

48 V emergency turbo pump and its gate valve to isolation vacuum (VH20)

- mangler noe!!!

Controlled mechanism	Control of small pump system to be activated in case the main diffusion/rotary pumping system fails or the isolation vacuum (IKR) passes its threshold value.
Operation Modes	Automatic or manual
Set Operating Mode	Manual operation mode has to be set from a switch in the pump room

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Actuator	Closing of contactor KM1
Actuating signal	
Condition for accepting control commands	Manual start of the turbo system can only be executed if the turbo pump has reached 80 % of rotation speed.
State	Indication of open/closed state of the gate valve VH20 from the front panel Indication of running/stopped state of the turbo pump system from the front panel.
State Readout	
Measured values	- Speed ratio of the turbo pump -
Location of the valve	
PLC-Connection	CAB 137
Operating commands	Manual start of the turbo system
Alarm signal	Operator will be given a warning alarm in case of: <ul style="list-style-type: none"> - Bad isolation vacuum - Loss of power to the diffusion pump (from KA2 in CP3 to T3-4) The system will switch over to show an alarm signal, if no action is taken after certain time after a warning signal.
Security mechanisms	The turbo pump system starts at the moment of a warning alarm. In case of an alarm signal, the PLC will open the gate valve VH20 is opened. In case of serious deterioration of the isolation vacuum after manual opening of VH20, the valve is automatically closed again.

