

Power-feed Modules EP-7631 and EP-7641 Potential Distribution Modules EP-700F, EP-710F, EP-711F, EP-751F, and EP-750F



Power-feed Module

GE provides RSTi-EP power-feed modules (EP-7631 and EP-7641), which are used to refresh the current paths and isolate the power supply. The RSTi-EP station's main power supply is always fed in through the network adapter. Each module has a Module Status LED and connector block LEDs for inspection.

The power-feed module EP7631 must be connected if the current demand of the series of input modules is too large. The power-feed module EP-7641 must be connected if the current demand of the series of output modules is too large.

The potential distribution module EP-700F provides 16 connections for the functional earth.

The potential distribution module EP-711F provides 16 connections for +24 V from the input current path.

The potential distribution module EP-751F provides 16 connections for +24 V from the output current path.

The potential distribution module EP-710F provides 16 connections for ground from the input current path.

The potential distribution module EP-750F provides 16 connections for ground from the output current path.

Power-feed and potential distribution modules are passive modules without fieldbus communication, therefore they are not considered during configuration. A maximum of three passive modules (power-feed module, potential distribution module, empty slot module) may be installed in succession, however the next module to be installed must be an active module.

The RSTi-EP station is usually installed on a horizontally positioned DIN rail. Installation on vertically positioned DIN rails is also possible.

Modules should be allowed to de-energize for a minimum 10 seconds after power down, prior to starting any maintenance activity.

In the case of a maximum power supply of >8 A and a maximum temperature of > +55 °C, all four contacts must be connected with 1.5 mm² wiring

Refer to the *RSTi-EP Slice I/O User Manual* (GFK-2958) for additional information.

Refer to the *RSTi-EP Power Supply Reference Guide*, a software utility available on PME V9.00, for detailed power-feed requirements.

Module Features

- Spring style technology for ease of wiring
- DIN rail mounted
- Double-click installation for positive indication of correct installation

GFK-2963A

Ordering Information

Module	Description
EP-7631	Power Module, 1 Channel 24VDC Input Flow 10A
EP-7641	Power Module, 1 Channel 24VDC Output Flow 10A
EP-711F	Power Module, 16 Channels 24VDC Potential Distribution +24 VDC from Input Current Path
EP-751F	Power Module, 16 Channels 24VDC Potential Distribution +24 VDC from Output Current Path
EP-700F	Power Module, 16 Channels 24VDC Potential Distribution Functional Earth
EP-710F	Power Module, 16 Channels 24VDC Potential Distribution +0VDC from Input Current Path
EP-750F	Power Module, 16 Channels 24VDC Potential Distribution +0VDC from Output Current Path

Specifications

Power-feed Modules

	EP-7631	EP-7641
Supply		
Supply voltage	20.4V – 28.8V	
Maximum feed current for input modules	10 A	--
Current consumption from output input path I _{IN}	10 mA	--
Maximum feed current for output modules	--	10 A
Current consumption from output input path I _{OUT}	--	10 mA
Operating temperature	-20°C to +60°C (-4 °F to +140 °F)	
Storage temperature	-40°C to +85°C (-40 °F to +185 °F)	
Air humidity (operation/transport)	5% to 95%, noncondensing as per IEC 61131-2	
General Data		
Width	11.5 mm (0.45 in)	
Depth	76 mm (2.99 in)	
Height	120 mm (4.72 in)	
Weight	76 g (6.21 oz)	76 g (6.21 oz)

Power Distribution Modules

	EP-700F	EP-711F	EP-751F	EP-710F	EP-750F
Supply					
Supply voltage	None	20.4V – 28.8V	20.4V – 28.8V	0 V (from input current path)	0 V (from input current path)
General Data					
Weight	84 g (2.96 oz)	84 g (2.96 oz)	84 g (2.96 oz)	84 g (2.96 oz)	84 g (2.96 oz)

LEDs

Potential distribution modules have only a Module Status LED.

Power feed Modules

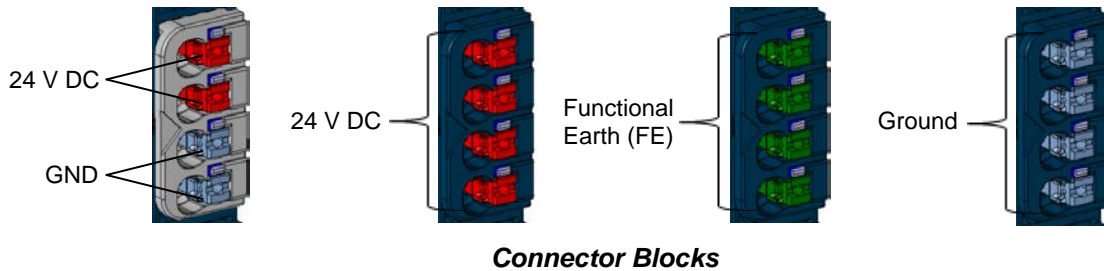
LED	EP-7631
Module Status	Green: Voltage applied and is > 18 V DC
1.1	
1.2	
1.3	
1.4	
2.1	
2.2	
2.3	
2.4	
3.1	Green: Supply voltage for input current path > 18 V DC
3.2	Red: Supply voltage for input current path < 18 V DC
3.3	
3.4	Red: Internal fuse defective, replace module
4.1	
4.2	
4.3	
4.4	

LED	EP-7641
Module Status	Green: Voltage applied and is > 18 V DC
1.1	
1.2	
1.3	
1.4	
2.1	
2.2	
2.3	
2.4	
3.1	
3.2	
3.3	
3.4	
4.1	Green: Supply voltage for output circuit > 18 V DC
4.2	Red: Supply voltage for output circuit < 18 V DC
4.3	
4.4	Red: Internal fuse defective, replace module

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Field Wiring

The connection frame has one connector block, and two 24 V DC wires can be connected to each connector, along with two ground connections. Those four connectors are used as shown in the following figure. The *Spring style* technology allows either finely stranded or solid wire with crimped wire-end ferrules or ultrasonically welded wires, each with a maximum cross-section of 1.5 mm² (16 gauge), to be inserted easily through the opening in the clamping terminal without having to use tools. To insert fine stranded wires without wire-end ferrules, the pusher must be pressed in with a screwdriver and released to latch the wire.



Connector Specifications:

- conductor cross-section 0.14 to 1.5 mm² (26 – 16 gauge)
- max. ampacity: 10 A
- 4-pole



Caution

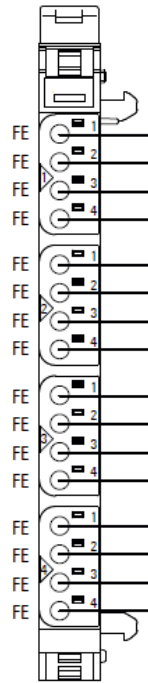
In the case of a maximum power supply of >8 A and a maximum temperature of > +55 °C, all four contacts must be connected with 1.5 mm² wiring.

The modules do not have a fused sensor/activator power supply. All cables to the connected sensors/actuators must be fused corresponding to their conductor cross-sections (as per Standard DIN EN 60204-1, section 12).

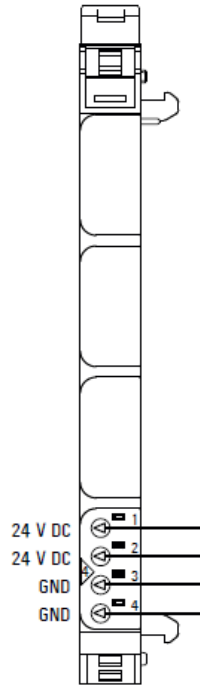
Refer to the *RSTi-EP Slice I/O User Manual* (GFK-2958) for additional information.

For technical assistance, go to <http://support.qe-ip.com>.

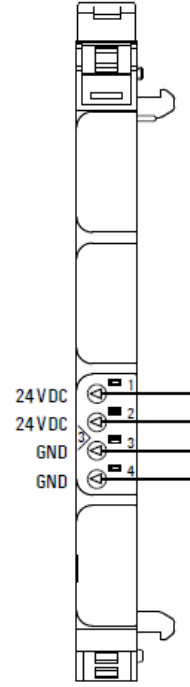
Connection Diagrams



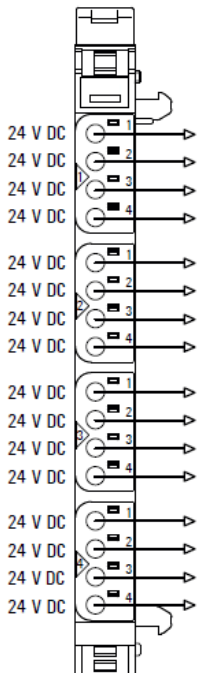
EP-700F



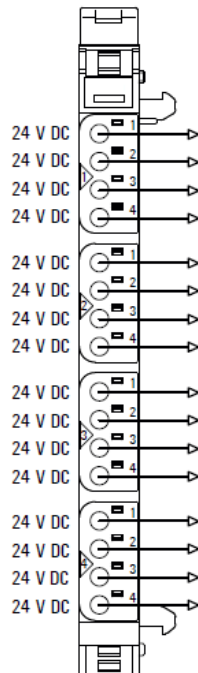
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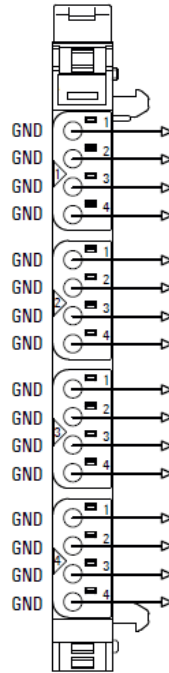
EP-7631



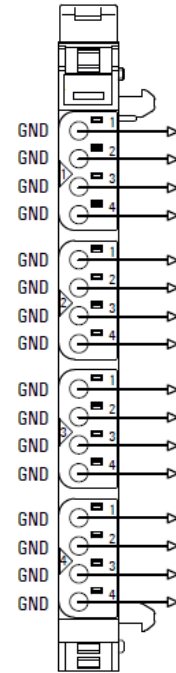
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EP-751F



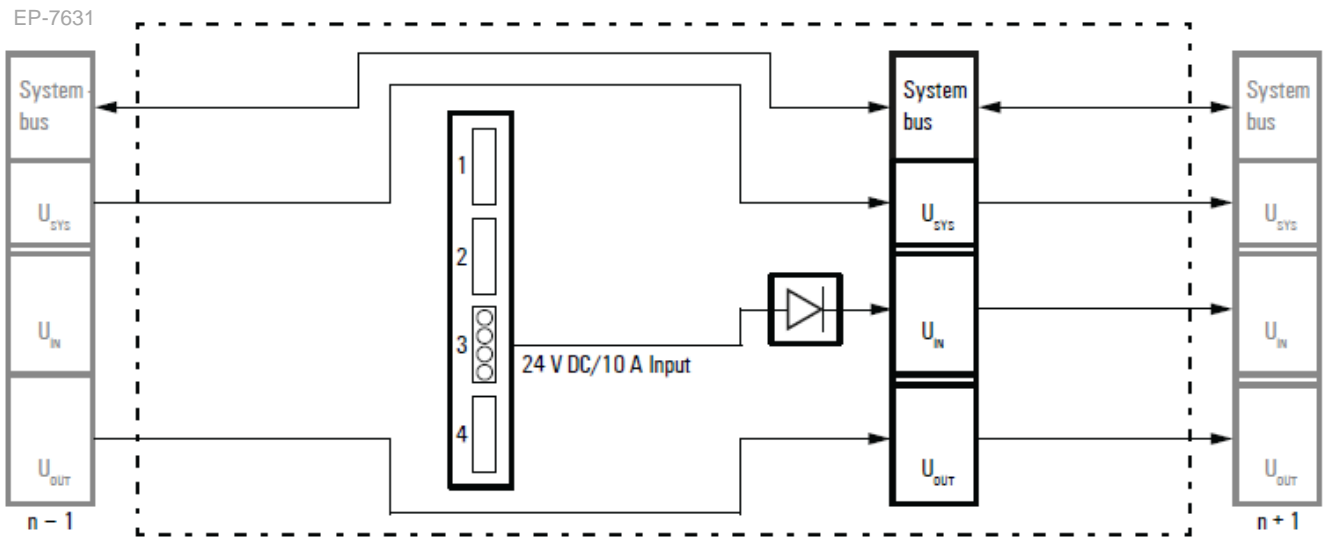
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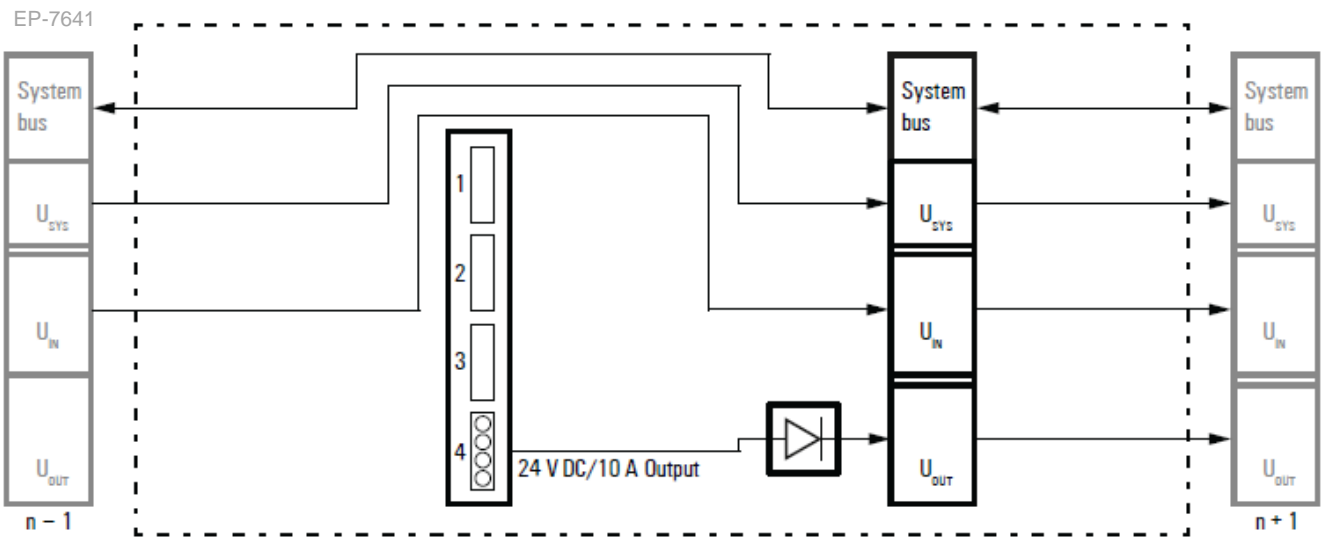
EP-750F

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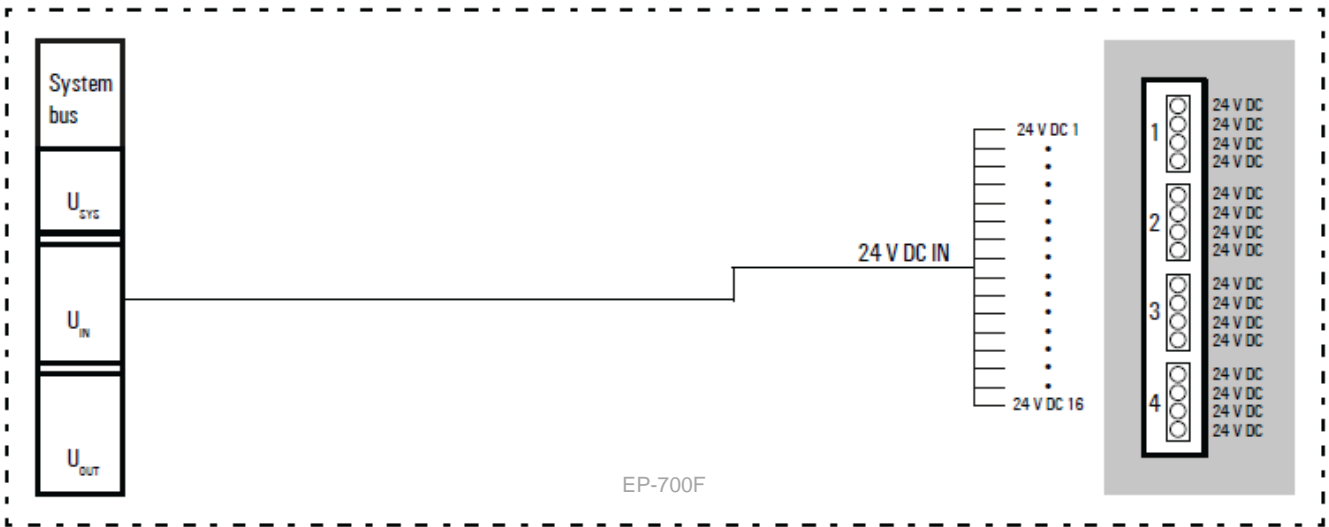
Connection Block Diagrams



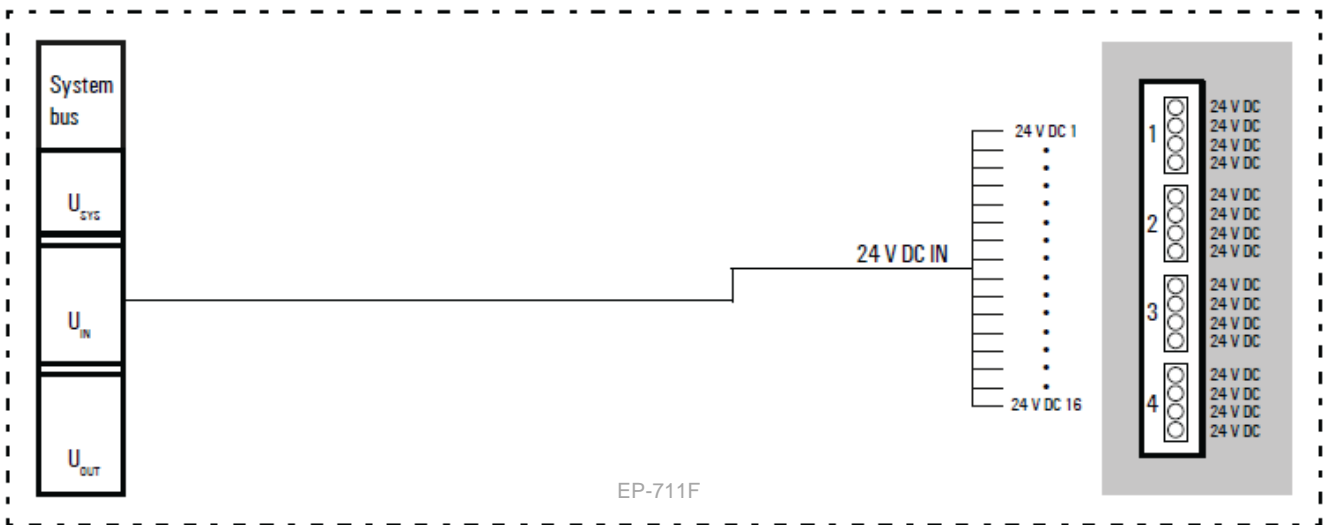
EP-7631



EP-7641

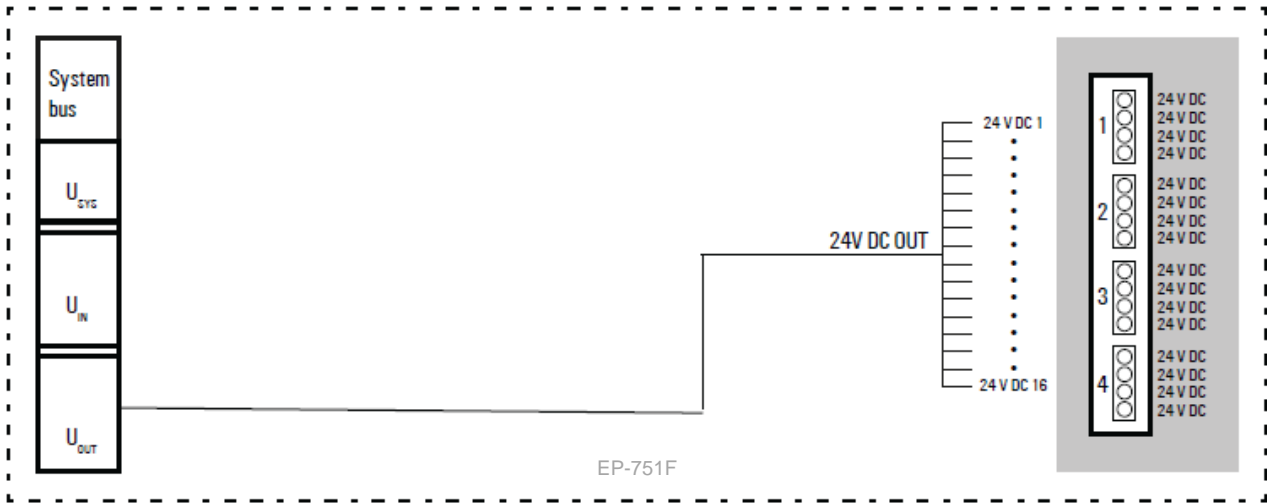


EP-700F

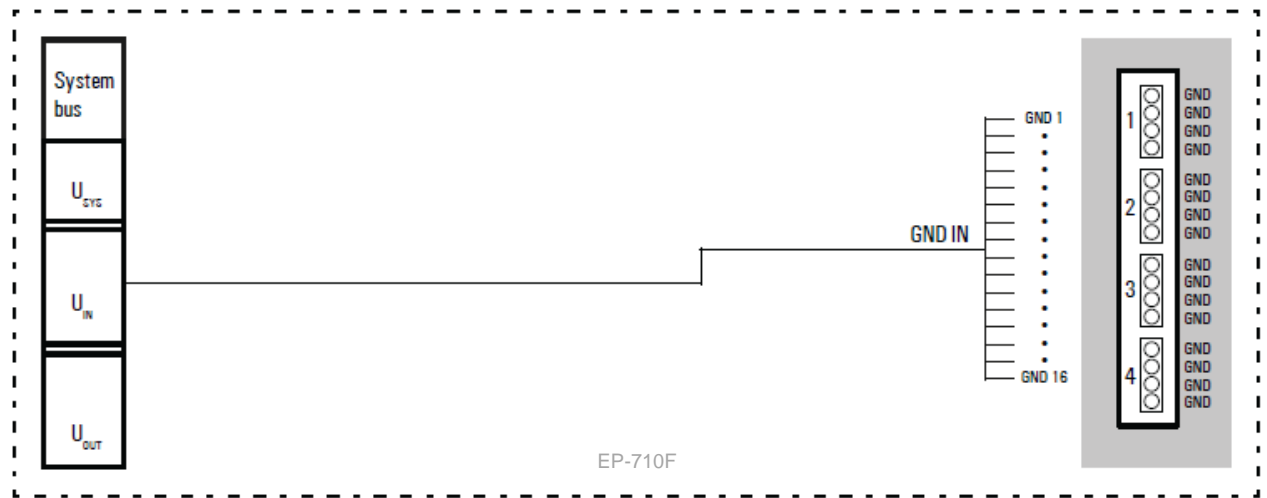


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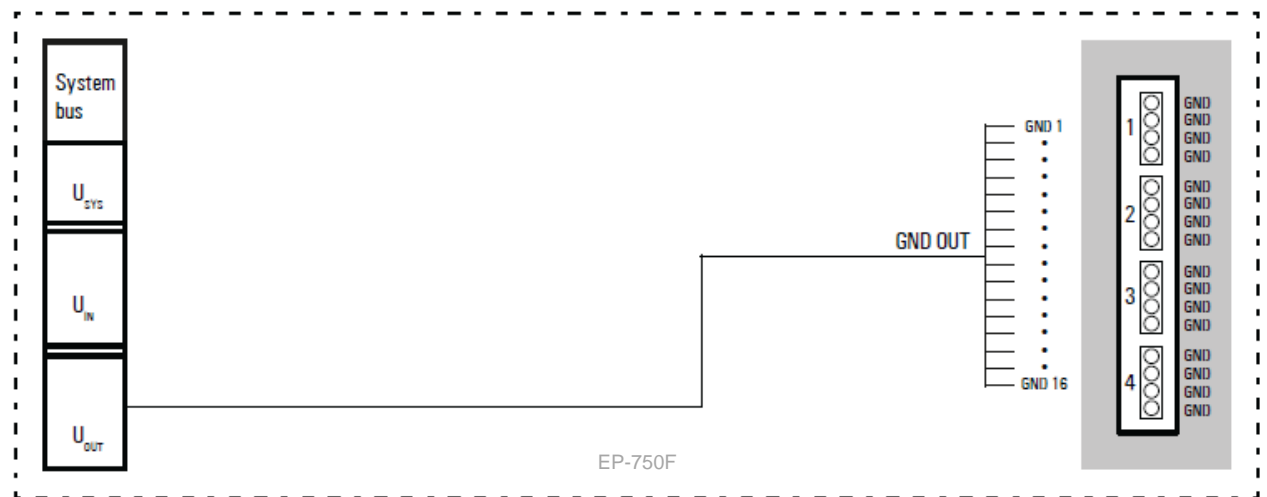
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EP-751F






EP710F




EP-750F

For public disclosure

Installation in Hazardous Areas

- EQUIPMENT LABELED WITH REFERENCE TO CLASS I, GROUPS A, B, C & D, DIV. 2 HAZARDOUS AREAS IS SUITABLE FOR USE IN CLASS I, DIVISION 2, GROUPS A, B, C, D OR NON-HAZARDOUS AREAS ONLY
-  **WARNING - EXPLOSION HAZARD - SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2;**
-  **WARNING - EXPLOSION HAZARD - WHEN IN HAZARDOUS AREAS, TURN OFF POWER BEFORE REPLACING OR WIRING MODULES; AND**
-  **WARNING - EXPLOSION HAZARD - DO NOT CONNECT OR DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NONHAZARDOUS.**

ATEX Marking

 II 3 G Ex nA IIC T4 Gc

Ta: -20°C to +60°C (-4° F to +140 °F)

Release History

Catalog Number	Firmware Version	Date	Comments
EP-7631, EP-7641, EP-700F, EP-711F, EP-751F, EP-710F, EP-750F	N/A	Dec-2015	Documentation update only
EP-7631, EP-7641, EP-700F, EP-711F, EP-751F, EP-710F, EP-750F	N/A	Oct-2015	Initial Release

Important Product Information for this Release

Updates

None - Documentation update only

Funcional Compatibility

N/A

Problems Resolved by this Release

None - Documentation update only

New Features and Enhancements

None - Documentation update only

Known Restrictions and Open Issues

None

Operational Notes

None

Product Documentation

RSTi-EP Slice I/O Module User Manual (GFK-2958)

RSTi-EP Slice I/O Functional Safety Module User Manual (GFK-2956)



1-800-433-2682

1-434-978-5100

www.ge-ip.com

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