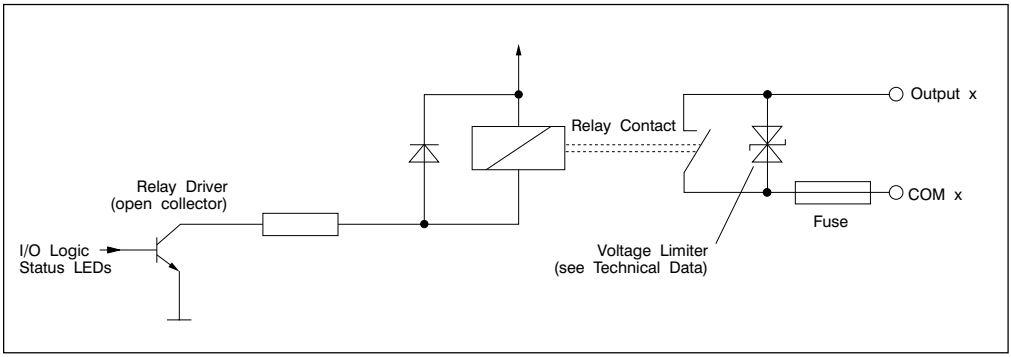
8.5 DO700

8.5.1 Technical Data

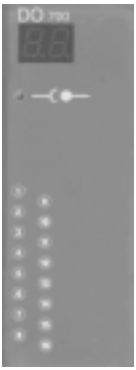
Module ID	DO700
Model Number	2DO700.6
Description	2010 Digital Output Module, 16 relay outputs 230 VAC / 24 VDC, 3 A, 4 electrically isolated output groups, Order terminal blocks separately!
C-UL-US Listed	Yes
B&R ID Code	$07
Base Plate Module	BP200, BP201, BP210
Number of Outputs Total in 4 Groups of	 16 4
Type	Relay / normally open
Electrical Isolation Output - PCC Group - Group Output - Output	 Yes Yes No
Switching Voltage Nominal Maximum	 230 VAC / 24 VDC 250 VAC / 30 VDC
Continuous Current Per Output per Group Module	 Max. 3 A Max. 8 A Max. 16 A
Switching Power Minimum Maximum	 1 mA / 5 VDC 750 VA / 90 W

Module ID	DO700
Switching Delay	Approx. 10 msec
Short Circuit Protection	Fuse 10 A (at least 8 A) slow-blow per group
External Protective Circuit	Generally required
Voltage Limits on Relay Contacts	400 V_{ss}
Contact Resistance at Maximum Load	30 mΩ
Switching Cycle Mechanical Electrical (nominal load) per Hour (nominal load)	 >2 x 10^7 >1 x 10^5 max. 600
Switching Frequency (nominal load)	max. 10 Hz
Dielectric Strength Contact Contact - Coil	 280 VAC (voltage limitation) 2000 VAC / 1 min
Relative Humidity	0 to 95 % (non-condensing)
Dimensions (H, W, D) [mm]	285, 40, 185

8.5.2 Output Diagram



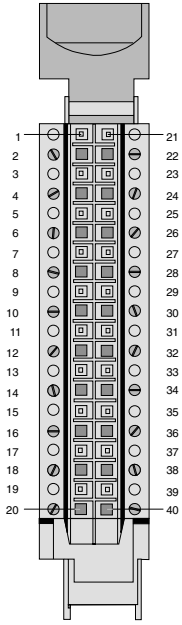
8.5.3 Status LEDs



—≺ ●— Indicates the status of the terminal block, i.e. if this LED is lit, either no terminal block is connected or the terminal block which is connected is not connected properly.

1 ... **16** LEDs 1 to 16 indicate the logical status of the respective output.

8.5.4 Terminal Assignments



TB120

Terminal	Description		Terminal	Description	
1		Group 1	21		Group 3
2	Output 1		22	Output 9	
3			23		
4	Output 2		24	Output 10	
5			25		
6	Output 3		26	Output 11	
7			27		
8	Output 4		28	Output 12	
9			29		
10	COM (1-4)		30	COM (9-12)	
11		Group 2	31		Group 4
12	Output 5		32	Output 13	
13			33		
14	Output 6		34	Output 14	
15			35		
16	Output 7		36	Output 15	
17			37		
18	Output 8		38	Output 16	
19			39		
20	COM (5-8)		40	COM (13-16)	

8.5.5 Variable Declaration

Function	Variable Declaration				
	Scope	Data Type	Length	Module Type	Channel
Single Digital Output (Channel x)	tc_global	BIT	1	Digital Out	1 ... 16
Read terminal block status Bit 0 = 1 ..... No terminal block connected Bit 0 = 0 ..... Terminal block connected properly	tc_global	BYTE	1	Status In	0

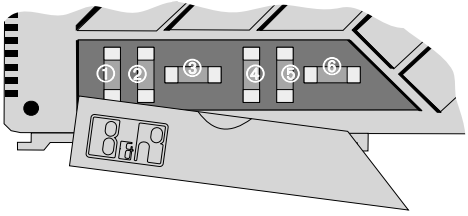
8.5.6 Fuses

A cover can be found on the right-hand side of the module housing, under which the fuses for the DO700 module are located. The following fuses are used:

Fuse:	10 A slow-blow (minimum. 8 A)

The fuses may only be exchanged if power is not being supplied to the module (Terminal block disconnected and module removed from base plate)

DO700 Fuses



Fuse	Output
①	13 16
②	5 8
③	Reserve
④	1 4
⑤	9 12
⑥	Reserve