

SIPLUS ET 200S 2DO HF -25...+70 °C based on 6ES7132-4BB31-0AB0 5 units per packing unit



Supply voltage

Reverse voltage protection	Yes; when using the same load voltage as on the power module
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Load voltage L+

- | | |
|---|--|
| <ul style="list-style-type: none"> Rated value (DC) | 24 V; From power module |
| <ul style="list-style-type: none"> Reverse polarity protection | Yes; polarity reversal can lead to the digital outputs being connected through |

Input current

from load voltage L+ (without load), max.	5 mA; Per channel
from backplane bus 3.3 V DC, max.	10 mA

Power loss

Power loss, typ.	1.4 W
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Address area

Address space per module

- | | |
|--|--------|
| <ul style="list-style-type: none"> Address space per module, max. | 1 byte |
| <ul style="list-style-type: none"> with packing | 2 bit |

Digital outputs

Type of digital output	Transistor
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Number of digital outputs	2
Short-circuit protection	Yes
• Response threshold, typ.	4 A
Limitation of inductive shutdown voltage to	-55 to -60 V, typ. L+()
Controlling a digital input	Yes
Switching capacity of the outputs	
• on lamp load, max.	5 W
Load resistance range	
• lower limit	12 Ω
• upper limit	3 400 Ω
Output voltage	
• for signal "1", min.	L+ (-1 V)
Output current	
• for signal "1" rated value	2 A
• for signal "1" permissible range, min.	7 mA
• for signal "1" permissible range, max.	2.4 A
• for signal "0" residual current, max.	0.5 mA
Output delay with resistive load	
• "0" to "1", max.	100 μs
• "1" to "0", max.	400 μs
Parallel switching of two outputs	
• for uprating	No
• for redundant control of a load	Yes; per module
Switching frequency	
• with resistive load, max.	100 Hz
• with inductive load, max.	2 Hz; 0,5 H
• on lamp load, max.	10 Hz
Total current of the outputs	
• Current per module, max.	4 A
Cable length	
• shielded, max.	1 000 m
• unshielded, max.	600 m
Interrupts/diagnostics/status information	
Diagnostics function	Yes; Can be read out
Substitute values connectable	Yes; 0/1
Diagnostic messages	
• Wire-break	Yes; channel by channel
• Short-circuit	Yes; channel by channel
Diagnostics indication LED	
• Group error SF (red)	Yes
• Status indicator digital output (green)	Yes

Parameter	
Remark	3 byte
Diagnostics wire break	Disable / enable
Diagnostics short-circuit	Disable / enable
Response to CPU/master STOP	Substitute a value/keep last value

Potential separation	
Potential separation digital outputs	
<ul style="list-style-type: none"> • between the channels 	No
<ul style="list-style-type: none"> • between the channels and backplane bus 	Yes

Isolation	
Isolation tested with	500 V DC

Ambient conditions	
Ambient temperature during operation	
<ul style="list-style-type: none"> • min. 	-25 °C; = Tmin
<ul style="list-style-type: none"> • max. 	70 °C; = Tmax

Altitude during operation relating to sea level	
<ul style="list-style-type: none"> • Installation altitude above sea level, max. 	5 000 m
<ul style="list-style-type: none"> • Ambient air temperature-barometric pressure-altitude 	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)

Relative humidity	
<ul style="list-style-type: none"> • With condensation, tested in accordance with IEC 60068-2-38, max. 	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)

Resistance	
Use in stationary industrial systems	
— to biologically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
— to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust, *

Use on ships/at sea	
— to biologically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
— to chemically active substances according to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust, *

Usage in industrial process technology	
— Against chemically active substances acc. to EN 60654-4	Yes; Class 3 (excluding trichlorethylene)

— Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04

Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)

Remark

— Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04

* The supplied plug covers must remain in place over the unused interfaces during operation!

Dimensions

Width	15 mm
Height	81 mm
Depth	52 mm

Weights

Weight, approx.	40 g
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last modified: 05/13/2020