MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

SIEMENS

6ES7148-4EA00-0AA0

PNEUMATIC VALVE INTERFACE MODULE

Used with the applicable SIMATIC ET 200pro configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Siemens 6ES7148-4EA00-0AA0 technical data and applicable product instructions

SIEMENS

Data sheet 6ES7148-4EA00-0AA0



SIMATIC DP, Pneumatic interface for ET 200 PRO, 16 DO pneumatics for coupling with Festo valve terminal CPV-10; incl. bus module

Supply voltage	
Load voltage 2L+	
● Rated value (DC)	24 V
● Short-circuit protection	Yes
● Reverse polarity protection	Yes
Input current	
from load voltage 2L+, max.	300 mA; Including valves
from backplane bus 3.3 V DC, max.	25 mA
Power loss	
Power loss, typ.	2.6 W
Address area	
Address space per module	
● Address space per module, max.	2 byte
Digital outputs	
Number of digital outputs	16
Load resistance range	
● lower limit	500 Ω
● upper limit	2 500 Ω
Output current	
● for signal "1" rated value	12 mA
● for signal "1" permissible range, min.	11 mA
● for signal "1" permissible range, max.	15 mA
Switching frequency	
● with inductive load, max.	25 Hz
Total current of the outputs (per group)	
all mounting positions	
— up to 55 °C, max.	250 mA; only up to 50 °C, limited by valves
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	
● Diagnostic alarm	Yes
Diagnoses	
● Diagnostic information readable	Yes
Diagnostics indication LED	
● Group error SF (red)	Yes
● Status indicator digital output (green)	Yes
Pneumatics	
Number of connectable valves, max.	16
permissible working pressure, min.	3 bar
permissible working pressure, max.	8 bar

Subject to change without notice
© Copyright Siemens

Rated flow rate	400 l/min
Valve switching times from "0" to "1"	17 ms
Valve switching times from "1" to "0"	25 ms
Parameter	
Remark	Diagnosis load voltage 2L+
Response to CPU/master STOP	No
Potential separation	
between backplane bus and all other circuit components	Yes
Potential separation digital outputs	
● between the channels and backplane bus	Yes
Isolation	
Isolation tested with	707 V DC (type test)
Standards, approvals, certificates	
Suitable for safety-related tripping of standard modules	Yes
Highest safety class achievable for safety-related tripping of standard modules	
● Performance level according to ISO 13849-1	PL d
● Category according to ISO 13849-1	Cat. 3
● SIL acc. to IEC 62061	SIL 2
Dimensions	
Width	90 mm
Height	130 mm
Depth	47 mm

last modified: 8/27/2023

Subject to change without notice
© Copyright Siemens