Additional I/O System Integration Modules

SI-I/O

M100	M200	M300	M400	M600	M700
	✓	✓	✓	✓	✓

Unidrive M's extended I/O interface module increases the number of I/O points on a drive. All connections from the option module to the drive are made via the drive connector. Connections from external equipment to the SI-I/O are made via a 3-way pluggable screw connector for the two relays and an 11-way pluggable screw connector for the digital and analog I/O.

Features include:

- 4 x Digital inputs/outputs
- 3 x Analog inputs (default) / Digital inputs
- 1 x Analog output (default)* / Digital input
- 2 x Relays

Digital I/O

By default, the SI-I/O Module is set up for four programmable digital inputs/outputs. By configuring the analog I/O as digital inputs, it is possible for the SI-I/O module to have four programmable inputs/outputs and also four digital inputs.

The functionality of these terminals is as follows:

- The logic sense selected can be positive (default) or negative
- The logic state of each input is monitored by a read-only parameter
- The logic state can be inverted
- The digital input can be programmed to any suitable destination bit parameter
- The digital output can be sourced from any suitable bit parameter
- The outputs can operate either as a push-pull or an open collector output

The SI-I/O has a maximum output current of 250 mA at 24 V across all four digital outputs.

Analog I/O

By default, the SI-I/O is set-up for three single-ended analog inputs and one analog output or one high resolution* differential analog input*, one single-ended analog input and one analog output.

Analog inputs 1 and 2 can only be configured as ±10 Vdc voltage inputs or digital inputs. When both are configured as analog voltage inputs, they can be used as a single high resolution differential analog input.

Analog input 3 can operate in voltage mode (±10 Vdc), current mode (0 to 20 mA) or as a digital input.

Analog output 1* can operate in voltage mode (±10 Vdc), current mode (0 to 20 mA) or as a digital input.

Relays

The two relays can be used to convey the logic state of any suitable parameter to external equipment. The logic state is processed as follows:

- A suitable source parameter is assigned to each relay
- The logic state can be inverted
- The state of the relay is monitored by a parameter

* Only supported by M600 and M700

Terminal descriptions

1	2	3	4	5	6	7	8	9	10	11

21	22	23

PL1	
Terminal	**Function**
1	0 V common
2	Digital input/output 1
3	Digital input/output 2
4	Digital input/output 3
5	Digital input/output 4
6	0 V common
7	Analog input 1/digital input 5
8	Analog input 2/digital input 6
9	Analog input 3/digital input 7
10	0 V common
11	Analog output 1/digital input 8

PL2	
Terminal	**Function**
21	Relay 1
22	Relay common
23	Relay 2