SIEMENS

Data sheet

6ES7147-6BG00-0AB0



SIMATIC DP, ET 200ECO PN, 8 DIO 24 V DC/1.3 A; 8xM12, Degree of protection IP67

Fi	g	ur	e	5	in	ni	1	ar

General information	
Vendor identification (VendorID)	002AH
Device identifier (DeviceID)	0306H
Supply voltage	
Rated value (DC)	24 V
Reverse polarity protection	Yes
power supply according to NEC Class 2 required	Yes
Load voltage 2L+	
Rated value (DC)	24 V
 permissible range, lower limit (DC) 	20.4 V
 permissible range, upper limit (DC) 	28.8 V
 Reverse polarity protection 	Yes
Input current	
Current consumption, typ.	100 mA
from supply voltage 1L+, max.	4 A
from load voltage 1L+ (unswitched voltage)	4 A
from load voltage 2L+, max.	4 A
Encoder supply	
24 V encoder supply	
 Short-circuit protection 	Yes; Electronic
Output current, max.	100 mA; per output
Power loss	
Power loss, typ.	6.5 W
Digital inputs	
Number of digital inputs	8
• in groups of	4
Input characteristic curve in accordance with IEC 61131, type 3	Yes
Number of simultaneously controllable inputs	
all mounting positions	
— up to 60 °C, max.	8
Input voltage	
 Rated value (DC) 	24 V
• for signal "0"	-3 to +5V
 for signal "1" 	+11 to +30V
Input current	
● for signal "1", typ.	7 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— at "0" to "1", max.	typically 3 ms

— at "1" to "0", max.	typically 3 ms			
Cable length				
• unshielded, max.	30 m			
Digital outputs				
Number of digital outputs	8			
• in groups of	4			
Short-circuit protection	Yes; Electronic			
Response threshold, typ.	1.8 A			
Limitation of inductive shutdown voltage to	Typ. (L1+, L2+) -47 V			
Controlling a digital input	Yes			
Switching capacity of the outputs				
• on lamp load, max.	5 W			
Output current				
 for signal "1" rated value 	1.3 A; Maximum			
 for signal "1" permissible range, max. 	1.3 A			
 for signal "0" residual current, max. 	1.5 mA			
Parallel switching of two outputs				
for uprating	No			
 for redundant control of a load 	Yes			
Switching frequency				
with resistive load, max.	100 Hz			
with inductive load, max.	0.5 Hz			
on lamp load, max.	1 Hz			
Total current of the outputs (per group)				
all mounting positions				
— up to 60 °C, max.	3.9 A			
Cable length				
• unshielded, max.	30 m			
Encoder				
Connectable encoders				
2-wire sensor	Vee			
	Yes			
	1.5 mA			
— permissible quiescent current (2-wire sensor), max. Interfaces				
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• ping	Yes				
• ARP	Yes				
Interrupts/diagnostics/status information					
Diagnostics function	Yes				
Alarms					
Diagnostic alarm	Yes				
Diagnoses					
Diagnostic information readable	Yes				
 Monitoring the supply voltage 	Yes; green "ON" LED				
 Wire-break in actuator cable 	Yes				
 Wire-break in signal transmitter cable 	Yes				
Short-circuit	Yes				
 Short-circuit encoder supply 	Yes				
Group error	Yes; Red/yellow "SF/MT" LED				
Potential separation					
between the load voltages	Yes				
between load voltage and all other switching components	No				
between Ethernet and electronics	Yes				
Potential separation channels					
between the channels	No				
Isolation					
tested with					
24 V DC circuits	707 V DC (type test)				
 Test voltage for interface, rms value [Vrms] 	1 500 V; According to IEEE 802.3				
Degree and class of protection					
IP degree of protection	IP65/67				
Standards, approvals, certificates					
Suitable for safety-related tripping of standard modules	No				
connection method					
Design of electrical connection	4/5-pin M12 circular connectors				
Dimensions					
Width	60 mm				
Height	175 mm				
Depth	49 mm				
Weights					
Weight, approx.	910 g				
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