Reference Manual

PlantPAx Distributed Control System

Rockwell Automation Library of Process Objects: Permissives with Bypass (P_Perm)

Version 3.5

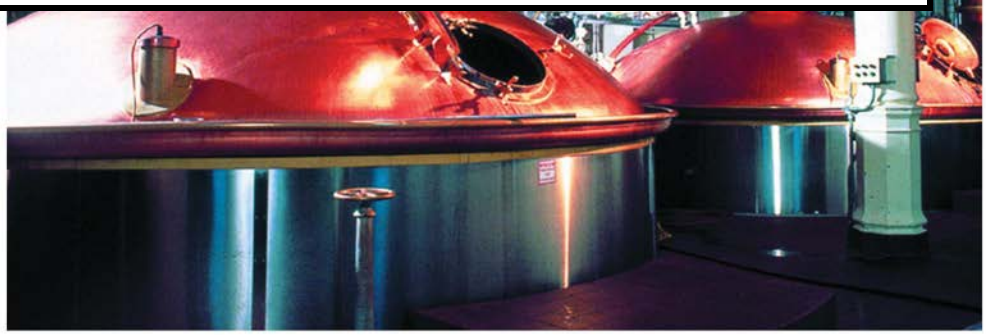
IMPORTANT This manual applies to the Rockwell Automation Library of Process Objects version 3.5 or earlier.

For Rockwell Automation Library of Process Objects version 5.0, see

- PROCES-RM200

For Rockwell Automation Library of Process Objects version 4.0 or later, use the following manuals:

- PROCES-RM013 contains logic instructions
- PROCES-RM014 contains display elements



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Important User Information

Read this document and the documents listed in the additional resources section about installation, configuration, and operation of this equipment before you install, configure, operate, or maintain this product. Users are required to familiarize themselves with installation and wiring instructions in addition to requirements of all applicable codes, laws, and standards.

Activities including installation, adjustments, putting into service, use, assembly, disassembly, and maintenance are required to be carried out by suitably trained personnel in accordance with applicable code of practice.

If this equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

In no event will Rockwell Automation, Inc. be responsible or liable for indirect or consequential damages resulting from the use or application of this equipment.

The examples and diagrams in this manual are included solely for illustrative purposes. Because of the many variables and requirements associated with any particular installation, Rockwell Automation, Inc. cannot assume responsibility or liability for actual use based on the examples and diagrams.

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Throughout this manual, when necessary, we use notes to make you aware of safety considerations.

	**WARNING:** Identifies information about practices or circumstances that can cause an explosion in a hazardous environment, which may lead to personal injury or death, property damage, or economic loss.
	**ATTENTION:** Identifies information about practices or circumstances that can lead to personal injury or death, property damage, or economic loss. Attentions help you identify a hazard, avoid a hazard, and recognize the consequence.
IMPORTANT	Identifies information that is critical for successful application and understanding of the product.

Labels may also be on or inside the equipment to provide specific precautions.

	**SHOCK HAZARD:** Labels may be on or inside the equipment, for example, a drive or motor, to alert people that dangerous voltage may be present.
	**BURN HAZARD:** Labels may be on or inside the equipment, for example, a drive or motor, to alert people that surfaces may reach dangerous temperatures.
	**ARC FLASH HAZARD:** Labels may be on or inside the equipment, for example, a motor control center, to alert people to potential Arc Flash. Arc Flash will cause severe injury or death. Wear proper Personal Protective Equipment (PPE). Follow ALL Regulatory requirements for safe work practices and for Personal Protective Equipment (PPE).

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Software Compatibility and Content Revisions

Table 1 - Summary of Changes

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For the latest compatible software information and to download the Rockwell Automation® Library of Process Objects, see the Product Compatibility and Download Center at http://www.rockwellautomation.com/rockwellautomation/support/pcdc.page.

For general library considerations, see Rockwell Automation Library of Process Objects, publication PROCES-RM002.

Additional Resources

These documents contain more information about related products from Rockwell Automation.

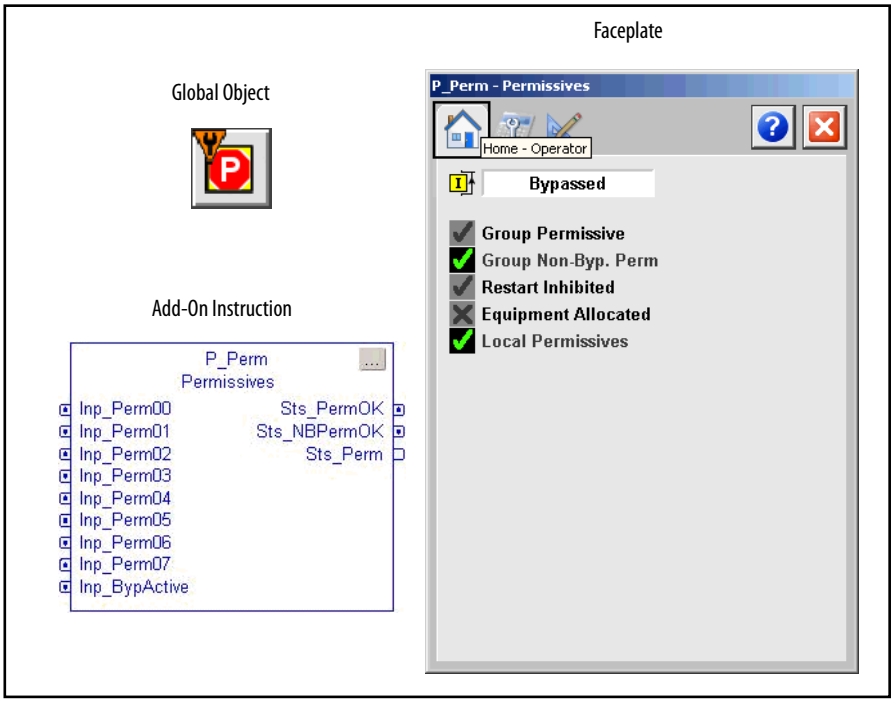
Resource	Description
PlantPAx® Distributed Control System Selection Guide, publication PROCES-SG001	Provides information to assist with equipment procurement for your PlantPAx® system.
PlantPAx Distributed Control System Reference Manual, publication PROCES-RM001	Provides characterized recommendations for implementing your PlantPAx system.
Rockwell Automation Library of Process Objects, publication PROCES-RM002	Provides general considerations for the PlantPAx system library of process objects.
FactoryTalk® View Machine Edition User Manual, publication VIEWME-UM004	Provides details on how to use this software package for creating an automation application.
FactoryTalk View Site Edition User Manual, publication VIEWSE-UM006	Provides details on how to use this software package for developing and running human-machine interface (HMI) applications that can involve multiple users and servers, distributed over a network.
Logix5000™ Controllers Add-On Instructions Programming Manual, publication 1756-PM010	Provides information for designing, configuring, and programming Add-On Instructions.
Rockwell Automation Library of Process Objects: Interlocks with First Out and Bypass (P_Intlk) Reference Manual, publication SYSLIB-RM004	Explains how to collect (sum up) the interlock conditions that stop or de-energize a running or energized piece of equipment or prevent it from starting or being energized.

You can view or download publications at http://www.rockwellautomation.com/literature/. To order paper copies of technical documentation, contact your local Allen-Bradley distributor or Rockwell Automation sales representative.

Notes:

Permissives with Bypass (P_Perm)

The P_Perm (Permissives with Bypass) Add-On Instruction is used to collect (sum up) the permissive conditions that allow a piece of equipment to start (run, energize, open, and so forth). Permissive conditions generally must be true to start the equipment. Once the equipment is running, permissives are ignored. Use the P_Intlk (Interlocks) Add-On Instruction to collect conditions that stop running equipment and prevent it from starting.



Guidelines

Use this instruction in these situations:

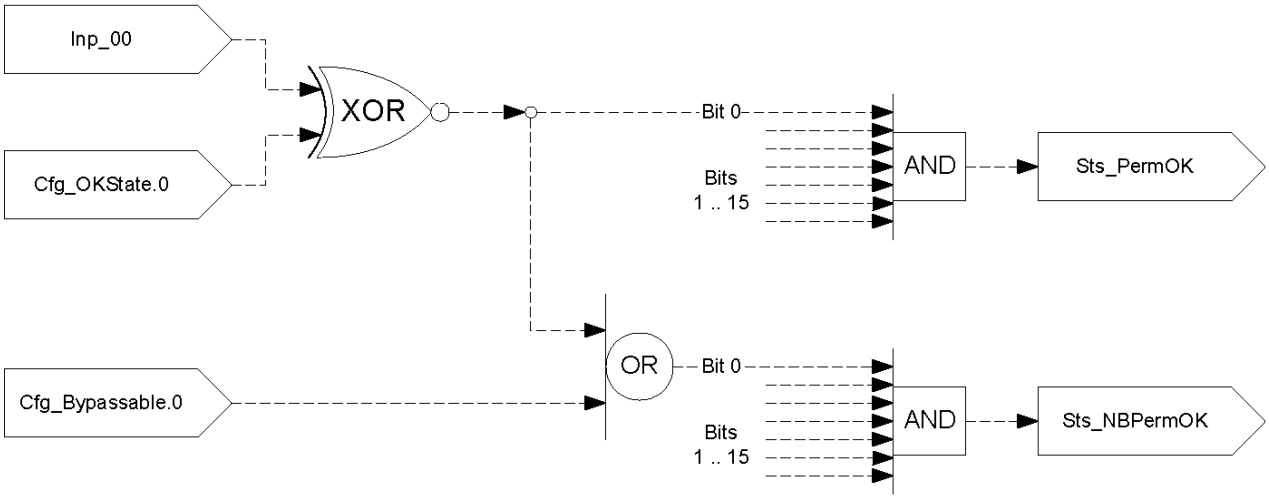
- You have multiple or cascaded permissive conditions that prevent some equipment (motor, valve, drive) from starting, but are ignored once the equipment is running. Link the P_Perm instruction status bits to the Inp_PermOK and Inp_NBPermOK inputs of the motor, valve, or drive.
- You want configurable text descriptions of the permissive conditions and other features of the P_Perm instruction faceplates.

Do **not** use this instruction in these situations:

- You have conditions that shut down running equipment and prevent it from starting. These conditions are interlock conditions, not permissive conditions. Use the P_Intlk instruction instead.
- You have only one permissive condition for the equipment. You can connect the condition directly to the permissive input on the device.

Functional Description

The following diagram shows the functional characteristics of the P_Perm Add-On Instruction.



The P_Perm instruction provides the following capabilities:

- Permissive input OK Check: evaluate the inputs; if they are all in their configured OK state, set the All Permissives OK status to true.
- Permissive bypass: evaluate the inputs that are not configured as Permissives that can be bypassed; if they are all in their configured OK state, set the 'All Non-Bypassable Permissives OK' status to true. (See Permissives with Bypass Input Structure in the Controller Code Section.)
- Summary status: The P_Perm Add-On Instruction summarizes its 16 permissive input conditions into two primary status bits: Sts_PermOK, which indicates that all permissive conditions are clear (ready to run), and Sts_NBPermOK, which indicates that all permissive conditions that cannot be bypassed are clear (ready to run if permissives are bypassed).

IMPORTANT Whether permissives are bypassed is determined by the downstream equipment instructions. The P_Perm instruction simply provides the two summary status bits. These two bits are to be wired or mapped to the equipment control logic.

- Faceplate: The P_Perm Add-On Instruction faceplate displays the permissive condition state of each input and whether it is bypassed, and shows the overall permissive (summary) status. The Engineering tab of the faceplate lets you configure the P_Perm Add-On Instruction for OK state configuration, latch configuration, configuration of permissives that can be bypassed, and the text that is associated with each permissive condition input. You can also configure a navigation tag for each permissive condition. If you enable navigation, the condition text on the Operator tab of the faceplate can be clicked to open the faceplate for that corresponding tag.

Required Files

Add-On Instructions are reusable code objects that contain encapsulated logic that can streamline implementing your system. With this code you can create your own instruction set for programming logic as a supplement to the instruction set provided natively in the ControlLogix® firmware. An Add-On Instruction is defined once in each controller project, and can be instantiated multiple times in your application code as needed.

Controller File

The P_Perm_3_5-**00**_AOI.L5X Add-On Instruction must be imported into the controller project to be used in the controller configuration. The service release number (boldfaced) can change as service revisions are created.

Visualization Files

This Add-On Instruction has associated visualization files that provide a common user interface. These files can be downloaded from the Product Compatibility and Download Center at http://www.rockwellautomation.com/rockwellautomation/support/pcdc.page.

IMPORTANT The visualization file dependencies require Process Library content imports to occur in a specific order as reflected in the following tables:

- Images
- Global Objects
- Standard Displays
- HMI Tags
- Macros

Images are external graphic files that can be used in displays. They must be imported for FactoryTalk View to make use of them.

When PNG files are imported, they are renamed by FactoryTalk View with a .bmp file extension, but retain a .png format.

Table 2 - Visualization Files: Images (.png)

FactoryTalk View SE Software	FactoryTalk View ME Software	Description
All .png files in the images folder	All .png files in the images folder	These are the common icons used in the global objects and standard displays for all Process Objects.

The Global Object files (.ggfx file type) in the following table are Process Library display elements that are created once and referenced multiple times on multiple displays in an application. When changes are made to a Global Object, all instances in the application are automatically updated.

Table 3 - Visualization Files: Global Objects (.ggfx)

FactoryTalk View SE Software	FactoryTalk View ME Software	Description
(RA-BAS) Common Faceplate Objects	(RA-BAS-ME) Common Faceplate Objects	Global objects used on process object faceplates.
(RA-BAS) Process Help Objects	(RA-BAS-ME) Process Help Objects	Global objects used for all process objects help displays.
(RA-BAS) Process Interlock Objects	(RA-BAS-ME) Process Interlock Objects	Global objects used for managing interlocks and permissives on process object faceplates.

The Standard Display files (.gfx file type) in the following table are the Process Library displays that you see at runtime.

Table 4 - Visualization Files: Standard Displays (.gfx)

FactoryTalk View SE Software	FactoryTalk View ME Software	Description
(RA-BAS) Common-AnalogEdit	N/A	Faceplate used for analog input data entry. The FactoryTalk View ME faceplates use the native analog input data entry so no file is required.
(RA-BAS) P_Perm-Faceplate	(RA-BAS-ME) P_Perm-Faceplate	The faceplate that is used for the object
(RA-BAS) Process Interlock Family-Help	(RA-BAS-ME) Process Interlock Family-Help	The Help display for Interlock objects

HMI Tags are created in a FactoryTalk View ME application to support tab switching on Process Library faceplates. The HMI tags may be imported via the comma-separated values file (.csv file type) in the following table.

Table 5 - Visualization Files: HMI Tags (.csv)

FactoryTalk View SE Software	FactoryTalk View ME Software	Description
N/A	FTVME_PlantPAxLib_Tags_3_5_**xx**.csv where **xx** = the service release number.	These tags must be imported into the FactoryTalk View ME project to support switching tabs on any Process Object faceplate.

In a FactoryTalk View SE application, a macro is a series of commands stored in a text file. In FactoryTalk View ME application, a macro is a list of tag assignments stored in a text file. The following table lists the Macros (.mcr file type) used by the Process Library.

Table 6 - Visualization Files: Macros (.mcr file)

FactoryTalk View SE Software	FactoryTalk View ME Software	Description
NavToObject	N/A	This macro must be imported into the FactoryTalk View SE project to support faceplate-to-faceplate navigation by name.

Controller Code

This section describes the parameter references for this Add-On Instruction.

Permissives with Bypass Input Structure

Input parameters include the following:

- Input data elements (Inp_) are typically used to connect field inputs from I/O modules or signals from other objects.
- Configuration data elements (Cfg_) are used to set configurable capabilities and features of the instruction.
- Settings (PSet_, OSet_, MSet_) are used by program logic, operators, and maintenance personnel to establish runtime setpoints, thresholds, and so forth. A Setting (without a leading P, O, or M) establishes runtime settings regardless of role or mode.

Table 7 - P_Perm Input Parameters

Input Parameter	Data Type	Alias For	Default	Description
EnableIn	BOOL		1	**Ladder Diagram:** If the rung-in condition is true, the instruction's Logic routine executes. If the rung-in condition is false, the instruction's EnableInFalse routine executes. **Function Block Diagram:** If true, or not connected, the instruction's Logic routine executes. If the parameter is exposed as a pin and wired, and the pin is false, the instruction's EnableInFalse routine executes. **Structured Text:** No effect. The instruction's Logic routine executes.
Inp_Perm00…Inp_Perm15	BOOL	Wrk_Inp.0…Wrk_Inp.15	1	Permissive Condition [00…15].
Inp_BypActive	BOOL		0	1 = Permissive Bypassing is currently active.
Cfg_OKState	INT		2#1111_1111_1111_1111	Bits indicate the state (0 or 1) of each input that indicates OK to run.
Cfg_Bypassable	INT		2#0000_0000_0000_0000	Set bits indicate the conditions that can be bypassed.
Cfg_HasNav	INT		2#0000_0000_0000_0000	Set bits indicate the Navigation buttons that are enabled.
MSet_Bypass00…MSet_Bypass15	BOOL	Wrk_IMSet.0…Wrk_MSet.15	0	Maintenance Bypass toggle for interlock condition 00…15: 1 = Bypass

Permissives with Bypass Output Structure

Output parameters include the following:

- Status data elements (Sts_) are bit outputs of the instruction for use by the HMI. Status bits can also be used by other application logic.

Table 8 - P_Perm Output Parameters

Output Parameter	Data Type	Description
EnableOut	BOOL	Enable Output: The EnableOut signal is not manipulated by this instruction. Its output state always reflects EnableIn input state.
Sts_PermOK	BOOL	Overall Permissive status (1 = OK to start).

Table 8 - P_Perm Output Parameters

Output Parameter	Data Type	Description
Sts_NBPermOK	BOOL	Permissive (that cannot be bypassed) status (1 = all Permissives (that cannot be bypassed) OK to start).
Sts_BypActive	BOOL	1 = Permissive Bypassing is active (ignore permissives that can be bypassed).
Sts_Perm	INT	Individual Permissive status: bit = 1 = OK bit = 0 = Don't start
P_Perm	BOOL	Unique parameter name for auto-discovery.

Permissives with Bypass Local Configuration Tags

Configuration parameters that are array, string, or structure data types cannot be configured as parameters for Add-On Instructions. Configuration parameters of these types appear as local tags to the Add-On Instruction. Local tags can be configured through the HMI faceplates or in Studio 5000 Logix Designer® application. Open the instruction logic of the Add-On Instruction instance and then open the Data Monitor on a local tag to accomplish this configuration. These parameters cannot be modified by using controller logic or Logix Designer application export/import functionality.

Table 9 - P_Perm Local Configuration Tags

Tag Name	Data Type	Default	Description
Cfg_CondTxt Cfg_CondTxt[0] Cfg_CondTxt[1]… Cfg_CondTxt[15]	STRING_20[16]	 'Enter Description #0' ' '	Short HMI descriptions of 16 Interlock Conditions.
Cfg_Desc	STRING_40	'Permissives'	Description for display on HMI. The string shows in the title bar of the faceplate.
Cfg_Label	STRING_20	'Permissives'	Label for graphic symbol that is displayed on HMI. This string appears on the graphic symbol.
Cfg_NavTag	STRING_NavTag[16]	' '	Tag names for destination of 16 navigation buttons. **IMPORTANT:** This function does not apply to FactoryTalk View ME Software.
Cfg_Tag	STRING_20	'P_Perm'	Ta gname for display on HMI. This string shows in the title bar of the home tab of the faceplate.

Operations

This section describes the primary operations for Add-On Instructions.

Modes

The P_Perm Add-On Instruction does not have modes and does not contain a P_Mode instruction instance.

Alarms

The P_Perm Add-On Instruction does not generate any alarms. The individual input conditions can be alarmed, if necessary, in other logic before they are sent to the inputs of the P_Perm instruction. In many applications, status bits from P_AIn Analog Input or P_DIn Discrete Input instructions are sent to the P_Perm inputs.

ATTENTION: Status bits are normally used as permissive conditions. Use alarm bits as permissive conditions only if you intend that the permissive condition be ignored when the corresponding alarm is inhibited.

Simulation

The P_Mode Add-On Instruction does not have Simulation capability.

Execution

The following table explains the handling of instruction execution conditions.

Condition	Description
EnableIn False (false rung) Handling	Processing for EnableIn False (false rung) is handled by setting the summary All Permissives OK and All Permissives (that cannot be bypassed) OK status outputs to false (0).
Powerup/Prescan Handling (initial modes)	No prescan logic is provided.
Postscan (SFC transition) Handling	No SFC postscan logic is provided.

See the Logix5000 Controllers Add-On Instructions Programming Manual, publication 1756-PM010, for more information.

Programming Example

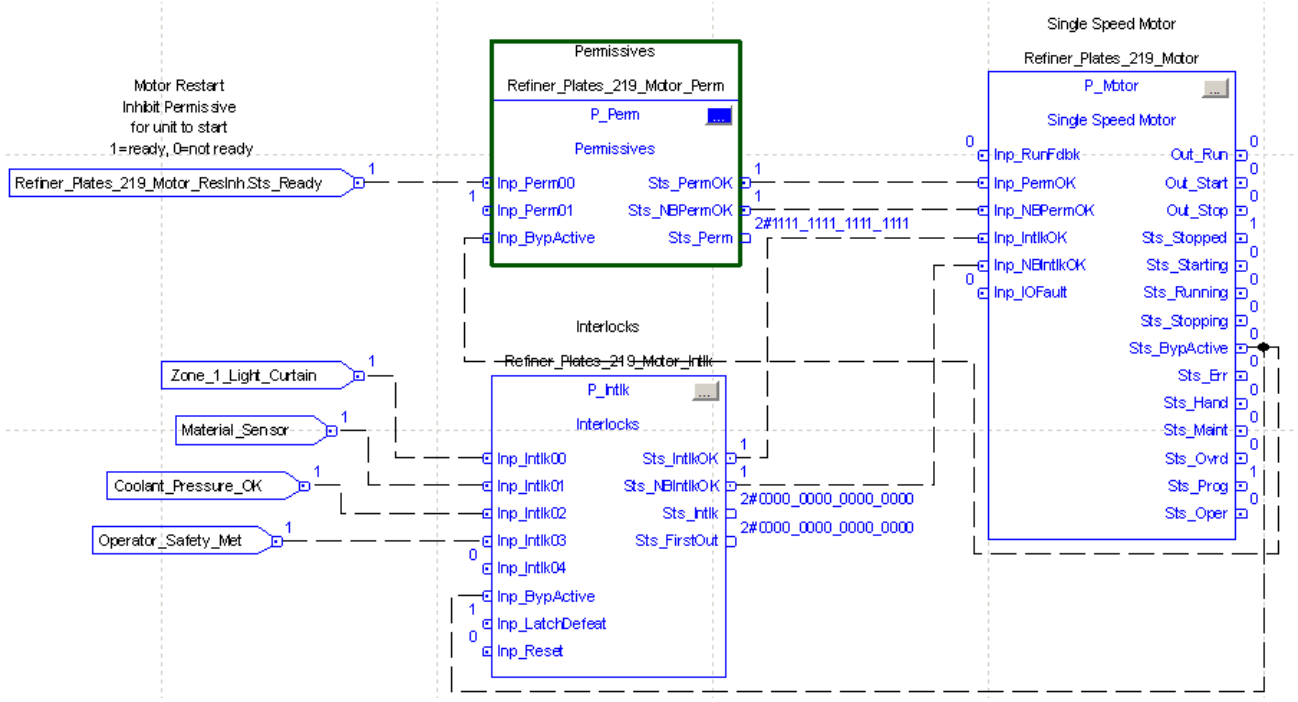
This example uses the P_Perm instruction to concentrate the permissive conditions that allow the start of a conveyor single speed motor.

Use these steps to import an Add-On Instruction to your project.

1. Right-click on “Add-On Instructions” and select “Import Add-On Instruction”
2. On the Import Add-On Instruction dialog box, select the P_ Perm instruction and click Import.
3. Add the P_ Perm instruction to your project by clicking the Add-On tab on the Language Element toolbar and then click the P_ Perm instruction. Also add the P_Motor instruction that controls the extracted material conveyor.

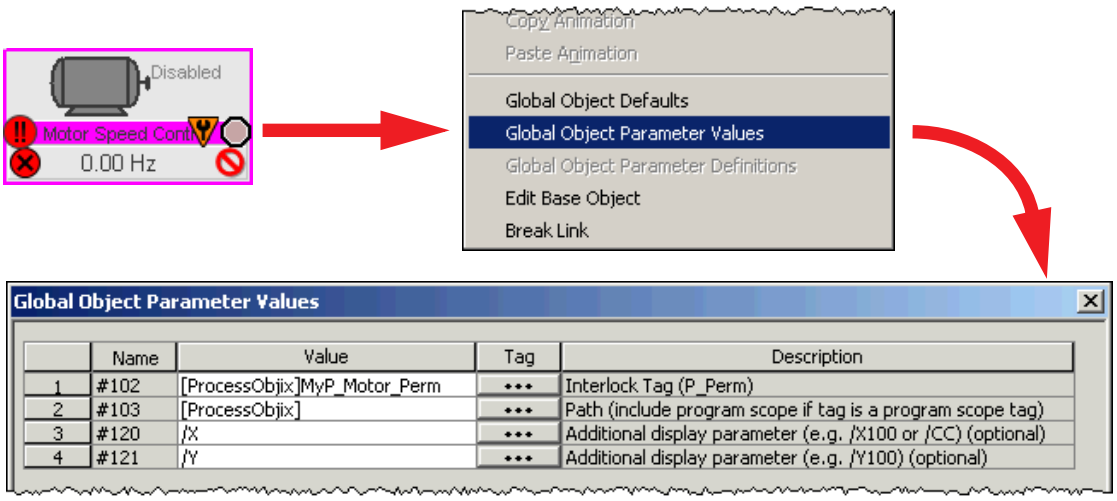
4. Double-click the interlock instruction name and create the tag name for it. The naming convention that makes this instruction work automatically is to use the motor's tag name followed by _Perm.
5. Create the input references necessary to achieve the appropriate operation of the refiner plates and create their appropriate tags.
6. Expose the Sts_BypActive pin on P_Motor. Wire this pin back to Inp_BypActive on P_Perm, and mark this wire 'Assume Data Available'.

   The following image is what the instruction looks like when connected correctly.

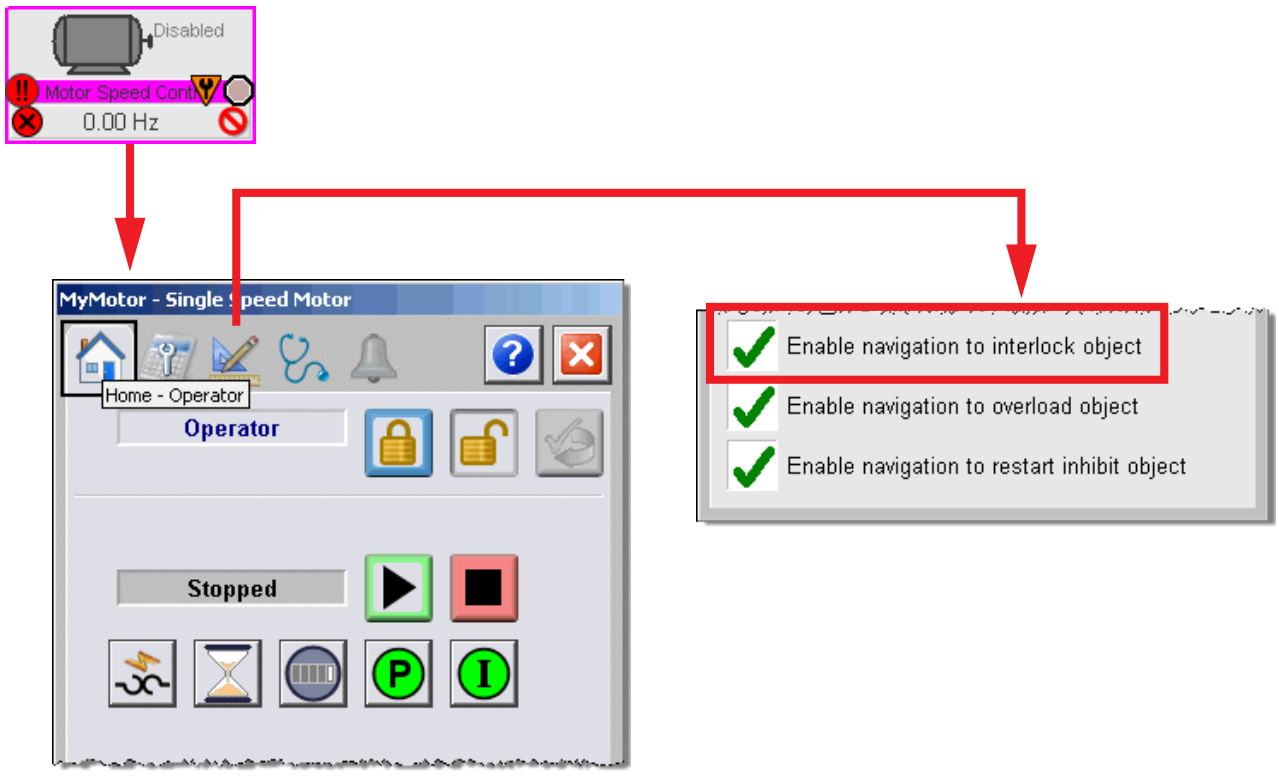


7. Save then download and run your Logix application.
8. In your HMI application, add a P_Motor motor graphic object from P_Motor Graphics Library.ggfx and right-click on it.
9. From the list, select "Global Object Parameter Values"
10. Associate the created tag for P_Motor of the Refiner Plates in the controller with the graphic object in the HMI:
    a. On the first line of the Global Object Parameter Value table, type its name.
    b. On the second line, type the name of the shortcut to the controller enclosed by brackets.
    c. Enter additional parameters as desired.

Because of the naming convention, the connection is made automatically and the permissive settings are associated with the Main Conveyor motor.

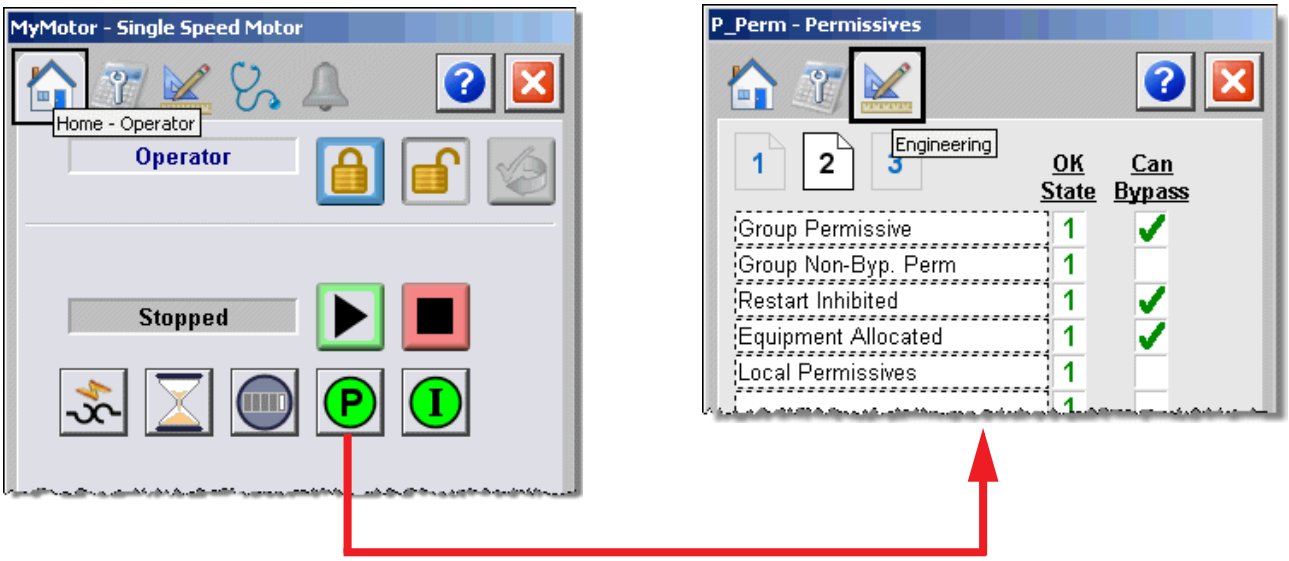


11. Save and run your HMI application.
12. Run your HMI application and click the motor graphic object. If the Quick display appears, click the 'go to faceplate' button. On the P_Motor faceplate, click the engineering tab and on the Engineering tab, check 'Enable navigation to permissive object'.



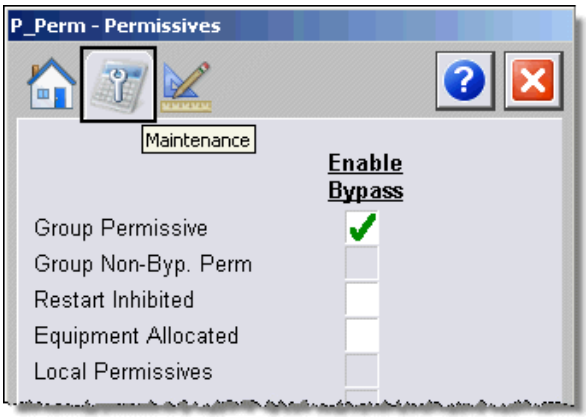
After doing this, the button to access the permissive faceplate is enabled.

13. On the P_Motor faceplate, click the interlock button to open the P_Perm faceplate. On the P_Perm faceplate, select the page 2 of the Engineering tab, and perform the following:
    a. Name the permissives accordingly.
    b. Select the appropriate state under 'OK State'.
    c. Indicate which permissives can be bypassed.
    d. Indicate which permissives must be reset.



IMPORTANT Specific inputs can be bypassed on the P_Perm Maintenance tab based on selections on page 2 of the Engineering tab (see Engineering Tab Page 2 on page 26).

When bypass is enabled, it bypasses only those set on the Maintenance tab (Maintenance Tab on page 24).

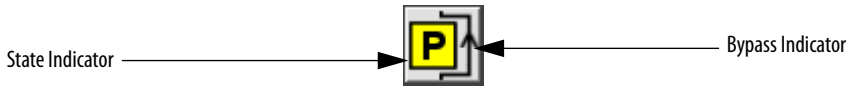


Display Elements

A display element (global object) is created once and can be referenced multiple times on multiple displays in an application. When changes are made to the original (base) object, the instantiated copies (reference objects) are automatically updated. Use of global objects with tag structures in the ControlLogix system, aid consistency and save engineering time.

Display Element Name	Display Element	Description
GO_P_Perm		Standard Permissive Global Object.

Graphic symbols are provided for use on end-user process graphic displays. Permissives graphic symbols have the following common attributes.



The Permissives graphic symbol displays the current summary state of the permissives and whether permissives that can be bypassed are bypassed. These indicators are described in Status/Bypass Indicators on page 18.

The overall graphic symbol includes a touch field over it that opens the instruction's faceplate. In addition, pausing the mouse over the graphic symbol displays a tooltip that describes the symbol's function.

Status/Bypass Indicators

The icon background changes color and shape based on the state of the permissive input conditions.

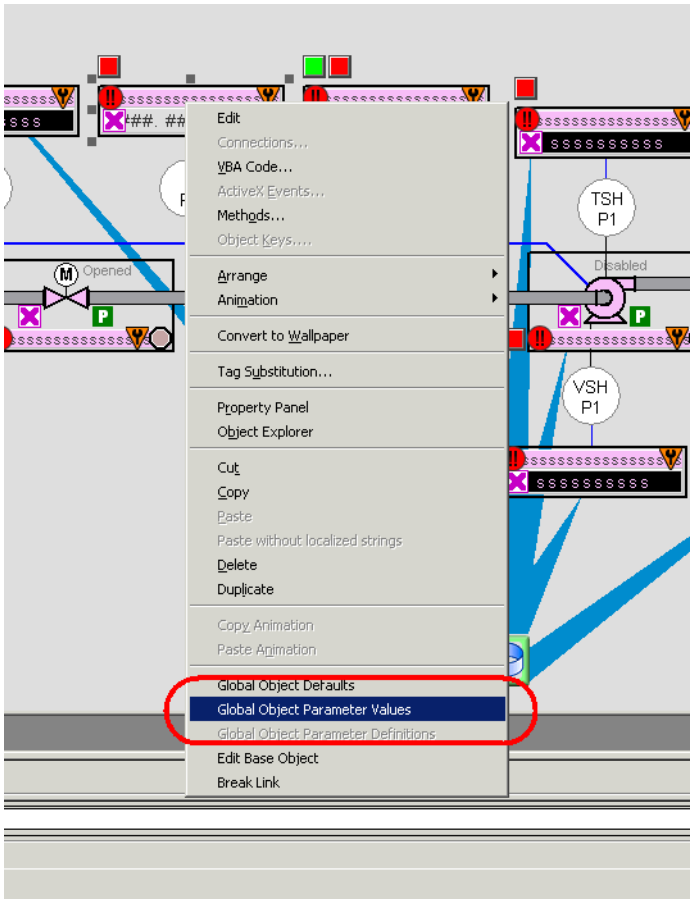
Indicator	Description
	Not ready to start or energize. One or more permissive conditions are not OK.
	Ready to start or energize. One or more conditions that can be bypassed are not OK, but these conditions are bypassed. All conditions that cannot be bypassed are OK.
	Ready to start or energize. All permissive conditions are OK.
	Ready to start or energize, and all permissive conditions are OK, but be aware that conditions that can be bypassed are being bypassed. If a condition that can be bypassed becomes not OK, it does not prevent starting the equipment.

The P_Perm instruction does not have bypass commands; they are in the associated device instruction. Connect the equipment's bypass status to the P_Perm instruction's Inp_BypActive input so that the graphic symbol and faceplate can display the equipment's bypass state.

Using Display Elements

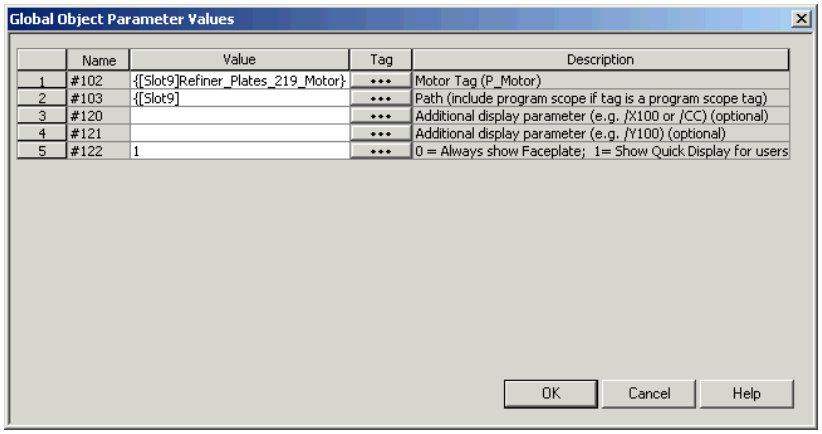
Normally, navigation to the P_Perm faceplate is included on the faceplate for the associated motor, drive, or other object. However, a graphic symbol for P_Perm instruction can be found in the global object file (RA-BAS) Process Interlock Objects.ggfx. Follow these steps to use the graphic symbol.

1. Copy the global object from the global object file and paste it in the display file.



2. In the display, right-click the global object and choose Global Object Parameter Values.

   The Global Object Parameter Values dialog box appears.



   The global object parameters are as follows.

Parameter	Required	Description
#102	Y	Object tag to point to the name of the associated object Add-On Instruction in the controller.
#103	Y	Path that is used for display navigation features to other objects. Include program scope if tag is a program scope tag.
#120	N	Additional parameter to pass to the display command to open the faceplate. Typically used to define position for the faceplate.
#121	N	Additional parameter to pass to the display command to open the faceplate. When you define the X and Y coordinate, separate parameters so that #120 defines X and #121 defines Y. This definition lets these same parameters to be used in subsequent display commands that originate from the faceplate.

3. Type the tag or value in the Value column as specified in the Description column.

   TIP Click the ellipsis (. . .) to browse and choose a tag.

   Values for items marked '(optional)' can be left blank.

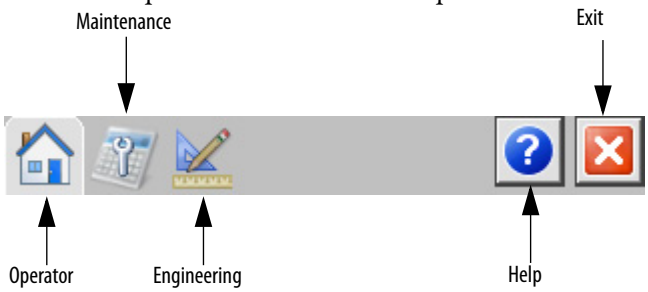
4. Click OK.

Faceplate

The P_Perm faceplate consists of three tabs and each tab consists of one or more pages.

Each faceplate title bar contains the value of local configuration tags Cfg_Tag and Cfg_Desc.

The Operator tab is displayed when the faceplate is initially opened. Click the appropriate icon at the top of the screen to access a specific tab.



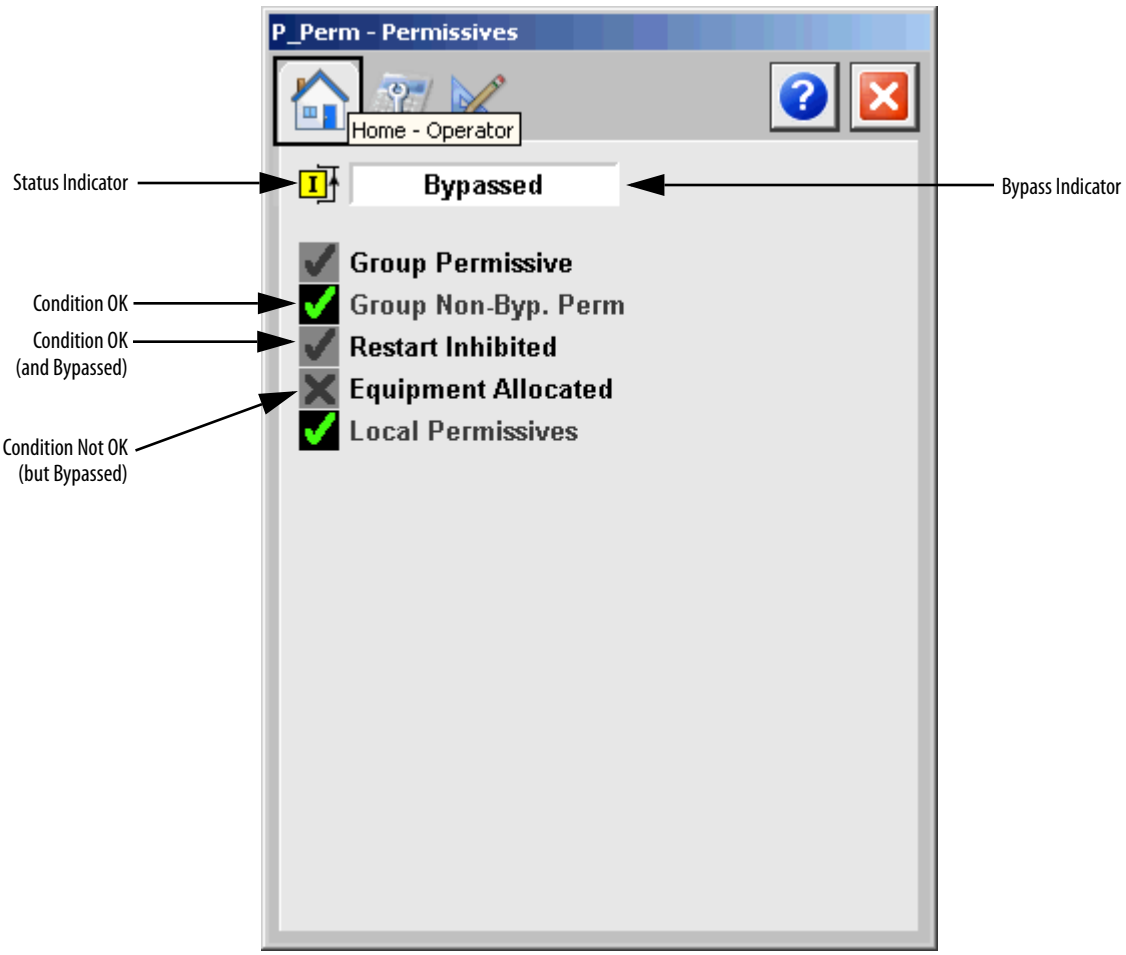
The faceplate provides the means for operators, maintenance workers, engineers, and others to interact with the P_Perm instruction instance. You can also view its status and values and manipulate it through its commands and settings. When a given input is restricted via FactoryTalk View security, the required user Security Code letter is shown in the tables that follow.

Operator Tab

The Faceplate initially opens to the Operator ('Home') tab. From here, an operator can monitor the device status.

The Operator tab shows the following information:

- A Bypass indicator, identical to the one on the Graphic Symbol, showing the current permissive state (Condition OK, Condition not OK, Bypassed, but OK, Not OK but bypassed).
- Permissive Bypass status indicator.
- Each configured permissive along with the current state of the permissive. When permissive bypass is enabled, bypassed permissive conditions are shown with an inactive state indicator.



If navigation is enabled, click the condition to open the faceplate of the object that is associated with the condition.

The following table lists the functions on the Operator tab.

Table 10 - Operator Tab Description

Function	Action	Security Required
Permissive Condition text	Click to open the faceplate for the associated tag. See Engineering Tab Page 3 on page 27 for information on how to enable navigation for permissive conditions.	None

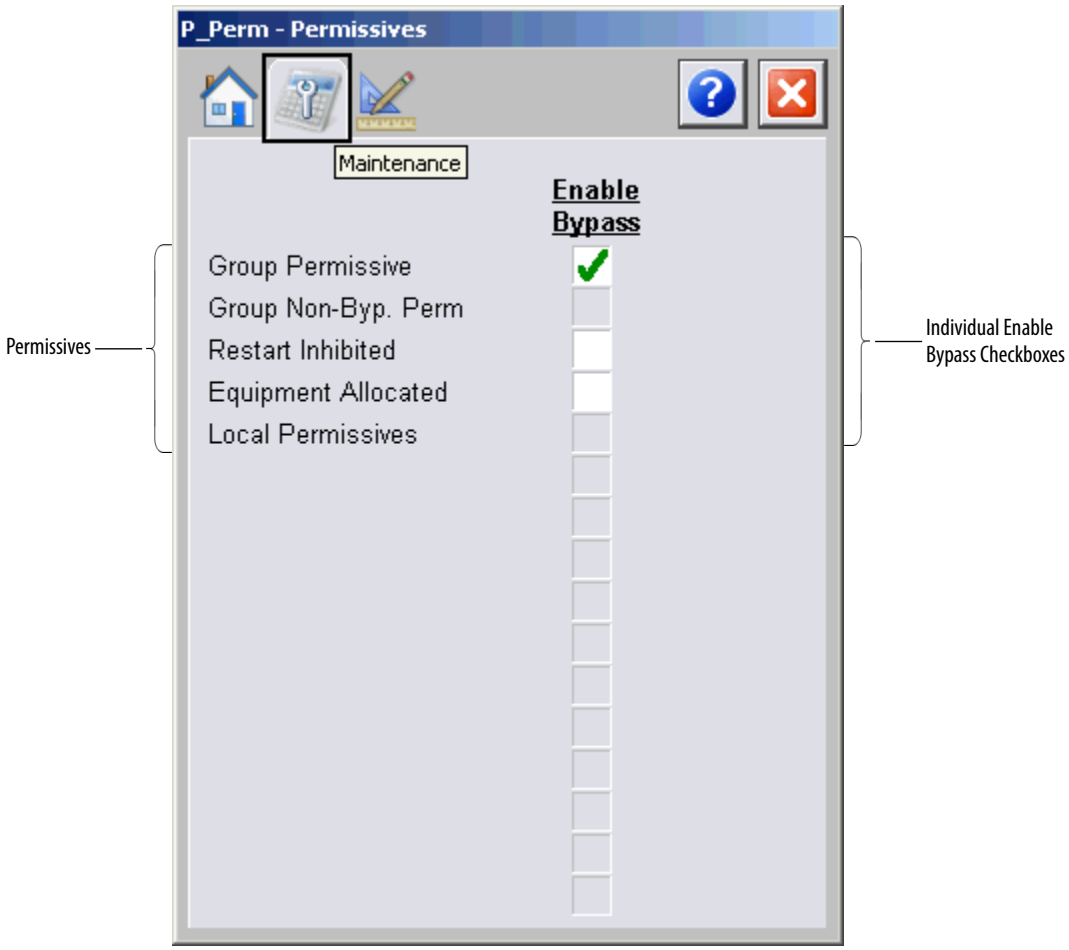
Table 11 - Operator Tab Status Indicators

Indicator	Description
	Condition OK
	Condition Not OK
	Bypassed, but OK
	Not OK, but bypassed

Maintenance Tab

Maintenance personnel use the information and controls on the Maintenance tab to adjust device parameters. They also troubleshoot and temporarily work around device problems, and disable the device for routine maintenance.

IMPORTANT	Only interlocks with white checkboxes can be individually bypassed. These interlocks are set up by using the 'Can Bypass' column on page 2 of the Engineering tab (See Engineering Tab Page 2 on page 26).



The following table lists the functions on the Maintenance tab.

Table 12 - Maintenance Tab Descriptions

Function	Action	Security	Configuration Parameters
Enable Bypass	Click an active permissive, one that has a white checkbox, to enable bypass of that individual permissive. See Engineering Tab Page 2 on page 26 for information on how to make permissive conditions active.	Configuration and Tuning Maintenance (Code D)	Cfg_CondTxt[0]…Cfg_CondTxt[15]

Engineering Tab

The Engineering tab provides access to device configuration parameters and ranges, options for device and I/O setup, displayed text, and faceplate-to-faceplate navigation settings, for initial system commissioning or later system changes.

The Engineering tab is divided into three pages.

Engineering Tab Page 1

On page 1 of the Engineering tab, you can configure the description, label, and tag for the device.

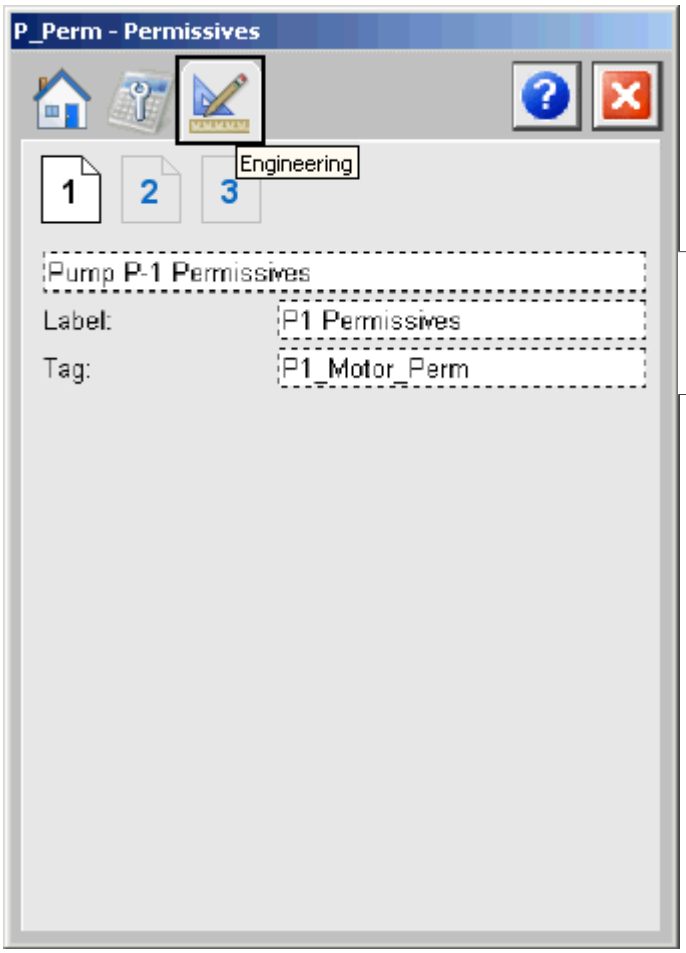
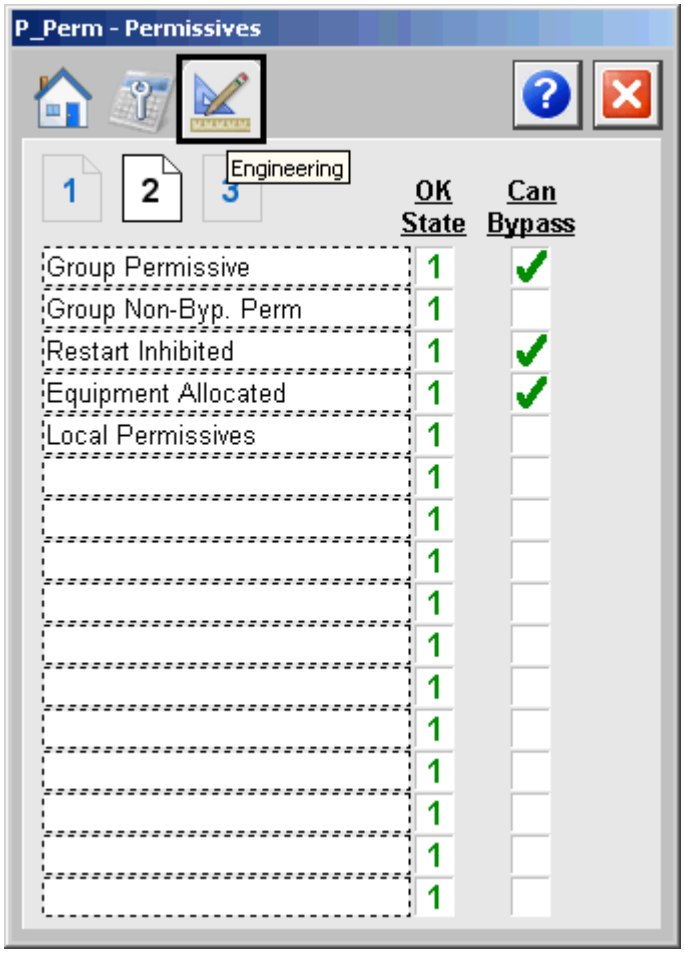


Table 13 - Engineering Tab Page 1 Descriptions

Function	Action	Security	Configuration Parameters
Description	Type the text description of the Permissive block that appears on the title bar of the faceplate.	Engineering Configuration (Code E)	Cfg_Desc
Label	Type the text label for the Permissive that appears on the graphic symbol.		Cfg_Label
Tag	Type the text for the tag that appears in the title bar of each faceplate.		Cfg_Tag

Engineering Tab Page 2

Page 2 of the Engineering tab shows the following information.



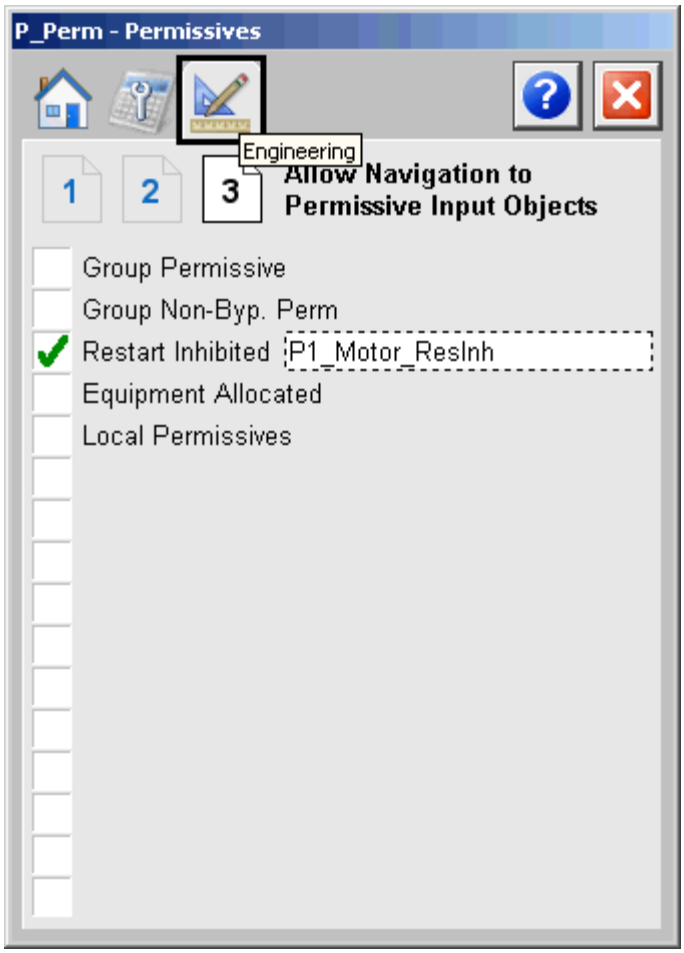
The 16 permissive inputs are configured on page 2 of the Engineering tab. For each permissive, the following can be configured.

Table 14 - Engineering Tab Page 2 Descriptions

Function	Action	Security	Configuration Parameters
Permissive Text	Enter a condition description for each permissive input that is used. Leave the text blank if the corresponding input is not used.	Engineering Configuration (Code E)	Cfg_CondTxt[0]… Cfg_CondTxt[15]
OK State	Click to toggle the state of the corresponding permissive that is the OK to Start state.		Cfg_OKState
Can Bypass	Check to indicate that the corresponding permissive can be bypassed. See Maintenance Tab on page 24 for information on how to bypass permissives.		Cfg_Bypassable

Page 3 of the Engineering tab shows the following information.

Engineering Tab Page 3

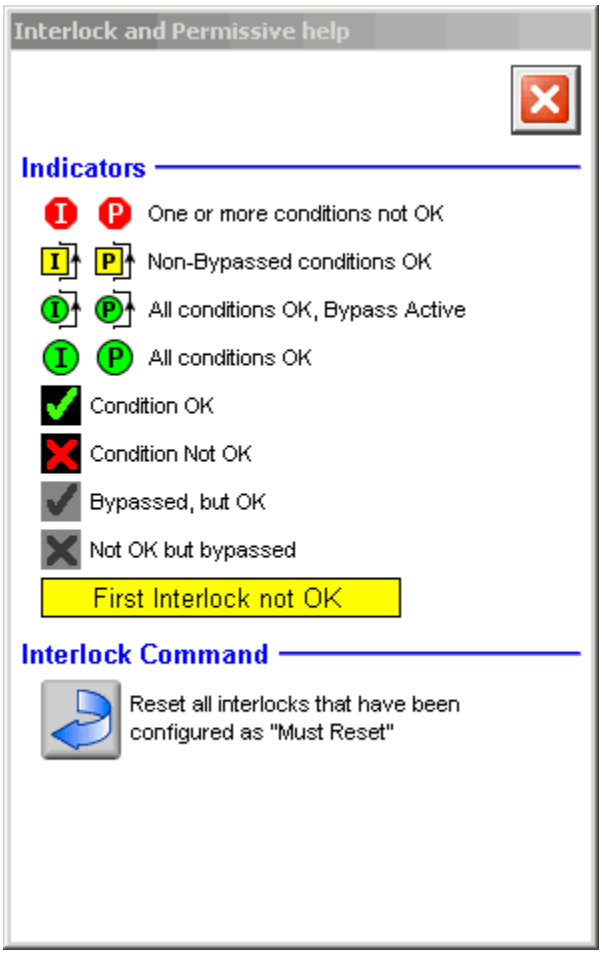


Navigation for up to16 permissive inputs is configured on page 3 of the Engineering tab. For each permissive, the following can be configured.

Table 15 - Engineering Tab Page 3 Descriptions

Function	Action	Security	Configuration Parameters
Allow Navigation to Permissive Input Objects	Check next to the appropriate Permissive input name to indicate that the corresponding object can be navigated to.	Engineering Configuration (Code E)	Cfg_HasNav
Navigation Tag	Type the name of the tag to navigate to when the permissive description on the Operator tab is clicked.		Cfg_NavTag[0]…Cfg_NavTag[15]

Permissives Faceplate Help



Rockwell Automation Support

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In addition, we offer multiple support programs for installation, configuration, and troubleshooting. For more information, contact your local distributor or Rockwell Automation representative, or visit http://www.rockwellautomation.com/services/online-phone.

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United States or Canada	1.440.646.3434
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