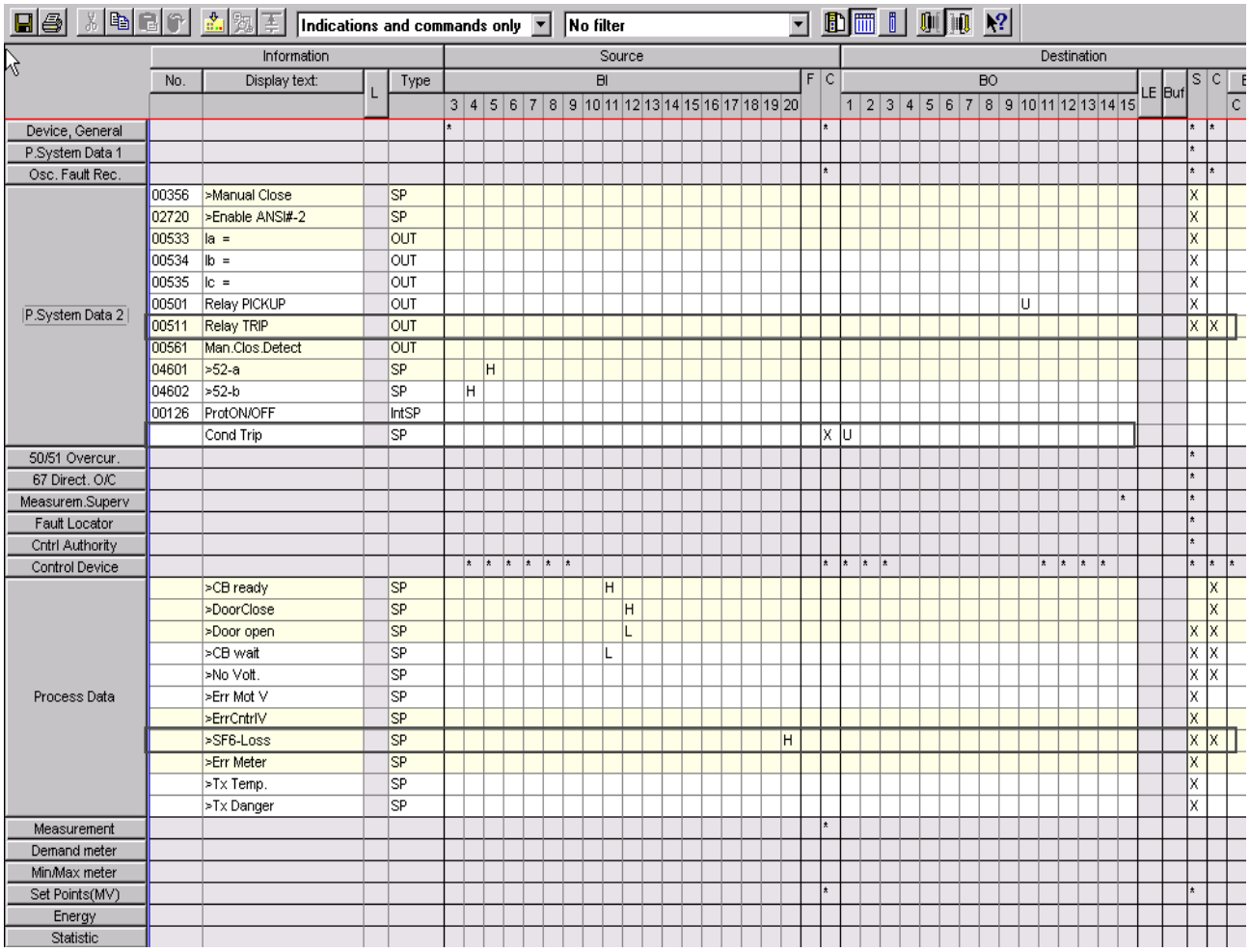
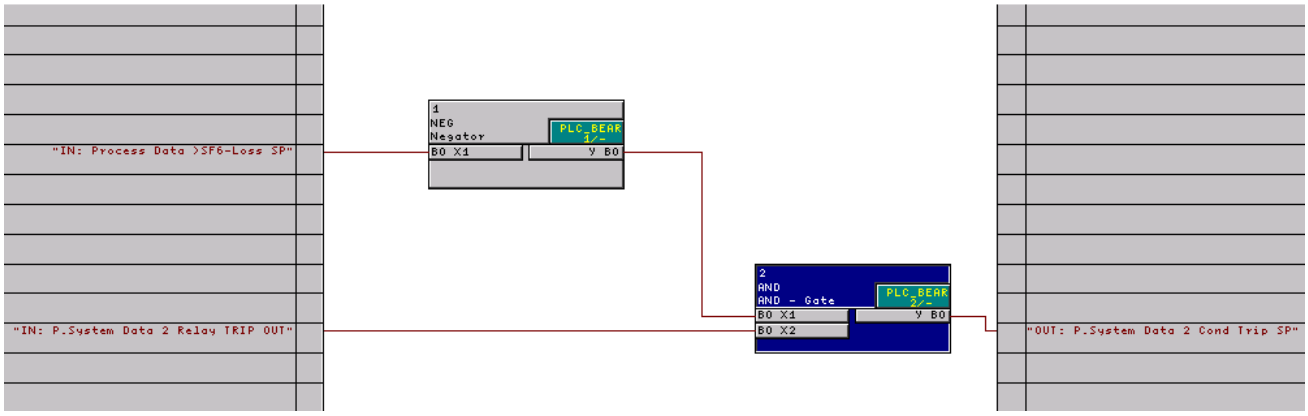
SF6 gas loss

In this application the SF6 gas loss of a circuit breaker shall be considered.
When the SF6 gas is low, tripping signals of the protection device shall be blocked and alarmed only.



Picture 1 : input-output matrix for SF6 gas loss

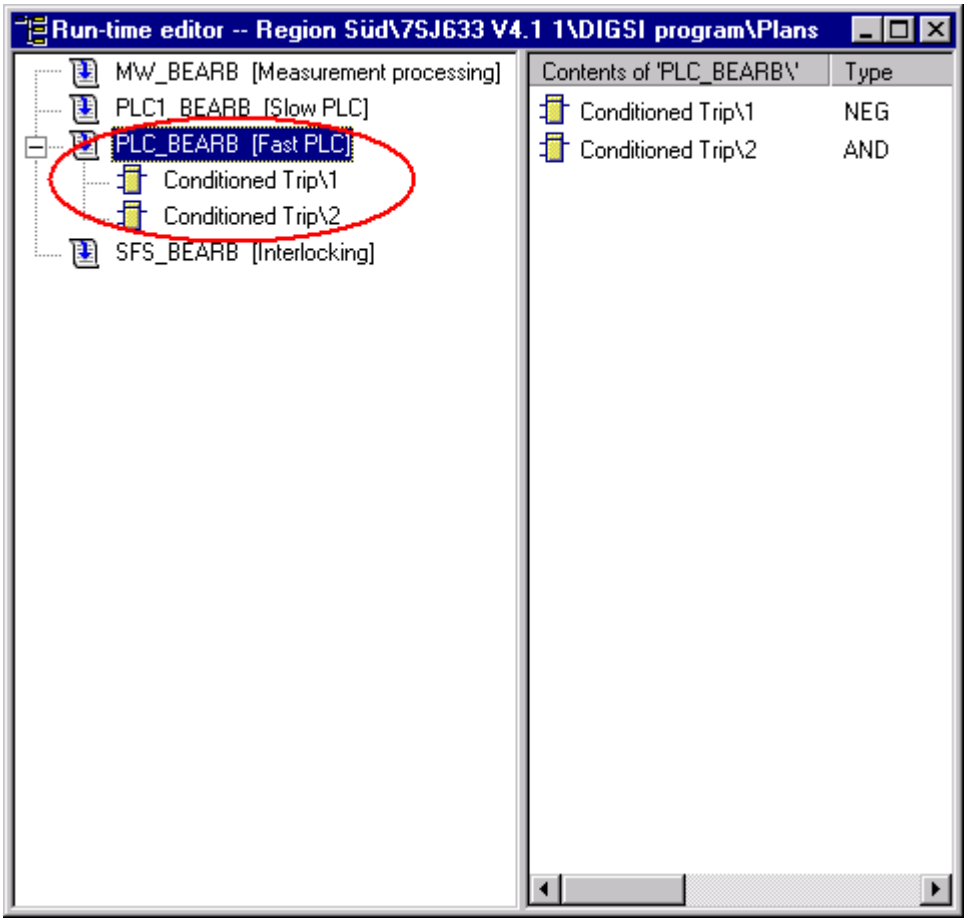
In this case the *0511 General Trip* signal shall be monitored, before it operates the output contact to trip the circuit breaker.
Refer to the CFC chart (picture 2). By means of the NEGATOR gate and an AND gate the *0511 General Trip* signal will only be forwarded, when no SF6 gas loss warning annunciation is present. As soon the SF6 gas loss warning appears, the *Cond-Trip* signal will be blocked, because the AND gate will not have the required two logic high states at its inputs.



Picture 2 : CFC chart

	Source	**Destination**
0511 Relay trip	generated by protection device	CFC chart
Cond. trip	CFC chart	BO , LED
SF6 loss	BI	CFC chart

In the input/output matrix two single point annunciations have to be inserted :
Cond-Trip and SF6 gas loss. The SF6 gas loss warning is derived from a binary input and must be routed with destination CFC.
The *0511 General Trip* signal must also be routed with destination CFC . This is required so that the CFC logic has the required input and output signals. The Cond-Trip signal is routed to an output contact and LED in the I/O matrix.



Picture 3 : the run time group PLC_BEARB is required

Please note that the correct layer is used for the CFC logic as a general trip signal must be blocked. The fast PLC layer, PLC_BEARB must be used in this case.