

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
Load voltage L+	
<ul style="list-style-type: none"> <li>Rated value (DC)</li> </ul>	24 V; From power module
<ul style="list-style-type: none"> <li>Reverse polarity protection</li> </ul>	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
Address area	
Address space per module	
<ul style="list-style-type: none"> <li>with packing</li> </ul>	2 bit
<ul style="list-style-type: none"> <li>without packing</li> </ul>	1 byte
Digital outputs	
Number of digital outputs	2
Short-circuit protection	Yes
<ul style="list-style-type: none"> <li>Response threshold, typ.</li> </ul>	4 A
Limitation of inductive shutdown voltage to	-55 to -60 V, typ. L+( )
Controlling a digital input	Yes
Switching capacity of the outputs	
<ul style="list-style-type: none"> <li>on lamp load, max.</li> </ul>	5 W
Load resistance range	
<ul style="list-style-type: none"> <li>lower limit</li> </ul>	12 Ω
<ul style="list-style-type: none"> <li>upper limit</li> </ul>	3 400 Ω
Output voltage	
<ul style="list-style-type: none"> <li>for signal "1", min.</li> </ul>	L+ (-1 V)
Output current	
<ul style="list-style-type: none"> <li>for signal "1" rated value</li> </ul>	2 A
<ul style="list-style-type: none"> <li>for signal "1" permissible range, min.</li> </ul>	7 mA
<ul style="list-style-type: none"> <li>for signal "1" permissible range, max.</li> </ul>	2.4 A
<ul style="list-style-type: none"> <li>for signal "0" residual current, max.</li> </ul>	0.5 mA
Output delay with resistive load	

• "0" to "1", max.	100 µs
• "1" to "0", max.	400 µs
<b>Parallel switching of two outputs</b>	
• for uprating	No
• for redundant control of a load	Yes; per module
<b>Switching frequency</b>	
• with resistive load, max.	100 Hz
• with inductive load, max.	2 Hz; 0,5 H
• on lamp load, max.	10 Hz
<b>Total current of the outputs</b>	
• Current per module, max.	4 A
<b>Cable length</b>	
• shielded, max.	1 000 m
• unshielded, max.	600 m
<b>Isochronous mode</b>	
Isochronous operation (application synchronized up to terminal)	Yes
<b>Interrupts/diagnostics/status information</b>	
Diagnostic functions	Yes; Can be read out
Substitute values connectable	Yes; 0/1
<b>Diagnostic messages</b>	
• Wire-break	Yes; channel by channel
• Short-circuit	Yes; channel by channel
<b>Diagnostics indication LED</b>	
• Group error SF (red)	Yes
• Status indicator digital output (green)	Yes
<b>Parameter</b>	
Remark	3 byte
Diagnostics wire break	Disable / enable
Diagnostics short-circuit	Disable / enable
Response to CPU/master STOP	Substitute a value/keep last value
<b>Potential separation</b>	
<b>Potential separation digital outputs</b>	
• between the channels	No
• between the channels and backplane bus	Yes
<b>Isolation</b>	
Isolation tested with	500 V DC
<b>Ambient conditions</b>	
<b>Ambient temperature during operation</b>	
• min.	-25 °C; = Tmin

• max.	70 °C; = Tmax
<b>Altitude during operation relating to sea level</b>	
• Installation altitude above sea level, max.	5 000 m
• 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)
<b>Relative humidity</b>	
• With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
<b>Resistance</b>	
<b>Use in stationary industrial systems</b>	
— 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, *
<b>Use on ships/at sea</b>	
— 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; *
<b>from supply voltage 1L+</b>	
— Note regarding classification of environmental conditions acc. to EN 60721	* The supplied plug covers must remain in place over the unused interfaces during operation!
<b>Dimensions</b>	
Width	15 mm
Height	81 mm
Depth	52 mm
<b>Weights</b>	
Weight, approx.	40 g
<b>last modified:</b>	05/18/2018