6ES7142-3BH00-0XA0

Data sheet





General information	
Vendor identification (VendorID)	80FBh
Supply voltage	
Rated value (DC)	24 V
Reverse polarity protection	Yes
Load voltage 2L+	
Rated value (DC)	24 V
 Reverse polarity protection 	Yes
Input current	
from supply voltage 1L+, max.	70 mA; Typical
from load voltage 2L+ (without load), max.	80 mA; Typical
Power loss	
Power loss, typ.	4 W
Digital outputs	
Number of digital outputs	16
Short-circuit protection	Yes
 Response threshold, typ. 	1.4 A; Per channel
Limitation of inductive shutdown voltage to	2L+ (-47 V)
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	4 kΩ
Output voltage	
● for signal "1", min.	2L+ (-0,8 V)
Output current	
for signal "1" rated value	0.5 A
 for signal "1" permissible range for 0 to 55 °C, min. 	5 mA
 for signal "1" permissible range for 0 to 55 °C, max. 	1 A
for signal "0" residual current, max.	0.1 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; According to IEC 60947-5-1, DC-13
on lamp load, max.	1 Hz
Total current of the outputs (per group)	
all mounting positions	
— up to 55 °C, max.	4 A; Please note the current carrying capacity of the cable!

Cable length	
• unshielded, max.	30 m
Interfaces	
PROFIBUS DP	
Transmission rate, max.	12 Mbit/s; 9,6 / 19,2 / 45,45 / 93,75 / 187,5 / 500 kbit/s; 1,5 / 3 / 6 / 12 Mbit/s
Protocols	
PROFIBUS DP	Yes
Interrupts/diagnostics/status information	
Alarms	No
Diagnoses	
Diagnostic information readable	Yes
Diagnostics indication LED	
 Group error SF (red) 	Yes
Status indicator digital output (green)	Yes
Channel fault indicator F (red)	No
Potential separation	
between PROFIBUS DP and all other circuit components	Yes
Potential separation digital outputs	
between the channels	No
Permissible potential difference	
between different circuits	75 V DC/60 V AC
Isolation	
Isolation tested with	500 V DC
Degree and class of protection	
IP degree of protection	IP65/67
connection method / header	
Design of electrical connection	4/5-pin M12 circular connectors
Dimensions	
Width	60 mm
Height	210 mm
Depth	28 mm
Weights	
Weight, approx.	210 g
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