

Description of H_STATUS

Typ/Number

FB 523

Area of application

The Block is used to display the operating conditions and states of an H-System. The following description is intended to use the block in CFC. If you work in CFC the following actions will be taken automatically:

- Instance assignment
- Insert in the Failure-OBs

The calling OBs

The block must be insert in the following OBs:

- OB35 Timed Interrupt OB
- OB100 Startup OB (Warm restart initialisation)
- OB102 Startup OB (Cold restart initialisation)

CFC-Representation:



Function

The Block is used to display the operating conditions RUN/STOP and status MASTER/Reserve of the CPUs4xx-xH of an H-System. The treatment of the block takes place cyclically in the OB35 and acyclic in the failure OBs. In case of failure of a CPU an appropriate message is produced.

Operating principle

The block is insert with the same instance once for an H-System into the OBs listed above. The information is picked out over the SFC51 RDSYSST from the SZL-ID W#16#xy71. The block possesses for each CPU of the H-System two outputs, which give information on the operating condition and status of the respective CPU. It determined from the SZL the current operating condition and sets the outputs according to Rx_RUN. The status master of a CPU is put out with Rx_MSTR = TRUE. (x=number of the rack.) In case of failure of a CPU the message "CPU im Rack x gestört" is given out. The message is marked as gone, as soon as the CPU is working again.

Error handling

The block evaluates the error information of ALARM_8P and writes it to the corresponding output parameters. See Error information of the output parameter ALARM_8P_STATUS.

Startup characteristics

H_STATUS initialises the messages of ALARM_8P. The current status of the two H-CPU's is determined by reading SZL71 (see "Functions and operating principles").

Time response

Missing

Message characteristics

H_STATUS generates a message for CPU redundancy error in cases of CPU failure/return.

Assignment of message texts and classes

Message-Nr.	default message text	message class
1	CPU in Rack 0: Ausfall	S
2	CPU in Rack 1: Ausfall	S

Auxiliary values

Auxiliary values are not used within the message text. The messages are produced over ALARM_8P (SFB35). With the messages "CPU in Rack x: Ausfall" the appropriate rack number (x) is not implemented as auxiliary value, instead of it is firmly given in the reporting text. The advantage is, if with lining up redundancy loss and following OS restart the correct value is represented in the reporting text on the OS.

Operator control and monitoring

The block does not have a faceplate

Parameters of H_Status:

I/O	Meaning	Data type	Default	Type	Attr.	OCM
MSG_LOCK	1: Message locked	BOOL	0	I		
MSG_EVID	Message number ALARM_8P	DWORD	0	I	U	
AUX_01	Auxiliary value 1 (can be used by the user)	INT		IO	U	
AUX_02	Auxiliary value 2 (can be used by the user)	INT		IO	U	+
R0_MSTR	1: CPU in rack 0 is master	BOOL	0	O		+
R1_MSTR	1: CPU in rack 1 is master	BOOL	0	O		+
R0_RUN	1: CPU in rack 0 is running	BOOL	0	O		+
R1_RUN	1: CPU in rack 1 is not running	BOOL	0	O		
ERR	1: Internal error	BOOL	0	O		
ALARM_8P_ STATUS	State of ALARM_8P	WORD	0	O		

Error information of the output ALARM_8P_STATUS

The messages can be disabled by setting EN_MSG = FALSE (output parameter ALARM_8P_STATUS remains unchanged).

Details on the error information of output parameter ALARM_8P_STATUS of the ALARM_8P and on the acknowledgment of ALARM_8P are found in the Online Help of SFB35 (ALARM_8P).

Error Information of the output parameter ALARM_8P_STATUS

STATUS (Decimal)	Explanation
11	Warning: Message lost, at least one signal transition/message could not be sent.
22	<ul style="list-style-type: none">• Error in the pointer to the associated values SD_i<ul style="list-style-type: none">○ relating to the data length or the data type○ no access to associated values in user memory, for example, due to deleted DB or area length error. The activated message is sent without associated values• The actual parameter you have selected for SEVERITY is higher than the permitted range. The activated message will be sent with SEVERITY=127.
25	Communication was initiated. The message is being processed.
1	Communications problems: connection aborted or no logon. With acknowledgment-triggered reporting active: temporary display, if no display devices support acknowledgment-triggered reporting
4	At the first call: - <ul style="list-style-type: none">• The specified EV_ID is outside the permitted range or .• The ANY pointer SD_i has a formal error .• The maximum memory area that can be sent for the CPU per SFB35 was exceeded
10	Access to local user memory not possible (for example, access to a deleted DB)
12	When the SFB was called: <ul style="list-style-type: none">• An instance DB that does not belong to SFB 35 was specified• A shared DB instead of an instance DB was specified
18	EV_ID was already being used by one of the SFBs 31 or 33 to 36.
20	Not enough working memory. H-System: SFB called while update in progress
21	The message with the specified EV_ID is disabled.