

SIPLUS ET 200S EM 2 Pulse -25...+70 °C with conformal coating based on 6ES7138-4DD01-0AB0 . Electronic module 2-pulse Pulse generator and timer module, 15 mm wide, 2 channels



Figure similar

Supply voltage	
Load voltage L+	
• Rated value (DC)	24 V; From power module
• Reverse polarity protection	Yes
Input current	
from load voltage L+ (without load), max.	40 mA
from backplane bus 3.3 V DC, max.	10 mA
Encoder supply	
Type of output voltage	L+ (-0.8 V)
Short-circuit protection	Yes
Output current	
• Rated value	500 mA
Power loss	
Power loss, typ.	1.8 W
Digital inputs	
Number of digital inputs	2

Input characteristic curve in accordance with IEC 61131, type 2	Yes
Input voltage	
• Rated value (DC)	24 V
• for signal "0"	-30 to +5V
• for signal "1"	+11 to +30V
Input current	
• for signal "1", typ.	9 mA
Input delay (for rated value of input voltage)	
• Input frequency (with a time delay of 0.1 ms), max.	20 kHz
• Minimum pulse width for program reactions	100 µs
Cable length	
• shielded, max.	100 m
Digital outputs	
Number of digital outputs	2
Short-circuit protection	Yes
• Response threshold, typ.	10 A
Limitation of inductive shutdown voltage to	L+ (-50 to -65 V)
Controlling a digital input	Yes
Accuracy of pulse duration	±(time period x 100 ppm), ±100 µs with a load ≤ 50 ohms
minimum pulse duration	100 µs
Switching capacity of the outputs	
• on lamp load, max.	10 W
Output voltage	
• for signal "1", min.	L+ (-1 V)
Output current	
• for signal "1" rated value	2 A
• for signal "1" permissible range for 0 to 60 °C, min.	7 mA
• for signal "1" permissible range for 0 to 60 °C, max.	2 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.	200 µs
Switching frequency	
• with resistive load, max.	5 kHz
• with inductive load, max.	2 Hz
• on lamp load, max.	10 Hz
Cable length	
• shielded, max.	1 000 m

- unshielded, max. 600 m

Encoder

Connectable encoders

- 2-wire sensor Yes
- permissible quiescent current (2-wire sensor), max. 2 mA

Interrupts/diagnostics/status information

Diagnostics indication LED

- Group error SF (red) Yes
- Status indicator digital input (green) Yes
- Status indicator digital output (green) Yes

Integrated Functions

Pulse generator

- Number of channels 2; 1 digital input and 1 digital output per channel

Potential separation

Potential separation digital inputs

- between the channels No
- between the channels and backplane bus Yes

Potential separation digital outputs

- between the channels No
- between the channels and backplane bus Yes

Permissible potential difference

between different circuits 75 V DC/60 V AC

Isolation

Isolation tested with 500 V DC

Ambient conditions

Altitude during operation relating to sea level

- 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)

Relative humidity

- 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
— to mechanically 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); *
Yes; Class 3S4 incl. sand, dust, *

Use on ships/at sea

— to biologically active substances according to EN 60721-3-6
— to chemically active substances according to EN 60721-3-6
— to mechanically active substances according to EN 60721-3-6

Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
Yes; Class 6S3 incl. sand, dust; *

from supply voltage 1L+

— Note regarding classification of environmental conditions acc. to EN 60721

* 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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