SIEMENS

Data sheet

6ES7143-3BH10-0XA0



SIMATIC DP, Basic module BM 143 ET 200ECO: 8 DI/8 DO, 1.3A, 8xM12, Duplicate assignment, IP65/67, Connection block 6ES7194-3AA00-0.A0 order separately

General information					
Vendor identification (VendorID)	80FCh				
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.	60 mA; Typical				
Encoder supply					
Number of outputs	8				
Short-circuit protection	Yes; Electronic				
Output current					
Rated value	1 A; Up to 55°C max. 1 A (summation current)				
Power loss					
Power loss, typ.	5 W				
Digital inputs					
Number of digital inputs	8				
Input characteristic curve in accordance with IEC 61131, type 1	Yes				
Number of simultaneously controllable inputs					
all mounting positions					
— up to 55 °C, max.	8				
Input voltage					
Rated value (DC)	24 V				
• for signal "0"	-3 to +5V				
• for signal "1"	13 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.	3 ms; Typical				
— at "1" to "0", max.	3 ms; Typical				
Digital outputs					
Number of digital outputs	8				
Short-circuit protection	Yes				
Response threshold, typ.	4 A; Per channel				
Limitation of inductive shutdown voltage to	2L+ (-44 V)				
Controlling a digital input	Yes				

Switching consolity of the suitaute	
Switching capacity of the outputs	10 W
• on lamp load, max.	10 W
Load resistance range	
lower limit	12 Ω
upper limit	4 kΩ
Output voltage	
• for signal "1", min.	2L+ (-1,2 V)
Output current	
 for signal "1" rated value 	1.3 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. 	1.8 A
 for signal "0" residual current, max. 	0.5 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; 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.	5.2 A; Please note the current carrying capacity of the cable!
Cable length	
• unshielded, max.	30 m
Encoder	
Connectable encoders	
2-wire sensor	Yes
permissible quiescent current (2-wire sensor), max.	1.5 mA
Interfaces	
PROFIBUS DP	
Transmission rate may	12 Mbit/e: 9 6 / 19 2 / 45 45 / 93 75 / 187 5 / 500 kbit/e: 1 5 / 3 / 6 / 12 Mbit/e
Transmission rate, max. Protocols	12 Mbit/s; 9,6 / 19,2 / 45,45 / 93,75 / 187,5 / 500 kbit/s; 1,5 / 3 / 6 / 12 Mbit/s
Protocols	
Protocols PROFIBUS DP	12 Mbit/s; 9,6 / 19,2 / 45,45 / 93,75 / 187,5 / 500 kbit/s; 1,5 / 3 / 6 / 12 Mbit/s Yes
Protocols PROFIBUS DP Interrupts/diagnostics/status information	Yes
Protocols PROFIBUS DP Interrupts/diagnostics/status information Alarms	
Protocols PROFIBUS DP Interrupts/diagnostics/status information Alarms Diagnoses	Yes
Protocols PROFIBUS DP Interrupts/diagnostics/status information Alarms Diagnoses • Diagnostic information readable	Yes
Protocols PROFIBUS DP Interrupts/diagnostics/status information Alarms Diagnoses • Diagnostic information readable Diagnostics indication LED	Yes No Yes
Protocols PROFIBUS DP Interrupts/diagnostics/status information Alarms Diagnoses • Diagnostic information readable Diagnostics indication LED • Group error SF (red)	Yes No Yes Yes
Protocols PROFIBUS DP Interrupts/diagnostics/status information Alarms Diagnoses • Diagnostic information readable Diagnostics indication LED • Group error SF (red) • Status indicator digital input (green)	Yes No Yes Yes Yes
Protocols PROFIBUS DP Interrupts/diagnostics/status information Alarms Diagnoses • Diagnostic information readable Diagnostics indication LED • Group error SF (red) • Status indicator digital input (green) • Status indicator digital output (green)	Yes No Yes Yes Yes Yes Yes
Protocols PROFIBUS DP Interrupts/diagnostics/status information Alarms Diagnoses • Diagnostic information readable Diagnostics indication LED • Group error SF (red) • Status indicator digital input (green) • Status indicator digital output (green) • Channel fault indicator F (red)	Yes No Yes Yes Yes
Protocols PROFIBUS DP Interrupts/diagnostics/status information Alarms Diagnoses Diagnostics information readable Diagnostics indication LED Group error SF (red) Status indicator digital input (green) Status indicator digital output (green) Channel fault indicator F (red) Potential separation	Yes No Yes Yes Yes Yes Yes No
Protocols PROFIBUS DP Interrupts/diagnostics/status information Alarms Diagnoses • Diagnostic information readable Diagnostics indication LED • Group error SF (red) • Status indicator digital input (green) • Status indicator digital output (green) • Channel fault indicator F (red)	Yes No Yes Yes Yes Yes Yes
Protocols PROFIBUS DP Interrupts/diagnostics/status information Alarms Diagnoses Diagnostics information readable Diagnostics indication LED Group error SF (red) Status indicator digital input (green) Status indicator digital output (green) Channel fault indicator F (red) Potential separation	Yes No Yes Yes Yes Yes Yes No
Protocols PROFIBUS DP Interrupts/diagnostics/status information Alarms Diagnoses Diagnostic information readable Diagnostics indication LED Group error SF (red) Status indicator digital input (green) Status indicator digital output (green) Channel fault indicator F (red) Potential separation between PROFIBUS DP and all other circuit components	Yes No Yes Yes Yes Yes Yes No
Protocols PROFIBUS DP Interrupts/diagnostics/status information Alarms Diagnoses • Diagnostic information readable Diagnostics indication LED • Group error SF (red) • Status indicator digital input (green) • Status indicator digital output (green) • Channel fault indicator F (red) Potential separation between PROFIBUS DP and all other circuit components Potential separation digital inputs	Yes No Yes Yes Yes Yes No Yes
Protocols PROFIBUS DP Interrupts/diagnostics/status information Alarms Diagnoses • Diagnostic information readable Diagnostics indication LED • Group error SF (red) • Status indicator digital input (green) • Status indicator digital output (green) • Channel fault indicator F (red) Potential separation between PROFIBUS DP and all other circuit components Potential separation digital inputs • between the channels	Yes No Yes Yes Yes Yes No Yes
Protocols PROFIBUS DP Interrupts/diagnostics/status information Alarms Diagnoses Diagnostic information readable Diagnostics indication LED Group error SF (red) Status indicator digital input (green) Status indicator digital output (green) Channel fault indicator F (red) Potential separation between PROFIBUS DP and all other circuit components Potential separation digital inputs between the channels Potential separation digital outputs 	Yes No Yes Yes Yes Yes Yes No Yes
Protocols PROFIBUS DP Interrupts/diagnostics/status information Alarms Diagnoses Diagnostic information readable Diagnostics indication LED Group error SF (red) Status indicator digital input (green) Status indicator digital output (green) Channel fault indicator F (red) Potential separation between PROFIBUS DP and all other circuit components Potential separation digital inputs between the channels Potential separation digital outputs between the channels 	Yes No Yes Yes Yes Yes Yes No Yes
Protocols PROFIBUS DP Interrupts/diagnostics/status information Alarms Diagnoses Diagnostic information readable Diagnostics indication LED Group error SF (red) Status indicator digital input (green) Status indicator digital output (green) Channel fault indicator F (red) Potential separation between PROFIBUS DP and all other circuit components Potential separation digital inputs between the channels Potential separation digital outputs between the channels Potential separation digital outputs between the channels Permissible potential difference	Yes No Yes Yes Yes Yes No Vo
Protocols PROFIBUS DP Interrupts/diagnostics/status information Alarms Diagnoses • Diagnostic information readable Diagnostics indication LED • Group error SF (red) • Status indicator digital input (green) • Status indicator digital output (green) • Channel fault indicator F (red) Potential separation between PROFIBUS DP and all other circuit components Potential separation digital inputs • between the channels Potential separation digital outputs • between the channels Potential separation digital outputs • between the channels	Yes No Yes Yes Yes Yes No Vo
Protocols PROFIBUS DP Interrupts/diagnostics/status information Alarms Diagnoses Diagnostic information readable Diagnostics indication LED Group error SF (red) Status indicator digital input (green) Status indicator digital output (green) Channel fault indicator F (red) Potential separation between PROFIBUS DP and all other circuit components Potential separation digital inputs between the channels Potential separation digital outputs between the channels Potential separation digital outputs Isolation Isolation	Yes No Yes Yes Yes Yes Yes No Yes No Yes 75 V DC/60 V AC
Protocols PROFIBUS DP Interrupts/diagnostics/status information Alarms Diagnoses Diagnostic information readable Diagnostics indication LED Group error SF (red) Status indicator digital input (green) Status indicator digital output (green) Status indicator digital output (green) Channel fault indicator F (red) Potential separation between PROFIBUS DP and all other circuit components Potential separation digital inputs between the channels Potential separation digital outputs between the channels Permissible potential difference between different circuits Isolation Isolation tested with Degree and class of protection	Yes No Yes Yes Yes Yes No Yes No 75 V DC/60 V AC
Protocols PROFIBUS DP Interrupts/diagnostics/status information Alarms Diagnoses Diagnostics indication LED Group error SF (red) Status indicator digital input (green) Status indicator digital output (green) Channel fault indicator F (red) Potential separation between PROFIBUS DP and all other circuit components Potential separation digital inputs between the channels Potential separation digital outputs between the channels Potential separation digital outputs between different circuits Isolation Isolation tested with Degree and class of protection	Yes No Yes Yes Yes Yes Yes No Yes No Yes 75 V DC/60 V AC
Protocols PROFIBUS DP Interrupts/diagnostics/status information Alarms Diagnoses Diagnostics indication LED Group error SF (red) Status indicator digital input (green) Status indicator digital output (green) Channel fault indicator F (red) Potential separation between PROFIBUS DP and all other circuit components Potential separation digital inputs between the channels Potential separation digital outputs between the channels Potential separation digital outputs between the channels Permissible potential difference between different circuits Isolation Isolation tested with Degree and class of protection IP degree of protection connection method	Yes No Yes Yes Yes Yes No Yes No Yes No 500 V DC 500 V DC
Protocols PROFIBUS DP Interrupts/diagnostics/status information Alarms Diagnoses Diagnostics indication LED Group error SF (red) Status indicator digital input (green) Status indicator digital output (green) Channel fault indicator F (red) Potential separation between PROFIBUS DP and all other circuit components Potential separation digital inputs between the channels Potential separation digital outputs between the channels Potential separation digital outputs between the channels Potential separation digital outputs between the channels Permissible potential difference between different circuits Isolation Isolation tested with Degree and class of protection IP degree of protection Connection method Design of electrical connection	Yes No Yes Yes Yes Yes No Yes No 75 V DC/60 V AC
Protocols PROFIBUS DP Interrupts/diagnostics/status information Alarms Diagnoses Diagnostic information readable Diagnostics indication LED Group error SF (red) Status indicator digital input (green) Status indicator digital output (green) Status indicator digital output (green) Channel fault indicator F (red) Potential separation between PROFIBUS DP and all other circuit components Potential separation digital inputs between the channels Potential separation digital outputs between the channels Permissible potential difference between different circuits Isolation tested with Degree and class of protection IP degree of protection Connection method Design of electrical connection Dimensions	Yes No Yes Yes Yes Yes Yes Yes Yes Yes No Yes Soo Yes Yes Yes Yes Yes Soo Yes Yes Yes Yes Yes Yo Yes No Yes Yes Yes Yes Yes Yes Yes Yes Yes Yo Yes Yo Yes Yo Yes Yo Yes Yes Yes Yo Yes Yes Yes Yes Yes Yes Yes
Protocols PROFIBUS DP Interrupts/diagnostics/status information Alarms Diagnoses Diagnostic information readable Diagnostics indication LED Group error SF (red) Status indicator digital input (green) Status indicator digital output (green) Channel fault indicator F (red) Potential separation between PROFIBUS DP and all other circuit components Potential separation digital inputs between the channels Potential separation digital outputs between the channels Permissible potential difference between different circuits Isolation Isolation tested with Degree and class of protection connection method Design of electrical connection Dimensions Width	Yes No Yes Yes Yes Yes No Yes No Yes No U Yes No Yes No Yes No Yes No Yes No Yes Yes No Yes No Yes Yes No Yes Yes Yes No Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes
Protocols PROFIBUS DP Interrupts/diagnostics/status information Alarms Diagnoses Diagnostic information readable Diagnostics indication LED Group error SF (red) Status indicator digital input (green) Status indicator digital output (green) Channel fault indicator F (red) Potential separation between PROFIBUS DP and all other circuit components Potential separation digital inputs between the channels Potential separation digital outputs between the channels Potential separation digital outputs between the channels Potential separation digital outputs between different circuits Isolation Isolation tested with Degree and class of protection connection method Design of electrical connection Dimensions Width Height	Yes No Yes Yes Yes Yes Yes Yes Yes Yes Yo Yes Yo Yes Yes Yo Yes Yo Yo </td
Protocols PROFIBUS DP Interrupts/diagnostics/status information Alarms Diagnoses Diagnostic information readable Diagnostics indication LED Group error SF (red) Status indicator digital input (green) Status indicator digital output (green) Channel fault indicator F (red) Potential separation between PROFIBUS DP and all other circuit components Potential separation digital inputs between the channels Potential separation digital outputs between the channels Permissible potential difference between different circuits Isolation Isolation tested with Degree and class of protection connection method Design of electrical connection Dimensions Width	Yes No Yes Yes Yes Yes No Yes No Yes No U Yes No Yes No Yes No Yes No Yes No Yes Yes No Yes No Yes Yes No Yes Yes Yes No Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes

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