Chapter 2

Drive Specifications

Input Power

IMC-1

The IMC-1/D is suitable for use on a circuit capable of delivering not more than 5000 rms symmetrical amperes, 130 volts maximum when protected by RK5 class fuses. Table 1.1 summarizes the IMC-1/D's ***maximum continuous*** input power requirements. The actual input power and current is a function of the motor's operating point and the duty cycle.

Table 1.1 Maximum Continuous Input Current and KVA

Voltage range	90 - 130 VAC, 1 phase
Frequency range	50 - 440 Hz
Current, max. continuous	10 A rms
Power, max. continuous	1.3 KVA @ 130 VAC
Fuses	Internally fused with 10 A , 250 volt fuse (Littelfuse 326010 or equivalent) on line input only. The neutral input is not fused. Use 10 A time delay branch circuit fuse.
Isolation transformer	None required. If the supply voltage is above 130 VAC, the voltage must be dropped to 120 VAC. The transformer should be sized to provide adequate power under all operating conditions. Choose a transformer rated for a minimum of 125% of the drive maximum continuous input KVA.

IMC-2

The IMC-2/D is suitable for use on a circuit capable of delivering not more than 5000 rms symmetrical amperes, 250 volts maximum when protected by RK5 class fuses. Table 1.2 summarizes the IMC-2/D's ***maximum continuous*** input power requirements.

Table 1.2 Maximum Continuous Input Current and KVA

Voltage range	90 - 250 VAC, 1 phase
Frequency range	50 - 440 Hz
Current, max. continuous	0.5 A @ 115V 0.25 A @ 230 V
Power, max. continuous	60 VA
Fuses	Internally fused with 2 A , 250 volt fuse (Littelfuse 224002 or equivalent) on L1 input only. The L2 input is not fused. Use 1 A time delay branch circuit fuse.
Isolation transformer	None required. If the supply voltage is above 250 VAC, the voltage must be dropped to 230 VAC. The transformer should be sized to provide adequate power under all operating conditions. Choose a transformer rated for a minimum of 125% of the drive maximum continuous input KVA.

IMC-3

The IMC-3/D is suitable for use on a circuit capable of delivering not more than 5000 rms symmetrical amperes, 250 volts maximum when protected by RK5 class 15 A fuses. Table 1.3 summarizes the IMC-3/D's ***maximum continuous*** input power requirements. The actual input power and current is a function of the motor's operating point and the duty cycle.

Discrete Inputs and Outputs

Inputs	
Operating Range	12-24 VDC, 30 VDC maximum
Maximum Off Input Voltage	4 VDC
Minimum On input Voltage	10 VDC
Load	2K Ohms
Interface Format	source/sink user configurable

Outputs	
Operating Range	12-24 VDC, 30 VDC maximum
Maximum On Resistance	35 Ohms
Maximum Load Current	100 mA
Maximum Off Leakage Current	200 nA
Interface Format	source/sink user configurable

Analog Inputs and Outputs

Inputs		
Model	IMC-105X-1-D IMC-105D-1-D IMC-200X-X-D IMC-200D-X-D IMC-3_ _X-X-D IMC-3_ _D-X-D	IMC-105E-1-D IMC-105P-1-D IMC-200E-X-D IMC-200P-X-D IMC-3_ _E-X-D IMC-3_ _P-X-D
Number	0	1
Operating Range	n.a.	+/- 10 VDC
Resolution	n.a.	12 bits
Input Impedance	n.a.	50K Ohms

Outputs		
Model	IMC-105_-1-D IMC-3_ _ _-X-D	IMC-200_-X-D
Number	1	1
Parameter	user programmable, or velocity, current, or following error	control output to external servo amplifier
Operating Range	+/- 10 VDC	
Resolution	12 bits	
Current	5 mA	