

SLOT
2

FRGN

SOFTWARE CONFIGURATION

Catalog #: FOREIGN

FOREIGN MODULE

Module ID : 3

%I Ref Adr : %I0001

%I Size : 16

%Q Ref Adr : %Q0001

%Q Size : 0

%AI Ref Adr : %AI001

%AI Size : 4

%AQ Ref Adr : %AQ001

%AQ Size : 4

Byte 1 : 00000001

Byte 2 : 00000100

Byte 3 : 00

Byte 4 : 00

Byte 5 : 00

Byte 6 : 00

Byte 7 : 00

Byte 8 : 00

Byte 9 : 00

Byte 10 : 00

Byte 11 : 00

Byte 12 : 00

Byte 13 : 00

Byte 14 : 00

Byte 15 : 00

Byte 16 : 00

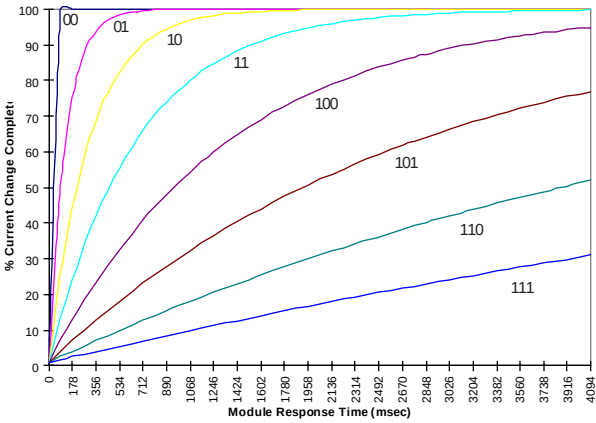
LM90 Foreign Module Configuration. To reach this screen in the LM90 Configuration Package, select I/O Configuration (F1), cursor over to the slot containing the module and select Other (F8), and Foreign (F3).

%I Size	%AI Size	%AQ Size	Byte 1	Byte 2	Bytes 3-6
16	4	4	0001	0 thru 111(see chart)	00: 4-20mA 01: +/-20mA

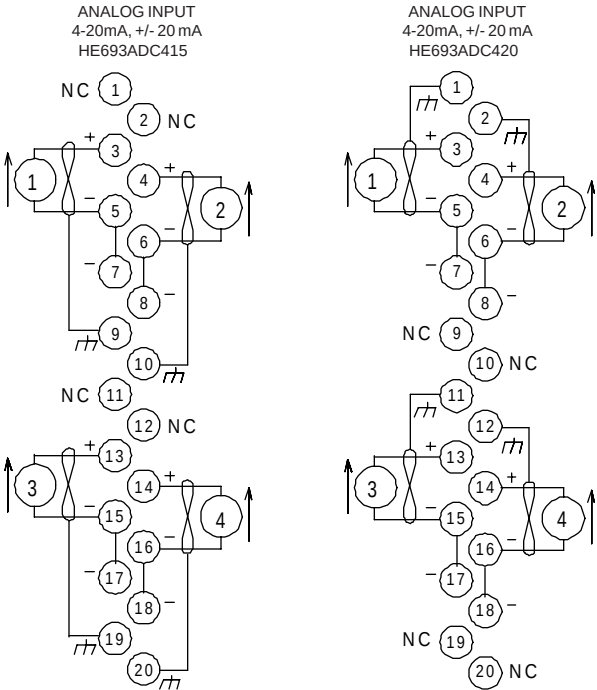
Configuration Parameters. The necessary parameters are %I Size, %AI Size, %AQ Size, Byte 1, Byte 2, and Bytes 3-6.

Mode	Scaling	Smallest Step Change
4-20mA	mA = %AI / 32,000 x 16 + 4	4 (dec) = 2uA
+/-20mA	mA = %AI / 32,000 x 20	4 (dec) = 2.5uA

Scaling. The modules convert each analog current into a decimal value between +/-32,000. The two least significant bits of each %AI are always 0, thus the smallest decimal step change is 4.



Digital Filtering. The effect of digital filtering (set with Byte 2) on module response to a change in current. (% current change completed vs. time).



Installation Suggestions

- Wiring should be routed in its own conduit.
- Shielded, twisted pair extension wiring offers best noise immunity.
- If shielded wiring is used, a good earth ground connection, at one end only, is critical. If shields are grounded at the module end, terminals 9, 10, 19 and 20 on the ADC415, or terminals 1, 2, 11, and 12 on the ADC420 should be used as the shield connection.