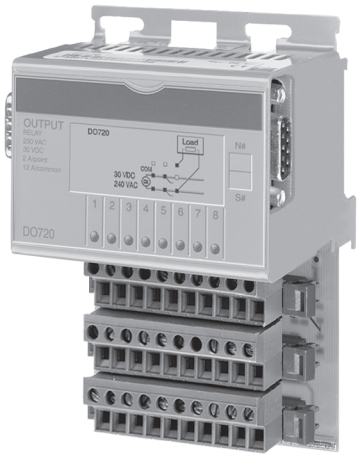
8.9 DO720

8.9.1 Technical Data



Terminal block is not included in the delivery.

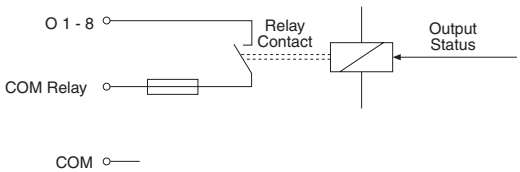
Module ID	DO720
General Information	
Model Number	7DO720.7
Short Description	2003 digital output module, 8 relay outputs 240 VAC / 30 VDC, 2 A, Order terminal blocks separately!
C-UL-US Listed	Yes
B&R ID Code	$E2
Amount EX270 CP430 CP470, CP770 CP474, CP476, CP774 EX470, EX770 EX477, EX777	 2 4 8
Static Characteristics	
Module Type	B&R 2003 I/O Module
Number of Outputs	8
Type	Relay / N.O.
Switching Voltage Nominal Maximum	 240 VAC / 30 VDC 264 VAC / 110 VDC
Continuous Current per Output Module	 2 A 12 A
Contact Resistance	30 mΩ at 6 VDC, 1 A

Module ID	DO720
Maximum Switching Power (AC)	480 VA
Maximum Switching Power (DC)	60 W
Power Consumption	Max. 1.4 W
Protection Characteristics	
Short Circuit Protection	Fuse 16 AT (root)
Dynamic Characteristics	
Switching Delay log 0 - log 1 log 1 - log 0	 Max. 10 ms Max. 10 ms
Operating Characteristics	
Electrical Isolation	Output - PCC
Dielectric Strength Contact - Contact Contact - Coil	 750 VAC / 1 min 2000 VAC / 1 min
Mechanical Characteristics	
Dimensions	B&R 2003 single width

8.9.2 Status LEDs

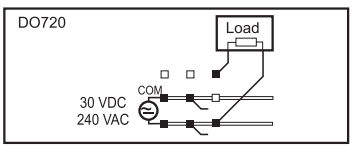
The Status LEDs 1 - 8 (orange) show the logical state of the corresponding output.

8.9.3 Output Circuit Diagram

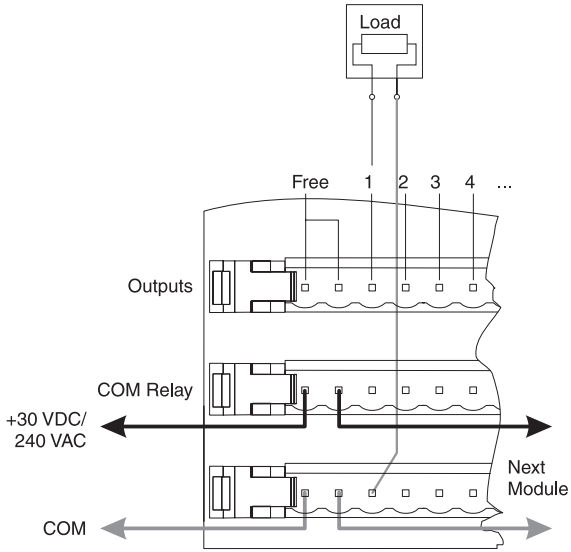


8.9.4 Legend Sheets

A legend sheet can be slid into the front of the module from above. The module circuit is shown on the back. The outputs can be labelled on the front.



8.9.5 Connections



8.9.6 Variable Declaration

The variable declaration is valid for the following controllers:

- 2003 PCC CPU
- Remote I/O Bus Controller
- CAN Bus Controller

The variable declaration is made in PG2000. The variable declaration is described in Chapter 4, "Module Addressing".

Automation Studio™ Support: See Automation Studio™ Help starting with V 1.40

Variable declaration with PCC 2003 CPU and remote slaves

Function	Variable Declaration				
	Scope	Data Type	Length	Module type	Chan.
Single digital output (channel x)	tc_global	BIT	1	Digit. Out	1 ... 8
Module status	tc_global	BYTE	1	Status In	0

Variable declaration with CAN slaves

Function	Variable Declaration				
	Scope	Data Type	Length	Module type	Chan.
Single digital output (channel x)	tc_global	BIT	1	Digit. Out	1 ... 8

Module status

The module status for CAN slaves can only be read using command codes. The command codes are explained in Chapter 5, "CAN Bus Controller Functions", section "Command Codes and Parameters". An example is provided in Chapter 4 "Module Addressing".

8.9.7 Access Using CAN IDs

Access via CAN Identifiers is used if the slave is being controlled by a device from another manufacturer. Access via CAN Identifiers is described in an example in Chapter 4, "Module Addressing". The transfer modes are explained in Chapter 5, "CAN Bus Controller Functions".

CAN ID Packed

A maximum of eight digital I/O modules can be operated in packed mode.

CAN ID [1]	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6	Byte 7	Byte 8
414	Module 1	Module 2	Module 3	Module 4	Module 5	Module 6	Module 7	Module 8

[1] CAN ID = 414 + (nd - 1) x 4 nd .... Node number of the CAN slave = 1

CAN ID Unpacked

A maximum of four digital I/O module can be run in unpacked mode.

Module	CAN ID [1]	Byte
1	414	Outputs 1 - 8
2	415	Outputs 1 - 8
3	416	Outputs 1 - 8
4	417	Outputs 1 - 8

[1] CAN ID = 414 + (nd - 1) x 4 + (ma - 1) nd ... Node number of the CAN slave = 1
ma ... Module address of digital I/O modules = 1 - 4

For more information on ID allocation, see Chapter 5, "CAN Bus Controller Functions".

8.9.8 Module Status

Evaluation of the module status is explained using an example in Chapter 4 "Module Addressing".

Bit	Description
7	x ....Not defined, masked out
6	Digital module = 0
5	x ....Not defined, masked out
0 - 4	Module code = $02

x	0	x	0	0	0	1	0
7							0