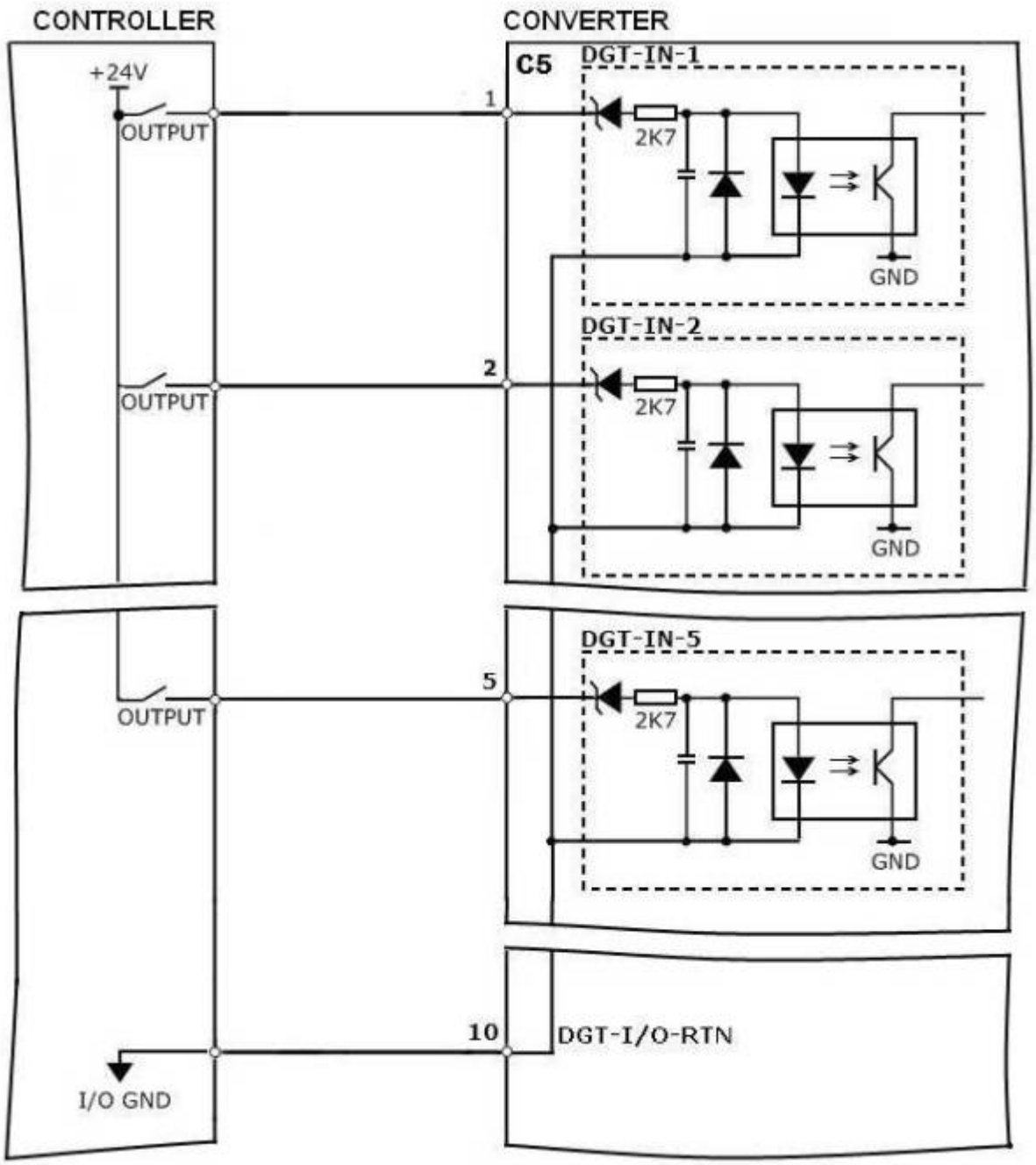
Digital Signals

I/O Signals

The C5 connector has 5 digital inputs and 3 digital outputs. To these signals is added a differential analog input. All the digital inputs are optically isolated and all have in common a pole (DGT-IN-RTN) which acts as a return; normally is protected by grounding connection. Even for the digital outputs one of the poles is in common for all (see figure on the C5 connector).

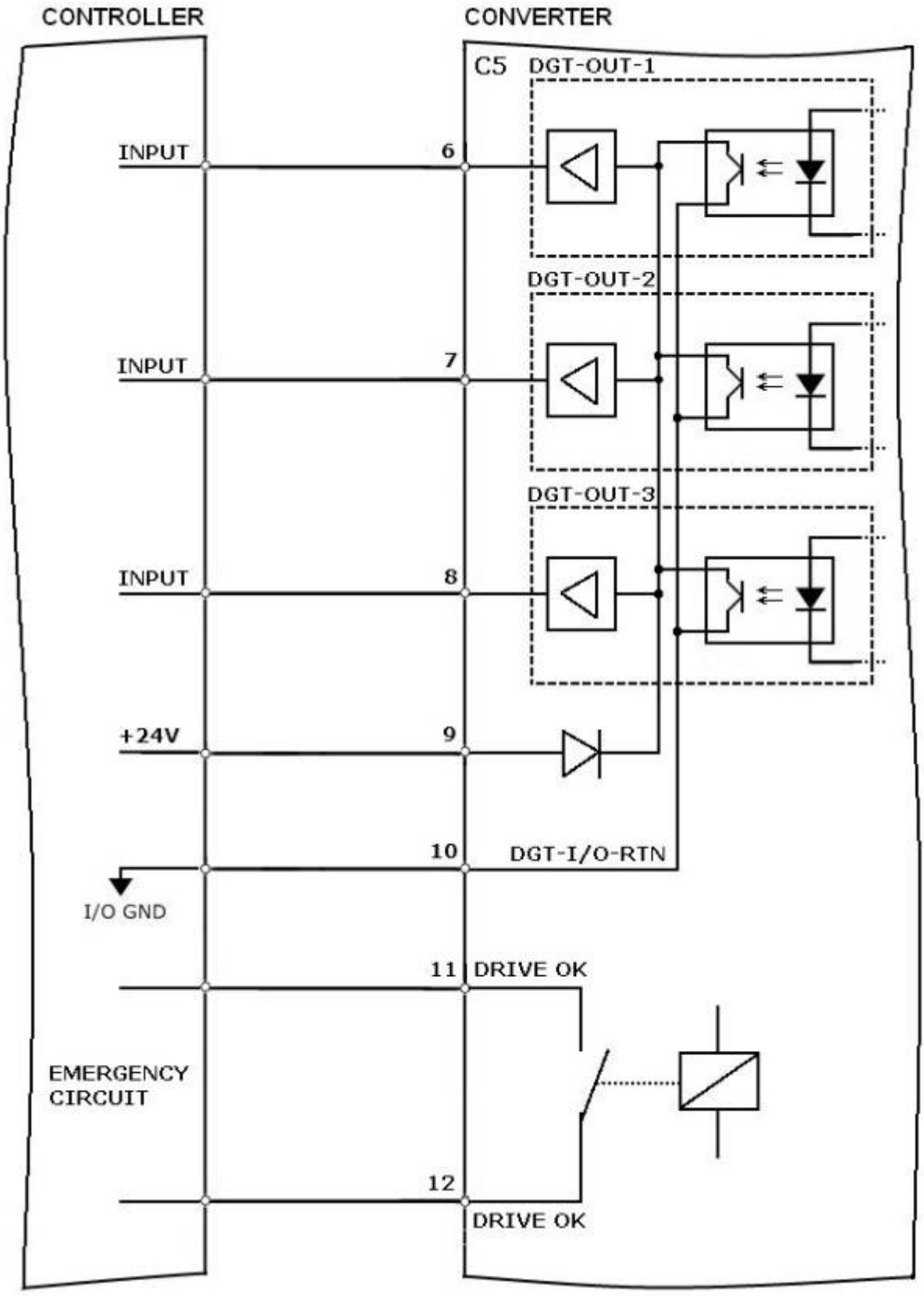
C5 CONNECTOR		
PIN	NAME	DESCRIPTION
1	DGT_IN1	Programmable Digital input 1, 24V@10mA. Normally configured as Drive ENABLE
2	DGT_IN2	Digital input 2, 24V@10mA - Programmable
3	DGT_IN3	Digital input 3, 24V@10mA - Programmable
4	DGT_IN4	Digital input 4, 24V@10mA - Programmable
5	DGT_IN5	Digital input 5, 24V@10mA - Programmable
6	DGT_OUT1	Digital Output 1, max. 30V@50mA - Programmable
7	DGT_OUT2	Digital Output 2, max. 30V@50mA - Programmable, Default STO-A.
8	DGT_OUT3	Digital Output 3, max. 30V@50mA - Programmable, Default STO-B.
9	+24V I/O	Link the auxiliary +24 VDC if I/O are used
10	DGT_IN_RTN	IN/OUT return. Link to 0V if I/O are used; digital input 1-5 / digital output 1-3.
11	DRIVE OK	Max. 30VDC/42VAC, 200mA
12	DRIVE OK	

Digital Input schematics



Digital Output Schematics

The servo amplifier supplies 3 programmable digital outputs. All outputs are protected against overvoltage and overcurrent.
A dedicated output, called relay Ok, provides a clean contact. In the start sequences you have to take account of the Relay OK contact.
After the auxiliary power supply +24 V to pin C1/1-2 is provided, the servo amplifier makes a check, if there aren't abnormalities the C5/11-12 Relay OK contact is closed allowing the system controller to provide the main power on C4/1-2-3.


CONTROLLER
CONVERTER
C5
DGT-OUT-1
INPUT
6
DGT-OUT-2
INPUT
7
DGT-OUT-3
INPUT
8
+24V
9
10
DGT-I/O-RTN
I/O GND
11
DRIVE OK
EMERGENCY
CIRCUIT
12
DRIVE OK