## 11 CO INV-4/4 740301

Devices Employing the Program

Product family: Controller
Product type: Controller
Manufacturer: Siemens

Name: Logic module N301
Order-no.: 5WG1 301-1AB01

Application Description

With this application program telegrams can be received and passed on immediately or inverted to another group. The application program supports 4 independent channels witch a separate input and output object each.
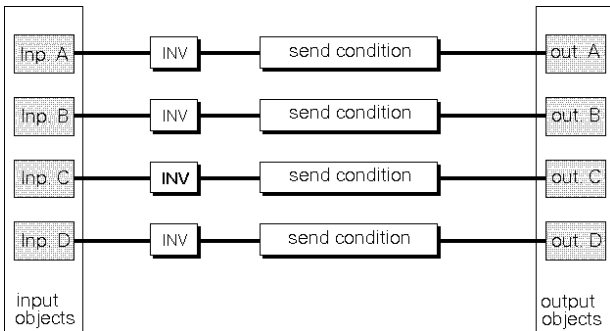
With sending conditions (output filters) whether only logic "0"s, "1"s or both output status are to be sent.

Additionally, parameters are provided to specifying the object status on bus voltage recovery.

Communication Objects

Note:

The order of the entries may vary from the above due to individual customization of the table.

Obj	Function	Object name	Type	Flag
0	Channel A	Input	1-Bit	CWTU
Via the group addresses of this input object the switching telegrams to channel A are received.				
1	Channel B	Input	1-Bit	CWTU
Via the group addresses of this input object the switching telegrams to channel B are received.				
2	Channel C	Input	1-Bit	CWTU
Via the group addresses of this input object the switching telegrams to channel C are received.				
3	Channel D	Input	1-Bit	CWTU
Via the group addresses of this input object the switching telegrams to channel D are received.				
4	Channel A	Output	1-Bit	CRTU
Via the group address of this output object the switching information of channel A is sent. A parameter is provided to specifying whether telegrams are sent on an object status of logic "0" or logic "1" only or on both status.				
5	Channel B	Output	1-Bit	CRTU
Via the group address of this output object the switching information of channel B is sent. A parameter is provided to specifying whether telegrams are sent on an object status of logic "0" or logic "1" only or on both status.				
6	Channel C	Output	1-Bit	CRTU
Via the group address of this output object the switching information of channel C is sent. A parameter is provided to specifying whether telegrams are sent on an object status of logic "0" or logic "1" only or on both status.				
7	Channel D	Output	1-Bit	CRTU
Via the group address of this output object the switching information of channel D is sent. A parameter is provided to specifying whether telegrams are sent on an object status of logic "0" or logic "1" only or on both status.				

Maximum number of group addresses: 13
Maximum number of assignments: 13

11 CO INV-4/4 740301

Parameters

Channel A

The parameters of the channels B to D can be set accordingly.

Parameters	Settings
Invert	disabled **enabled**
This parameter rules whether the switching status is to be inverted before passing it on to the output. "Enabled": The switching status at the input object is inverted and then passed on to the output object. A logic "1" telegram at the input produces a logic "0" at the output and vice versa. "Disabled": The switching status at the input object is not inverted before passing it on to the output object. A logic "1" telegram at the input produces a logic "0" at the output and vice versa.	
Send condition	**none** only on 0 at output only on 1 at output only on 1 => 0 edge at output only by 0 => 1 edge at output
On receiving a telegrams at the input, the switching information is inverted if the parameter "Invert" is set accordingly and then sent to the output. This parameter rules whether the switching information is sent at output: "None": The object status is not considered at the output and every telegram that is received at the input is also sent from the output. "Only on 0 at output": The switching information is sent only if the object status at the output is a logic "0". "Only on 1 at output": The switching information is sent only if the object status at the output is a logic "1". "Only on 1 => 0 edge at output": The switching information is sent only if the object status at the output changes from logic "1" to logic "0". Thus, when receiving a series of telegrams with the same switching information, only a single telegram is sent at the output. "Only on 0 => 1 edge at output": The switching information is sent only if the object status at the output changes from logic "0" to logic "1". Thus, when receiving a series of telegrams with the same switching information, only a single telegram is sent at the output.	
Starting value	**0** 1
This parameter defines the status of the output objects on bus voltage recovery or after commissioning the device. "0": On bus voltage recovery the output objects are set to logic"0". "1": On bus voltage recovery the output objects are set to logic"1".	

3.11.1.2.2/2