	
Factory Controller Setting (°F / °C)		80 / 27	
SOUND LEVEL			
At 1.5 Meters	66.1 dBA	65.5 dBA	65.5 dBA
UNIT CONSTRUCTION			
Material		Galvanized Sheet Metal Type 4 Models Stainless steel 316L Type 4X and Offshore Models RAL 7035 light-gray, semi-textured powder-coat paint standard Other colors available	
Finish			
UNIT DIMENSIONS			
Height (in / mm)		28 / 711.2	
Width (in / mm)		11.50 / 292.1	
Depth (in / mm)		14.00 / 355.6	
Weight (lb / kg)	84/38	84/38	98/44

*Units with Remote Access Control utilize a digital controller and communicate via EtherNet/IP, Profinet, Modbus TCP/IP and SNMP over ethernet or modbus RTU over USB.

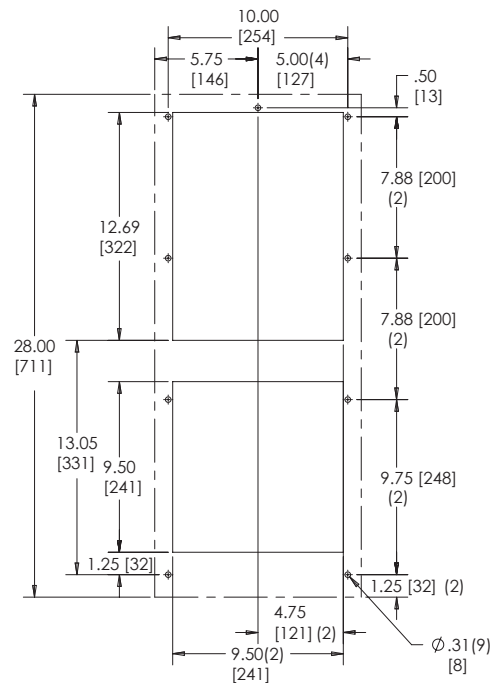
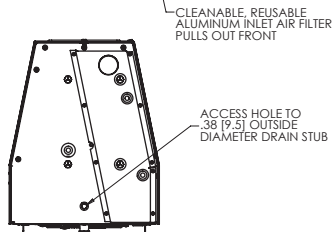
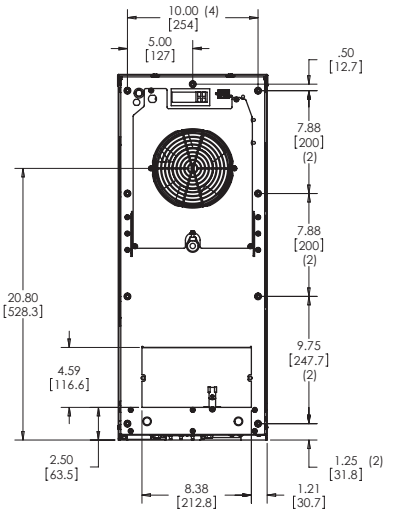
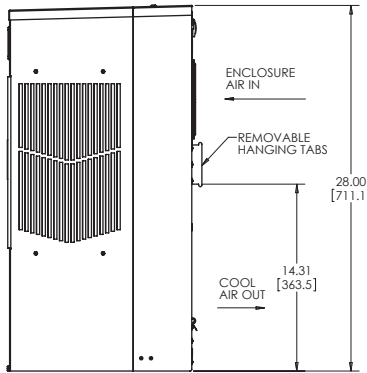
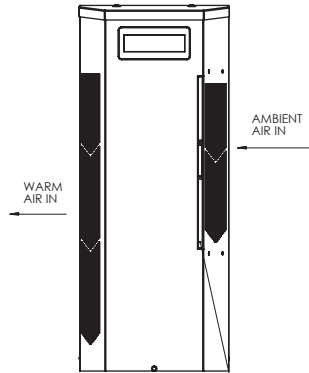
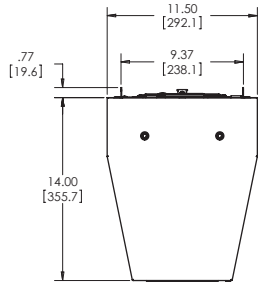
Performance Curves for NHZ28 Models 4000 BTU/Hr. (1172 Watt)



Performance Curves for NHZ28 Models 4000 BTU/Hr. (1172 Watt)



NHZ28 Models 4000 BTU/Hr. (1172 Watt)



Cutout Dimensions

Visit www.PentairProtect.com to download 2D and 3D CAD drawings into the overall design of your electronic system.

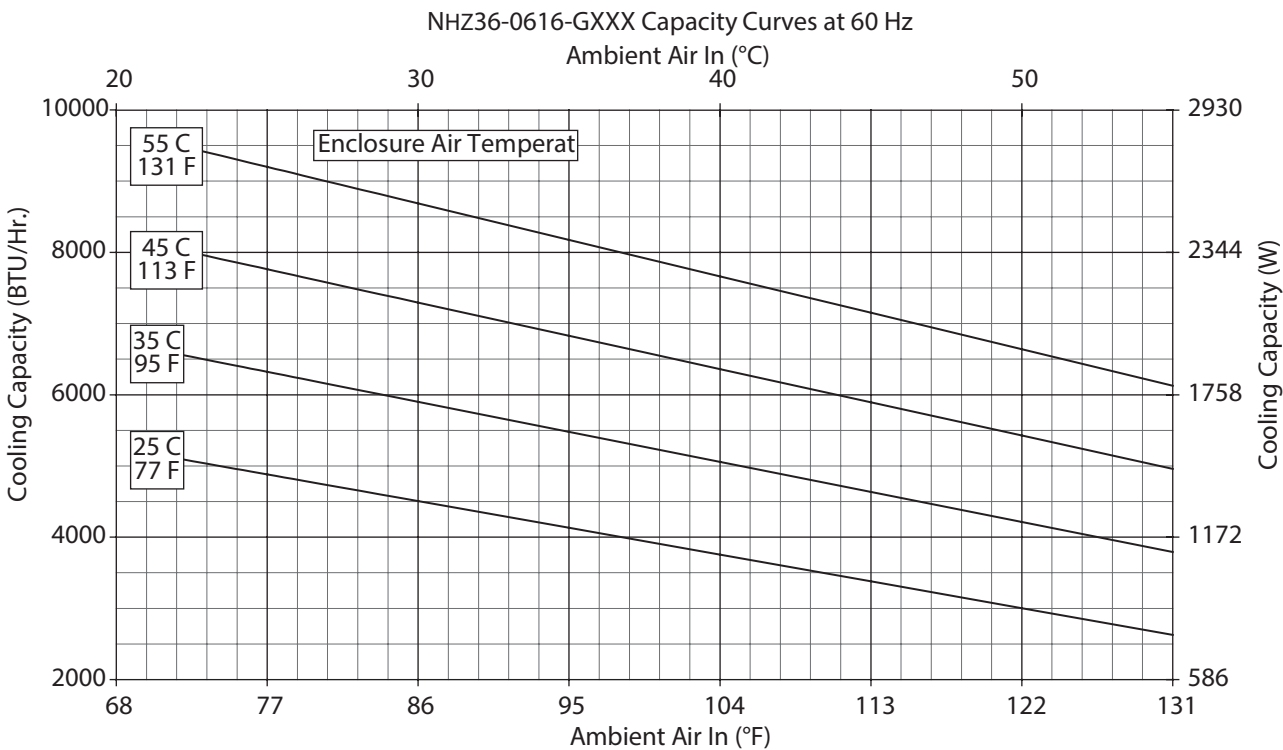
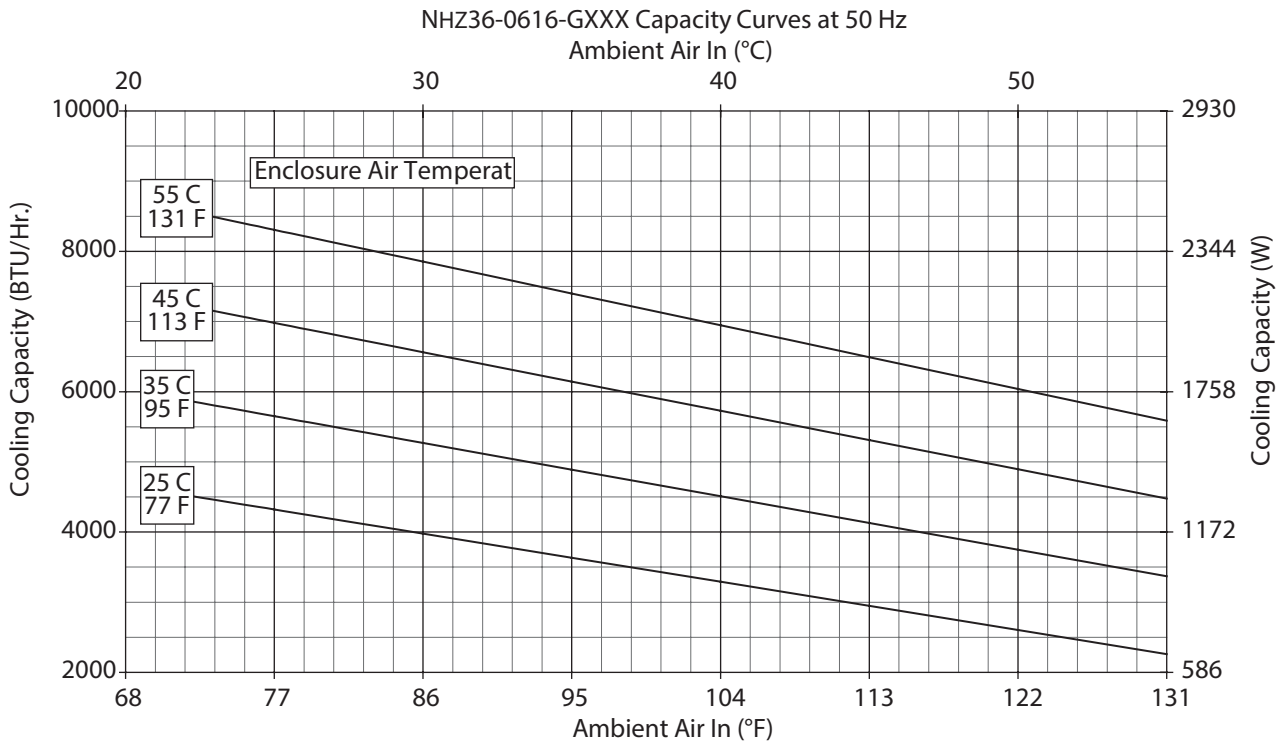


Performance Data NHZ36 6000/8000 BTU/Hr. (1758/2344 Watt)

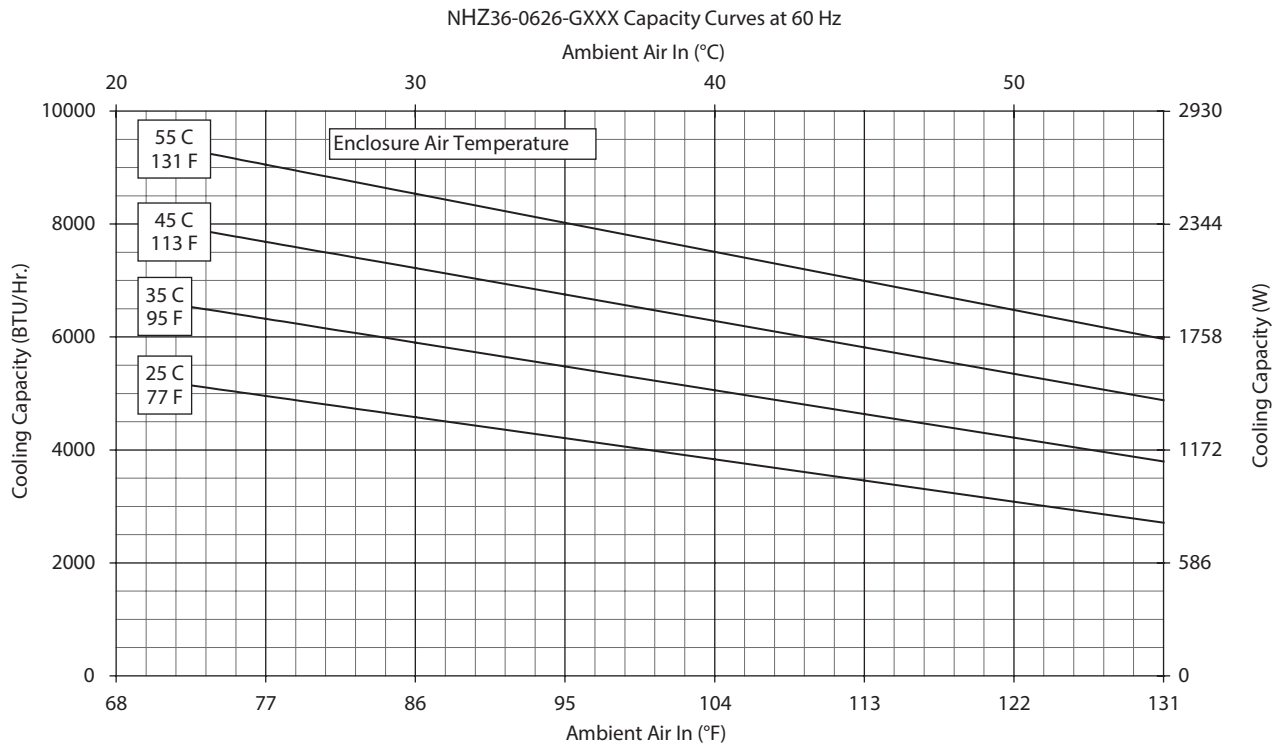
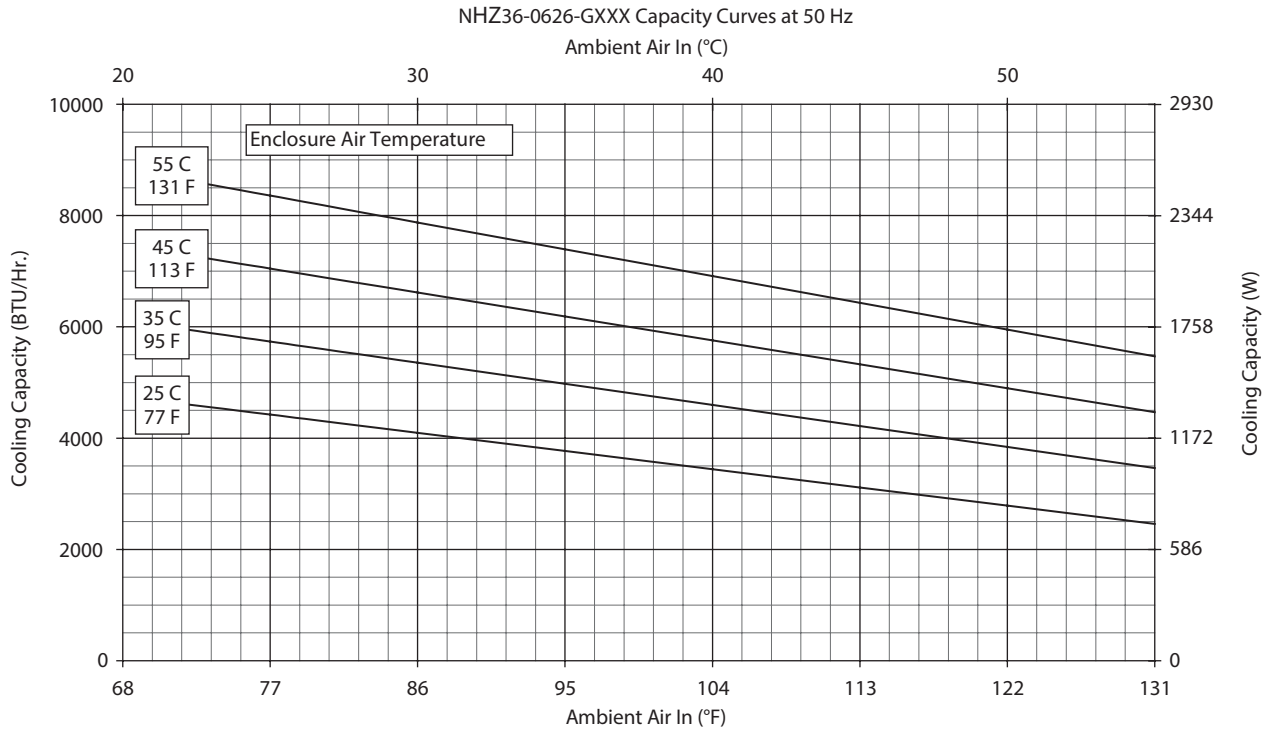
CATALOG NUMBER						
Painted Galvanized Steel Type 4	NHZ360616G300	NHZ360626G300	NHZ360646G300	NHZ360816G300	NHZ360826G300	NHZ360846G300
Painted Galvanized Steel Type 4 with Remote Access Control*	NHZ360616G360	NHZ360626G360	NHZ360646G360	NHZ360816G360	NHZ360826G360	NHZ360846G360
Stainless Steel Type 4X	NHZ360616G400	NHZ360626G400	NHZ360646G400	NHZ360816G400	NHZ360826G400	NHZ360846G400
Stainless Steel Type 4X with Remote Access Control*	NHZ360616G460	NHZ360626G460	NHZ360646G460	NHZ360816G460	NHZ360826G460	NHZ360846G460
Stainless Steel Type 4X Offshore	NHZ360616G500	NHZ360626G500	NHZ360646G500	NHZ360816G500	NHZ360826G500	NHZ360846G500
COOLING PERFORMANCE						
Nominal:						
BTUs/Hr.	5400 / 6000	5400 / 6000	5400 / 6000	8250 / 8500	8250 / 8500	8250 / 8500
Watts	1581 / 1757	1581 / 1757	1581 / 1757	2416 / 2489	2416 / 2489	2416 / 2489
At 131 F / 131 F (55 C / 55 C):						
BTU/Hr. (50 / 60 Hz)	5585 / 6180	5469 / 5965	5300 / 6089	8213 / 8453	7874 / 8063	7777 / 8166
Watts (50 / 60 Hz)	1637 / 1811	1603 / 1748	1553 / 1785	2405 / 2475	2306 / 2361	2277 / 2391
At 95 F / 95 F (35 C / 35 C):						
BTU/Hr. (50 / 60 Hz)	4909 / 5485	5159 / 5621	5572 / 6026	7028 / 7626	6660 / 7411	6877 / 7525
Watts (50 / 60 Hz)	1439 / 1607	1512 / 1647	1633 / 1766	2058 / 2233	1950 / 2170	2014 / 2203
Refrigerant	R134a	R134a	R134a	R134a	R134a	R134a
Refrigerant Charge (ounces/grams)	20 / 567	22 / 624	16 / 454	36 / 1021	36 / 1021	36 / 1021
Operating Temperature Range:						
Maximum (°F / °C)	131 / 55	131 / 55	131 / 55	131 / 55	131 / 55	131 / 55
Minimum (°F / °C)	-40 / -40	-40 / -40	-40 / -40	-40 / -40	-40 / -40	-40 / -40
Air Flow at 0 Static Pressure:						
Internal loop 50 Hz (CFM / M ³ /Hr)	251 / 426	250 / 425	250 / 425	250 / 425	245 / 416	243 / 413
External loop 50 Hz (CFM / M ³ /Hr)	284 / 483	338 / 574	338 / 574	313 / 532	347 / 589	365 / 620
Internal loop 60 Hz (CFM / M ³ /Hr)	261 / 443	261 / 443	261 / 443	263 / 447	258 / 439	254 / 432
External loop 60 Hz (CFM / M ³ /Hr)	311 / 528	356 / 605	356 / 605	338 / 574	382 / 648	394 / 669
ELECTRICAL DATA						
Rated Voltage	115	230	400 / 460 3~	115	230	400 / 460 3~
Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60
Operating Range	+/-10%	+/-10%	+/-10%	+/-10%	+/-10%	+/-10%
Max. Power Consumption (Watts at 50 / 60 Hz)	911 / 1108	908 / 1073	691 / 783	1206 / 1422	1265 / 1403	572 / 628
Max. Nominal Current (Amps at 50 / 60 Hz)	9.1 / 10.1	4.5 / 4.7	1.7 / 1.8	11.2 / 12.4	5.5/6.2	3.0 / 3.4
Starting Current (Amps)	39.2	23	8.1	48.3	27	16
Agency Approvals	cUL Listed CE Others available upon request					
Power Input Description	Terminal Block					
ENCLOSURE PROTECTION						
UL Type	Type 4, 4X Standard					
CONTROLLER						
Description	Digital Controller					
Controller Location	Enclosure Side					
Factory Controller Setting (°F / °C)	80 / 27					
SOUND LEVEL						
At 1.5 Meters	66.9 dBA	66.7 dBA	68.2 dBA	66.0 dBA	66.0 dBA	66.0 dBA
UNIT CONSTRUCTION						
Material	Galvanized Sheet Metal Type 4 Models Stainless steel 316L Type 4X and Offshore Models					
Finish	RAL 7035 light-gray, semi-textured powder-coat paint standard Other colors available					
UNIT DIMENSIONS						
Height (in / mm)	36.00 / 914.4					
Width (in / mm)	11.50 / 292.1					
Depth (in / mm)	14.00 / 355.6					
Weight (lb / kg)	100 / 45	100 / 45	104 / 47	106 / 48	106 / 48	114 / 52

*Units with Remote Access Control utilize a digital controller and communicate via EtherNet/IP, Profinet, Modbus TCP/IP and SNMP over ethernet or modbus RTU over USB.

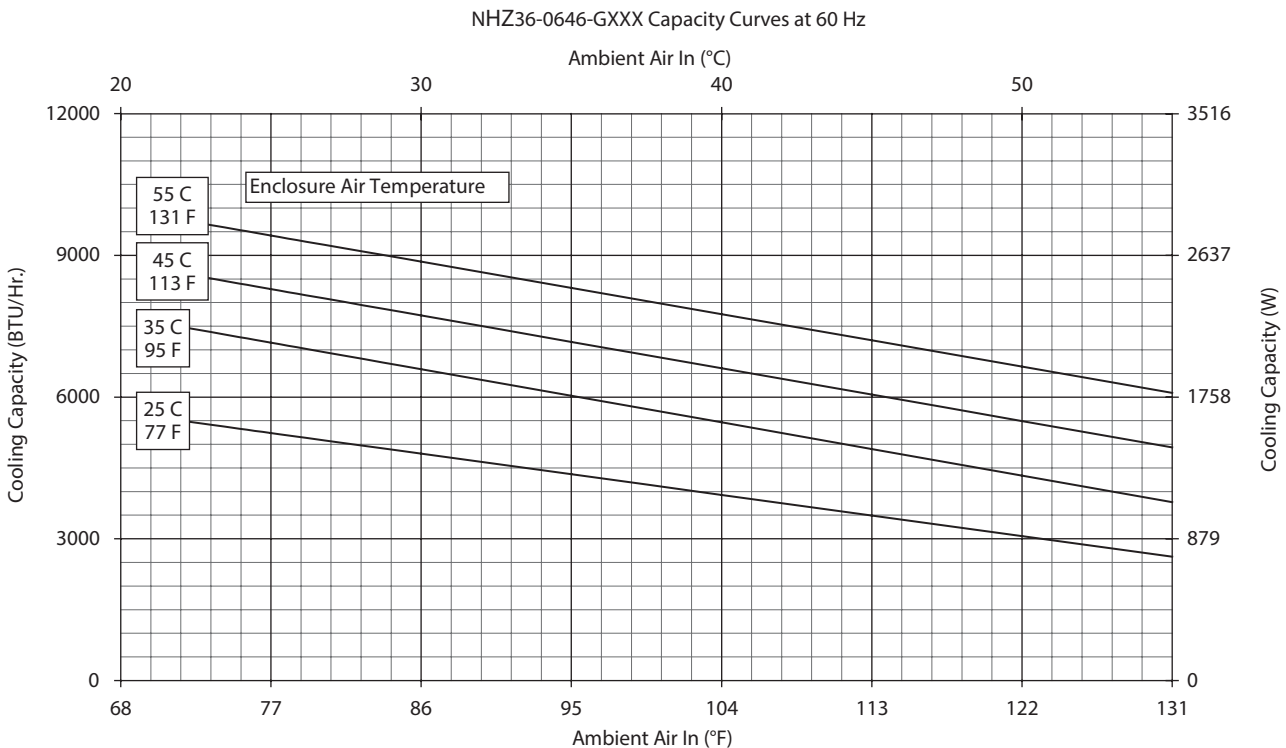
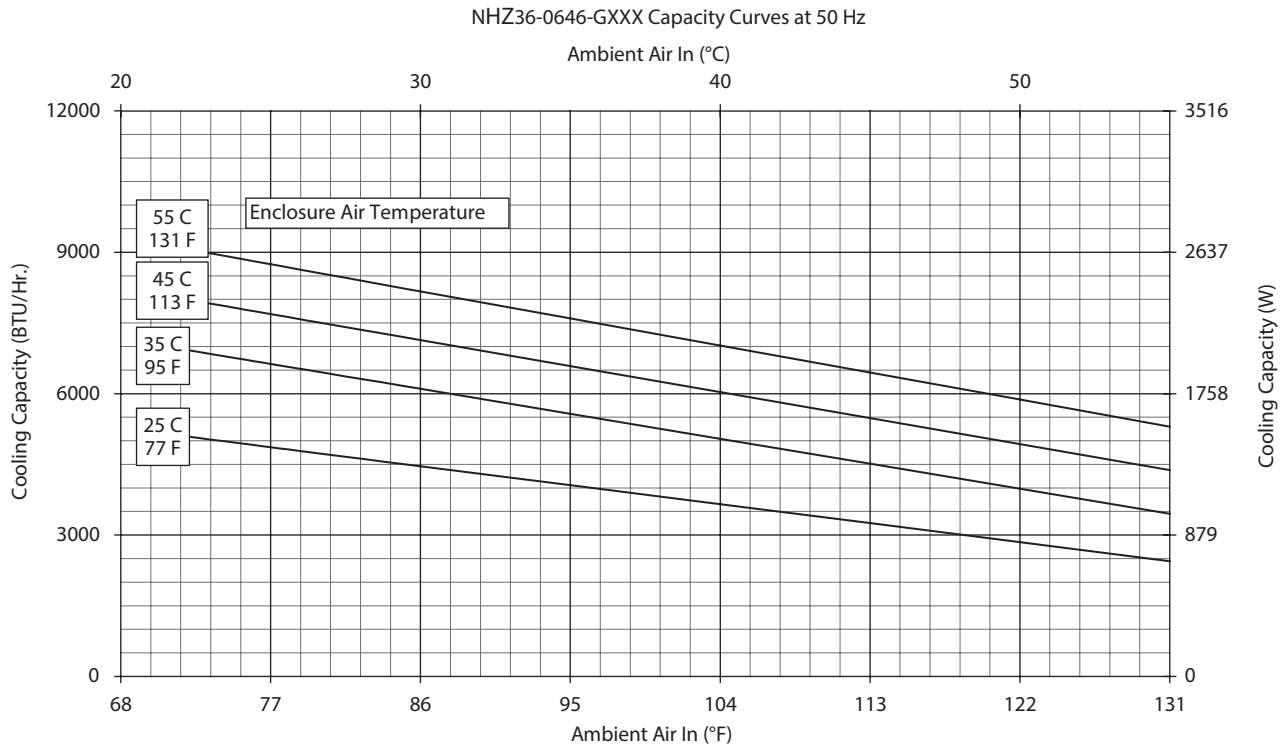
Performance Curves for NHZ36 Models 6000 BTU/Hr. (1758 Watt)



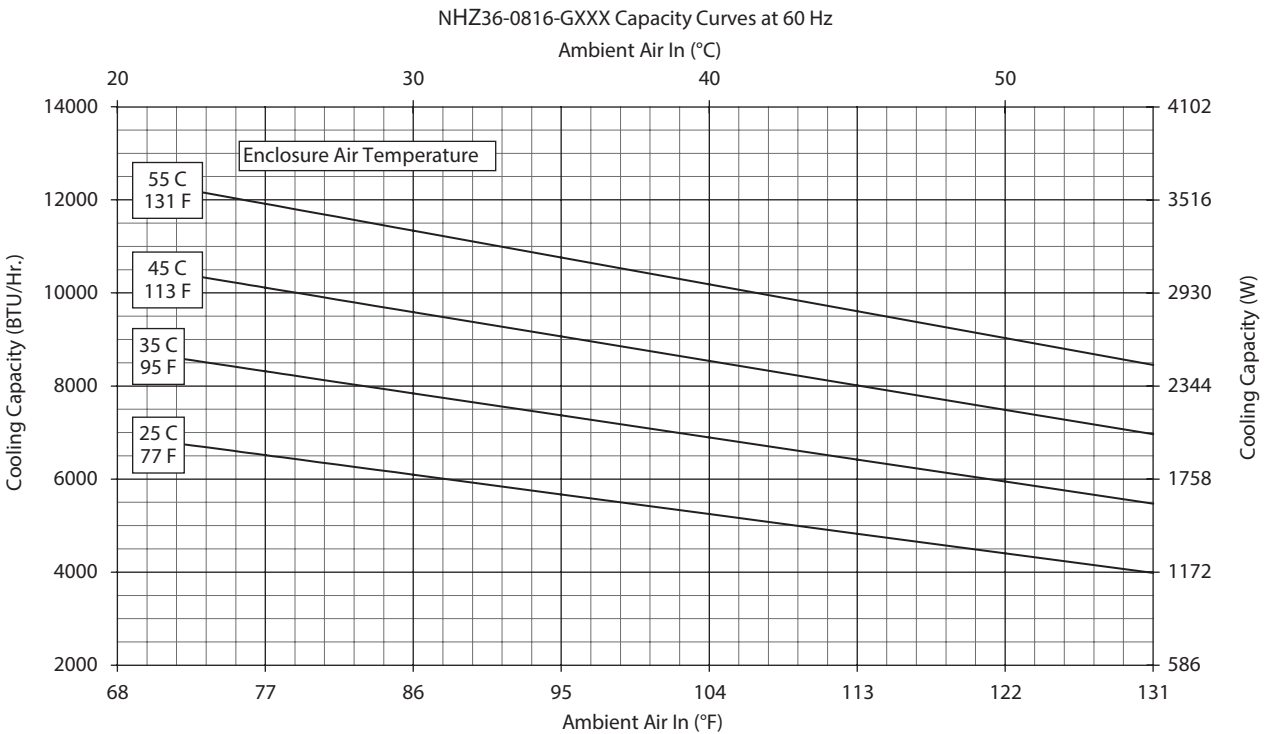
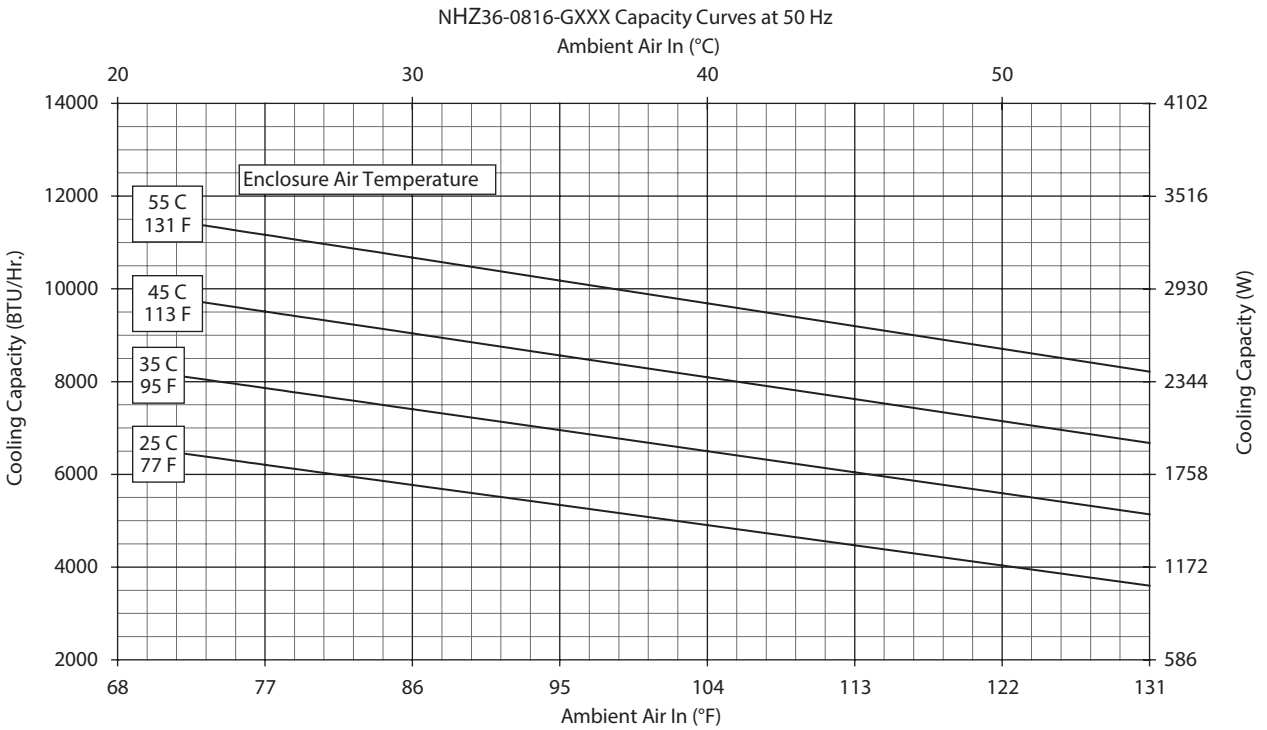
Performance Curves for NHZ36 Models 6000 BTU/Hr. (1758 Watt)



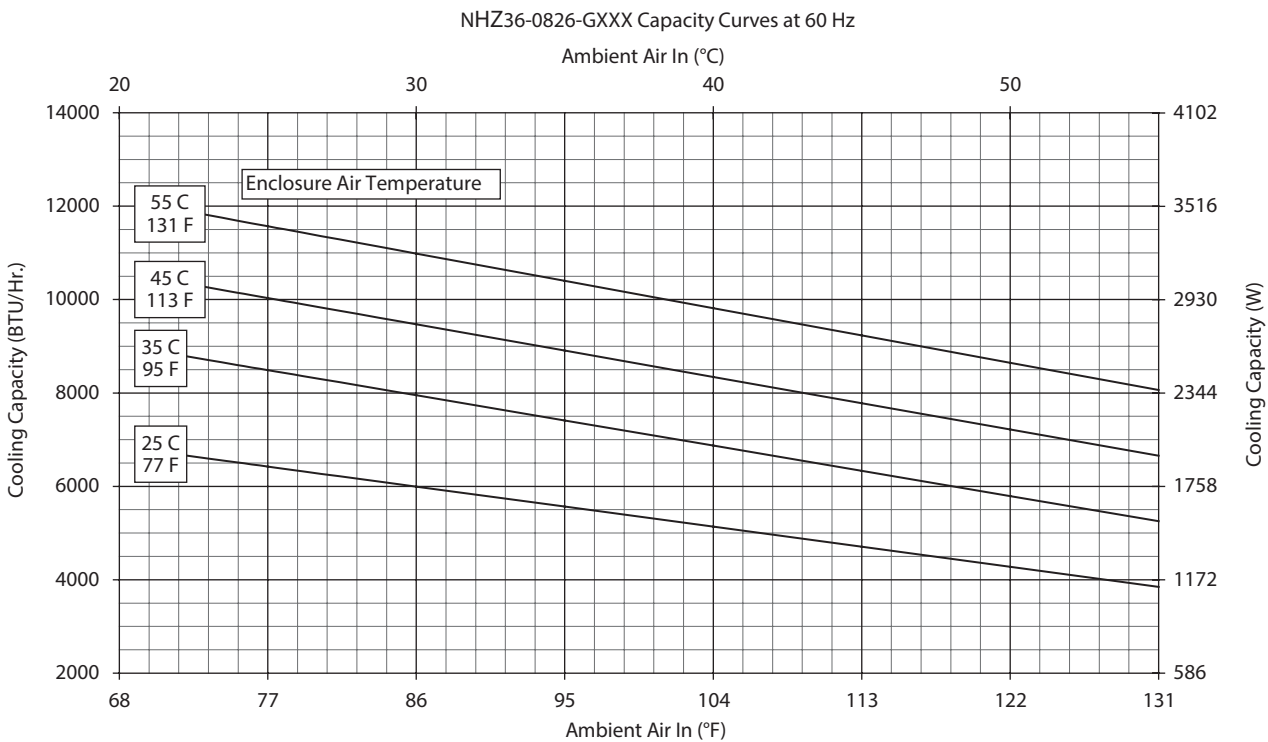
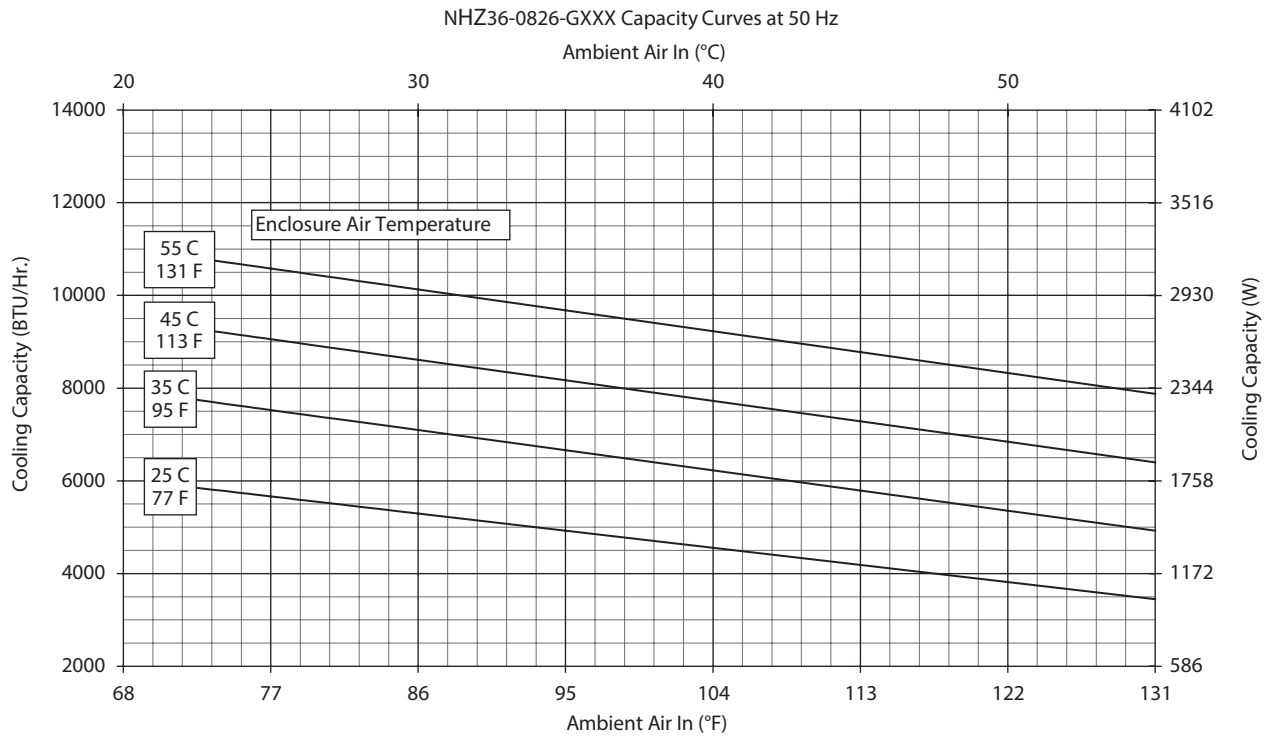
Performance Curves for NHZ36 Models 6000 BTU/Hr. (1758 Watt)



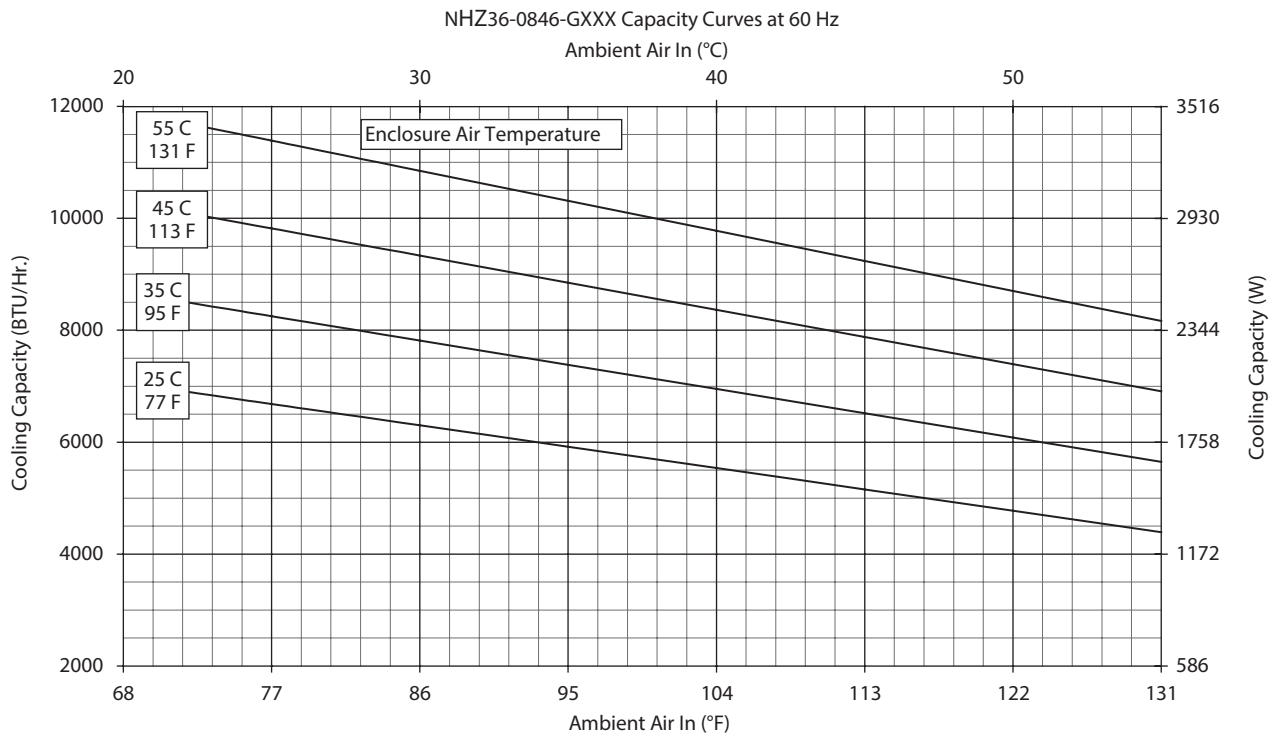
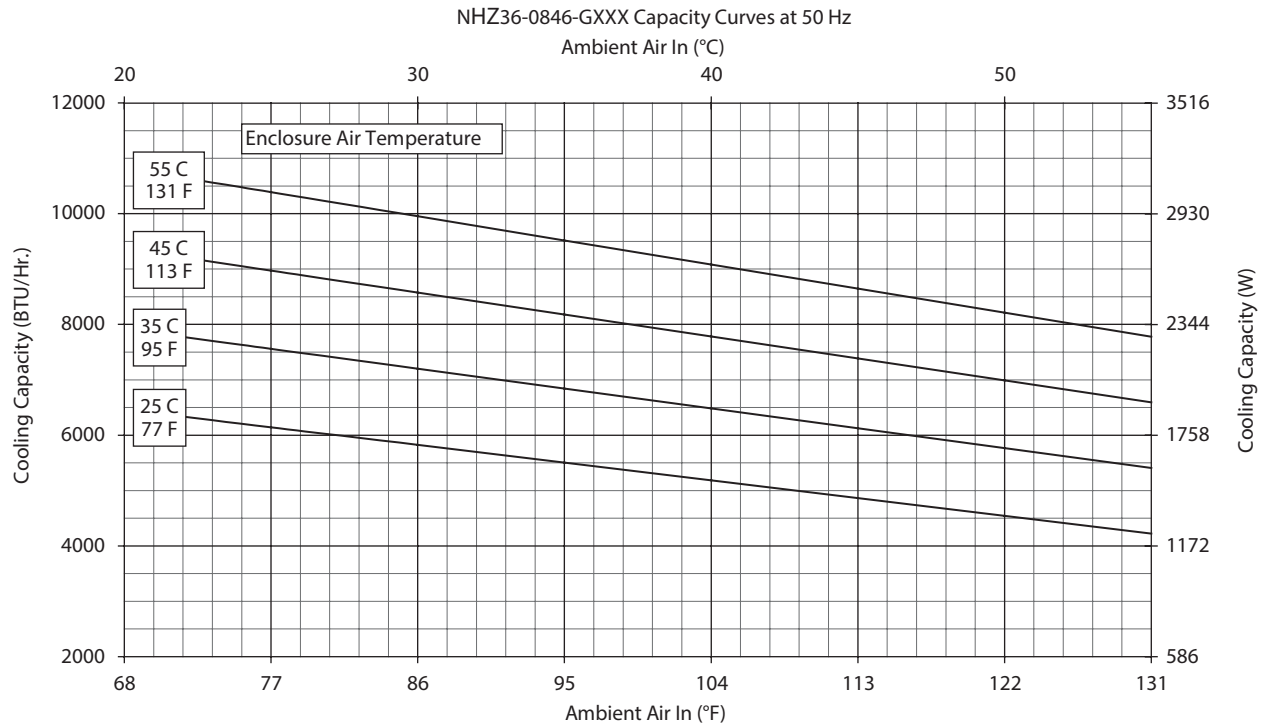
Performance Curves for NHZ36 Models 8000 BTU/Hr. (2344 Watt)



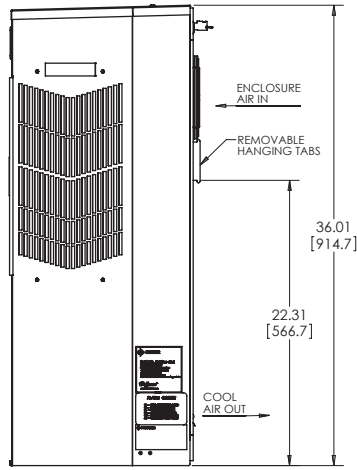
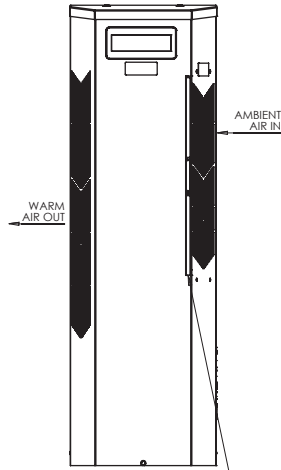
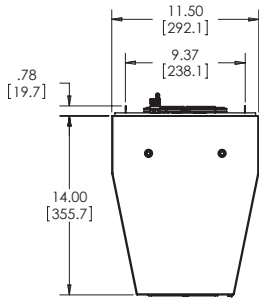
Performance Curves for NHZ36 Models 8000 BTU/Hr. (2344 Watt)



Performance Curves for NHZ36 Models 8000 BTU/Hr. (2344 Watt)

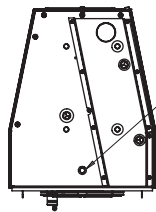
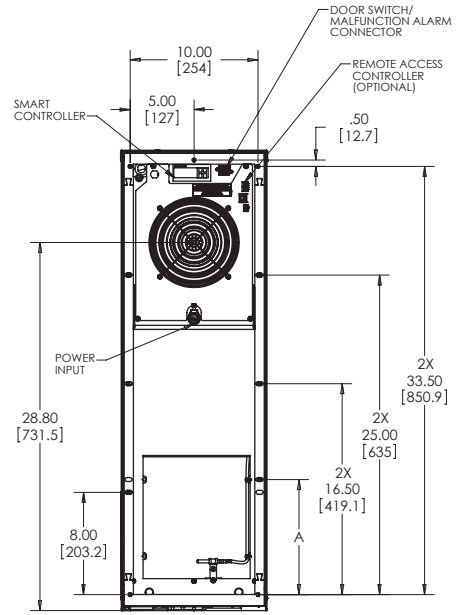


NHZ36 6000/8000 BTU/Hr. (1758/2344 Watt)

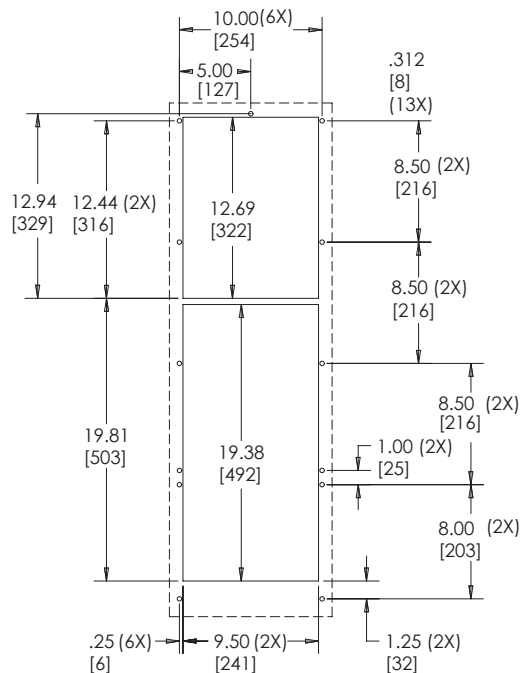


CLEANABLE, REUSABLE ALUMINUM INLET AIR FILTER PULLS OUT FRONT

89115570



ACCESS HOLE TO .375 [9.5] O.D. DRAIN STUB



Cutout Dimensions

Visit www.PentairProtect.com to download 2D and 3D CAD drawings into the overall design of your electronic system.



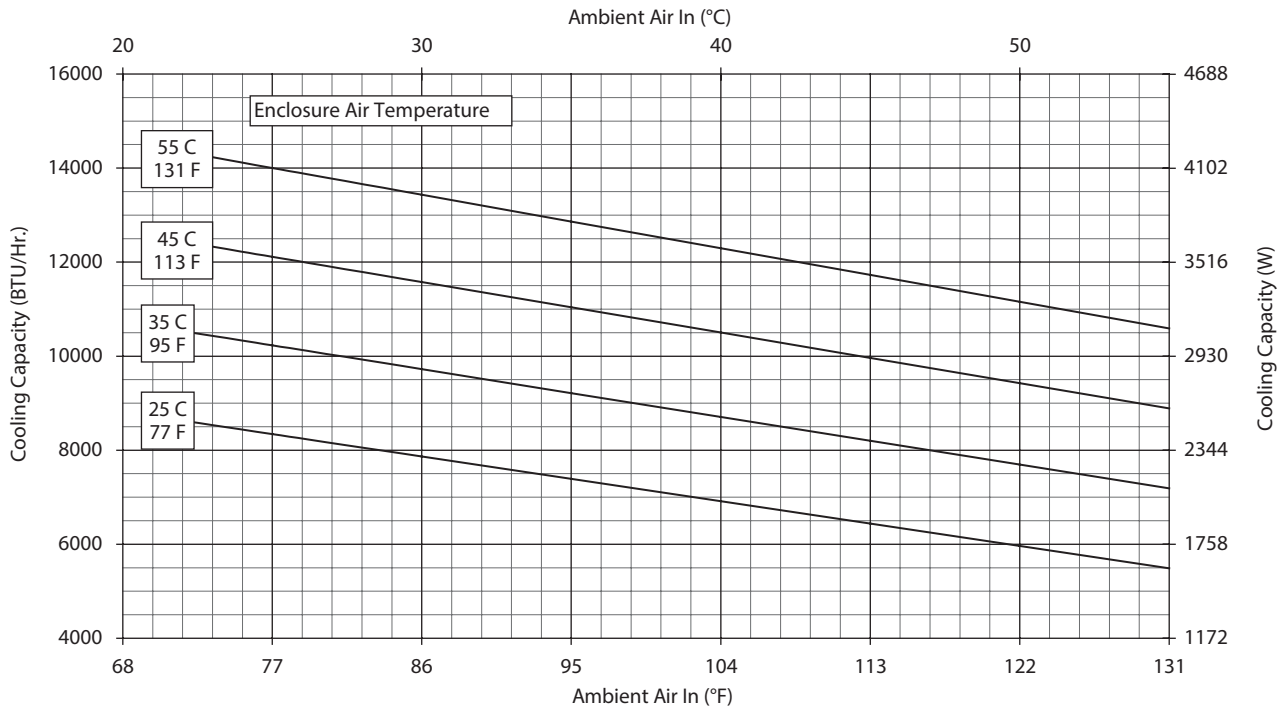
Performance Data NHZ43 11000 BTU/Hr. (3223 Watt)

CATALOG NUMBER			
Painted Galvanized Steel Type 4	NHZ431216G300	NHZ431226G300	NHZ431246G300
Painted Galvanized Steel Type 4 with Remote Access Control*	NHZ431216G360	NHZ431226G360	NHZ431246G360
Stainless Steel Type 4X	NHZ431216G400	NHZ431226G400	NHZ431246G400
Stainless Steel Type 4X with Remote Access Control*	NHZ431216G460	NHZ431226G460	NHZ431246G460
Stainless Steel Type 4X Offshore	NHZ431216G500	NHZ431226G500	NHZ431246G500
COOLING PERFORMANCE			
Nominal:			
BTUs/Hr.	10400 / 11000	10400 / 11000	10400 / 11000
Watts	3047 / 3223	2900 / 3223	2900 / 3223
At 131 F / 131 F (55 C / 55 C):			
BTU/Hr. (50 / 60 Hz)	10588 / 11180	9946 / 11052	10048 / 10797
Watts (50 / 60 Hz)	3103 / 3277	2915 / 3239	2945 / 3164
At 95 F / 95 F (35 C / 35 C):			
BTU/Hr. (50 / 60 Hz)	9475 / 10023	8967 / 9644	8587 / 9559
Watts (50 / 60 Hz)	2777 / 2937	2628 / 2826	2517 / 2801
Refrigerant	R134a	R134a	R134a
Refrigerant Charge (ounces/grams)	36 / 1021	38 / 1077	41 / 1162
Operating Temperature Range:			
Maximum (°F / °C)	125 / 52	131 / 55	131 / 55
Minimum (°F / °C)	-40 / -40	-40 / -40	-40 / -40
Air Flow at 0 Static Pressure:			
Internal loop 50 Hz (CFM / M ³ /Hr)	239 / 406	259 / 440	254 / 432
External loop 50 Hz (CFM / M ³ /Hr)	494 / 839	489 / 831	341 / 579
Internal loop 60 Hz (CFM / M ³ /Hr)	250 / 425	267 / 454	260 / 442
External loop 60 Hz (CFM / M ³ /Hr)	528 / 897	525 / 892	564 / 958
ELECTRICAL DATA			
Rated Voltage	115	230	400 / 460 3~
Frequency (Hz)	50 / 60	50 / 60	50 / 60
Operating Range	+/-10%	+/-10%	+/-10%
Max. Power Consumption (Watts at 50 / 60 Hz)	1620 / 2061	1802 / 2446	1294 / 1421
Max. Nominal Current (Amps at 50 / 60 Hz)	15.1 / 18.2	9.0 / 9.1	3.4 / 3.5
Starting Current (Amps)	57	38	16
Agency Approvals		cUL Listed CE	
		Others available upon request	
Power Input Description		Terminal Block	
ENCLOSURE PROTECTION			
UL Type		Type 4, 4X Standard	
CONTROLLER			
Description		Digital Controller	
Controller Location		Enclosure Side	
Factory Controller Setting (°F / °C)		80 / 27	
SOUND LEVEL			
At 1.5 Meters	68.4 dBA	68.4 dBA	69.6 dBA
UNIT CONSTRUCTION			
Material		Galvanized Sheet Metal Type 4 Models Stainless steel 316L Type 4X and Offshore Models	
Finish		RAL 7035 light-gray, semi-textured powder-coat paint standard Other colors available	
UNIT DIMENSIONS			
Height (in / mm)		43.00 / 1092.2	
Width (in / mm)		11.50 / 292.1	
Depth (in / mm)		14.00 / 355.6	
Weight (lb / kg)	127/57.6	127/57.6	138/62.6

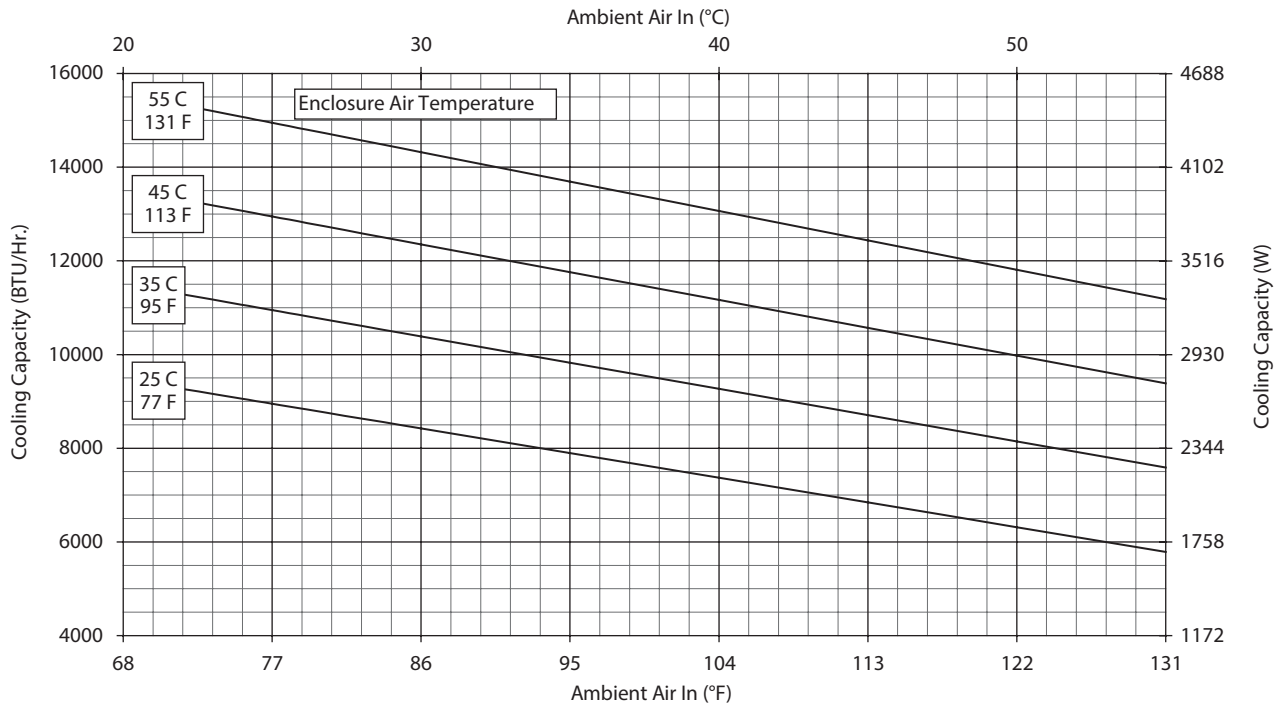
*Units with Remote Access Control utilize a digital controller and communicate via EtherNet/IP, Profinet, Modbus TCP/IP and SNMP over ethernet or modbus RTU over USB.

Performance Curves for NHZ43 Models 11000 BTU/Hr. (3223 Watt)

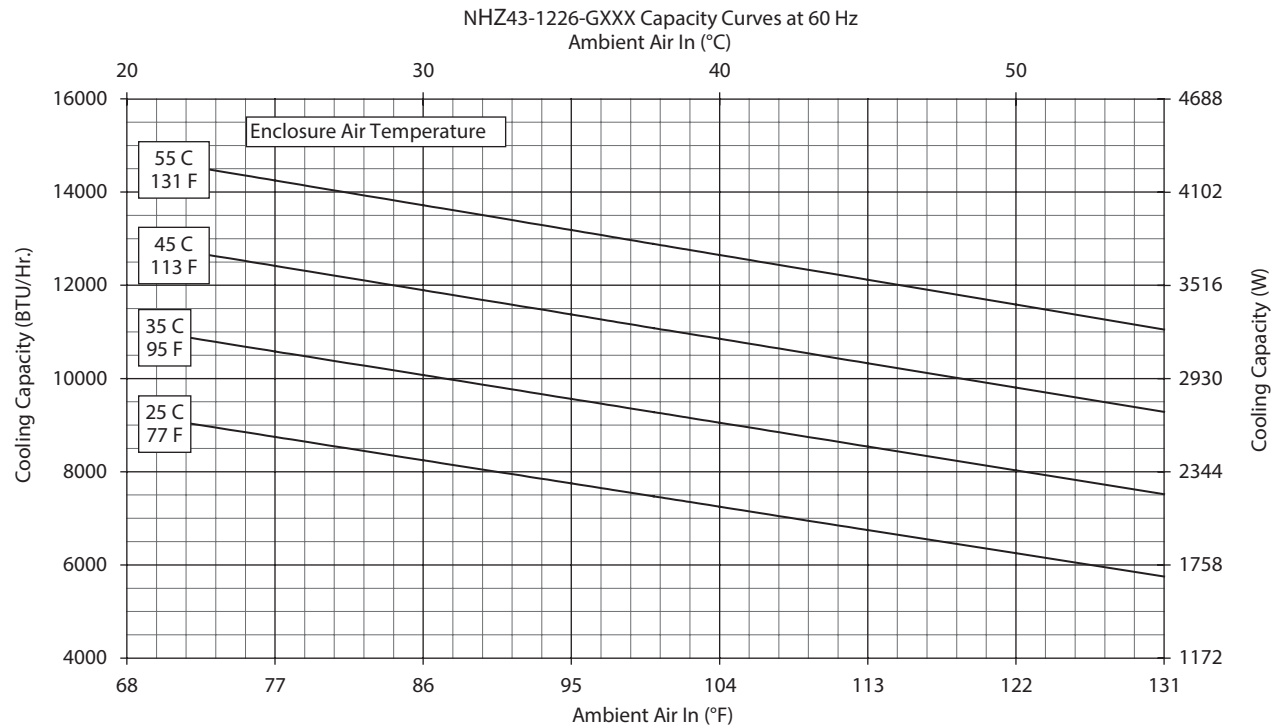
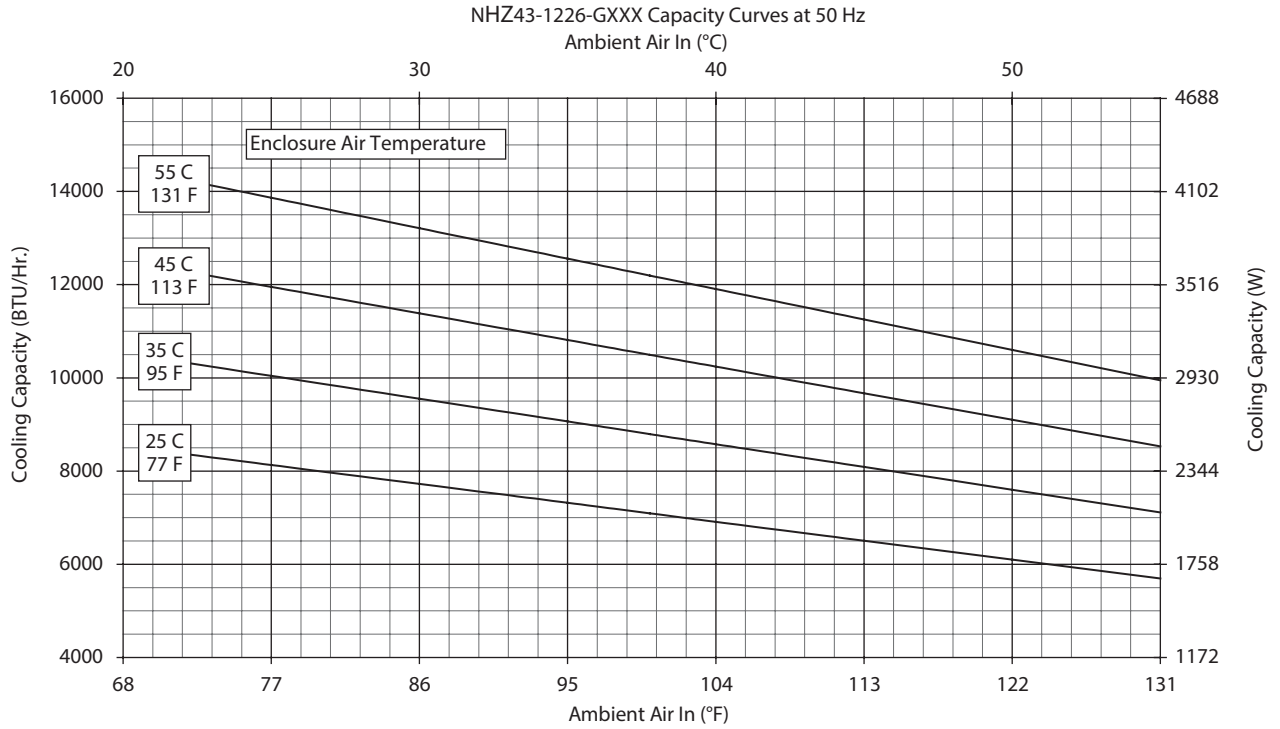
NHZ43-1216-GXXX Capacity Curves at 50 Hz



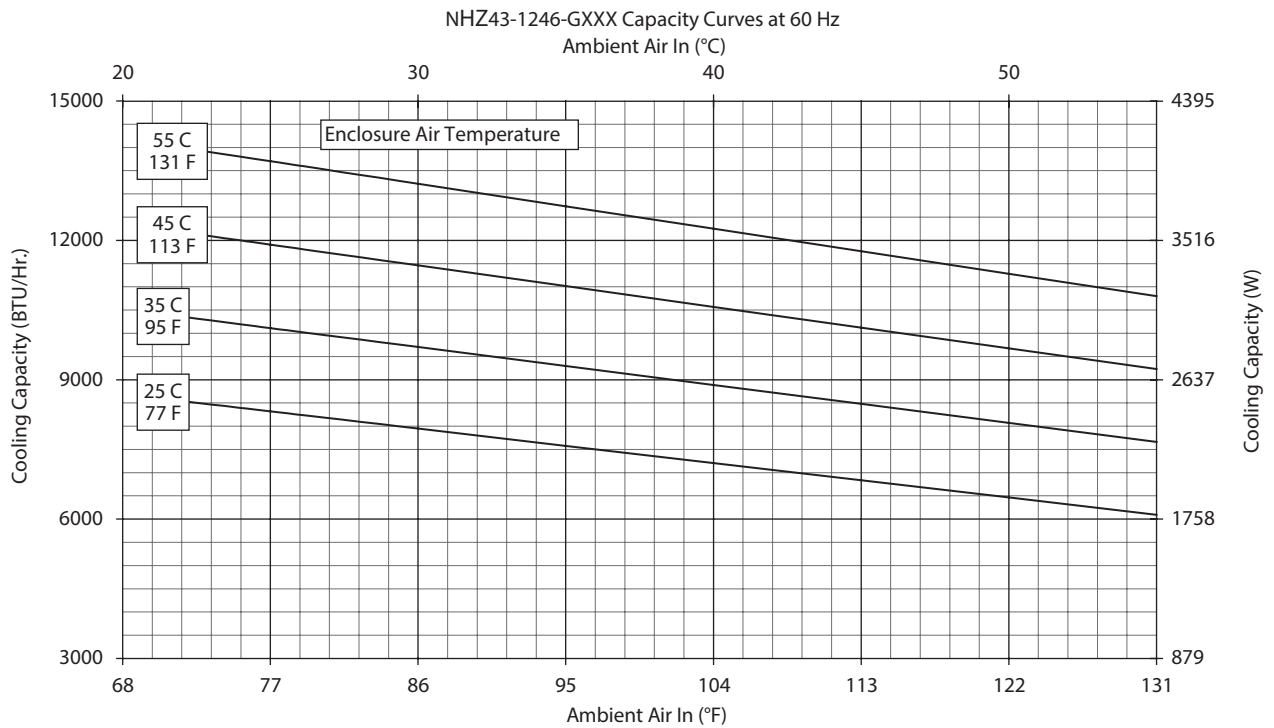
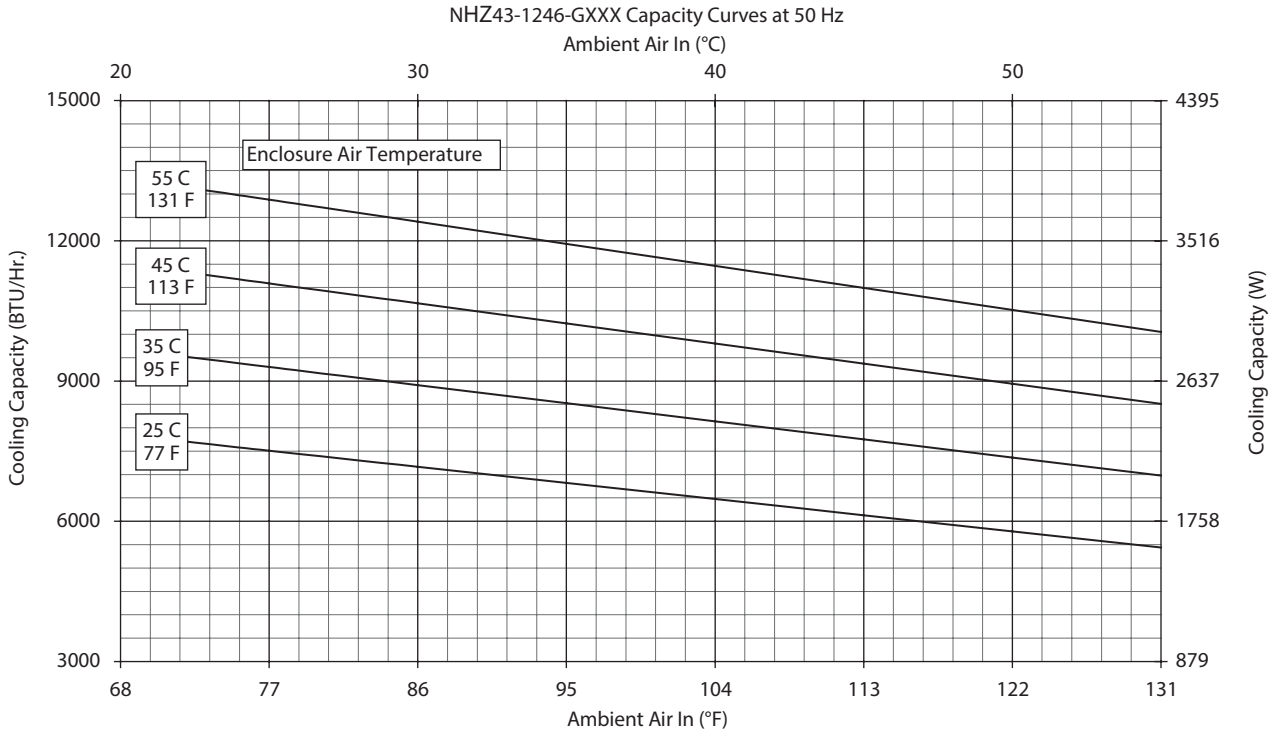
NHZ43-1216-GXXX Capacity Curves at 60 Hz



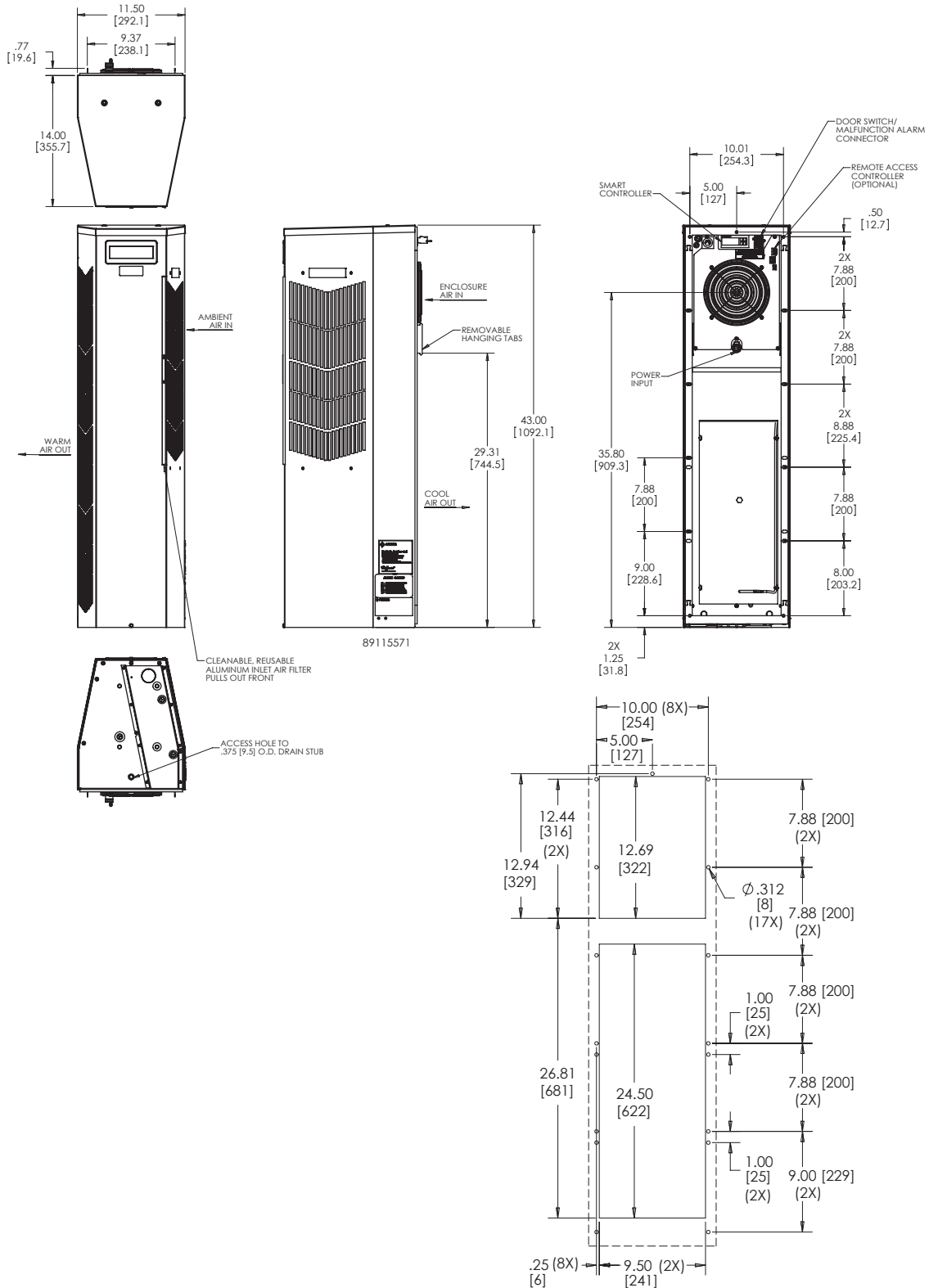
Performance Curves for NHZ43 Models 11000 BTU/Hr. (3223 Watt)



Performance Curves for NHZ43 Models 11000 BTU/Hr. (3223 Watt)



NHZ43 11000 BTU/Hr. (3223 Watt)



CUTOUT INSTRUCTIONS

Visit www.PentairProtect.com to download 2D and 3D CAD drawings into the overall design of your electronic system.



HAZARDOUS LOCATION HEATERS



INDUSTRY STANDARDS

ATEX, IECEx
 I12G Ex d IIC T3 / I12 D Ex Td A21 IP65 T200 C
 NEC CSA us
 Class I, Div 1 Groups A, B, C, D / Class II Div 1 Groups E, F, G

APPLICATION

Designed for use in hazardous locations where electronic components require protection from cold freezing temperatures, condensation and corrosion.

SPECIFICATIONS

- 50W, 80W, 200W, 300W, 400W and 600W models available
- Provides freeze protection down to -76 F / -60 C
- Conductive and Convection heating types available
- 50W and 80W models can be mounted directly to manifolds, measuring or analyzing instruments, control valves, and similar equipment
- 200W, 300W, 400W, 600W models are finned heaters that heat the area by transferring the heat from the heater to surrounding air, creating a convection current.
- Two thermostat options available with a 50 F / 10 C or 68 F / 20 C set point

FINISH

- Black Anodized Aluminum

Performance Data 50W and 80W Hazardous Location Heaters

CATALOG NUMBERS		
	DAHHL501AC	DAHHL801AC
HEATING PERFORMANCE		
Watts	50	80
Heating Type	Conductive	Conductive
Power Regulation	Self Limiting	Self Limiting
HAZARDOUS LOCATION CERTIFICATION		
Temperature Classification (T Code)	T4	T3
Agency Approvals	ATEX, IECEx, CSA us	
ATEX / IECEx Certification	I12G Ex d IIC T3 / I12 D Ex Td A21 IP65 T200 C	
NEC CSA us Certification	Class I, Div 1 Groups A, B, C, D / Class II Div 1 Groups E, F, G	
ELECTRICAL DATA		
Rated Voltage (VAC or VDC)	110 - 265	110 - 265
Operating Range		
Maximum (F/C)	302/150	302/150
Minimum (F/C)	-76/-60	-76/-60
UNIT CONSTRUCTION		
Material	Black anodized sea water proof aluminium	
ACCESSORIES		
Thermostat*	HLTSTAT10C, HLTSTAT20C	
UNIT DIMENSIONS		
Height (in./mm)	3.5/190	3.5/190
Width (in./mm)	1.6/40	1.6/40
Depth (in./mm)	1.2/30	1.2/30
Weight (lb./kg)	1.1/50	1.1/50

Thermostats sold separately as an accessory.

Performance Data 200W, 300W, 400W, 600W Hazardous Location Heaters

CATALOG NUMBERS	DAHHL200AC	DAHHL300AC	DAHHL4001A	DAHHL4002A	DAHHL6001A	DAHHL6002A
HEATING PERFORMANCE						
Watts	200	300	400	400	600	600
Heating Type	Convection	Convection	Convection	Convection	Convection	Convection
Power Regulation	Self Limiting	Self Limiting	Constant Power	Constant Power	Constant Power	Constant Power
HAZARDOUS LOCATION CERTIFICATION						
Temperature Classification (T Code)	T3	T3	T3	T3	T3	T3
Agency Approvals	ATEX, IECEx, CSA us					
ATEX / IECEx Certification	II2G Ex d IIC T3 / II2 D Ex Td A21 IP65 T200 C					
NEC CSA us Certification	Class I, Div 1 Groups A, B, C, D / Class II Div 1 Groups E, F, G					
ELECTRICAL DATA						
Rated Voltage (VAC or VDC)	110 - 265	110 - 265	108 - 132	207 - 253	108 - 132	207 - 253
Operating Range						
Maximum (F/C)	302/150	302/150	302/150	302/150	302/150	302/150
Minimum (F/C)	-76/-60	-76/-60	-76/-60	-76/-60	-76/-60	-76/-60
UNIT CONSTRUCTION						
Material	Black anodized sea water proof aluminium					
ACCESSORIES						
Thermostat*	HLTSTAT10C, HLTSTAT20C					
UNIT DIMENSIONS						
Height (in./mm)	8.9/225	12.8/325	8.9/225	8.9/225	12.8/325	12.8/325
Width (in./mm)	9.0/229	9.0/229	9.0/229	9.0/229	9.0/229	9.0/229
Depth (in./mm)	2.4/60	2.4/60	2.4/60	2.4/60	2.4/60	2.4/60
Weight (lb./kg)	8.7/3.95	12.5/5.65	8.7/3.95	8.7/3.95	12.5/5.65	12.5/5.65

* A thermostat is required for 400W and 600W models. It is sold separately as an accessory.

HAZARDOUS LOCATION HEATER (100 WATT)



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/I (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

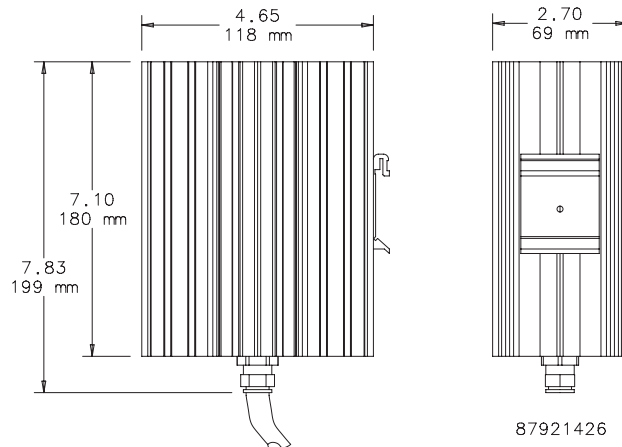
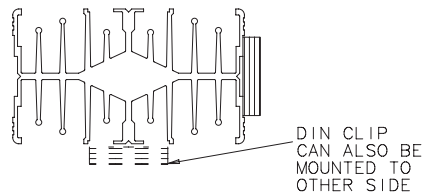
Black anodized

BULLETIN: HL

Standard Product

Catalog Number	AxBxC in./mm	Heating Power	Surface Temperature T ₄ (°F) ^a	Surface Temperature T ₄ (°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.



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)

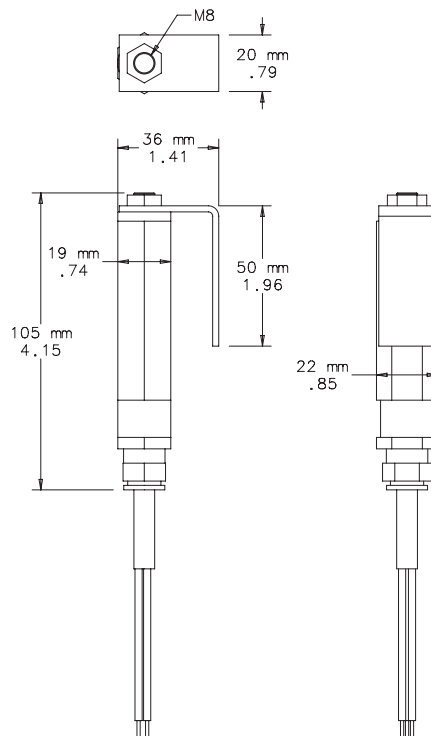
FINISH

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 Temperature (°F)	Switch On (Closed) Temperature below Switch Off Temperature (°C)
HLTHERMNC	250 V	100 V	4A resistive; 1A ind. (cos f = 0.6)	77 +/- 6	25 +/- 3K	7.2 +/- 2	4 +/- 1K



87921425