**Transferring Variables with Ethernet/IP-Safe**

The MLX Variable Transfer option provides a viable solution for the standard DX200 or YRC1000 controller to transfer robot variables (B, I, D, R, Strings and P-variables) between a Rockwell PLC and robot controller when Ethernet/IP-Safe is enabled. This software works with a YRC1000 or DX200 controller that uses the standard INFORM robot programming language.

In the past, controller variable transfers were not possible when Ethernet/IP-Safe (CIP Safety) was enabled. The reason for this is the Rockwell explicit messaging (MSG command) would not function under this condition. The MLX Variable Transfer option works because it uses implicit messaging to transfer variables with the GET/SET parameter AOI commands.

Note that the MLX Variable Transfer option is only available for non-MLX300 controllers. The MotoLogix option is turned on in the Maintenance screen, but only a small subset of AOIs are provided to transfer any variable type. All other features of the MLX300 software are disabled.

**Transfer Options**

Many of the MLX Variable Transfer function blocks can transfer large number of variables with one execution of the AOI. The list below shows what variable types that are transferable and the maximum number for a single execution.

