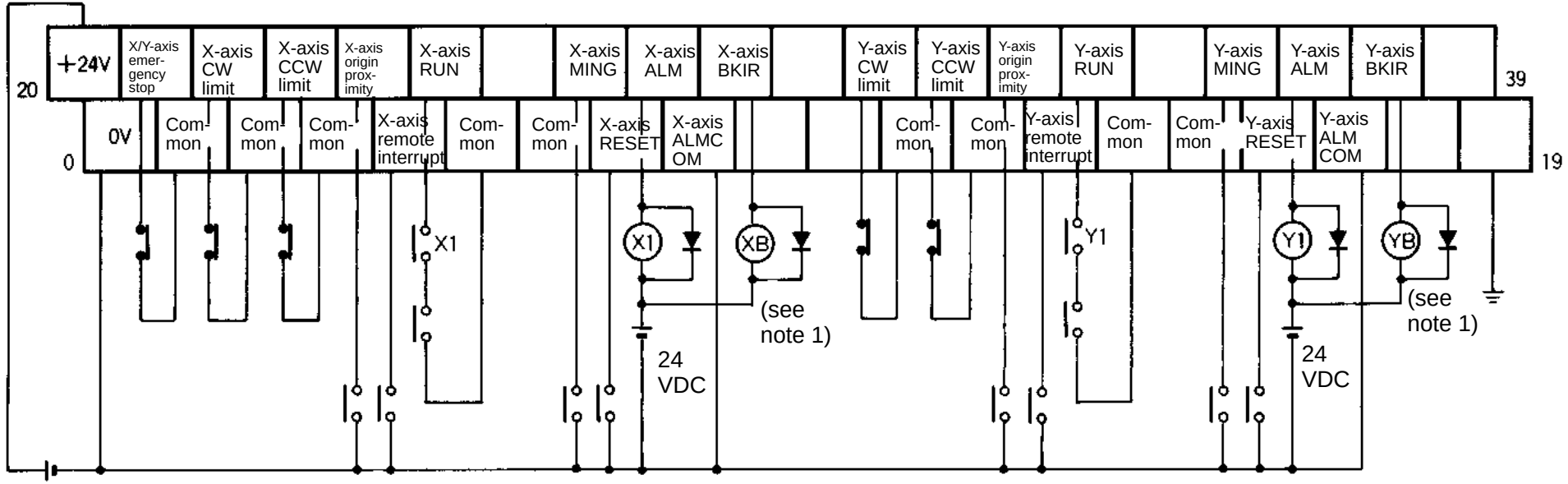

Note: Use mode 2 for origin search.