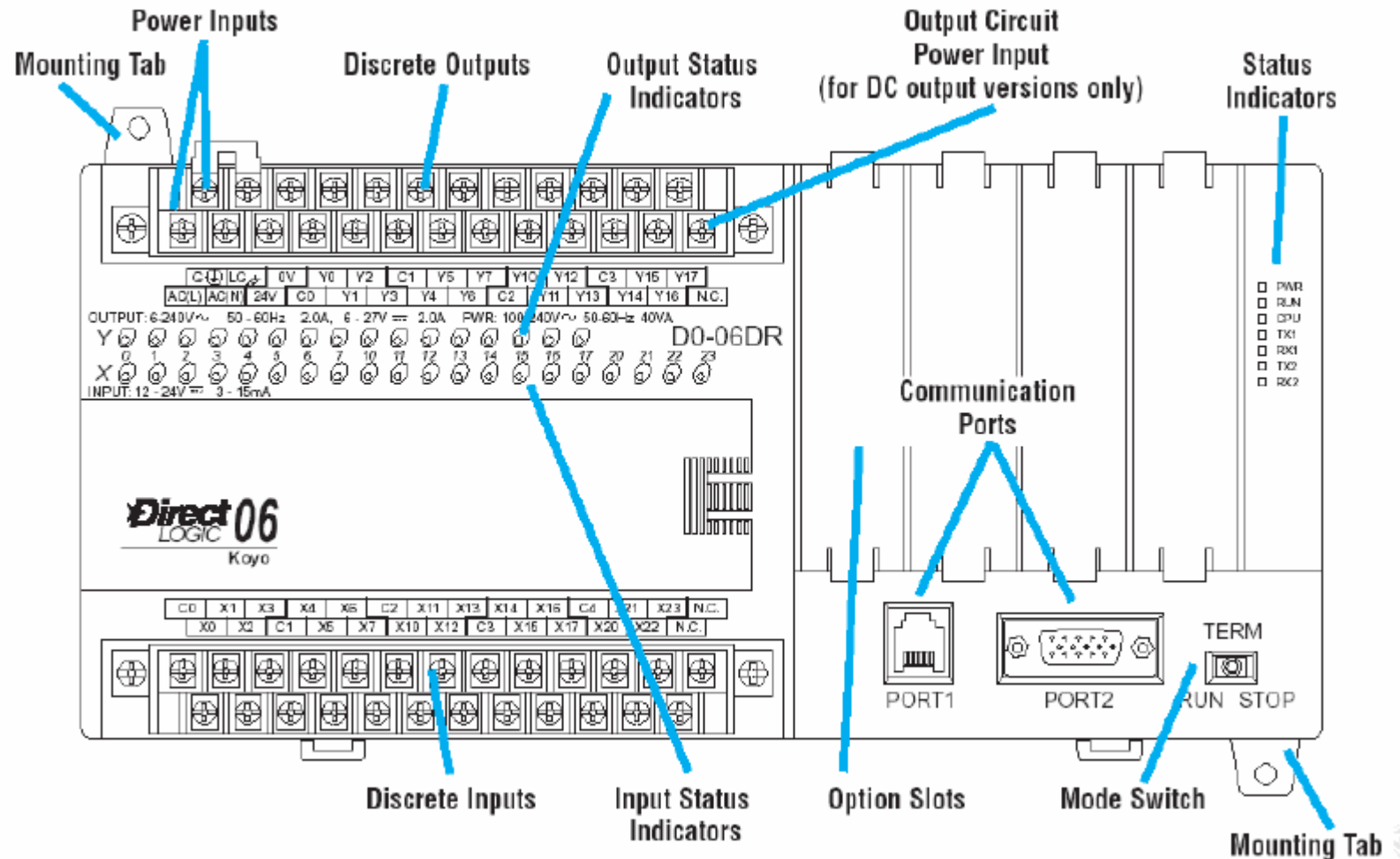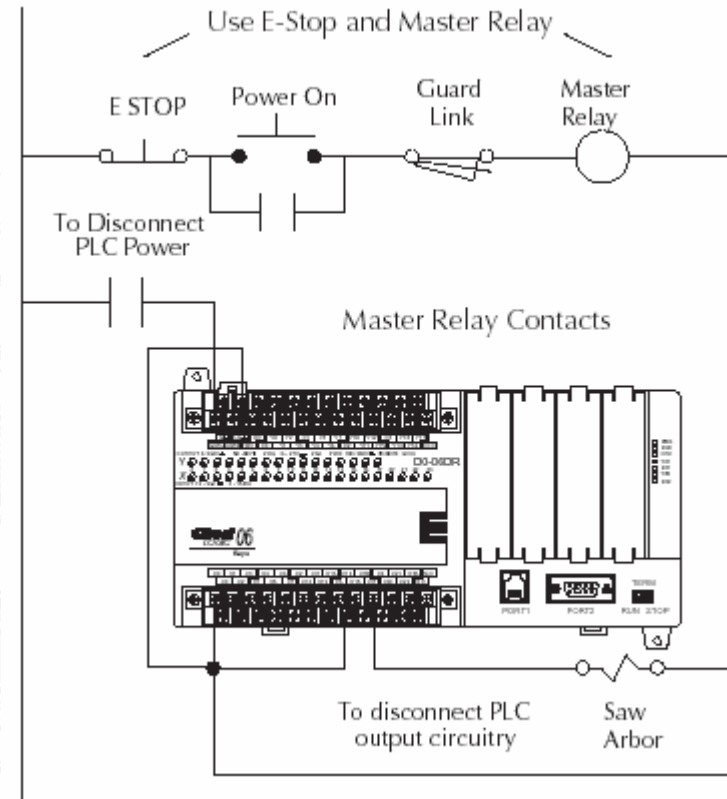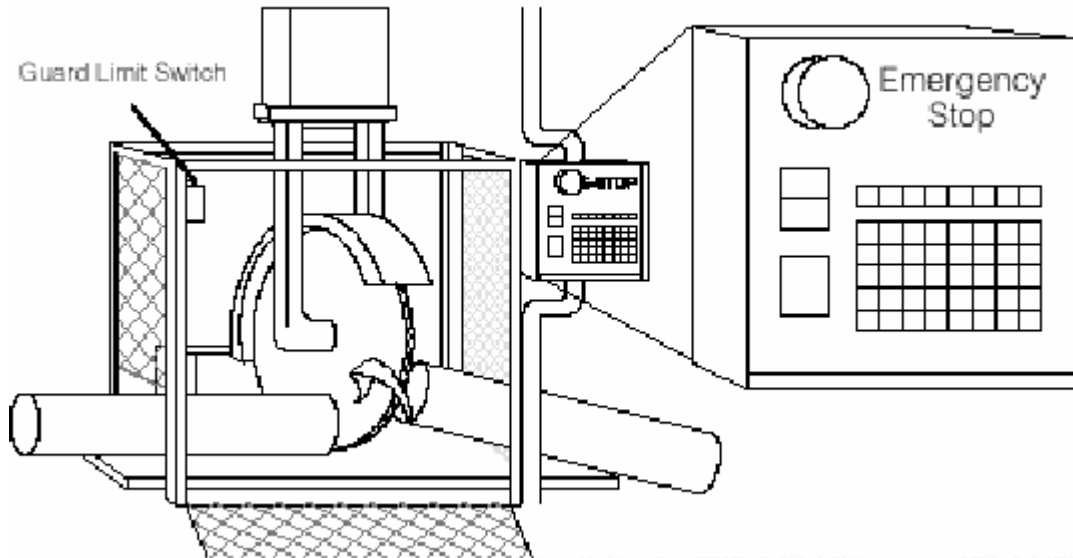# PLC Front Panel

# PLC Wiring

- Power Inputs
- Signal Inputs
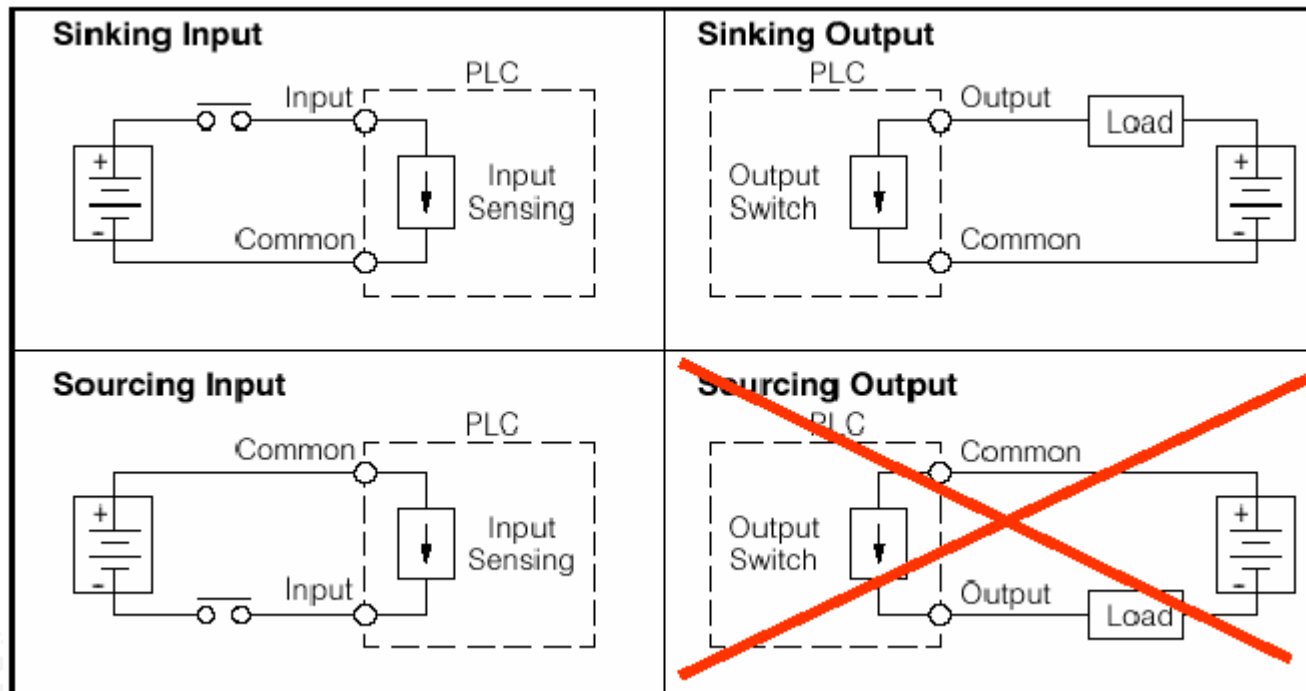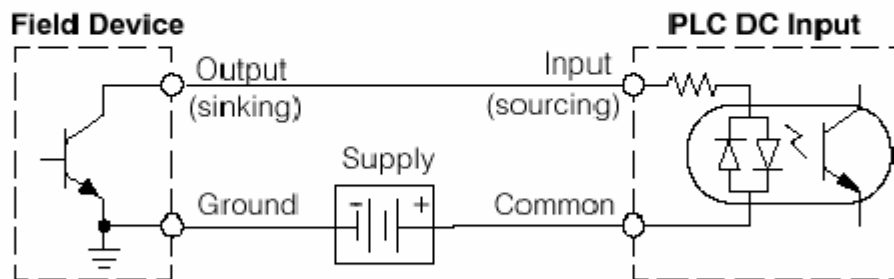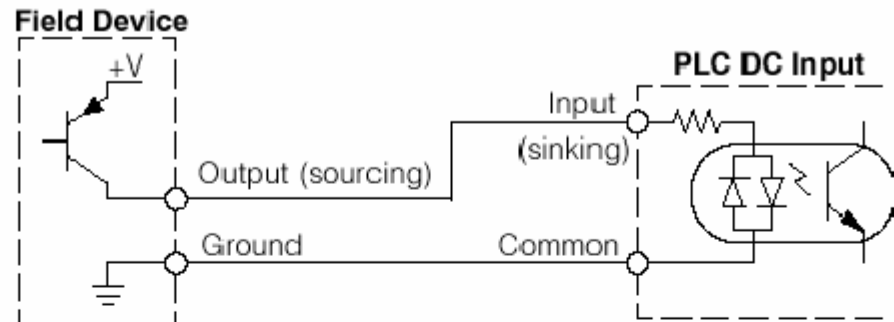- Control Outputs

# POWER WIRING



- Three levels of protection:
  - PLC logic - shutdown sequence
  - PLC output power disconnect
  - E-Stop shutdown of all energy sources
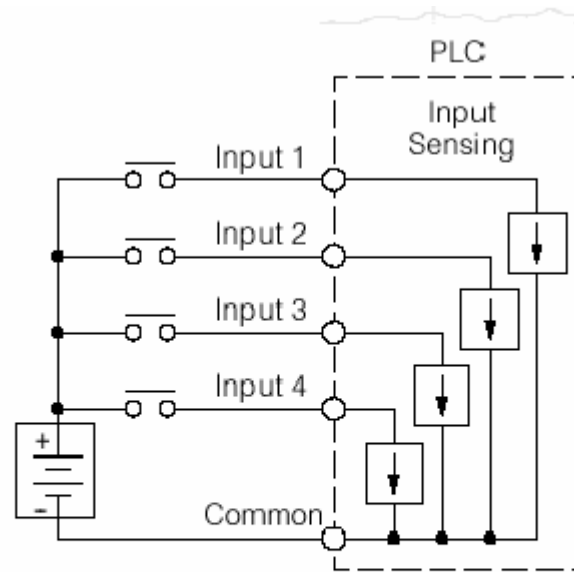
# PLC Inputs and Outputs



- Sinking = drawing current
- Sourcing = supplying current
- Sinking output connects to sourcing input
- Sourcing output connects to sinking input

# DL06 Signal Inputs

**Field Device**

+V

Output (sourcing)

Ground

**PLC DC Input**

Input
(sinking)

Common

**Field Device**

Output
(sinking)

Ground

Supply

**PLC DC Input**

Input
(sourcing)

Common

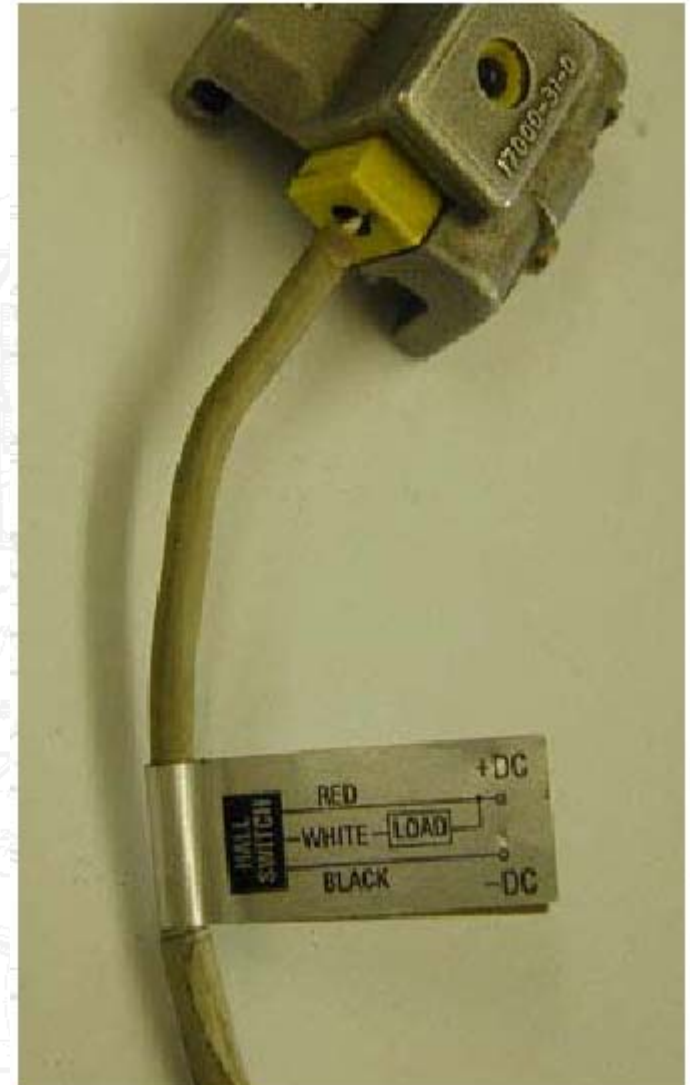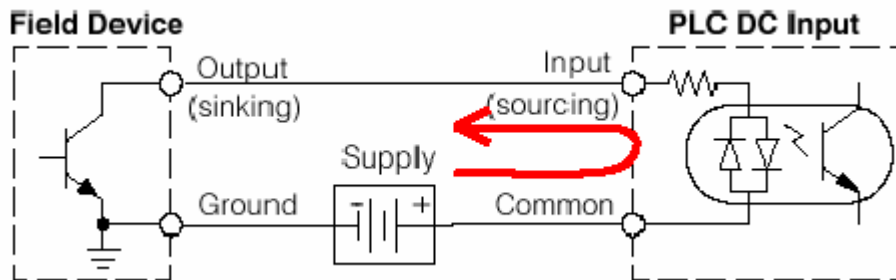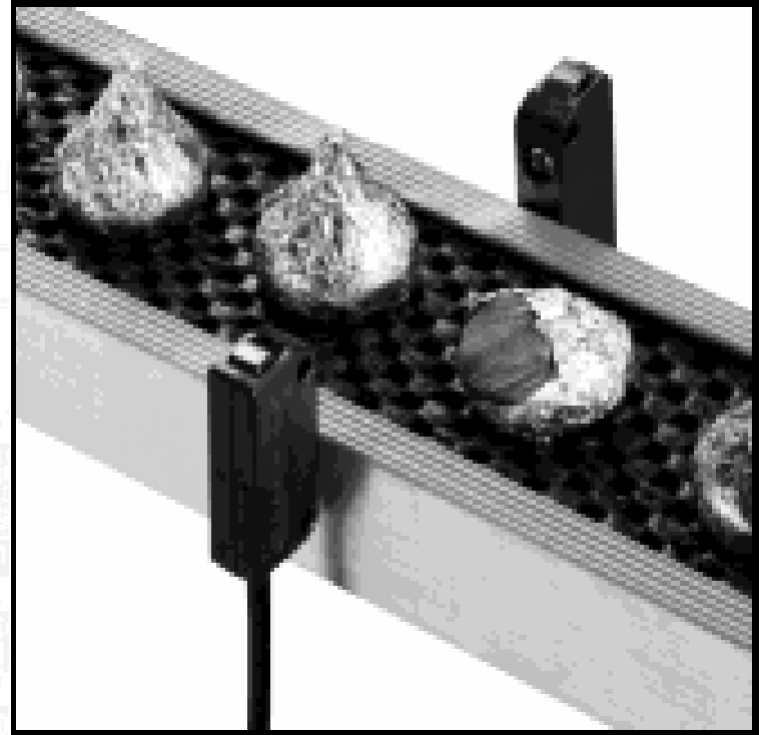| C0 | | X1 | | X3 | | X4 | | X6 | | C2 | | X11 | | X13 | | X14 | | X16 | | C4 | | X21 | | X23 | | N.C. |
|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|-----|-----|-----|-----|------|
| | X0 | | X2 | | C1 | | X5 | | X7 | | X10 | | X12 | | C3 | | X15 | | X17 | | X20 | | X22 | | N.C. |

# Signal Inputs



Multiple sinking inputs

- The tag indicates that the LOAD (PLC input has a +DC common
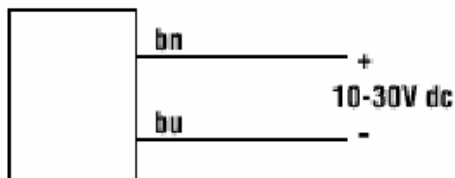  - this is a sinking output
  - Sinking output => sourcing input

# Another Input Device

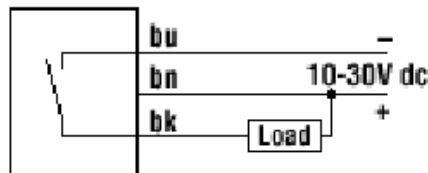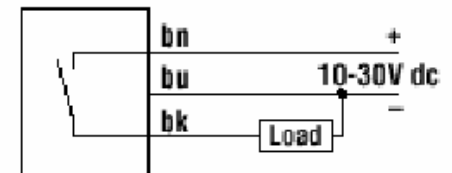- Photosensor – comes in either NPN (sinking) or PNP (sourcing)

**Emitters**
**Cabled Hookup**

bn — +
10-30V dc
bu — -

**Receivers with NPN Outputs**
**Cabled Hookup**

bu — —
bn — 10-30V dc
bk — +
Load

**Receivers with PNP Outputs**
**Cabled Hookup**

bn — +
bu — 10-30V dc
bk — —
Load

# DC Control Outputs

# DC Control Outputs



6-27VDC
1A/output