GAUMER PROCESS -





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#### **HEAT TRACING SYSTEM**

The Gaumer Process Heat Tracing System consists of Self-regulating heating cable and accessories including GB Series. Depending on the installation environment, the system could be installed in various ways, and for safety reasons, the system must be properly installed using a compatible product.



#### **CERTIFICATION**

	< Ex>	IECEx
FM24US0113X / FM24CA0042X	FM24ATEX0018X	IECEx FMG 24.0017X





Industrial Self-Regulating Heating Cables







The GHT Self-Regulating Heating Cable is designed for freeze protection and process temperature maintenance of metal and non-metal pipes, vessels, and equipment.

The unique PTC feature of GHT self-regulating core elements adjusts its heat output in response to the surrounding temperature along the entire circuit, delivering more heat where and when required. This self-regulating feature also serves to prevent overheating, even in cases where GHT cables overlap. Another benefit of the cable is the ability to cut to length in the field, completed with Gaumer Process system connection kits for quick and convenient installations.

GHT heating cable system is certified for hazardous locations with maximum maintain temperature of 150°F (65°C) and intermittent exposure temperature of 185°F (85°C). Use of GB connection kits for GHT installation is required to comply with system approval, ensuring safe operation and reliable thermal performance.

### CERTIFICATION

	Æx>	IECEx
FM24US0113X / FM24CA0042X	FM24ATEX0018X	IECEx FMG 24.0017X



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#### **SPECIFICATION**

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Max. Intermittent Exposure Temp.	185°F (85°C)
Max. Maintain or Continuous Exposure Temp.	150°F (65°C)
Supply Voltage	100-120V or 200-277V
Output Wattage	3, 5, 8, 10, 12* W/ft @50°F (10, 16, 26, 33, 39W/m @10°C) (*12W/ft only available in Supply Voltage 200 – 277V)
Bus wire	16 AWG
Min. Bending Radius	0.5" @68°F (13mm @20°C), 1.6" @-58°F (40mm @-50°C)
Min. Installation Temperature	-58°F (-50°C)
Min. Start-up Temperature	-40°F (-40°C)
Maximum Circuit Breaker Size	40A
Outer Jacket Color	CR : Dark Grey, CT : Black
Heating Cable Dimensions (Nominal)	CR : 0.49" x 0.25" (12.5mm x 6.0mm), CT : 0.46" x 0.21" (11.8mm x 5.0mm)
Heating Cable Weight	CR : 0.0741lb/ft (0.110kg/m), CT : 0.0695lb/ft (0.103kg/m)

#### **ORDERING INFORMATION**





\* 12W/ft only available for 2(200 – 277V)

#### NOMINAL POWER OUTPUT RATINGS

#### Circuit length adjustment factor

Voltage	GHT3-2	GHT5-2	GHT8-2	GHT10-2	GHT12-2
208V	0.969	0.957	0.925	0.920	0.915
240V	1.000	1.000	1.000	1.000	1.000
277V	1.054	1.065	1.088	1.120	1.130

#### Power adjustment factor

Voltage	GHT3-2	GHT5-2	GHT8-2	GHT10-2	GHT12-2
208V	0.800	0.820	0.880	0.910	0.943
240V	1.000	1.000	1.000	1.000	1.000
277V	1.190	1.170	1.120	1.100	1.071



[NOTE] 1. Thermal outputs above are tested in accordance with IEC/IEEE 60097-30-1:2015, with each model on a metallic pipe insulated with a fiberglass insulation. 2. The power output will be derated by 25% on plastic pipes. GAT-L164 aluminum tape is required for installation on plastic pipes. \* Technical information subject to change without notification.



The GHU Self-Regulating Heating Cable is designed for freeze protection and process temperature maintenance of metal and non-metal pipes, vessels, and equipment.

The unique PTC feature of GHU self-regulating core elements adjusts its heat output in response to the surrounding temperature along the entire circuit, delivering more heat where and when required. This self-regulating feature also serves to prevent overheating, even in cases where GHU cables overlap. Another benefit of the cable is the ability to cut to length in the field, completed with Gaumer Process system connection kits for quick and convenient installations.

GHU heating cable system is certified for hazardous locations with maximum maintain temperature of 250°F (120°C) and intermittent exposure temperature of 392°F (200°C). Use of GB connection kits for GHU installation is required to comply with system approval, ensuring safe operation and reliable thermal performance.

#### CERTIFICATION

FM	<pre> </pre>	<b>IECEx</b>
FM24US0113X / FM24CA0042X	FM24ATEX0018X	IECEx FMG 24.0017X





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Max. Intermittent Exposure Temp.	392°F (200°C)
Max. Maintain or Continuous Exposure Temp.	250°F (120°C)
Supply Voltage	100-120V or 200-277V
Output Wattage	5, 10, 15, 20W/ft @50°F (16, 33, 49, 66W/m @10°C)
Bus wire	16 AWG
Min. Bending Radius	0.8" @70°F (20mm @20°C), 1.8" @-76°F (45mm @-60°C)
Min. Installation Temperature	-76°F (-60°C)
Min. Start-up Temperature	-40°F (-40°C)
Maximum Circuit Breaker Size	50A (40A for ATEX and IECEx)
Outer Jacket Color	Yellow
Heating Cable Dimensions (Nominal)	0.43" x 0.20" (11.0mm x 5.0mm)
Heating Cable Weight	0.0753lb/ft (0.112kg/m)

#### **ORDERING INFORMATION**



#### NOMINAL POWER OUTPUT RATINGS

#### Circuit length adjustment factor

Voltage	GHU5-2	GHU10-2	GHU15-2	GHU20-2
208V	0.94	0.94	0.93	0.94
240V	1.00	1.00	1.00	1.00
277V	1.09	1.09	1.11	1.11

#### Power adjustment factor

Voltage	GHU5-2	GHU10-2	GHU15-2	GHU20-2
208V	0.88	0.89	0.90	0.91
240V	1.00	1.00	1.00	1.00
277V	1.06	1.07	1.07	1.06



#### [NOTE]

1. Thermal outputs above are tested in accordance with IEC/IEEE 60097-30-1:2015, with each model on a metallic pipe insulated with a fiberglass insulation. 2. The power output will be derated by 25% on plastic pipes. GAT-L164 aluminum tape is required for installation on plastic pipes. \* Technical information subject to change without notification.

#### GHU Power-Temperature Characteristics



The GHK Self-Regulating Heating Cable is designed for freeze protection and high process temperature maintenance of metal and non-metal pipes, vessels, and equipment where steam cleaning is required.

The unique PTC feature of GHK self-regulating core elements adjusts its heat output in response to the surrounding temperature along the entire circuit, delivering more heat where and when required. This self-regulating feature also serves to prevent overheating, even in cases where GHK cables overlap. Another benefit of the cable is the ability to cut to length in the field, completed with Gaumer Process system connection kits for quick and convenient installations.

GHK heating cable system is certified for hazardous locations with maximum maintain temperature of 300°F(150°C) and intermittent exposure temperature of 482°F(250°C). Use of GB connection kits for GHK installation is required to comply with system approval, ensuring safe operation and reliable thermal performance.

#### **CERTIFICATION**





### GAUMER<sup>®</sup> PROCESS

#### **SPECIFICATION**

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Max. Intermittent Exposure Temp.	482°F (250°C)
Max. Maintain or Continuous Exposure Temp.	300°F (150°C)
Supply Voltage	100-120V or 200-277V
Output Wattage	5, 10, 15, 20W/ft @50°F (16, 33, 49, 66W/m @10°C)
Bus wire	16 AWG
Min. Bending Radius	0.8" @70°F (20mm @20°C), 1.8" @-76°F (45mm @-60°C)
Min. Installation Temperature	-76°F (-60°C)
Min. Start-up Temperature	-40°F (-40°C)
Maximum Circuit Breaker Size	50A (40A for ATEX and IECEx)
Outer Jacket Color	Red
Heating Cable Dimensions (Nominal)	0.50" x 0.20" (13.0mm x 5.0mm)
Heating Cable Weight	0.0902lb/ft (0.134kg/m)

#### **ORDERING INFORMATION**



#### NOMINAL POWER OUTPUT RATINGS

#### Circuit length adjustment factor

Voltage	GHK5-2	GHK10-2	GHK15-2	GHK20-2
208V	0.93	0.94	0.94	0.94
240V	1.00	1.00	1.00	1.00
277V	1.10	1.10	1.11	1.11

#### Power adjustment factor

Voltage	GHK5-2	GHK10-2	GHK15-2	GHK20-2
208V	0.93	0.94	0.94	0.94
240V	1.00	1.00	1.00	1.00
277V	1.10	1.10	1.11	1.11



# [NOTE] 1. Thermal outputs above are tested in accordance with IEC/IEEE 60097-30-1:2015, with each model on a metallic pipe insulated with a fiberglass insulation. 2. The power output will be derated by 25% on plastic pipes. GAT-L164 aluminum tape is required for installation on plastic pipes. \* Technical information subject to change without notification.







GB Connection Kit Series

#### **GB CONNECTION KIT SERIES**

#### GB100S



GB300-L-R GB300-L-G

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## **GB100**\$

Power Connection ; Single Entry

#### PRODUCT DESCRIPTION

The GB100S is designed to provide power connection for GHT, GHU or GHK industrial self-regulating heating cables of Gaumer Process.

The GB series utilize pipe standoff for on-pipe installation to allow heating cables to directly enter the enclosure without the use of insulation while protecting the cables from exposure.

The GB series connection kits use core sealer and RTV adhesive without the need for heatgun for installation. Spring-type terminals provide safe and reliable connections with capacity up to 8AWG conductor sizes. GB100S-A has enclosure with one NPT 3/4" through hole, GB100S-E with one M25 through hole for power entry, to energize single heating cable. GB100S may also be used as splice of two heating cables or end of the circuit termination if the through hole is blocked with a certified plug.

#### **CERTIFICATION**

	ROVED	Æx>	IECEx
FM24US0113X ,	/ FM24CA0042X	FM24ATEX0018X	IECEx FMG 24.0017X





	GB100S-A	GB100S-E	
Application	Power Connectio	Power Connection with Single Entry	
Heating Cable Capability No. of Heating Cable Entry	GHT-CR, GHT-CT, GHU-CT,	GHK-CT (One heating cable)	
Supply Voltage	100 -	- 277V	
Ingress Protection	NEMA Type 4X, IP66 IP66		
Ambient Temperature Range	-40°F ~ 131°F	-40°C ~ 55°C	
Min. Installation Temperature	-40°F	-40°C	
Through Hole for Conduit	NPT 3/4"	M25	
Maximum Conductor Sizes	8AWG (6AWG optional)	10mm² (16mm² optional)	
Maximum Circuit Breaker Size	50A	40A	

[Note] GB100S requires box stopping plug for splice or end termination.

#### **ORDERING INFORMATION**



#### \* APPLICATION 100 = Power connection and more

**200 =** Tee or Splice connection, End termination

**300 =** End seal, In-line splice connection

Contents	Enclosure material	Installation Accessories (Sold separately)	Tools required
<ul> <li>1 Junction box with terminal blocks</li> <li>1 Lid and 4 screws</li> <li>1 Pipe stand, compression cap, locknut and cable tie</li> <li>3 Grommets for different cable sizes</li> <li>1 Core sealer</li> <li>1 Insulation tube</li> <li>2 Grommet plugs</li> <li>1 RTV sealant</li> <li>2 O-rings</li> <li>1 Wrench</li> </ul>	<ul> <li>Glass reinforced polymer junction box</li> <li>Glass reinforced polymer lid with stainless steel screws</li> <li>Glass reinforced polymer box stand</li> </ul>	<ul> <li>Conduit and fittings</li> <li>Box plug</li> <li>Pipe Strap</li> <li>Fiberglass tape</li> <li>Aluminum tape</li> </ul>	<ul> <li>Wire cutters, Utility knife, Marking pen</li> <li>Large slotted screwdriver</li> <li>3/16"(or 5mm) hex key</li> <li>Adjustable pliers, Needle nose pliers</li> </ul>



### GB100N

#### Power Connections ; Multiple Entries

### **PRODUCT DESCRIPTION**

The GB100M is designed to provide power connections for up to three heating cables. The GB100M can also be used for splice or tee connection or end termination if the power through hole is blocked with a certified plug.

The GB series utilize pipe standoff for on-pipe installation to allow heating cables to directly enter the enclosure without the use of insulation while protecting the cables from exposure.

The GB series connection kits use core sealer and RTV adhesive without the need for heatgun for installation. Spring-type terminals provide safe and reliable connections with capacity up to 8AWG conductor sizes.

GB100M-A has enclosure with one NPT 3/4" through hole, GB100M-E with one M25 through hole for power entries for power connection up to three Gaumer Process heating cables.

#### **CERTIFICATION**

FM	Æx>	IECEx
FM24US0113X / FM24CA0042X	FM24ATEX0018X	IECEx FMG 24.0017X





	GB100M-A	GB100M-E	
Application	Power Connection with Multiple Entries (Two independent circuits if desired)		
Heating Cable Capability No. of Heating Cable Entry	GHT-CR, GHT-CT, GHU-CT, G	GHK-CT (Three heating cables)	
Supply Voltage	100 ~ 277V		
Ingress Protection	NEMA Туре 4X, IP66 IP66		
Ambient Temperature Range	-40°F ~ 131°F -40°C ~ 55°C		
Min. Installation Temperature	-40°F	-40°C	
Through Hole for Conduit	NPT 34"	M25	
Maximum Conductor Sizes	8AWG (6AWG optional)	10mm² (16mm² optional)	
Maximum Circuit Breaker Size	50A	40A	

[NOTE] GB100M requires box stopping plug for splice or tee connection or end termination.

#### **ORDERING INFORMATION**





Contents	Enclosure material	Installation Accessories (Sold separately)	Tools required
<ul> <li>1 Junction box with terminal blocks</li> <li>1 Lid and 4 Screws</li> <li>1 Pipe stand, compression cap, locknut and cable tie</li> <li>3 Grommets for different cable sizes</li> <li>3 Core sealers</li> <li>3 Insulation tubes</li> <li>2 Grommet plugs</li> <li>1 RTV sealant</li> <li>2 O-rings</li> <li>1 Wrench</li> </ul>	<ul> <li>Glass reinforced polymer junction box</li> <li>Glass reinforced polymer lid with stainless steel screws</li> <li>Glass reinforced polymer box stand</li> </ul>	<ul> <li>Conduit and fittings</li> <li>Box plug</li> <li>Pipe Strap</li> <li>Fiberglass tape</li> <li>Aluminum tape</li> </ul>	<ul> <li>Wire cutters, Utility knife, Marking pen</li> <li>Large slotted screwdriver</li> <li>3/16"(or 5mm) hex key</li> <li>Adjustable pliers, Needle nose pliers</li> </ul>



### **GB20**

### Splice or Tee Connection, End Termination

#### PRODUCT DESCRIPTION

The GB200 is designed to provide splice or tee connections or end terminations for Gaumer Process GHT, GHU or GHK industrial self-regulating heating cables.

The GB series utilize pipe standoff for on-pipe installation to allow heating cables to directly enter the enclosure without the use of insulation while protecting the cables from exposure.

The GB series connection kits use core sealer and RTV adhesive without the need for heatgun for installation. Spring-type terminals provide safe and reliable connections with capacity up to 8AWG conductor sizes.

GB200 junction box has the same dimensions as that of GB100M, but does not have any through holes. GB200 is dedicated for splice or tee connections as well as end terminations.

#### **CERTIFICATION**

	<pre> </pre>	<b>IECEx</b>	
FM24US0113X / FM24CA0042X	FM24ATEX0018X	IECEx FMG 24.0017X	





	GB200
Application	Splice or Tee Connection, End Termination
Heating Cable Capability         GHT-CR, GHT-CT, GHU-CT, GHK-CT (Up to three heating cab           No. of Heating Cable Entry         GHT-CR, GHT-CT, GHU-CT, GHK-CT (Up to three heating cab	
Supply Voltage	100 ~ 277V
Ingress Protection	NEMA Type 4X, IP66
Ambient Temperature Range	-40°F ~ 131°F (-40°C ~ 55°C)
Min. Installation Temperature	-40°F (-40°C)
Through Hole for Conduit	N/A
Maximum Conductor Sizes	8AWG (10mm²), 6AWG (16mm²) optional
Maximum Circuit Breaker Size	50A (40A for ATEX and IECEx)

#### **ORDERING INFORMATION**

\* APPLICATION

100 = Power connection and more200 = Tee or Splice connection, End termination300 = End seal, In-line splice connection

**200 \* APPLICATION** 100, 200, 300

GB

Contents	Enclosure material	Installation Accessories (Sold separately)	Tools required
<ul> <li>1 Junction box with terminal blocks</li> <li>1 Lid and 4 screws</li> <li>1 Pipe stand, compression cap, locknut and cable tie</li> <li>3 Grommets for different cable sizes</li> <li>3 Core sealers</li> <li>3 Insulation tubes</li> <li>2 Grommet plugs</li> <li>1 RTV sealant</li> <li>2 O-rings</li> <li>1 Wrench</li> </ul>	<ul> <li>Glass reinforced polymer junction box</li> <li>Glass reinforced polymer lid with stainless steel screws</li> <li>Glass reinforced polymer box stand</li> </ul>	<ul> <li>Conduit and fittings</li> <li>Pipe Strap</li> <li>Fiberglass tape</li> <li>Aluminum tape</li> </ul>	<ul> <li>Wire cutters, Utility knife, Marking pen</li> <li>Large slotted screwdriver</li> <li>3/16"(or 5mm) hex key</li> <li>Adjustable pliers, Needle nose pliers</li> </ul>



# **GB30**0

### End Seal / In-line Splice Connection

#### PRODUCT DESCRIPTION

The GB300 is designed to terminate Gaumer Process GHT, GHU, or GHK industrial self-regulating heating cables for up to two heating cables and also allows for in-line splice connections.

The GB series utilize pipe standoff for on-pipe installation to allow heating cables to directly enter the enclosure without the use of insulation while protecting the cables from exposure.

GB300 uses rubber end cap or core sealers and RTV adhesive without the need for heatgun for installation.

#### **CERTIFICATION**

FM	Ex	<b>IECE</b> x	
FM24US0113X / FM24CA0042X	FM24ATEX0018X	IECEx FMG 24.0017X	





	GB300	
Application	End Seal / In-line Splice Connection	
Heating Cable Capability No. of Heating Cable Entry	GHT-CR, GHT-CT, GHU-CT, GHK-CT (Up to two heating cables)	
Supply Voltage	100 ~ 277V	
Ingress Protection	NEMA Type 4X, IP66	
Ambient Temperature Range	-40°F ~ 131°F (-40°C ~ 55°C)	
Min. Installation Temperature	-40°F (-40°C)	

#### **ORDERING INFORMATION**



Contents	Required for splice connection (Sold separately)	Enclosure material	Installation Accessories (Sold separately)	Tools required
<ul> <li>1 End cap</li> <li>1 Pipe stand and cable tie</li> <li>3 Grommets for different cable sizes</li> <li>2 Rubber end caps</li> <li>1 RTV sealant</li> <li>1 O-ring</li> <li>1 Wrench</li> </ul>	GB-SK, consists of: • 2 Core sealers (S) • 2 Insulation tubes Y/G (S) • 3 Closed end connectors • 1 RTV sealant	<ul> <li>Glass reinforced polymer end cap</li> <li>Glass reinforced polymer pipe stand</li> </ul>	<ul> <li>Pipe Strap</li> <li>Fiberglass tape</li> <li>Aluminum tape</li> </ul>	<ul> <li>Wire cutters, Utility knife, Marking pen</li> <li>Large slotted screwdriver</li> <li>Adjustable pliers, Needle nose pliers</li> <li>Molex RHT-7000 crimp tool or equivalent; 10-16AWG slot (For in-line splice connection only)</li> </ul>



### **GB300-D**

Lighted End Seal

#### PRODUCT DESCRIPTION

The GB300-L is designed to terminate Gaumer Process GHT, GHU or GHK industrial self-regulating heating cables with red or green light indicator for single heating cable.

The GB series utilize pipe standoff for on-pipe installation to allow heating cables to directly enter the enclosure without the use of insulation while protecting the cables from exposure.

The GB300-L uses core sealer and RTV adhesive without the need for heatgun for installation.

#### **CERTIFICATION**

FM	<pre> </pre>	IECEx
FM24US0113X / FM24CA0042X	FM24ATEX0018X	IECEx FMG 24.0017X





	GB300-L	
Application	Lighted End Seal	
Heating cable capability No. of heating cable entry	GHT-CR, GHT-CT, GHU-CT, GHK-CT (One heating cable)	
Supply Voltage	100 ~ 277V	
Ingress Protection	NEMA Type 4X, IP66	
Ambient Temperature Range	-40°F ~ 131°F (-40°C ~ 55°C)	
Min. Installation Temperature	-40°F (-40°C)	

#### **ORDERING INFORMATION**



Contents	Enclosure material	Installation Accessories (Sold separately)	Tools required
<ul> <li>1 Lighted end cap</li> <li>1 Pipe stand and cable tie</li> <li>3 Grommets for different cable sizes</li> <li>2 Closed end connectors</li> <li>1 Core sealer (S)</li> <li>1 RTV sealant</li> <li>1 O-ring</li> <li>1 Wrench</li> </ul>	<ul> <li>Glass reinforced polymer end cap</li> <li>Glass reinforced polymer pipe stand</li> </ul>	<ul> <li>Pipe Strap</li> <li>Fiberglass tape</li> <li>Aluminum tape</li> </ul>	<ul> <li>Wire cutters, Utility knife, Marking pen</li> <li>Large slotted screwdriver</li> <li>Adjustable pliers, Needle nose pliers</li> <li>Molex RHT-7000 crimp tool or equivalent; 10-16AWG slot</li> </ul>

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