

Data sheet

6ES7650-8EK80-1AA0

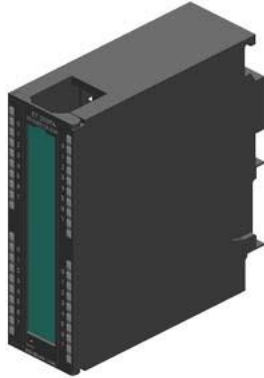


Figure similar

ET 200PA SMART, digital output 32 DQ, 24 V DC / 0.5 A, 1 x 40-pole, connection IM650-8PH required; conformal coating ISA-S71.04 severity level G1; G2; G3

General information	
Product function	
• Isochronous mode	No
Supply voltage	
Load voltage L+	
• Rated value (DC)	24 V
• Reverse polarity protection	No
Input current	
from load voltage L+ (without load), max.	100 mA
from backplane bus 5 V DC, max.	60 mA
Power loss	
Power loss, typ.	9.3 W
Digital outputs	
Number of digital outputs	32
Short-circuit protection	Yes; Electronic
• Response threshold, typ.	1 A
Limitation of inductive shutdown voltage to	L+ (-53 V)
Controlling a digital input	Yes
Switching capacity of the outputs	
• on lamp load, max.	5 W
Load resistance range	
• lower limit	48 Ω
• upper limit	4 kΩ
Output voltage	
• for signal "1", min.	L+ (-1.3 V)
Output current	
• for signal "1" rated value	0.5 A
• for signal "1" permissible range, min.	5 mA
• for signal "1" permissible range, max.	0.6 A
• for signal "0" residual current, max.	0.5 mA
Output delay with resistive load	
• "0" to "1", max.	200 μs
• "1" to "0", max.	300 μs
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 (acc. to IEC 60947-5-1, DC13), max.	0.5 Hz
• on lamp load, max.	10 Hz
Total current of the outputs (per group)	
horizontal installation	
— up to 40 °C, max.	4 A
— up to 60 °C, max.	3 A
vertical installation	
— up to 40 °C, max.	2 A
Cable length	
• shielded, max.	1 000 m
• unshielded, max.	600 m
Interrupts/diagnostics/status information	
Diagnostics function	No
Alarms	
• Diagnostic alarm	No
Diagnoses	
• Diagnostic information readable	No
• Wire break	No
• Short-circuit	No
• missing load voltage	No
Diagnostics indication LED	
• Group error SF (red)	Yes
• Status indicator digital output (green)	Yes; per channel
• Channel fault indicator F (red)	No
Potential separation	
Potential separation digital outputs	
• between the channels	No
• between the channels, in groups of	8
• between the channels and backplane bus	Yes; Optocoupler
Permissible potential difference	
between different circuits	75 V DC/60 V AC
Isolation	
Isolation tested with	500 V AC/707 V DC, type test
Connection method	
required front connector	40-pin
Dimensions	
Width	40 mm
Height	125 mm
Depth	120 mm
Weights	
Weight, approx.	300 g
Classifications	

	Version	Classification
eClass	14	27-24-26-04
eClass	12	27-24-26-04
eClass	9.1	27-24-26-04
eClass	9	27-24-26-04
eClass	8	27-24-26-04
eClass	7.1	27-24-26-04
eClass	6	27-24-26-04
ETIM	10	EC001599
ETIM	9	EC001599
ETIM	8	EC001599
ETIM	7	EC001599
IDEA	4	3566
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval	For use in hazardous locations
--------------------------	--------------------------------



[China RoHS](#)

[Manufacturer Declaration](#)



last modified:

10/23/2025

TURLL

YOUR GLOBAL AUTOMATION PARTNER

6ES7650-8EK80-1AA0

OFFICIAL DATASHEET & QUOTATION

- 100% New & Original Factory Sealed
- Global Express Shipping (DHL/FedEx/UPS)
- 12-Month Warranty Protection
- Professional Technical Support

[CHECK STOCK & PRICE](#)



Need Assistance? Scan to Chat on WhatsApp

sales@turl.com | +852 6339 7344