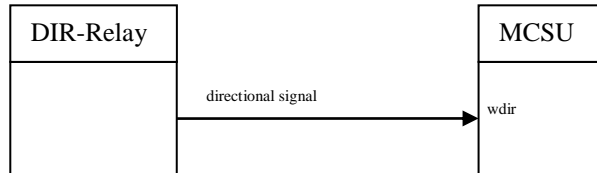## Alstom MCSU

This sensitive earth fault relay model is complete, though it can also be used in conjunction with an external directional relay. To use the external direction control function is it necessary to add a new composite frame which connects the input "wdir" with an output of a directional relay.

```
┌──────────────┐                              ┌──────────────┐
│  DIR-Relay   │                              │    MCSU      │
├──────────────┤    directional signal        ├──────────────┤
│              │ ───────────────────────────► │  wdir        │
│              │                              │              │
└──────────────┘                              └──────────────┘
```

All settings are in p.u. (%/100) instead of %
The nominal current can be defined in the "Measure" slot. (1A or 5A)
Plugboard settings Kplug: -> see "Measure" slot -> Current Setting in p.u.
Multiplier settings: -> see "Io>" slot in x Is : Is = Kplug * In