

# VB1-28ML-D

## Programmable Logic Controller

### Hardware Supplementary Manual

VIGOR ELECTRIC CORP.

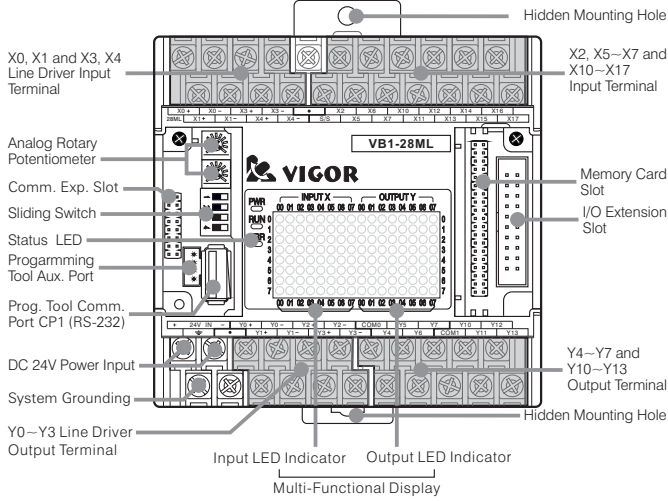
#### Foreword

The VB1-28ML-D Main Unit is a member of the VB1 series PLC. Its functions and specifications are followed the VB1 (please refer to the VB User's Manual). The difference between the VB1-28ML-D and other VB1 Main Unit are the interfaces of high speed input and output, at the VB1-28ML-D which is used the way of Line Driver. Its purpose is for simple and accurate to connect to the Line Driver encoders and servo drives.

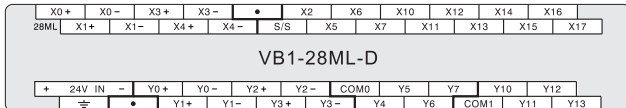
The X0, X1 and X3, X4 are the Line Driver input points, these two pairs of inputs could receive pulses from two A/B phase encoders (the Linear Scale or Rotary encoder is usually sent out the Line Driver signal). Besides, the X2, X5~X7 and X10~X17 are as same as other VB1 Main Unit, which are triggered by DC 24V (either Sink or Source, please refer to the VB User's Manual).

The Y0~Y3 are the Line Driver output points, these four points could connect to two servo (or linear) motor drives. Besides, the Y4~Y7 and Y10~Y13 are as same as other VB1 Main Unit, which are 0.5A NPN transistor outputs (please refer to the VB User's Manual).

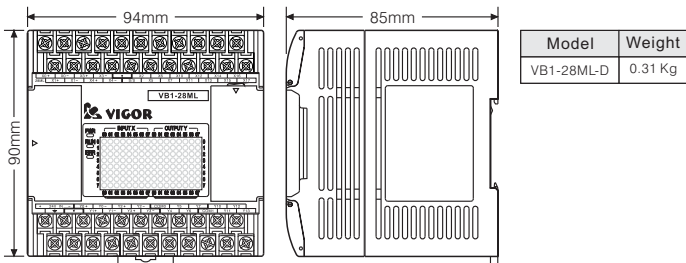
#### Component Names



#### Terminal Layout



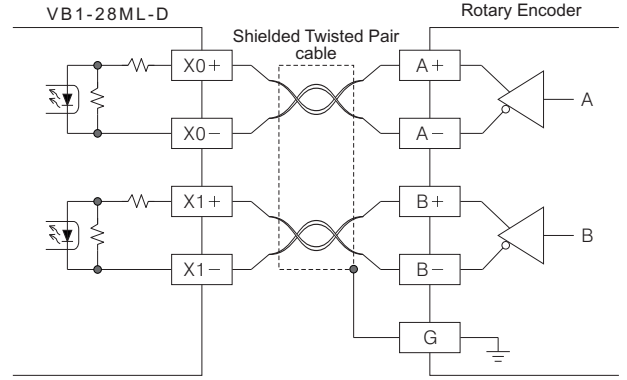
#### Dimensions



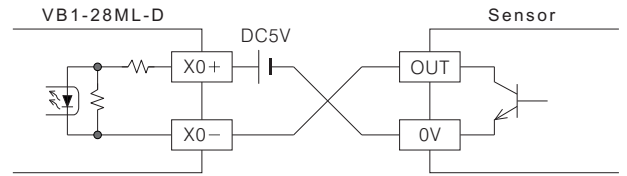
#### X0, X1 and X3, X4 Input Wiring

The input point X0, X1 and X3, X4 are particularly for receiving and distinguishing the Line Driver signals which must use the Shielded Twisted Pair cables. Also, these four could be used for ordinary inputs but should pay attention to the working voltage, please follow the instructions as below.

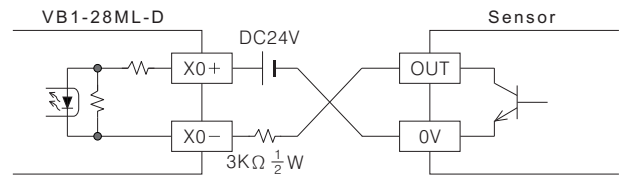
##### (1) To receive the Line Driver signal



##### (2) To receive the DC 5V signal



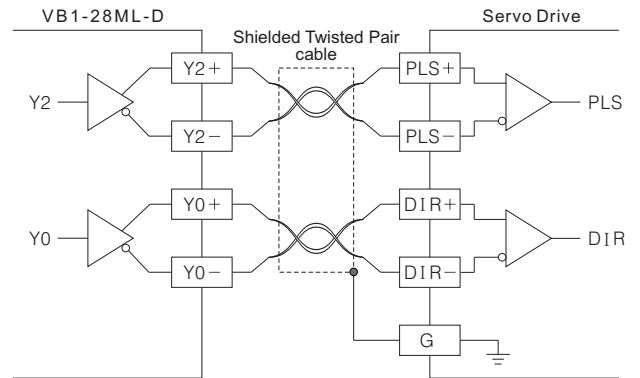
##### (3) To receive the DC 24V signal



#### Y0~Y3 Output Wiring

The output point Y0, Y1 and Y2, Y3 are particularly for sending signals to device inputs of the Line Driver which must use the Shielded Twisted Pair cables. Also, these four could propel the input circuits of DC 5V photo-coupler (ex. to the driver of a stepper motor), please follow the instructions as below.

##### (1) To send out the Line Driver signal



##### (2) To propel the DC 5V photo-coupler

